Series Compatible with Secondary Batteries

25A - Series

Copper (Cu) and Zinc (Zn)

Restrictions

Compatible with dew points as low as

-70℃

Longer life

due to use of grease compatible with low dew points

A wide range of products!
Now with a greater number of models!

Nev

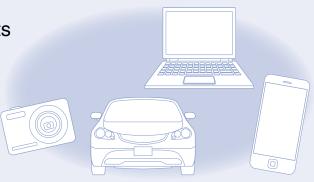
57 models have been newly added. (For details, refer to the "INDEX" pages.)

Compatible with the various environments of each manufacturing process



P-E23-13

Products compatible with the environments of the secondary battery manufacturing process are available, contributing to the improvement of productivity and reduced defects.



Series Compatible with Secondary Batteries 25A- Series

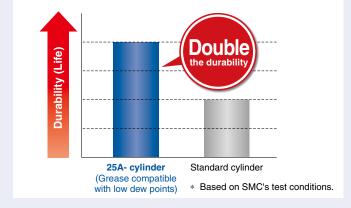


Improved performance in environments with low dew points

Uses grease compatible with low dew points

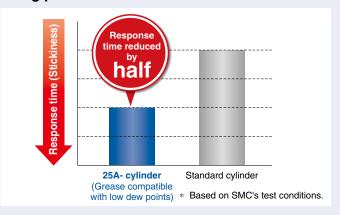
Double the durability

Durability comparison (Air cylinder)



Response time reduced by half

Comparison of cylinder response times after being pressurized and stored



Material Restrictions

The following materials are not used in order to reduce the number of defective products produced during the secondary battery manufacturing process:

- Metal materials whose main component is either copper or zinc are not used.
 - * Some of the aluminum alloy and aluminum die-cast materials contain traces of copper or zinc as an additive element. If a product with restrictions on the amounts of these additive elements is required, we can accommodate your needs via a special product. Please contact your local sales representative for further details.
- Electrolytic nickel plating with a copper layer or zinc plating are not used.
 - * Electroless nickel plating is used.
- Parts of the piston rod, clevis pin, split pin, etc., of the cylinder are made of carbon steel with hard chrome plating. Therefore, as the processed parts aren't coated, an anti-rust oil coating is applied to these parts before shipment.
 - * Rust may be generated due to the operating environment. If the generation of rust is a problem, made-to-order options using stainless steel, etc., are available. Please contact your local sales representative for further details.
- The coils of solenoid valves, the circuit boards of electrical equipment, the motors of electric actuators, etc., use copper materials.
 - * Parts whose materials cannot be easily changed to alternative ones and parts whose functions would be compromised by changing to alternative materials use copper and/or zinc materials. Please contact your local sales representative for further details.



Restrictions

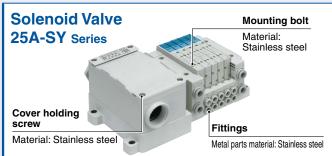
Material

Copper (Cu) Zinc (Zn)

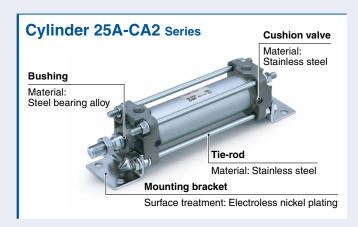
Surface treatment

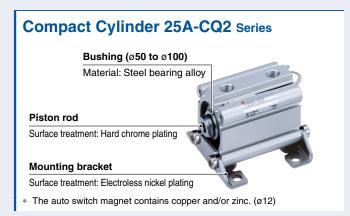
- Electrolytic nickel plating with a copper layer
- Zinc plating

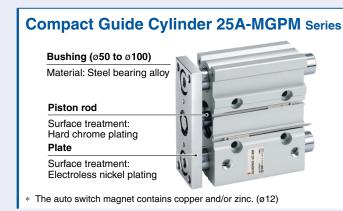
(Electroless nickel plating is used.)



- * Coils for solenoid valves, connector pins, and lead wires are made of
- Manifold terminal block, wiring parts, connector metal parts, and printed circuit board are made of copper.















* Cylinder mounting brackets made of steel are either electroless nickel plated, treated with RAYDENT®, or coated with electrodeposition paint.



Series Compatible with Secondary Batteries











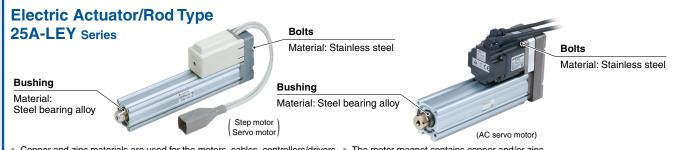
- * The motor magnet contains copper and/or zinc.











* Copper and zinc materials are used for the motors, cables, controllers/drivers. * The motor magnet contains copper and/or zinc.

Dustproof Products

* Not compatible with the secondary battery specifications

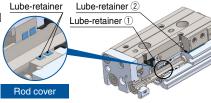
High Durability Series Dust Resistant Cylinder CM2/CG1/MB/CQ2/MGP/MXQ-XC4

- Up to 6 times more durable in dusty environments (-XC4A/-XC4B/-XC4C)
 Applicable powder particle size: 20 to 100 μm
 Suitable for environments with ceramic powder, toner powder, paper powder, and metallic powder
- Excludes weld spatter

 Can be selected according to the application

MXQ-XC4A

 Lube-retainers are installed on the guide unit and rod cover.
 This prevents the entry of dust and foreign matter.



Description	Applicable powder particle size	Structure (CQ2)	Durability
With 2 Lube- retainers XC4A	20 to 50 μm	Lube-retainer	Standard model
With heavy-duty scraper + Lube-retainer XC4B	30 to 100 μm	Lube-retainer Heavy-duty scraper	Standard model
With heavy-duty scraper XC4C	50 to 100 μm	Heavy-duty scraper	2 times Standard model

Applicable Cylinders







Compact Cylinder CQ2-XC4□ ø20 to ø63



Explosion-proof Products

* Not compatible with the secondary battery specifications

■ Explosion-proof Solenoid Valves

For Japan (TIIS certification)

- Intrinsically Safe Explosion-proof System 5-Port Solenoid Valve
- · 51-SY5000/7000/9000 Series

Ex ia IIB T4

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- · 50-VFE/VPE Series

d2G4, Ex d IIB T4

For China (CCC certification)

- Intrinsically Safe Explosion-proof 5-Port Solenoid Valve
- · 52-SY5000/7000/9000-X140 Series

Ex ia IIC T4 to T6 Gb

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- · 50-VFE/VPE-X140 Series

Ex d IIC T5/T6 Gb Ex tD A21 IP6X T85°C/T100°C

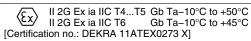
For Taiwan (TS certification)

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- · 50-VFE/VPE-X170 Series

Ex db IIC T5/T6 Gb Ex tb IIIC T100°C/T85°C Db

For Europe (CE marking, ATEX directive)

- Intrinsically Safe Explosion-proof System
- · 5-Port Solenoid Valve/52-SY5000/7000/9000



- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- · 50-VFE/VPE-X60 Series



II 2G Ex db IIC T5 Gb Ta:-10°C TO +50°C II 2G Ex db IIC T6 Gb Ta:-10°C TO +40°C II 2D Ex tb IIIC T100°C Db Ta:-10°C TO +50°C

II 2D Ex to IIIC 1100°C Db 1a:-10°C 1O +50°C II 2D Ex tb IIIC T85°C Db Ta:-10°C TO +40°C [Certification no.: KEMA 09ATEX0024X]

For Korea (KOSHA certification)

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- · 50-VFE/VPE-X100 Series

Ex d IIB T4

For North America (UL 913/CSA C22.2 No. 157)

- Intrinsically Safe Explosion-proof
- Pilot Operated 5-Port Solenoid Valve: 53-SY5000/7000/9000 Series

Electrical Entry TT
Hazardous Location
Class I, II, III
Division 1
Groups A, B, C, D, E, F, G

Electrical Entry L and LL
Hazardous Location
Class I
Division 1
Groups A, B, C, D

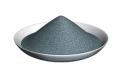
Secondary Battery Manufacturing Process

Electrode Production Process

Same for both can types and laminate types

1 Mixing and kneading machine

The proper amount of raw materials for positive or negative electrodes are mixed to make electrode slurry.

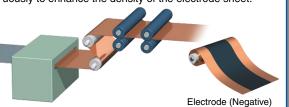




2 Coating and rolling

Positive or negative electrode slurry is coated with a metallic foil made from aluminum, copper, etc.

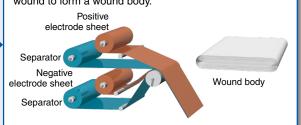
The coated slurry is then compressed with rollers continuously to enhance the density of the electrode sheet.



Cell Assembly Process

4 Winder (Winding)

The positive electrode sheet, negative electrode sheet, and separator sheets are laid on top of each other and wound to form a wound body.



5 Attaching tabs and an insulating plate and inserting into a case

Current collecting tabs and an insulating plate are bonded to the wound body.

It is then inserted into a case.



Bonding tabs and an insulating plate

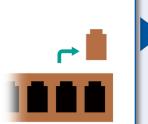


4 Punching electrodes

The rolled positive and negative electrodes are punched according to the battery size.

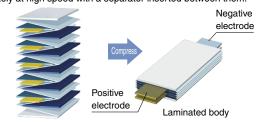


Electrode puncher



5 Stacking (Layering)

Positive and negative electrodes are stacked alternately and accurately at high speed with a separator inserted between them.



Stacking positive and negative electrodes

Inspection/Packaging Process

8 Charging/discharging and aging

Standard products are applicable.

Charging and discharging are repeated to activate batteries. Charged battery cells are then left for a certain period of time, and the initial deterioration of batteries is checked to detect defective products.

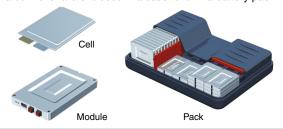


Packaging

Standard products are applicable.

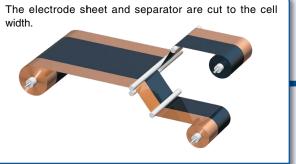
Connected multiple cells are enclosed in a metallic case, and terminals are attached to form a module.

Then, the connected multiple modules with a sensor and a controller are enclosed in a case to form a battery pack.



Laminate type

Slitting width.



6 Welding cell lid and pouring electrolytic solution

The electrode and lid are laser-welded, and then the entire periphery of the cell case and lid is welded. Electrolytic solution is poured into the cell.

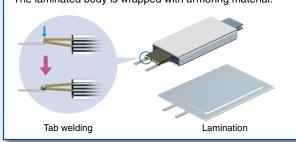




Welding cell lid Pouring electrolytic solution

6 Tab welding and lamination

Current collecting tabs are welded to the laminated body. The laminated body is wrapped with armoring material.



7 Pre-charging and welding infusion plug

Pre-charging (formation charging) is performed to remove the gas generated in the initial charging process, and then the infusion plug is welded to seal the cell.



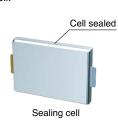


Welding infusion plug

7 Pre-charging and sealing cell

Pre-charging (formation charging) is performed to remove the gas generated in the initial charging process, and then heat is applied to seal the cell.











25A- Series Applicable Products

Separate Type Double Check Block 3-Port Solenoid Valve Separate Type Double Check Block 25A-VQ1000/2000-FPG 25A-VP342/542/742 (Body ported) 25A-VP344/544/744 (Base mounted) 25A-VP344/544/744 (Base mounted) 25A-VF344/544/744 (Base mounted) 25A-VF344/544/744 (Base mounted) 25A-VF344/544/744 (Base mounted) 25A-VF344/544/740 (Base mounted) 25A-VF344/544/744 (Base mounted) 25A-VF344/544/744 (Base mounted) 25A-VF344/544/744 (Base mounted) 25A-VF344/544/744 (Base mounted) 25A-VF34500/7000 25A-VF34500/7000	14-1 15 29 33 63 73 87 91 95 96 97 98 99 100 101
Separate Type Double Check Block 3-Port Solenoid Valve 5-Port Air Operated Valve 25A-SYJA500/7000 25A-SYJ000/3000 (Non plug-in metal base) 25A-SY5000/7000 (Plug-in connector connecting base) 25A-SY5000/7000 (Single unit, Individual wiring) 25A-VQ2000/4000 (Single unit, Plug-in unit) 25A-SQ2000 (Plug-in type, Plug lead type) 25A-VQZ1000 (Single unit, Plug lead) 25A-VQ1000/2000-FPG 25A-VP342/542/742 (Body ported) 25A-VP342/542/744 (Base mounted) 25A-VP300/700-X536, X538, X555 25A-VT317 25A-VG342 25A-SYJA5000/7000 25A-SYJA5000/7000	29 33 63 73 87 91 95 96 97 98 99
Separate Type Double Check Block 3-Port Solenoid Valve Separate Valve 5-Port Air Operated Valve Separate Valve 25A-SY5000/7000 (Plug-in connector connecting base) 25A-SY5000/7000 (Single unit, Individual wiring) 25A-VQ2000/4000 (Single unit, Plug-in unit) 25A-SQ2000 (Plug-in type, Plug lead type) 25A-VQZ1000/2000-FPG 25A-VQ21000/2000-FPG 25A-VP342/542/742 (Body ported) 25A-VP344/544/744 (Base mounted) 25A-VP300/700-X536, X538, X555 25A-VT317 25A-VG342 25A-SYA5000/7000 25A-SYJA5000/7000	33 63 73 87 91 95 96 97 98 99
Separate Type Double Check Block 3-Port Solenoid Valve 5-Port Air Operated Valve 5-Port Air Operated Valve 25A-SY5000/7000 (Single unit, Individual wiring) 25A-VQ2000/4000 (Single unit, Plug-in unit) 25A-VQ21000 (Single unit, Plug lead type) 25A-VQ21000/2000-FPG 25A-VQ21000/2000-FPG 25A-VP342/542/742 (Body ported) 25A-VP344/544/744 (Base mounted) 25A-VP300/700-X536, X538, X555 25A-VT317 25A-VG342 25A-SYA5000/7000 25A-SYJA500/7000	63 73 87 91 95 96 97 98 99
Separate Type Double Check Block 3-Port Solenoid Valve 5-Port Air Operated Valve 25A-VQ2000/4000 (Single unit, Plug-in unit) 25A-VQ21000 (Single unit, Plug lead type) 25A-VQ21000/2000-FPG 25A-VP342/542/742 (Body ported) 25A-VP344/544/744 (Base mounted) 25A-VP344/544/744 (Base mounted) 25A-VP344/544/744 (Base mounted) 25A-VP342/542/742 (Body ported) 25A-VP342/542/742 (Body ported) 25A-VP344/544/744 (Base mounted)	73 87 91 95 96 97 98 99
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Separate Type Double Check Block 3-Port Solenoid Valve 25A-VQ1000/2000-FPG 25A-VP342/542/742 (Body ported) 25A-VP344/544/744 (Base mounted) 25A-VP500/700-X536, X538, X555 25A-VT317 25A-VG342 25A-SYA5000/7000 3-Port Air Operated Valve 25A-SYJA500/700	91 95 96 97 98 99
Separate Type Double Check Block 3-Port Solenoid Valve 25A-VP342/542/742 (Body ported) 25A-VP344/544/744 (Base mounted) 25A-VP500/700-X536, X538, X555 25A-VT317 25A-VG342 25A-SYA5000/7000 3-Port Air Operated Valve 25A-SYJA500/700	95 96 97 98 99 100
25A-VQ1000/2000-FPG	96 97 98 99 100
3-Port Air Operated Valve 25A-SYJA500/700	97 98 99 100
3-Port Air Operated Valve 25A-SYJA500/700	98 99 100
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^{*1} Standard products: For the standard model, copper (Cu) and zinc (Zn) are not used as main components in the metal materials. Refer to the **Web Catalog** for details.

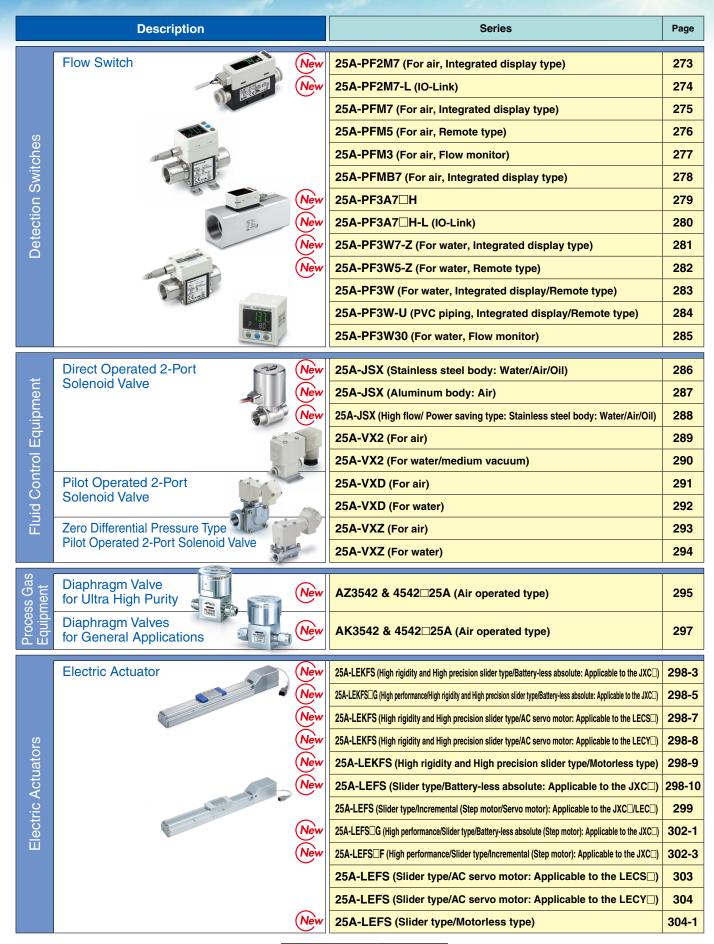


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nent/I	Check Valve	25A-AKH (With One-touch fittings)	258
uipr	One-touch Fittings	KQ2-G (Stainless steel)	259
<u> </u>		KQ2 (Only the type without a connection thread)	*1
ntro		KPG (Clean One-touch fittings)	260
ပိ	<u>~</u>	KQG2 (Stainless steel 316 One-touch fittings)	261
<u> 0</u> <u>0</u>	Stainless Steel Fittings	KFG2 (Stainless steel 316 insert fittings)	262
		MS (Miniature fittings/Stainless steel 316)	263
	Rectangular Multi-connector	25A-KDM (Rectangular multi-connector)	264
	Coupler	KKA (S Couplers stainless steel type)	265
	Tubing	T (Nylon)	267
		TS (Soft nylon)	267
		TU (Polyurethane)	267
ور ق		TA□ (Antistatic)	267
Tubing		TL (Fluoropolymer)	268
		TH (FEP)	268
		TD (Soft fluoropolymer)	268
		TPS (Soft polyolefin)	268
	9	IDK (Moisture control tube)	268
_ s	Pressure Switch	25A-ZSE20(F)/ISE20 (3-screen display high-precision)	269
che	8.8 mm	25A-ZSE20A(F)/ISE20A (3-screen display high-precision)	270
Detection Switches	0007- 8. 1 osm	25A-ZSE20B(F)/ISE20B (3-screen display high-precision)	271
		25A-ZSE20C(F)/ISE20C(H) (3-screen display high-precision, for general fluids)	272
*1 Stan	dard products: For the standard model, copper (Cu) and zinc (Zn) a	re not used as main components in the metal materials. Refer to the Web Catalog	for details.

^{*1} Standard products: For the standard model, copper (Cu) and zinc (Zn) are not used as main components in the metal materials. Refer to the **Web Catalog** for details.

*2 Pressure gauge mounting: The G43-10-01-X300/G46-SRB pressure gauge cannot be mounted directly to the booster regulator as it will interfere with the booster regulator (25A-VBA10A) handle or the other pressure gauge (for the 25A-VBA20A/40A). In order to mount the pressure gauge, piping which does not cause any interference must be prepared separately.

*3 Aside from the external parts and wetted parts, copper (Cu) and zinc (Zn) are used as main components in the metal materials.



25A- series grease pack*1 applicable models

*1 Air cylinders (Except guide unit). For other models, please contact your local sales representative.

Grease pack part no.	Quantity
GR-D-005	5 g
GR-D-010	10 g
GR-D-100	100 g

Contained in a plastic container.



	Description	Series	
Electric Actuators	Electric Actuator New New New New New New New New New Ne	Series 25A-LEJS (High rigidity slider type/AC servo motor: Applicable to the LECS 25A-LEJS (High rigidity slider type/AC servo motor: Applicable to the LECY 25A-LEJS (High rigidity slider type/Motorless type) 25A-LEY (Rod type/Battery-less absolute: Applicable to the JXC 25A-LEY (High performance/Rod type/Battery-less absolute (Step motor): Applicable to the JXC 25A-LEY (High performance/Rod type/Incremental (Step motor): Applicable to the JXC 25A-LEY (Rod type/Incremental (Step motor/Servo motor): Applicable to the JXC 25A-LEY (Rod type/AC servo motor: Applicable to the LECS 25A-LEY (Rod type/AC servo motor: Applicable to the LECY 25A-LEY (Rod type/Motorless type) 25A-LEY (Guide rod type/Motorless type) 25A-LEYG (Guide rod type/Battery-less absolute: Applicable to the JXC 25A-LEYG (Guide rod type/Battery-less absolute: Applicable to the LECS 25A-LEYG (Guide rod type/AC servo motor: Applicable to the LECS 25A-LEYG (Guide rod type/AC servo motor: Applicable to the LECS)	305 306-1 306-2 306-4 306-6 307 311 313 314-1 314-2 314-4 314-6 314-8
Auto Switches	Solid State Auto Switch Reed Auto Switch	D-M9□□-900 D-F8□-900 D-F900 D-G59/G5P/K59-900 D-F79/F7P/J79-900 D-F7□V-900 D-A90L/A93L-900 D-Z80L-900 D-E73A/E76A/E80A	315 and onward

Special Products (Please contact your local sales representative for more details.)

	Description	Series
Directional Control Valves	3-Port Solenoid Valve/Residual Pressure Release Valve with Detection of Main Valve Position (Safety Standard ISO 13849-1 Certified)	VG342-X87
	Air Cylinder With End Lock	CBM2 MBB
Air Cylinders	Compact Cylinder with Lock	CLQ
Air Cyl	Stopper Cylinder	RSQ
	Heavy Duty Stopper Cylinder	RS2H
Vacuum Equipment	Non-contact Gripper	XT661
High Vacuum Equipment	Aluminum High Vacuum Angle Valve	XLA (Normally closed) XLC (Double acting)

Related Products Consult with SMC for "Copper (Cu) and Zinc (Zn) Restrictions" products.

1 Antistatic Equipment

Vacuum

Static electricity

Antistatic performance achieved through conductive measures for a reduction in static-related trouble.

Actuators · Antistatic Air Cylinder

(Made to Order) CM2-X1051 Series

Vacuum Equipment · Vacuum Pad ······ ZP Series

Fittings and Tubing

· Antistatic One-touch Fittings ····· KA Series

· Miniature Fittings/Stainless Steel 316 ···· MS Series (Some types only)

· Antistatic Tubing ······ TA Series

Flow Control Equipment

· Antistatic Speed Controller (Made to Order) AS-X260 Series



KA Series

2 Static Neutralization Equipment

lons generated by corona discharge neutralize static electricity.

- · Ionizer IZS31 Series
- · Fan Type Ionizer ······ IZF ☐ Series

Measurement Equipment | Measures the electrostatic potential.

- · Electrostatic Sensor IZD10/IZE11 Series
- · Handheld Electrostatic Meter ---- IZH10 Series

Static electricity





IZF10 Series





Temperature Control Equipment

· Thermo-chiller/Standard Type ····· HRS Series

4 Electric Actuators

- · Electric Actuator/Slider Type LEFB Series
- · Electric Actuator/Low Profile Slider Type ··· LEM Series
- · Electric Actuator/Guide Rod Slider ······ LEL Series
- · Electric Slide Table LES Series

· Electric Actuator/Miniature Rod Type

/Miniature Slide Table Type



- · Electric Rotary Table LER Series · Electric Gripper LEH Series
- · Motorless Type Electric Actuator ······· LE Series







LEM Series

HRS Series





LEHZ Series

5 High Purity Chemical Liquid Valves

 High Purity Chemical Liquid Valve/Air Operated Type LVC/LVA/LVH Series

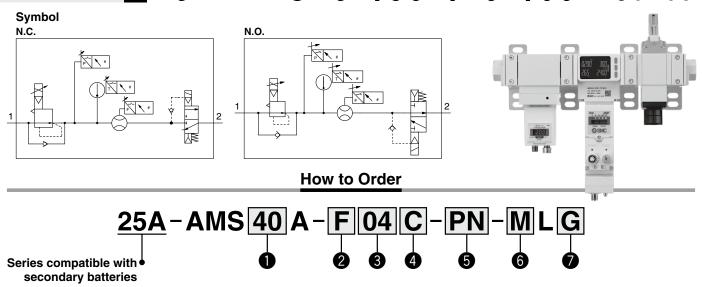








Air Management System C E CA Electro-Pneumatic Regulator Type RoHS 25A-AMS 20A/30A/40A/60A Series



			Symbol	Description		Body	size	
					20	30	40	60
			R	Rc	•	•	•	•
	5		N	NPT	•	•	•	•
2	Pipe thread type		F	G	•	•	•	•
			Н	Without attachments	•	•	•	•
			+					
			01	1/8	•	_	_	_
	3 Port size		02	1/4	•	•	_	_
			03	3/8	_	•	•	_
8			04	1/2	_	_	•	_
			06	3/4	_	_	_	•
			10	1	_	_	_	•
			00	Without attachments	•	•	•	•
			+					
4	Electro-Pneumatic regulator, Residual	N.O./N.C.	С	N.C. (Normally closed)	•	•	•	•
U	pressure relief 3-port solenoid valve	11.0./11.0.	D	N.O. (Normally open)	•	•	•	•
			+					
			SA	Standalone (When wireless adapter is connected*3: Wireless remote)	•	•	•	•
6	Air management hub	Protocol	PN	PROFINET, OPC UA (When wireless adapter is connected*3: Wireless base)	•	•	•	•
U	Air management hub	1 1010001	EN	EtherNet/IPTM, OPC UA (When wireless adapter is connected*3: Wireless base)	•	•	•	•
			EC	EtherCAT*4 (When wireless adapter is connected*3: Wireless base)	•	•	•	•
			+					
6	Electro-Pneumatic regulator,	Unit	K *1	EXA1/ITV: Units selection function	•	•	•	•
	Air management hub	Offic	M*2	EXA1/ITV: SI units only	•	•	•	
			+					
	Residual pressure relief	Manual	G	Non-locking push type	•	•	•	•
	3-port solenoid valve	override	E	Push-turn locking type (Manual)	•		•	

^{*1} Applies to overseas destinations only

Accumulated flow : L
Pressure : kPa, MPa
Temperature : °C

SMC

^{*2} Fixed units Instantaneous flow: L/min

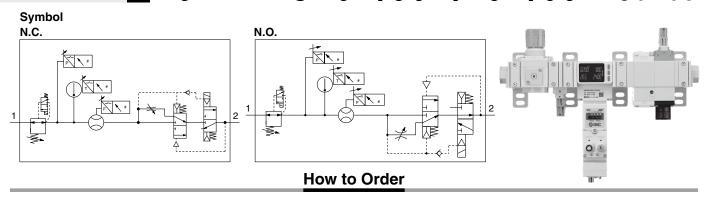
^{*3} The wireless adapter is sold separately. (Refer to page 14-8.)

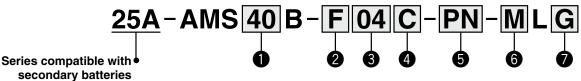
^{*4} EtherCAT is not compatible with OPC UA. In addition, the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).

^{*} The connection cable for the standby electro-pneumatic regulator/residual pressure relief valve is connected.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Air Management System Regulator Type 25A-AMS20B/30B/40B/60B Series





			Symbol	Description		`	y size	
					20	30	40	60
			R	Rc	•	•	•	•
2	Pipe thread type*1		N	NPT	•	•	•	•
			F	G	•	•	•	•
			+					
			01	1/8	•	_	—	_
			02	1/4	•	•	—	_
			03	3/8	_	•	•	-
8	Port size		04	1/2	_	-	•	-
		06	3/4	_	-	-	•	
				1	_	_	—	•
			00	Without attachments	•	•	•	•
			+					
A	Residual pressure relief	N.O./N.C.	С	N.C. (Normally closed)		•	•	•
U	3-port solenoid valve	14.0./14.0.	D	N.O. (Normally open)	•	•	•	•
			+					
			SA	Standalone (When wireless adapter is connected*4: Wireless remote)	•	•	•	•
6	Air management hub	Protocol	PN	PROFINET, OPC UA (When wireless adapter is connected*4: Wireless base)		•	•	•
v	All management hub	Protocor	EN	EtherNet/IPTM, OPC UA (When wireless adapter is connected*4: Wireless base)	•	•	•	•
			EC	EtherCAT*5 (When wireless adapter is connected*4: Wireless base)		•	•	•
			+					
6	Air management hub	Unit	K *2	EXA1: Units selection function	•	•	•	•
U	All management hub	Offic	M	EXA1: SI units only*3	•	•	•	•
			+					
a	Regulator/Residual pressure relief	Manual	G	Non-locking push type	•	•	•	•
J	3-port solenoid valve	override	E	Push-turn locking type (Manual)		•	•	•

- *1 For port size "00", specify thread type of the standby regulator (ARS).
- *2 Applies to overseas destinations only
- *3 Fixed units Instantaneous flow: L/min

Accumulated flow: L

Pressure : kPa, MPa

Temperature : °C

*4 The wireless adapter is sold separately. (Refer to page 14-8.)

*5 EtherCAT is not compatible with OPC UA. In addition, the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).

* The connection cable for the standby electro-pneumatic regulator/residual pressure relief valve is connected.



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

CECH CHUS

Air Management Hub



25A-EXA1 Series

Symbol How to Order 25A-EXA1-40-SA-Series compatible with

		Symbol	Description				
		Symbol	20	30	40	60	
					For 25A-AMS30	For 25A-AMS40	For 25A-AMS60
		SA	Standalone (When wireless adapter is connected*3: Wireless remote)	•	•	•	•
6	Durate and	PN	PROFINET, OPC UA (When wireless adapter is connected*3: Wireless base)	•	•	•	•
4	Protocol	EN	EtherNet/IP™, OPC UA (When wireless adapter is connected*3: Wireless base)	•	•	•	•
		EC	EtherCAT*4 (When wireless adapter is connected*3: Wireless base)	•	•	•	•
		+					
6	Linit	K *1	Units selection function	•	•	•	•
9	Unit	M*2	SI units only	•	•	•	•

- *1 Applies to overseas destinations only
- *2 Fixed units Instantaneous flow: L/min, Accumulated flow: L, Pressure: kPa/MPa, Temperature: °C
- *3 The wireless adapter is sold separately. (Refer to page 14-8.)

secondary batteries

*4 EtherCAT is not compatible with OPC UA. In addition, the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).



CEA GRANGE ROHS Standby Electro-Pneumatic Regulator 25A-ITV2050 to 3050-X399

Symbol



How to Order



For 25A-AMS20A	25A-ITV2050-IL20-1-K-X399
For 25A-AMS30A	25A-ITV2050-IL30-1-K-X399
For 25A-AMS40A	25A-ITV3050-IL 40-1-K-X399
For 25A-AMS60A	25A-ITV3050-IL60-1-K-X399
Series compatible secondary batt	

Applicable AMS□A size

20	For 25A-AMS20A
30	For 25A-AMS30A
40	For 25A-AMS40A
60	For 25A-AMS60A

2 Type of actuation

	P :	
1	Normally closed	
2	Normally open	

3 Pressure display unit

• · · · · · · · · · · · · · · · · · · ·			
K Units selection function			
M	SI units only		

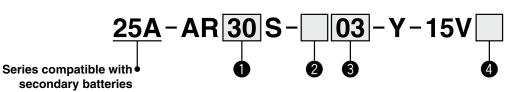
^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Standby Regulator 25A-AR20S to 50S Series





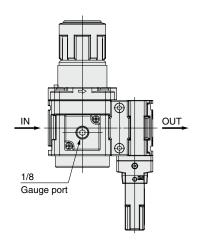




	Syml		Symbol Description		Body size 20 30 40 50			
						30 For 25A-AMS30B	40 For 25A-AMS40B	For 25A-AMS60B
			Nil	Rc	•	•	•	•
2	Pipe thre	ad type	N	NPT	•	•	•	•
		F	G	•	•	•		
	+							
			02	1/4	•	_	_	_
8	Port :	size	03	3/8	_	•	_	_
9	(Screws are I	N side only.)	04	1/2	_	_	•	_
			10	1	_	_	_	•
			+					
	Pilot valve Manual override	Nil	Non-locking push type	•	•	•	•	
4		E	Push-turn locking type (Manual)	•	•	•	•	

Gauge port view

* Same for all sizes

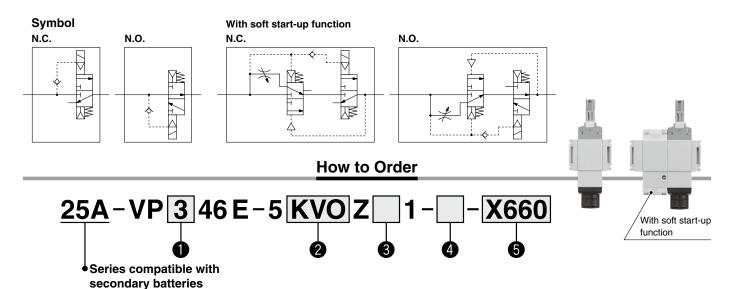


^{*} The 25A- series specifications and dimensions are the same as those of the standard model.





Residual Pressure Relief 3-Port Solenoid Valve 25A-VP346E/546E/746E/946E-X660/X661



Series 3 For 25A-AMS20 VP300 5 For 25A-AMS30 VP500 7 For 25A-AMS40 VP700 9 For 25A-AMS60 VP900

•		Pin		Sei	ies	
W M	12 connector	assignment	VP300	VP900		
ко	Without connector		_	_	_	•
KVO	Without connector		•	•	•	_

Manual override

_	_	
Г	Nil	Non-locking push type
Γ	F	Push-turn locking type (Manual)

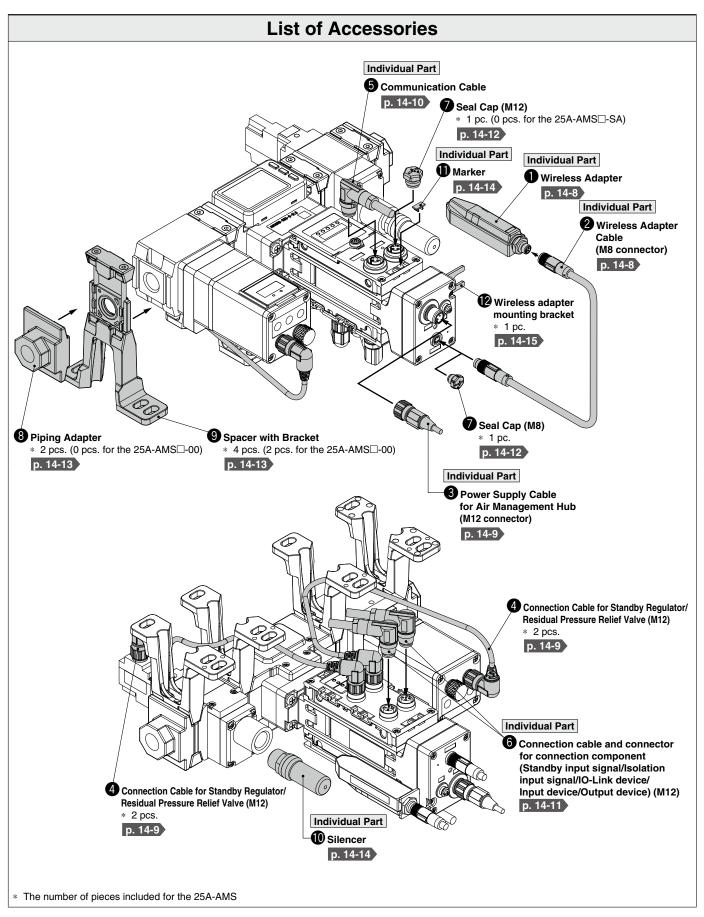
4 Sof	ft start-up function
Nil	None

Nil	None	
S	With soft start-up function	

5 Type of actuation

X660	N.C. (Normally closed)
X661	N.O. (Normally open)

25A-AMS20/30/40/60 Series Accessories



Accessories 25A-AMS20/30/40/60 Series

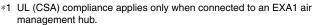
Wireless Adapter

Wireless adapter for air management hub EXA1 A wireless adapter needs to be connected to both the wireless base and the wireless remote.

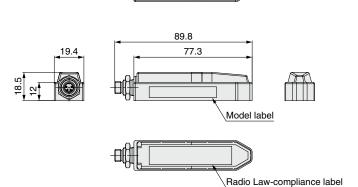
EXW1-A11N

Specifications

Specifications				
	Item	Specifications		
	Protocol	SMC original protocol (SMC encryption		
	Radio wave type (spread)	Frequency Hopping Spread Spectrum (FHSS		
	Frequency	2.4 GHz (2403 to 2481 MHz)		
	Number of frequency channels	79 ch		
Wireless	Channel bandwidth	1.0 MHz		
communication	Communication speed	1 Mbps		
Communication	Communication distance	Approx. 100 m (Depending on the operating environment)		
	Radio Law certificate	Refer to the SMC website for the latest information regarding in which countries the product is certified.		
Electrical	Power supply voltage range	24 VDC +10%		
	Current consumption	50 mA or less		
	Enclosure	IP67		
	Ambient temperature (Operating temperature)	0 to 50°C		
	Ambient temperature (Storage temperature)	−10 to 60°C		
	Ambient humidity	35 to 85%RH (No condensation)		
	Withstand voltage	500 VAC, 1 min		
General	Insulation resistance	500 VDC, 10 M Ω or more		
	Vibration resistance	Conforms to EN 61131-2 5 <= f < 8.4 Hz 3.5 mm $8.4 <= f < 150 \text{ Hz } 9.8 \text{ m/s}^2$		
	Impact resistance	Conforms to EN 61131-2 147 m/s ² , 11 ms		
	Standards	CE/UKCA marking, UL (CSA)*1		
	Weight	40 g		



^{*2} Order the wireless adapter cable separately.



/18, 4-pin, plug	Terminal no.	Description
3 1	1	24V (US1)
(° °)	2	Internal bus B
\00/	3	0V (US1)
4 2	4	Internal bus A
	Wireless a	dapter

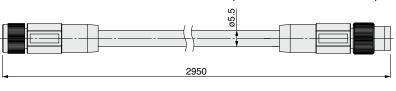
* Fixing bracket part no.: 25A-EXA1-AB1

* Only the screws are stainless steel.

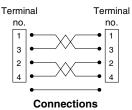
Wireless Adapter Cable [M8 connector, For EXW1-A11N, With connectors on both sides (socket/plug)]

Straight 2950 mm EXW1-AC030-SSPS

* This product must be used in a fixed position.









Item	Specifications
Cable O.D.	ø5.5 mm
Conductor nominal cross section	AWG24
Wire O.D. (Including insulator)	1.12 mm
Min. bending radius	22 mm



25A-AMS20/30/40/60 Series

3 Power Supply Cable (M12 connector, For EXA1)

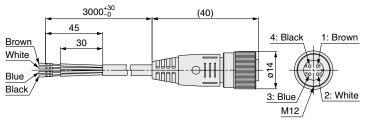
* The shape of the M12 connector is A-coded (Normal key).

90-ZS-37-A-X258

Lead wire with M12 connector

Cable Specifications

	Item	Specifications
Conductor	Nominal cross section	AWG23
	Outside diameter	Approx. 1.1 mm
Insulator	Color	Brown, Blue, Black, White
Sheath	Finished outside diameter	ø4

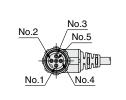


Pin no.	Pin name	Wire color
1	DC(+)	Brown
2	N.C.	White
3	DC(-)	Blue
4	N.C.	Black

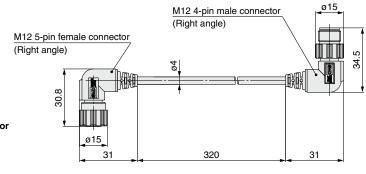
4 Connection Cable for Standby Regulator/Residual Pressure Relief Valve [With M12 angle connectors on both sides (male/female)]

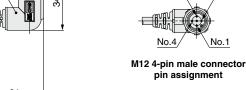
25A-EXA1-AC1 Cable length L: 320 mm 25A-EXA1-AC2 Cable length L: 220 mm

* Included with 25A-AMS□A/B air management systems



M12 5-pin female connector pin assignment





Component and Connection Cable Suitable Table

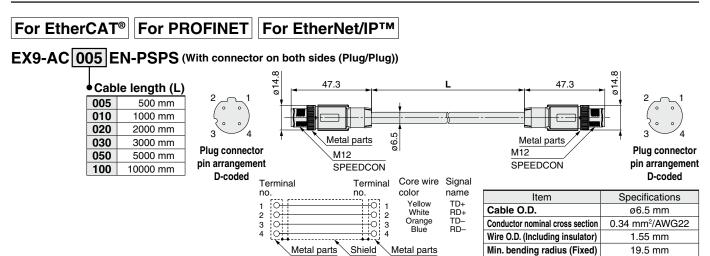
No.3

No.2

Body size	Standby electro- pneumatic regulator	Standby regulator	Residual pressure relief 3-port solenoid valve
20 30	05A EVAL 401	054 5744 400	25A-EXA1-AC2
40	25A-EXA1-AC1	25A-EXA1-AC2	
60			25A-EXA1-AC1

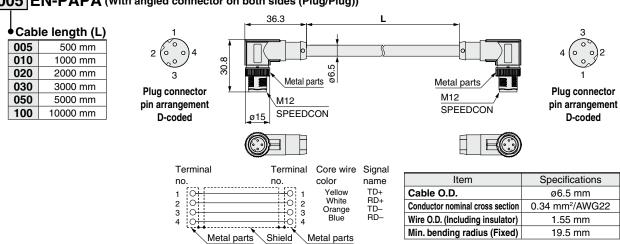
Accessories 25A-AMS20/30/40/60 Series

6 Communication Cable



Connections (Straight cable)

EX9-AC 005 EN-PAPA (With angled connector on both sides (Plug/Plug))



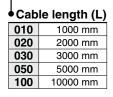
Connections (Straight cable)

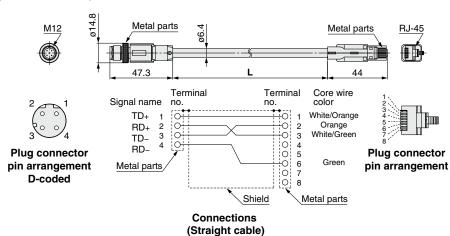
25A-AMS20/30/40/60 Series

6 Communication Cable



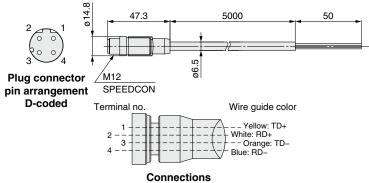
EX9-AC 020 EN-PSRJ (Plug/RJ-45 connector)





Item	Specifications
Cable O.D.	ø6.4 mm
Conductor nominal cross section	0.14 mm ² /AWG26
Wire O.D. (Including insulator)	0.98 mm
Min_bending radius (Fixed)	26 mm

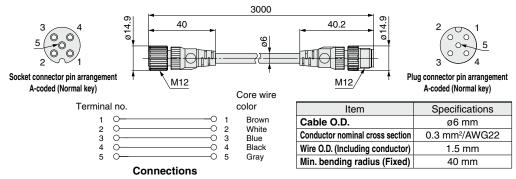
PCA-1446566 (Plug)



Item	Specifications
Cable O.D.	ø6.5 mm
Conductor nominal cross section	AWG22
Wire O.D. (Including insulator)	1.55 mm
Min. bending radius (Fixed)	45.5 mm

6 Connection cable and connector for connection component (Standby input signal/Isolation input signal/IO-Link device/Input device/Output device) (M12)

IO-Link Device Cable 90-ZS-37-A-X547





Accessories 25A-AMS20/30/40/60 Series

Seal Cap (10 pcs.)

Be sure to mount a seal cap on any unused I/O connectors. Otherwise, the specified enclosure cannot be maintained.

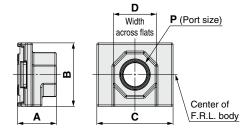






25A-AMS20/30/40/60 Series

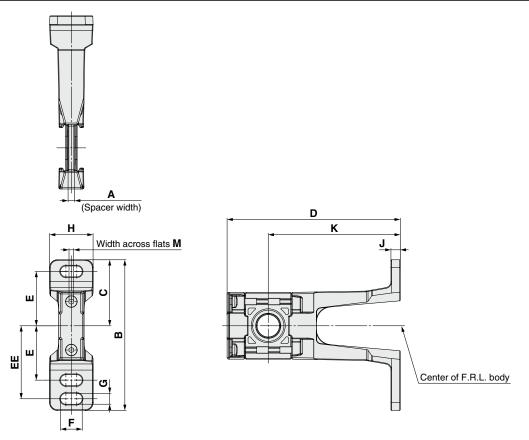
Piping Adapter A piping adapter allows for the installation/removal of the component without removing the piping and thus makes maintenance easier. E 200 -01 -D Applicable size Port size Symbol | Port size | 25A-AMS20 | 25A-AMS30 | 25A-AMS40 | 25A-AMS60 200 25A-AMS20 **300** 25A-AMS30 01 1/8 Symbol Thread type 400 25A-AMS40 02 1/4 Nil Rc 600 25A-AMS60 03 3/8 G 04 1/2 N NPT 06 3/4 10 1



Model	P	Α	В	С	D
E200-□01-D	1/8	24	35	42	24
E200-□02-D	1/4	24	35	42	24
E300-□02-D	1/4	27	43	53	30
E300-□03-D	3/8	27	43	53	30
E400-□03-D	3/8	30	51	71	36
E400-□04-D	1/2	30	51	71	36
E600-□06-D	3/4	39	64	90	46
E600-□10-D	1	39	64	90	46

^{*} A spacer with bracket is required for modular unit.

Spacer with Bracket

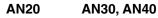


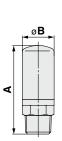
Model	Α	В	С	D	E	EE	F	G	Н	J	K	М	Applicable size
25A-Y200T-2-D	3.2	97	42.5	106	35	47	14	7	28	6	85	2	25A-AMS20
25A-Y300T-2-D	4.2	97	42.5	111.5	35	47	14	7	28	6	85	3	25A-AMS30
25A-Y400T-1-D	5.2	115	50	120.5	40	55	18	9	32	7	85	3	25A-AMS40
25A-Y600T-2-D	6.2	140	60	145	50	70	20	11	37	8	100	4	25A-AMS60

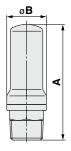
Accessories 25A-AMS20/30/40/60 Series

Silencer

Compact Resin Type





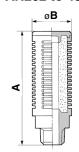




Dimensions [mm								
Model	Port size R	Α	В					
AN20-02	1/4	45	16.5					
AN30-03	3/8	58.5	20					
AN40-04	1/2	68	24					

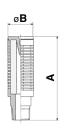
High Noise Reduction Type

AN202 to 402





High Noise Reduction Type ANA1-06





Dimensions [mn									
	Model	Port size R	Α	В					
	AN202-02	1/4	64	22					
	AN302-03	3/8	84	28					
	AN402-04	1/2	95	34					

Dimensions			[mm]
Model	Port size R	Α	В
ANA1-06	3/4	111	46

Compatibility Chart for Residual Pressure Relief Valve and Silencers

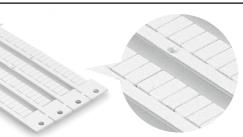
Companionity Chart for recodular resource femer valve and Chericers									
	Silencer	C	Compact resin type			High noise reduction type			
	Model	AN20-02	AN30-03	AN40-04	AN202-02	AN302-03	AN402-04	ANA1-06	
	Port size	1/4	3/8	1/2	1/4	3/8	1/2	3/4	
25A-VP346E	X660 (N.C.)	0	_	_	0	_	_	_	
23A-VP340E	X661 (N.O.)	0	_	_	_	_	_	_	
054 VD5405	X660 (N.C.)	_	0	_	_	0	_	_	
25A-VP546E	X661 (N.O.)	_	0	_	_	_	_	_	
25A-VP746E	X660 (N.C.)	_	_	0	_	_	0	_	
25A-VP/46E	X661 (N.O.)	_	0	_	_	_	_	_	
25A-VP946E	X660 (N.C.)	_	_	_	_	_	_	O*1	
	X661 (N.O.)	_	_	_	_	_	_	0	

^{*1} Combined with silencer bushing: 25A-AMS-AB1

Marker (1 sheet, 88 pcs.)

The signal name of I/O device and each unit address can be entered and mounted on each unit.





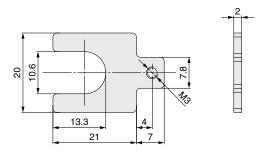


25A-AMS20/30/40/60 Series

@ Wireless Adapter Mounting Bracket

1 round head combination screw (M3 x 10) is included.

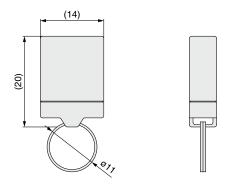
25A-EXA1-AB1



® IO-Link Device Tool License Key

USB dongle **EX9-ZSW-LDT1**





* The IO-Link Device Tool V5-PE (V5 or later only) manufactured by TMG Technologie und Engineering GmbH (hereinafter referred to as TMG) is required for setting IO-Link devices. The IO-Link Device Tool can be downloaded for free from TMG's website. However, to use it for more than 30 days, a license key for the IO-Link Device Tool is required.

Plug-in Connector Connecting Base

D-sub Connector

Type 10 Side Ported

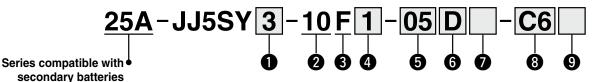
25A-JSY1000/3000 Series

(E UK RoHS



Internal Pilot

How to Order Manifolds

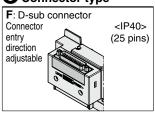


A Series

00.	100
1	JSY1000
3	JSY3000

2 Туре

3 Connector type



4 Connector entry direction

1: Upward	2: Lateral

Valve stations

F: D-sub connector (25 pins)			
Symbol	mbol Stations Note		
02	2 stations		
i		Double wiring*1	
12	12 stations	-	
02	2 stations	Charified leveut*2	
i		Specified layout*2 (Up to 16 solenoids available)	
16	16 stations	(Op to 10 soleriolds available)	

- *1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * This also includes the number of blanking plates.

6 P, E port entry

U	U side (2 to 10 stations)
D D side (2 to 10 stational B Both sides (2 to 16 stational B B B B B B B B B B B B B B B B B B B	

SUP/EXH block assembly

Nil	Internal pilot	
s	Internal pilot,	
3	Built-in silencer	

* The 3/5(E) port is plugged for the built-in silencer type.

8A, B port size (Metric/One-touch fitting)

Symbol		A, B port	JSY1000	JSY3000	
C4		ø4	•	_	
C6	Straight	ø6	•	•	
C8	Stra	ø8	_	•	
CM*1		Straight port, mixed sizes	•	•	8
		port size uch fittings)	ø8	ø10	

- *1 Indicate the sizes on the manifold specification sheet for "CM."
- The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

9 Mounting and Option

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

DIN Rail Option

Nil	DIN rail mounting (With DIN rail)		
0	DIN rail mounting (Without DIN rail)		
3	For 3 stations	Specify a length longer than that of the standard rail.	
	÷		
16	For 16 stations	iliai oi ilie siailuatu tall.	

- * Enter the number of stations inside \square when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown
- Refer to the Web Catalog for details on securing the DIN rail mounting type manifold.



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

How to Order Manifold Assembly

Example (25A-JJ5SY3-10F1-□) 2-position single (24 VDC) 25A-JSY3200-5U (3 sets) Manifold base (5 stations) 25A-JJ5SY3-10F1-05D-C8

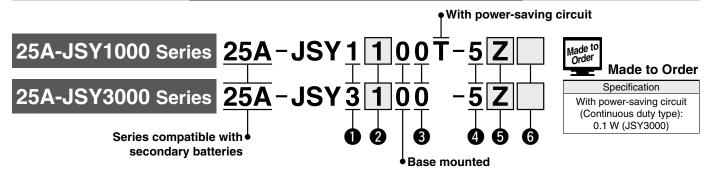
- 25A-JJ5SY3-10F1-05D-C8 ···1 set (Type 10 5-station manifold base part no.)

 * 25A-JSY3100-5U ···············2 sets (2-position single part no.)
- * 25A-JSY3200-5U3 sets (2-position double part no.)
 - The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.
- · For the valve arrangement, the valve closest to the D side is considered the 1st station
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to the **Web Catalog** for valve specifications.



Series

<u> </u>		
1	JSY1000	
3	JSY3000	

3 Pilot valve exhaust method

_	
_ ^	Pilot valve individual exhaust
U	i ilot vaive iliulvidual exilaust

4 Rated voltage

ſ	5	24 VDC	

∧ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification. Refer to "Made to Order."

For the JSY1000 series, only the power-saving circuit specification is available.

2 Type of actuation

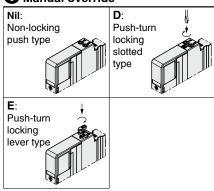
1	2-position	Single
2	2-position	Double
3		Closed center
4	3-position	Exhaust center
5		Pressure center
Α	4-nosition	N.C./N.C.
В		N.O./N.O.
С	duai 5-port	N.C./N.O.

5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
U			Non-polar
Z	•	•	Positive common
NZ			Negative common

- Only "Z" and "NZ" types are available for the JSY1000 series.
- When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the Web Catalog.

6 Manual override



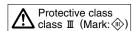
- Push-turn locking lever type "E" is not available for the JSY1000.
- * When ordering a valve individually, the base gasket is not included.

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance. Refer to the **Web Catalog** for base gasket part numbers.

Refer to page 24 for mounting screw part numbers.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.





Plug-in Connector Connecting Base

Terminal Block Box

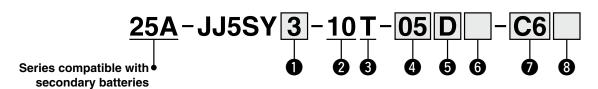
Type 10 Side Ported

25A-JSY1000/3000 Series

CE UK ROHS

Internal Pilot

How to Order Manifolds



Series

1 JSY1000

JSY3000

Type

10 Side ported

Wiring
T Terminal block box

4 Valve stations

T: Terminal block box			
Symbol	Stations	Note	
02	2 stations		
	:	Double wiring*1	
10	10 stations		
02	2 stations	Cracifical lava 4*2	
:	:	Specified layout*2 (Up to 16 solenoids available)	
16	16 stations	(Op to 10 soleriolds available)	

- *1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- *3 This also includes the number of blanking plates.

5 P, E port entry

U		U side (2 to 10 stations)
	D	D side (2 to 10 stations)
	В	Both sides (2 to 16 stations)

6 SUP/EXH block assembly

	<u> </u>
Nil Internal pilot	
S	Internal pilot, Built-in silencer

- * The 3/5(E) port is plugged for the built-in silencer type.
- * When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

A, B port size (Metric/One-touch fitting)

• ri, 2 peri eize (metrie, erie teden niting)					
Symbol		A, B port	JSY1000	JSY3000	
C4		ø4	•	_	
C6	Straight	ø6	•	•	
C8	Stra	ø8	_	•	0 900 99
CM*1		Straight port, mixed sizes	•	•	9
		port size uch fittings)	ø8	ø10	

- *1 Indicate the sizes on the manifold specification sheet for "CM."
- * The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

13 Mounting and Option

	<u> </u>
Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- Refer to the Web Catalog for details on securing the DIN rail mounting type manifold.

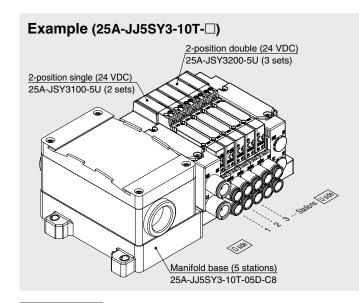
DIN Rail Option

Nil	DIN rail mounting (With DIN rail)			
0	DIN rail mounting (Without DIN rail)			
3	For 3 stations	0 " 1 " 1		
	:	Specify a length longer that that of the standard rail.		
16	For 16 stations	that of the standard rail.		



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

How to Order Manifold Assembly



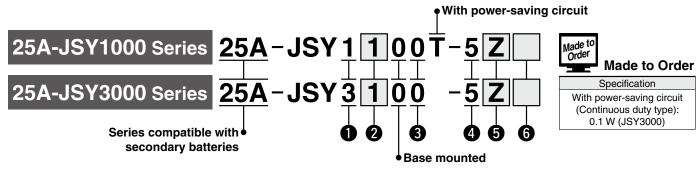
- 25A-JJ5SY3-10T-05D-C8 1 set (Type 10 5-station manifold base part no.) * 25A-JSY3100-5U 2 sets (2-position single part no.) * 25A-JSY3200-5U 3 sets (2-position double part no.)
- ➤The asterisk denotes the symbol for the assembly.

 Prefix it to the part numbers of the valve, etc.
- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- · Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet

Internal Pilot

How to Order Valves (With mounting screw)

Refer to the Web Catalog for valve specifications.



Series

O CO1100	
1	JSY1000
3	JSY3000

3 Pilot valve exhaust method

0	Pilot valve individual exhaust

4 Rated voltage

That	eu voitage		
5		24 VDC	

⚠ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification. Refer to "Made to Order."

For the JSY1000 series, only the power-saving circuit specification is available.

2 Type of actuation

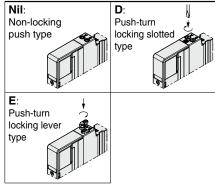
1	2-position	Single	
2	2-position	Double	
3		Closed center	
4	3-position	Exhaust center	
5		Pressure center	
Α	4-position dual 3-port	N.C./N.C.	
В		N.O./N.O.	
С		N.C./N.O.	

5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
U			Non-polar
Z	•	•	Positive common
NZ			Negative common

- Only "Z" and "NZ" types are available for the JSY1000 series.
- When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the Web Catalog.

6 Manual override



- Push-turn locking lever type "E" is not available for the JSY1000.
- * When ordering a valve individually, the base gasket is not included.

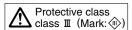
Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to the **Web Catalog** for base gasket part numbers.

Refer to page 24 for mounting screw part numbers.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.





Plug-in Connector Connecting Base

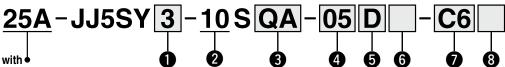
25A-JSY1000/3000 Series

(E UK RoHS



Internal Pilot

How to Order Manifolds



Series compatible with secondary batteries

Series

1	JSY1000
3	JSY3000

SI unit (Output polarity, Protocol, Number of outputs, Communication connector)

Symbol (Our Positive common (NPN)		Protocol	Number of outputs	Communication connector
0	*1	Without	SI unit	
QA	QAN	DeviceNet™	32	M12
QB	QBN	Devicemet	16	IVITZ
NA	NAN	PROFIBUS	32	M12
NB	NBN	DP	16	IVITZ
VA	VAN	CC-Link	32	M12
VB	VBN	CC-LITIK	16	IVITZ
DA	DAN	EtherCAT	32	M12
DB	DBN	EllielCAT	16	IVIIZ
FA	FAN	PROFINET	32	M12
FB	FBN	FNOFINET	16	IVITZ
EA	EAN	EtherNet/IP™	32	M12
EB	EBN	Ellelivel/IF	16	IVITZ

- Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common specification of the valves to be used.
- DIN rail cannot be mounted without SI unit.

2 Type

10	Side ported

5 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
В	Both sides (2 to 16 stations)

6 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

- The 3/5(E) port is plugged for the built-in silencer type.
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

Valve stations

In the case of the 32-output SI unit

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
16	16 stations	

In the case of the 16-output SI unit

Symbol	Stations	Note
02	2 stations	
1	:	Double wiring*1
08	8 stations	
02	2 stations	0
i	:	Specified layout*2 (Up to 16 solenoids available)
16	16 stations	

- *1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * This also includes the number of blanking plates.
- For the product without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the lavout is specified, indicate it on the manifold specification sheet.

A, B port size (Metric/One-touch fitting)

Symbol	A, B port		JSY1000	JSY3000	
C4		ø4	•	_	
C6	Ctroight	ø6	•	•	
C8	Straight	ø8	_	•	
CM*1		Straight port, mixed sizes	•	•	08
	P, E port size (One-touch fittings)		ø8	ø10	

- *1 Indicate the sizes on the manifold specification sheet for "CM."
- * The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

8 Mounting and Option

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

- Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- Refer to the Web Catalog for details on securing the DIN rail mounting type manifold.
- DIN rail mounting (D□) is not available for the product without the SI unit (S0).

DIN Rail Option

	and the second s			
Nil	DIN rail mounting (With DIN rail)			
0	DIN rail mounting (Without DIN rail)			
3	For 3 stations	0		
:	:	Specify a length longer than that of the standard rail.		
16	For 16 stations	that of the Standard rail.		

- Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to the Web Catalog for the DIN rail part number.)
- * The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For the part numbers of the SI units to be mounted, refer to the Web Catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com



How to Order Manifold Assembly

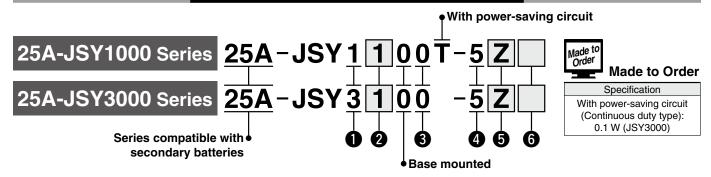
Example (25A-JJ5SY3-10SNAN-□) 2-position double (24 VDC) 25A-JSY3200-5U (3 sets) 2-position single (24 VDC) 25A-JSY3100-5U (2 sets) Manifold base (5 stations) 25A-JJ5SY3-10SNAN-05D-C8

- - →The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.
- · For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to the Web Catalog for valve specifications.



Series

1	JSY1000
3	JSY3000

3 Pilot valve exhaust method

4 Rated voltage

_	U
5	24 VDC

∧ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification. Refer to "Made to Order."

For the JSY1000 series, only the power-saving circuit specification is available.

2 Type of actuation

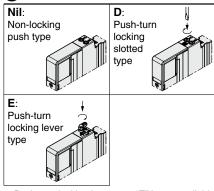
1	2-position	Single	
2	2-position	Double	
3		Closed center	
4	3-position	position Exhaust center	
5		Pressure center	
Α	4-position dual 3-port	N.C./N.C.	
В		N.O./N.O.	
C		N.C./N.O	

5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification		
U	•	•	Non-polar		
Z			Positive common		
NZ			Negative common		

- * Select "U" or "Z" for the valve when the SI unit output polarity is Nil (positive common). Select "U" or "NZ" for the valve when the SI unit output polarity is N (negative common).
- Only "Z" and "NZ" types are available for the JSY1000 series.
- When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the Web Catalog.

6 Manual override



- Push-turn locking lever type "E" is not available for the JSY1000.
- * When ordering a valve individually, the base gasket is not included.

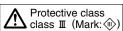
Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to the **Web Catalog** for base gasket part numbers.

Refer to page 24 for mounting screw part numbers.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.





Plug-in Connector Connecting Base

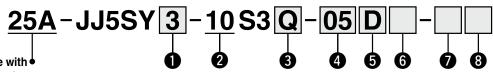
25A-JSY1000/3000 Series

(E UK RoHS



Internal Pilot

How to Order Manifolds



Series compatible with secondary batteries

1 Series		
1	JSY1000	
3	JSY3000	

2 Туре

Side ported

3 SI unit

0	Without SI unit	
Q	DeviceNet™ (Positive common NPN CC-Link (Positive common NPN)	
V		

* Ensure a match with the common specification of the valve to be used.

4 Valve stations

Symbol	Stations	Note	
02	2 stations		
:	:	Double wiring*1	
08	8 stations		
02	2 stations	Considered lawww.k*2	
:	÷	Specified layout*2 (Up to 16 solenoids available)	
16	16 stations		

- *1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * This also includes the number of blanking

5 P, E port entry

U	U side (2 to 10 stations)	
D D side (2 to 10 stations)		
В	Both sides (2 to 16 stations)	

6 SUP/EXH block

Nil	Internal pilot	
S	Internal pilot, Built-in silencer	

* The 3/5(E) port is plugged for the built-in silencer type.

A, B port size (Metric/One-touch fitting)

Symbol	A, B port		JSY1000	JSY3000	
C4		ø4	•	_	
C6	- Straight	ø6	•	•	
C8		ø8	_	•	
CM*1		Straight port, mixed sizes	•	•	0
P, E port size (One-touch fittings)		ø8	ø10		
A hadinate the sine of the monifold and ifficiency continues to the continues of the contin					

- *1 Indicate the sizes on the manifold specification sheet for "CM."
- * The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

8 Mounting and Option

Symbol	Mounting	
Nil	Direct mounting	
D	DIN rail mounting	

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to the Web Catalog for details on securing the DIN rail mounting type manifold.

DIN Rail Option

Nil	DIN rail mounting (With DIN rail)		
0	DIN rail mounting (Without DIN rail)		
3	For 3 stations	0	
:	1	Specify a length longer that that of the standard rail.	
16	For 16 stations	lilat of the Standard rail.	

* If the DIN rail must be mounted without an SI unit, select D0. Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to the Web Catalog for the DIN rail part number.)

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX120 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For the part numbers of the SI units to be mounted, refer to the Web Catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com



How to Order Manifold Assembly

Example (25A-JJ5SY3-10S3Q-□) 2-position single (24 VDC) 25A-JSY3200-5U (3 sets) Manifold base (5 stations) 25A-JJ5SY3-10S3Q-05D-C8

- 25A-JJ5SY3-10S3Q-05D-C8 ··1 set (Type 10 5-station manifold base part no.)

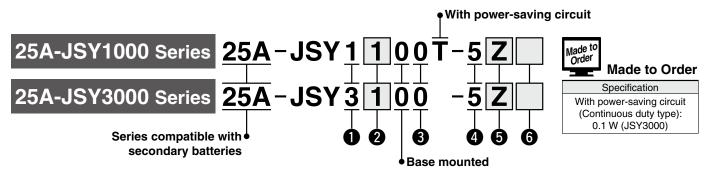
 * 25A-JSY3100-5U ················2 sets (2-position single part no.)

 * 25A-JSY3200-5U ················3 sets (2-position double part no.)
 - →The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.
- · For the valve arrangement, the valve closest to the D side is considered the 1st station.
- · Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet

Internal Pilot

How to Order Valves (With mounting screw)

Refer to the Web Catalog for valve specifications.



Series

O 001100		
	1	JSY1000
	3	JSY3000

3 Pilot valve exhaust method

0	Pilot valve individual exhaust

4 Rated voltage

5	24 VDC

⚠ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

For the JSY1000 series, only the power-saving circuit specification is available.

2 Type of actuation

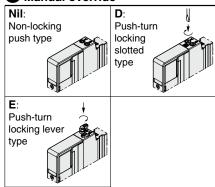
1	2-position	Single
2		Double
3	3-position	Closed center
4 3-position 5		Exhaust center
		Pressure center
A B C	4	N.C./N.C.
	4-position dual 3-port	N.O./N.O.
		N.C./N.O.

5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
U		•	Non-polar
Z		•	Positive common

- Only "Z" and "NZ" types are available for the JSY1000 series.
- When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the Web Catalog.

6 Manual override



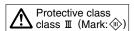
- Push-turn locking lever type "E" is not available for the JSY1000.
- When ordering a valve individually, the base gasket is not included.

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to the **Web Catalog** for base gasket part numbers.

Refer to page 24 for mounting screw part numbers.

* The 25A- series specifications and dimensions are the same as those of the standard model.



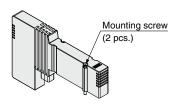


25A-JSY1000/3000 Series Manifold Options

■ Blanking plate assembly

(With two mounting screws)

Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



How to Order Blanking Plate Assembly

25A-JSY 3 1M-26P-1A

Series

1 JSY1000
3 JSY3000

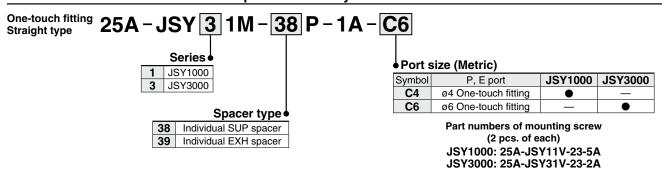
SI Unit Part Nos

Description	SI unit part no.	Note
	EX260-SPR1-X117	PROFIBUS DP M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPR2-X117	PROFIBUS DP M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPR3-X117	PROFIBUS DP M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPR4-X117	PROFIBUS DP M12 connector, 16 outputs, Positive common (NPN)
	EX260-SDN1-X117	DeviceNet® M12 connector, 32 outputs, Negative common (PNP)
	EX260-SDN2-X117	DeviceNet® M12 connector, 32 outputs, Positive common (NPN)
	EX260-SDN3-X117	DeviceNet® M12 connector, 16 outputs, Negative common (PNP)
	EX260-SDN4-X117	DeviceNet® M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEC1-X117	EtherCAT M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEC2-X117	EtherCAT M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEC3-X117	EtherCAT M12 connector, 16 outputs, Negative common (PNP)
EX260 SI unit	EX260-SEC4-X117	EtherCAT M12 connector, 16 outputs, Positive common (NPN)
EA260 SI UIII	EX260-SMJ1-X117	CC-Link M12 connector, 32 outputs, Negative common (PNP)
	EX260-SMJ2-X117	CC-Link M12 connector, 32 outputs, Positive common (NPN)
	EX260-SMJ3-X117	CC-Link M12 connector, 16 outputs, Negative common (PNP)
	EX260-SMJ4-X117	CC-Link M12 connector, 16 outputs, Positive common (NPN)
	EX260-SPN1-X117	PROFINET M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPN2-X117	PROFINET M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPN3-X117	PROFINET M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPN4-X117	PROFINET M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEN1-X117	EtherNet/IP™ M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEN2-X117	EtherNet/IP™ M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEN3-X117	EtherNet/IP™ M12 connector, 16 outputs, Negative common (PNP)
	EX260-SEN4-X117	EtherNet/IP™ M12 connector, 16 outputs, Positive common (NPN)
EX120 SI unit	EX120-SMJ1-X220	CC-Link (Terminal block, 16 outputs, Positive common (NPN))
	EX120-SDN1-X220	DeviceNet® (Terminal block, 16 outputs, Positive common (NPN))

One-touch Fittings Part Nos.

	Series	25A-JSY1000		25A-JSY3000	Note
Port size		6.5 mm pitch	9 mm pitch	25A-3513000	Note
	ø4	25A-KQSY10-C4-X1336	_	_	
A, B port	ø6	_	25A-KQSY11-C6-X1336	25A-KQSY30-C6	The west supplies for 4 siece
	ø8	_	-	25A-KQSY30-C8-X1336	The part number is for 1 piece. (Sales unit: 10 pcs.)
P, E port	ø8	25A-KQSY3	0-C8-X1336	_	(Sales utilt. 10 pcs.)
F, E port	ø10	-	_	25A-KQSY31-C10-X1336	

How to Order Individual SUP/EXH Spacer Assembly





Manifold Options 25A-JSY1000/3000 Series

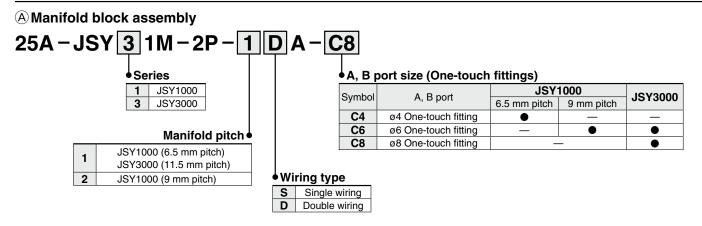
Manifold Parts Nos./For the 25A-JJ5SY1-10, 25A-JJ5SY3-10

Description	25A-JSY1000		25A-JSY3000	
Description	6.5 mm pitch	9 mm pitch	25A-0513000	
Tie-rod for additional stations	JSY11M-49P-4-1-A	JSY11M-49P-3-1-A	JSY31M-49P-2-1-A	
rie-rod for additional stations	(6.5 mm pitch)	(9 mm pitch)	(11.5 mm pitch)	
Tie-rod	JSY11M-49P-4-□-A	JSY11M-49P-3-□-A	JSY31M-49P-2-□-A	
ne-rod	(6.5 mm pitch)	(9 mm pitch)	(11.5 mm pitch)	
Valve mounting screw	25A-JSY1	1V-23-4A	25A-JSY31V-23-1A	
valve illounting screw	(M1.4 x 21.5)		(M2 x 25)	
Clamp bracket	25A-JSY11M-15P-1A (Refer to the table below.) 25A-JSY11M-15P-2A (Refer to the table below.)		25A-SY30M-15-1A	
(for connector connecting base)			23A-313UW-13-1A	

Table. 25A-JSY1000 series clamp bracket

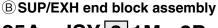
Wiring (JSY1000 series)		25A-JSY11M-15P-1A	25A-JSY11M-15P-2A
F D-sub connector		•	_
Т	Terminal block box	_	•
S	EX260	•	_
S3	EX120	•	_

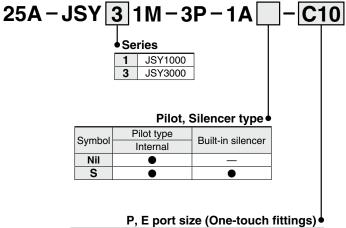
Manifold Parts Nos.



25A-JSY1000/3000 Series

Manifold Parts Nos.





	DIN rail mounting (without DIN rail)		
D00*1	DIN rail mounting (Without DIN rail)		
*1 Part number only for the 25A-JSY1000 Part number is different depending on the wir			

Mounting

Refer to Table 1.

Nil

Table 1. JSY1000 series DIN rail mounting

Direct mounting

Symbol	Wiring	
D0	D-sub connector (F type) EX260 (S □□ type) EX120 (S3 type)	
D00	Terminal block box (T type)	

Clamp bracket

Symbol C8

C10

00

Series		Part no.	
25A-JSY1000	For D0	25A-JSY11M-15P-1A	
25A-J511000	For D00	25A-JSY11M-15P-2A	
25A-JSY3000		25A-SY30M-15-1A	

P, E port

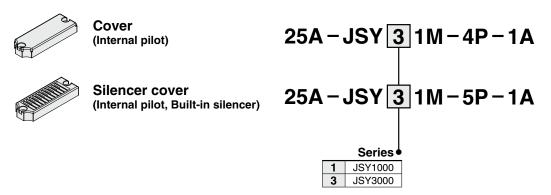
ø8 One-touch fitting

ø10 One-touch fitting

Plug

JSY1000 JSY3000

■ Cover, Silencer cover for SUP/EXH (end) block assembly

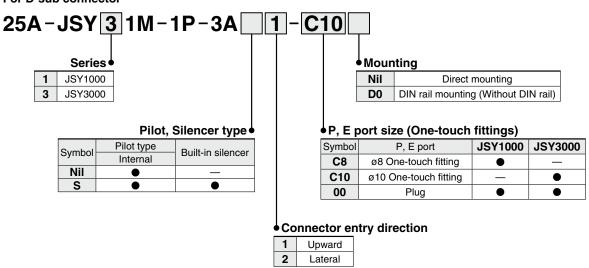


Manifold Options 25A-JSY1000/3000 Series

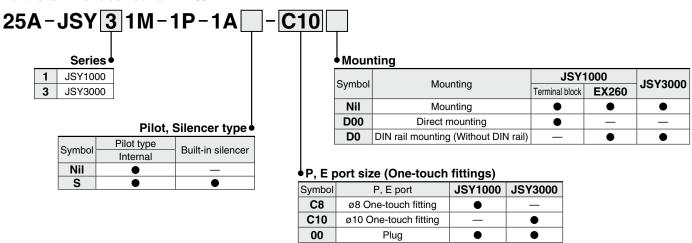
Manifold Parts Nos.

© SUP/EXH block assembly

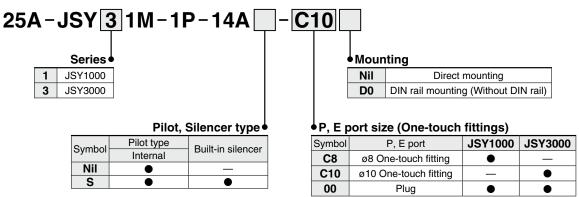
For D-sub connector



For the terminal block box or EX260





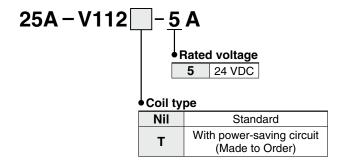


^{*} Refer to page 25 for clamp bracket part numbers.



25A-JSY1000/3000 Series

How to Order Pilot Valves



Pilot cover

25A-SY30V-25AS (For 25A-JSY3000)

* The pilot valve of the 25A-JSY1000 series cannot be replaced.



Type 40 Side Ported

Non Plug-in Metal Base

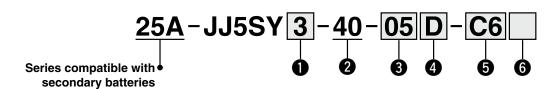
25A-JSY1000/3000 Series

(E UK ROHS



Internal Pilot

How to Order Manifolds



6 Thread type

Nil Rc

Series JSY1000 JSY3000

2 1	Гуре	
40)	Side ported

Valve stations

Symbol	Stations	
02	2 stations	
:	:	
20	20 stations	

4 P. E port entry

<u> </u>		
U	U side*1	
D	D side*1	
В	Both sides	

*1 Plugs are mounted on the opposite side of the selected ports.

6 A, B port size Thread piping

Symbol	A, B port	JSY1000	JSY3000
М3	M3 x 0.5	•	_
M5	M5 x 0.8	•	•
01	1/8	_	•

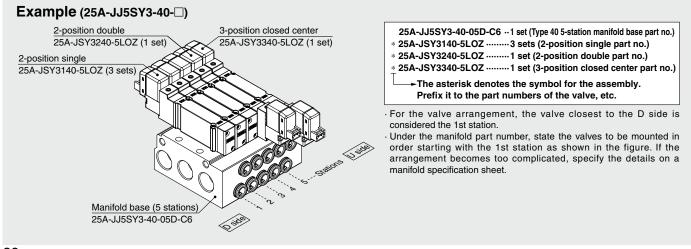
One-touch fitting (Metric)

S	ymbol	A, B port	JSY1000	JSY3000	
Fixed	C4	ø4	•	_	60
Fix	C6	ø6	_	•	GOR
Ф	KC4	ø4	•	_	Type 40 (Side ported)
seable	KC6	ø6	•	•	(Side ported)
Replaceable	KC8	ø8	_	•	
ш	M*1	A, B ports mixed	_	•	
		port size ad piping)	1/8	1/4	

^{*1} When ports are mixed sizes, indicate the piping specifications on the manifold specification sheet.

For details, refer to the Web Catalog.

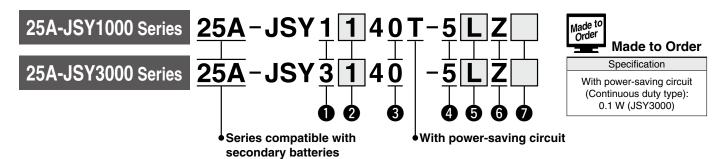
How to Order Manifold Assembly



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Internal Pilot

How to Order Valves (With two mounting screws)



Series

1	JSY1000
3	JSY3000

2 Type of actuation

1	1 2-position single		
2	2-position double		
3	3-position closed center		
4	3-position exhaust center		
5	3-position pressure center		
Α	Dual 3-port (N.C./N.C.)		
B Dual 3-port (N.O./N.O			
C Dual 3-port (N.C./N.O.)			

3 Pilot valve exhaust method

Pilot valve individual exhaust

4 Rated voltage

6 Light/surge voltage suppressor

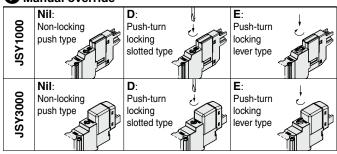
Z With light/surge voltage suppressor

5 Electrical entry

	L plug connector		M plug connector		
	L	LO	M	MO	
JSY1000	L: With lead wire (300 mm)	LO: Without connector	M: With lead wire (300 mm)	MO: Without connector	
JSY3000	L: With lead wire (300 mm)	LO: Without connector	M: With lead wire (300 mm)	MO: Without connector	

* Refer to the Web Catalog for the lead wire length of L and M plug connectors.

Manual override



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⚠ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification. Refer to "Made to Order."

For the JSY1000 series, only the power-saving circuit specification is available.

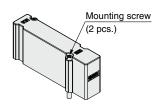


25A-JSY1000/3000 Series Manifold Options

■ Blanking plate assembly

(With two mounting screws)

Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



How to Order Blanking Plate Assembly

25A-JSY 3 1M-26-1A
Series •

1 JSY1000 3 JSY3000

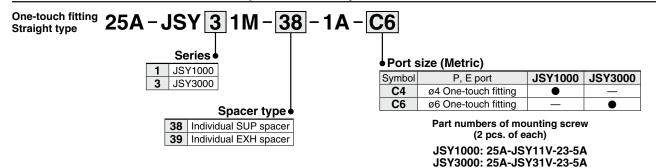
Valve Mounting Screw Part No.

	<u> </u>			
Description	Part	Note		
Description	25A-JJ5SY1	25A-JJ5SY3	Note	
Round head combination screw	25A-JSY11V-23-4A	25A-JSY31V-23-4A	Part numbers shown on the left are for 10 valves. (20 pcs.)	

One-touch Fittings Part Nos.

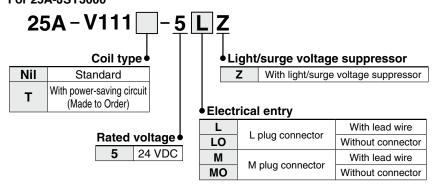
one todon i itango i di i itooi						
	Port size		25A-JSY1000	25A-JSY3000		
		ø4 One-touch fitting (Straight type)	25A-KQSY10-C4-X1336	_		
,	Metric size	ø6 One-touch fitting (Straight type)	25A-KQSY11-C6-X1336	25A-KQSY30-C6		
		ø8 One-touch fitting (Straight type)	_	25A-KQSY30-C8-X1336		

How to Order Individual SUP/EXH Spacer Assembly



How to Order Pilot Valves

For 25A-JSY3000



^{*} For the 25A-JSY1000, the pilot valve is the same as that of the standard model.





Type 10 Side Ported Type 11 **Bottom Ported**

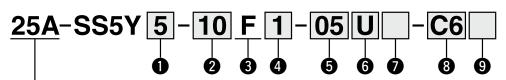
Plug-in Connector Connecting Base

D-sub Connector

25A-SY5000/7000 Series CANUS



How to Order Manifolds



Series compatible with secondary batteries

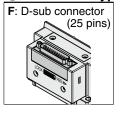
Series

5	SY5000
7	SY7000

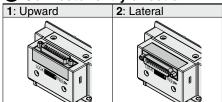
2 Type

10	Side ported
11	Bottom ported

3 Connector type



4 Connector entry direction



Valve stations

F: D-sub connector (25 pins)						
	Stations	Note				
02	2 stations					
:	:	Double wiring*1				
12	12 stations					
02	2 stations	Specified layout*2				
:	:	(Up to 24 solenoids				
24	24 stations					

*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.

The use of a 2-position single solenoid will result in an unused control signal. If

this is not desired, order with a specified layout.

- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * The blanking plate assembly is included in this number.

A P F nort entry

_	<u>, </u>	<u> </u>
	U	U side (2 to 10 stations)
	D	D side (2 to 10 stations)
	В	Both sides (2 to 24 stations)

SUP/EXH block assembly

• • • • • • • • • • • • • • • • • • •					
Nil	Internal pilot				
s	Internal pilot,				
5	Built-in silencer				
R	External pilot				

The 3/5(E) port is plugged for the built-in silencer type.

8 A, B port size (Metric)

Symbol			Side	e 10/ ported	Type Bottom	ported	
			SY5000	SY7000	SY5000	SY7000	
C4		ø4	•	_	•	_	
C6	<u>+</u>	ø6	•	•	•	•	
C8	ligh	ø8	•	•	•	•	
C10	Straight	ø10	_	•	_	•	
C12	U)	ø12	_	•	_	•	015000
CM*1		Straight port, mixed sizes	•	•	•	•	
(0	P, E port size (One-touch fittings)		ø10	ø12	ø10	ø12	

- *1 Indicate the sizes on the manifold specification sheet for "CM."
- * The direction of P, E port fittings is the same as for the A, B port.

Mounting

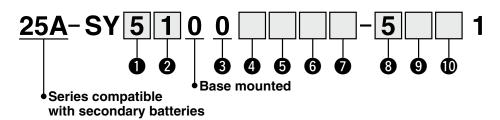
Woulding			
Cumbal	Mauntina	Opt	tion
Symbol	iviouriting	Name plate	Station number
Nil		_	_
AA	Direct mounting		
BA			_
$D\square$	D DIN rail mounting	_	_
A□			
В□		•	_

DIN Rail Ontion

Dily Hall Option		
Nil	Direct mounting	
	Without DIN rail (with bracket)	
3	For 3 stations	Specify a longer rail
:		than the total length
24	For 24 stations of specified stations.	

- * Enter the number of stations inside \square when it is larger than the number of valve stations. (Refer to "DIN Rail Option" above.)
- Only direct mounting is available for the type 11 bottom-ported
 - * The 25A- series specifications and dimensions are the same as those of the standard model.





A Series

U OCITOO		
	5	SY5000
	7	SY7000

2 Type of actuation

1	2-position single	
2	2-position double	
3	3-position closed center	
4	3-position exhaust center	
5	3-position pressure center	
Α	4-position dual 3-port valve (N.C./N.C.)	
В	B 4-position dual 3-port valve (N.O./N.O	
С	4-position dual 3-port valve (N.C./N.O.)	

A Cool tuno

Sear type		ai type		
	0		Rubber seal	_

A Pilot type

T not type		
	Nil	Internal pilot
	R	External pilot

* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the Web Catalog.

Back pressure check valve (Built-in valve type)

(Built iii vaivo typo)	
Nil	None
Н	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

6 Pilot valve option

Nil	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

Coil type

	-71
Nil	Standard
Т	With power-saving circuit (Continuous duty type)

- * Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
- * Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

Rated voltage

O na	ieu voitage
5	24 VDC
6	12 VDC

9 Light/surge voltage suppressor and common specification

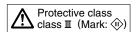
and common opecimeanen		
Nil	Without light/surge voltage suppressor (Non-polar)	
R	With surge voltage suppressor (Non-polar)	
U	With light/surge voltage suppressor (Non-polar)	
s	With surge voltage suppressor (Positive common)	
Z	With light/surge voltage suppressor (Positive common)	
NS	With surge voltage suppressor (Negative common)	
NZ	With light/surge voltage suppressor (Negative common)	

Only "Z" and "NZ" types are available with a power-saving circuit.

Manual override

•	
Nil: Non-locking push type	D: Push-turn locking slotted type
E: Push-turn locking lever type	F: Slide locking type

* The 25A- series specifications and dimensions are the same as those of the standard model.





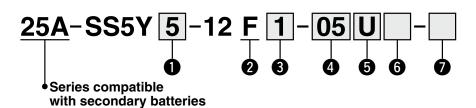
Plug-in Connector Connecting Base

D-sub Connector

25A-SY5000/7000 Series CANUS



How to Order Manifolds

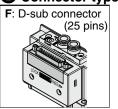


Series

ype 12 op Ported

<u> </u>		
5	SY5000	
7	SY7000	

2 Connector type



3 Connector entry direction

1: Upward	2: Lateral

4 Valve stations

F: D-sub connector (25 pins)		
Symbol	Stations	Note
02	2 stations	
:		Double wiring*1
12	12 stations	
02	2 stations	Specified layout*2
:		Specified layout*2 (Up to 24 solenoids
24	24 stations	` available)

*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not

desired, order with a specified layout.

- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * The blanking plate assembly is included in this number.

6 P. E port entry

<u> </u>	E port critiy
U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
В	Both sides (2 to 24 stations)

*1 **6** For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

6 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

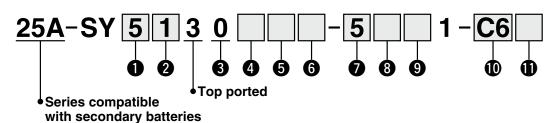
The P and E ports are only available on the U and D sides for the builtin silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)

Mounting

Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a length longer than that of the standard rail
÷	:	
D24	For 24 stations	

* The 25A- series specifications and dimensions are the same as those of the standard model.





Series

5	SY5000
7	SY7000

2 Type of actuation

1	2-position single	
2	2-position double	
3	3-position closed center	
4	3-position exhaust center	
5	3-position pressure center	
Α	4-position dual 3-port valve (N.C./N.C.)	
В	4-position dual 3-port valve (N.O./N.O.)	
С	4-position dual 3-port valve (N.C./N.O.)	

Seal type

0	Rubber seal

4 Back pressure check valve (Built-in valve type)

Nil	None
Н	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

5 Pilot valve option

Nil	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

6 Coil type

Nil	Standard
Т	With power-saving circuit (Continuous duty type)

- * Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
- * Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

Rated voltage

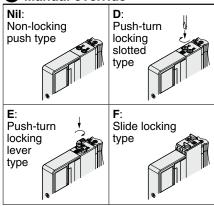
O Hatou Foliago	
5	24 VDC
6	12 VDC

8 Light/surge voltage suppressor and common specification

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
s	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

* Only "Z" and "NZ" types are available with a power-saving circuit.

Manual override



A, B port size

Thread piping

	· · · · · ·		
Symbol	Port size	Applicable series	
02	1/4	SY7000	

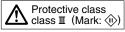
One-touch fitting (Metric)

A, B port	SY5000	SY7000	
ø4	•	_	
ø6	•	•	
ø8	•	•	
ø10	_	•	
ø12	_	•	
	ø4 ø6 ø8 ø10	ø4	

Thread type

Nil	Rc
F	G
N	NPT
Т	NPTF

* The 25A- series specifications and dimensions are the same as those of the standard model.





Type 10
Side Ported

Type 11
Bottom Ported

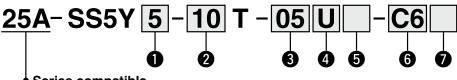
Plug-in Connector Connecting Base

Terminal Block Box

25A-SY5000/7000 Series 593 us



How to Order Manifolds



 Series compatible with secondary batteries

Series

5	SY5000
7	SY7000

2 Type

10	Side ported
11	Bottom ported

3 Valve stations

Symbol	Stations	Note		
02	2 stations			
:	:	Double wiring*1		
10	10 stations	_		
02	2 stations	Specified layout*2		
:	:	(Up to 20 solenoids available)		
20	20 stations			

- *1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a
- specified layout.

 *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * The blanking plate assembly is included in this number.

4 P, E port entry

U side (2 to 10 stations	
D D side (2 to 10 stations)	
B Both sides (2 to 20 station	

5 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer
R	External pilot

- * The 3/5(E) port is plugged for the builtin silencer type.
- * When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

7 Mounting

<u> </u>			
Mounting	Opt	tion	
	Name plate	Station number	
	_	_	
	•	•	
mounting	•	_	
DIN rail mounting	_		
	•	•	
	•	_	
	Direct nounting DIN rail	DIN rail	

- Enter the number of stations inside
 when it is larger than the number of
 valve stations. (Refer to "DIN Rail
 Option" below.)
- Only direct mounting is available for the type 11 bottom-ported type.

DIN Rail Option

Nil	Direct mounting			
0	Without DIN rail (with bracket)			
3	For 3 stations Specify a longer rail			
	:	than the total length of		
20	For 20 stations	specified stations.		

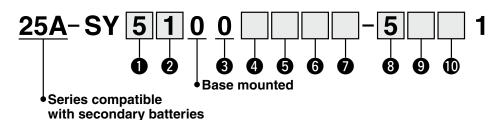
6 A, B port size (Metric)

A, B port size (Metric)							
Symbol	A, B port		Type 10/ Side ported B		Type 11/ Bottom ported		
			SY5000	SY7000	SY5000	SY7000	
C4		ø4	•	_	•	_	
C6	.	ø6	•	•	•	•	
C8	igh	ø8	•	•	•	•	
C10	Straight	ø10	_	•	_	•	
C12	(0)	ø12	_	•	_	•	O al Sales
CM*1		Straight port, mixed sizes	•	•	•	•	
P, E port size (One-touch fittings)		ø10	ø12	ø10	ø12		

- *1 Indicate the sizes on the manifold specification sheet for "CM."
- * The direction of P, E port fittings is the same as for the A, B port.

* The 25A- series specifications and dimensions are the same as those of the standard model.





A Series

U OCITICO		
5	SY5000	
7	SY7000	

6 Pilot valve option

Nil	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

2 Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
Α	4-position dual 3-port valve (N.C./N.C.)
В	4-position dual 3-port valve (N.O./N.O.)
С	4-position dual 3-port valve (N.C./N.O.)

Coil type

Nil	Standard
т	With power-saving circuit (Continuous duty type)

- * Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
- * Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

Manual override

<u> </u>	
Nil: Non-locking push type	D: Push-turn locking slotted type
E: Push-turn locking lever type	F: Slide locking type

3 Seal type

0	Rubber seal

8 Rated voltage

5	24 VDC
6	12 VDC

4 Pilot type

Nil	Internal pilot
R	External pilot

* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the Web Catalog.

Back pressure check valve (Built-in valve type)

	ant in taite type,
Nil	None
Н	Built-in

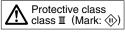
 The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

9 Light/surge voltage suppressor and common specification

and common opeciment		
Nil	Without light/surge voltage suppressor (Non-polar)	
R	With surge voltage suppressor (Non-polar)	
U	With light/surge voltage suppressor (Non-polar)	
s	With surge voltage suppressor (Positive common)	
Z	With light/surge voltage suppressor (Positive common)	
NS	With surge voltage suppressor (Negative common)	
NZ	With light/surge voltage suppressor (Negative common)	

Only "Z" and "NZ" types are available with a power-saving circuit.

> * The 25A- series specifications and dimensions are the same as those of the standard model.





Plug-in Connector Connecting Base

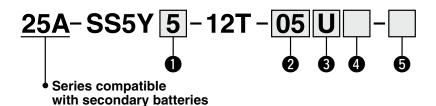
Terminal Block Box

Type 12 Top Ported

25A-SY5000/7000 Series 5933 us



How to Order Manifolds



Series

5	SY5000
7	SY7000

3 P, E port entry

U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
В	Both sides (2 to 20 stations)

2 Valve stations

Symbol	Stations	Note
02	2 stations	
		Double wiring*1
10	10 stations	
02	2 stations	Charified lavout*2
	:	Specified layout*2
20	20 stations	(Up to 20 solenoids available)

- *1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
 - The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * The blanking plate assembly is included in this number.

4 SUP/EXH block assembly

	. , = ,
Nil	Internal pilot
S	Internal pilot, Built-in silencer

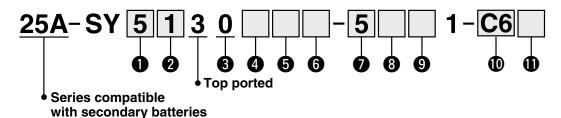
- * The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
- * When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

5 Mounting

Nil	Di	rect mounting
D		N rail mounting With DIN rail)
D0		N rail mounting (ithout DIN rail)
D3	For 3 stations	Specify a length
÷	:	longer than that of
D20	For 20 stations	the standard rail.

* The 25A- series specifications and dimensions are the same as those of the standard model.





1 Series

	1100
5	SY5000
7	SY7000

2 Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
Α	4-position dual 3-port valve (N.C./N.C.)
В	4-position dual 3-port valve (N.O./N.O.)
С	4-position dual 3-port valve (N.C./N.O.)

3 Seal type

0	Rubber seal

4 Back pressure check valve (Built-in valve type)

Nil	None
Н	Built-in

^{*} The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

5 Pilot valve option

Nil	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

6 Coil type

Nil	Standard
Т	With power-saving circuit (Continuous duty type)

- * Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
- * Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

Rated voltage

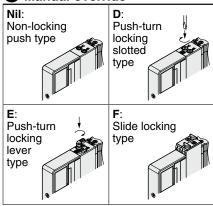
<u> </u>	tou voitago
5	24 VDC
6	12 VDC

8 Light/surge voltage suppressor and common specification

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
s	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

* Only "Z" and "NZ" types are available with a power-saving circuit.

Manual override



10 A, B port size

Thread piping

Symbol	Port size	Applicable series
02	1/4	SY7000

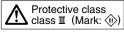
One-touch fitting (Metric)

Symbol	A, B port	SY5000	SY7000
C4 C6	ø4	•	_
C6	ø6	•	•
C8	ø8	•	•
C10	ø10	_	•
C12	ø12	_	•

Thread type

Nil	Rc
F	G
N	NPT
Т	NPTF

* The 25A- series specifications and dimensions are the same as those of the standard model.





ype 10 Side Ported Type 11 **Bottom Ported**

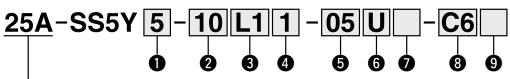
Plug-in Connector Connecting Base

Lead Wire

25A-SY5000/7000 Series 530 us



How to Order Manifolds



Series compatible with secondary batteries

(L3□)

Series

SY5000 SY7000

3 Number of cores (Lead wire)

L1	34 cores
L2	17 cores
L3	9 cores

2 Type

<u>• </u>	Po
10	Side ported
11	Bottom ported

4 Lead wire length

1	0.6 m
2	1.5 m
3	3 m

6 Valve stations

•	•	4 11	 311
(L1 [□)		

	Stations	Note
02	2 stations	
:	:	Double wiring*1
16	16 stations	_
02	2 stations	Specified layout*2
:	:	(Up to 32 solenoids
24	24 stations	available)

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
	4 stations	
02	2 stations	Specified layout*2
:	:	(Úp to 8 solenoids
08	8 stations	available)

(L2□)

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
08	8 stations	
02	2 stations	Specified layout*2
:	:	(Up to 16 solenoids
16	16 stations	available)

- Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * The blanking plate assembly is included in this number.

6 P. E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
В	Both sides (2 to 24 stations)

SUP/EXH block assembly

NIII lasta wa a lasilat	
Nil Internal pilot	
S Internal pilot, Built-in silence	er
R External pilot	

- * The 3/5(E) port is plugged for the built-in silencer type.
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

8 A, B port size (Metric)

			Type 10/S	ide ported	Type 11/Bo	ttom ported	
Symbol						SY7000	
C4		ø4	•	_	•	_	D
C6		ø6	•	•	•	•	
C8	ij	ø8	•	•	•	•	
C10	Straight	ø10	_	•	_	•	
C12	رن	ø12	_	•	_	•	000
CM*1		Straight port, mixed sizes	•	•	•	•	
P, E port size (One-touch fittings)			ø10	ø12	ø10	ø12	
A ladiate that the state of the same that the state of th							

- Indicate the sizes on the manifold specification sheet for "CM."
- * The direction of P, E port fittings is the same as for the A, B port.

9 Mounting

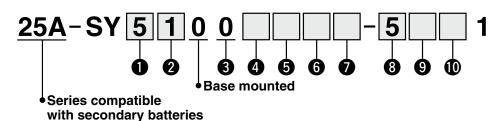
Symbol	Mounting	Option		
Symbol		Name plate	Station number	
Nil	Direct mounting	_	_	
AA		•	•	
BA		•	_	
D□	DIN rail mounting	_	_	
A□		•	•	
В□		•	_	

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)
- * Only direct mounting is available for the type 11 bottom-ported type.

DIN Rail Option

Nil	Direct mounting		
0	Without DIN rail (with bracket)		
3	For 3 stations	Specify a longer rail than	
i	:	the total length of specified	
24	For 24 stations	stations.	

* The 25A- series specifications and dimensions are the same as those of the standard model.



A Series

U OCITICO			
5	SY5000		
7	SY7000		

6 Pilot valve option

Nil	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

2 Type of actuation

1 2-position single	
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
Α	4-position dual 3-port valve (N.C./N.C.)
B 4-position dual 3-port valve (N.O./N C 4-position dual 3-port valve (N.C./N	

Coil type

type)

- * Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
- * Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

Manual override

<u> </u>	
Nil: Non-locking push type	D: Push-turn locking slotted type
E: Push-turn locking lever type	F: Slide locking type

3 Seal type

0	Rubber seal

8 Rated voltage

24 VDC	5
12 VDC	6
	6

4 Pilot type

Nil	Internal pilot
R	External pilot

* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the **Web Catalog**.

Back pressure check valve (Built-in valve type)

	une in vario typo,
Nil	None
Н	Built-in

 The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

9 Light/surge voltage suppressor and common specification

and common opecinication	
Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

Only "Z" and "NZ" types are available with a power-saving circuit.

> * The 25A- series specifications and dimensions are the same as those of the standard model.



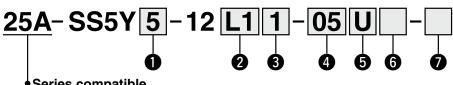
Plug-in Connector Connecting Base

Lead Wire

25A-SY5000/7000 Series 593 us



How to Order Manifolds



 Series compatible with secondary batteries

Series

ype 12 op Ported

5	SY5000
7	SY7000

Number of cores (Lead wire)

L1	34 cores
L2	17 cores
L3	9 cores

3 Lead wire length

1	0.6 m
2	1.5 m
3	3 m
3	3 m

4 Valve stations (L1□)

`		
Symbol	Stations	Note
02	2 stations	
i	:	Double wiring*1
16	16 stations	_
02	2 stations	Specified layout*2
:	:	(Up to 32 solenoids
24	24 stations	available)

1	Symbol	Stations	Note
]	02	2 stations	
	:	:	Double wiring*1
	04	4 stations	
]	02	2 stations	Specified layout*2
	:	:	(Úp to 8 solenoids
	80	8 stations	available)

(L3□)

(L2□)

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
08	8 stations	_
02	2 stations	Specified layout*2
:	:	(Up to 16 solenoids
16	16 stations	available)

- *1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * The blanking plate assembly is included in this number.

5 P, E port entry

U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
В	Both sides (2 to 24 stations)

*1 **6** For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

6 SUP/EXH block assembly

	· · · · · · · · · · · · · · · · · · ·
Nil	Internal pilot
S	Internal pilot, Built-in silencer

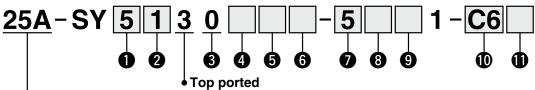
- * The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
- * When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

Mounting

Nil	Direct mounting		
D	DIN rail mounting (With DIN rail)		
D0	DIN rail mounting (Without DIN rail)		
D3	For 3 stations Specify a length		
:	: longer than that of		
D24	For 24 stations the standard rail.		

* The 25A- series specifications and dimensions are the same as those of the standard model.





Series compatible with secondary batteries

Series

_	
5	SY5000
7	SY7000

2 Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
Α	4-position dual 3-port valve (N.C./N.C.)
В	4-position dual 3-port valve (N.O./N.O.)
С	4-position dual 3-port valve (N.C./N.O.)

Seal type

• • • •	ai typo
	Pubbor coal

Back pressure check valve (Built-in valve type)

Nil	None
Н	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

5 Pilot valve option

Nil	Standard (0.7 MPa)		
B Quick response type (0.7 M			

6 Coil type

<u> </u>		
	Nil	Standard
	Т	With power-saving circuit (Continuous duty type)

- * Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
- * Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

Rated voltage

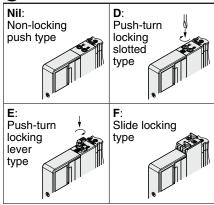
	tou rondigo
5	24 VDC
6	12 VDC

8 Light/surge voltage suppressor and common specification

Nil	Without light/surge voltage suppressor (Non-polar)			
R	With surge voltage suppressor (Non-polar)			
U	With light/surge voltage suppressor (Non-polar)			
s	With surge voltage suppressor (Positive common)			
Z	With light/surge voltage suppressor (Positive common)			
NS	With surge voltage suppressor (Negative common)			
NZ	With light/surge voltage suppressor (Negative common)			

* Only "Z" and "NZ" types are available with a power-saving circuit.

Manual override



(I) A, B port size

Thread piping

Symbol	Port size	Applicable series
02	1/4	SY7000

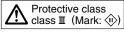
One-touch fitting (Metric)

one reason maning (means)				
Symbol	A, B port	SY5000	SY7000	
C4	ø4	•	_	
C6	ø6	•	•	
C8	ø8	•	•	
C10	ø10	_	•	
C12	ø12	_	•	

Thread type

Timeda type		
Nil	Rc	
F	G	
N	NPT	
Т	NPTF	

* The 25A- series specifications and dimensions are the same as those of the standard model.





ype 10 Side Ported Type 11 **Bottom Ported**

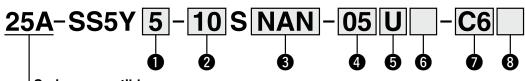
Plug-in Connector Connecting Base

25A-SY5000/7000 Series 530 us





How to Order Manifolds



Series compatible with secondary batteries

Series

5	SY5000
7	SY7000

1 Type

9 '	ype
10	Side ported
11	Bottom ported

SI unit specifications

(Output polarity, Protocol, Number of outputs, Communication connector)

(Output polarity, 1 rotocol, Humber of Outputs, Communication Connector)				
Symbol (Out	tput polarity)		Number	Communication
Positive common (NPN)	Negative common (PNP)	Protocol	of outputs	connector
()	Without SI unit		
QA	QAN	DeviceNet®	32	M12
QB	QBN	Devicemen	16	IVIIZ
NA	NAN	PROFIBUS	32	M12
NB	NBN	DP	16	IVIIZ
VA	VAN	CC-Link	32	M12
VB	VBN	OO-LIIK	16	
DA	DAN	EtherCAT	32	M12
DB	DBN	EllielCAT	16	
FA	FAN	PROFINET	32	M12
FB	FBN	ITOFINE	16	IVITZ
EA	EAN	EtherNet/IP™	32	M12
EB	EBN	Luicine/iF ····	16	IVITZ
_	KAN	IO-Link	32	M12

- Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common specification of the valves to be used.
- DIN rail cannot be mounted without SI unit.
- For IO-Link, only the negative common (PNP) type and the 32 outputs type are available.

4 Valve stations

In the case of the 32-output SI unit

Symbol	Stations	Note	
02	2 stations		
:	:	Double wiring*1	
16	16 stations	_	
02	2 stations	Cracified layers*2	
:	:	Specified layout*2 (Up to 32 solenoids available)	
24	24 stations	(Op to 32 soleriolds available)	

In the case of the 16-output SI unit

Symbol	Stations	Note	
02	2 stations		
:	:	Double wiring*1	
08	8 stations	•	
02	2 stations	Considered lawayet*?	
:	:	Specified layout*2 (Up to 16 solenoids available)	
16	16 stations	(Op to 10 soletiolds available)	

- *1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
 - The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- The blanking plate assembly is included in this number.
- For the model without the SI unit (S0). note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

6 P. E port entry

<u> </u>	_ port order,
U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
В	Both sides (2 to 24 stations)

6 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer
R	External pilot
• •	=/::0::::a:: p:::0::

- The 3/5(E) port is plugged for the builtin silencer type.
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

Mounting

Symbol	Mounting	Option Name plate Station number			
Symbol		Name plate	Station number		
Nil		_			
AA	Direct mounting	•	•		
BA	mounting	•	_		
D□	DIM	_	_		
A	DIN rail mounting	•	•		
В□	mounting	•	_		

- * Enter the number of stations inside \square when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)
- Only direct mounting is available for the type 11 bottom-ported type.

DIN Rail Option

Nil	Direct mounting			
0	Without DIN rail (with bracket)			
3	For 3 stations	Specify a longer rail		
•	than the total length of			
24	For 24 stations specified stations.			

A. B port size (Metric)

_		_					
Cumbal		A B part		ide ported			
Symbol		A, B port	SY5000	SY7000	SY5000	SY7000	
C4		ø4	•	_	•	_	
C6	<u>.</u>	ø6	•	•	•	•	
C8	ig	ø8	•	•	•	•	
C10	Straight	ø10	_	•	_	•	
C12	(0)	ø12	_	•	_	•	0 1985
CM*1		Straight port, mixed sizes	•	•	•	•	
P, E port size (One-touch fittings)		ø10	ø12	ø10	ø12		

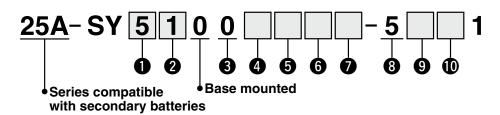
*1 Indicate the sizes on the manifold specification sheet for "CM."

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com





A Series

<u> </u>	1100
5	SY5000
7	SY7000

2 Type of actuation

<u>• • y</u>	pe or actuation
1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
Α	4-position dual 3-port valve (N.C./N.C.)
В	4-position dual 3-port valve (N.O./N.O.)
С	4-position dual 3-port valve (N.C./N.O.)

Seal type

	u. 1, po
0	Rubber seal

4 Pilot type

Nil	Internal pilot
R	External pilot

* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the Web Catalog.

Back pressure check valve (Built-in valve type)

Nil	None
Н	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

6 Pilot valve option

Nil	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

Coil type

Nil	Standard
Т	With power-saving circuit (Continuous duty type)

- * Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
- * Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

Rated voltage

5 24 VDC					
	5	24 VDC			

9 Light/surge voltage suppressor and common specification

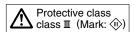
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

- Select "R," "U," "S," or "Z" for the valve when the SI unit output polarity is Nil (positive common). Select "R," "U," "NS," or "NZ" for the valve when the SI unit
- output polarity is N (negative common). Only "Z" and "NZ" types are available with a power-saving circuit.

Manual override

Widiladi Overri	iuc .	
Nil: Non-locking push type	D: Push-turn locking slotted type	
E: Push-turn locking lever type	F: Slide locking type	

* The 25A- series specifications and dimensions are the same as those of the standard model.





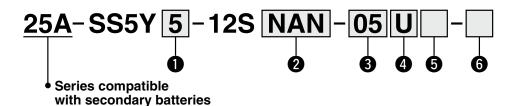
Plug-in Connector Connecting Base

25A-SY5000/7000 Series CANUS





How to Order Manifolds



Series

ype 12

5	SY5000
7	SY7000

SI unit specifications

(Output polarity, Protocol, Number of outputs, Communication connector)

, ,	tput polarity)		Number	Communication
Positive common (NPN)	Negative common (PNP)	Protocol	of outputs	connector
()	Without	Without SI unit	
QA	QAN	DeviceNet®	32	M12
QB	QBN	Devicemen	16	IVIIZ
NA	NAN	PROFIBUS	32	M12
NB	NBN	DP	16	W12
VA	VAN	CC-Link	32	M12
VB	VBN		16	
DA	DAN	EtherCAT	32	M12
DB	DBN	EtherCAT	16	IVIIZ
FA	FAN	PROFINET	32	M12
FB	FBN	FNOFINEI	16	IVITZ
EA	EAN	EtherNet/IP™	32	M12
EB	EBN	Eulenvel/IF	16	IVITZ
_	KAN	IO-Link	32	M12

- * Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common specification of the valves to be used.
- DIN rail cannot be mounted without SI
- For IO-Link, only the negative common (PNP) type and the 32 outputs type are available.

Valve stations

In the case of the 32-output SI unit

Symbol	Stations	Note	
02	2 stations		
:	:	Double wiring*1	
16	16 stations	_	
02	2 stations	Specified layout*2 (Up to 32 solenoids available	
:	:		
24	24 stations	(Op to 32 sole loids available)	
	02 : 16 02 :	: : : : : : : : : : : : : : : : : : :	

In the case of the 16-output SI unit

Symbol	Stations	Note	
02	2 stations		
:		Double wiring*1 Specified layout*2 (Up to 16 solenoids available)	
80	8 stations		
02	2 stations		
:			
16	16 stations		

- Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- The blanking plate assembly is included in this number.
- For the model without the SI unit (S0). note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

P. E port entry

<u> </u>	_ port order,
U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
В	Both sides (2 to 24 stations)

*1 5 For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

5 SUP/EXH block assembly

Nil Internal pilot	
S	Internal pilot, Built-in silencer

- * The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

6 Mounting

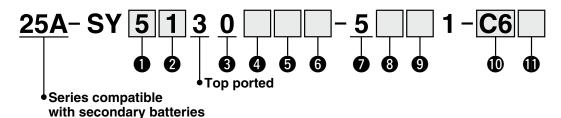
Nil	Direct mounting		
D	DIN rail mounting (With DIN rail)		
D0	DIN rail mounting (Without DIN rail)		
D3	For 3 stations	Specify a length	
÷	:	longer than that of	
D24	For 24 stations	the standard rail.	

- If the DIN rail must be mounted without an SI unit, select D0. Then, refer to L3 of the dimensions for the DIN rail length and order separately.
- * The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com





Series

5	SY5000
7	SY7000

2 Type of actuation

1	2-position single	
2	2-position double	
3	3-position closed center	
4	3-position exhaust center	
5	3-position pressure center	
Α	4-position dual 3-port valve (N.C./N.C.)	
В	4-position dual 3-port valve (N.O./N.O.)	
С	4-position dual 3-port valve (N.C./N.O.)	

Seal type

<u> </u>	ai type	
Λ	Rubber seal	

Back pressure check valve (Built-in valve type)

	ant in varvo typo,
Nil	None
Н	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

6 Pilot valve option

<u> </u>	
Nil	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

6 Coil type

Nil	Standard	
Т	With power-saving circuit (Continuous duty type)	

- * Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

Rated voltage

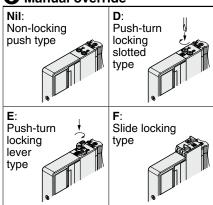
5	24 VDC
---	--------

8 Light/surge voltage suppressor and common specification

R	With surge voltage suppressor (Non-polar)	
U	With light/surge voltage suppressor (Non-polar)	
s	With surge voltage suppressor (Positive common)	
Z	With light/surge voltage suppressor (Positive common)	
NS With surge voltage suppres (Negative common)		
NZ	With light/surge voltage suppressor (Negative common)	

- Select "R," "U," "S," or "Z" for the valve when the SI unit output polarity is NiI (positive common). Select "R," "U," "NS," or "NZ" for the valve when the SI unit output polarity is N (negative common). Only "Z" and "NZ" types are available
- with a power-saving circuit.

Manual override



A, B port size

Thread piping

Symbol	Port size	Applicable series
02	1/4	SY7000

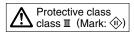
One-touch fitting (Metric)

0110	One todon many (metric)			
Symbol	A, B port	SY5000	SY7000	
C4	ø4	•	_	
C6	ø6	•	•	
C8	ø8	•	•	
C10	ø10	_	•	
C12	ø12	_	•	

Thread type

Nil	Rc
F	G
N	NPT
Т	NPTF

* The 25A- series specifications and dimensions are the same as those of the standard model.





Type 10 Side Ported Type 11 **Bottom Ported**

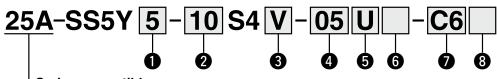
Plug-in Connector Connecting Base

25A-SY5000/7000 Series CANUS





How to Order Manifolds



Series compatible with secondary batteries

Series

5	SY5000
7	SY7000

2 Type

<u> </u>	P •
10	Side ported
11	Bottom ported

3 SI unit

0	Without SI unit
V	CC-Link (Positive common NPN)

Only a terminal block plate is mounted for the valve without SI unit. For SI unit part numbers, refer to page 53. **5** P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
В	Both sides (2 to 16 stations)

6 SUP/EXH block assembly

Nil	Internal pilot			
S	Internal pilot, Built-in silencer			
R	External pilot			

- The 3/5(E) port is plugged for the builtin silencer type.
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

8 Mounting

Mounting	Option		
	Name plate	Station number	
	_	_	
	•	•	
mounting	•	_	
DIN rail	_	_	
	•	•	
mounting	•	_	
	Direct mounting	Direct mounting DIN rail	

- Enter the number of stations inside \square when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)
- Only direct mounting is available for the type 11 bottom-ported type.

DIN Rail Option

Nil	Direct mounting			
0		it DIN rail (with bracket)		
3	For 3 stations	Specify a longer rail		
•	:	than the total length of		
16	For 16 stations	specified stations.		

4 Valve stations

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
08	8 stations	
02	2 stations	0
:	:	Specified layout*2 (Up to 16 solenoids available)
16	16 stations	

- *1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a
- specified layout. *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- The blanking plate assembly is included in this number.

A, B port (Metric)							
Symbol		A, B port	Type 10/ Side ported		Type 11/ Bottom ported		
			SY5000	SY7000	SY5000	SY7000	
C4		ø4	•	_	•	_	
C6	.	ø6	•	•	•	•	
C8	ig	ø8	•	•	•	•	
C10	Straight	ø10	_	•	_	•	
C12	(0)	ø12	_	•	_	•	O DESTRUCTION OF THE PARTY OF T
CM*1		Straight port, mixed sizes	•	•	•	•	
P, E port size (One-touch fittings)		ø10	ø12	ø10	ø12		

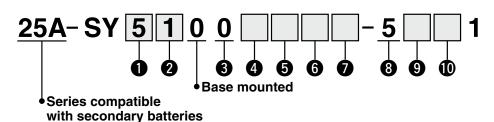
- *1 Indicate the sizes on the manifold specification sheet for "CM."
- * The direction of P, E port fittings is the same as for the A, B port.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX126 Integrated Type (For Output) Serial Transmission System, refer to the **Web Catalog** and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com





A Series

	1100
5	SY5000
7	SY7000

6 Pilot valve option

Nil	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

2 Type of actuation

1	2-position single		
2	2-position double		
3	3-position closed center		
4	3-position exhaust center		
5	3-position pressure center		
Α	4-position dual 3-port valve (N.C./N.C.)		
В	4-position dual 3-port valve (N.O./N.O.)		
С	4-position dual 3-port valve (N.C./N.O.)		

Coil type

<u> </u>				
Nil	Standard			
Т	With power-saving circuit (Continuous duty type)			

- Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

Manual override

W manaar ovorrido		
Nil: Non-locking push type	D: Push-turn locking slotted type	
E: Push-turn locking lever type	F: Slide locking type	

3 Seal type

<u> </u>	ui typo
	Pubbor coal

4 Pilot type

Nil	Internal pilot	
R	External pilot	

* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the Web Catalog.

Back pressure check valve
 (Built-in valve type)

(= and m raine type)		
Nil	None	
Н	Built-in	

 The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000. Rated voltage

<u> </u>	tou voitage
5	24 VDC

Light/surge voltage suppressor and common specification

and common operation		
R	With surge voltage suppressor (Non-polar)	
U	With light/surge voltage suppressor (Non-polar)	
s	With surge voltage suppressor (Positive common)	
Z	With light/surge voltage suppressor (Positive common)	

* Only "Z" type is available with a power-saving circuit.

* The 25A- series specifications and dimensions are the same as those of the standard model.



ype 12 op Ported

Plug-in Connector Connecting Base

25A-SY5000/7000 Series CANUS





How to Order Manifolds



Series compatible with secondary batteries

Series

	5	SY5000
	7	SY7000

2 SI unit

0	Without SI unit
٧	CC-Link (Positive common NPN)

Only a terminal block plate is mounted for the valve without SI unit. For SI unit part numbers, refer to page 53.

3 Valve stations

Symbol	Stations	Note	
02	2 stations		
:		Double wiring*1	
08	8 stations		
02	2 stations	Cracified lavouty?	
:	:	Specified layout*2 (Up to 16 solenoids available)	
16	16 stations	(Op to 10 solerious available)	

- *1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
 - The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- The blanking plate assembly is included in this number.

P. E port entry

	<u> </u>	_ port order,
	U*1	U side (2 to 10 stations)
D *1 D side (2 to		D side (2 to 10 stations)
B Both sides (2 to 16 station		Both sides (2 to 16 stations)

*1 5 For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

5 SUP/EXH block assembly

Nil	Internal pilot	
S	Internal pilot, Built-in silencer	

- * The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

6 Mounting

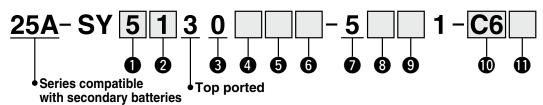
	· · · · · · · · · · · · · · · · · · ·	
Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations Specify a length	
÷	i longer than that	
D16	For 16 stations	the standard rail.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX126 Integrated Type (For Output) Serial Transmission System, refer to the **Web Catalog** and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com





A Series

	1103
5	SY5000
7	SY7000

2 Type of actuation

_ ,	
1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
Α	4-position dual 3-port valve (N.C./N.C.)
В	4-position dual 3-port valve (N.O./N.O.)
С	4-position dual 3-port valve (N.C./N.O.)

Seal type

<u> </u>	O courtype		
0	Rubber seal		

4 Back pressure check valve (Built-in valve type)

Nil	None
Н	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

Nil	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

6 Coil type

O Con type		
Nil	Standard	
Т	With power-saving circuit (Continuous duty type)	

- Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

Rated voltage

9 Manual override

Nil:

Non-locking

push type

Push-turn

locking

lever

type

5	24 VDC

8 Light/surge voltage suppressor and common specification

R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)

* Only "Z" type is available with a power-saving circuit.

Push-turn locking

Slide lockina

slotted type

type

A, B port size

Thread piping

Symbol	Port size	Applicable series	
02	1/4	SY7000	

One-touch fitting (Metric)

Symbol	A, B port	SY5000	SY7000
C4	ø4	•	_
C6	ø6	•	•
C8	ø8	•	•
C10	ø10	_	•
C12	ø12	_	•

Thread type

Nil	Rc
F	G
N	NPT
Т	NPTF

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

. Caution

Tightening torque for mounting screw M3: 0.8 N·m

5 Pilot valve option

Nil	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

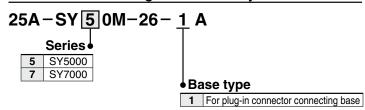
Manifold Options

■Blanking plate assembly

(With mounting screw) Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



How to Order Blanking Plate Assembly



* The 25A- series specifications and dimensions are the same as those of the standard model.

25A-SY5000/7000 Series

SI Unit Part Nos.

Description	SI unit part no.	Note
	EX260-SPR1-X117	PROFIBUS DP M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPR2-X117	PROFIBUS DP M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPR3-X117	PROFIBUS DP M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPR4-X117	PROFIBUS DP M12 connector, 16 outputs, Positive common (NPN)
	EX260-SDN1-X117	DeviceNet® M12 connector, 32 outputs, Negative common (PNP)
	EX260-SDN2-X117	DeviceNet® M12 connector, 32 outputs, Positive common (NPN)
	EX260-SDN3-X117	DeviceNet® M12 connector, 16 outputs, Negative common (PNP)
	EX260-SDN4-X117	DeviceNet® M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEC1-X117	EtherCAT M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEC2-X117	EtherCAT M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEC3-X117	EtherCAT M12 connector, 16 outputs, Negative common (PNP)
	EX260-SEC4-X117	EtherCAT M12 connector, 16 outputs, Positive common (NPN)
EX260 SI unit	EX260-SMJ1-X117	CC-Link M12 connector, 32 outputs, Negative common (PNP)
	EX260-SMJ2-X117	CC-Link M12 connector, 32 outputs, Positive common (NPN)
	EX260-SMJ3-X117	CC-Link M12 connector, 16 outputs, Negative common (PNP)
	EX260-SMJ4-X117	CC-Link M12 connector, 16 outputs, Positive common (NPN)
	EX260-SPN1-X117	PROFINET M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPN2-X117	PROFINET M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPN3-X117	PROFINET M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPN4-X117	PROFINET M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEN1-X117	EtherNet/IP™ M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEN2-X117	EtherNet/IP™ M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEN3-X117	EtherNet/IP™ M12 connector, 16 outputs, Negative common (PNP)
	EX260-SEN4-X117	EtherNet/IP™ M12 connector, 16 outputs, Positive common (NPN)
	EX260-SIL1-X117	IO-Link M12 connector, 32 outputs, Negative common (PNP)
EX126 SI unit	EX126D-SMJ1-X220	CC-Link (Terminal block, 16 outputs, Positive common (NPN))

Valve Mounting Screw Part No.

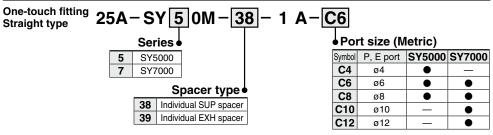
Description		Part no.		Nata	
	Description SY5000 SY7000		SY7000	Note	
	Round head combination screw	SY5000-223-1A	SY7000-224-1A	Part numbers shown on the left are for 10 valves. (SY5000: 20 pcs./SY7000: 30 pcs.)	

One-touch Fittings Part Nos.

		Port size	25A-SY5000	25A-SY7000
ø4 One-		ø4 One-touch fitting (Straight type)	90-VVQ1000-51A-C4	_
A, B Metric port size	Motrio	ø6 One-touch fitting (Straight type)	90-VVQ1000-51A-C6	25A-KJH06-17-X1607
	ø8 One-touch fitting (Straight type)	90-VVQ1000-51A-C8	90-VVQ2000-51A-C8	
	Size	ø10 One-touch fitting (Straight type)	_	90-VVQ2000-51A-C10
		ø12 One-touch fitting (Straight type)	_	25A-KQ2H12-17-X1607
P, E	Metric	ø10 One-touch fitting (Straight type)	90-VVQ2000-51A-C10	_
port	size	ø12 One-touch fitting (Straight type)	_	90-VVQ4000-50B-C12

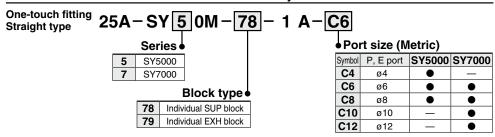
Manifold Options





Part numbers of mounting screw SY5000: SY5000-223-2A (2 pcs. of each) SY7000: SV1000-136-12A (3 pcs. of each)

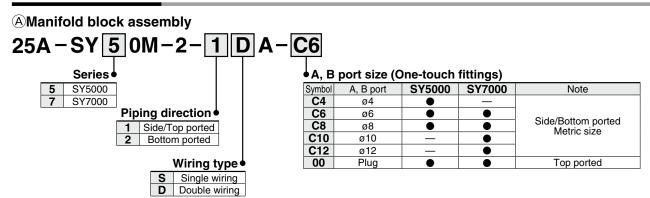
How to Order Individual SUP/EXH Block Assembly



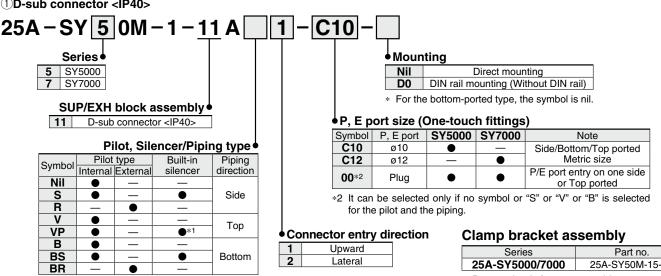


Manifold Options 25A-SY5000/7000 Series

Manifold Parts Nos.



- **BSUP/EXH block assembly**
- 1)D-sub connector <IP40>

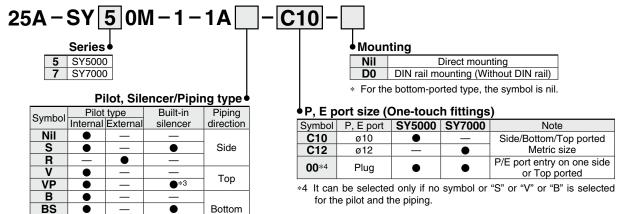


^{*1} For silencer (supply side) E port is plugged.

Series	Part no.
25A-SY5000/7000	25A-SY50M-15-3A

^{*} Part number is for one assembly.

2)Terminal block box



^{*3} For silencer (supply side) E port is plugged.

BR

Terminal block box housing assembly

25A-VVQC1000-T0-1

Clamp bracket assembly for terminal block box

25A-SY30M-15-6A

* Part number is for one assembly.

Clamp bracket assembly

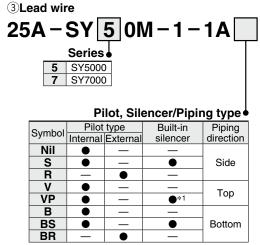
Series	Part no.	
25A-SY5000/7000	25A-SY50M-15-3A	

^{*} Part number is for one assembly.



25A-SY5000/7000 Series

Manifold Parts Nos.



^{*1} For silencer (supply side) E port is plugged.

Mounting

Nil	Direct mounting
D0	DIN rail mounting (Without DIN rail)

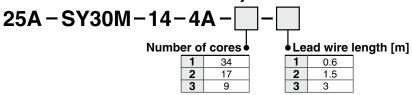
^{*} For the bottom-ported type, the symbol is nil.

P, E port size (One-touch fittings)

Symbol	P, E port	SY5000	SY7000	Note
C10	ø10	•	_	Side/Bottom/Top ported
C12	ø12	_	•	Metric size
00*2	Plug	•	•	P/E port entry on one side or Top ported

^{*2} It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

Lead wire connector block assembly

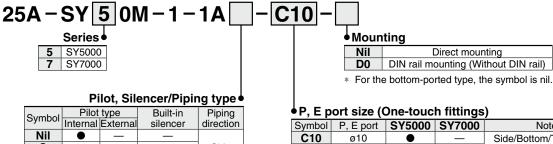


Clamp bracket assembly

Series	Part no.
25A-SY5000/7000	25A-SY50M-15-3A

* Part number is for one assembly.

(4)EX126



Internal	External	silencer	direction
•	_	_	
•	_	•	Side
_	•	_	
•	_	_	Ton
•	_	●*3	Тор
•	_	_	
•		•	Bottom
_	•	_	
	• •	• – • – – •	Internal External Silencer

^{*3} For silencer (supply side) E port is plugged.

Symbol	P, E port	SY5000	SY7000	Note
C10	ø10	•	_	Side/Bottom/Top ported
C12	ø12	_	•	Metric size
00*4	Plug	•	•	P/E port entry on one side or Top ported

^{*4} It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

Terminal block plate assembly

25A-VVQC1000-74A-2

Clamp bracket assembly for EX126 SI unit

25A-SY30M-15-6A

* Part number is for one assembly.

Clamp bracket assembly

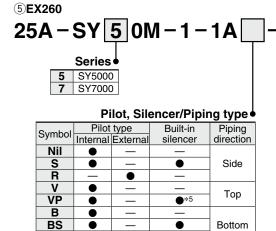
Series	Part no.	
25A-SY5000/7000	25A-SY50M-15-3A	

^{*} Part number is for one assembly.

Manifold Options 25A-SY5000/7000 Series

Manifold Parts Nos.

BR



^{*5} For silencer (supply side) E port is plugged.

Mounting

Nil	Direct mounting
D0	DIN rail mounting (Without DIN rail)

^{*} For the bottom-ported type, the symbol is nil.

♦P, E port size (One-touch fittings)

Symbol	P, E port	SY5000	SY7000	Note
C10	ø10	•	_	Side/Bottom/Top ported
C12	ø12		•	Metric size
00*6	Plug	•	•	P/E port entry on one side or Top ported

^{*6} It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

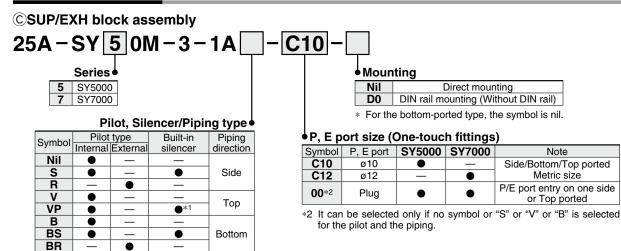
Clamp bracket assembly

Series	Part no.	
25A-SY5000/7000	25A-SY50M-15-3A	* Part number is for one assembly.



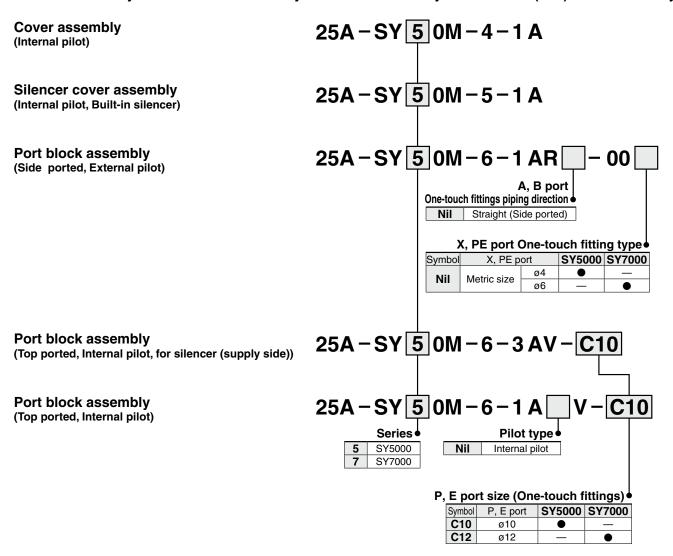
Manifold Options 25A-SY5000/7000 Series

Manifold Parts Nos.



^{*1} For silencer (supply side)
E port is plugged.

■ Cover assembly/Silencer cover assembly/Port block assembly for SUP/EXH (end) block assembly



■ Name plate bracket assembly (For SY5000 only)

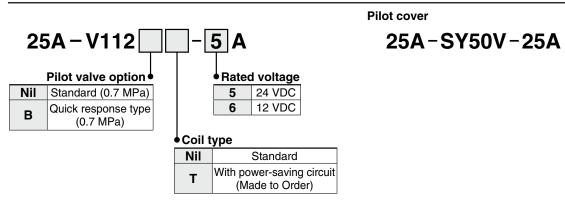
25A-SY50M-85-1A



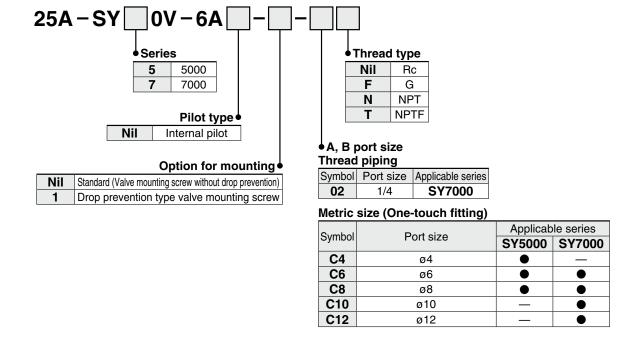
^{* &}quot;B" for the bottom-ported type can be selected for the SY5000/7000 series.

25A-SY5000/7000 Series Valve Replacement Parts

How to Order Pilot Valves



How to Order Port Block Assembly



Body Cover Assembly

* Used when the top-ported type is changed to the side or bottom-ported type

Series		Part no.		
		Standard (Valve mounting screw without drop prevention)	Drop prevention type valve mounting screw	
SY5000	Internal pilot	25A-SY50V-16A	25A-SY50V-16A-1	
315000	External pilot	25A-SY50V-16AR	25A-SY50V-16AR-1	
SY7000	Internal pilot	25A-SY70V-16A	25A-SY70V-16A-1	
317000	External pilot	25A-SY70V-16AR	25A-SY70V-16AR-1	

^{*} The part number is not indicated on the product.

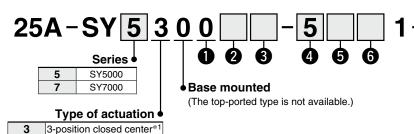


25A-SY5000/7000 Series With Residual Pressure Release Valve







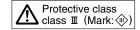


*1 Only the closed center type is available.

With residual pressure release valve

With residual pressure release valve*2

*2 Mounting screw types, hexagon socket head cap screw B and drop prevention type K, H are not available.



Seal type

Rubber seal

Pilot valve option

Nil	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

3 Coil type

Nil	Standard
Т	With power saving circuit (Continuous duty type)

- * Be sure to select the power saving circuit type if the valve is to be continuously energized for long periods of time.
- * Be careful of the energizing time when the power saving circuit is selected. Refer to the Web Catalog for details.

A Rated voltage

U III	ica voitage
5	24 VDC
6	12 VDC

The applicable rated voltage varies depending on the manifold wiring type. Refer to the "How to Order Manifolds" pages.

5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage	Common	
Cyrribor	vvitiriigiit	suppressor	specification	
Nil	_	_		
R	_		Non-polar	
U	•	•		
S	_		Positive	
Z	•		common	
NS	_		Negative	
NZ	•		common	

* Only "Z" and "NZ" types are available with a power saving circuit.

6 Manual override

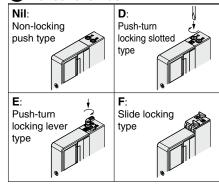
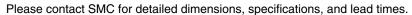


Table 1. Valve mounting screw

SY5000	SY7000	
SY5000-221-9A	SY7000-221-14A	
(2 pcs.)	(3 pcs.)	



Made to Order



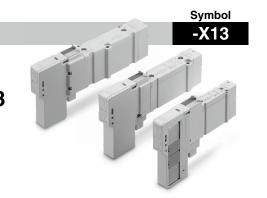


1 With Safety Slide Locking Manual Override

A safety lock is added to the slide locking manual override.

25A-SY ⁵ 00 G1-X13

Entry is the same as 25A-standard products. Specifications and performance are the same as standard products.



Symbol

-X350

2-Position Single Solenoid Valve with Built-in Return Spring

A 2-position single solenoid valve with a spring built into the main valve

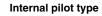
The main valve returns to origin (the OFF position) via the spring when it is not pressurized.

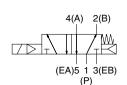
 Entry is the same as 25A-standard products.
 Specifications and performance are the same as standard products.

 For the external pilot type, exhaust the external pilot (X) port and the main pressure simultaneously.

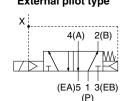
If the main pressure cannot be exhausted due to the system specifications, please contact SMC separately.

* The manual option is only applicable to the non-locking push type.





External pilot type



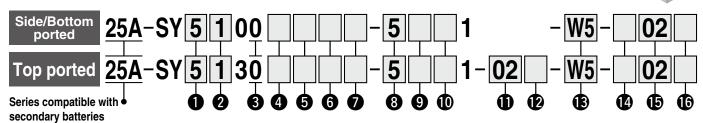
Plug-in Single Unit/Sub-plate Type [IP67 Compliant]

(Side ported, Bottom ported, Top ported)



How to Order

In the case of (Valve) + (Sub-plate) (Built-in valve type part no.)



U Se	ries
5	SY5000
7	SY7000

2 Type of actuation

<u> </u>	• 1,60 0. 40.44.0			
1	O position	Single		
2	2-position	Double		
3		Closed center		
4	3-position	Exhaust center		
5		Pressure center		
Α	4-position dual 3-port	N.C./N.C.		
В		N.O./N.O.		
С		N.C./N.O.		

8 Rated voltage

5	24 VDC
6	12 VDC

Uight/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	
Nil	_	_	Non-polar	
R	_	•		
U	•			
S	_		Positive	
Z	•		common	
NS	_		Negative	
NZ	•		common	

* Only "Z" and "NZ" types are available with a power saving circuit.

A, B port tilleau type (Tilleau pipil		
Nil	Rc	
F	G	

(Sub-plate) Wiring specifications

WO	Without M12 con	nector cable	
W5	With M12 connec	ctor cable (30	000 mm)

* When ordering a product with M12 connector cable, the connector cable is included.

Port location (Sub-plate)

Port size (Sub-plate)

Port size

1/4

Thread type (Sub-plate)

Symbol

02

03

Nil	Side ported	
В	Bottom ported	
V *1	Top ported (1P, 5EA, 3EB port: Side ported)	

*1 Only available for the valve piping type "3" top ported

Applicable series

SY5000

SY7000

Rubber seal

4 Pilot type

3 Seal type

Nil	Internal pilot
R	External pilot

Dack pressure check valve (Dulletti valve t		
Nil		None
	Н	Built-in

The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

6 Pilot valve ontion

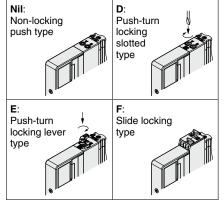
O i not raite option		
Nil	Standard (0.7 MPa)	
R	Quick response type (0.7 MPa)	

Coil type

Oon type		
Nil	Standard	
Т	With power saving circuit (Continuous duty type)	

- Be sure to select the power saving circuit type if the valve is to be continuously energized for long periods of time.
- Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

Manual override



A, B port size (* Top-ported valve only) Thread piping

Applicable series 1/4 SY7000

Metric size (One-touch fitting)

Symbol	A, B port	SY5000	SY7000
C4 C6	ø4	•	_
C6	ø6	•	•
C8	ø8	•	•
C10	ø10	_	•
C12	ø12	_	•

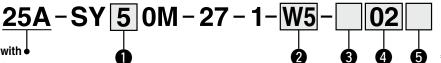
- The 25A- series specifications and dimensions are the same as those of the standard model.
- When mounting a special order (including Made-to-Order specification) valve or manifold option (spacer, etc.) on the sub-plate, add the valve part number or spacer part number under the sub-plate part number to place an order. For details, refer to the ordering example on page 61.



How to Order

In the case of Sub-plate (Sub-plate single unit part no.)

* Without valve



Base gasket is included.
Valve mounting screws are not included.

Series compatible with secondary batteries

0	Series
•	0000

• ceries	
5	SY5000
7	SY7000

Wiring specifications

	<u> </u>		
WO Without M12 connector cable			
	W5	With M12 connector cable (3000 mm)	

- * Refer to the table below for connector cable part numbers.
- When ordering a product with M12 connector cable, the connector cable is included.

Port location (Sub-plate)

O i dit idealien (das plate)		
Nil	Side ported	
В	Bottom ported	
V	Top ported [1(P), 5(EA), 3(EB) port: Side ported]	

Sub-plate thread type

Sub-plate tilleau type	
Nil	Rc
F	G

4 Port size (Sub-plate)

Symbol	Port size	Applicable series
02	1/4	SY5000
03	3/8	SY7000

How to Order when mounting a special order (including Made-to-Order specification) valve on the sub-plate (Ordering example: X350)

25A-SY50M-27-1-W5-02······1 set (Sub-plate single unit part no.) *25A-SY5100-5U1-X350·······1 set (Built-in return spring specification)

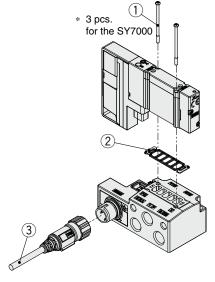
Ordering example when mounting a manifold option (spacer, etc.)

25A-SY50M-27-1-W5-02 ······ 1 set (Sub-plate single unit part no.)

*25A-SY5400-5U1 ············· 1 set (3-position exhaust center part no.)

*25A-SY50M-39-1A-C6 ········· 1 set (Individual EXH spacer part no.)

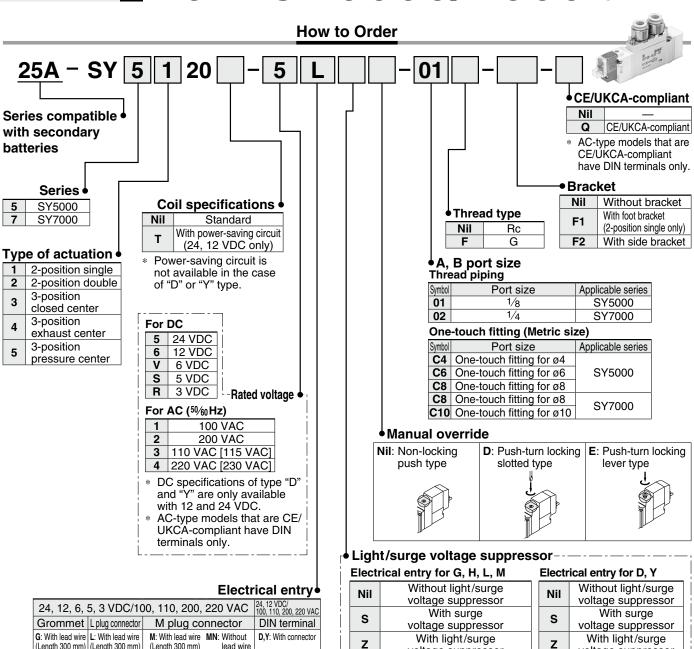
Sub-plate Parts Nos.

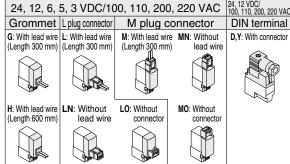


No.	Description	Part no.		Note
INO.		SY5000	SY7000	Note
1	Round head combination screw	SY5000-223-1A (M3 x 32.5)	SY7000-224-1A (M3 x 36.5)	Part numbers shown on the left are for 10 valves (20 pcs.). (30 pcs. for the SY7000)
2	Base gasket (for sub-plate)	SY50M-11-1A	SY70M-11-1A	Part numbers shown on the left are for 10 valves (10 pcs.).
3	M12 waterproof connector cable	90-ZS-37-A-X258		Cable length: 3000 mm



5-Port Solenoid Valve **Body Ported/Single Unit** 25A-SY5000/7000 Series





- "LN." "MN" type: with 2 sockets.
- "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
- Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

Electrical entry for G, H, L, M			
Nil	Without light/surge		
1411	voltage suppressor		
S	With surge		
	voltage suppressor		
Z	With light/surge		
	voltage suppressor		
R	With surge voltage suppressor		
n	(Non-polar type)		
U	With light/surge voltage suppressor		
U	(Non-polar type)		

- There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.
- For "R" and "U," DC voltage is only available
- Power-saving circuit is only available in the "Z" type.

Nil	Without light/surge
1411	voltage suppressor
s	With surge
3	voltage suppressor
7	With light/surge
	voltage suppressor

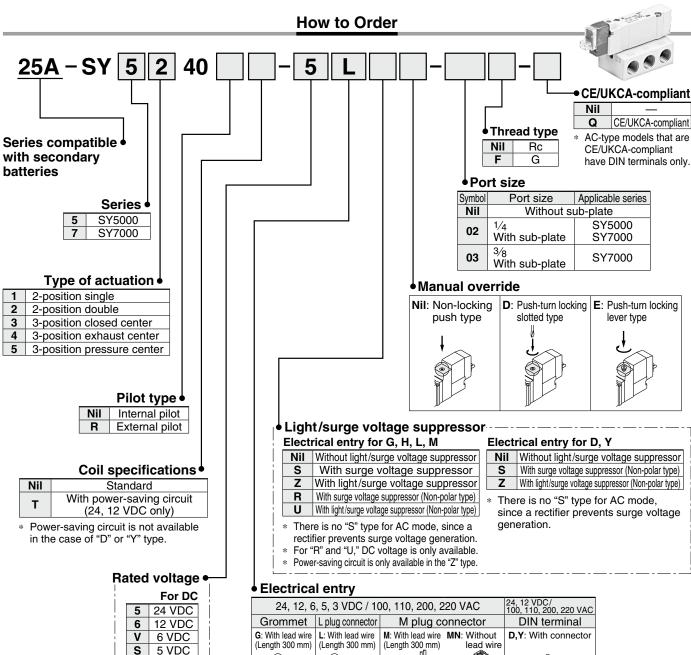
- There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.
- When placing an order for body ported solenoid valve as a single unit, mounting screw for manifold and gasket are not attached. Order them separately, if necessary,
 - * The 25A- series specifications and dimensions

are the same as those of the standard model.



5-Port Solenoid Valve **Base Mounted/Single Unit** 25A-SY5000/7000 Series





For AC (50/60Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

3 VDC

- DC specifications of type "D" and "Y" are only available with 12 and
- AC-type models that are CE/UKCAcompliant have DIN terminals only.

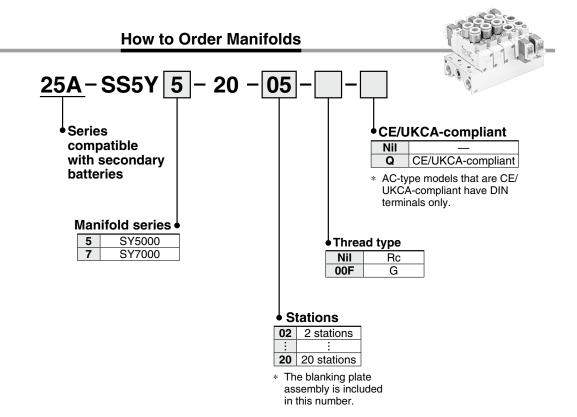
24, 12, 6, 5, 3 VDC / 100, 110, 200, 220 VAC				24, 12 VDC/ 100, 110, 200, 220 VAC
Grommet	L plug connector	M plug co	onnector	DIN terminal
	L: With lead wire (Length 300 mm)	M: With lead wire (Length 300 mm)		D,Y: With connector
H: With lead wire (Length 600 mm)	LN: Without lead wire	LO: Without connector	MO: Without connector	

- "LN," "MN" type: with 2 sockets.
- "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
- * Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Туре 20

5-Port Solenoid Valve Body Ported Manifold Bar Stock Type/Individual Wiring 25A-SY5000/7000 Series



* The 25A- series specifications and dimensions are the same as those of the standard model. However, the blanking plate assembly has different dimensions. Refer to page 71.

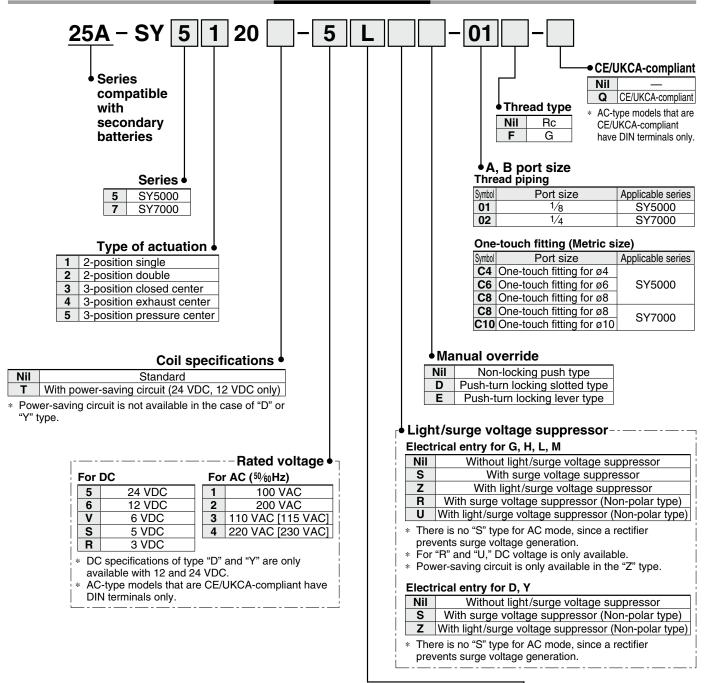
For details, refer to the Web Catalog.



Bar Stock Type/Individual Wiring 25A-SY5000/7000 Series



How to Order Valves



Electrical entry

24, 12, 6	24, 12 VDC/ 100, 110, 200, 220 VAC		
Grommet	L plug connector	M plug connector	DIN terminal
G: With lead wire	D : With connector		
(Length 300 mm)	Y: With connector		
H: With lead wire			
(Length 600 mm)	LO: Without connector	MO: Without connector	

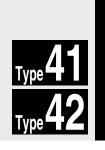
* "LN," "MN" type: with 2 sockets.

* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).

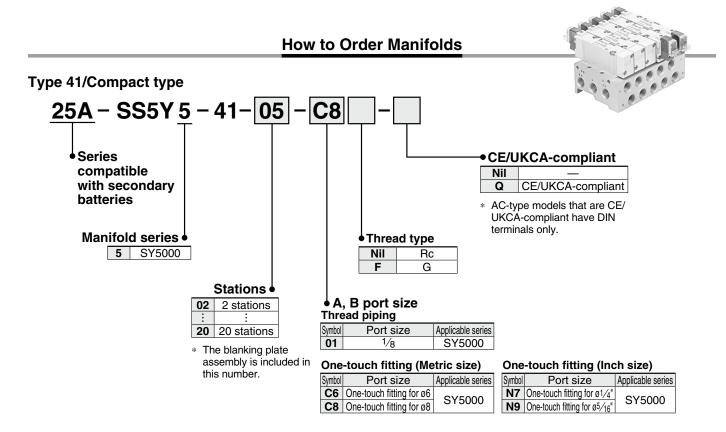
* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

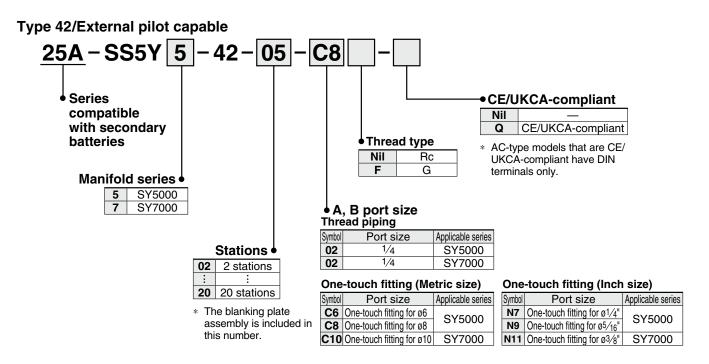
* The 25A- series specifications and dimensions are the same as those of the standard model.





5-Port Solenoid Valve Base Mounted Manifold Bar Stock Type/Individual Wiring 25A-SY5000/7000 Series



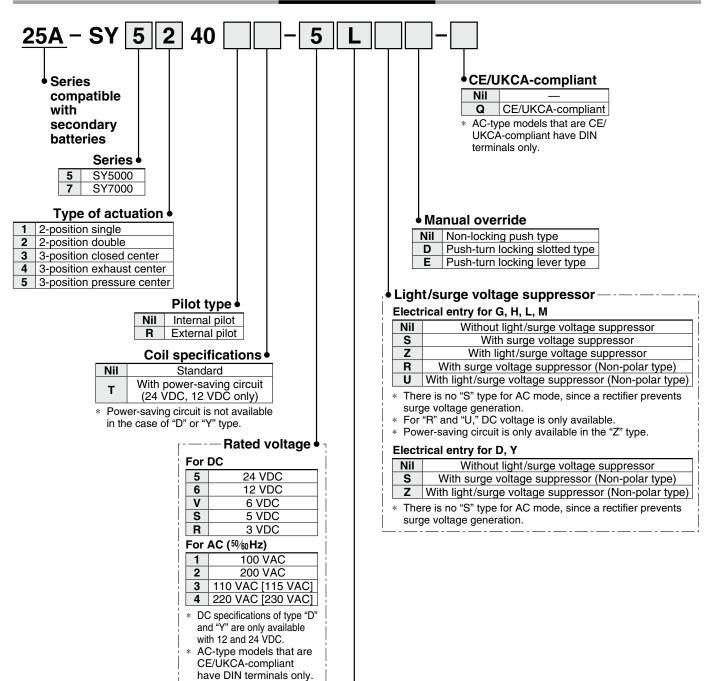


* The 25A- series specifications and dimensions are the same as those of the standard model. However, the blanking plate assembly has different dimensions. Refer to page 71.

Bar Stock Type/Individual Wiring 25A-SY5000/7000 Series



How to Order Valves



Electrical entry

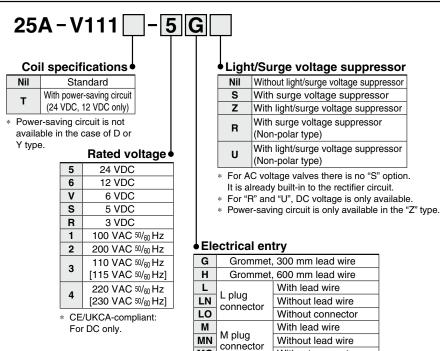
24, 12, 6	24, 12 VDC/ 100, 110, 200, 220 VAC				
Grommet	Grommet L plug connector M plug connector				
G: With lead wire (Length 300 mm) H: With lead wire (Length 600 mm)	L: With lead wire (Length 300 mm) LN: Without lead wire LO: Without connector	MN: Without lead wire	D: With connector Y: With connector		

- * "LN," "MN" type: with 2 sockets.
- * "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
- * Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.
 - * The 25A- series specifications and dimensions are the same as those of the standard model.





How to Order Pilot Valve Assembly (With two mounting screws)



МО

DIN terminal type 25A - V115 - 5 D Rated voltage

5	24 VDC 12 VDC 100 VAC 50/60 Hz		
6			
1			
2	200 VAC 50/60 Hz		
3	110 VAC 50/60 Hz		
3	[115 VAC 50/60 Hz]		
4	220 VAC 50/60 Hz		
4	[230 VAC 50/60 Hz]		

* DC specifications of type D and Y is only available with 12 and 24 VDC.

Light/Surge voltage suppressor

Without connector

Nil	Without light/surge voltage suppressor		
	With surge voltage suppressor		
	(Non-polar type)		
z	With light/surge voltage suppressor		
	(Non-polar type)		

- * DOZ and YOZ are not available.
- * For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

►Electrical entry

D	DIN terminal	With connector
DO	(Type D)	Without connector
Υ	DIN terminal	With connector
YO	(Type Y)	Without connector

 Do not replace V111 (G, H, L, M) to V115 (DIN terminal) and vice versa when replacing pilot valve assembly only.

 Since V111 and V115 are CE/UKCA-compliant as standard, the suffix "-Q" is not necessary.



Bar Stock Type/Individual Wiring 25A-SY5000/7000 Series

One-touch Fittings Part Nos. for Body Ported

		Port size	25A-SY5000	25A-SY7000
	ø8 One-touch fitting (Straight type)	ø4 One-touch fitting (Straight type)	90-VVQ1000-51A-C4	
Outlined as a past		ø6 One-touch fitting (Straight type)	90-VVQ1000-51A-C6	
Cylinder port		90-VVQ1000-51A-C8	90-VVQ2000-51A-C8	
		ø10 One-touch fitting (Straight type)		90-VVQ2000-51A-C10

Gasket Assembly Part Nos.

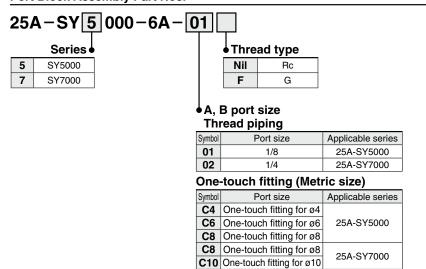
Valve model	Manifold type	25A-SY5000	25A-SY7000
Body ported	Type 20	SY5000-GS-3	SY7000-GS-3
Base mounted	Type 41/42	SY5000-GS-4 (-Q)	SY7000-GS-4 (-Q)

^{*} The gasket assembly includes 10 sets of a gasket and mounting screws.

Bracket Assembly Part Nos.

Description	Part no.
Bracket (For F1)	25A-SX ₇ 000-16-2A (With mounting screw)
Bracket (For F2)	25A-SX ₇ 000-16-1A (With mounting screw)

Port Block Assembly Part Nos.



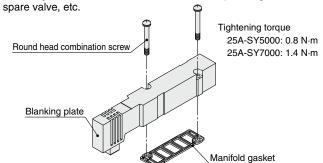


Manifold Options

■Blanking plate assembly

(Mounting screw: 2 pcs., with gasket)

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a snare valve, etc.



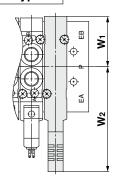
How to Order

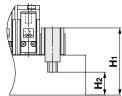
⚠ Caution

When mounted on a type 20 manifold, only the P port is plugged. In addition, it cannot be used for the type 20 CE/UKCA-compliant manifold.

Dimensions

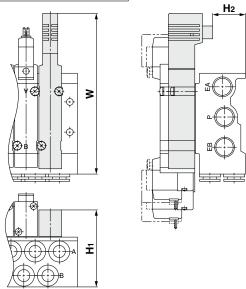
Manifold type/For type 20





Dimensions [mm]					
Series	Manifold type	W 1	W2	H1	H ₂
25A-SY5000	Type 20	33.3	69.6	44.5	15.2
25A-SY7000	Type 20	39.4	76.4	41.1	18.3

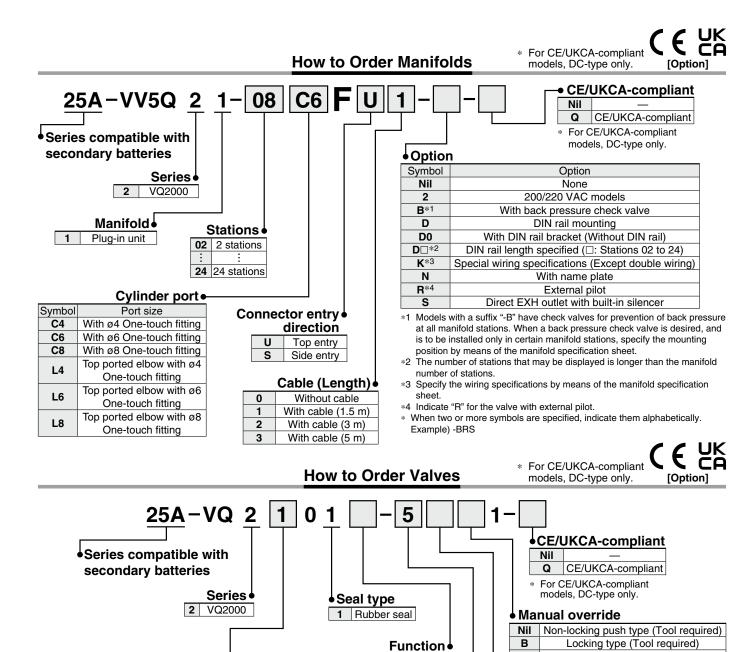
Manifold type/For type 41/42



Dimensions [mm]					
Series	Manifold type	W	H ₁	H ₂	
25A-SY5000	Type 41	106.4	51	21.7	
25A-515000	Type 42	107.6	56	26.7	
25A-SY7000	Type 42	118.1	55.6	32.8	



Plug-in Unit/Base Mounted F Kit (D-sub connector kit) 25A-VQ2000 Series



2 2-position double 3 3-position closed center 4 3-position exhaust center 5 3-position pressure center A 4-position dual port (N.C./N.C.) B 4-position dual port (N.O./N.O.)

2-position single

4-position dual port (N.C./N.O.)

B High speed response type
N Negative common
R External pilot

Symbol Specifications

 When two or more symbols are specified, indicate them alphabetically.

1 100 VAC (50/60 Hz) — 2 200 VAC (50/60 Hz) — 3 110 VAC (50/60 Hz) — 4 220 VAC (50/60 Hz) — 5 24 VDC — 6 12 VDC

Light/surge voltage suppressor

C

D

None

Nil

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Locking type (Manual)

Slide locking type (Manual)

CE/UKCA-compliant

△ Caution

73

1

Use the standard (DC) specification when continuously energizing for long periods of time.

DC

(0.4 W)

0

(0.95 W)

0

0

AC

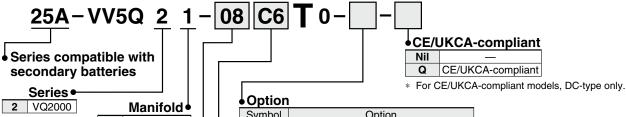
0

Plug-in Unit/Base Mounted T Kit (Terminal block box kit) 25A-VQ2000 Series

How to Order Manifolds

* For CE/UKCA-compliant models, DC-type only.





	1	Plug-in unit		
	Stations)
ĺ	02 2 stations			
	:		:	
ĺ	20 20 stations			
	Cylinder nort			

Symbol	Port size	
C4	C4 With ø4 One-touch fitting	
C6	With ø6 One-touch fitting	
C8	C8 With ø8 One-touch fitting	
L4	4 Top ported elbow with ø4 One-touch fitting	
L6	Top ported elbow with ø6 One-touch fitting	
L8	Top ported elbow with ø8 One-touch fitting	

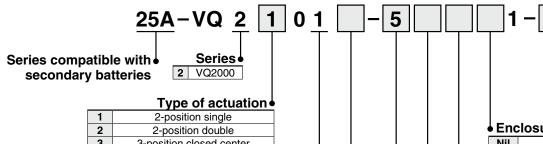
	* TOLOL/ONO	
Option	l	
Symbol Option		
Nil	None	
B*1	With back pressure check valve	
D	DIN rail mounting	
DO	With DIN rail bracket	
D0	(Without DIN rail)	
D □*2	DIN rail length specified	
D□*²	(□: Stations 02 to 20)	
K *3	Special wiring spec.	
Ko	(Except double wiring)	
N	With name plate	
R*4 External pilot		
S	Direct EXH outlet with built-in silence	
147	Enclosure: Dust-tight,	
W	Water-jet-proof (IP65)	

- *1 Models with a suffix "-B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.
- *2 The number of stations that may be displayed is longer than the manifold number of stations.
- Specify the wiring specifications by means of the manifold specification sheet.
- *4 Indicate "R" for the valve with external pilot.
- * When two or more symbols are specified, indicate them alphabetically.
 - Example) -BRS
- Specify the mounting position by means of the manifold specification sheet.

How to Order Valves

* For CE/UKCA-compliant models, DC-type only.





2	2-position double	
3	3-position closed center	
4	3-position exhaust center	
5	3-position pressure center	
Α	4-position dual port (N.C./N.C.)	
В	4-position dual port (N.O./N.O.)	
С	4-position dual port (N.C./N.O.)	

Seal type ⊌ 1 Rubber seal

Function 4

Symbol	Specifications	DC	AC
Nil	Standard	(0.4 W)	0
В	High speed	(0.95 W)	
Ь	response type	0	
N	Negative		
- 13	common		
R	External		
n	pilot		

 When two or more symbols are specified, indicate them alphabetically. Combination of "B" and "K" is not possible.

CE/UKCA-compliant

CE/UKCA-compliant

For CE/UKCA-compliant models, DC-type only.

Enclosure

Nil	Dustproof		
w	Dust-tight/Water-jet-proof type		
VV	(IP65)		

Manual override

l	NII	Non-locking push type (Tool required		
	В	Locking type (Tool required)		
	С	Locking type (Manual)		
	D	Slide locking type (Manual)		

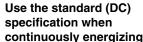
Light/surge voltage suppressor

INII	165	
Ε	None	

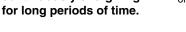
<u> </u>		CE/UKCA-compliant
1	100 VAC (50/60 Hz)	_
3	110 VAC (50/60 Hz)	_
5	24 VDC	•
6	12 VDC	•

The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

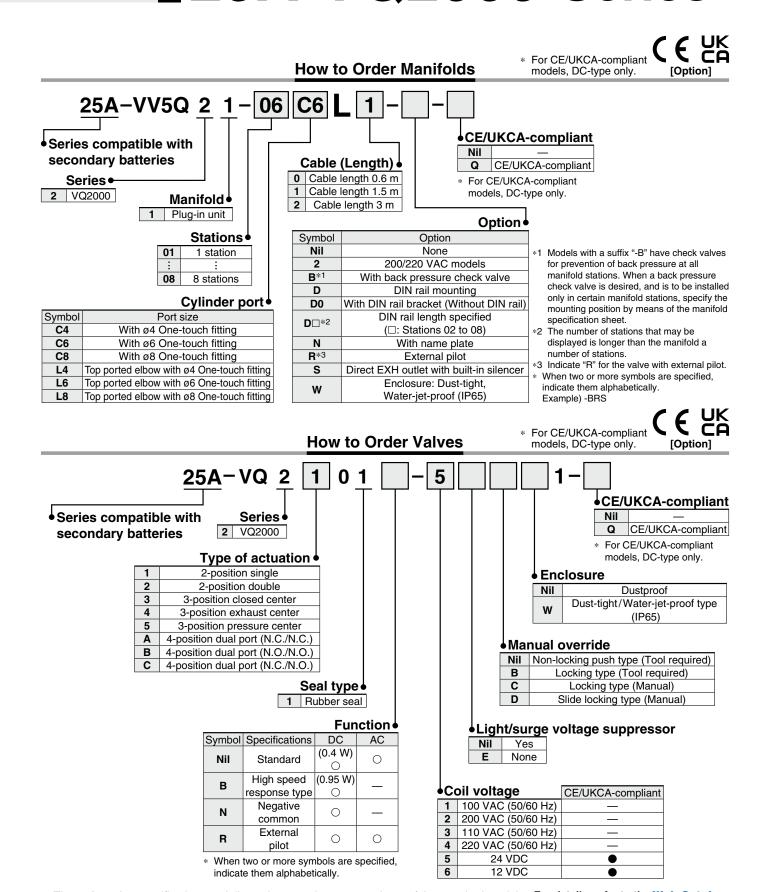


△ Caution





Plug-in Unit/Base Mounted L Kit (Lead wire) 25A-VQ2000 Series



Plug-in Unit/Base Mounted S Kit (Serial transmission) 25A-VQ2000 Series



 Refer to "SI Unit Part Nos." when ordering the CE/ UKCA-compliant SI unit.

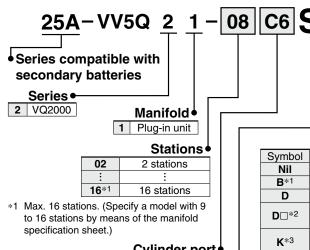
CE/UKCA-compliant

Option

Q CE/UKCA-compliant
Refer to "SI Unit Part Nos." when

ordering the CE/UKCA-compliant SI unit.





	Cylinder port •		
Symbol	Port size		
C4	With ø4 One-touch fitting		
C6	With ø6 One-touch fitting		
C8	With ø8 One-touch fitting		
L4	Top ported elbow with ø4 One-touch fitting		
L6	Top ported elbow with ø6 One-touch fitting		

SI unit specifications

Symbol	Protocol	Stations
0	Without SI unit	_
Q	DeviceNet®	Max.16
V	CC-Link	stations

Top ported elbow with ø8 One-touch fitting

Symbol	Option	
Nil	None	
B*1	With back pressure check valve	
D	DIN rail mounting	
D □*2	DIN rail length specified	
ט⊔ייב	(□: Stations 02 to 16)	
K *3	Special wiring specifications	
K.o	(Except double wiring)	
N	With name plate	
R*4	With external pilot	
s	Direct EXH outlet	
3	with built-in silencer	
W *5	Enclosure: Dust-tight,	
VV.S	Water-jet-proof (IP65)	

SI Unit Part Nos.

Symbol	Protocol	SI unit part no.
Q	DeviceNet®	EX120-SDN1-X220
V	CC-Link	EX120-SMJ1-X220

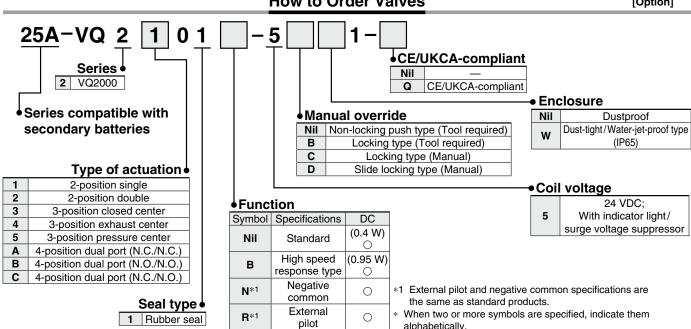
- *1 Models with a suffix "-B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.
- *2 The number of stations that may be displayed is longer than the manifold number of stations.
- *3 Specify the wiring specifications by means of the manifold specification sheet.
- *4 Indicate "R" for the valve with external pilot.
- *5 Refer to "Dimensions" of the standard products for SI unit and valve, in case of "W" (Dust-tight, Water-jet-proof).
- When two or more symbols are specified, indicate them alphabetically.
 Example) -BRS.

SI Unit Part Nos. (With option W)

Symbol	Protocol	SI unit part no.
Q	DeviceNet®	EX124D-SDN1-X220
٧	CC-Link	EX124D-SMJ1-X220





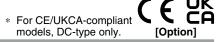


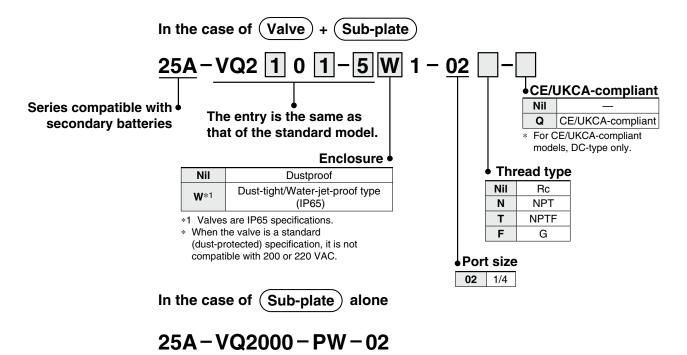
* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.



Sub-plate Single Unit 25A-VQ2000 Series

How to Order





* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

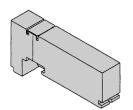
25A-VQ2000 Series

Manifold Options

Blanking plate assembly

25A-VVQ2000V-10A-1

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SI Unit Part Nos.

Description	SI unit part no.	Note
EX124D-SMJ1-X220		CC-Link
EX 124 SI UIIII	EX124D-SDN1-X220	DeviceNet [®]
EX120 SI unit	EX120-SMJ1-X220	CC-Link (VQ2000/Without option "W")
EX 120 SI UNIT	EX120-SDN1-X220	DeviceNet® (VQ2000/Without option "W")

One-touch Fittings Part Nos.

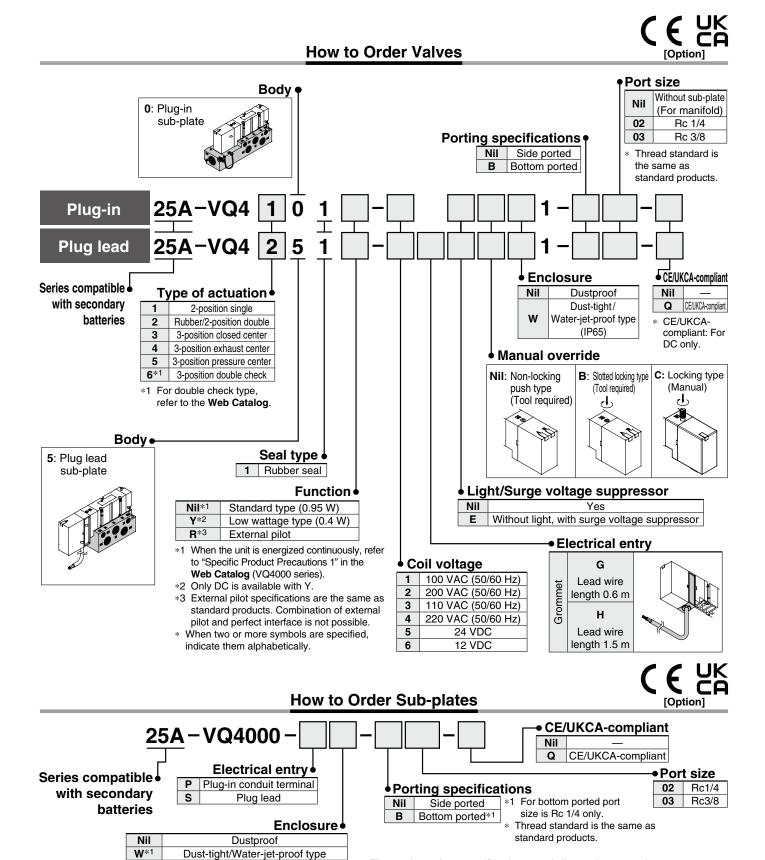
Port size			One-touch fitting part no.
		ø4 One-touch fitting (Straight type)	90-VVQ1000-51A-C4
Cylinder port	Metric size	ø6 One-touch fitting (Straight type)	90-VVQ1000-51A-C6
		ø8 One-touch fitting (Straight type)	90-VVQ1000-51A-C8
1 (P), 3 (R) port	Metric size	ø10 One-touch fitting (Straight type)	90-VVQ2000-51A-C10



Plug-in/Plug Lead: Single Unit

Base Mounted

25A-VQ4000 Series

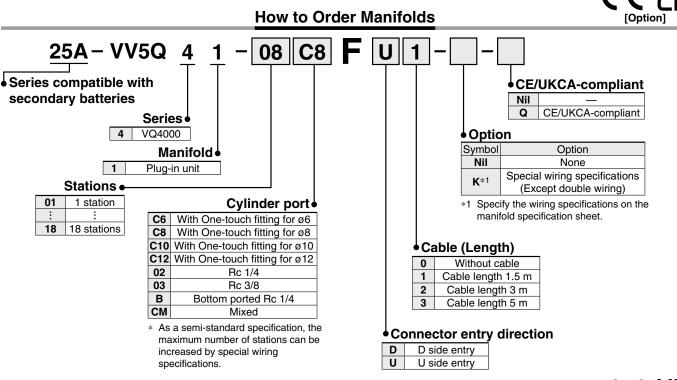


* The 25A- series specifications and dimensions are the same as

those of the standard model. For details, refer to the Web Catalog.

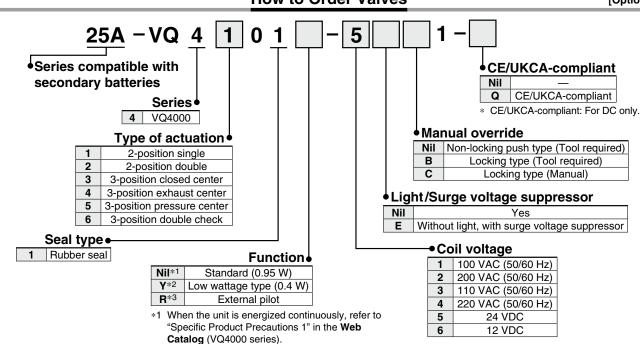
*1 It is not necessary for plug lead type.

Plug-in Unit/Base Mounted F Kit (D-sub connector kit) 25A-VQ4000 Series



How to Order Valves





* The 25A- series specifications and dimensions are the same

as those of the standard model.



*2 Only DC is available with Y.

them alphabetically.

*3 External pilot specifications are the same as

and perfect interface is not possible.

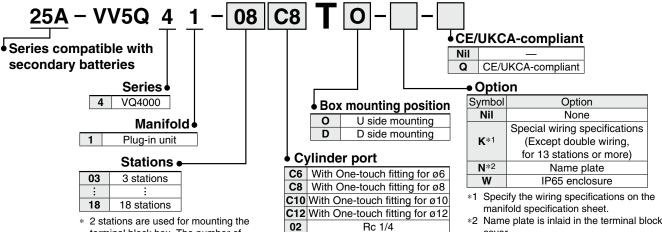
standard products. Combination of external pilot

When two or more symbols are specified, indicate

Plug-in Unit/Base Mounted T Kit (Terminal block box kit) 25A-VQ4000 Series

How to Order Manifolds





03

В

CM

terminal block box. The number of stations is the number of manifold valves plus 2 stations for the terminal block box. For 13 stations or more. specify the wiring specifications by means of the manifold specification

*3 External pilot specifications are the same as standard

When two or more symbols are specified, indicate them

is not possible.

alphabetically.

products. Combination of external pilot and perfect interface

As a semi-standard specification, the maximum number of stations can be increased by special wiring specifications.

Rc 3/8

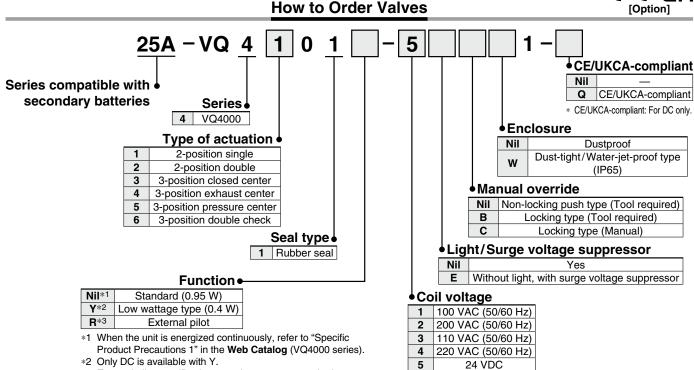
Bottom ported Rc 1/4

Mixed

- cover.
- * When two or more symbols are specified, indicate them alphabetically. Example) -KM







* The 25A- series specifications and dimensions are the same as those of the standard model.

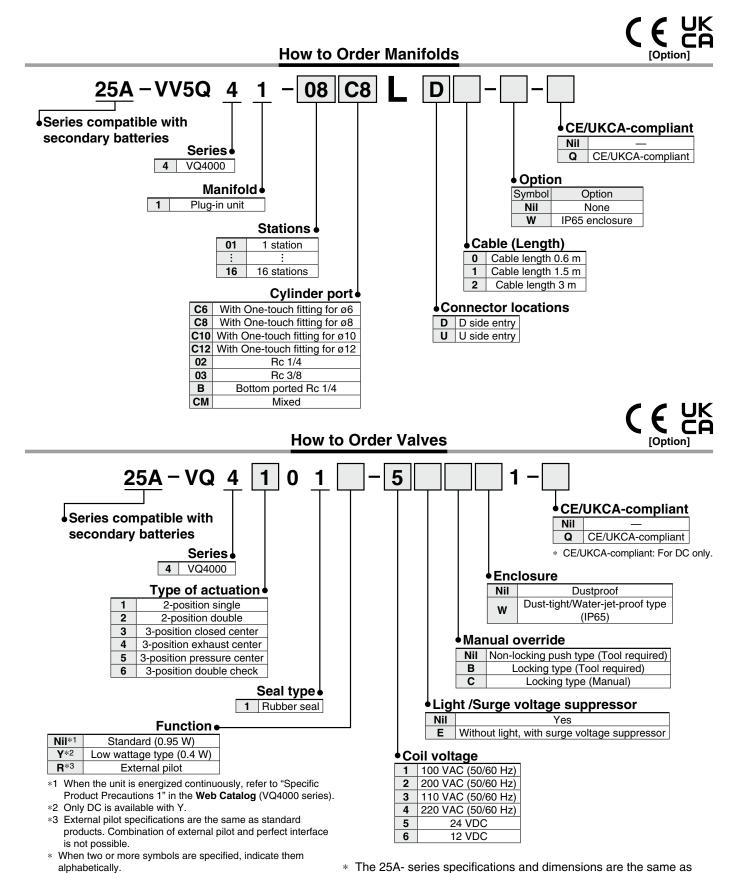
For details, refer to the Web Catalog.



6

12 VDC

Plug-in Unit/Base Mounted L Kit (Lead wire cable) 25A-VQ4000 Series



^{*} The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.

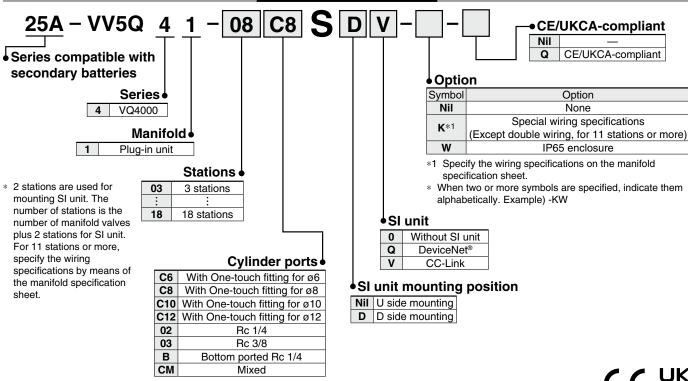


Plug-in Unit/Base Mounted S Kit (Serial transmission unit) 25A-VQ4000 Series



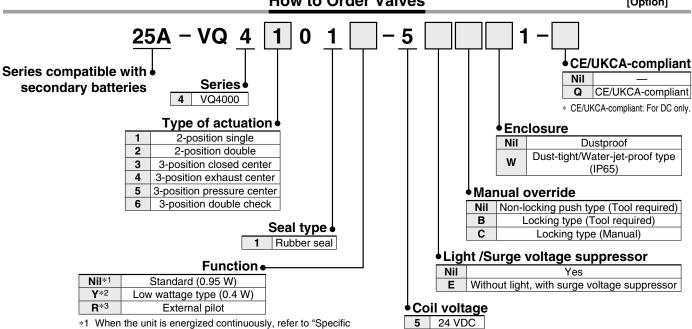
 Refer to "SI Unit Part Nos." when ordering the CE/ UKCA-compliant SI unit.





How to Order Valves

(E UK [Option]



Product Precautions 1" in the **Web Catalog** (VQ4000 series).

- *2 Only DC is available with Y.
- *3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.
- * When two or more symbols are specified, indicate them alphabetically.

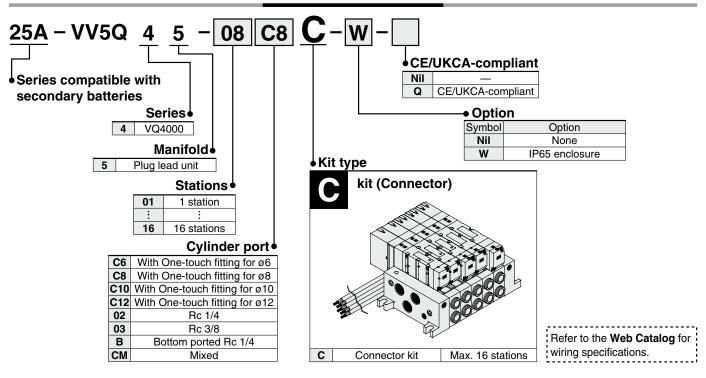
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

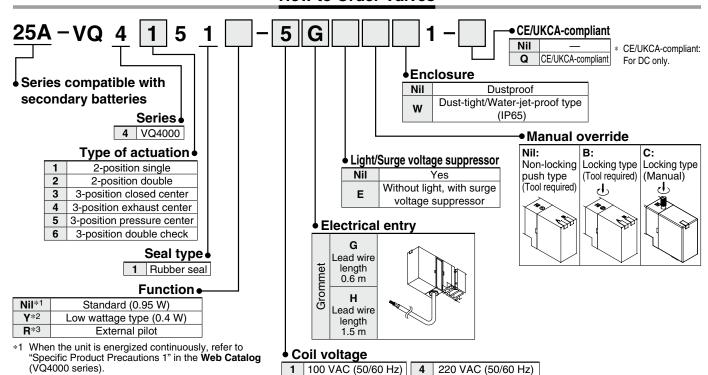


Plug Lead Unit/Base Mounted C Kit (Connector kit) 25A-VQ4000 Series

How to Order Manifolds



How to Order Valves



standard products. Combination of external pilot and * The 25A- series specifications and dimensions are the same as When two or more symbols are specified, indicate those of the standard model. For details, refer to the Web Catalog.

5

24 VDC

12 VDC



200 VAC (50/60 Hz)

3 110 VAC (50/60 Hz)

*2 Only DC is available with Y.

them alphabetically.

*3 External pilot specifications are the same as

perfect interface is not possible.

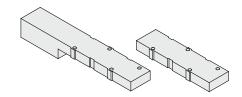
25A-VQ4000 Series

Manifold Options

Blanking plate assembly

25A-VVQ4000-10A-1 (Plug-in type) 25A-VVQ4000-10A-5 (Plug lead type)

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SI Unit Part Nos.

Description	SI unit part no.	Note
EX124 SI unit	EX124D-SMJ1-X220	CC-Link/D side mounting
	EX124D-SDN1-X220	DeviceNet®/D side mounting
	EX124U-SMJ1-X220	CC-Link/U side mounting
	EX124U-SDN1-X220	DeviceNet®/U side mounting

One-touch Fittings Part Nos

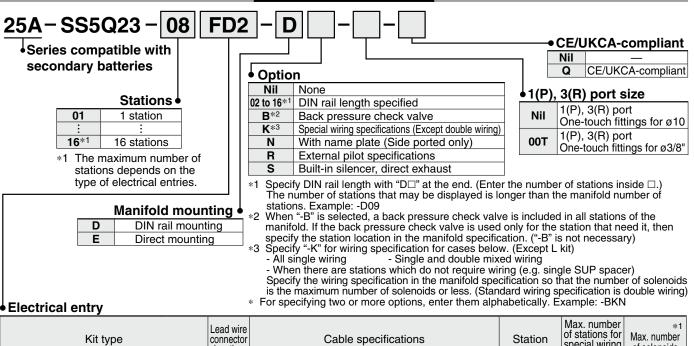
One-touch i titings Fait Nos.					
Port size			One-touch fittings part no.		
Cylinder port Metric size		ø6 One-touch fitting (Straight type)	90-VVQ4000-50B-C6		
	Metric size	ø8 One-touch fitting (Straight type)	90-VVQ4000-50B-C8		
		ø10 One-touch fitting (Straight type)	90-VVQ4000-50B-C10		
		ø12 One-touch fitting (Straight type)	90-VVQ4000-50B-C12		





Plug-in Unit 25A-SQ2000 Series

How to Order Manifolds



Liecuicai enu y						
Kit type		Lead wire connector location	Cable specifications	Station	Max. number of stations for special wiring specifications	*1 Max. number of solenoids
The electric parts are made of copper. D-sub D side Connector kit Mounting screw: Stainless steel U side Connector kit	FD0 FD1 FD2 FD3	D side	D-sub connector (25P) kit, without cable D-sub connector (25P) kit, with 1.5 m cable D-sub connector (25P) kit, with 3.0 m cable D-sub connector (25P) kit, with 5.0 m cable	1 to 12 stations	16 stations	24
Terminal block box kit	TD0	D side	Terminal block box kit	1 to 10 stations	16 stations	16
Mounting screw: Stainless steel	LD0 LU0	D side U side	Lead wire kit with 0.6 m cable			
	LD1 LU1	D side U side	Lead wire kit with 1.5 m cable	1 to 12 stations	_	_
One-touch fitting Body: Stainless steel	LD2 LU2	D side U side	Lead wire kit with 3.0 m cable			
Mounting screw:Stainless steel The electric parts are made	SDQ	D side	DeviceNet [®]	1 to 8 stations	16 stations	16
One-touch fitting Body: Stainless steel Serial transmission kit EX140 integrated-type (for output) serial transmission system*2	SDV	D Side	CC-Link	1 to 8 stations	16 stations	16

^{*1} The maximum number of stations should not be more than the maximum number of solenoids. (The number of solenoids are counted as: 1 for single solenoids and 2 for type 3P and 4P double solenoids.)

SI unit part nos.

Symbol	Protocol type	SI unit part no.	Page
SDQ	DeviceNet®	EX140-SDN1-X220	00
SDV	CC-Link	EX140-SMJ1-X220	88

Blanking plate assembly

25A-SSQ2000-10A-3

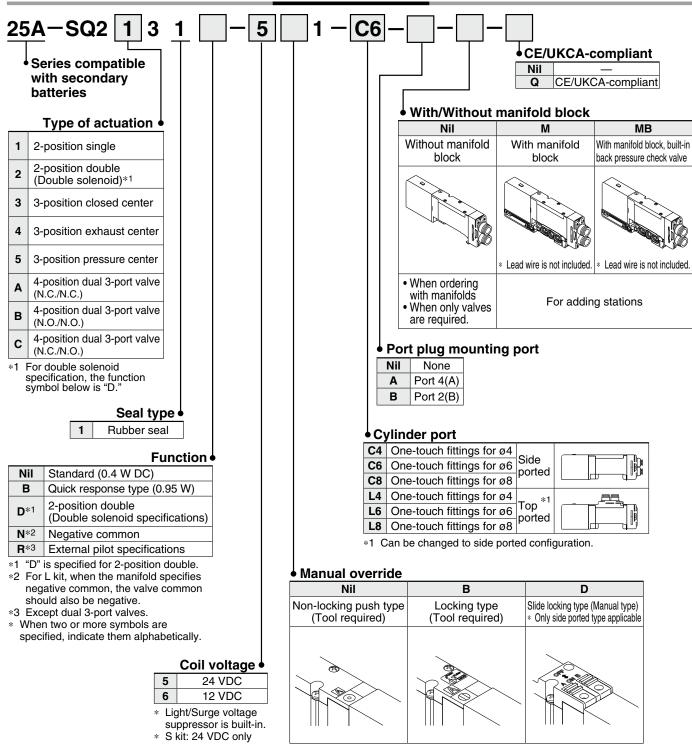
* The 25A- series specifications and dimensions are the same as those of the standard model.



^{*2} Refer to the **Web Catalog** for the details of EX140 integrated-type (for output) serial transmission system. Refer to "SI unit part nos." below when ordering the CE/UKCA-compliant SI unit.

CE UK [Option]

How to Order Valves



SI Unit Part Nos.

Description	SI unit part no.	Note
EV4.40.01	EX140-SMJ1-X220	CC-Link
EX140 SI unit	EX140-SDN1-X220	DeviceNet®

One-touch Fittings Part Nos.

one todan rituinger arrives.						
		One-touch fittings part no.				
		ø4 One-touch fitting (Straight type)	90-VVQ1000-51A-C4			
Cylinder port	Metric size	ø6 One-touch fitting (Straight type)	90-VVQ1000-51A-C6			
		ø8 One-touch fitting (Straight type)	90-VVQ1000-51A-C8			
1 (P), 3 (R) port	Metric size	ø10 One-touch fitting (Straight type)	90-VVQ2000-51A-C10			

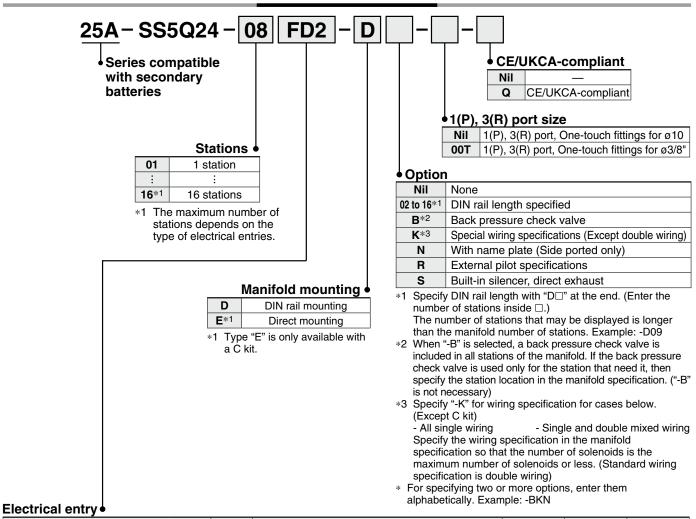
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



Plug Lead Unit 25A-SQ2000 Series

How to Order Manifolds



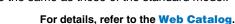
Kit type		Lead wire connector location	Cable specifications	Stations	Max. number of stations for special wiring specifications	of solenoids	
F kit	Mounting screw: Stainless steel	FD0		D-sub connector (25P) kit, without cable			
The electric	The electric Uside	FD1	D side	D-sub connector (25P) kit, with 1.5 m cable	1 to 12 stations	16 stations	24
parts are made D side of copper.	FD2	Diside	D-sub connector (25P) kit, with 3.0 m cable	1 10 12 Stations	TO Stations	24	
D-sub connector kit One-touch fitting Body: Stainless steel			FD3				D-sub connector (25P) kit, with 5.0 m cable
C kit Connector kit	Mounting screw: Stainless steel One-touch fitting Body: Stainless steel	С	_	Connector kit	1 to 16 stations		_

- *1 The maximum number of stations should not be more than the maximum number of solenoids. (The number of solenoids are counted as: 1 for single solenoids and 2 for type 3P and 4P double solenoids.)
- Refer to the Web Catalog for manifold spare parts.

Blanking plate assembly

25A-SSQ2000-10A-4

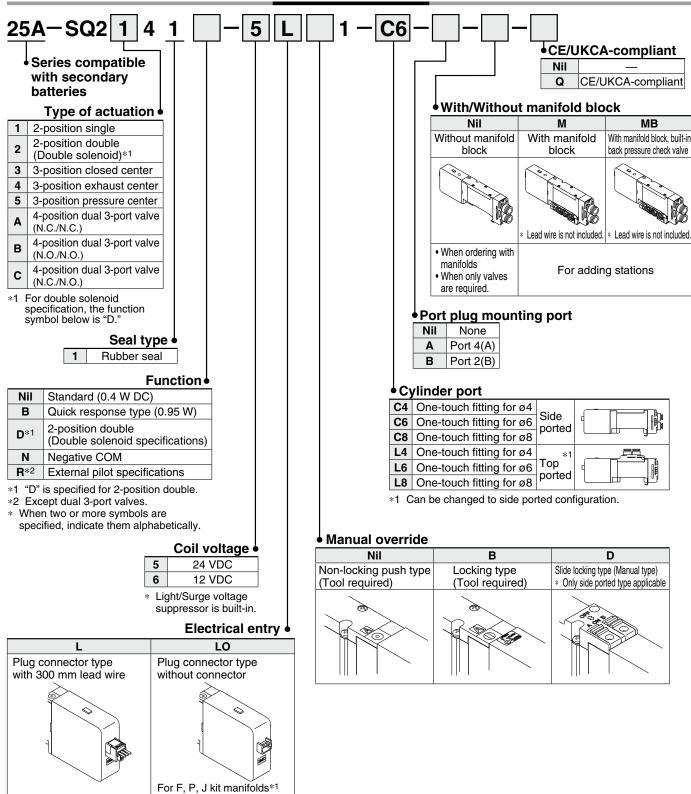
* The 25A- series specifications and dimensions are the same as those of the standard model.





CE UK [Option]

How to Order Valves



*1 Indicate "LO" when ordering centralized wiring type manifolds, F, P, and J kits, since the lead wire will be attached to the manifold side.

One-touch Fittings Part Nos.

<u> </u>					
		One-touch fittings part no.			
Cylinder port	Metric size	ø4 One-touch fitting (Straight type)	90-VVQ1000-51A-C4		
		ø6 One-touch fitting (Straight type)	90-VVQ1000-51A-C6		
		ø8 One-touch fitting (Straight type)	90-VVQ1000-51A-C8		
1 (P), 3 (R) port	Metric size	ø10 One-touch fitting (Straight type)	90-VVQ2000-51A-C10		

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

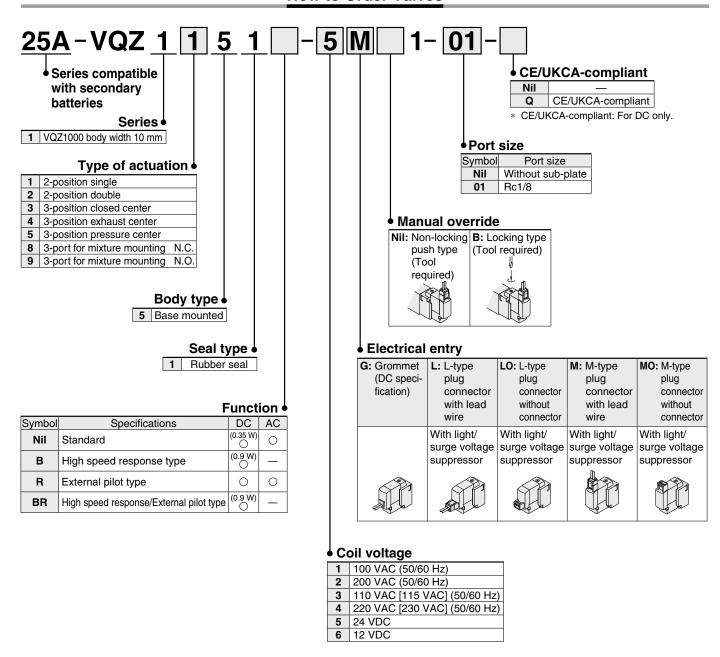


Base Mounted

Plug Lead Unit

5-Port Solenoid Valve 25A-VQZ1000 Series Single Unit

How to Order Valves





Use standard (DC) specification for continuous duty.

* The 25A- series specifications and dimensions are the same as those of the standard model.



Base Mounted

Plug Lead Unit

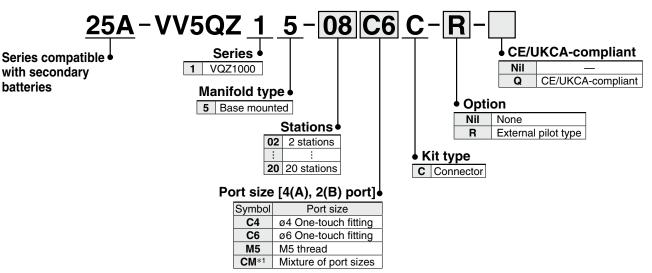
5-Port Solenoid Valve

25A-VQZ1000 Series

Manifold Connector Kit

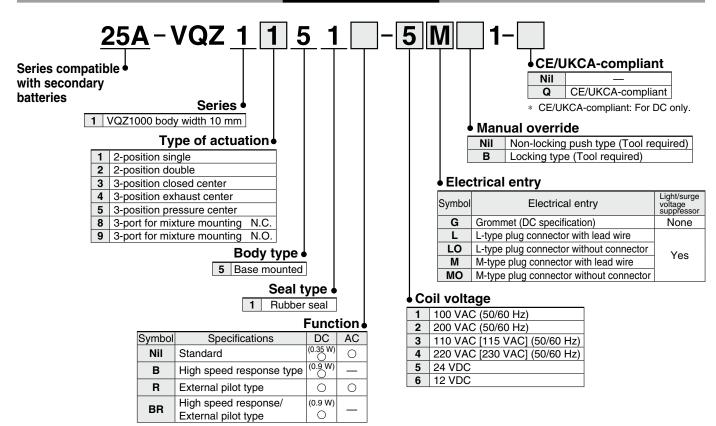


How to Order Manifolds



^{*1} Specify port mixture/with port plug by the manifold specification sheet. Port mixture and port plug are available only for One-touch fitting type.

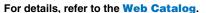
How to Order Valves



⚠ Caution

Use standard (DC) specification for continuous duty.

* The 25A- series specifications and dimensions are the same as those of the standard model.

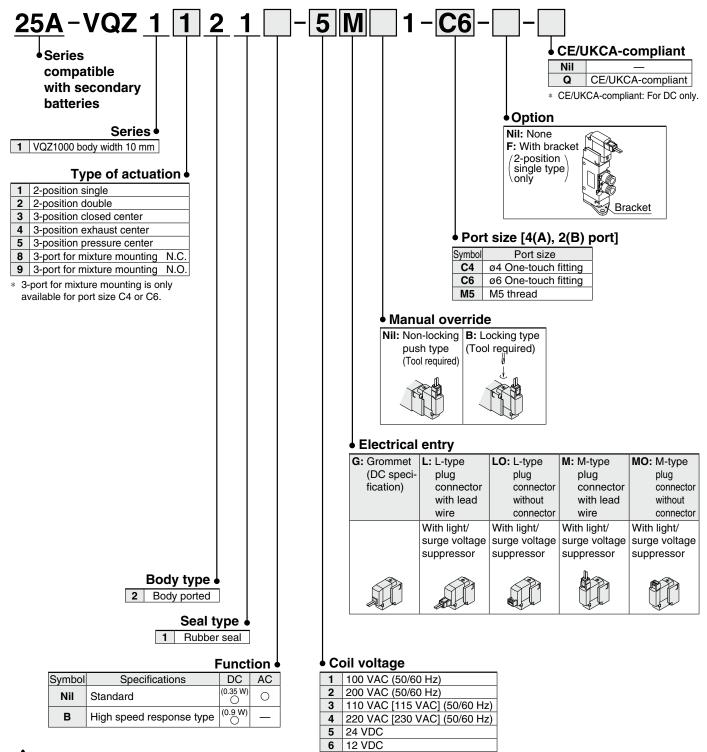


Body Ported

Plug Lead Unit

5-Port Solenoid Valve 25A-VQZ1000 Series Single Unit (€ CH

How to Order Valves





Use standard (DC) specification for continuous duty.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Body Ported Plug Lead Unit

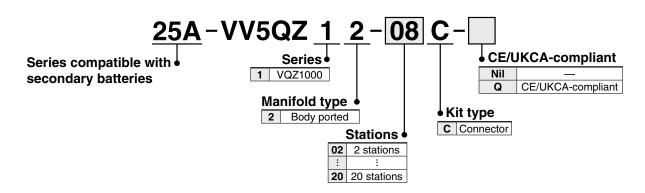
5-Port Solenoid Valve

25A-VQZ1000 Series

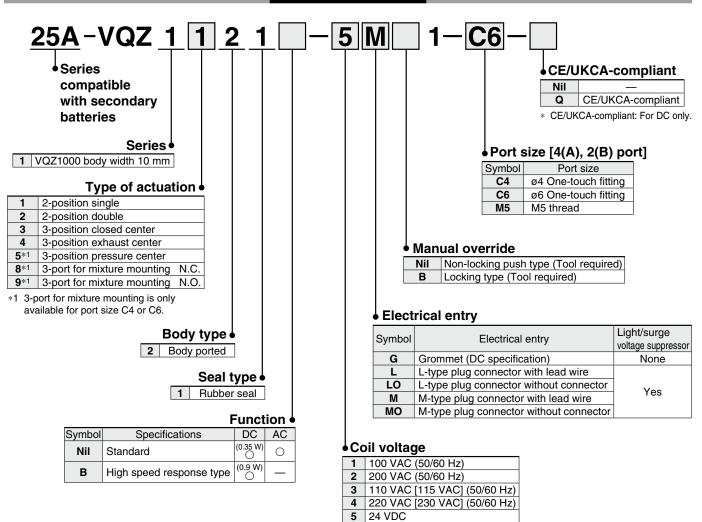
Manifold Connector Kit



How to Order Manifolds



How to Order Valves





Use standard (DC) specification for continuous duty.

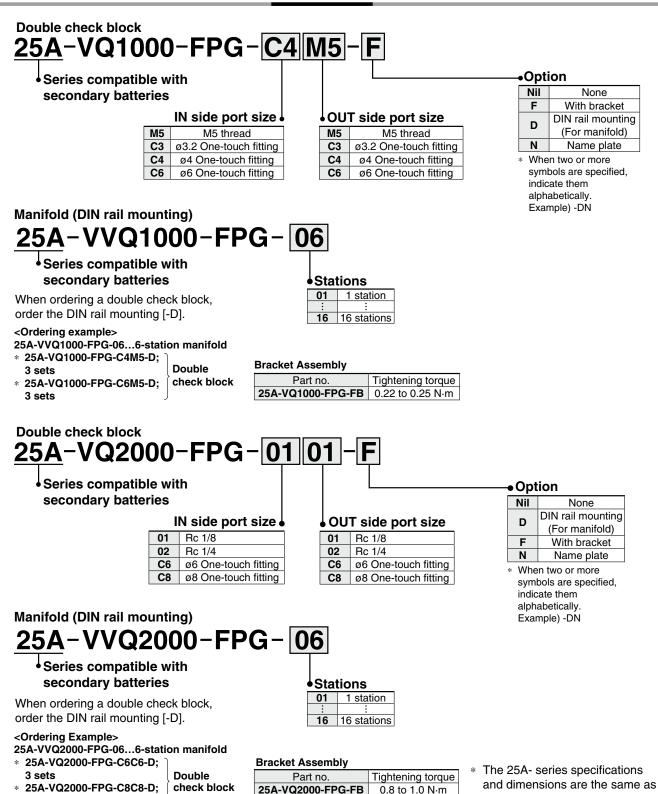


6 12 VDC

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

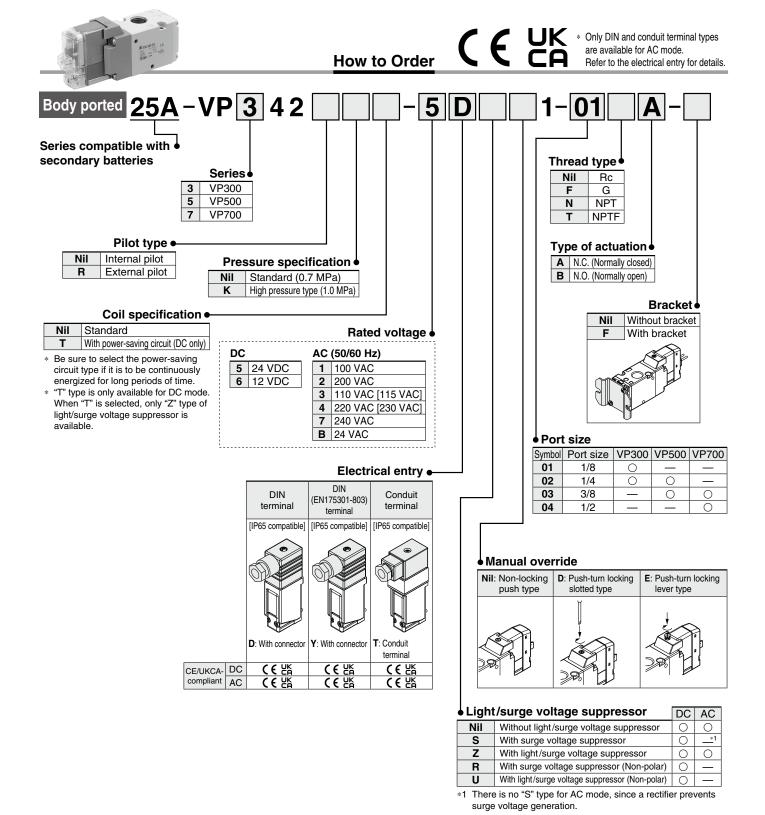
Plug-in Unit Base Mounted 25A-VQ1000/2000 Series Double check block (Separated)

How to Order



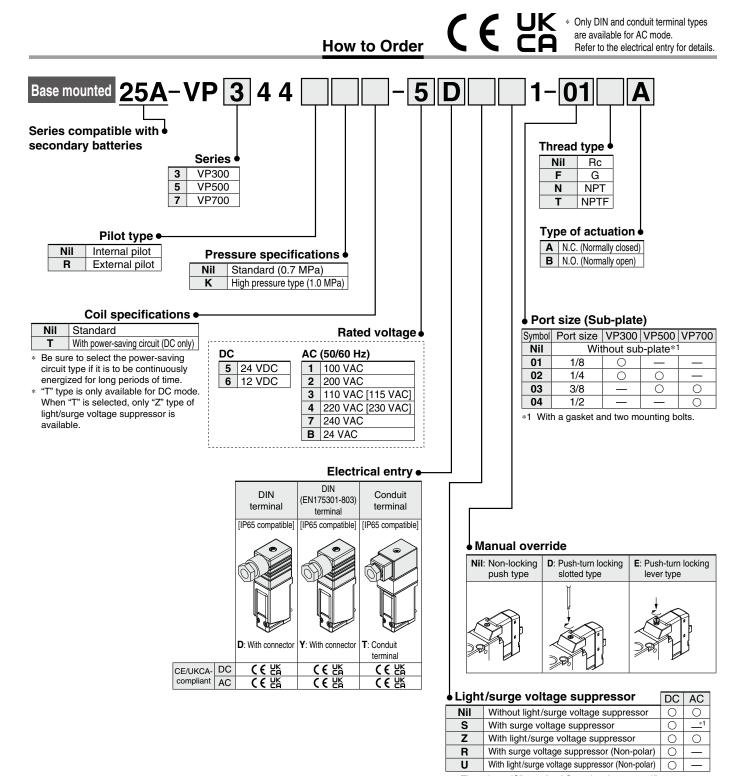
3 sets

Rubber Seal 3-Port/Pilot Poppet Type 25A-VP342/542/742 Series



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Rubber Seal 3-Port/Pilot Poppet Type 25A-VP344/544/744 Series



^{*1} There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

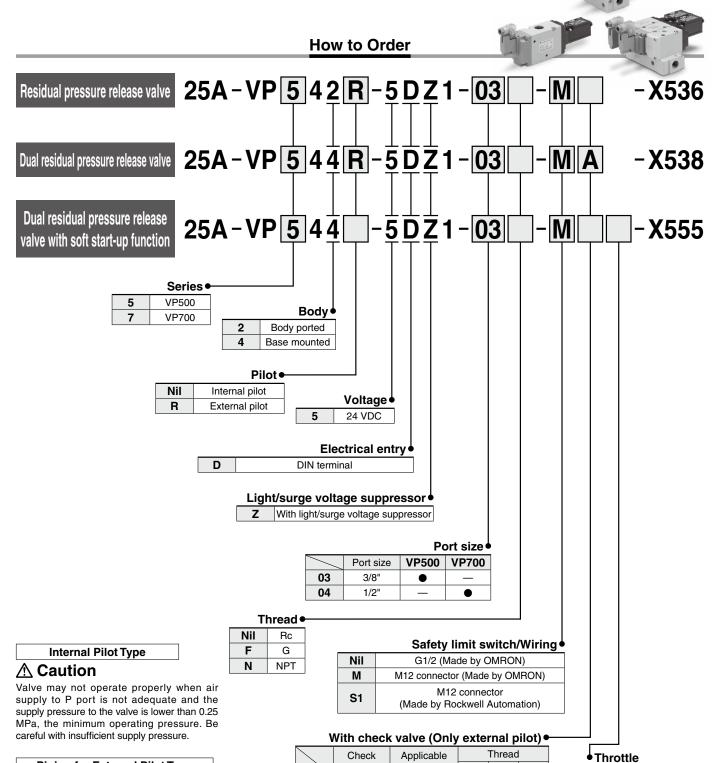
Safety Standard ISO 13849-1 Certified

3-Port Solenoid Valve/Residual Pressure Release Valve with Detection of Main Valve Position





25A-VP500/700-X536, X538, X555



Piping for External Pilot Type

∕∿ Caution

The product may not operate when the external pilot pressure is insufficient due to simultaneous operation or restricted air piping. In this case, use the check valve (AKH series) with the external pilot port, change the piping size or adjust the set pressure to provide a constant pressure of 0.25 MPa or more.

tube O.D. valve Rc G **NPT** None •

Nil Α ø6 • В ø1/4"

15 ø1.5 fixed orifice

10

20*1 ø2 fixed orifice *1 VP700 only

Variable throttle

ø1 fixed orifice

* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.



For the internal pilot, the symbol is nil.

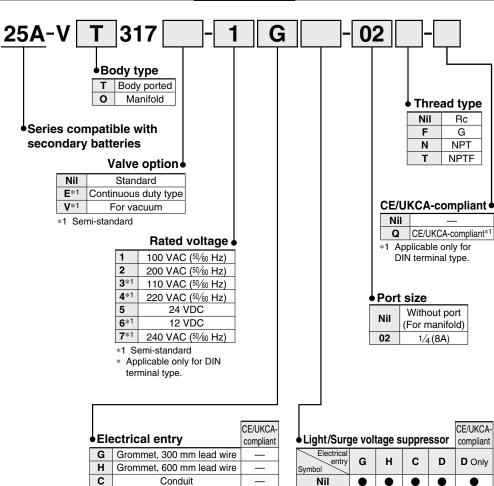
3-Port Solenoid Valve **Direct Operated Poppet Type**

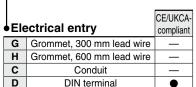
25A-VT317 Series

Rubber Seal

* CE/UKCA-compliant: For DIN terminal type.

How to Order



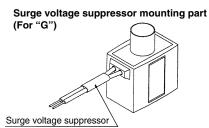


S: With surge voltage suppressor

S Z

*1 Refer to the figure below.

Z: With light/surge voltage suppressor



Accessory

Model	Applicable manifold type	Description (Part no.)
25A-VO317	Common or individual exhaust	O-ring (KA00066, 4 pcs.)*1 Bolts (CA01161, 2 pcs.)

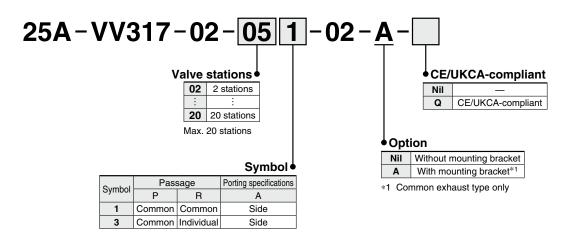
^{*1} It is not applied to "Continuous duty type." Refer to the accessories in the Web Catalog.



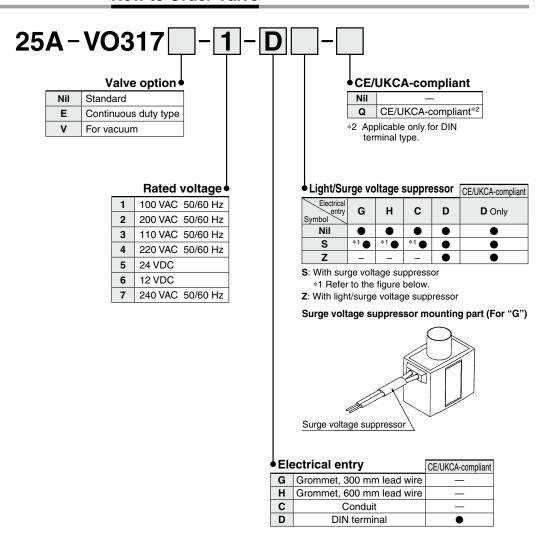
^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Direct Operated Poppet Type 25A-VT317 Series

How to Order Manifold



How to Order Valve



Blanking plate assembly part no.: PVT317-53-3A (With bolt, O-ring)

3-Port Solenoid Valve Direct Operated Poppet Type 25A-VG342 Series Rubber Seal

Low power consumption

4.8 W DC (Standard type) 2 W DC (Energy-saving type)

No lubrication required Possible to use in vacuum or under low pressures

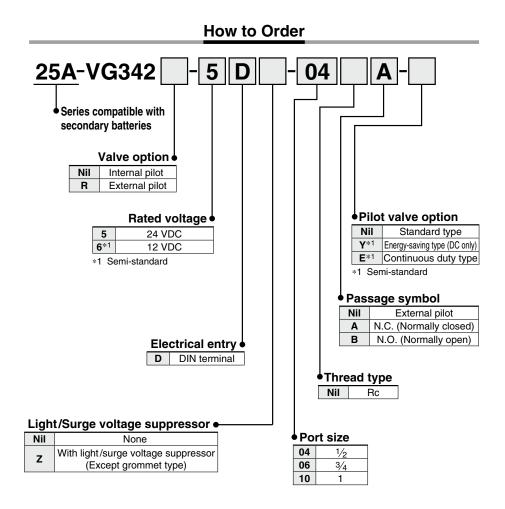
External pilot Vacuum: Up to -101.2 kPa Low pressure: 0 to 0.2 MPa

Changeable actuation:

N.C., N.O., or external pilot Can be used as a selector or divider valve (External pilot)





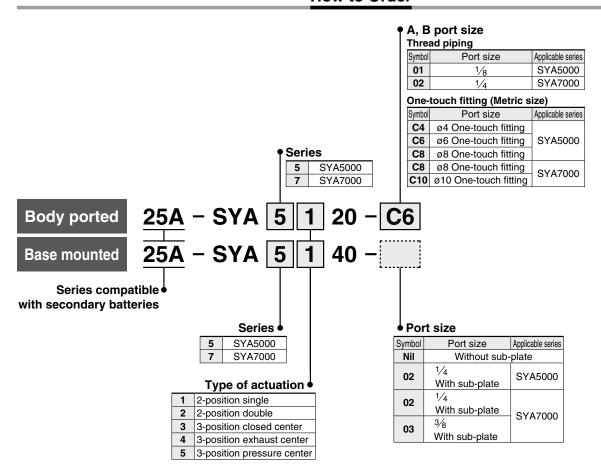


* The 25A- series specifications and dimensions are the same as those of the standard model.



5-Port Air Operated Valve 25A-SYA5000/7000 Series

How to Order



How to Order Manifold Base

Same manifolds as the SY series (Non plug-in type) are prepared. (For 20, 41 and 42 Types)

25A-SS5YA₇⁵ Fill the same as 25A-SS5Y ₇⁵.

(Refer to pages 65 and 67.)

 Specify the part numbers for valves and options together beneath the manifold base part number.

<Example>

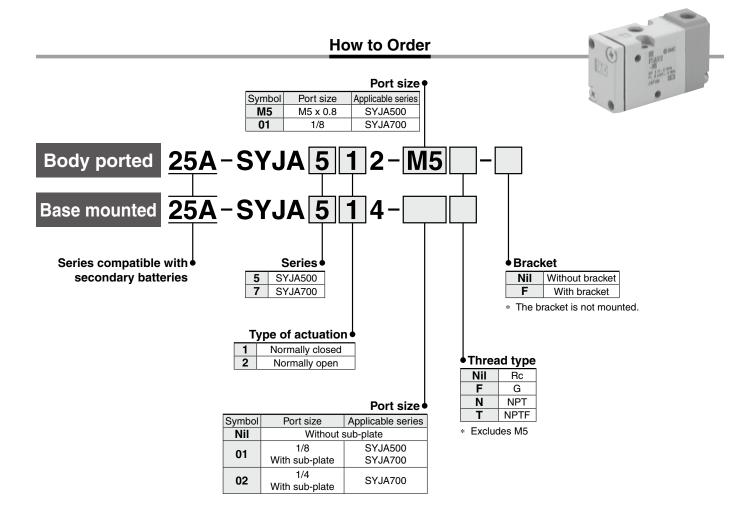
 When single body ported air operated valves are ordered, manifold mounting screws and gaskets are not included. Order them separately if necessary.
 (For details, refer to page 70.)

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.





3-Port Air Operated Valve 25A-SYJA500/700 Series





^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

25A-SYJA500/700 Series

Manifold Type for the SYJA500

Type 20

How to Order 25A - SS3YJA5 - 20 - 05

Stations

02 2 stations

: :
20 20 stations

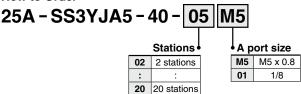
Applicable valve 25A-SYJA5□2

Applicable blanking plate assembly 25A-SYJ500-10-1A

* For more than 6 stations, supply air to both sides of P port and exhaust air from both sides of R port.

Type 40

How to Order

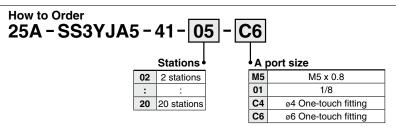


Applicable valve 25A-SYJA5□4

Applicable blanking plate assembly 25A-SYJ500-10-3A

* For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

Type 41



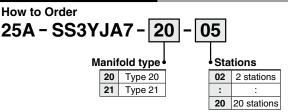
Applicable valve 25A-SYJA5□4

Applicable blanking plate assembly 25A-SYJ500-10-3A

* For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

Manifold Type for the SYJA700

Type 20/21

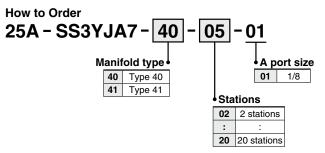


Applicable valve 25A-SYJA7□2

Applicable blanking plate assembly 25A-SYJ700-10-1A

* If there are more than 6 stations for type 20, or more than 9 stations for type 21, supply air to both sides of P port and exhaust air from both sides of R port.

Type 40/41

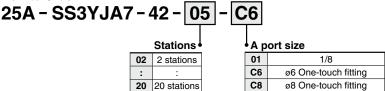


Applicable valve 25A-SYJA7□4

Applicable blanking plate assembly 25A-SYJ700-10-2A

* If there are more than 6 stations for type 40, or more than 9 stations for type 41, supply air to both sides of P port and exhaust air from both sides of R port.

Type 42 How to Order



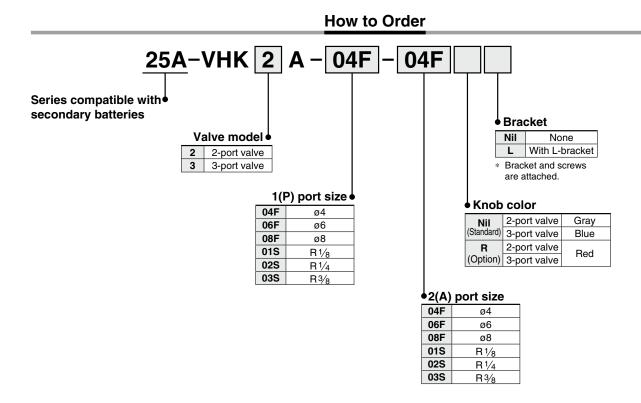
Applicable valve 25A-SYJA7□4

Applicable blanking plate assembly 25A-SYJ700-10-2A

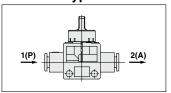
^{*} For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

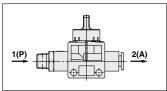


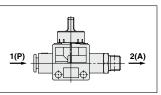
Finger Valve 25A-VHK \(\Bar{\text{A}}\) A Series



Standard Type







1(P): One-touch fitting 2(A): One-touch fitting

	2(A)	Applicable tubing O.D. [mm]		
1(P	′ \	ø4 ø6 ø8		
Applicable tubing O.D. [mm]	ø4	•		
able t	ø6	•	•	
Applic O.	ø8		•	•

1(P): Male thread 2(A): One-touch fitting

	2(A)	Applicab	le tubing O	.D. [mm]
1(P)		ø4	ø6	ø8
<u>~</u>	1/8	•	•	•
Port size R	1/4		•	•
Por	3/8		•	•

1(P): One-touch fitting 2(A): Male thread

	2(A)	P	ort size l	R
1(P)		1/8	1/4	3/8
Applicable tubing O.D. [mm]	ø4	•		
able t D. [mr	ø6	•	•	•
Applic O.	ø8	•	•	•



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

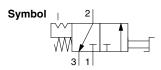
OSHA Standard Compliant Pressure Relief 3-Port Valve with Locking Holes

Single Action

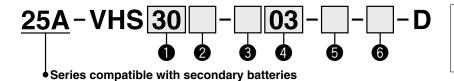
25A-VHS20/30/40/50-D Series

Double Action

25A-VHS20W/30W/40W/50W-D Series



How to Order



Option/Semi-standard: Select one each for **a to f**.

 $\cdot \text{Option/Semi-standard symbol:} \\$

When more than one specification is required, indicate in alphanumeric order.

RoHS

Example) 25A-VHS30-N03-BS-RZ-D

							1	
Symb		Symbol	Description		Body size			
				20	30	40	50	
<u> </u>			Nil	Single action	•	•	•	•
2	Ha	andle operation	W	Double action	•	•	•	•
			+					
			Nil	Rc*1	•	•	•	•
3	Pi	pe thread type	N	NPT	•	•	•	•
			F	G		•	•	•
			+					
			01	1/8	•		_	
			02	1/4	•	•	•	_
4		Port size	03	3/8		•	•	_
		1 011 3126	04	1/2			•	_
			06	3/4			•	•
			10	1			_	•
			+					
	B Mounting		Nil	Without mounting option	•	•	•	•
_ 5			В	With bracket	•	•	•	•
5 \$	<u>.</u>		+					
0	h Cilonoor		Nil	Without silencer	•	•	•	•
		Glicitoci	S	With built-in silencer (for EXH port)		•	•	•
			+				,	
	C	Handle color	Nil	Red	•	•	•	•
	١Ľ	Transic color	K	Black	•	•	•	•
	.		+				,	
aro	d	Handle material	Nil	Resin	•	•	•	•
9 Semi-standard		andio material	M	Metal		•	•	
9 sts			+					
Ĭ.	e	Flow direction	Nil	Flow direction: Left to right		•	•	•
ျွတ္	نا ان		R	Flow direction: Right to left				
			+				1	
	f	Pressure unit	Nil	Product label in SI units: MPa		•	•	•
		cccaro arm	Z *2	Product label in imperial units: psi	○*3	○*3	○*3	○*3

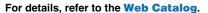
^{*1} The pipe thread type for the EXH port is G.

Option/Part Nos.

option/r art 1100					
Ontional appoifications			Model		
Optional specifications	25A-VHS20-D	25A-VHS30-D	25A-VHS40-D	25A-VHS40-06-D	25A-VHS50-D
Bracket assembly*1	25A-VHS24P-180AS	25A-VHS34P-180AS	25A-VHS44P-180AS	25A-VHS44P-180AS	25A-VHS54P-180AS
Silencer assembly*2	VHS24P-190AS	VHS34P-190AS	VHS44P-190AS	VHS54P-190AS	VHS54P-190AS

^{*1} The assembly consists of a bracket A/B and 2 mounting screws.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.





^{*2} For the pipe thread type: NPT only. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

^{*3} \bigcirc : For the pipe thread type: NPT only

^{*2} The assembly consists of the element assembly and an O-ring.

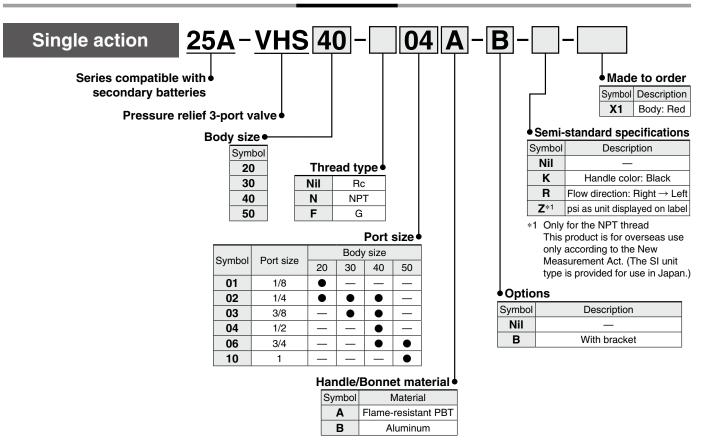
Conforming to OSHA Standard

Pressure Relief 3-Port Valve with Locking Holes (Single Action)

25A-VHS20/30/40/50 Series







Option Part Nos.

- p	· · ·
Model	Bracket assembly part no.*1
25A-VHS20	VHS20PW-180AS-6
25A-VHS30	VHS30PW-180AS-6
25A-VHS40	VHS40PW-180AS-6
25A-VHS40-06	VHS40PW-180-06AS-6
25A-VHS50	VHS50PW-180AS-6

^{*1} Bracket/1 pc., Mounting screw/2 pcs.

OSHA standard (Occupational Safety and Health Administration Department of Labor)

For safety control, OSHA rule requires energy sources for certain equipment be turned off or disconnected and that the device either be locked or labelled with a warning tag.



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Conforming to OSHA Standard

Pressure Relief 3-Port Valve with Locking Holes (Double Action)

25A-VHS2510/3510/4510/5510 Series



Made to order

Description

Handle color: Black

Flow direction: Right → Left

psi as unit displayed on label

use only according to the New Measurement Act. (The SI unit type is provided for use in

Description Body: Red

Symbol

Semi-standard specifications



Series compatible with secondary batteries

Pressure relief 3-port valve

Body size ● Symbol 2 3 4 5

Double action Thread type

> Nil Rc NPT G

				POIL:	312C -
Symbol	Port size		Body	size	
Symbol	FUIT SIZE	2	3	4	5
01	1/8	•	_	_	_
02	1/4	•	•	•	_
03	3/8	_	•	•	_
04	1/2	_	_	•	_
06	3/4	_	_	•	•
10	1	_	_	_	•

Symbol

Nil

Κ

R

Optio	113
Symbol	Description
Nil	_
В	With bracket

*1 Only for the NPT thread This product is for overseas

Handle/Bonnet material

Port size

Symbol	Material
Α	Flame-resistant PBT
В	Aluminum

Option Part Nos.

Model	Bracket assembly part no.*1
25A-VHS2510	VHS20PW-180AS-6
25A-VHS3510	VHS30PW-180AS-6
25A-VHS4510	VHS40PW-180AS-6
25A-VHS4510-06	VHS40PW-180-06AS-6
25A-VHS5510	VHS50PW-180AS-6

^{*1} Bracket/1 pc., Mounting screw/2 pcs.

OSHA standard (Occupational Safety and Health Administration Department of Labor)

For safety control, OSHA rule requires energy sources for certain equipment be turned off or disconnected and that the device either be locked or labelled with a warning tag.

> * The 25A- series specifications and dimensions are the same as those of the standard model.



Pin Cylinder: Double Acting, Single Rod

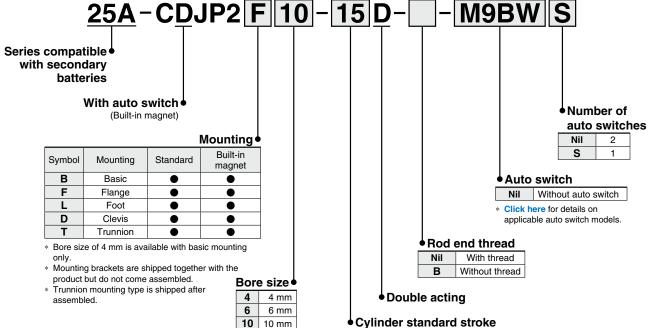
25A-CJP2 Series

Ø4, Ø6, Ø10, Ø16



How to Order





16 mm

Bore size [mm] Stroke [mm]	
4	5, 10, 15, 20*1
6	5, 10, 15, 20, 25
10, 16	5, 10, 15, 20, 25, 30, 35, 40

^{*1 20} stroke of bore size 4 mm is standard type only.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDJP2F10-15D

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Flange	Foot	Trunnion
6	25A-CP-F006A	25A-CP-L006A	25A-CP-T006A
10	25A-CP-F010A	25A-CP-L010A	25A-CP-T010A
16	25A-CP-F016A	25A-CP-L016A	25A-CP-T016A

Accessory Bracket Part Nos. for the 25A- Series

Bore size [mm]	Single knuckle joint	Double knuckle joint	Knuckle joint pin	Trunnion pin	Mounting nut	Rod end nut
4	_	_	_	_	25A-SNPS-004	25A-NTJ-004
6	25A-I-P006A	25A-Y-P006A	25A-IY-P006	25A-CT-P006	25A-SNP-006	25A-NTP-006
10	25A-I-P010A	25A-Y-P010A	25A-IY-P010	25A-CT-P010	25A-SNP-010	25A-NTP-010
16	25A-I-P016A	25A-Y-P016A	25A-IY-P016	25A-CT-P016	25A-SNP-016	25A-NTP-016

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

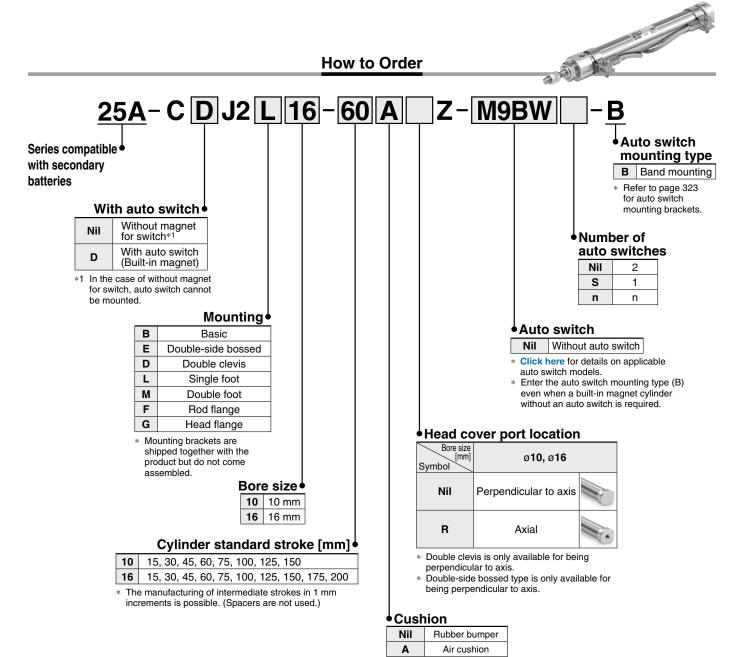


Air Cylinder: Standard Type Double Acting, Single Rod

25A-CJ2 Series ROHS



ø10, ø16



Mounting Bracket Part Nos. for the 25A- Series

Mounting	Bore size [mm]	
bracket	10	16
Foot bracket	25A-CJ-L010B	CJ-L016SUS
Flange bracket	25A-CJ-F010B	CJ-F016SUS

The 25A- series specifications and dimensions are the same as those of the standard model.

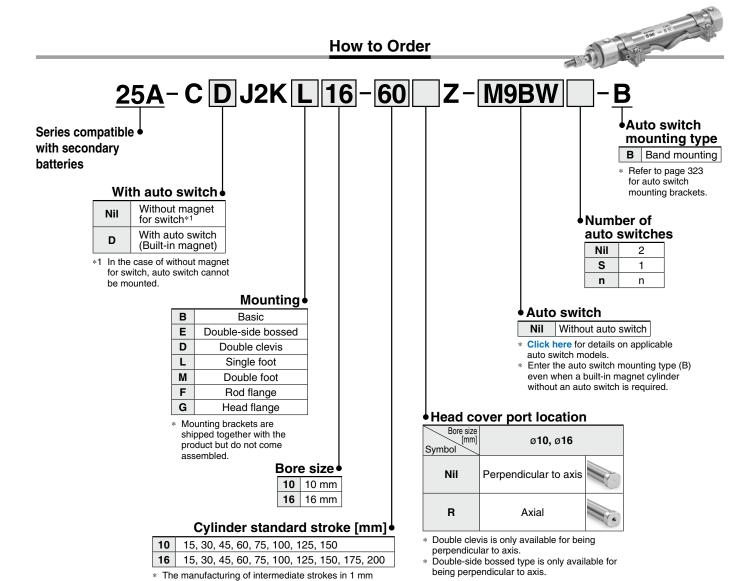


Air Cylinder: Non-rotating Rod Type Double Acting, Single Rod

25A-CJ2K Series

ø10, ø16





Mounting Bracket Part Nos. for the 25A- Series

increments is possible. (Spacers are not used.)

Mounting	Bore size [mm]	
bracket	10	16
Foot bracket	CJ-L016SUS	CJK-L016SUS
Flange bracket	CJ-F016SUS	CJK-F016SUS

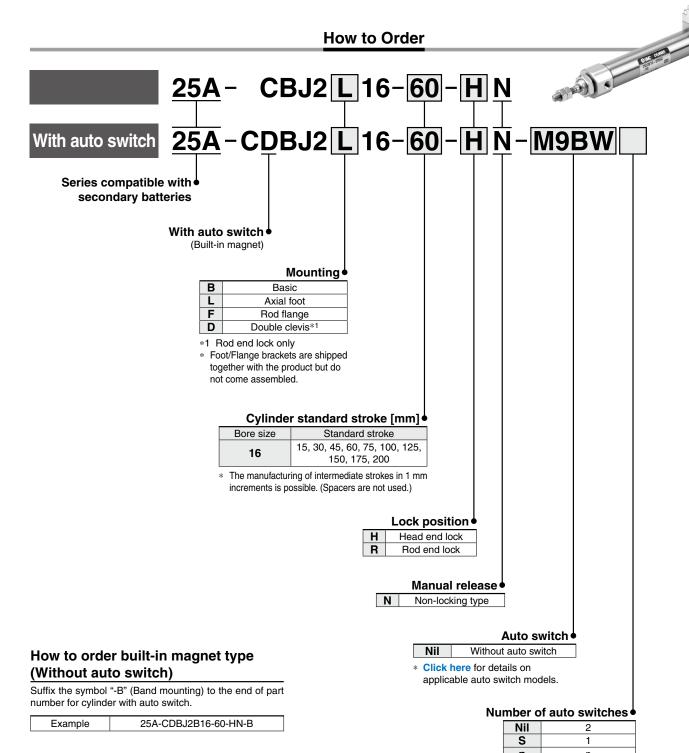
 The 25A- series specifications and dimensions are the same as those of the standard model. (Excluding the foot and flange plate thickness)

Air Cylinder: With End Lock

25A-CBJ2 Series

ø16





Mounting Bracket Part Nos. for the 25Δ- Series

Marina handrat	Bore size [mm]	
Mounting bracket	16	
Foot bracket	CJ-L016SUS	
Flange bracket	CJ-F016SUS	

The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.

Air Cylinder: Standard Type Double Acting, Single Rod

25A-CM2 Series

Ø20, Ø25, Ø32, Ø40

RoHS

How to Order



Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

	Mounting •
В	Basic
L	Axial foot
F	Rod flange
G	Head flange
С	Single clevis
D	Double clevis
U	Rod trunnion
Т	Head trunnion
Е	Integrated clevis
V	Integrated clevis (90°)
BZ	Boss-cut/Basic
FZ	Boss-cut/
FZ	Rod flange
117	Boss-cut/
UZ	Rod trunnion

Bore size

DO: 0 0:E0		
20	20 mm	
25	25 mm	
32	32 mm	
40	40 mm	

25A-C D M2 L 40 -150 A Z-M9BW

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil Without auto switch

 Click here for details on applicable auto switch models.

Rod end thread

Nil	Male rod end
F	Female rod end

Cushion

Nil	Rubber bumper
Α	Air cushion

◆Cylinder Stroke [mm]

Bore size	Standard stroke*1	Maximum stroke
20	25, 50, 75, 100, 125, 150 200, 250, 300	1000
25		1500
32		2000
40		2000

- *1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)
- When exceeding 300 strokes, the allowable maximum stroke length is determined by the stroke selection table (Web Catalog).

Port thread type

Nil	Rc
TN	NPT
TF	G

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDM2F32-100AZ

Mounting Bracket Part Nos. for the 25A- Series

modificing Bracket Fat 11001 for the 2011 Corne								
Maunting brookst	Min.	Min. Bore size [mm]				Description (for min. order)		
Mounting bracket	order	20	25 32		40	Description (for min. order)		
Axial foot*1	2	CM-L020B-XB12	CM-L032B-XB12		CM-L040B-XB12	2 foot brackets, 1 mounting nut		
Flange	1	CM-F020BSUS	CM-F032BSUS		CM-F040BSUS	1 flange		
Single clevis*2	1	CM-C020B	CM-C032B		CM-C040B	1 single clevis, 3 liners		
Double clevis*2*3 (with pin)	1	25A-CM-D020B	25A-CM-D032B		25A-CM-D040B	1 double clevis, 3 liners, 1 clevis pin, 2 retaining rings		
Trunnion (with nut)	1	25-CM-T020B	25-CM	-T032B	25-CM-T040B	1 trunnion, 1 trunnion nut		

- *1 Order 2 foot brackets for each cylinder unit.
- *2 3 liners are attached with a clevis bracket for adjusting the mounting angle.
- *3 A clevis pin and retaining rings (split pins for ø40) are attached.
- * The 25A- series specifications and dimensions are the same as those of the standard model.

Air Cylinder: Standard Type Double Acting, Single Rod



25A-CG1 Series

Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



25A-CDG1LN25 100 Z-M9BW Number of Series compatible with auto switches secondary batteries Nil S n With auto switch Auto switch Without magnet Nil for switch*1 Nil Without auto switch With auto switch D Click here for details on (Built-in magnet) applicable auto switch models.

In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

В	Basic					
Z *1	Basic (without trunnion mounting female thread)					
L	Axial foot					
F	Rod flange					
G	Head flange					
U*1	Rod trunnion					
T *1	Head trunnion					
D	Clevis					

- *1 Not available for ø80 or ø100.
- * Mounting brackets are shipped together with the product but do not come assembled.
- The cylinder for F, G, L, D mounting types is Z: Basic (without trunnion mounting female thread).

Type •

N	Rubber bumper
Α	Air cushion

Bore size [mm]	Standard stroke*1 [mm]	Long stroke*2 [mm]
20	25, 50, 75, 100, 125, 150, 200	201 to 1500
25		
32		
40	25, 50, 75, 100, 125,	301 to 1500
50, 63	150, 200, 250, 300	301 10 1300
80		
100		

Rod end thread

♦Cylinder stroke [mm]

Nil Rod end male thread

Rod end female thread

- *1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)
- *2 For details on the maximum stroke that can be used for each mounting bracket, refer to the stroke selection table (Web Catalog).

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDG1FN32-100Z

DUIC SIZE						
20	20 mm					
25	25 mm					
32	32 mm					
40	40 mm					
50	50 mm					
63	63 mm					
80	80 mm					
100	100 mm					

◆Port thread type

Rubber	bumper		Air cushio	n
Nil	Do	ø20 to ø100	M5 x 0.8	ø20, ø25
Nil Rc	020 10 0 100	Rc	ø32 to ø100	
TN	NPT	ø20 to ø100	NPT*1	ø32 to ø100
TF	M5 x 0.8	ø20, ø25	G*1	ø32 to ø100
ır	G	ø32 to ø100	*1 Not availab	le for ø20 and ø25

Mounting Bracket Part Nos. for the 25A- Series * The rod end brackets are the same as those of the CG5-S series. Refer to the Web Catalog for details.

Mounting	Min.		Bore size [mm]							Description
bracket	order	20	25	32	40	50	63	80	100	Description
Foot	2*1	90-CG-L020	90-CG-L025	90-CG-L032	90-CG-L040	90-CG-L050	25-CG-L063	25-CG-L080	25-CG-L100	Foot x 2, Mounting bolt x 8
Flange	1	90-CG-F020	90-CG-F025	90-CG-F032	90-CG-F040	90-CG-F050	25-CG-F063	25-CG-F080	25-CG-F100	Flange x 1, Mounting bolt x 4
Trunnion pin				25-CG-T032					_	Trunnion pin x 2, Trunnion bolt x 2, Flat washer x 2
Clevis	1	25-CG-D020	25-CG-D025	25-CG-D032	25-CG-D040	25-CG-D050	25-CG-D063	25-CG-D080	25-CG-D100	Clevis x 1, Mounting bolt x 4, Clevis pin x 1, Retaining ring x 2
Pivot bracket	1	25-CG-020-24A	25-CG-025-24A	25-CG-032-24A	25-CG-040-24A	25-CG-050-24A	25-CG-063-24A	25-CG-080-24A	25-CG-100-24A	Pivot bracket x 1

^{*1} Order two foot brackets per cylinder.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

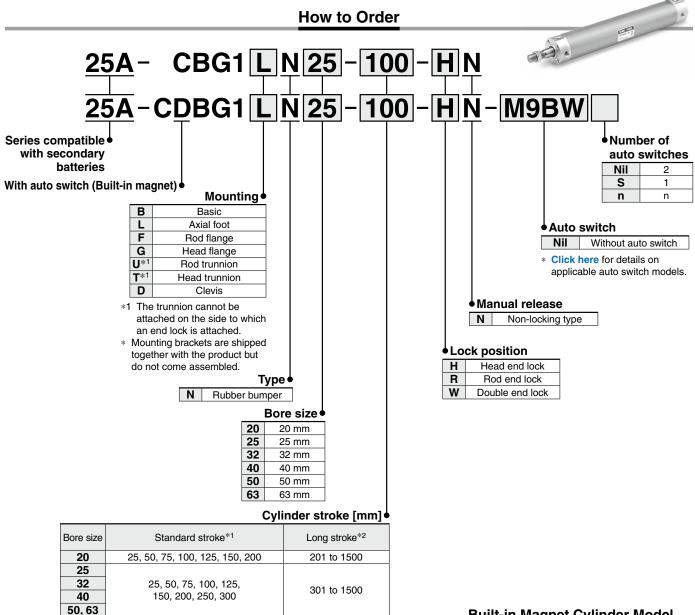
For details, refer to the Web Catalog.

Air Cylinder: With End Lock



25A-CBG1 Series

Ø20, Ø25, Ø32, Ø40, Ø50, Ø63



*1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDBG1FN32-100-RN

Mounting Bracket Part Nos. for the 25A- Series * The rod end brackets are the same as those of the CG5-S series. Refer to the Web Catalog for details.

Mounting	Min.		Bore size [mm]						
bracket	order	20	25	32	40	50	63	Description	
Foot	2*1	90-CG-L020	90-CG-L025	90-CG-L032	90-CG-L040	90-CG-L050	25-CG-L063	Foot x 2, Mounting bolt x 8	
Flange	1	90-CG-F020	90-CG-F025	90-CG-F032	90-CG-F040	90-CG-F050	25-CG-F063	Flange x 1, Mounting bolt x 4	
Trunnion pin	1	25-CG-T020	25-CG-T025	25-CG-T032	25-CG-T040	25-CG-T050	25-CG-T063	Trunnion pin x 2, Trunnion bolt x 2, Flat washer x 2	
Clevis	1	25-CG-D020	25-CG-D025	25-CG-D032	25-CG-D040	25-CG-D050	25-CG-D063	Clevis x 1, Mounting bolt x 4, Clevis pin x 1, Retaining ring x 2	
Pivot bracket	1	25-CG-020-24A	25-CG-025-24A	25-CG-032-24A	25-CG-040-24A	25-CG-050-24A	25-CG-063-24A	Pivot bracket x 1	

^{*1} Order two foot brackets per cylinder. * The 25A- series specifications and dimensions (excluding the cap) are the same as those of the standard model. For details, refer to the Web Catalog.



^{*2} For details on the maximum stroke that can be used for each mounting bracket, refer to the stroke selection table (Web Catalog).

Air Cylinder: Single Rod

25A-MB Series

Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



How to Order



Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting 4

В	Basic				
L	Axial foot				
F	Rod flange				
G	Head flange				
С	Single clevis				
D	Double clevis				
Т	Center trunnion				

25A-MDBL32

Bore size

U UU U
32 mm
40 mm
50 mm
63 mm
80 mm
100 mm

Number of auto switches

Nil	2			
S	1			
3	3			
n	n			

Auto switch

Nil Without auto switch

 Click here for details on applicable auto switch models.

Cylinder stroke [mm]

50 Z-M9BW

Bore [mm]	Standard stroke [mm]
32	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
40	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
50	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600
63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600
80	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800
100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800

^{*} Intermediate strokes are available. (No spacer is used.)

◆Port thread type

Nil	Rc
TN	NPT
TF	G

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-MDBB40-100Z

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	32	40	50	63	80	100
Foot*1	25-MB-L03	25-MB-L04	25-MB-L05	25-MB-L06	25-MB-L08	25-MB-L10
Flange	MB-F03-XC7	MB-F04-XC7	MB-F05-XC7	MB-F06-XC7	MB-F08-XC7	MB-F10-XC7
Single clevis	25-MB-C03	25-MB-C04	25-MB-C05	25-MB-C06	25-MB-C08	25-MB-C10
Double clevis	25-MB-D03	25-MB-D04	25-MB-D05	25-MB-D06	25-MB-D08	25-MB-D10
Single knuckle joint	25A-I-03M	25A-I-04M	25A-I-05M	25A-I-05M	25A-I-08M	25A-I-10M
Double knuckle joint	25A-Y-03M	25A-Y-04M	25A-Y-05M	25A-Y-05M	25A-Y-08M	25A-Y-10M
Double clevis pin Double knuckle joint pin	25-CD-M03	25-CD-M03	25-CD-M05	25-CD-M05	25-CD-M08	25-CD-M08
Rod end nut	NT-03SUS	NT-04SUS	NT-05SUS	NT-05SUS	NT-08SUS	NT-10SUS
Trunnion pivot bracket	25A-MB-S03	25A-MB-S04	25A-MB-S04	25A-MB-S06	25A-MB-S06	25A-MB-S10
Double clevis bracket	25A-MB-B03	25A-MB-B03	25A-MB-B05	25A-MB-B05	25A-MB-B08	25A-MB-B08

^{*1} Two foot brackets required for one cylinder.

Foot, Flange, Single clevis: Body mounting bolt

Double clevis: Body mounting bolt, Pin, Flat washers and Split pins

Double knuckle joint: Pin, Flat washers and Split pins

Double clevis pin, Double knuckle joint pin: Flat washers and Split pins

^{*} Accessories for each mounting bracket are as follows.

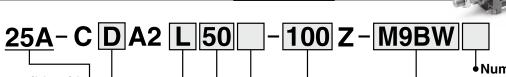
Air Cylinder: Standard Type Double Acting, Single Rod

25A-CA2 Series

Ø40, Ø50, Ø63, Ø80, Ø100



How to Order



Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

В	Basic			
L	Axial foot			
F	Rod flange			
G	Head flange			
С	Single clevis			
D	Double clevis			
Т	Center trunnion			

Bore size 40 mm

50 50 mm 63 63 mm 80 80 mm 100 100 mm

Number of auto

SWILCITES				
Nil 2				
S	1			
3	3			
n	n			

Auto switch

Nil Without auto switch

 Click here for details on applicable auto switch models.

♦Cylinder stroke [mm]

40	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
50, 63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 500, 600
80, 100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700

Intermediate strokes not listed above are produced upon receipt of order.

Port thread type

Rc
NPT
G

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch (Example) 25A-CDA2L40-100Z

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

zammig znachet i ar			v		
Bore size [mm]	40	50	63	80	100
Axial foot*1	90-CA2-L04	90-CA2-L05	90-CA2-L06	90-CA2-L08	90-CA2-L10
Flange	25A-CA2-F04	25A-CA2-F05	25A-CA2-F06	25A-CA2-F08	25A-CA2-F10
Single clevis	25A-CA2-C04	25A-CA2-C05	25A-CA2-C06	25A-CA2-C08	25A-CA2-C10
Double clevis	25A-CA2-D04	25A-CA2-D05	25A-CA2-D06	25A-CA2-D08	25A-CA2-D10
Single knuckle joint	I-04A	I-05A	I-05A	I-08A	I-10A
Double knuckle joint	25A-Y-04D	25A-Y-05D	25A-Y-05D	25A-Y-08D	25A-Y-10D
Clevis pin	25A-CDP-2A	25A-CDP-3A	25A-CDP-4A	25A-CDP-6A	25A-CDP-7A
Knuckle pin	25A-CDP-3A	25A-CDP-3A	25A-CDP-3A	25A-CDP-5A	25A-CDP-6A
Rod end nut	NT-04SUS	NT-05SUS	NT-05SUS	NT-08SUS	NT-10SUS
Trunnion pivot bracket	25A-CA2-S04	25A-CA2-S04	25A-CA2-S06	25A-MB-S10	25A-MB-S10
Double clevis bracket	25A-CA2-B04	25A-CA2-B05	25A-CA2-B06	25A-CA2-B08	25A-CA2-B10

^{*1} When axial foot brackets are used, two pieces should be ordered for each cylinder.

Double clevis: Hexagon nut, Spring washer, Pin, Flat washers and Split pins

Double knuckle joint: Pin, Flat washers and Split pins

Clevis pin, Knuckle pin: Flat washers and Split pins



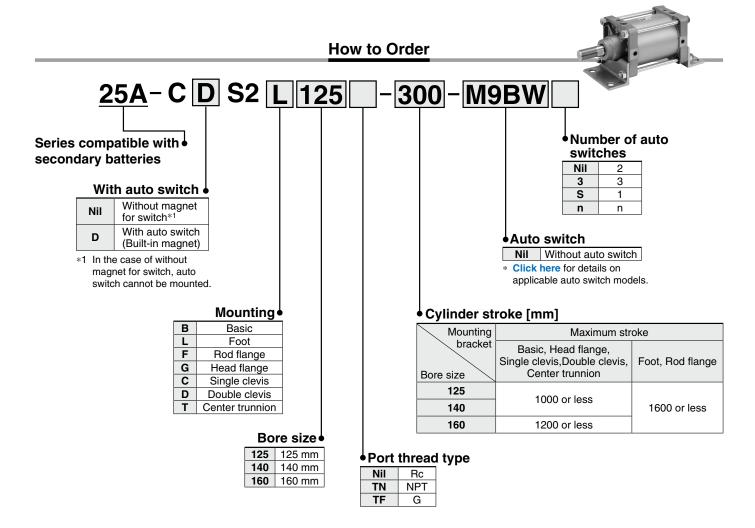
Accessories for each mounting bracket are as follows.
 Axial foot, Flange, Single clevis: Hexagon nut, Spring washer

Air Cylinder: Standard Type Double Acting, Single Rod

25A-CS2 Series

ø125, ø140, ø160





Built-in Magnet Cylinder Model

If a built-in magnet cylinder without auto switch is required, there is no need to enter the symbol for auto switch.

(Example) 25A-CS2B125-100

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

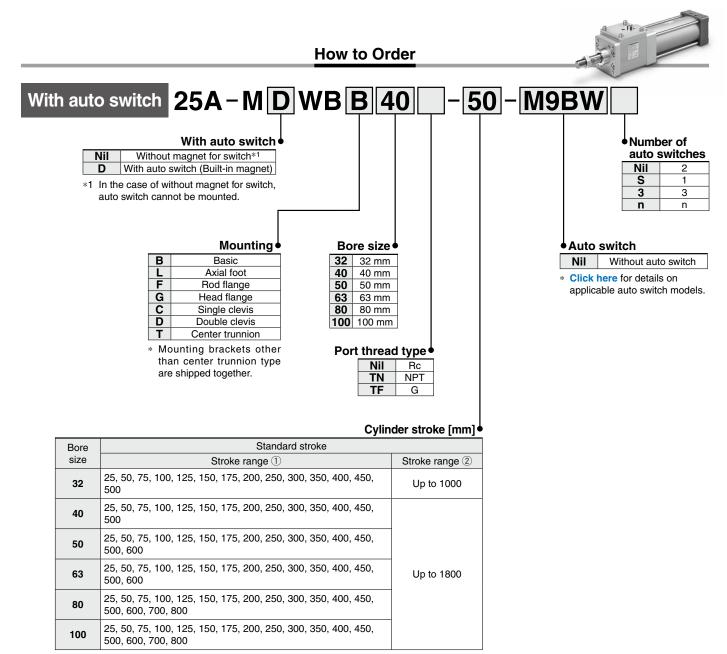
Bore size [mm]	125	140	160
Axial foot*1	CS2-L12	CS2-L14	CS2-L16
Flange	CS2-F12	CS2-F14	CS2-F16
Single clevis	CS2-C12	CS2-C14	CS2-C16
Double clevis*2	25A-CS2-D12	25A-CS2-D14	25A-CS2-D16

^{*1} Order two foot brackets per cylinder.



^{*2} A clevis pin and split pins are shipped together with double clevis.

Cylinder with Lock Double Acting, Single Rod 25A-NVB Series Ø32, Ø40, Ø50, Ø63, Ø80, Ø100 RoHS



^{*} The manufacturing of intermediate strokes is possible. (Spacers are not used.)

Mounting Brackets/Part Nos.

Bore size [mm]	32	40	50	63	80	100
Foot	25-MB-L03	25-MB-L04	25-MB-L05	25A-MWB-L06	25-MB-L08	25-MB-L10
Flange	25A-MWB-F03	25A-MWB-F04	25A-MWB-F05	25A-MWB-F06	MB-F08-XC7	MB-F10-XC7
Single clevis	25-MB-C03	25-MB-C04	25-MB-C05	25-MB-C06	25-MB-C08	25-MB-C10
Double clevis	25-MB-D03	25-MB-D04	25-MB-D05	25-MB-D06	25-MB-D08	25-MB-D10

^{*} Order two foot brackets per cylinder.

Foot, Flange, Single clevis: Body mounting bolt

Double clevis: Body mounting bolt, Clevis pin, Flat washers and Split pins

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.



^{*} Accessories for each mounting bracket are as follows.

Lock Unit 25A-MVB-UT Series 32, 40, 50, 63, 80, 100



25A-MWBB40 -UT-500

Series compatible with secondary batteries

Mounting **◆**

В	Basic
L	Axial foot
F	Flange

 Mounting bracket is shipped together with the product.

Model

Model	Applicable rod size
32	12 mm
40	16 mm
50	20 mm
63	20 mm
80	25 mm
100	30 mm

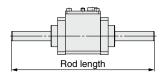
Port thread type

Nil	Rc
TN	NPT
TF	G

Rod length [mm]

N	il	Without accessory rod		
Min. length	Max. length	Applicable model	Note	
050		32		
250	2500	40	Can be manufactured	
		50	in increments of	
300		63	1 mm up to the	
300		80	maximum length.	
		100		

* The rod length indicates the overall length of the rod.



Rod is shipped together with the product.

* This product uses lithium-based grease (standard grease).

Mounting Brackets/Part Nos.

Bore size [mm]	32	40	50	63	80	100
Foot	25-MB-L03	25-MB-L04	25-MB-L05	25A-MWB-L06	25-MB-L08	25-MB-L10
Flange	25A-MWB-F03	25A-MWB-F04	25A-MWB-F05	25A-MWB-F06	MB-F08-XC7	MB-F10-XC7

^{*} Order two foot brackets per lock unit.



Accessories for each mounting bracket are as follows.
 Foot, Flange: Body mounting bolt

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Cylinder with Lock Double Acting, Single Rod

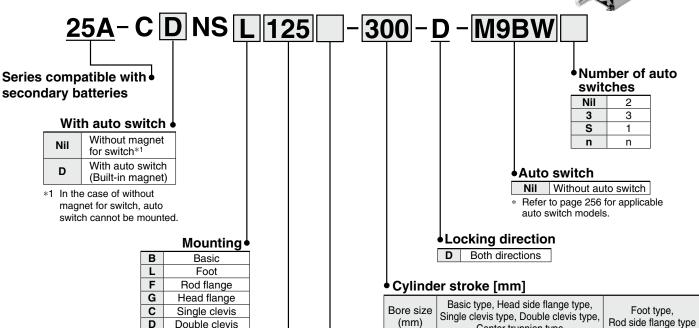
25A-CNS Series

ø125, ø140, ø160

RoHS



How to Order



125, 140

160

D Double clevis Т Center trunnion

Mounting brackets are assembled before shipping.

25	125 mm	Nil	R
40	140 mm	TN	NF
60	160 mm	TF	Ċ

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without auto switch is required, there is no need to enter the symbol for auto switch. (Example) 25A-CDNSL140-100-D

The 25A- series specifications and dimensions are the same as those of the standard model.

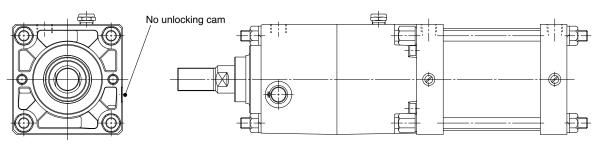
Center trunnion type

Up to 1000

Up to 1200

For details, refer to the Web Catalog.

⚠There is no built-in unlocking cam.



Directional Control Valves

Air Cylinders

Related Products

Rotary Actuators

Air Grippers Equipment Vacuum

Air Preparation Equipment

Air Filters

Up to 1400

Up to 1400

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

Electric Actuators

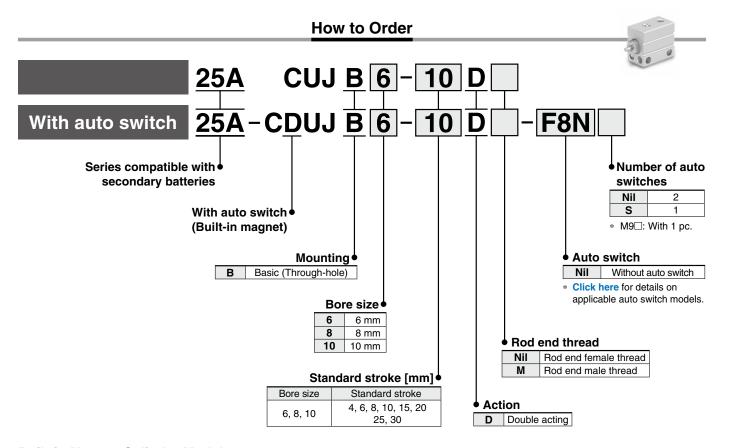
Auto Switches

Mini Free Mount Cylinder

25A-CUJ Series

Ø6, Ø8, Ø10





Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDUJB8-15DM

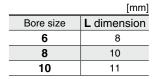
* The 25A- series specifications are the same as those of the standard model.

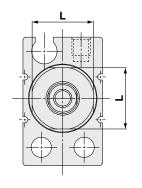
For details, refer to the Web Catalog.

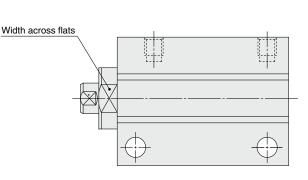
Dimensions (Dimensions other than those shown below are the same as the standard model.) For details, refer to the Web Catalog.

25A-C□UJB 8

 $\ast\,$ The position of the width across flats may not be parallel to the cylinder tube





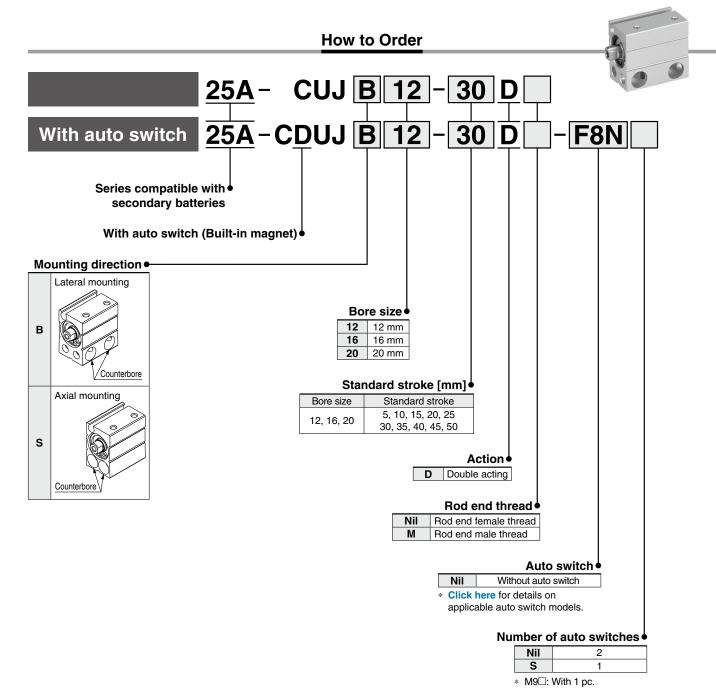


Mini Free Mount Cylinder

25A-CUJ Series

ø12, ø16, ø20





Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDUJB12-15DM

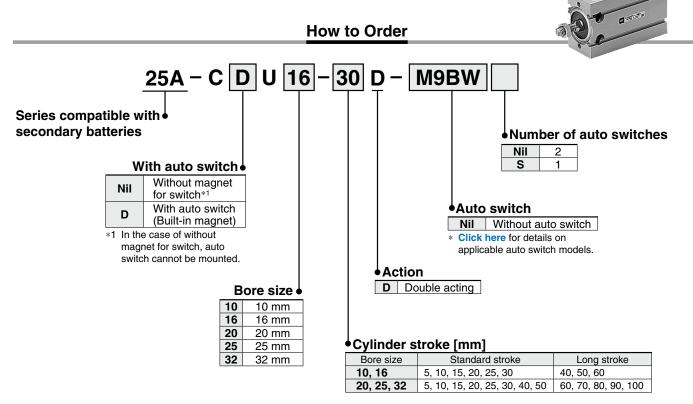


^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Free Mount Cylinder Double Acting, Single Rod

25A-CU Series Ø10, Ø16, Ø20, Ø25, Ø32

RoHS



Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDU20-25D

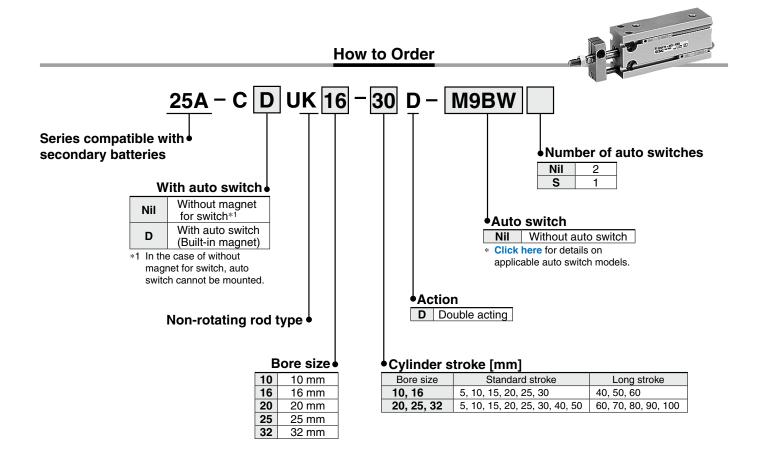
* The 25A- series specifications and dimensions are the same as those of the standard model.



Free Mount Cylinder: Non-rotating Rod Type Double Acting, Single Rod

25A-CUK Series Ø10, Ø16, Ø20, Ø25, Ø32

RoHS



Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDUK20-25D



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Compact Cylinder: Standard Type Double Acting, Single Rod

25A-CQS Series

Ø12, Ø16, Ø20, Ø25

RoHS

How to Order

25A-CDQSB20-30D-M9BW

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting 4

	В	Through-hole/Both ends
		tapped common (Standard)
	L	Foot
	LC	Compact foot
	F	Rod flange
G Hea		Head flange
	D	Double clevis

- In the case of long strokes, use either ends tapped mounting or bracket mounting.
- Mounting brackets are shipped together with the product but do not come assembled.
- Cylinder mounting bolts are not included.

Bore size

Ξ			
	12	12 mm	
	16	16 mm	
	20	20 mm	
	25	25 mm	

Number of auto

0111101100	
Nil	2
S	1
-	-

Auto switch

Nil Without auto switch

Click here for details on

 Click here for details on applicable auto switch models.

♦Body option

<Standard stroke> <Long stroke>

Nil	Standard		
C With rubber bumper			
M	Rod end male thread		
* Combination of body			
options is available.			

1=011g 011 0110r				
С	With rubber bumper Rod end female thread (Standard)			
СМ	With rubber bumper			

 Rubber bumper is standard equipment for long stroke type.

Action

D Double acting

♦Cylinder stroke [mm]

Bore size	Standard stroke	Long stroke	
12, 16	5, 10, 15, 20, 25, 30	35, 40, 45, 50, 75, 100, 125, 150, 175, 200	
20	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	75, 100, 125, 150, 175, 200	
25		75, 100, 125, 150, 175, 200, 250, 300	

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDQSL25-30D

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

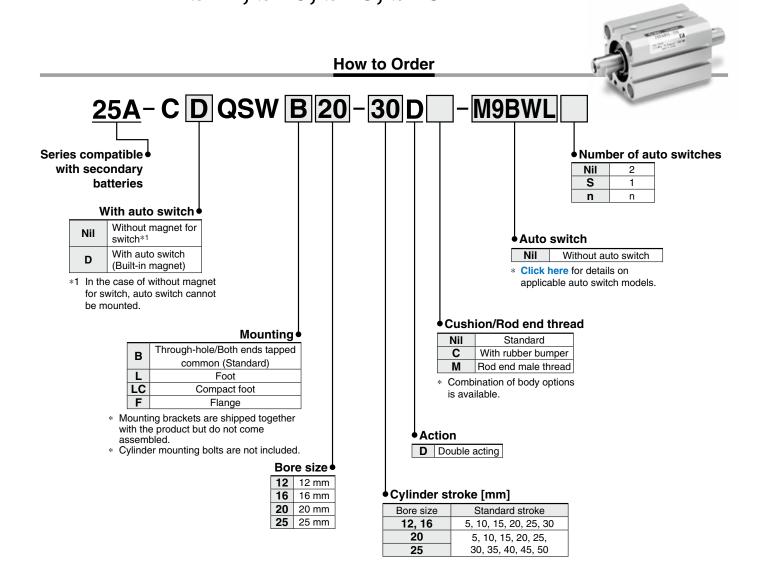
Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
12	25A-CQS-L012	25A-CQS-LC012	25A-CQS-F012	25-CQS-D012
16	25A-CQS-L016	25A-CQS-LC016	25A-CQS-F016	25-CQS-D016
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020	25-CQS-D020
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025	25-CQS-D025

- *1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.
- Parts included with each type of bracket are as follows.
 Foot, Compact foot, Flange: Body mounting bolts

Double clevis type: Clevis pin, Type C retaining ring for axis, Body mounting bolt



Compact Cylinder: Standard Type Double Acting, Double Rod 25A-CQSV Series Ø12, Ø16, Ø20, Ø25



Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange		
12	25A-CQS-L012	25A-CQS-LC012	25A-CQS-F012		
16	25A-CQS-L016	25A-CQS-LC016	25A-CQS-F016		
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020		
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025		

- *1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.
- * Body mounting bolts are included for each bracket.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDQSWL25-30D

* The 25A- series specifications and dimensions are the same as those of the standard model.



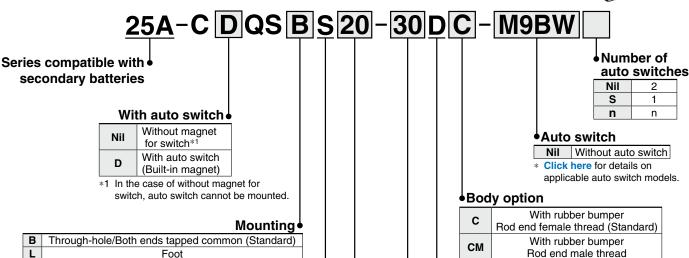
Compact Cylinder: Anti-lateral Load Type

25A-CQS Series

Ø12, Ø16, Ø20, Ø25



How to Order



Action

D Double acting

F Rod flange
G Head flange
D Double clevis

Mounting brackets are shipped together with the product but

Compact foot

do not come assembled.

* Cylinder mounting bolts are not included.

LC

Cushion

S Anti-lateral load type

Bore size

i	DO: 0 0:E0		
	12	12 mm	
	16	16 mm	
	20	20 mm	
	25	25 mm	

Cylinder stroke [mm]

Bore size	Standard stroke
12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQSLS12-25DC

* With cushion only.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
12	25A-CQS-L012	25A-CQS-LC012	25A-CQS-F012	25-CQS-D012
16	25A-CQS-L016	25A-CQS-LC016	25A-CQS-F016	25-CQS-D016
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020	25-CQS-D020
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025	25-CQS-D025

*1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.

Parts included with each type of bracket are as follows.

Foot, Compact foot, Flange: Body mounting bolts

Double clevis type: Clevis pin, Type C retaining ring for axis, Body mounting bolt



Compact Cylinder: Standard Double Acting, Single Rod



25A-CQ2 Series

30D

Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100

How to Order



Series compatible with secondary batteries With auto switch

25A - C D Q2 B 20

Nil	Without magnet fo	r switch*1
D	With auto switch (I	Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting •

В	Through-hole (Standard)	
Α	Both ends tapped	
L	Foot	
LC	Compact foot	
F	Rod flange	
G	Head flange	
D	Double clevis	

- Mounting brackets are shipped together with the product but do not come assembled.
- Cylinder mounting bolts are not included

•Auto switch

Nil	Without auto switch	
* Click here for details on		
applicable auto switch		
mod	models	

Number of auto switches Nil 2

n

n

applicable auto switch models.

♦ Auto switch mounting groove

7	ø12 to ø25	2 surfaces
_	ø32 to ø100	4 surfaces

"Z" is not available for ø12 to ø25 without auto switches.

Body option

Nil	Standard (Rod end female thread)	
С	With rubber bumper	
M	Rod end male thread	

Combination of body options is available.

•Action

D Double acting

12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50 to 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDQ2L32-25DZ

Mounting Bracket Part Nos. for the 25A- Series

	Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
12	Without auto switch	25A-CQ-L012	25A-CQ-LC012	25A-CQ-F012	25-CQ-D012
	With auto switch	25A-CQ-LZ12	25A-CQ-LCZ12	25A-CQ-F012	25-CQ-D012
16	Without auto switch	25A-CQ-L016	25A-CQ-LC016	25A-CQ-F016	25 CO D016
10	With auto switch	25A-CQ-LZ16	25A-CQ-LCZ16	25A-CQ-F016	25-CQ-D016
20	Without auto switch	25A-CQ-L020	25A-CQ-LC020	25A-CQ-F020	25-CQ-D020
20	With auto switch	25A-CQ-LZ20	25A-CQ-LCZ20	25A-CQ-F020	25-CQ-D020
25	Without auto switch	25A-CQ-L025	25A-CQ-LC025	25A-CQ-F025 25-CQ-D025	
25	With auto switch	25A-CQ-LZ25	25A-CQ-LCZ25	25A-CQ-F025	25-CQ-D025
32		25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032
	40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040
50		25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050
63		25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063
80		25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080
100		25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100

Bore size

Port thread type

M thread ø12 to ø25

63

80

32 | 32 mm | 100 | 100 mm

Rc

NPT

G

40 40 mm

50 mm

63 mm

80 mm

ø32 to ø100

12 mm

20 mm

16 16 mm

25 25 mm

20

Nil

ΤN

- *1 When ordering foot and compact foot brackets, the required quantity will be different depending on the bore size. a12 to a25:
 - Without auto switch: Order 2 pieces per cylinder.
 - With auto switch: Order 1 piece per cylinder. (Part number for a set of 2 foot brackets) ø32 to ø100:
 - Order 2 pieces per cylinder.
- * Parts included with each type of bracket are as follows.

Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

Simple Joint (Standard)/ Part Nos.

Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket
32, 40	YU-03	YA-03	YB-03
50, 63	YU-05	YA-05	YB-05
80	YU-08	YA-08	YB-08
100	YU-10	YA-10	YB-10

<Ordering>

 Joints are not included with type A or B mounting brackets. Order them separately. (Example)

Bore size Ø40	Part no.
 Type A mounting 	bracket YA-03

• Joint......YU-03





Compact Cylinder: Standard Double Acting, Double Rod



25A-CQ2W Series

30 D

Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100

How to Order



Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1	
D	With auto switch (Built-in magnet)	

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

- Mounting brackets are shipped together with the product but do not come assembled.
- Cylinder mounting bolts are not included.

	Wounting
В	Through-hole (Standard)
Α	Both ends tapped
L	Foot
LC	Compact foot
F	Flange

25A - CD Q2W B 20

Bore size

12	12 mm	40	40 mm
16	16 mm	50	50 mm
20	20 mm	63	63 mm
25	25 mm	80	80 mm
32	32 mm	100	100 mm

Mounting Bracket Part Nos. for the 25A- Series

E	Bore size [mm]	Foot*1	Compact foot*1	Flange
12	Without auto switch	25A-CQ-L012	25A-CQ-LC012	25A-CQ-F012
12	With auto switch	25A-CQ-LZ12	25A-CQ-LCZ12	25A-CQ-F012
16	Without auto switch	25A-CQ-L016	25A-CQ-LC016	25A-CQ-F016
10	With auto switch	25A-CQ-LZ16	25A-CQ-LCZ16	25A-CQ-F016
20	Without auto switch	25A-CQ-L020	25A-CQ-LC020	25A-CQ-F020
20	With auto switch	25A-CQ-LZ20	25A-CQ-LCZ20	25A-CQ-F020
25	Without auto switch	25A-CQ-L025	25A-CQ-LC025	25A-CQ-F025
25	With auto switch	25A-CQ-LZ25	25A-CQ-LCZ25	25A-CQ-F025
	32	25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032
	40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040
	50	25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050
	63	25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063
	80	25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080
	100	25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100

*1 When ordering foot and compact foot brackets, the required quantity will be different depending on the bore size.

ø12 to ø25:

- · Without auto switch: Order 2 pieces per cylinder.
- With auto switch: Order 1 piece per cylinder. (Part number for a set of 2 foot brackets)

ø32 to ø100:

- · Order 2 pieces per cylinder.
- * Body mounting bolts are included for each bracket.

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil Without auto switch

Click here for details on applicable auto switch models.

Auto switch mounting groove

7	ø12 to ø25	
	ø32 to ø100	4 surfaces

Z-M9BW

"Z" is not available for Ø12 to Ø25 without auto switches.

Body option

Nil	Standard (Rod end female thread)
С	With rubber bumper
M	Rod end male thread

* Combination of body options is available.

Action

D Double acting

Cylinder stroke [mm]

12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50 to 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

Port thread type

Nil	M thread	ø12 to ø25	
NII	Rc		
TN	NPT	ø32 to ø100	
TF	G		

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQ2WL32-25DZ

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Simple Joint (Standard)/Part Nos.

Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket
32, 40	YU-03	YA-03	YB-03
50, 63	YU-05	YA-05	YB-05
80	YU-08	YA-08	YB-08
100	YU-10	YA-10	YB-10

<Ordering>

Joints are not included with type A or B mounting brackets. Order them separately.

(Example)

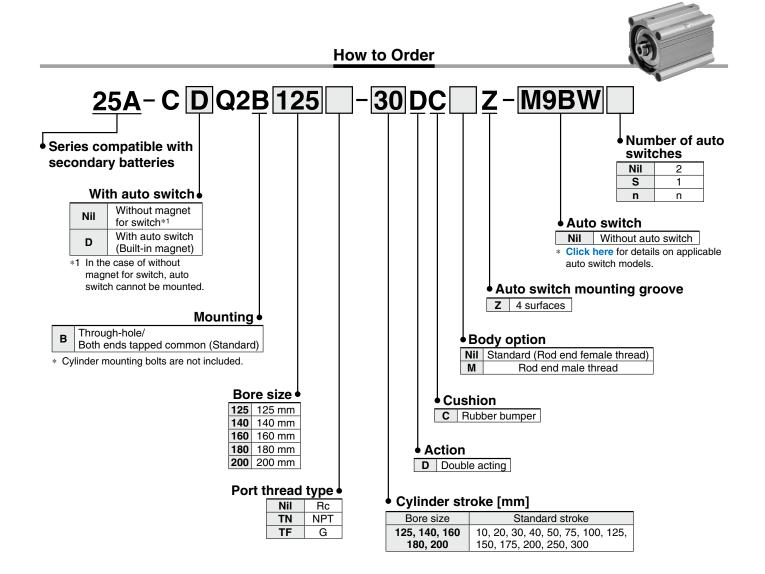
Bore size ø40 Part no Type A mounting bracket ········· YA-03



Compact Cylinder: Large Bore Size Double Acting, Single Rod

25A-CQ2 Series ø125, ø140, ø160, ø180, ø200





Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDQ2B140-30DCZ

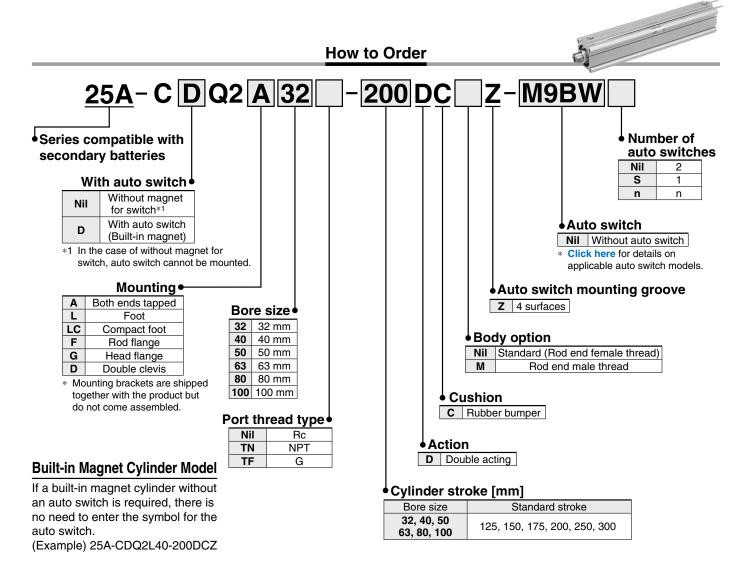


^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Compact Cylinder: Long Stroke Double Acting, Single Rod



Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



Simple Joint (Standard)/Part Nos.

Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket
32, 40	YU-03	YA-03	YB-03
50, 63	YU-05	YA-05	YB-05
80	YU-08	YA-08	YB-08
100	YU-10	YA-10	YB-10

<Ordering>

 Joints are not included with type A or B mounting brackets. Order them separately. (Example)

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
32	25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032
40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040
50	25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050
63	25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063
80	25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080
100	25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100

^{*1} Order 2 pieces per cylinder.

* The 25A- series specifications and dimensions are the same as those of the standard model.



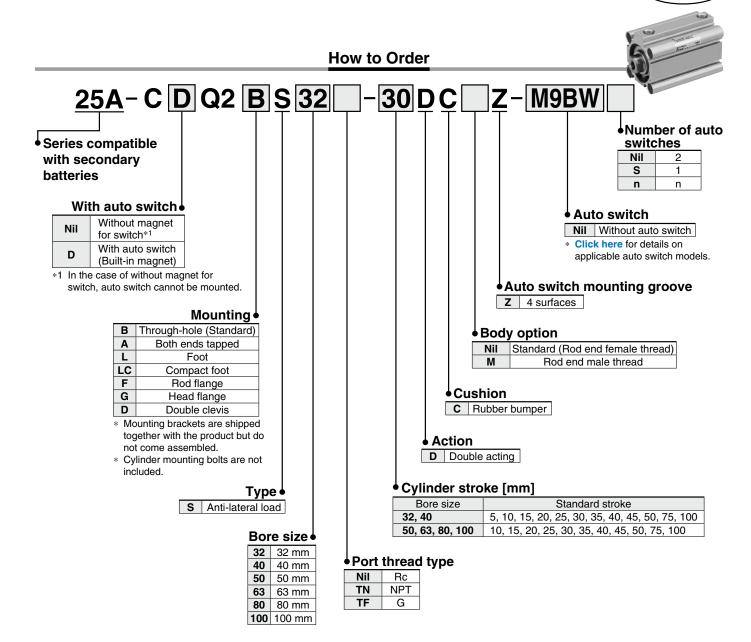
Parts included with each type of bracket are as follows.
 Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

Compact Cylinder: Anti-lateral Load

25A-CQ2 Series

Ø32, Ø40, Ø50, Ø63, Ø80, Ø100

RoHS



Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDQ2LS40-30DCZ

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
32	25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032
40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040
50	25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050
63	25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063
80	25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080
100	25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100

^{*1} Order 2 pieces per cylinder.

^{*} Parts included with each type of bracket are as follows.

Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

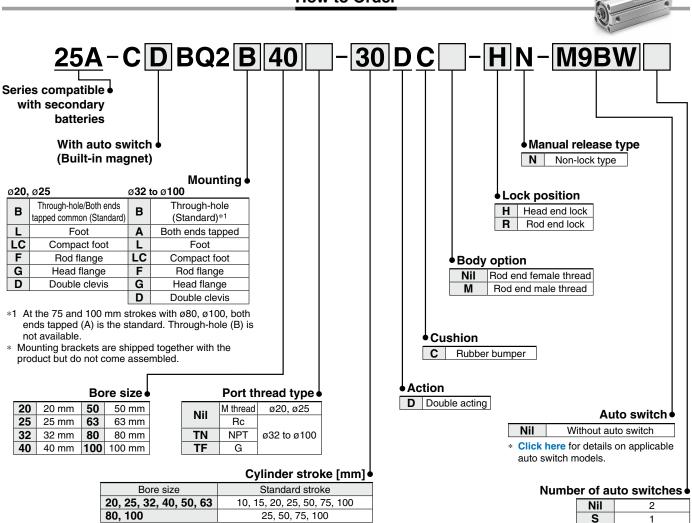
Compact Cylinder: With End Lock

25A-CBQ2 Series

Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



How to Order



Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDBQ2L32-30DC-RN

Mounting Bracket Part Nos. for the 25A- Series

u	Diagnot i ait	11001 101 1110 2	071 001100	
Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020	25-CQS-D020
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025	25-CQS-D025
32	25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032
40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040
50	25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050
63	25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063
80	25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080
100	25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100

^{*1} Order 2 pieces per cylinder.

* The 25A- series specifications and dimensions are the same as those of the standard model.

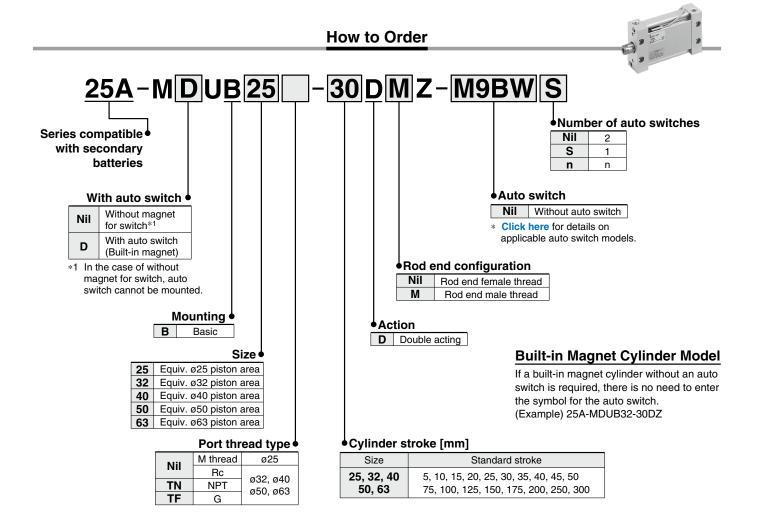
Parts included with each type of bracket are as follows: Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

Plate Cylinder: Double Acting, Single Rod

25A-MU Series

Ø25, Ø32, Ø40, Ø50, Ø63





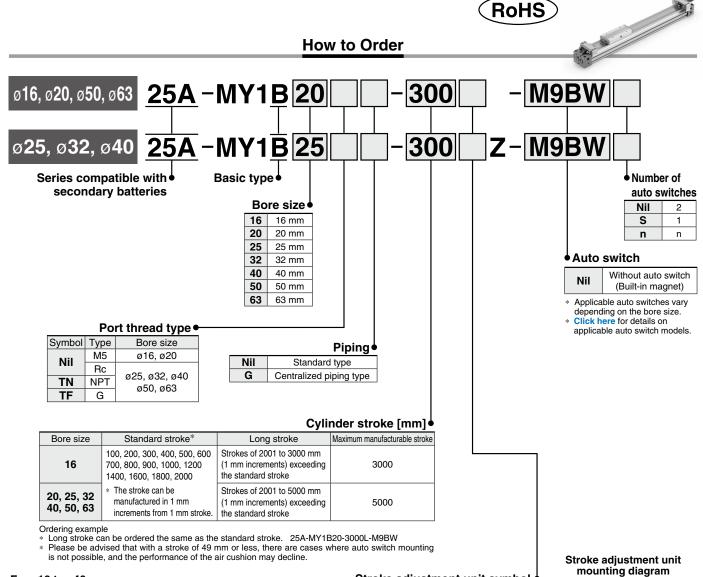
^{*} The 25A- series specifications and dimensions are the same as those of the standard model.



Mechanically Jointed Rodless Cylinder Basic Type

25A-MY1B Series

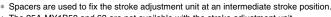
Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63



For a16 to a40

Stroke adjustment unit symbol

FC	or Ø16 to Ø40 Stroke adjustment unit symbol											
		_				Right sid	de stroke	adjustn	nent unit			
			Without	A: With adjustment bolt		ent bolt	L: With lov + Adjustm	v load shoc ent bolt	k absorber	H: With hig + Adjustme	h load shoc ent bolt	k absorber
			unit		With short spacer	With long spacer		With short spacer	With long spacer		With short spacer	With long spacer
unit	Wit	thout unit	Nil	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7
			AS	Α	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7
ner		With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7
ustment		With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7	A7H	A7H6	A7H7
adji	L: With low lo	oad shock absorber +	LS	LA	LA6	LA7	L	LL6	LL7	LH	LH6	LH7
ķe	Adjustment	With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7
stroke	bolt	With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7
de			HS	HA	HA6	HA7	HL	HL6	HL7	Н	HH6	HH7
eft si	Adjustment	With short spacer	H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	Н6Н	H6	Н6Н7
Le	bolt	With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7



The 25A-MY1B50 and 63 are not available with the stroke adjustment unit.

Example of H6H7 attachment

Stroke adjustment unit

Left side

Port

* The 25A- series specifications and dimensions are the same as those For details, refer to the Web Catalog. of the standard model.



Intermediate fixing spacer

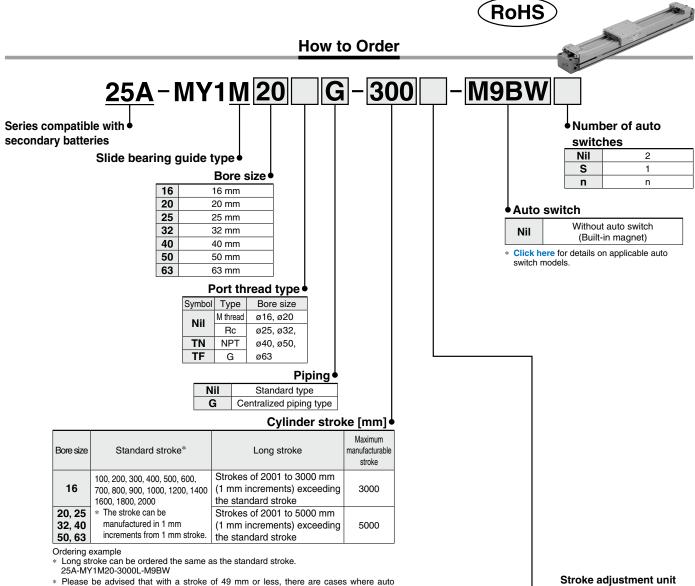
^{*} The stroke adjustment unit H unit is not available for the 25A-MY1B16.

H unit H unit Short spacer Long spacer,

Mechanically Jointed Rodless Cylinder Slide Bearing Guide Type

25A-MY1M Series

Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63



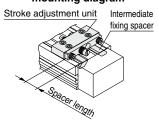
switch mounting is not possible, and the performance of the air cushion may decline.

	Stroke adjustment unit symbol •											
						Right s	ide stroke	adjustm	ent unit			
			Without			ent bolt		ow load sh + Adjustr		H: With high load shock absorber + Adjustment bolt		
			unit		With short spacer	With long spacer		With short spacer	With long spacer		With short spacer	With long spacer
Ħ	Wit	hout unit	Nil	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7
۳ تا	Without unit A: With adjustment bolt With short spacer With long spacer		AS	Α	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7
Je I		With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7
nst		With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7	A7H	A7H6	A7H7
adji		oad shock absorber +	LS	LA	LA6	LA7	L	LL6	LL7	LH	LH6	LH7
홍	Adjustment	With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7
stroke	bolt	With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7
side		load shock absorber +	HS	HA	HA6	HA7	HL	HL6	HL7	Н	HH6	HH7
	Adjustment bolt	With short spacer	H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	Н6Н	H6	Н6Н7
Left	DOIL	With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7

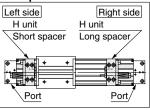
Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

Stroke adjustment unit H is not available for 25A-MY1M16

mounting diagram



Example of H6H7 attachment



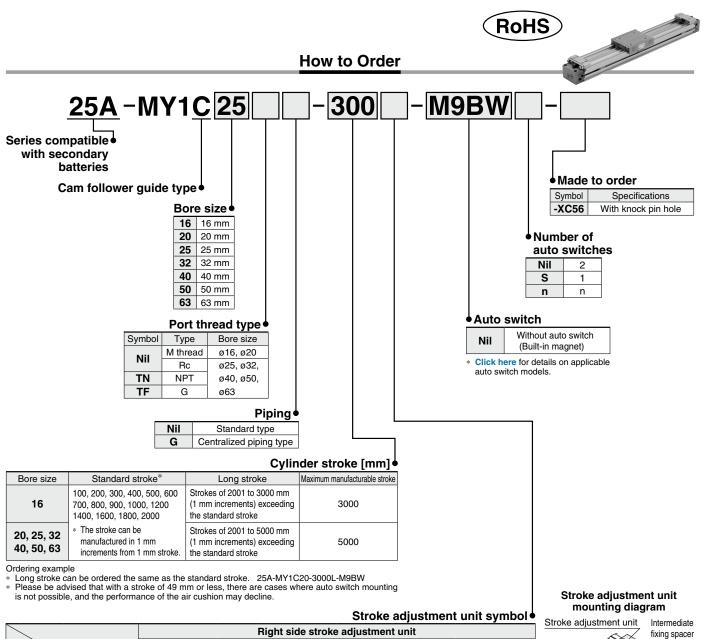
^{*} The 25A- series specifications and dimensions are the same as those of the standard model.



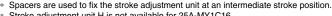
Mechanically Jointed Rodless Cylinder Cam Follower Guide Type

25A-MY1C Series

Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63



	Stroke adjustment unit symbol •												
						Right sid	de stroke	adjustn	nent unit				
			Without	A: With adjustment bolt		ent bolt	L: With lov + Adjustm	v load shoc ent bolt	k absorber		H: With high load shock absorber + Adjustment bolt		
			unit		With short spacer	With long spacer		With short spacer	With long spacer		With short spacer	With long spacer	
Ħ	Wit	thout unit	Nil	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7	
ᆵ	With out unit A: With adjustment bolt With short spacer With long spacer L: With low load shock absorber +		AS	Α	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7	
Jer		With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7	
nst		With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7	A7H	A7H6	A7H7	
adji	L: With low lo	oad shock absorber +	LS	LA	LA6	LA7	L	LL6	LL7	LH	LH6	LH7	
ş	Adjustment	With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7	
stroke	bolt	With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7	
side	B H: With high load shock absorbe		HS	HA	HA6	HA7	HL	HL6	HL7	Н	HH6	HH7	
		With short spacer	H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	Н6Н	H6	Н6Н7	
은	bolt	With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7	



Stroke adjustment unit H is not available for 25A-MY1C16.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.



Example of H6H7 attachment

H unit

Long spacer

Left side H unit

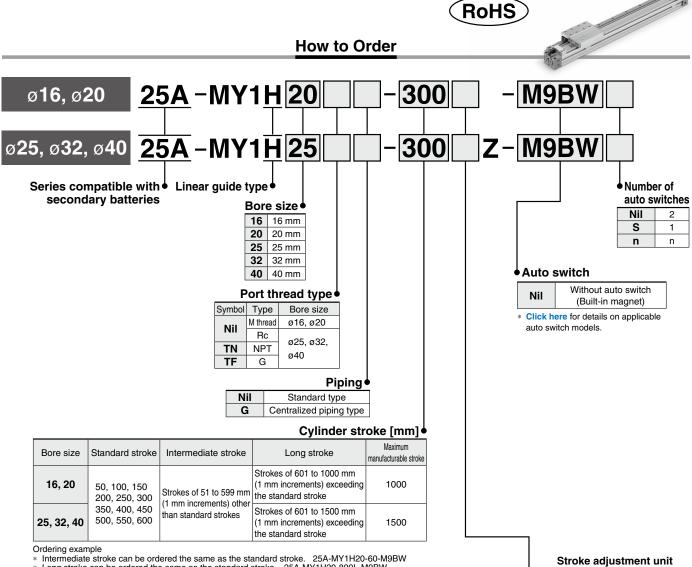
Short spacer

Right side

Mechanically Jointed Rodless Cylinder Linear Guide Type

25A-MY1H Series

Ø16, Ø20, Ø25, Ø32, Ø40



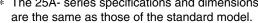
Intermediate stroke can be ordered the same as the standard stroke. 25A-MY1H20-60-M Long stroke can be ordered the same as the standard stroke. 25A-MY1H20-800L-M9BW

mounting diagram Stroke adjustment unit

	Stroke adjustment unit symbol •											
				Right side stroke adjustment unit								
			Without	A: With	adjustm	ent bolt	L: With lov + Adjustm	v load shoc ent bolt	k absorber	H: With hig + Adjustme	gh load shoc ent bolt	k absorber
			unit		With short spacer	With long spacer		With short spacer	With long spacer		With short spacer	With long spacer
ŧ	Without unit		Nil	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7
T E	A: With adjustment bolt		AS	Α	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7
adiustment		With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7
usti		With long spacer	A7S	A7A	A7A6	A 7	A7L	A7L6	A7L7	A7H	A7H6	A7H7
adi		oad shock absorber +	LS	LA	LA6	LA7	L	LL6	LL7	LH	LH6	LH7
şe	Adjustment	With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7
stroke	bolt	With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7
<u>e</u>	H: With high load shock absorber +		HS	HA	HA6	HA7	HL	HL6	HL7	Н	HH6	HH7
efts			H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	Н6Н	H6	H6H7
F	bolt	With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7

Spacers are used to fix the stroke adjustment unit at an intermediate stroke position

^{*} The 25A- series specifications and dimensions



Left side

Short spacer

L unit



Place the protruding section on the stroke adjusting unit side **Example of L6L7 attachment**

Intermediate fixing spacer

Right side

L unit

Long spacer

H: With high load shock absorber + Adjustment bolt is not available for 25A-MY1H16.

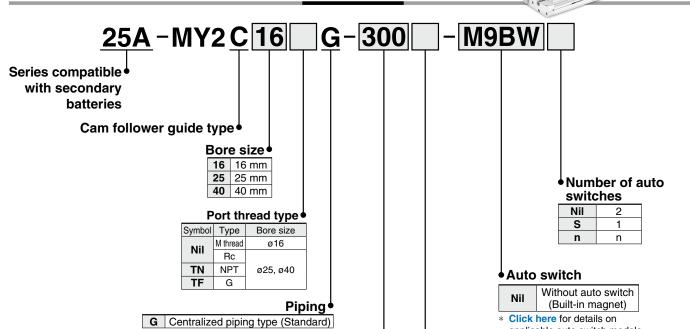
Mechanically Jointed Rodless Cylinder Cam Follower Guide Type

25A-MY2C Series

Ø16, Ø25, Ø40



How to Order



Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]*1	Max. manufacturable stroke [mm]
16	100, 200, 300, 400, 500, 600, 700, 800,	3000
25, 40	900, 1000, 1200, 1400, 1600, 1800, 2000	5000

- *1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke. However, please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.
- Long stroke can be ordered the same as the standard stroke. 25A-MY2C25G-3000L-M9BW

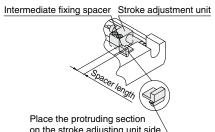
Stroke adjustment unit symbol

Ottoke dajustinent dritt symbol											
				Right side stroke adjustment unit							
				L: With low load shock Without absorber				high load	l shock		
					With short spacer	With long spacer		With short spacer	With long spacer		
	Wit	thout unit	Nil	SL	SL6	SL7	SH	SH6	SH7		
i še	L: With lo	w load shock	LS	L	LL6	LL7	LH	LH6	LH7		
stroke int unit	absorber	With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6	L6H7		
side s		With long spacer	L7S	L7L	L7L6	L7	L7H	L7H6	L7H7		
t si ust	absorber With short spacer With long spacer H: With high load shock absorber With short spacer With short spacer		HS	HL	HL6	HL7	Н	HH6	HH7		
Lef			H6S	H6L	H6L6	H6L7	Н6Н	Н6	Н6Н7		
		With long spacer	H7S	H7L	H7L6	H7L7	H7H	H7H6	H7		

^{*} Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

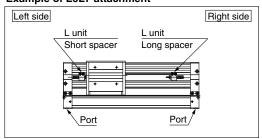
Stroke adjustment unit mounting diagram

applicable auto switch models.



on the stroke adjusting unit side.

Example of L6L7 attachment



* The 25A- series specifications and dimensions are the same as those of the standard model.

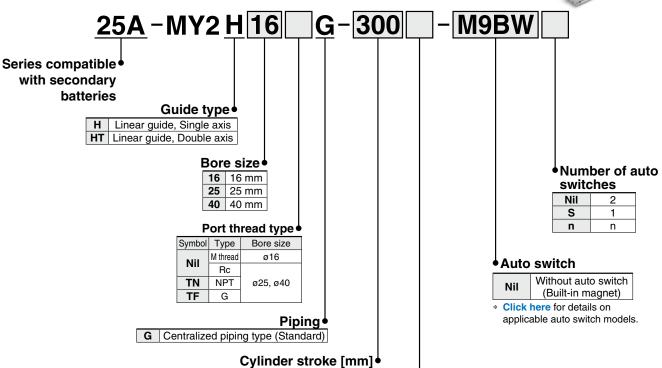
Mechanically Jointed Rodless Cylinder Linear Guide Type

25A-MY2H/HT Series

ø16, ø25, ø40







- 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600 25, 40 *1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke
- * Intermediate stroke can be ordered the same as the standard stroke 25A-MY2H16G-80-M9BW

Standard stroke [mm]*1

Long stroke can be ordered the same as the standard stroke. 25A-MY2H25G-800L-M9BW

Bore size

[mm]

16

Stroke adjustment unit symbol

Max. manufacturable

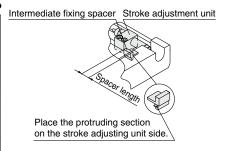
stroke [mm]

1000

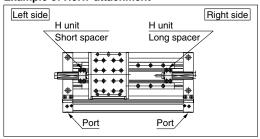
_									
				Riç	ght side s	troke adj	ustment เ	unit	
				L: With low load shock absorber				high load r	shock
					With short spacer	With long spacer		With short spacer	With long spacer
	Wit	thout unit	Nil	SL	SL6	SL7	SH	SH6	SH7
a ke	L: With lo	w load shock	LS	L	LL6	LL7	LH	LH6	LH7
stro	absorber	With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6	L6H7
Left side stroke adjustment unit		With long spacer	L7S	L7L	L7L6	L7	L7H	L7H6	L7H7
t si ust	H: With high load shock		HS	HL	HL6	HL7	Н	HH6	HH7
Left	absorber With short spacer		H6S	H6L	H6L6	H6L7	Н6Н	H6	Н6Н7
	With long spacer		H7S	H7L	H7L6	H7L7	H7H	H7H6	H7

^{*} Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

Stroke adjustment unit mounting diagram



Example of H6H7 attachment



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

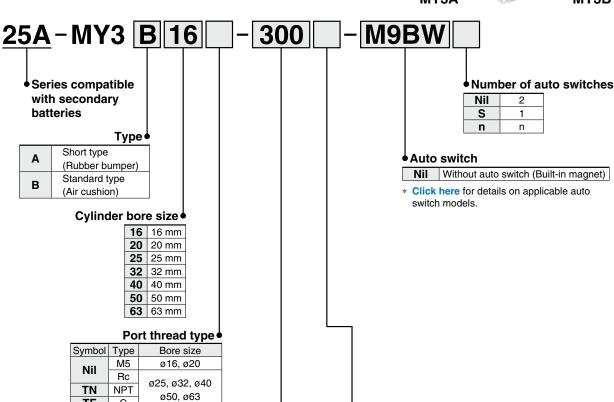


Mechanically Jointed Rodless Cylinder/Basic Type

25A-MY3A/3B Series

Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63





How to Order

Cylinder stroke [mm]

Bore size	Standard stroke*	Long stroke	Maximum manufacturable stroke
16, 20 25, 32 40, 50 63	100, 200, 300, 400, 500, 600 700, 800, 900, 1000, 1200 1400, 1600, 1800, 2000 * The stroke can be manufactured in 1 mm increments from 1 mm stroke.	Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke	3000

G

TF

Ordering example

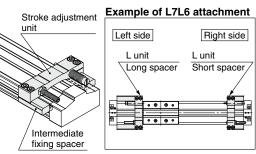
- Long stroke can be ordered the same as the standard stroke. 25A-MY3A25-3000L-M9BW
- Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

Stroke adjustment unit symbol

				Right side stroke adjustment unit							
								h load shoo ent bolt	k absorber		
			unit		With short spacer	With long spacer		With short spacer	With long spacer		
ب رہ	Without u	ınit	Nil	SL	SL6	SL7	SH	SH6	SH7		
돌		ad shock absorber +	LS	L	LL6	LL7	LH	LH6	LH7		
nt t	Adjustment	With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6	L6H7		
side stroke Istment unit	bolt	With long spacer	L7S	L7L	L7L6	L7	L7H	L7H6	L7H7		
si	H: With high I	oad shock absorber +	HS	HL	HL6	HL7	Н	HH6	HH7		
Left	Adjustment With short spacer		H6S	H6L	H6L6	H6L7	Н6Н	H6	H6H7		
a	bolt	With long spacer	H7S	H7L	H7L6	H7L7	H7H	H7H6	H7		

* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

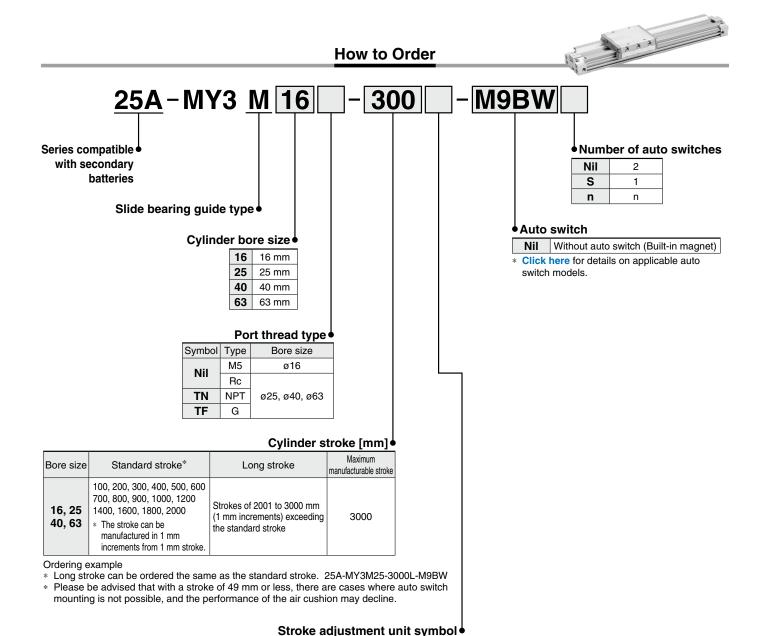
Stroke adjustment unit mounting diagram



For details, refer to the Web Catalog. * The 25A- series specifications and dimensions are the same as those of the standard model.



Mechanically Jointed Rodless Cylinder Slide Bearing Guide Type 25A-NY3N Series Ø16, Ø25, Ø40, Ø63



Right side stroke adjustment unit H: With high load shock absorber L: With low load shock absorber + Adjustment bolt + Adjustment bolt Without With short With long With short With long spacer spacer spacer spacer Without unit Nil SL SL6 SL7 SH SH7 SH₆ t side stroke ustment unit L: With low load shock absorber + LS L LL6 LL7 LH LH6 LH7 Adjustment With short spacer L6S L6L L6 L6L7 L6H L6H6 L6H7 bolt With long spacer L7S L7L L7L6 L7 L7H L7H6 L7H7 H: With high load shock absorber + HS HL HL6 HL7 Н HH₆ HH7 Adjustment With short spacer H₆S H₆L H6L6 H6L7 H₆H **H6 H6H7**

st Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

H7L

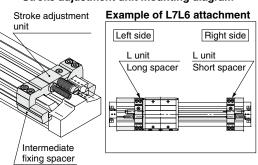
H7L6

H7L7

H7S

With long spacer

Stroke adjustment unit mounting diagram



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



H7H6

H7

H7H

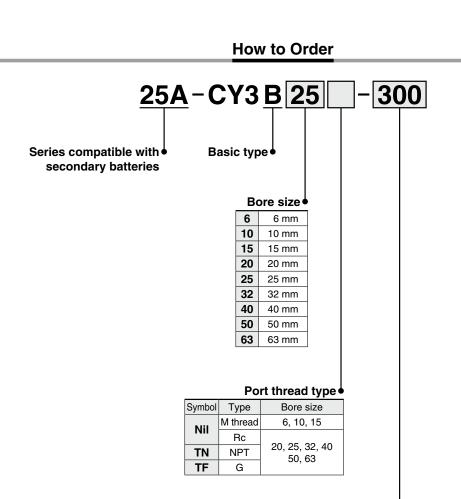
Magnetically Coupled Rodless Cylinder/Basic Type

25A-CY3B Series

Ø6, Ø10, Ø15, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63



X-



Standard stroke [mm]

	O to	aara ou onto [mm]
Bore size	Standard stroke	Max. manufacturable stroke
6	50, 100, 150, 200	300
10	50, 100, 150, 200, 250, 300	500
15	50, 100, 150, 200, 250, 300, 350 400, 450, 500	1000
20	100 150 000 050 000 050	1500
25	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800	
32	400, 400, 500, 600, 700, 600	2000
40, 50, 63	100, 150, 200, 250, 300, 350, 400 450, 500, 600, 700, 800, 900, 1000	2000

- * Please contact SMC if the maximum stroke is exceeded.
- * The longer the stroke, the larger the amount of deflection in a cylinder tube. Pay attention to the mounting bracket and clearance value.
- * Intermediate stroke is available in 1 mm increments.

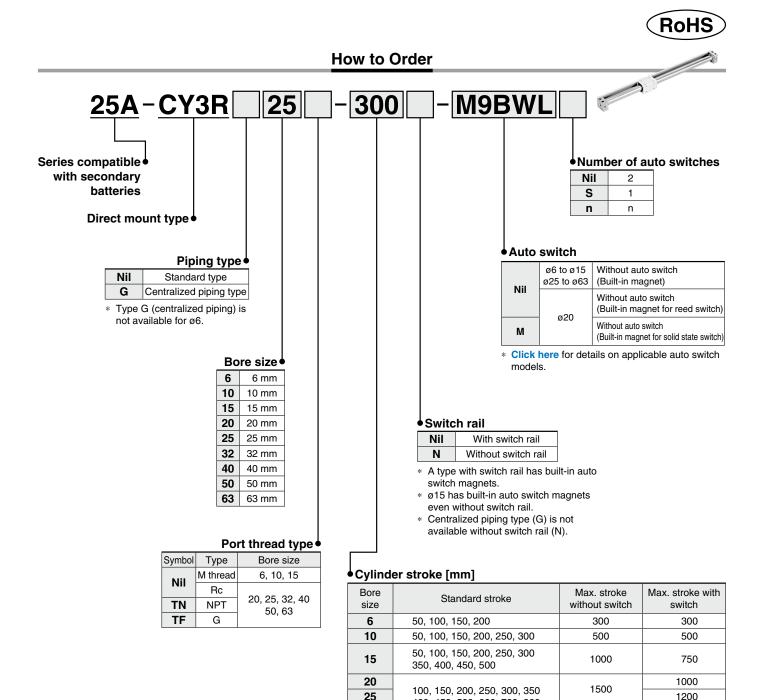


^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Magnetically Coupled Rodless Cylinder/Direct Mount Type

25A-CY3R Series

Ø6, Ø10, Ø15, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63



900.1000

400, 450, 500, 600, 700, 800

100, 150, 200, 250, 300, 350

400, 450, 500, 600, 700, 800

2000

1500



32

40, 50,

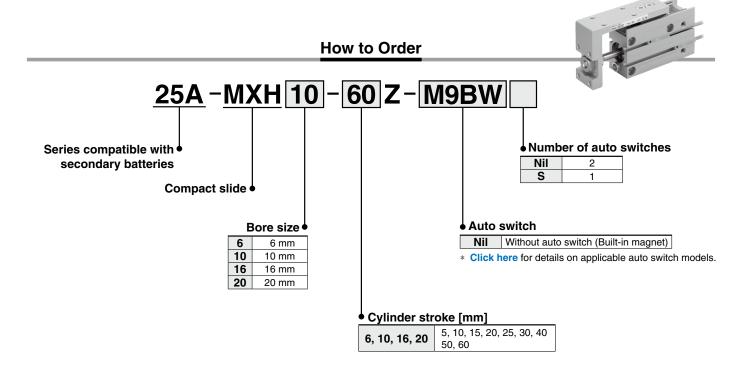
63

^{*} The longer the stroke, the larger the amount of deflection in a cylinder tube. Pay attention to the mounting bracket and clearance value.

^{*} Intermediate stroke is available in 1 mm increments.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Compact Slide 25A-INXH Series Ø6, Ø10, Ø16, Ø20 ROHS



* The 25A- series specifications and dimensions are the same as those of the standard model.

Air Slide Table

25A-MXS Series

Ø6, Ø8, Ø12, Ø16, Ø20, Ø25



How to Order



25A-MXS 16 Air slide table

Series compatible with secondary batteries

Port thread type

NII	M thread	ø6 to ø16		
INII	Rc			
TN	NPT	ø20, ø25		
TF	G			

Symmetric type

Nil	Standard type
Ĺ	Symmetric type

◆Bore size (Standard stroke [mm])

6	10, 20, 30, 40, 50
8	10, 20, 30, 40, 50, 75
12	10, 20, 30, 40, 50, 75, 100
16	10, 20, 30, 40, 50, 75, 100, 125
20	10, 20, 30, 40, 50, 75, 100, 125, 150
25	10, 20, 30, 40, 50, 75, 100, 125, 150

Number of auto switches

SWILCINGS						
Nil	2					
S	1					
n	n					

Auto switch

50 AS - M9BW

Nil	Without auto switch
INII	(Built-in magnet)

Click here for details on applicable auto switch models.

Adjuster option

Nil	Without adjuster				
AS	Adjuster on extension end				
AT	Adjuster on retraction end				
Α	Adjuster on both ends				
BS	Absorber on extension end				
BT	Absorber on retraction end				
В	Absorber on both ends				
ASBT	Adjuster on extension end + Absorber on retraction end				
BSAT	Absorber on extension end + Adjuster on retraction end				

- * With shock absorber is not available in the 25A-MXS6 series.
- * When the adjuster option with shock absorber is used, metal-to-metal collisions occur, and may generate dust particles.

Corrosion Resistant Air Slide Table

(Made to order: 25A-MXS□-X1949)

The material of the head cap part has been changed to a highly corrosion-resistant material.

Please contact your local sales representative for more details.



* The 25A- series specifications and dimensions are the same as those of the standard model.



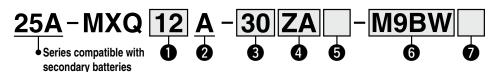
Air Slide Table **Double-ported Type**





Ø6, Ø8, Ø12, Ø16, Ø20, Ø25

How to Order





Bore	2 Body option: Double-ported type	3 Standard stroke [mm]
size	Α	
6	Port Port Switch mounting groove Switch mounting groove	10, 20, 30, 40, 50
8		10, 20, 30, 40, 50, 75
12		10, 20, 30, 40, 50, 75, 100
16	Port Port Switch mounting groove Switch mounting groove	10, 20, 30, 40, 50, 75, 100, 125
20	\\ <u>\$\$</u>	10, 20, 30, 40, 50, 75, 100, 125, 150
25		10, 20, 30, 40, 50, 75, 100, 125, 150

5 Functional options

Symbol	Functional option		
Nil	Without functional option		
1	With buffer		
2	With end lock		
3	Axial piping		
4	With buffer, end lock		
5	With buffer, axial piping		

Number of auto switches

auto owito						
Nil	2					
S	1					
n	n					

6 Auto switch

Nil Without auto switch (Built-in magnet)

Click here for details on applicable auto switch models.

4 Adjuster options/Functional option combinations

				Adjuster mounting Functional option combination									
					posit	ion*1	Nil	1	2	3	4	5	
Symbol					Retraction stroke end	Without functional option	*2*7 With buffer	With end lock	Axial piping	With buffer,			
Z	W	ithout adjuste	r				0	0	0	0	0	0	
ZA					•	•	0	×	×	0	×	×	
ZB	Me	etal stopper w	vith	bumper			0	×	0	0	×	×	Ì
ZC						•	0	×	×	0	×	×	
ZD					•	•	0	×	×	0	×	×	l
ZE	Rι	ibber stopper	r		•		0	0	0	0	0	0	
ZF					•	0	×	×	0	×	×		
ZG						•	0	×	×	0	×	×	
ZH	Sr	ock absorbe	r/R	J			0	×	0	0	×	×	
ZJ					•	0	×	×	0	×	×		
ZK	Metal stopper			•	0	×	×	0	×	×			
ZL					0	0	0	0	0	0			
ZM						•	0	×	×	0	×	×	
ZN				Without adjuster] /	1	0	○*4	×	0	×	○*4	
ZP	Q.	Shorter total		Rubber stopper] /	•	0	×	×	0	×	×	
ZQ	_	ngth type*3		Shock absorber/RJ] /	•	0	×	×	0	×	×	
ZS	iei	igiii type · ·	Ę.	Metal stopper with bumper] /	•	0	×	×	0	×	×	
ZT			adjuster	Metal stopper	/	•	0	×	×	0	×	×	
ZBF	<u>_</u>	Metal		Rubber stopper	•	•	0	×	×	0	×	×	
ZBJ	ste	stopper with	end	Shock absorber/RJ	•	•	0	×	×	0	×	×	
ZBM	adjuster	bumper		Metal stopper	•	•	0	×	×	0	×	×	
ZEC		Rubber	stroke	Metal stopper with bumper	•	•	0	×	×	0	×	×	
ZEJ	end	stopper	st	Shock absorber/RJ	•	•	0	×	×	0	×	×	
ZEM	ô	зторрег	<u>ا</u> ا	Metal stopper	•	•	0	×	×	0	×	×	
ZHC	stroke	Shock	etraction	Metal stopper with bumper	•	•	0	×	×	0	×	×	
ZHF		absorber/RJ	ita	Rubber stopper	•	•	0	×	×	0	×	×	
ZHM	ši	αυδυίμει/Πυ	æ	Metal stopper	•	•	0	×	×	0	×	×	
ZLC	Sue	Metal		Metal stopper with bumper	•	•	0	×	×	0	×	×	
ZLF	Extension	stopper		Rubber stopper	•	•	0	×	×	0	×	×	
ZLJ	Ш	Stopper		Shock absorber/RJ	•	•	0	×	×	0	×	×	

- ■: Shipped together with the product, but not assembled Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- 2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- 3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- *4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
- There is no piping port on the side surface of the product.
- The metal stopper with bumper option is not available for ø6.
- As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

Adjuster Mounting Position



- When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.
 - * The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.



Air Slide Table

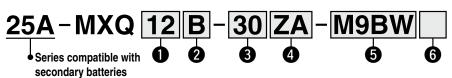
Low Thrust with High Rigidity Type RoHS

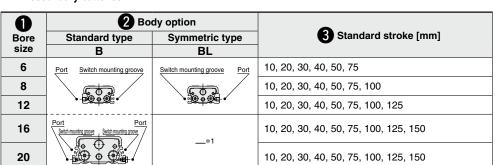


25A-MXQ\(\subseteq\) B Series

Ø6, Ø8, Ø12, Ø16, Ø20

How to Order





*1 Not available, as the standard model has piping ports and auto switch mounting grooves on both sides. Please use the standard type.

4 Adjuster options

Symbol	Adjuster type* ³					Adjuster mounting position*1			
					Extension stroke end	Retraction stroke end			
Z	Wit	hout adjuster							
ZA					•	•			
ZB	Ме	tal stopper with bum	per		•				
ZC						•			
ZD					•	•			
ZE	Ru	bber stopper			•				
ZF						•			
ZG					•	•			
ZH	Sh	ock absorber/RJ			•				
ZJ						•			
ZK				•	•				
ZL	Me	tal stopper		•					
ZM						•			
ZN	Without adjuster] /				
ZP	Shorter total			Rubber stopper		•			
ZQ	length type*2			Shock absorber/RJ] /	•			
ZS		length type		Metal stopper with bumper] /	•			
ZT			nst	Metal stopper	/	•			
ZBF		Metal stopper with	Retraction stroke end adjuster	Rubber stopper	•	•			
ZBJ	end adjuster	bumper	ğ	Shock absorber/RJ	•	•			
ZBM	iğ	bumpor	ē	Metal stopper	•	•			
ZEC	ğ		총	Metal stopper with bumper	•	•			
ZEJ	eu	Rubber stopper	Shock absorber/RJ	•	•				
ZEM	ě	Š Č Č		Metal stopper	•	•			
ZHC	tro	Shock absorber/RJ Metal stopper		Metal stopper with bumper	•	•			
ZHF	n s			Rubber stopper	•	•			
ZHM	sio		l ac	Metal stopper	•	•			
ZLC	ten			Metal stopper with bumper	•	•			
ZLF	Ш	Metal stopper		Rubber stopper	•	•			
ZLJ				Shock absorber/RJ	•	•			

5 Auto switch

Nil Without auto switch (Built-in magnet)

Click here for details on applicable auto switch models.

6 Number of auto switches

Nil	2		
S	1		
n	n		

•: Shipped together with the product, but not assembled

Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.

Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.

The metal stopper with bumper option is not available for ø6.

Adjuster Mounting Position



When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles. * The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.

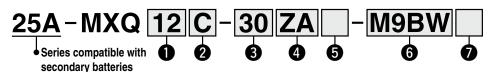
Air Slide Table Single Side-ported Type



25A-MXQ C Series

ø8, ø12

How to Order





0	2 Bod	3			
Bore size	Standard type C	Symmetric type CI	Standard stroke [mm]		
8	Port Switch mounting groove	Switch mounting groove Port	10, 20, 30, 40, 50, 75		
12			10, 20, 30, 40, 50, 75, 100		

Functional options						
Symbol	Functional option					
Nil	Without functional option					
1	With buffer					
2	With end lock					
3	Axial piping					

With buffer, end lock

With buffer, axial piping

6 Auto switch

Nil Without auto switch (Built-in magnet)

Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

4 Adjuster options/Functional option combinations

						Adjuster mounting Functional option combination																													
						position*1		1	2	3	4	5																							
Symbol		Adjuster type		Extension stroke end	Retraction stroke end	Without functional option	*2*6 With buffer	With end lock		With buffer,																									
Z	W	ithout adjuste	r				0	0	0	0	0	0																							
ZA					•	•	0	×	×	0	×	×																							
ZB	Me	etal stopper v	vith	bumper	•		0	×	0	0	×	×																							
ZC						•	0	×	×	0	×	×																							
ZD					•	•	0	×	×	0	×	×																							
ZE	Rι	ıbber stoppeı	•		•		0	0	0	0	0	0																							
ZF						•	0	×	×	0	×	×																							
ZG						•	0	×	×	0	×	×																							
ZH	Sr	ock absorbe	r/R	J	•		0	×	0	0	×	×																							
ZJ						•	0	×	×	0	×	×																							
ZK		Metal stopper				•	0	×	×	0	×	×																							
ZL	Me						0	0	0	0	0	0																							
ZM						•	0	×	×	0	×	×																							
ZN				Without adjuster] /		0	○*4	×	0	×	0*																							
ZP	Qh	orter overall		Rubber stopper] /	•	0	×	×	0	×	×																							
ZQ	_	gth type*3		Shock absorber/RJ] /	•	0	×	×	0	×	×																							
ZS	lien	girtype	te	Metal stopper with bumper] /	•	0	×	×	0	×	×																							
ZT			adjuster	Metal stopper	/	•	0	×	×	0	×	×																							
'BF	<u></u>	Metal		Rubber stopper	•	•	0	×	×	0	×	×																							
ZBJ	ste	stopper with	end	Shock absorber/RJ	•	•	0	×	×	0	×	×																							
'BM	adjuster	bumper	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	ē	e e	e e	ē	ē	Metal stopper		0	×	×	0	×	×
ZEC	a	Rubber	stroke	Metal stopper with bumper	•	•	0	×	×	0	×	×																							
ZEJ	end	stopper	st	Shock absorber/RJ	•	•	0	×	×	0	×	×																							
EM	ê	Gropper	le le	Metal stopper	•	•	0	×	×	0	×	×																							
HC	stroke	Shock	Retraction	Metal stopper with bumper		•	0	×	×	0	×	×																							
'HF		absorber/RJ	tra	Rubber stopper	•	•	0	×	×	0	×	×																							
HM	Extension	absorber/110	æ	Metal stopper	•	•	0	×	×	0	×	×																							
ZLC	en en	Metal		Metal stopper with bumper	•	•	0	×	×	0	×	×																							
ZLF	Ĭ	stopper		Rubber stopper	•	•	0	×	×	0	×	×																							
ZLJ	٣	srobbei		Shock absorber/RJ	•		0	×	×	0	×	×																							

- •1 •: Shipped together with the product, but not assembled Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- *3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- *4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
- *5 There is no piping port on the side surface of the product.
- 6 As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

Adjuster Mounting Position



- * When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

* The 25A- series specifications and dimensions are the same as those of the standard model.

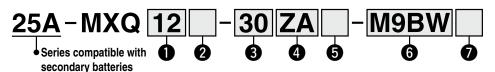
Air Slide Table Height Interchangeable Type



25A-MXQ Series

Ø6, Ø8, Ø12, Ø16, Ø20, Ø25

How to Order





0	2 Bod	y option					
Bore	Standard type	Symmetric type	Standard stroke [mm]				
size	Nil	L					
6	Port Switch mounting groove	Switch mounting groove Port	10, 20, 30, 40, 50				
8			10, 20, 30, 40, 50, 75				
12	**************************************		10, 20, 30, 40, 50, 75, 100				
16	Switch mounting groove Switch mounting groove		10, 20, 30, 40, 50, 75, 100, 125				
20		*1	10, 20, 30, 40, 50, 75, 100, 125, 150				
25	Port Port		10, 20, 30, 40, 50, 75, 100, 125, 150				

*1 Not available, as the standard model has piping ports and auto switch mounting grooves

⁵ Functional options

<u> </u>	o i unotional options							
Symbol	Functional option							
Nil	Without functional option							
1	With buffer							
2	With end lock							
3	Axial piping							
4	With buffer, end lock							
5	With buffer, axial piping							

Number of auto switches

auto switche						
Nil	2					
S	1					
n	n					

6 Auto switch

Nil Without auto switch (Built-in magnet)

Click here for details on applicable auto switch models.

4 Adjuster options/Functional option combinations

on both sides. Please use the standard type.

	Adjuster mounting Functional option com							on comb	oination					
						tion*1	Nil	1	2	3	4	5		
Symbol		Adjuster type* ⁶		Extension stroke end	Retraction stroke end	Without functional option	*2*7 With buffer	With end lock	*5 Axial piping		*2*5*7 With buffer, axial piping			
Z	W	ithout adjuste	r				0	0	0	0	0	0		
ZA					•	•	0	×	×	0	×	×		
ZB	Me	etal stopper w	/ith	bumper	•		0	×	0	0	×	×		
ZC						•	0	×	×	0	×	×		
ZD					•	•	0	×	×	0	×	×		
ZE	Rι	ubber stopper			•		0	0	0	0	0	0		
ZF						•	0	×	×	0	×	×		
ZG					•	•	0	×	×	0	×	×		
ZH	Sr	nock absorbe	r/Ru	J	•		0	×	0	0	×	×		
ZJ						•	0	×	×	0	×	×		
ZK				,	•	•	0	×	×	0	×	×		
ZL	Me	etal stopper			•		0	0	0	0	0	0		
ZM						•	0	×	×	0	×	×		
ZN				Without adjuster	/	1	0	O*4	×	0	×	0*4		
ZP				Rubber stopper] /	•	0	×	×	0	×	×		
ZQ		norter total		Shock absorber/RJ] /	•	0	×	×	0	×	×		
ZS	ier	ngtn type*3	ength type*3	er	Metal stopper with bumper] /	•	0	×	×	0	×	×	
ZT							adjuster	Metal stopper	V	•	0	×	×	0
ZBF	_	Metal	adj	Rubber stopper	•	•	0	×	×	0	×	×		
ZBJ	djuster	stopper with	end	Shock absorber/RJ	•	•	0	×	×	0	×	×		
ZBM	븕	bumper		Metal stopper	•	•	0	×	×	0	×	×		
ZEC	ן מ	Dubban	stroke	Metal stopper with bumper	•	•	0	×	×	0	×	×		
ZEJ	end	Rubber	stro	Shock absorber/RJ	•	•	0	×	×	0	×	× ×		
ZEM				Metal stopper	•	•	0	×	×	0	×	×		
ZHC	stroke	Ob I	뜒	Metal stopper with bumper	•	•	0	×	×	0	×	×		
ZHF		Shock	Retraction	Rubber stopper	•	•	0	×	×	0	×	×		
ZHM	<u></u>	absorber/RJ	Re	Metal stopper	•	•	0	×	×	0	×	×		
ZLC	Extension	N4-4-1	1	Metal stopper with bumper	•	•	0	×	×	0	×	×		
ZLF	发	Metal		Rubber stopper	•	•	0	×	×	0	×	×		
ZLJ	ш	stopper		Shock absorber/RJ	•	•	0	×	×	0	×	×		

- Shipped together with the product, but not assembled Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- *3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- *4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward
- *5 There is no piping port on the side surface of the product.
- *6 The metal stopper with bumper option is not available for ø6.
- 7 As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

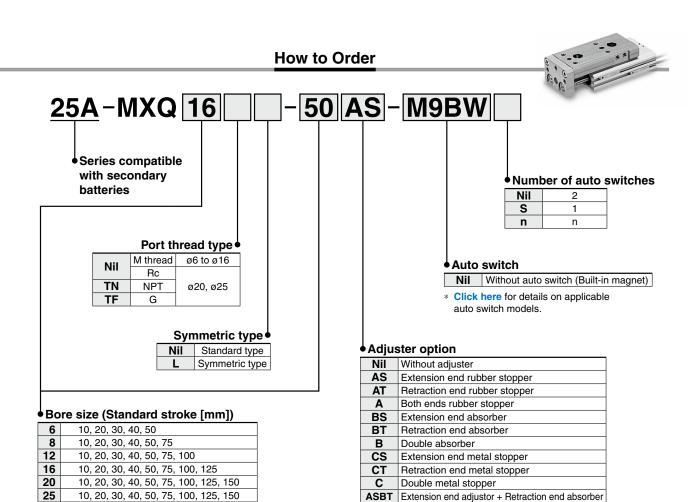
Adjuster Mounting Position



- * When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- * When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.
- * The 25A- series specifications and dimensions are the same as those of the standard model.



Air Slide Table 25A-IVXQ Series Ø6, Ø8, Ø12, Ø16, Ø20, Ø25



Corrosion Resistant Air Slide Table (Made to order: 25A-MXQ□-X771) The material of the head cap part has been changed to a highly corrosion-resistant material. Please contact your local sales representative for more details.

After change

Aluminum

Head cap

Before change

Synthetic resin

* The 25A- series specifications and dimensions are the same as those of the standard model.

may generate dust particles.

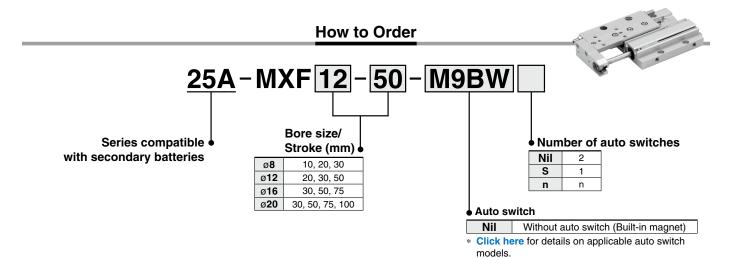


Low Profile Slide Table

25A-MXF Series

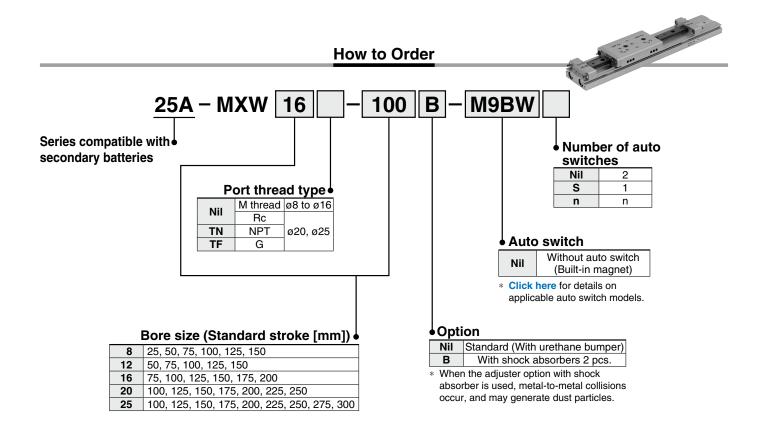
Ø8, Ø12, Ø16, Ø20

RoHS



* The 25A- series specifications and dimensions are the same as those of the standard model.

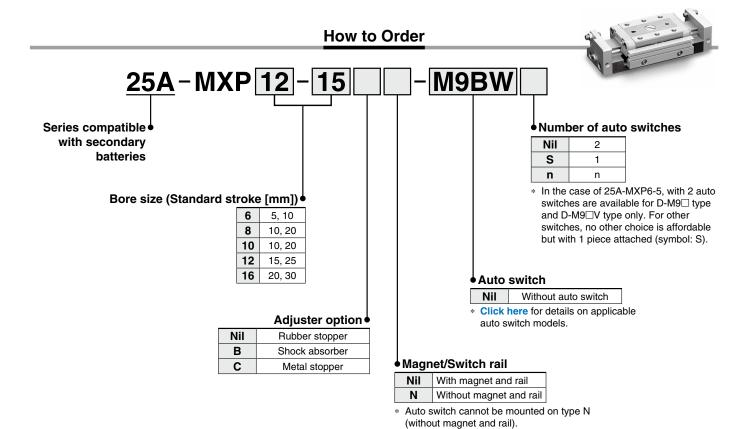
Air Slide Table 25A-MXV Series 88, \$\00.012, \$\00.016, \$\0.020, \$\0.025



 The 25A- series specifications and dimensions are the same as those of the standard model.

Air Slide Table **25A-IVXP** Series Ø6, Ø8, Ø10, Ø12, Ø16

RoHS



* The 25A- series specifications and dimensions are the same as those of the standard model.



^{*} Adjuster for 25A-MXP6 series is available for one side only.

^{*} Shock absorber is not available in 25A-MXP6 and 25A-MXP8 series.

^{*} When the adjuster option with shock absorber or metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.

Miniature Guide Rod Cylinder

25A-MGJ Series

ø6, ø10



How to Order

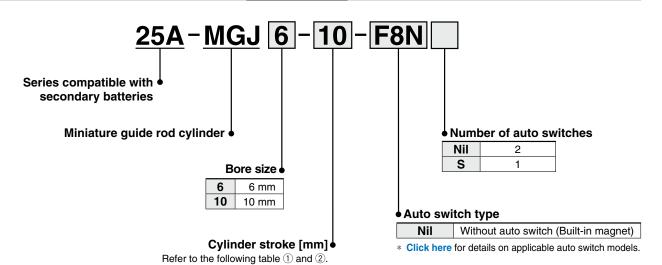


Table 1 Standard Strokes

Bore size [mm]	Standard stroke [mm]				
6	5, 10, 15				
10	5, 10, 15, 20				

Table 2 Intermediate Stroke (by the 1 mm stroke)

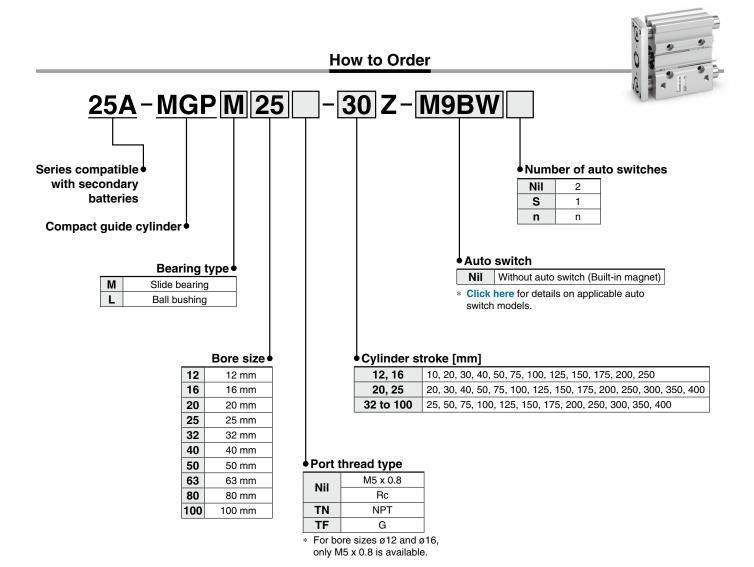
Bore size [mm]	Applicable stroke [mm]			
6	1 to 15 (Spacer type)			
10	1 to 20 (Spacer type)			
Example	Model no.: 25A-MGJ6-9 Installing a 1 mm width spacer for 25A-MGJ6-10 External size: same as 25A-MGJ6-10			

^{*} When mounting an auto switch, the min. stroke is 4 mm. However, only 1 auto switch can be mounted in this case.



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Compact Guide Cylinder 25A-NGP Series ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

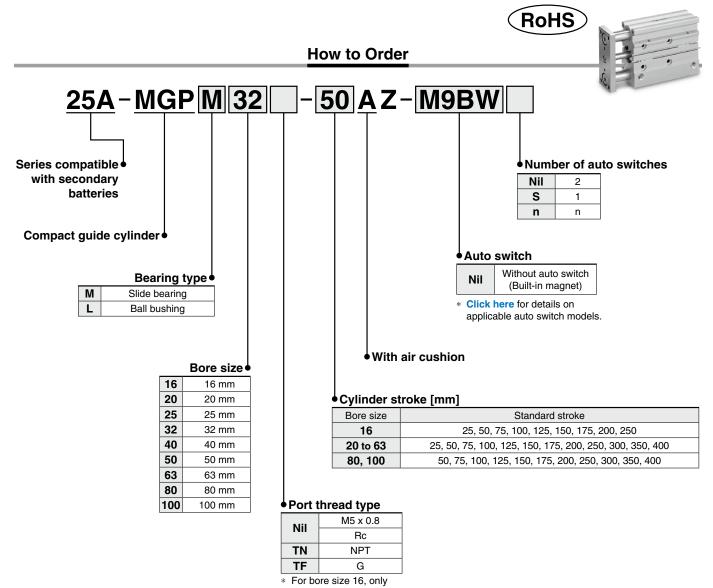




^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Compact Guide Cylinder/With Air Cushion 25A-MGP Series

Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



M5 x 0.8 is available.

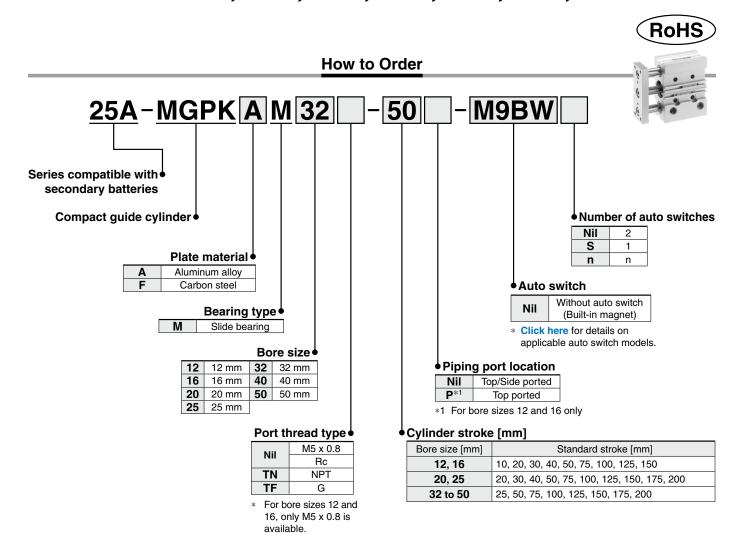


^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Compact Guide Cylinder

25A-MGPK Series

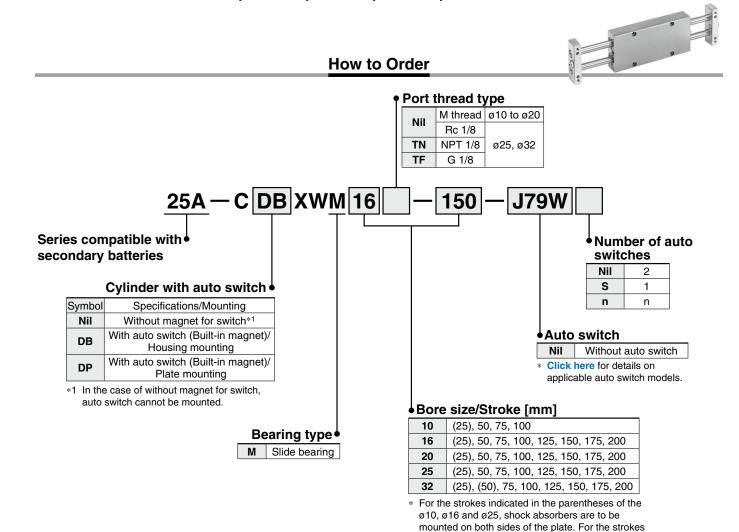
Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50



* The 25A- series specifications and dimensions are the same as those of the standard model.



Slide Unit: Built-in Shock Absorber Slide Bearing Type 25A-CXVVI Series ø10, ø16, ø20, ø25, ø32



Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDPXWM20-100

- indicated in the parentheses of the ø20 and ø32, a shock absorber is to be mounted on single side of the plate.

 For the strokes other than those indicated above,
- refer to the **Web Catalog**.
- For ø16, ø20 and ø25, strokes up to 300, and for ø32, strokes up to 250 are available as Made-to-Order.

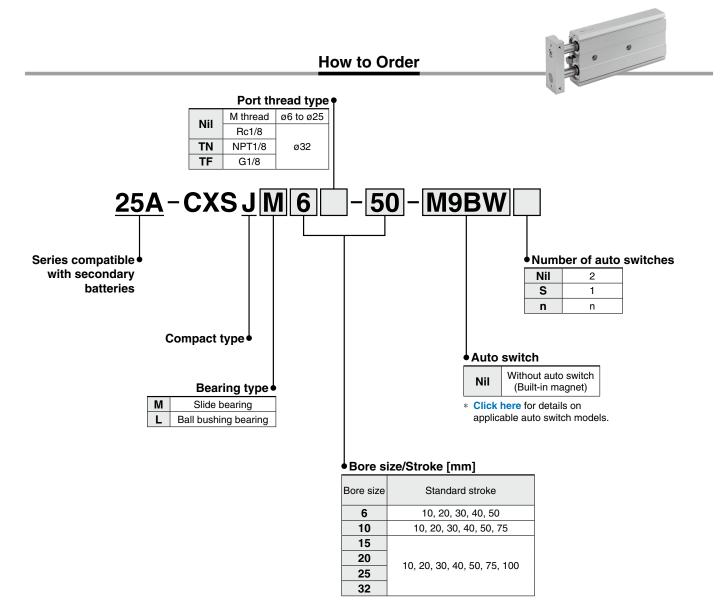
* The 25A- series specifications and dimensions are the same as those of the standard model.



Dual Rod Cylinder/Compact Type

25A-CXSJ Series

Ø6, Ø10, Ø15, Ø20, Ø25, Ø32



For details, refer to the Web Catalog.

RoHS



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Dual Rod Cylinder Basic Type

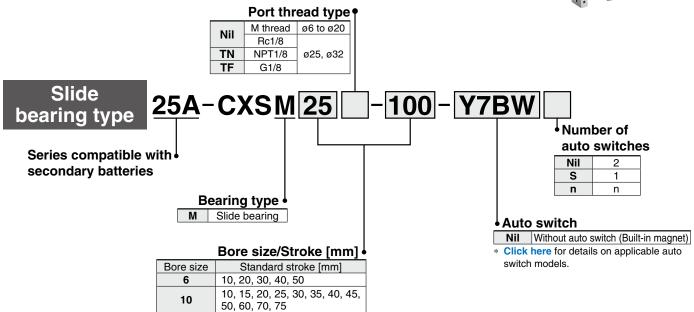
25A-CXS Series

Ø6, Ø10, Ø15, Ø20, Ø25, Ø32



How to Order





10, 15, 20, 25, 30, 35, 40, 45,

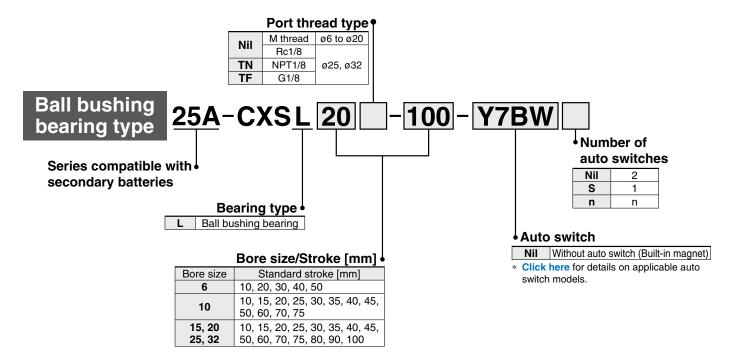
50, 60, 70, 75, 80, 90, 100

15, 20

25, 32

 The 25A- series specifications and dimensions are the same as those of the standard model.

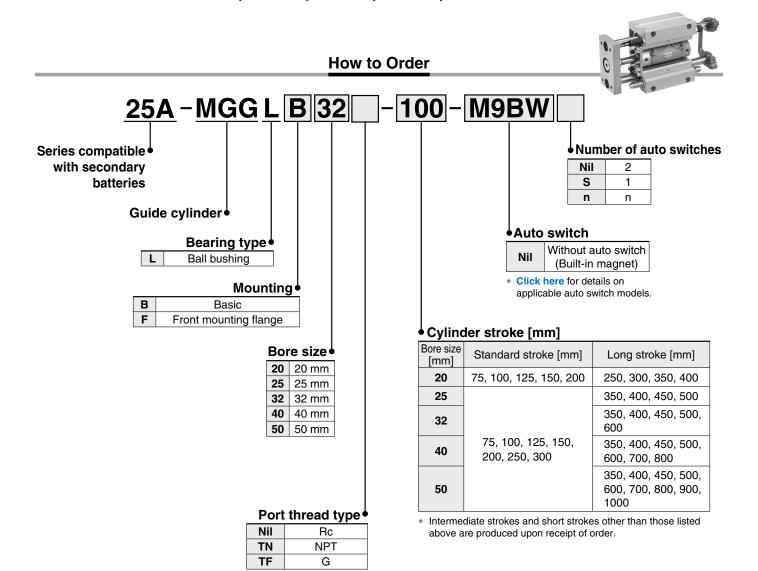
For details, refer to the Web Catalog.



 The 25A- series specifications and dimensions are the same as those of the standard model.



Guide Cylinder 25A-NGG Series 20, ø25, ø32, ø40, ø50



* The 25A- series specifications and dimensions are the same as those of the standard model.

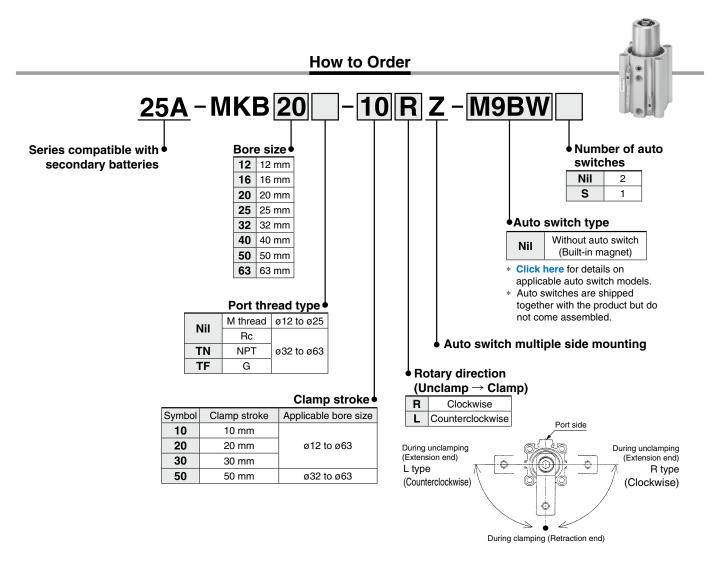


Rotary Clamp Cylinder: Standard

25A-MK Series



Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63



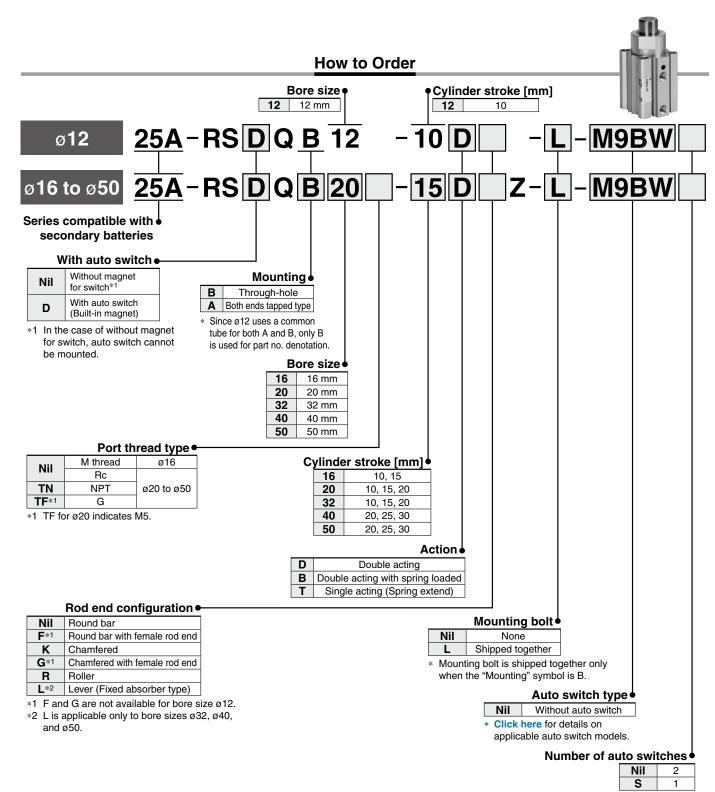
- * The coil scraper is not built-in.
- * The 25A- series specifications and dimensions are the same as those of the standard model.



Stopper Cylinder/Fixed Mounting Height

25A-RSQ Series

Ø12, Ø16, Ø20, Ø32, Ø40, Ø50



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

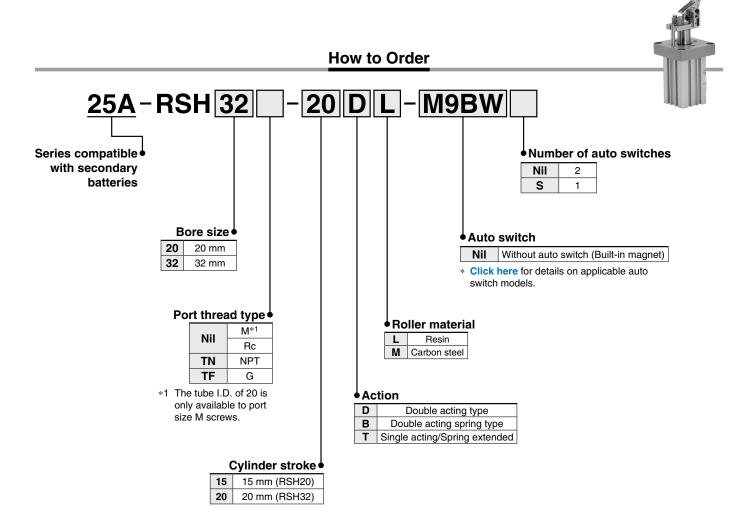
RoHS



Heavy Duty Stopper Cylinder 25A-RSH Series



ø20, ø32



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

ISO Standard (6432)

ISO Cylinder: Standard

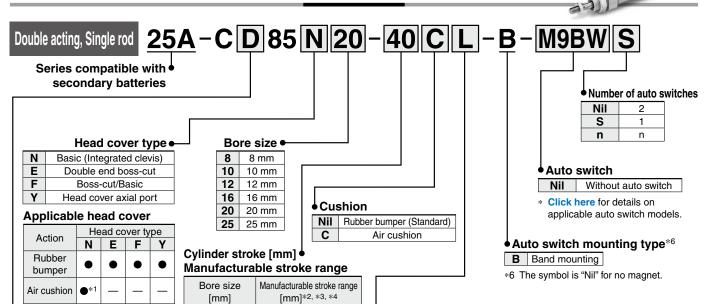
Double Acting, Single Rod

25A-C85 Series

Ø8, Ø10, Ø12, Ø16, Ø20, Ø25







*1 Excluding Ø8

Built-in magnet

Nil	None	
D	Built-in magnet	

20	5 to 1000
25	5 10 1000

8*1

10 12

16 20

*1 Not available with air cushion. *2 The minimum stroke with air cushion is 25 mm.

5 to 200

5 to 400

- *3 The min. stroke of the type with a magnet varies depending on the switch.
- *4 Applicable strokes differ depending on the usage conditions and mounting brackets. For details, refer to the "Stroke Selection" section of the C85 series in the Web Catalog.

Mounting bracket*5

Nil	None	
L	Single foot	
M	Double foot	
G	Flange	
U	Trunnion	
N	Clevis	

- Mounting bracket is shipped together with *7 Excluding ø8 the product.
- *5 Refer to Mounting Brackets for details of mounting brackets.

Applicable mounting bracket

Action	Head	N	/lount	ing b	racke	ŧ
Action	cover type	L	M	G	U	N
	N	•	•	•	•	•
Rubber	E	•	•	•	•	_
bumper	F	•	_	•	•	_
	Υ	•	_	•	•	_
Air cushion	N*7	•	•	•	•	•

Mounting Bracket Part Nos. for the 25A- Series

	Manuatia a la calcat			Bore si	ze [mm]			0	
	Mounting bracket	8	10	12	16	20	25	Contents	
	Rod end nut	C85N	T08A-S	C85N1	Γ10A-S	C85NT20A-S	C85NT25A-S	1 rod end nut	
	Mounting nut	C85N	C85NT08B-S		C85N	T20B-S	1 mounting nut		
bracket	Foot (1 pc.)	25A-C	85L10A	25A-C	35L16A	25A-C	85L25A	1 foot bracket	
brac	Foot (2 pcs. with 1 mounting nut)	25A-C	85L10B	25A-C	35L16B	25A-C	85L25B	2 foot brackets, 1 mounting nut	
ing	Foot (1 pc. with 1 mounting nut)	25A-C85L10C		25A-C85L10C 25A-C85L16C 25A-C85L25C		85L25C	1 foot bracket, 1 mounting nut		
Mounting	Flange	25A-C	C85F10 25A-C85F16		25A-C	85F25	1 flange		
Š	Trunnion	C85	5T10	C85	T16	C85	5T25	1 trunnion	
	Clevis	25A-C	85C10	25A-C	85C16	25A-C	85C25	1 clevis pivot bracket, 1 clevis pin 2 pin retaining rings	

Replacement Parts: For Standard Type

Bore size [mm]	Part no.	Note
20	25A-C85A-20PS	Every set includes: 1 rod seal
25	25A-C85A-25PS	1 flat washer 1 retaining ring

^{*} When replacing the seals, use grease (GR-D-010: ordered separately) on the sliding parts.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.



ISO Standard (15552)

ISO Cylinder: Standard

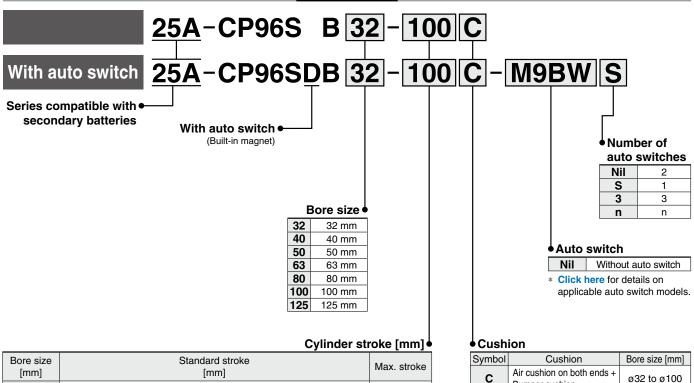




Ø32, Ø40, Ø50, Ø63, Ø80, Ø100, Ø125







Bore size [mm]	Standard stroke [mm]	Max. stroke
32	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1900
40	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1900
50	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
63	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
80	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1900
100	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1850
125	_	1850

^{*} Aside from the standard strokes, intermediate strokes are also available in 1 mm increments and are produced upon receipt of order.

For details, refer to the Web Catalog.

ø125

Bumper cushion

Air cushion

Nil



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

ISO Standard (15552)

ISO Cylinder: Standard



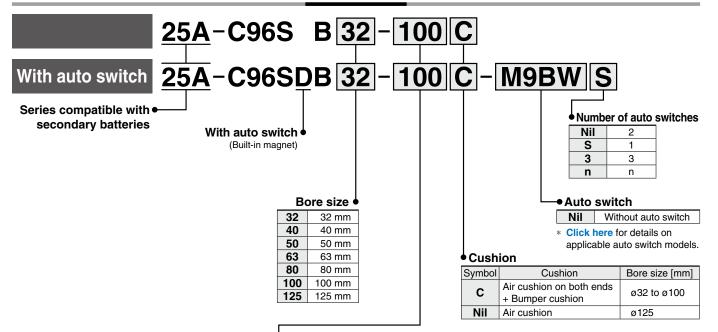


Ø32, Ø40, Ø50, Ø63, Ø80, Ø100, Ø125





How to Order



Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]	Max. stroke
32	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1000
40	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1900
50	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
63	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
80	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1900
100	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1850
125	_	1850

Aside from the standard strokes, intermediate strokes are also available in 1 mm increments and are produced upon receipt of order.



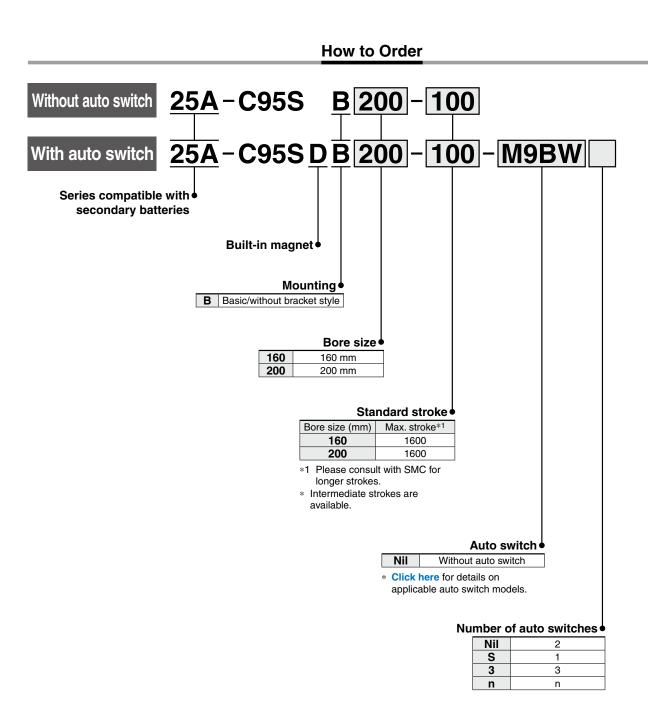
^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

ISO/VDMA Cylinder: Large Bore Size Type

Double Acting, Single Rod

25A-C95 Series ø 160, ø 200





^{*} The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.



ISO Standard (21287)



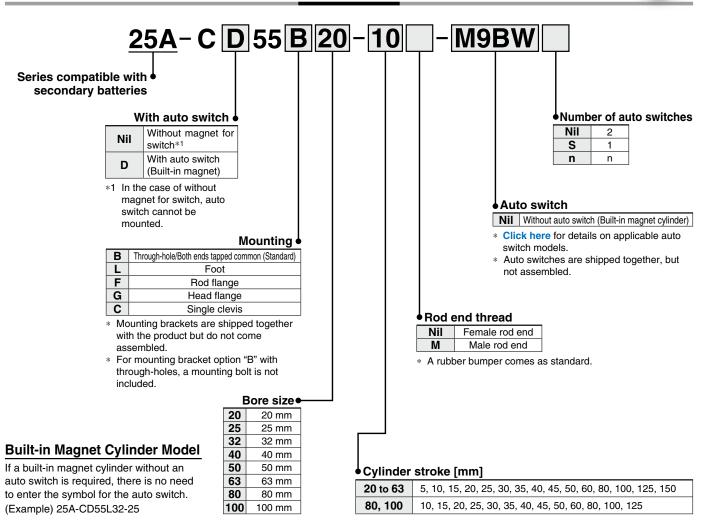


25A-C55 Series

Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



How to Order



Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Flange	Single clevis*2
20	25A-C55-L020	25A-C55-F020	25A-C55-C020
25	25A-C55-L025	25A-C55-F025	25A-C55-C025
32	25A-C55-L032	25A-C55-F032	_
40	25A-C55-L040	25A-C55-F040	_
50	25A-C55-L050	25A-C55-F050	_
63	25A-C55-L063	25A-C55-F063	_
80	25A-C55-L080	25A-C55-F080	_
100	25A-C55-L100	25A-C55-F100	_

- *1 Foot bracket part number contains two foot brackets
- *2 The single clevis is only applicable to bore sizes ø20 and ø25.
- * Mounting bolts are also included with bracket.
- * The 25A- series specifications and dimensions are the same as those of the standard model.



Shock Absorber Soft Type







O.D. thread size/Stroke • Stroke

Symbol O.D. thread 0604 4 mm 6 mm

Option • Symbol Hexagon nut Nil 2 pcs. Ν

25A - RJ 0604

25A - RJ 0806 H U

Series compatible with secondary batteries

Shock absorber/Soft type

O.D. thread size/Stroke

Symbol	O.D. thread	Stroke
0806	8 mm	6 mm
1007	10 mm	7 mm
1412	14 mm	12 mm
2015	20 mm	15 mm
2725	27 mm	25 mm

Option

Symbol	Hexagon nut	Stopper nut
Nil	2 pcs.	_
J	3 pcs.	_
N	_	_
S	2 pcs.	1 pc.
SJ	3 pcs.	1 pc.
SN	_	1 pc.

♦ With cap

Nil	Basic type	
U	With urethane cap	

Collision speed range

Н	0.05 to 2 m/s
L	0.05 to 1 m/s

* RJ0604: 0.05 to 1.0 m/s

* RJ2725H: 0.05 to 1.5 m/s

Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

				Threa	d size		
		М6	M8	M10	M14	M20	M27
Hexagon nut		25A-RJ06J	25-RB08J	25-RB10J	25-RB14J	25-RB20J	25-RB27J
Ctonnor mut	Basic type		25-RB08S	25-RB10S	25-RB14S	25-RB20S	25-RB27S
Stopper nut	With cap	_	25-RBC08S	25-RBC10S	25-RBC14S	25-RBC20S	25-RBC27S

Material: Special steel

Treatment: Electroless nickel plating

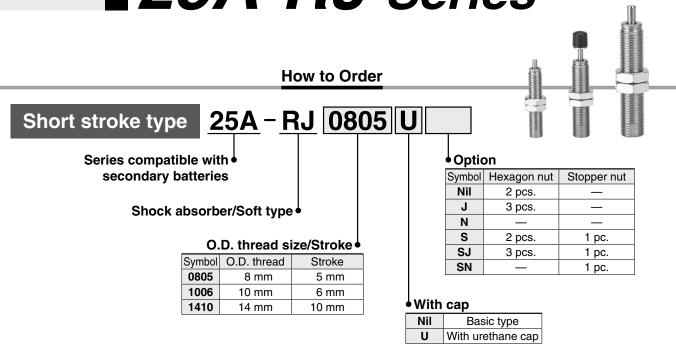
* The 25A- series specifications and dimensions are the same as those of the standard model.



Shock Absorber Short Stroke Type



25A-RJ Series



Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

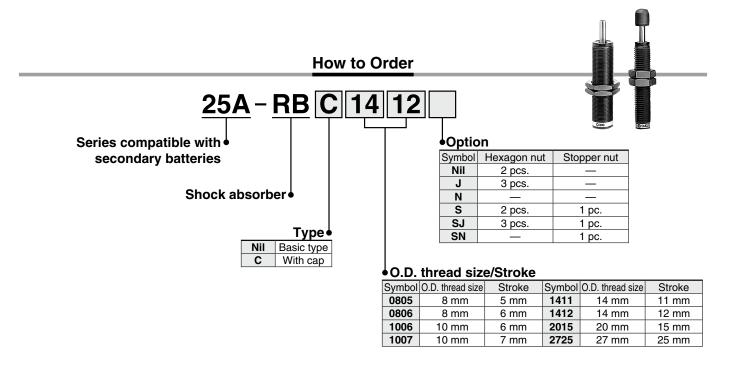
		Thread size			
		M8	M10	M14	
Hexagon nut		25-RB08J	25-RB10J	25-RB14J	
Ctonnor nut	Basic type	25-RB08S	25-RB10S	25-RB14S	
Stopper nut	With cap	25-RBC08S	25-RBC10S	25-RBC14S	

Material: Special steel Treatment: Electroless nickel plating



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Shock Absorber 25A-RB/RBC Series



Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

				Thread size		
		M8	M10	M14	M20	M27
Hexagon nut		25-RB08J	25-RB10J	25-RB14J	25-RB20J	25-RB27J
Ctannar nut	Basic type	25-RB08S	25-RB10S	25-RB14S	25-RB20S	25-RB27S
Stopper nut	With cap	25-RBC08S	25-RBC10S	25-RBC14S	25-RBC20S	25-RBC27S

Material: Special steel

Treatment: Electroless nickel plating



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

Floating Joint

25A-J□ Series



How to Order

Stainless steel type

25A-JS 32-

10-125

Series compatible with

Series compatible with secondary batteries

Stainless steel type •

Applicable bore size [mm]

Symbol	Applicable
Symbol	bore size [mm]
10	10
16	10, 16
20	20
32	25, 32
40	40
63	50, 63

Thread nominal size

Tilleau lioillilai Size			
Nominal	Applicable cylinder		
thread size	nominal thread size		
4-070	M4 x 0.7		
5-080	M5 x 0.8		
8-125	M8 x 1.25		
10-125	M10 x 1.25		
14-150	M14 x 1.5		
18-150	M18 x 1.5		

● Material of dust cover

| Symbol | Material |
| Nil | Fluororubber (FKM)

Silicone rubber (Si)

The 25A- series specifications and dimensions are the same as those of the standard model.

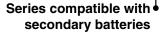
For details, refer to the Web Catalog.

S

How to Order

Standard type

25A-JA80-22-150



Applicable bore size [mm]

Model	Symbol	Applicable bore size [mm]
Standard	80	80
Standard	100	100

 For Ø63 or less, please consider using the stainless steel type 25A-JS series.

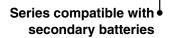
Applicable cylinder nominal thread size			
nominal thread size			
M22 x 1.5			
M26 x 1.5			

The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order

For compact cylinders 25A – JB 40 – 8-125



For compact cylinders/Female thread

Applicable bore size [mm]

Symbol	Applicable			
Symbol	bore size [mm]			
12	12			
16	16			
20	20			
25	25			
40	32, 40			
63	50, 63			
80	80			
100	100			

Thread nominal size

rinicad nominal size				
Nominal	Applicable cylinder			
thread size	nominal thread size			
3-050	M3 x 0.5			
4-070	M4 x 0.7			
5-080	M5 x 0.8			
6-100	M6 x 1			
8-125	M8 x 1.25			
10-150	M10 x 1.5			
16-200	M16 x 2			
20-250	M20 x 2.5			

* The 25A- series specifications and dimensions are the same as those of the standard model.



Rotary Table: Vane Type

25A-MSUB Series

Size: 1, 3, 7, 20

How to Order

Connection • port location

Nil	Side ported		
E	Axial ported		
Available with side ported			

only, when equipped with auto switch unit.

90

Without auto switch 25A – M SUB 20 – 90 S

With auto switch 25A - M D SUB 20

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Nominal size (Torque) •

1	MSUB 1
3	MSUB 3
7	MSUB 7
20	MSUB20

Rotating angle

Application	Symbol	Rotating angle
Single	90	90°
vane	180	180°
Double	90	90°
vane	90	90

Rotation adjustment range Single vane: Both ends $\pm 5^{\circ}$ each Double vane: Both ends $\pm 2.5^{\circ}$ each

Vane type

S	Single vane
D	Double vane

Number of

~~~	0111101100
S	1*1
Nil	2*2

*1 S (1 auto switch) is shipped with a right-hand auto switch.

RoHS

*2 Nil (2 auto switches) is shipped with a right-hand and a left-hand switch.

# Electrical entry/ Lead wire length

Nil	Grommet/Lead wire: 0.5 m
L	Grommet/Lead wire: 3 m

#### Auto switch

switch models.

	Nil	Without auto switch
		(Built-in magnet)
	* Click	here for details on applicable auto

- * The 25A- series specifications and dimensions are the same as those of the standard model.
- * Zinc is used in part of deep groove ball bearing.



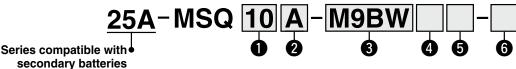
# **Rotary Table/Rack & Pinion Type**

# 25A-MSQ Series

Size: 10, 20, 30, 50

#### **How to Order**





1 Size

20 30 50 2 Cushion type

Α	Cushion pad
D	Bumper
R	Internal shock absorber

3 Auto switch

	Nil	Without auto switch (Built-in magnet)	
*	Click here for details on applicable auto		
	switch models.		

4 Number of auto switches

	• • • • • • • • • • • • • • • • • • • •
Nil	2
s	1
n	n

Port type
-----------

End port type		Size
Nil	M5	10, 20
Nil	Rc1/8	
-XF	G1/8	20 50
-XN	NPT1/8	30, 50
-XT	NPTF1/8	

6 Made to order

Nil	None	
Α	With interchangeable table and plate	
В	With interchangeable table	
С	With interchangeable plate	

* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 176 for details. Other specifications are the same as those of the standard model.

For details, refer to the Web Catalog.



# secondary batteries

* Zinc is used in part of deep groove ball bearing and seal washer.

# 2 Cushion type

A Cushion page		Cushion pad
	D	Bumper
	R	Internal shock absorber

# 3 Auto switch

Nil Without auto switch (Built-in magnet) * Click here for details on applicable auto

switch models.

# 4 Number of

auto switche			
Nil	2		
s	1		
n	n		

# Port type

End	port type	Size			
Nil	Nil M5				
Nil	Rc1/8				
-XF	G1/8	30, 50			
-XN	NPT1/8	30, 30			
-XT	NPTF1/8				

## **6** Made to order

O made to order					
Nil	None				
В	With interchangeable table				

Internal SI	he 25A- Series	
Size	Part no.	
10	25A-RBA0805-X692	
20	25A-RBA1006-X692	
30	23A-NBA1000-A092	
50	25A-RBA1411-X692	

^{*} The part number is the same for the 25A-MSQ-X251.

175

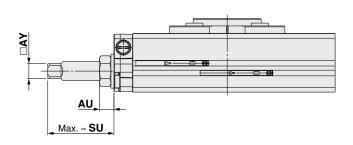
* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 176 for details. Other specifications are the same as those of the standard model.

^{*} Zinc is used in part of deep groove ball bearing and seal washer.

# Rotary Table/Rack & Pinion Type 25A-MSQ Series

### **Dimensions**

### Basic type 25A-MSQ□A



[mm]						
Size	AU	AY	FU	HU	SU	
10	6.5	6	32	18	24	
20	7.5	8	36	26	34	
30	7.5	8	34	24	32	
50	10	10	54	34	45.5	

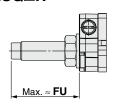
 $\ast\,\,$  Dimensions other than those shown above are identical to the standard products.

For details, refer to the Web Catalog.

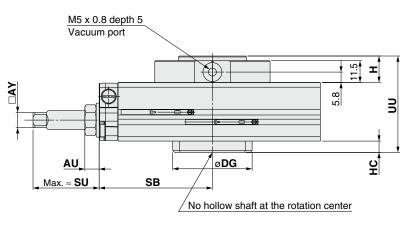
### Bumper 25A-MSQ□D



# Internal shock absorber 25A-MSQ□R



# With vacuum port 25A-MSQ□A-X251



										[mm]
Size	AU	AY	DG	FU	Н	нс	HU	SB	SU	UU
10	6.5	6	35h9	32	14.2	5	18	47.2	24	48.7
20	7.5	8	42h9	36	14	6	26	59.9	34	51
30	7.5	8	48h9	34	14	6	24	65.3	32	58
50	10	10	54h9	54	14	7	34	77.7	45.5	64

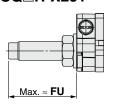
- * Dimensions other than those shown above are identical to the standard products.
- $\ast\,$  The product with the vacuum port has no hollow shaft at its rotation center.

For details, refer to the Web Catalog.

# Bumper 25A-MSQ□D-X251



# Internal shock absorber 25A-MSQ□R-X251



# MSQ Series

# **Made to Order**

Please contact SMC for detailed dimensions, specifications, and delivery times.



# 1 With Interchangeable Table and Plate

Symbol -A, -B, -C

Interchangeable

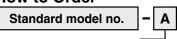
Cross recessed head machine screw for

precision instruments

### **Applicable Rotary Table**

Model	With interchangeable	With interchangeable	With interchangeable	Note
	table and plate	table	plate	
25A-MSQ	0	0	0	
25A-MSQ□-B-X251	_	0	_	

#### **How to Order**



#### Made to order

Α	With interchangeable table and plate
В	With interchangeable table
С	With interchangeable plate

- The interchangeable table and plate can be ordered separately. For details, refer to the tables below.
- * The interchangeable table and plate are assembled before shipment.

### Part Nos. of Interchangeable Parts

Interchangeable A Unit (With Interchangeable Table and Plate)

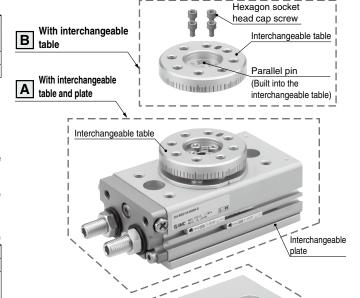
Size	Part no.	Contents				
Size	raitiio.	Description (Qty.)				
10	P891010-53	· Interchangeable table (1)				
20	P891020-53	Parallel pin (1) Hexagon socket head cap screw (4)				
30	P891030-53	Interchangeable plate (1) Cross recessed head machine				
50	P891040-53	screw for precision instruments (2)				

#### Interchangeable B Unit (With Interchangeable Table)

Size	Part no.	Contents			
Size	Faitillo.	Description (Qty.)			
10	P891010-54				
20	P891020-54	· Interchangeable table (1) · Parallel pin (1)			
30	P891030-54	Hexagon socket head cap screw (4)			
50	P891040-54	Hexagori socket flead cap screw (4)			

#### Interchangeable C Unit (With Interchangeable Plate)

Size	Part no.	Contents			
Size	Faitillo.	Description (Qty.)			
10	P891010-55	1			
20	P891020-55	Interchangeable plate (1) Cross recessed head machine			
30	P891030-55	screw for precision instruments (2)			
50	P891040-55	screw for precision instruments (2)			



* To position the product, use the knock pin holes on the body instead of the through holes that are empty in the interchangeable plate.

Dimensions: The dimensions of the 25A-MSQ are the same as those of the standard product.

Refer below for the dimensions of the 25A-MSQ□-B-X251 with a vacuum port.

* Refer to the Web Catalog for the tightening torque of the interchangeable parts.

## **Dimensions**

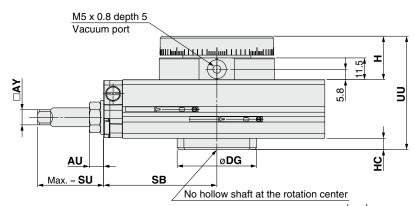
* Mounting diagram of the interchangeable table Dimensions other than those shown below are the same as those of the basic type. Refer to the **Web Catalog** for details.

C plate

Through hole

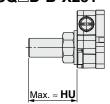
With interchangeable

# With vacuum port/With interchangeable table 25A-MSQ□A-B-X251

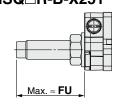


										(mm)	
Size	AU	AY	DG	FU	Н	НС	HU	SB	SU	UU	
10	6.5	6	35h9	32	21	5	18	47.2	24	55.7	
20	7.5	8	42h9	36	23	6	26	59.9	34	60	*
30	7.5	8	48h9	34	23	6	24	65.3	32	67	*
50	10	10	54h9	54	26	7	34	77.7	45.5	75.5	

### Bumper 25A-MSQ□D-B-X251



# Internal shock absorber 25A-MSQ□R-B-X251



- * Dimensions other than those shown above are identical to the standard products.
- The product with the vacuum port has no hollow shaft at its rotation center.

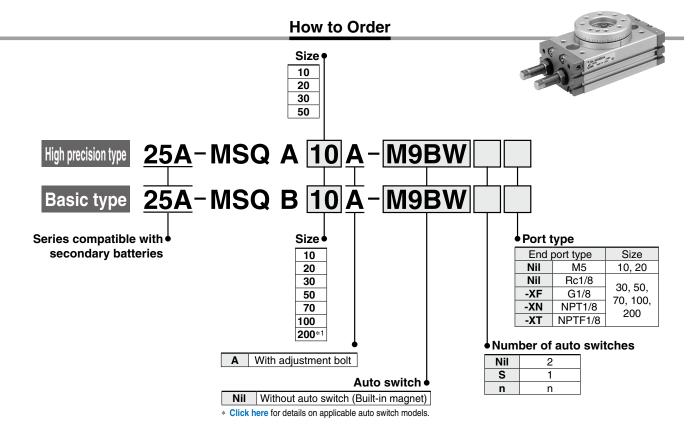


# Rotary Table/Rack & Pinion Type

# 25A-MSQ Series

Size: 10, 20, 30, 50, 70, 100, 200

RoHS

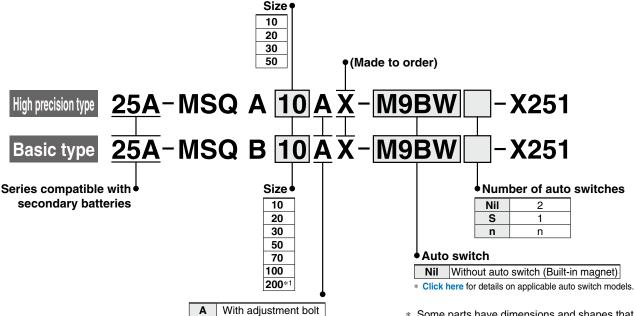


- *1 Size 200 is produced upon receipt of order.
- Zinc is used in part of deep groove ball bearing and seal washer.
- Side port cannot be used.

* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 179 for details. Other specifications are the same as those of the standard model.

For details, refer to the Web Catalog.

# With Vacuum Port



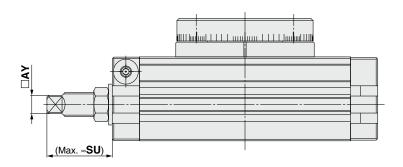
- *1 Size 200 is produced upon receipt of order.
- * Zinc is used in part of deep groove ball bearing and seal washer.
- Side port cannot be used.

* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 179 for details. Other specifications are the same as those of the standard model.

# 25A-MSQ Series

# **Dimensions**

## 25A-MSQB□A

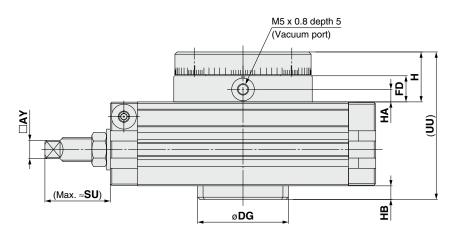


		[mm]
Size	AY	SU
10	6	23.7
20	8	33
30	8	33
50	10	42.9
70	16	44.2
100	16	44.3
200	21	52.2

* Dimensions other than those shown above are identical to the standard products.

For details, refer to the Web Catalog.

### 25A-MSQB□AX-X251



								[mm]
Size	AY	DG	FD	Н	HA	НВ	SU	UU
10	6	35h9	11.5	20	5.5	5	23.7	59
20	8	40h9	11.5	22	5.5	6	33	65
30	8	48h9	11.5	22	5.5	6	33	68
50	10	54h9	11.5	24	5.5	7	42.9	77
70	16	50h9	12	25	6	7	44.2	85
100	16	52h9	12	27	6	7	44.3	93
200	21	64h9	15	32	7.5	8	52.2	114

- * The product with the vacuum port has no hollow shaft at its rotation center.
- * Dimensions other than those shown above are identical to the standard products.

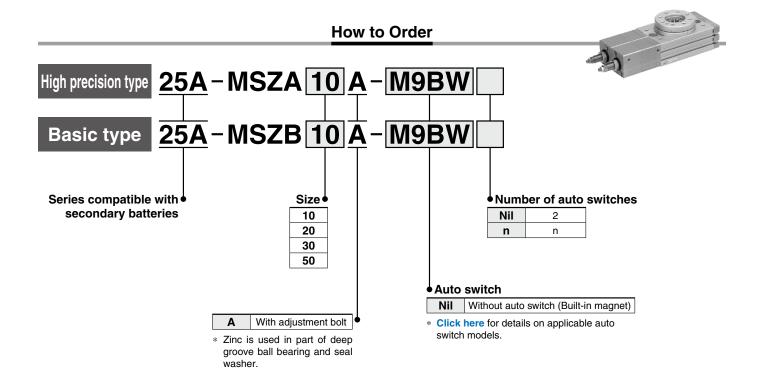


# **3-Position Rotary Table**

# 25A-MSZ Series

Size: 10, 20, 30, 50

RoHS



* The 25A- series specifications and dimensions are the same as those of the standard model.

**Compact Type Parallel Style Air Gripper** 

# 25A-JMHZ2 Series



Compact Type Parallel Style Air Gripper/With Positioning Pins on the Lateral Mounting Surface

25A-JMHZ2-X6900(A, B) (Made to Order) Compact Type Parallel Style Air Gripper/Lateral Auto Switch Mounting

**25A-JMHZ2-X7460** (Made to Order)

Ø8, Ø12, Ø16, Ø20

**How to Order** 

### **Bore Size**

ø8 to ø20

25A-JMHZ2-16D - M9BW

Series compatible with secondary batteries



2 Bore size				
8	8 mm			
<b>12</b> 12 mm				
16	16 mm			
20	20 mm			

3 Action				
D	Double acting			

4 Finger option					
Nil	Standard				
1	Side tapped mounting				
2	Through-holes in opening closing direction				



	6 Number of auto switches				
	Nil	2			
S		1			

* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.

#### **Bore Size**

Ø8 to Ø20 Made to Order

25A-JMHZ2-16 D - M9BW - X6900 A

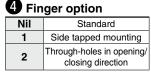
Series compatible with secondary batteries

With positioning pins on the lateral mounting surface

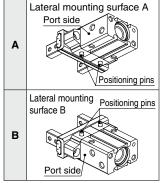


Dole Size				
<b>8</b> 8 mm				
12	12 mm			
16	16 mm			
20	20 mm			





# **7** Direction of pin projection



Auto switch

Nil Without auto switch (Built-in magnet)

Click here for details on applicable auto switch models 6 Number of auto switches

Nil	2			
S	1			
n	n			

* The 25A- series have the same specifications and dimensions as those of the JMHZ2-X6900(A, B) (made-to-order individual specifications). For details, refer to the Web Catalog.

#### **Bore Size**

Ø**8 to** Ø**20** Made to Order 25A - JMHZ 2 - 16 D - M9BW - X7460

Lateral auto

Series compatible with secondary batteries

Number of fingers

8 8 mm
12 12 mm
16 16 mm
20 20 mm

3 Action
Double acting

Finger option

Nil Standard

Side tapped mounting

Through-holes in opening, closing direction

5 Auto switch

Nil Without auto switch (Built-in magnet)

* Click here for details on

 Click here for details on applicable auto switch models

6 Number of auto switches					
Nil 2					

switch mounting

^{*} The 25A- series have the same specifications and dimensions as those of the JMHZ2-X7460 (made-to-order individual specifications). For details, refer to the Web Catalog.

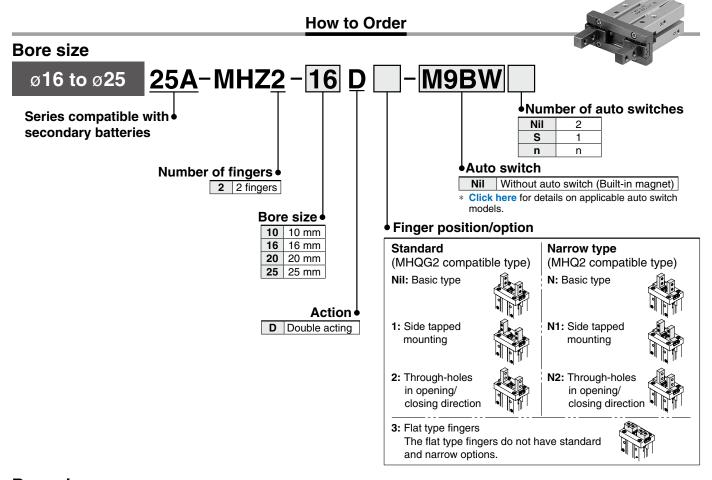


# Parallel Type Air Gripper Standard Type

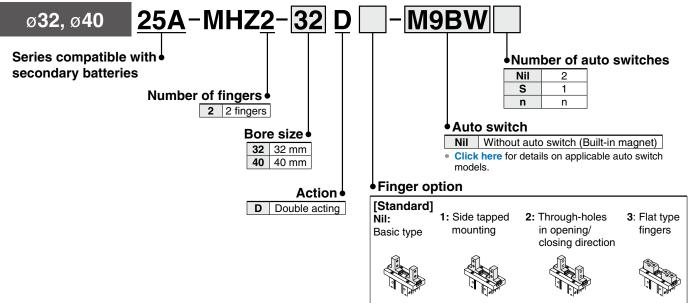
# 25A-MHZ2 Series

Ø10, Ø16, Ø20, Ø25, Ø32, Ø40





# Bore size

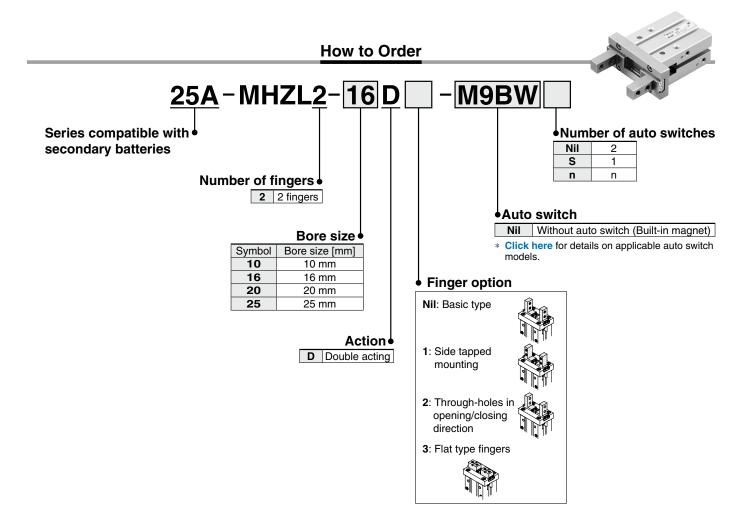


* The 25A- series specifications and dimensions are the same as those of the standard model.

# Parallel Type Air Gripper Long Stroke Type 25A-MHZL2 Series

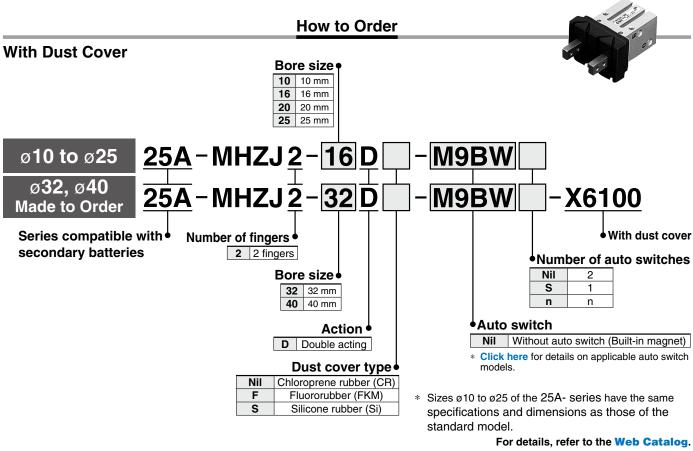


Ø10, Ø16, Ø20, Ø25



* The 25A- series specifications and dimensions are the same as those of the standard model.

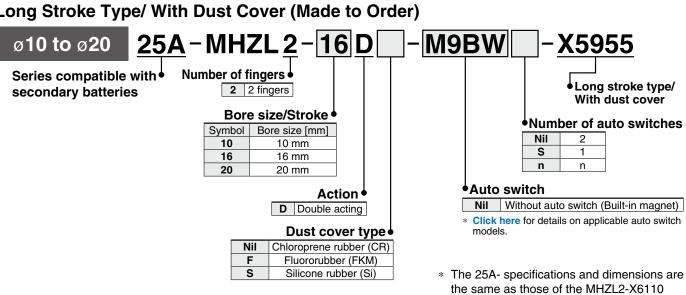
# Parallel Type Air Gripper with Dust Cover **25A-MHZJ2** Series **RoHS 25A-MHZJ2-X6100** (Made to Order) Parallel Type Air Gripper with Dust Cover: Long Stroke Type **25A-MHZL2-X5955** (Made to Order)



* Sizes ø32 and ø40 of the 25A- series have the same specifications and dimensions as those of the MHZJ2-X6100 (made-to-order individual specifications).

For details, refer to the Web Catalog.

# Long Stroke Type/ With Dust Cover (Made to Order)



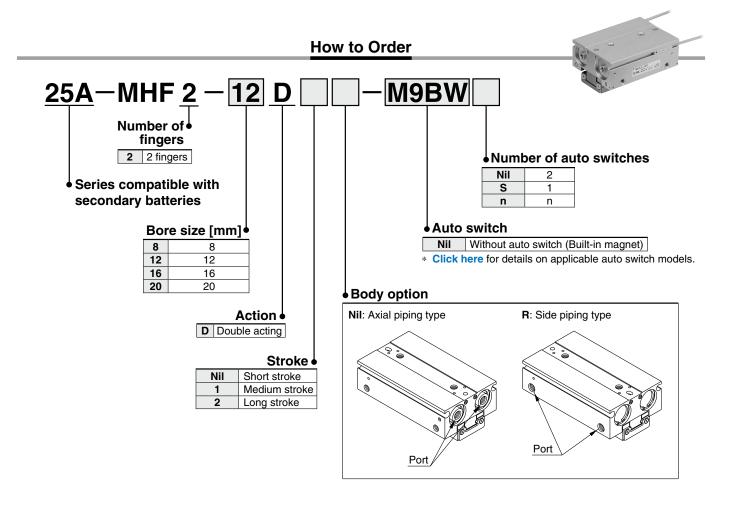
For details, refer to the Web Catalog.

(made to order individual specifications).

# Low Profile Air Gripper 25A-MHF2 Series

Ø8, Ø12, Ø16, Ø20





* The 25A- series specifications and dimensions are the same as those of the standard model.

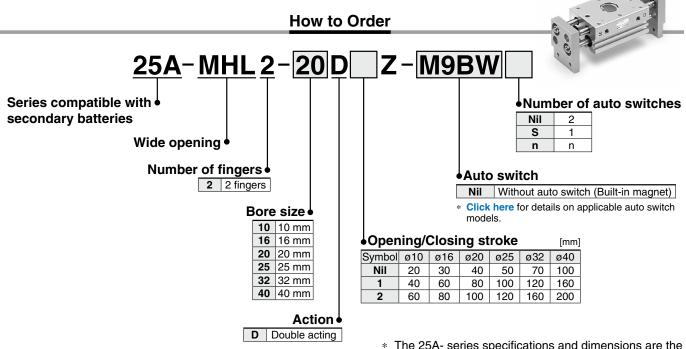


# Parallel Type Air Gripper: Wide Type

# 25A-MHL2 Series

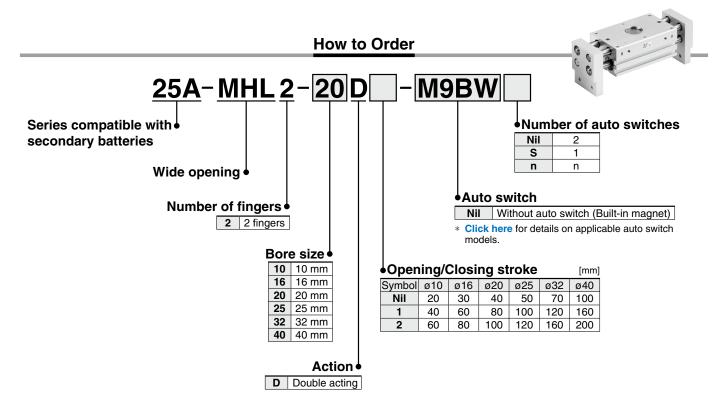
Ø10, Ø16, Ø20, Ø25, Ø32, Ø40

RoHS



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



* The 25A- series specifications and dimensions are the same as those of the standard model.

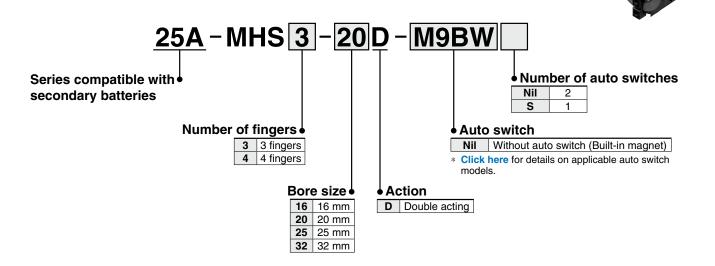
# Parallel Type Air Gripper

# 25A-MHS Series

Ø16, Ø20, Ø25, Ø32

RoHS

#### **How to Order**



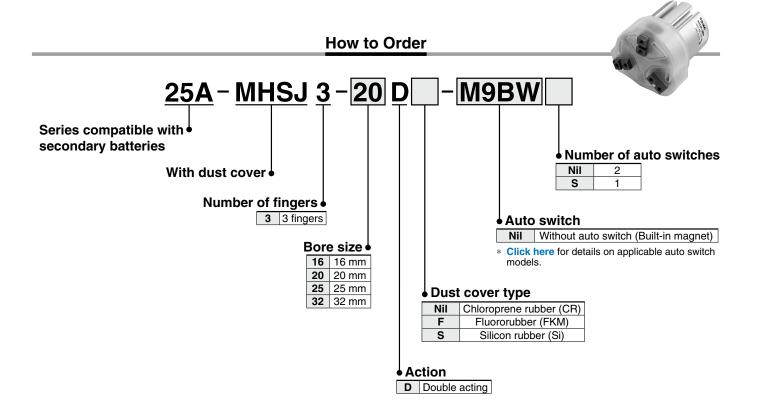
* The 25A- series specifications and dimensions are the same as those of the standard model.

# Parallel Type Air Gripper 3-Finger Type with Dust Cover

# 25A-MHSJ3 Series

Ø16, Ø20, Ø25, Ø32

RoHS



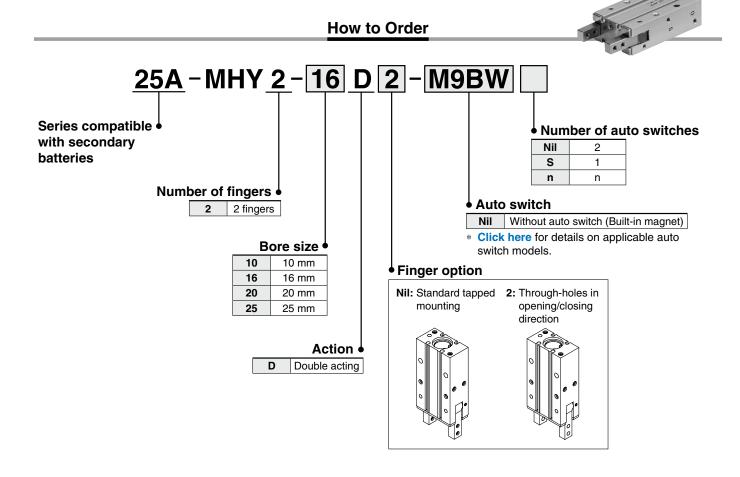
* The 25A- series specifications and dimensions are the same as those of the standard model.

# 180° Angular Type Air Gripper Cam Type

# 25A-MHY2 Series

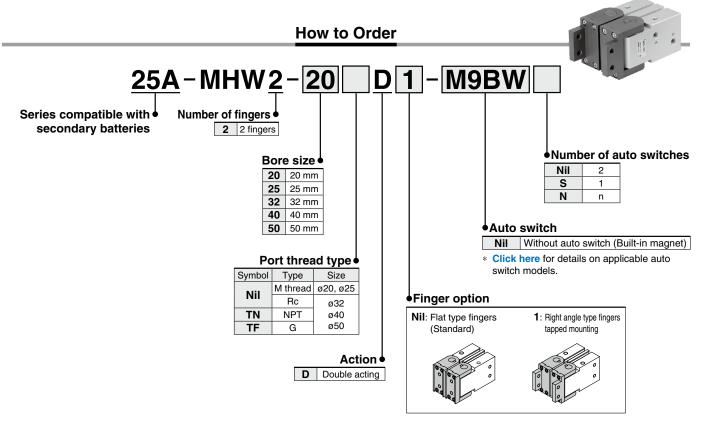
Ø10, Ø16, Ø20, Ø25





* The 25A- series specifications and dimensions are the same as those of the standard model.

# 180° Angular Type Air Gripper Rack & Pinion Type 25A-NHV2 Series Ø20, Ø25, Ø32, Ø40, Ø50



- * Change of material and surface treatment are not available for the bearing or the parallel key.
- * As metal-to-metal collision occurs when the fingers are fully closed, dust particles may be generated.

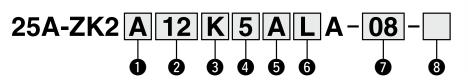
^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

# **Ejector System Vacuum Unit**

# 25A-ZK2 A Series RoHS

Single Unit Ejector + With Valve + Without Energy Saving Function

#### **How to Order**





$\overline{}$	Ody/Exilads	- 71 -			
Symbol	Body	Exhaust type			
A		Silencer exhaust*1			
В	Single unit	Port exhaust exhaust			
G		High-noise reduction silencer exhaust			

^{*1} With exhaust port when 2 is 12 or 15

# 4 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC
6	12 VDC

### **5** Pressure switch for vacuum/Pressure sensor

		Durana		Specifications		
Symbol	Type	Pressure range [kPa]	NPN	PNP	With unit selection	
		range [ki a]	2 ou	tputs	function*3	
Α			•	_	•	
В	for	0 to -101	•	_	None (SI unit only)	
С	Pressure switch for vacuum	010-101	_	•	•	
D	ure swit ⁄acuum		_	•	None (SI unit only)	
E	ure ⁄acı		•	_	•	
F	ISSE	-100 to 100	•	_	None (SI unit only)	
Н	Pre	-100 10 100	_	•	•	
J			_	•	None (SI unit only)	
Р	Pressure	0 to -101	Analog output 1 to 5 \			
Т	sensor	-100 to 100			σιιραί τιο 5 ν	
N	Without pressure switch for vacuum/pressure sensor					

^{*3} The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

### Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8

# 2 Nominal nozzle size

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

 The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product.
 For details, refer to the Web Catalog.

# 3 Combination of supply valve and release valve

	Symbol	Supply valve		Release valve
		N.C.	Self-holding	N.C.
	K	•	_	•
	J	•	_	_
	R	_	●*2	•

*2 Supply valve maintains vacuum by energization (20 ms or more). Stopping the vacuum turns on the release valve.

### 6 Connector (Supply valve/Release valve/Pressure switch for vacuum)

Symbol	For supply valve/ release valve: 300 mm (Connector assembly)*4	For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note	
L	•			Cannot be selected	
L1	None		when 6 is N		
L2	•	None		Cannot be selected	
L3	None	None		when 6 is P or T	

^{*4} For the connector length other than 300 mm, select L1 or L3, and order the connector assembly on page 194 separately.

### **8** Option*5 (For details on the Function/Application, refer to page 195.)

Symbol		Туре	Note
Nil	Without o	_	
В	Mounting for single (nuts and		_
D	With individual release PD port pressure supply (PD) port (M3)*6		Cannot be selected when <b>3</b> is J
E	eak flow needle	Screwdriver operation type long lock nut	Cannot be selected when <b>3</b>
J	Vacuum break flow adjusting needle	Round lock nut Lock nut	is J Can be selected only for the
к	Vacu	Screwdriver operation type  Vacuum break flow adjusting needle	combination of J and K
w	With exhauntering interferent prevention	ce Exhaust interference	When J is selected for <b>3</b> , install the release valve or vacuum breaker in the middle of the vacuum piping.

^{*5} When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)



^{*6} Use a One-touch fitting or barb fitting for piping. (O.D.: Within  $\emptyset 6.2$ )

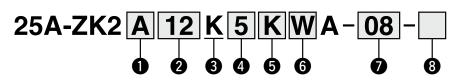
^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

# **Ejector System Vacuum Unit**

# 25A-ZK2 A Series ROHS

Single Unit Ejector + With Valve + With Energy Saving Function

#### **How to Order**





### Body/Exhaust type

<u> </u>	b body/Exhaust type				
Symbol	Body	Exhaust type			
A		Silencer exhaust*1			
В	Single unit	Port exhaust exhaust			
G		High-noise reduction silencer exhaust			

Pressure switch for vacuum with energy saving function

1 output

NPN

Specifications

With unit selection

function*2

None (SI unit only)

None (SI unit only)

**PNP** 

*1 With exhaust port when 2 is 12 or 15

Pressure range

[kPa]

-100 to 100

Symbol

Q

R

# 2 Nominal nozzle size

Symbol	Nominal nozzle size	
07	ø0.7	
10	ø1.0	
12	ø1.2	
15	ø1.5	

 The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product.
 For details, refer to the Web Catalog.

# 4 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC
6	12 VDC

# **6** Connector

Symbol	For pressure switch for vacuum with energy saving function: 2 m (Lead wire with connector)
VV	•
L3	None

# 3 Combination of supply valve and release valve

Symbol	Supply valve	Release valve
Symbol	N.C.	N.C.
K	•	•

	Symbol	Vacuum (V) port
	06	ø6
	08	ø8

Vacuum (V) port

### **8** Option*3 (For details on the Function/Application, refer to page 195.)

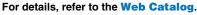
9	puon	(For details on the Function/Application, refer to page 195.)		
Symbol		Туре	Note	
Nil	Without o	option	_	
В	Mounting bracket for single unit (nuts and bolts are included)			
D		With individual release PD port pressure supply (PD) port (M3)*4		
E	tlow edle	Screwdriver operation type long lock nut	Can be calcuted	
J	Vacuum break flow adjusting needle	Round lock nut Lock nut	Can be selected only for the combination of J and K	
K	Vacu	Screwdriver operation type Vacuum break flow adjusting needle	and K	

*3 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)

*4 Use a One-touch fitting or barb fitting for piping. (O.D.: Within ø6.2)

The manifold type is available as a special order.

 The 25A- series specifications and dimensions are the same as those of the standard model.



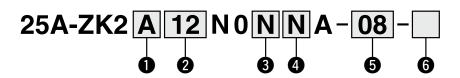


^{*2} The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

# Ejector System Vacuum Unit ( E UK CA 25A-ZK2 A Series RoHS)

Single Unit Ejector + Without Valve + Without Energy Saving Function

#### **How to Order**





Symbol	Body		Exhaust type
A		Silencer exhaust*1	Silencer exhaust
В	Single unit	Port exhaust	Port exhaust
G		High-noise reduction silencer exhaust	High-noise reduction silencer exhaust

*1 With exhaust port when 2 is 12 or 15

### 2 Nominal nozzle size

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

 The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product.

For details, refer to the Web Catalog.

### 4 Connector

Symbol	For pressure switch for vacuum: sensor 2 m (Lead wire assembly: 3 m with connector) (With lead wire)	Note	
Y	•	Cannot be selected when 3 is N	
Y1	None	Cannot be selected when <b>3</b> is P, T, or N	
N	None	When "N" is selected for 3	

### 3 Pressure switch for vacuum/Pressure sensor

			_			cifications
Sy	ymbol	Type	Pressure range [kPa]	NPN	PNP	With unit selection
			range [Ki a]	2 ou	tputs	function*2
	Α		0 to -101	•	_	•
	В	for		•	_	None (SI unit only)
	C	tch (		_	•	•
	D	Pressure switch for vacuum		_	•	None (SI unit only)
	Е	ure ⁄acı		•	_	•
	F	1886	-100 to 100	•	_	None (SI unit only)
	Н	Pre	-100 to 100	_	•	•
	L			_	•	None (SI unit only)
	Р	Pressure	0 to -101	A 1		output 1 to 5 V
	Т	sensor	-100 to 100		analog (	Julput 1 to 5 v
	N Without pressure switch for vacuum/pressure		sure sensor			

^{*2} The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

# Vacuum (V) port

Tuoudiii (1) poi		
Symbol	Vacuum (V) port	
06	ø6	
08	ø8	

6 Option*3 (For details on the Function/Application, refer to page 195.)

Symbol	1	Туре	
Nil	Without option	***	_
В	Mounting bracket for single unit (nuts and bolts are included)	Bracket	_
w	With exhaust interference prevention valve	Exhaust interference prevention valve	Install the release valve or vacuum breaker in the middle of the vacuum piping.

^{*3} When more than one option is selected, list the option symbols in alphabetical order. (Example -BW)

The manifold type is available as a special order.

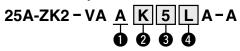
For details, refer to the Web Catalog.

* The 25A- series specifications and dimensions are the same as those of the standard model.



## Replacement Parts for Single Unit / How to Order

Valve assembly



Applicable system

A Ejector system

2 Valve type			
K	Supply valve: N.C., Release valve: N.C.		
R	Supply valve: Self-holding release valve linked, Release valve: N.C.		
J	Supply valve: N.C., Release valve: None		

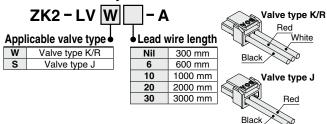
Rated voltage 5 24 VDC 12 VDC

4 Wiring

	L	Individual wiring: With connector assembly (Lead wire length: 300 mm)
	LO	Individual wiring: Without connector assembly

Select the 25A-ZK2VAAK□LOA-A for a switch with energy saving function.

#### Connector assembly



Sound absorbing material (10 pcs. per set)

Vacuum port adapter assembly (Purchasing order is available in units of 1 piece.)



#### One-touch fitting size

6	ø6 One-touch fitting	Metric
8	ø8 One-touch fitting	size

Filter element (10 pcs. per set)

#### Nominal filtration rating

**3** 30 μm

Body gasket*1 (10 pcs. per set)

#### Applicable type

Γ	1	One check valve type
L		(All specifications other than vacuum switch with energy saving function and exhaust interference prevention valve)
	2	Two check valve type
	2	(Vacuum switch with energy saving function and exhaust interference prevention valve)

*1 When ZK2-BG5-2-A is mounted, the workpiece cannot be removed until vacuum is released.

#### Filter case*1

ZK2-FC

#### Port for the pressure switch or sensor

Symbol	Port for the pressure switch or sensor	Filter case color
Р	With port (type with pressure switch or sensor)	Smoke
T	Without port (type without pressure switch or sensor)	Clear

*1 Vacuum port adapter assembly is not included.

Pressure switch for vacuum assembly (With 2 mounting screws)



#### Rated pressure range and function

_			
	0 to -101 kPa	Pressure switch for vacuum	Open collector 2 outputs
F	-100 to 100 kPa	Pa Pressure switch for vacuum Open co	Open collector 2 outputs
V	-100 to 100 kPa	Pressure switch for vacuum with energy saving function	Open collector 1 output

9	Juipui
Α	NPN
В	PNP

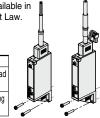
Offic		
Nil	Unit selection function*1	
М	SI unit only*2	

The unit selection function is not available in Japan due to the New Measurement Law.

#### *2 Fixed unit: kPa

#### 4 Lead wire with connector

Nil	None	
G	wire with connector (Length 2	When <b>1</b> is E or F···For pressure switch for vacuum, Lead wire with connector (Length 2 m)
G lead wire	When <b>1</b> is V···For pressure switch for vacuum with energy saving function, Lead wire with connector (Length 2 m)	



#### Lead wire with connector

(When individual lead wire is necessary, order with the part number below.)

- Lead wire with connector for pressure switch for vacuum ZS - 39 - 5G
- Lead wire with connector for pressure switch for vacuum with energy saving function

Pressure sensor assembly (With 2 mounting screws)

#### Rated pressure range

	0 to -101 kPa, Output: 1 to 5 V, Accuracy: ± 2% F.S.
3	$-100$ to 100 kPa, Output: 1 to 5 V, Accuracy: $\pm$ 2% F.S.



#### High-noise reduction silencer case assembly

#### Applicable nozzle size

4	For nozzle size 07, 10
6	For nozzle size 12 15

Sound absorbing material for high-noise reduction silencer (5 pcs. per set)

Release lever (10 pcs. per set)

ZK2 - RL1 - A

Lock nut (10 pcs. per set)

25A-ZK2 - LN1 - A



# **25A-ZK2**□**A** Series

# **Optional Specifications/Functions/Applications**

Symbol			Туре	Function/Application
В	Mounting bracket for single unit (nuts and bolts are included)		Bracket	· Use when a single unit is mounted to the floor in an upright position is requested. If only ordering the bracket, the product number is as follows: 25A-ZK2-BK1-A (includes nuts and bolts).
D	With individual release pressure supply (PD) port (M3)		PD port	Use when supply pressure for vacuum release is individually requested.
E		Screwdriver operation type long lock nut	Screwdriver operation type long lock nut	· Used when the needle adjustment operation is difficult
J	Vacuum break flow adjusting needle	Round lock nut	Lock nut	Thicker than standard hexagon type. More suitable for hand tightening.     Round lock nut improves operability when the port exhaust type is used.
K		Screwdriver operation type	Vacuum break flow adjusting needle	Slotted type improves fine adjustment performance when the port exhaust type is used.
w	With exhaust interference prevention valve		Exhaust interference prevention valve	· When ejectors are operated individually, exhausted air may flow backward from the V port of ejectors that are turned off. Exhaust interference prevention valve prevents backflow.



# Ejector System Compact Vacuum Unit With Energy Saving Function

25A-ZQ A Series

Single Unit Part Number

### **How to Order**

25A - ZQ 05 1U A - K1 5 LO - VA M W - 0 0 - - Series compatible with 0 2 3 4 5 6 7 8 9 0 0

secondary batteries

Nominal pozzle size

W Monimal Hozzle Size		
05	0.5	
07	0.7	
10	1.0	

2 Body type		
1U	For Single unit	
3M	For Manifold	

3	3 Solenoid valve combinate	
K	(1	Supply valve (N.C.), Release valve (N.C.)

<b>4</b> s		olenoid valve rated voltage
	5	24 VDC

RoHS

**5** Electrical entry

10	L plug connector (Without connector)
LU	With light/surge voltage suppressor

## 6 Manual override

	Nil	Non-locking push type	
	В	Locking slotted type	

### Vacuum pressure switch (With suction filter*1)

Symbol	Pressure range [kPa]	Output
VA	-100 to 100	NPN 1 output + Energy saving function
VB		PNP 1 output + Energy saving function

*1 The filter used in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.

Unit

Nil*2	With unit switching function	
M	SI unit only (kPa)	

^{*2} Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

9 Lead wire

Nil	III Without lead wire with connecto	
W	Lead wire for switch with energy saving function (Length: 2 m) (Included)	

Fitting (V port)

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

Fitting (P port)

Symbol	Applicable tubing O.D.	Specification
Nil	Without port	Manifold
0	Without fitting (M5 x 0.8)	Single unit

(P) Option

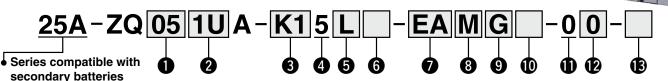
Bracket for single i		single unit
	Single unit	Manifold
Nil	With	Without
N	Without	Not available

* The 25A- series specifications and dimensions are the same as those of the standard model.

#### **Ejector System Compact Vacuum Unit** Without Energy Saving Function

Single Unit Part Number

#### **How to Order**



#### Nominal nozzle size

05	0.5
07	0.7
10	1.0

#### 2 Body type

1U	For Single unit
3M	For Manifold

#### Solenoid valve combination

K1	Supply valve (N.C.), Release valve (N.C.)			
K2	Supply valve (N.O.), Release valve (N.C.)			
J1	Supply valve (N.C.)			
J2	Supply valve (N.O.)			
Q1*1	Supply valve (Latching), Release valve (N.C.)			
Q2*1	Supply valve (Latching)			

#### *1 Latching (+ common)

#### 4 Solenoid valve rated voltage

_	_	_	 	_	 -	_		-	_	
5					2	1	١	/Г	7	`

#### **5** Electrical entry

	<u> </u>					
	L plug connector (Lead wire length: 0.3 m)					
_	With light/surge voltage suppressor					
10	L plug connector (Without connector)					
LU	With light/surge voltage suppressor					

#### 6 Manual override

	Non-locking push type	
Nil	Latching:	
	Push-locking slotted type	
B*2	Locking slotted type	

*2 When "Q1" is selected in 3, the locking slotted type is only available in the release valve.

This option cannot be chosen when "Q2" is selected in 3.

#### Vacuum pressure switch (With suction filter*3)

Symbol	Pressure range [kPa]	Output		
EA		NPN 2 outputs		
EB	0 to -100	PNP 2 outputs		
EC		NPN 1 output + Analog voltage		
EE		PNP 1 output + Analog voltage		
FA		NPN 2 outputs		
FB	-100 to 100	PNP 2 outputs		
FC		NPN 1 output + Analog voltage		
FE		PNP 1 output + Analog voltage		
<b>F</b> *4	Suction filter only			

- *3 The filter used in this product is of a simple type, and will become cloaged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.
- *4 It is not necessary to select the items for 8 and 9.

#### Unit

	<del>-</del>			
Nil*5	With unit switching function			
M	SI unit only (kPa)			
<b>P</b> *5	With unit switching function (Initial value: psi)			

**RoHS** 

*5 Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

#### 9 Lead wire

Nil	Without lead wire with		
INII	connector		
G	Lead wire with connector		
	(Length: 2 m) (Included)		

#### Check valve*6

_	
Nil	None
K*7	With check valve

*6 The check valve has a function to prevent the exhaust air from the exhaust unit overflowing to the vacuum port side when a manifold is used, but it cannot prevent overflow of the exhaust air completely. During usage, please inspect thoroughly with actual machine.

Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.

*7 Cannot be selected when 2 is "1U" In addition, for the type with a check valve, the air in the adsorption part is not released to the atmosphere when vacuum is stopped. If "J1," "J2," or "Q2" is selected for 3, be sure to also install a circuit for vacuum release.

#### 🗥 Warning

- · Cannot be used for vacuum retention
- · Use a release valve. Without a release valve, a workpiece may not be released.

#### Fitting (V port)

	Symbol	Applicable tubing O.D.
0 Witho		Without fitting (M5 x 0.8)

#### Fitting (P port)

Symbol	Applicable tubing O.D.	Specification
Nil	Without port	Manifold
0	Without fitting (M5 x 0.8)	Single unit

#### (B) Option

#### For Single Unit (2: 1U)

	For Walliold (19. 31VI)				
<b>y</b> 8	Symbol	Low release pressure specification*9	Converter for solenoi		
	NII	· ·			

For Manifold (A: 3M)

Symbol	Bracket assembly	Converter assembly for solenoid valve*8	Symbol		Converter assembly for solenoid valve*8
Nil	0	_	Nil	_	_
N	_	_	S	0	_
С	_	0	С	_	0
D	0	0	E	0	0

- *8 A converter assembly for attaching the VQ100 lead wire assembly with a connector to the ZQ-A is included. Refer to the "Converter assembly for solenoid valve" in the Web Catalog. "Q2" cannot be selected in 3. Select "LO" in 5.
- *9 Select "C" for 4 for the manifold part number on page 180-3. "J1", "J2", or "Q2" cannot be selected in 3. For a release pressure supply pressure of 0.3 MPa or lower, select "S" or "E."

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



#### **Ejector System Compact Vacuum Unit**

## 25A-ZQ A Series ROHS

**Manifold Part Number** 

#### How to Order

25A - ZZQ1 08 A - B S C - A

Series compatible with secondary batteries



01	1 station
02	2 stations
÷	:
08	8 stations

*1 Number of stations varies according to nominal nozzle size during simultaneous operation. (Table 1)

#### Table 1. Max. Number of Stations that Can Operate Simultaneously*2

Nominal nozzle size	Max. number of stations that can operate simultaneously	
0.5	8 stations	
0.7	6 stations	
1.0	4 stations	

*2 For any of the nominal nozzle sizes, the max. number of stations that can be mounted is 8. However, please ensure that the max. number of stations that are operated simultaneously comply with the values above.

#### 2 Air pressure supply (P) port location

ם	Dath aidea
В	Both sides

#### 4 Release pressure supply (PD) port

В	None (Release pressure: Commonly supplied from the P port)
<b>C</b> *3	Provided (Release pressure: Supplied from the PD port)

*3 For a release pressure supply pressure of 0.3 MPa or lower (for an individual unit without the energy-saving function), select "S" or "E" for for the single unit part number on page 198.

#### 3 Exhaust

S	Silencer exhaust (Both sides)
Р	Port exhaust (Both sides)

#### **5** Shipping configuration

Nil	Assembled as a vacuum unit
<b>A</b> *4	Manifold unit only

*4 A set of end blocks and the clamp rod assembly is included in this manifold unit. (Used for the maintenance of the end block)

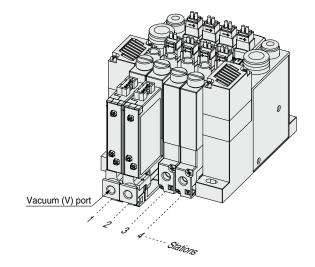
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

#### **Manifold Order Example**

#### 25A-ZZQ104A-BSB----- 1 pc.

- * 25A-ZQ053MA-K15L-EAG-0 $\cdots$  2 pcs.  $\rightarrow$  Stations 1 and 2
- * 25A-ZQ103MA-K15L-F-0  $\cdots$  2 pcs.  $\rightarrow$  Stations 3 and 4
  - * When the manifold is viewed from the vacuum (V) port, the first station starts from the left.
    - 25A-ZQ053MA-K15L-EAG-0 (2 pcs.) and 25A-ZQ103MA-K15L-F-0 (2 pcs.) are arranged from the first station.



#### **∧** Caution when ordering manifold

- The asterisk (*) denotes the symbol for the assembly.
- Prefix it to the single unit part number.
- If "*" is not entered, the manifold and single unit will be shipped without being assembled.
- When the manifold and the units are not assembled, please assemble them by referring to
- I "How to increase/decrease manifold stations" in the Web Catalog.
- I There is nothing else to arrange additionally.

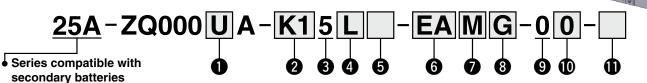


#### Vacuum Pump System Compact Vacuum Unit

## 25A-ZQ A Series ROHS

Single Unit Part Number

#### **How to Order**



#### Body type

_	
U	For Single unit
M	For Manifold

#### 2 Solenoid valve combination

K1	Supply valve (N.C.), Release valve (N.C.)
K2	Supply valve (N.O.), Release valve (N.C.)
J1*1	Supply valve (N.C.)
J2*1	Supply valve (N.O.)
Q1*2	Supply valve (Latching), Release valve (N.C.)
Q2*1 *2	Supply valve (Latching)

^{*1} The air in the adsorption section of this product is not released to the atmosphere at the vacuum suspension state. Devise the circuit for the vacuum release additionally.

#### 3 Solenoid valve rated voltage

	5	24 VDC
--	---	--------

#### 4 Electrical entry

_	<b>-</b>
L	L plug connector (Lead wire length: 0.3 m) With light/surge voltage suppressor
LO	L plug connector (Without connector) With light/surge voltage suppressor

#### **6** Manual override

Nil	Non-locking push type
INII	Latching: Push-locking slotted type
B*3 Locking slotted type	

^{*3} When "Q1" is selected in ②, the locking slotted type is only available in the release valve. This option cannot be chosen when "Q2" is selected in ②.

#### 6 Vacuum pressure switch (With suction filter*4)

Symbol	Pressure range [kPa]	Output
EA		NPN 2 outputs
EB	0 to -100	PNP 2 outputs
EC		NPN 1 output + Analog voltage
EE		PNP 1 output + Analog voltage
FA	-100 to 100	NPN 2 outputs
FB		PNP 2 outputs
FC		NPN 1 output + Analog voltage
FE		PNP 1 output + Analog voltage
<b>F</b> *5	Suction filter only	

^{*4} The filter used in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.

#### **7** Unit

Nil*6 With unit switching function	
M SI unit only (kPa)	
P*6 With unit switching function (Initial value	

^{*6} Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

#### Fitting (PS/PV port)

Symbol	Applicable tubing O.D.	Specification
Nil	Without port	Manifold
0	Without fitting (M5 x 0.8)	Single unit

#### 8 Lead wire

Nil	Without lead wire with connector
G	Lead wire with connector (Length: 2 m) (Included

#### 9 Fitting (V port)

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

#### Option

For Single Unit (1: U)

	For Ma	nifold ( <b>①</b> : M)
v		Low release pressure

Symbol		Converter assembly for solenoid valve*7	Symbol		Converter assembly for solenoid valve*7
Nil	0	_	Nil	_	_
Ν	_	_	S	0	_
С	_	0	С	_	0
D	0	0	E	0	0

^{*7} A converter assembly for attaching the VQ100 lead wire assembly with a connector to the ZQ-A is included. Refer to the "Converter Assembly for Solenoid Valve" in the **Web Catalog**. "Q2" cannot be selected in **②**. Select "LO" in **④**.

^{*2} Latching (+ common)

^{*5} It is not necessary to select the items for 7 and 8.

^{*8} Select "C" for 3 for the manifold part number on page 201. "J1", "J2", or "Q2" cannot be selected in 2. For a release pressure supply pressure of 0.3 MPa or lower, select "S" or "E."

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

#### Vacuum Pump System Compact Vacuum Unit

## 25A-ZQ A Series ROHS

Manifold Part Number

#### **How to Order**

25A - ZZQ1 08 A - L O C - A

Series compatible with secondary batteries

#### 1 Stations

01 1 station		
02	2 stations	
i	:	
08	8 stations	

#### 2 Vacuum pressure supply (PV) port location*1

	port recurrent		
L	Left side		
R	Right side		

*1 The position of the vacuum pressure supply (PV) port when the vacuum (V) port is facing front. The pilot pressure supply (PS) port is on the opposite side. Refer to the "Table 1" for details.

#### 3 Release pressure supply (PD) port

В	None (Release pressure: Commonly supplied from the PS port)
C*2	Provided (Release pressure: Supplied from the PD port)

#### 4 Shipping configuration

Nil	Assembled as a	a vacuum unit
<b>A</b> *3	Manifold (	unit only

*3 A set of end blocks and the clamp rod assembly is included in this manifold unit. (Used for the maintenance of the end block)

#### Table 1. Location of Each Port

ODV mont location	<b>O</b> DD mont	Left side with the V port facing the front			Right side with the V port facing the front		
2 PV port location	3 PD port	PS port	PV port	PD port	PS port	PV port	PD port
	В	_	•	_	•	_	_
_	С	_	•	•	•	_	•
В	В	•	_	_	_	•	_
n	С	•	_	•	_	•	•

* The 25A- series specifications and dimensions are the same as those of the standard model.

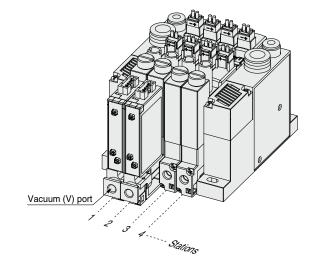
For details, refer to the Web Catalog.

#### **Manifold Order Example**

25A-ZZQ104A-ROB ...... 1 pc.

- * 25A-ZQ000MA-K15L-EAG-0  $\cdots$  2 pcs.  $\rightarrow$  Stations 1 and 2
- * 25A-ZQ000MA-K15L-F-0  $\cdots$  2 pcs.  $\rightarrow$  Stations 3 and 4
  - * When the manifold is viewed from the vacuum (V) port, the first station starts from the left.

25A-ZQ000MA-K15L-EAG-0 (2 pcs.) and 25A-ZQ000MA-K15L-F-0 (2 pcs.) are arranged from the first station.



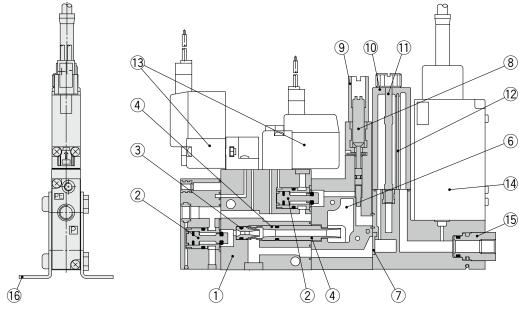
#### **∧** Caution when ordering manifold

- The asterisk (*) denotes the symbol for the assembly.
- Prefix it to the single unit part number.
- If "*" is not entered, the manifold and single unit will be shipped without being assembled.
- When the manifold and the units are not assembled, please assemble them by referring to
- "How to increase/decrease manifold stations" in the Web Catalog.
- There is nothing else to arrange additionally.

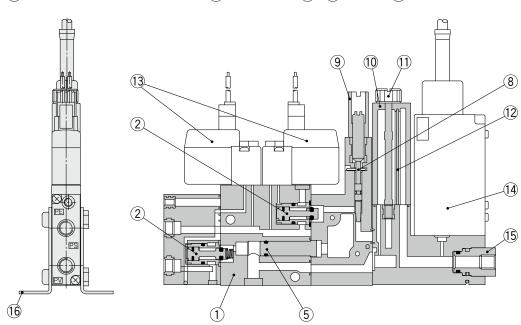


#### Construction

Vacuum ejector (N.O. specification)



Vacuum pump system (N.C. specification)



**Component Parts** 

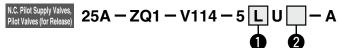
No.	Description	Material	Note	
1	Body	PBT	Aluminum alloy is also used.	
2	Supply valve / Release valve assembly	POM/Aluminum alloy/Stainless steel		
3	Nozzle	PBT		
4	Diffuser	PBT		
5	Bushing	Aluminum alloy		
6	Sound absorbing material	Non-woven fabric (PET)	Refer to 3 on page 204 for how to order. (When replacing the sound absorbing material, order a silencer plate assembly.)	
7	Check valve	HNBR	Refer to 6 on page 204 for how to order.	
8	Vacuum release flow adjusting needle	Stainless steel		
9	Lock nut	Aluminum alloy (Anodized)		
10	Filter case	PC (Refer to the precautions in the Web Catalog.)	Refer to 4 on page 204 for how to order.	
_11	Tension bolt	Stainless steel	heler to 4 or page 204 for flow to order.	
12	Filter element	PVA sponge	Refer to 5 on page 204 for how to order.	
13	Pilot supply valve / Pilot valve (for release)	_	Refer to 1 on page 203 for how to order.	
14	Vacuum pressure switch	_	Refer to 2 on page 203 for how to order.	
15	Vacuum (V) port M5 bushing	Aluminum alloy (Anodized)		
16	Bracket assembly	Steel (Electroless nickel plating), Stainless steel	Refer to 7 on page 204 for how to order.	
	Seal material (O-ring, etc.)	NBR/HNBR		
_	Screws for assembly	Steel (Electroless nickel plating), Stainless steel		



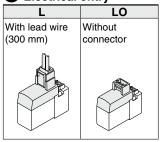
#### **How to Order Replacement Parts for Single Unit**

1 Solenoid Valve

(Recommended torque for replacement: 0.054 to 0.08 N·m)



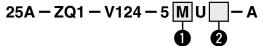
Electrical entry



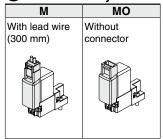
#### 2 Manual override

Wianuan Ov	erride
Nil	В
Non-locking	Locking slotted
push type	type

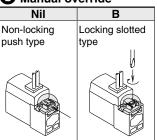




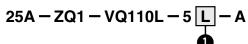
Electrical entry



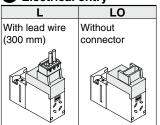
#### 2 Manual override



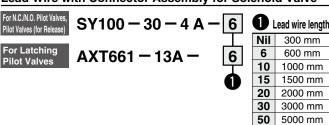








#### Lead Wire with Connector Assembly for Solenoid Valve



#### **Connector and Socket for Solenoid Valve**



SY100 - 30 - A

 With connector and sockets only

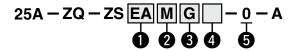


AXT661 — 12A

(Number of sockets: 3)

(Number of sockets: 2)

2 Vacuum Pressure Switch (With Suction Filter)
(Recommended torque for replacement: 0.11 to 0.13 N·m)



Vacuum pressure switch

	•			
Symbol	Pressure range [kPa]	Output		
EA		NPN 2 outputs		
EB	0 to -100	PNP 2 outputs		
EC	0 10 - 100	NPN 1 output + Analog voltage		
EE		PNP 1 output + Analog voltage		
FA		NPN 2 outputs		
FB		PNP 2 outputs		
FC	-100 to 100	NPN 1 output + Analog voltage		
FE	-100 to 100	PNP 1 output + Analog voltage		
<b>VA</b> *1		NPN 1 output + Energy saving control		
VB*1		PNP 1 output + Energy saving control		

*1 It is not possible to replace the vacuum pressure switch from the specification without energy saving function to the specification with energy saving function.

#### **2** Uni

Nil*2	With unit switching function
M	SI unit only (kPa)
<b>P</b> *2, *3	With unit switching function (Initial value: psi)

*2 Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

*3 Cannot be selected when 1 is "VA" or "VB"

#### 3 Lead wire

Nil	Without lead wire with connector
G	Lead wire with connector (Length: 2 m) (Included)
W	Lead wire for switch with energy saving function (Length: 2 m) (Included)

#### 4 Check valve*4

• • • • • • • • • • • • • • • • • • •			
Nil	None		
<b>K</b> *5	With check valve		

*4 The check valve has a function to prevent the exhaust air from the exhaust unit overflowing to the vacuum port side when a manifold is used, but it cannot prevent overflow of the exhaust air completely. During usage, please inspect thoroughly with actual machine.

Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.

*5 When "VA" or "VB" is specified for **①**, the check valve is already built in.

#### **.** Marning

- Cannot be used for vacuum retention
- Use a release valve. Without a release valve, a workpiece may not be released.

#### **5** Fitting (V port)

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

#### Lead Wire with Connector Assembly for Vacuum Pressure Switch

(When an individual lead wire is necessary, order with the part numbers below.)

· Lead wire with connector for vacuum pressure switch

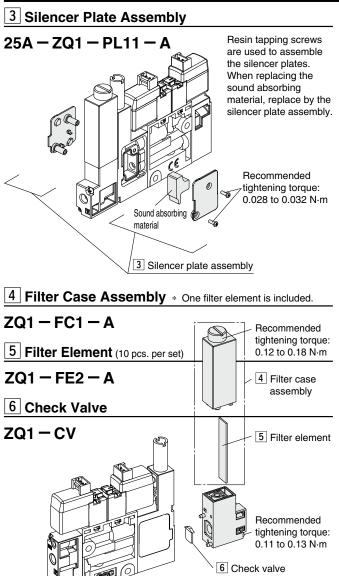
$$ZS - 39 - 5G$$

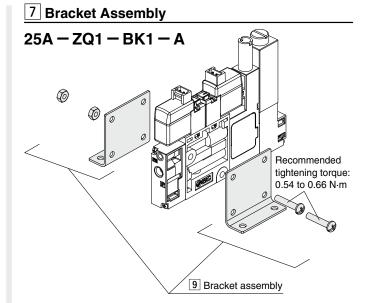
· Lead wire with connector for pressure switch with energy saving function

1 Output		
	N	NPN open collector
	В	PNP open collector

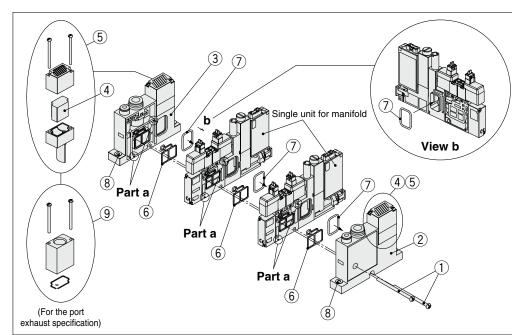


#### **How to Order Replacement Parts for Single Unit**





## Compact Vacuum Unit/25A-ZQ A Series Manifold Exploded View



#### How to increase/decrease manifold stations

#### Disassembly

- 1. Remove 2 clamp rods ①.
- 2. Remove end block L ②. (Be careful not to drop the gasket.)

#### Assembly

- Confirm that the body gasket for manifold (§) is attached to the gasket groove on each single unit and that the exhaust block gasket (?) is also attached to the outer side of the raised part. (See View b.)
- 2. Confirm that the body gasket for manifold (a) is attached to the gasket groove on end block R (3).
- Confirm that the exhaust block gasket

   is attached to the outer side of the raised part on end block L ②.
- 4. Put together the single units for manifold, end block R ③, and end block L ② using the positioning pins (at two "a" locations), and assemble them using the clamp rods ①. Tightening torque: 0.54 to 0.66 N·m

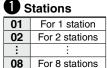
**Component Parts** 

••••	iponone i di to			
No.	Description	Material	Note	
1	Clamp rod assembly	Steel (Electroless nickel plating)	Refer to 1 below for how to order.	
2	End block L	PBT, POM, PET, Steel, Aluminum alloy, Stainless steel	Left side with the vacuum (V) port facing the front	
3	End block R	PBT, POM, PET, Steel, Aluminum alloy, Stainless steel	Right side with the vacuum (V) port facing the front	
4	Sound absorbing material (For Manifold)	Non-woven fabric (PET)	Refer to 2 below for how to order.	
5	Silencer block assembly	PBT	Refer to 3 below for how to order.	
6	Body gasket for manifold	NBR	Refer to 4 below for how to order.	
7	Exhaust block gasket	NBR	Refer to 5 below for how to order.	
8	Washer assembly	Stainless steel	Refer to 6 below for how to order.	
9	Port block assembly	Aluminum alloy, Steel (Electroless nickel plating), NBR	Refer to 7 below for how to order.	

#### **How to Order Replacement Parts for Manifold**



04]-**1** 



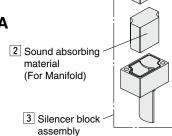
2 Sound Absorbing Material (For Manifold)
(2 pcs. per set)

**ZQ1 - SE2 - A** 

Recommended tightening torque: 0.25 to 0.31 N·m

3 Silencer Block Assembly (2 pcs. per set)

25A - ZQ1 - SC1 - A



4 Body Gasket for Manifold (10 pcs. per set)

$$ZQ - 3 - 005 - 10AS$$

5 Exhaust Block Gasket (10 pcs. per set)

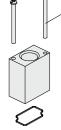
$$ZQ - 3 - 009 - 10AS$$

6 Washer Assembly (4 pcs. per set)



- For M3 (Without release pressure supply port)For M4 (With release pressure supply port)
- 7 Port Block Assembly
  (2 pcs. per set)

25A - ZQ1 - EP2 - A



Recommended tightening torque: 0.25 to 0.31 N·m

### Vacuum Ejector Body Ported Type/Box Type (Built-in Silencer)

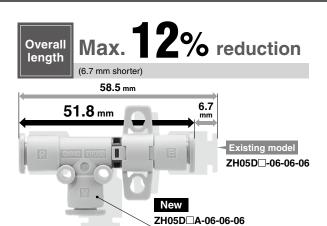
#### **ZH** Series



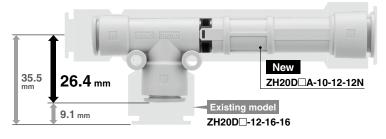
## **Compact and lightweight**

#### **Body ported type**

Port size: G threads have been added.



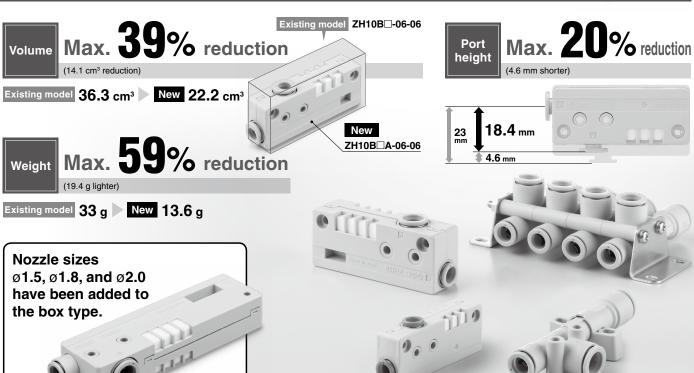






#### Box type (Built-in silencer)



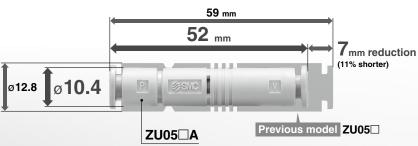


### In-line Type Vacuum Ejector

#### **ZU** A Series



## Compact and Lightweight





Weight 3.9 g (Previous model 6.5 g)

Overall length 52 mm (Previous model 59 mm)

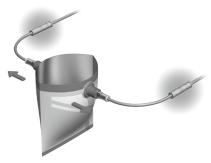


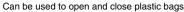
#### **Application Examples**



Numerous pads can be used to adsorb workpieces with holes.

#### For improving responsiveness by installing on flexible parts







For mounting on the end of a Z-axis air cylinder

#### **Variations**

Model	Nozzle size	Standard supply	Ultimate vacuun	n pressure [kPa]	Maximum suction flo	w rate [L/min (ANR)]	Air consumption	Port size
Model	[mm]	pressure [MPa]	Type S	Type L	Type S	Type L	[L/min (ANR)]	FULL SIZE
ZU03□A	0.3	0.35	-85	-40	1.8	3.4	4.2	ø4 One-touch fitting
ZU04□A	0.4	0.33	-87	-40	3.2	5.8	7.7	ø5/32"
ZU05□A	0.5	0.45	-90	-48	7	13	14	ø6 One-touch fitting
ZU07□A	0.7	0.45	-90	-40	11	16	28	Rc1/8



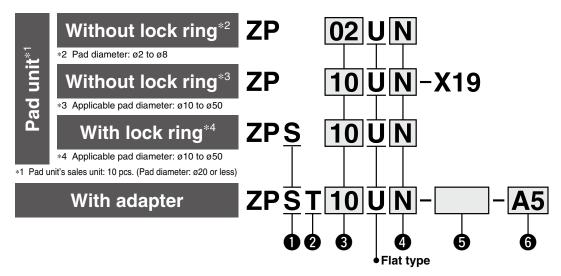
## **Basic Pad** Flat Type ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the Web Catalog.





#### **How to Order**



#### Adapter (Lock ring) material

S Stainless steel (Stainless steel 304)

#### Vacuum inlet direction Vertical

diameter

02	ø2	16	ø16
04	ø4	20	ø20
06	ø6	25	ø25
08	ø8	32	ø32
10	ø10	40	ø40
13	ø13	50	ø50

#### 4 Material

N	NBR	
S	Silicone rubber*1 *2	
U	Urethane rubber	
F	FKM	
GN	Conductive NBR	
GS	Conductive silicone rubber	

- *1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated
- *2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/ Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

#### With adapter

#### Vacuum inlet

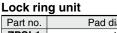
Turne Curreles		C:	Pad diameter [mm]			
Type	Symbol	Size ø2 to ø8	ø2 to ø8	ø10 to ø16	ø20 to ø32	ø40, ø50
	A5	M5 x 0.8	O*1	_	_	_
	AS5	IVIO X U.O	_	O*1	○*1	_
Male	A6	M0 4	○*1	_	_	_
thread	AS6	M6 x 1	_	O*1	○*1	O*1
	AG01	G1/8	_	O*1	○*1	_
	AG02	G1/4	_	_	_	O*1
	Nil	M3 x 0.5	_	○ ( <b>6</b> Connection thread: A5/A6)	○ ( <b>6</b> Connection thread: A6)	○ ( <b>6</b> Connection thread: A6)
		M5 x 0.8	_	_	○ ( <b>6</b> Connection thread: A8)	○ ( <b>6</b> Connection thread: A8)
	B4	M4 x 0.7	○*1	_	_	_
Female thread	B5	M5 x 0.8	O*1	O*1	O*1	_
uneau	B6	M6 x 1	_	O*1	○*1	O*1
	B8	M8 x 1.25	_	_	O*1	○*1
	B01	Rc1/8	_	O*1	○*1	O*1
	BG01	G1/8	_	O*1	○*1	_
	BG02	G1/4	_	_	_	○*1

*1 Use the connection thread.

#### 6 Connection thread

<u> </u>						
Type	Cumbal	Size	Pad diameter [mm]			
Type Symbol		Size	ø2 to ø8	ø8		ø40, ø50
Mala	A5	M5 x 0.8	_	○*2	_	_
Male thread	A6	M6 x 1	_	O*2	O*2	○*2
ınread	A8	M8 x 1	_	_	O*2	○*2

#### *2 With a (female) vacuum inlet



Part no.	no. Pad diameter [mm]	
ZPSL1	ø10 to ø16	
ZPSL2	ø20 to ø32	
ZPSL3	ø40, ø50	



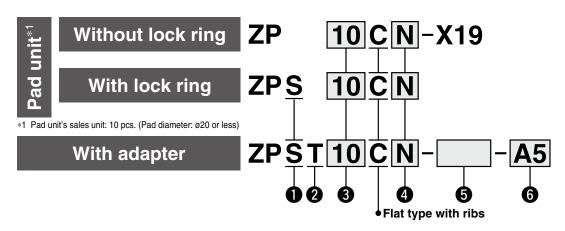


# Basic Pad Flat Type with Ribs ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



#### **How to Order**



#### Adapter (Lock ring) material

S Stainless steel (Stainless steel 304)

### Vacuum inlet direction T Vertical

#### 3 Pad diameter

10	ø10
13	ø13
16	ø16
20	ø20
25	ø25
32	ø32
40	ø40
50	ø50

#### With adapter

#### Vacuum inlet

Time	Symbol	Size	Pad diameter [mm]			
Type	Symbol	Size	ø10 to ø16	ø20 to ø32	ø40, ø50	
	AS5	M5 x 0.8	O*2	○*2	_	
Male	AS6	M6 x 1	○*2	○*2	○*2	
thread	AG01	G1/8	O*2	O*2	_	
	AG02	G1/4	_	_	○*2	
	Nil	M3 x 0.5	○ ( <b>6</b> Connection thread: A5/A6)	○ ( <b>6</b> Connection thread: A6)	O (6 Connection thread: A6)	
		M5 x 0.8	_	○ ( <b>6</b> Connection thread: A8)	○ ( <b>6</b> Connection thread: A8)	
Female	B5	M5 x 0.8	O*2	○*2	_	
thread	B6	M6 x 1	O*2	○*2	○*2	
	B8	M8 x 1.25	_	○*2	○*2	
	B01	Rc1/8	○*2	○*2	○*2	
	BG01	G1/8	○*2	○*2	_	
	BG02	G1/4	_	_	○*2	

*1 Use the connection thread.

#### 6 Connection thread

Type Symbo	Symbol	Size —	Pad diameter [mm]		
	Syllibol		ø10 to ø16	ø20 to ø32	ø40, ø50
Male thread	A5	M5 x 0.8	○*2	_	_
	A6	M6 x 1	○*2	○*2	○*2
	A8	M8 x 1	_	○*2	O*2

*2 With a (female) vacuum inlet

#### 4 Material

N	NBR	
S	Silicone rubber*1 *2	
U	Urethane rubber	
F	FKM	
GN	Conductive NBR	
GS	Conductive silicone rubber	

- *1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"
- *2 Compliant with the standards for "Rubber apparatus" (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

#### Lock ring unit

Part no.	Pad diameter [mm]				
ZPSL1	ø10 to ø16				
ZPSL2	ø20 to ø32				
ZPSL3	ø40. ø50				

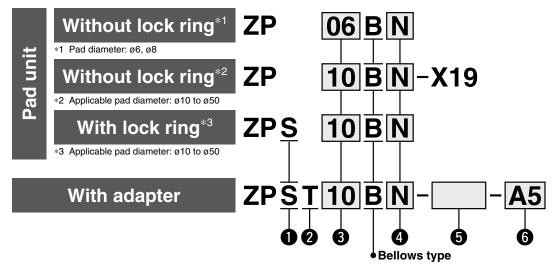


## **Basic Pad Bellows Type ZP** Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the Web Catalog.



#### **How to Order**



#### Adapter (Lock ring) material

S Stainless steel (Stainless steel 304)

<b>y</b> vac	cuum iniet airection
Т	Vertical

#### Pad diameter

06	ø6	20	ø20
08	ø8	25	ø25
10	ø10	32	ø32
13	ø13	40	ø40
16	ø16	50	ø50

#### 4 Material

N	NBR
S	Silicone rubber*1 *2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

- *1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"
- *2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/ Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

#### With adapter

#### Vacuum inlet

Time	Curaha al	C:	Pad diameter [mm]			
туре	Type Symbol	Size	ø6, ø8	ø10 to ø16	ø20 to ø32	ø40, ø50
	A5	M5 x 0.8	○*1	_	_	_
	AS5	IVIO X U.6	_	O*1	○*1	_
Male	A6	M6 x 1	○*1	_	_	_
thread	AS6	IVIOXI	_	O*1	○*1	○*1
	AG01	G1/8	_	○*1	○*1	_
	AG02	G1/4	_	_	_	○*1
N	Nil	M3 x 0.5	_	○ ( <b>6</b> Connection thread: A5/A6)	O (6 Connection thread: A6)	O (6 Connection thread: A6)
	INII	M5 x 0.8	_	_	O (6 Connection thread: A8)	O (6 Connection thread: A8)
	B4	M4 x 0.7	O*1	_	_	_
Female thread	B5	M5 x 0.8	O*1	O*1	O*1	_
	B6	M6 x 1	_	O*1	○*1	O*1
	B8	M8 x 1.25	_	_	O*1	O*1
	B01	Rc1/8	_	O*1	○*1	○*1
	BG01	G1/8	_	O*1	○*1	_
	BG02	G1/4	_	_	_	○*1

*1 Use the connection thread.

#### 6 Connection thread

Type Symbol	Cumbal	Ciro	Pad diameter [mm]			
	Symbol	Size	ø6, ø8	ø10 to ø16	ø20 to ø32	ø40, ø50
NA-1-	A5	M5 x 0.8	_	○*2	_	_
Male thread	A6	M6 x 1	_	O*2	O*2	○*2
uneau	A8	M8 x 1	_	_	O*2	O*2

#### *2 With a (female) vacuum inlet

#### Lock ring unit

	ig arm
Part no.	Pad diameter [mm]
ZPSL1	ø10 to ø16
ZPSL2	ø20 to ø32
ZPSL3	ø40. ø50

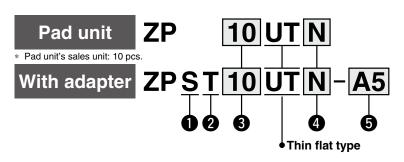




For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



#### **How to Order**



#### Adapter material

Stainless steel (Stainless steel 304)

#### 2 Vacuum inlet direction

T Vertical

#### 3 Pad diameter

10	ø10
13	ø13
16	ø16

#### 4 Material

N	NBR	
S	Silicone rubber *1 *2	
U	Urethane rubber	
F	FKM	
GN	Conductive NBR	
GS	Conductive silicone rubber	

- *1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"
- *2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

#### With adapter

#### **5** Vacuum inlet

Tuno	Symbol	Size	Pad diameter
Type	Symbol	Size	All sizes
Female	A5	M5 x 0.8	0
thread	A6	M6 x 1	0
One-touch	B4	M4 x 0.7	0
fitting	B5	M5 x 0.8	0





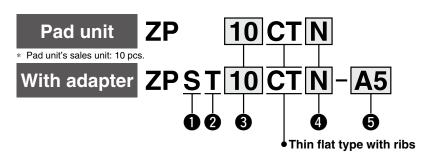
## Basic Pad Thin Flat Type with Ribs

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

## **ZP** Series



#### **How to Order**



#### Adapter material

Stainless steel (Stainless steel 304)

#### 2 Vacuum inlet direction

T Vertical

#### 3 Pad diameter

10	ø10
13	ø13
16	ø16

#### Material

N	NBR	
S	Silicone rubber*1 *2	
U	Urethane rubber	
F	FKM	
GN	Conductive NBR	
GS	Conductive silicone rubber	

- *1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"
- *2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

#### With adapter

#### Vacuum inlet

Туре	Symbol	Size	Pad diameter
			All sizes
Male	A5	M5 x 0.8	0
thread	A6	M6 x 1	0
Female	B4	M4 x 0.7	0
thread	B5	M5 x 0.8	0



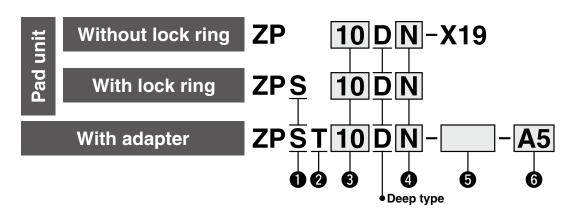


# Basic Pad Deep Type ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



#### **How to Order**



#### Adapter (Lock ring) material

S Stainless steel (Stainless steel 304)

#### 3 Pad diameter

10	ø10
16	ø16
25	ø25
40	ø40

#### Vacuum inlet direction

	*******
Т	Vertical

#### With adapter

#### Vacuum inlet

Time	Cumphal	Size	Pad diameter [mm]			
Type	Symbol	Size	ø10, ø16	ø25	ø40	
	AS5	M5 x 0.8	○*1	○*1	_	
Male	AS6	M6 x 1	O*1	○*1	○*1	
thread	AG01	G1/8	<u></u> *1	○*1	_	
	AG02	G1/4	_	_	○*1	
	Nil	M3 x 0.5	O (6 Connection thread: A5/A6)	○ ( <b>6</b> Connection thread: A6)	O (6 Connection thread: A6)	
		M5 x 0.8	_	○ ( <b>6</b> Connection thread: A8)	O (6 Connection thread: A8)	
Female I	B5	M5 x 0.8	O*1	O*1	_	
thread	B6	M6 x 1	○*1	○*1	○*1	
	B8	M8 x 1.25	_	○*1	○*1	
	B01	Rc1/8	○*1	○*1	○*1	
	BG01	G1/8	O*1	O*1	_	
	BG02	G1/4	_	_	O*1	

*1 Use the connection thread.

#### 6 Connection thread

_						
Time	Symbol	Size	Pad diameter [mm]			
Type			ø10, ø16	ø25	ø40	
Male thread	A5	M5 x 0.8	○*2	_	_	
	A6	M6 x 1	O*2	O*2	O*2	
	A8	M8 x 1	_	○*2	○*2	

*2 With a (female) vacuum inlet

#### 4 Material

N	NBR		
S	Silicone rubber*1 *2		
U	Urethane rubber		
<b>F</b> FKM			
GN Conductive NBR			
GS Conductive silicone rubber			

- *1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"
- *2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

#### Lock ring unit

Part no.	Pad diameter [mm]
ZPSL1	ø10, ø16
ZPSL2	ø25
ZPSL3	ø40





## Compact Type Flat Type

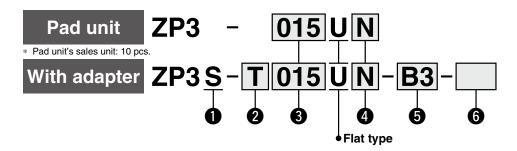
For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

## **ZP3** Series

Pad diameter:  $\emptyset$ 1.5,  $\emptyset$ 2,  $\emptyset$ 3.5



#### **How to Order**



#### Adapter material

Stainless steel (Stainless steel 304)

#### Vacuum inlet direction

Nil	Pad unit		
Т	Vertical		
Υ	Lateral		

#### 3 Pad diameter

015	ø1.5		
02	ø2		
035	ø3.5		

#### With adapter

Con	Connection thread/ Vacuum inlet : 2P3S-I/Vertical •: 2					23S-Y/Lateral
<b>6</b> 0	Connectio	n thread	6 Vacuum inlet		Pad diameter	
Type	Symbol	Size	Туре	Symbol	Size	All sizes
Male	A3	M3 x 0.5	_	Nil	<u></u> *1	0
thread	A6	M6 x 0.75	Female thread	B3	M3 x 0.5	0
Female	В3	M3 x 0.5	_	Nil	<u></u> *1	0
thread	В	IVIO X U.S	Female thread	B3	M3 x 0.5	•

^{*1} Use the connection thread.

N	NBR		
S	Silicone rubber*1 *2		
U	Urethane rubber		
F	FKM		
GN	Conductive NBR		
GS	Conductive silicone rubber		

- *1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"
- *2 Compliant with the standards for "Rubber apparatus" (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/ Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)





## Compact Type Flat Type with Groove

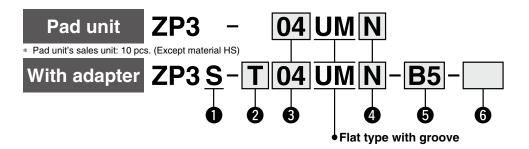
For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

## **ZP3** Series

Pad diameter: Ø4, Ø6, Ø8, Ø10, Ø13, Ø16



#### **How to Order**



#### Adapter material

S Stainless steel (Stainless steel 304)

#### 2 Vacuum inlet direction

Nil	Pad unit
Т	Vertical
Υ	Lateral

#### 3 Pad diameter

04	ø4
06	ø6
08	ø8
10	ø10
13	ø13
16	ø16

#### With adapter

<b>6</b> Con	6 Connection thread/ 6 Vacuum inlet				O: ZP3S-T/Vertica	I ●: ZP3S	-Y/Lateral
5 Connection thread		6 Vacuum inlet		Pad diameter [mm]			
Type	Symbol	Size	Type	Symbol	Size	ø4 to ø8	ø10 to ø16
Mala	A5	M5 x 0.8		Nil	Use the connection thread.	0	0
Male thread	A10	M10 x 1	Female thread	B5	M5 x 0.8	0	_
uneau	A12	M12 x 1	Female thread	B5	M5 x 0.8	_	0
Female	B5	M5 x 0.8	_	Nil	Use the connection thread.	0	0
thread	БЭ	IVIS X U.6	Female thread	B5	M5 x 0.8	•	•

NBR		
Silicone rubber*1*2		
Urethane rubber		
FKM		
Conductive NBR		
Conductive silicone rubber		
Semiconductive silicone rubber		

- *1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"
- *2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959).



## Compact Type Bellows Type

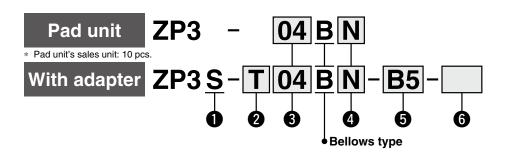
For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

**ZP3** Series

Pad diameter: Ø4, Ø6, Ø8



#### **How to Order**



#### Adapter material

S Stainless steel (Stainless steel 304)

...

#### 2 Vacuum inlet direction

Nil	Pad unit			
Т	Vertical			
Υ	Lateral			

#### Pad diameter

_	
04	ø4
06	ø6
08	ø8

#### With adapter

Connection thread/			Vacuum inle	et	O: ZP3S-T/Vertical ●: Z	P3S-Y/Lateral	
	5 Connection thread 6 Vacuum inlet			Pad diameter			
	Type	Symbol	Size	Type	Type Symbol Size		All sizes
	Male	A5	M5 x 0.8	_	Nil	Use the connection thread.	0
	thread	A10	M10 x 1	Female thread <b>B5</b> M5 x 0.8		0	
	Female	B5	M5 x 0.8	_	<ul> <li>Nil Use the connection thread</li> </ul>		0
	thread	60	IVIO X U.O	Female thread	B5	M5 x 0.8	•

N	NBR
S	Silicone rubber*1 *2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

- *1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"
- *2 Compliant with the standards for "Rubber apparatus" (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)





## Compact Type Bellows Type with Ribs

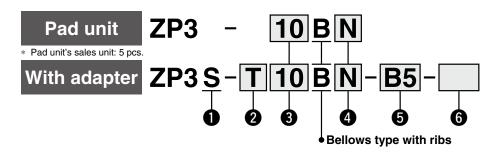
For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

## **ZP3** Series

Pad diameter: Ø10, Ø13, Ø16



#### **How to Order**



#### Adapter material

S Stainless steel (Stainless steel 304)

#### 2 Vacuum inlet direction

Nil	Pad unit			
Т	Vertical			
Υ	Lateral			

#### 3 Pad diameter

_	
10	ø10
13	ø13
16	ø16

#### With adapter

<b>6</b>	Connection thre	ad/ <b>6</b> V	/acuum	inlet

O: ZP3S-T/Vertical ●: ZP3S-Y/Lateral

5 Connection thread		6 Vacuum inlet			Pad diameter	
Type	Symbol	Size	Type	Type Symbol Size		All sizes
Male	A5	M5 x 0.8	<ul> <li>Nil Use the connection thread.</li> </ul>		0	
thread	A12	<b>A12</b> M12 x 1 Female		B5	M5 x 0.8	0
Female	B5	M5 x 0.8	_	Nil	Use the connection thread.	0
thread	60	IVIS X U.6	Female thread	B5	M5 x 0.8	•

N	NBR
S	Silicone rubber*1 *2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

- *1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"
- *2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)



## Vacuum Pad

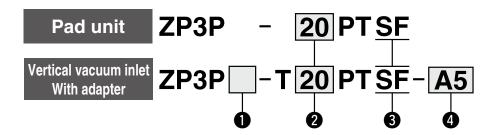
For pad units and pads with an adapter (Excludes the M12 x 1.75 type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the Web Catalog.

**ZP3P-PT** Series

Pad diameter: Ø20, Ø25, Ø35, Ø50



#### How to Order



#### Adapter material

Nil	Aluminum	
S	Stainless steel	
	(Stainless steel 304)	

#### 2 Pad diameter

20	ø20
25	ø25
35	ø35
50	ø50

With adapter

#### 4 Mounting thread size

Type	Symbol	Size	ø <b>20</b>	ø <b>25</b>	ø <b>35</b>	ø <b>50</b>
	A5	M5 x 0.8	•	•	_	_
Male	AG1	G1/8	•	•	_	_
thread	AG2	G1/4	_	_	•	•
	AG3	G3/8	_	_	•	•
Female	B5	M5 x 0.8	•	•	_	_
thread	B8	M8 x 1.25	_	_	•	•

#### 3 Pad material

SF				Sil	licone	rubber*	K1, #2		
	*1 C	ompliant	with the	FDA	(USA	Food	and Dru	g Adminis	tration)
	re	gulation	21CFR§	177.26	00 for	"Rubb	er article	s intended	for re-

peated use" *2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959).





## Vacuum Pad

2.5-Stage Bellows Type

For pad units and pads with an adapter (Vacuum inlet: Excludes the built-in One-touch fitting type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

## **ZP3P-JT** Series

#### **How to Order**



With adapter

Pad unit

Silicone rubber

Adapter material

Nil	Aluminum
S	Stainless steel (Stainless steel 304)

2 Pad diameter

20	ø20
25	ø25
32	ø32
40	ø40
50	ø50

2.5-stage •

**3** Attachment

W With attachment	
WM	With mesh attachment
WF	With flat attachment

#### With adapter

#### 4 Connection thread/5 Vacuum inlet

Connection thread			5 Vacuum inlet		Pad diameter [mm]			
Type	Thread	Symbol	Size	Thread	Symbol	Size	ø20, ø25	ø32, ø40, ø50
		AG01	G1/8				•	•
	Male	AG02	<b>AG02</b> G1/4	*1	•	•		
Direct	thread	AG03	G3/8	_	Nil		•	•
mounting		AG04	G1/2				_	•
	Female	BG01	G1/8		Nil	*1	•	_
	thread	BG02	G1/4	_	INII		_	•
		A16	<b>A16</b> M16 x 1	Female	B01	Rc1/8		
Plate	Male	AIO	IVIIOXI	thread	BN01	NPT1/8	_	_
mounting	thread	thread A20	M20 x 1	Female	B02	Rc1/4		
		AZU	IVIZU X I	thread	BN02	NPT1/4	_	

^{*1} Use the connection thread.

Pad, adapter assembly, and mounting nuts are included but do not come assembled.

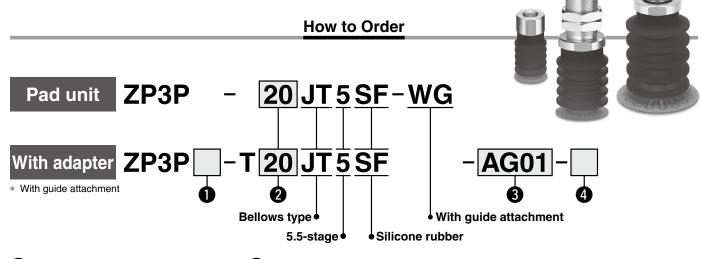




## Vacuum Pad 5.5-Stage Bellows Type

For pad units and pads with an adapter (Vacuum inlet: Excludes the built-in One-touch fitting type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

## **ZP3P-JT** Series



#### Adapter material

Nil	Aluminum
S	Stainless steel (Stainless steel 304)

#### 2 Pad diameter

20	ø20
25	ø25
32	ø32
40	ø40
50	ø50

#### With adapter

#### 3 Connection thread/4 Vacuum inlet

3 Connection thread			4 Vacuum inlet			Pad diameter [mm]		
Type	Thread	Symbol	Size	Thread	Symbol	Size	ø20, ø25	ø32 to ø50
	Male	AG01	G1/8		Nil	*1	•	•
Direct	thread	d <b>AG02</b> G1/4	INII		_	•		
mounting	Female	BG01	G1/8		Nil	*1	•	_
	thread	BG02	G1/4	_	INII		_	•
		A16	M16 x 1 Female B	B01	Rc1/8			
Plate	Male	AIO	IVIIOXI	thread	BN01	NPT1/8	_	_
mounting	thread	ad <b>A20</b> M20 x 1 F	Female	B02	Rc1/4			
		AZU	IVIZU X I	thread	BN02	NPT1/4	-	

^{*1} Use the connection thread.

Pad, adapter assembly, and mounting nuts are included but do not come assembled.



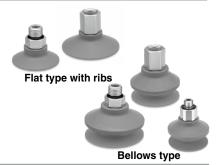


## Vacuum Pad

Flat Type with Ribs Bellows Type

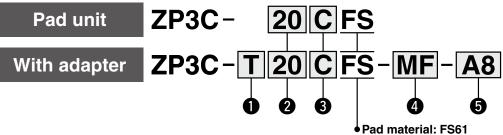
**ZP3C** Series

For pad units and pads with an adapter: The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



#### **How to Order**

-----



#### Vacuum inlet direction

Nil	Pad unit
Т	Vertical

2 Pa	d diar	neter
------	--------	-------

20	ø20	
25	ø25	
32	ø32	
40	ø40	
50	ø50	

#### 3 Pad form

_	
С	Flat type with ribs
В	Bellows type

#### 4 Mesh filter

Nil	Without mesh filter
MF	With mesh filter

#### **5** Connection thread

Tuno	Thread	Cumbal	Cino	Pad diameter [mm]	
Type	Tilleau	Symbol	Size	Size Ø20 to Ø32	ø <b>40</b> , ø <b>50</b>
		A8	M8 x 1	•	_
	Male	A10	M10 x 1	_	•
Direct	thread	AG01	G1/8	_	
mounting		AG02	G1/4	_	•
	Female	BG01	G1/8	•	_
	thread	BG02	G1/4	_	•

^{*} Use the connection thread for the vacuum inlet.

#### **Specifications**

#### Pad/Mesh filter specifications

	Material	FS61 (Fluoro-based rubber)
Pad	Color	Green
	Hardness (Shore A: ±5°)	60
Mesh filter		Opening: 250 μm

#### **Adapter specifications**

Connection	Male thread		Female thread		
Pad diameter	ø20 to ø32 Ø40, ø50		ø <b>20 to</b> ø <b>32</b>	ø <b>40</b> , ø <b>50</b>	
Connection thread	M8 x 1 G1/8	M10 x 1 G1/4	G1/8	G1/4	
Vacuum inlet	Use the connection thread.				



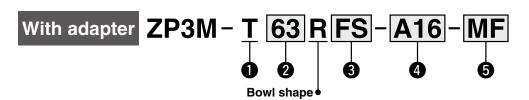
## Vacuum Pad/Bowl Shape with Non-slip Feature

For pads with an adapter: The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

## ZP3M Series



**How to Order** 



#### Vacuum inlet direction

•	•	u	Juuiii	 an couon	
Т	•			Vertical	

#### 2 Pad diameter

32	ø32
40	ø40
50	ø50
63	ø63
80	ø80
100	ø100

#### **3** Material

Symbol	Material	Color
FS	FS61 (Fluoro-based rubber)	Green

#### 4 Connection thread and type

Mounting	Туре	Symbol	Size	Pad diameter	
Mounting		Symbol	Size	ø32 to ø50	ø63 to ø100
		A10	M10 x 1.0	•	_
	Male thread	A16	M16 x 1.5	_	•
Divers		AG02	G1/4	•	•
Direct mounting	Female thread	B14	M14 x 1.0	•	•
mounting		BG02	G1/4	•	•
		BG03	G3/8	•	•
	Square adapter	S32	□31.8	•	•

**⁵** Mesh filter

Nil	None
MF	With mesh filter

#### Mesh filter unit

Part no.	Pad diameter		
Fait iio.	ø32 to ø50	ø63 to ø100	
ZPMF-60-D13	•	_	
ZPMF-60-D18	_	•	

#### **Specifications**

#### **Pad Material**

Material	FS61 (Fluoro-based rubber)	
Color of rubber	Green	
Rubber hardness (Shore A: ±5°)	60	
Operating temperature range*1	0°C to 200°C	
Ambient temperature	0°C to 150°C	

^{*1} Surface temperature of the workpiece to be adsorbed

#### **Adapter Specifications**

Connection	Male thread ø32 to ø50   ø63 to ø100		Female thread		Square adapter
Pad diameter			ø32 to ø50	ø63 to ø100	ø32 to ø100
Size	M10 x 1.0 G1/4	M16 x 1.5 G1/4	M14 x 1.0 G1/4 G3/8		□31.8
Vacuum inlet		Use the connection thread and type.			

#### **Pad Specifications**

Part no.	Horizontal holding force [N]*1		Minimum curvature radius	
Part IIO.	Without oil	With oil	for adsorption [mm]*2	
ZP3M-T32RFS	47	21	14	
ZP3M-T40RFS	81	53	15	
ZP3M-T50RFS	111	74	20	
ZP3M-T63RFS	170	108	27.5	
ZP3M-T80RFS	231	178	36	
ZP3M-T100RFS	387	224	46	

- *1 These are actual measurement values when flat workpieces were adsorbed and are not guaranteed values. (According to the SMC test) The values vary depending on the conditions (shape, surface roughness, oil type, oil amount, and other conditions) of the workpiece.
- *2 These are actual measurement values when cylindrical workpieces were adsorbed and are not guaranteed values. (According to the SMC test)

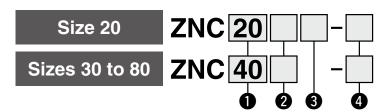
#### **Mesh Filter Specifications**

Mesh filter	60
Opening	250 μm

^{*} The adapter and pad are adhered to each other and cannot be disassembled.

## Bernoulli Gripper ZNC Series

#### **How to Order**



## 20 ø20 mm 30 ø30 mm 40 ø40 mm 60 ø60 mm

ø80 mm

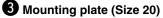
80

# P Resin Stainless steel

(	4 Att	achment		NBR	Silicone rubber
[	Nil	Basic type (W	ithout attachment)		
	PN	With stanners	NBR (Black)		
	PS	With stoppers	Silicone rubber (White)	Resi	n Stainless steel
	VP	With vibration suppression cover*1	Resin		
	vs		Stainless steel	6.533	

*1 Refer to the Table 1. With Vibration Suppression Cover for the size and material.

- * Stoppers cannot be retrofitted.
- * Vibration suppression cover can be retrofitted to the basic type.
- * The vibration suppression cover cannot be used with the type with stoppers.



Nil	Without mounting plate		
Т	With mounting plate	Aluminum	
TS		Stainless steel	



- * The mounting plate is shipped together with the product but does not come assembled. Single unit part nos. ⇒ Web Catalog
- st The piping methods for types with and without a mounting plate are shown in Table 2 below.

**Table 1. With Vibration Suppression Cover** 

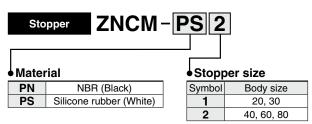
Symbol	Material	Body size		Body material	
Symbol	Ivialeriai	symbol	Aluminum	Resin	Stainless steel
		20	_	_	_
		30	_	_	_
VP	Resin	40	•	•	_
		60	_	_	_
		80	_	_	_
	VS Stainless steel	20	•	•	•
		30	•	•	•
VS		40	•	_	•
		60	•	•	•
		80	•	•	•

Table 2. Size 20 Piping (Refer to the Web Catalog for details on how to mount the product.)

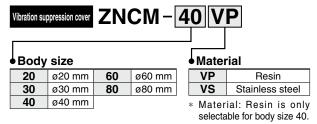
	, , , , , , , , , , , , , , , , , , ,				
	Side ported	Body ported (Requires no piping)			
Without mounting plate					
	Can be used by blocking the supply port on the top surface of the product with the mounting surface and connecting from the side port	Can be used by connecting the piping inside the mounting surface with the supply port on the top surface of the product			
	Top ported	Side ported			
With mounting plate					
	Can be used by mounting a fitting on the supply port on the top surface of the product and connecting	Can be used by blocking the supply port on the top surface of the product with the mounting plate and connecting from the side port			

* An O-ring (5.7 x 3.7 x 1) and a plug are shipped together with the product as accessories.

#### Attachments/Part Nos.



* Stopper size 1: With 3 stoppers
 Stopper size 2: With 3 stoppers and 3 spring pins
 For replacement instructions ⇒ Refer to the Web Catalog.



For stainless steel:
 Body sizes ø20mm and ø30 mm: With 2 mounting screws
 Body sizes ø40 mm, ø60 mm, and ø80 mm: With 3 mounting screws



## Bernoulli Gripper With Coanda Grip

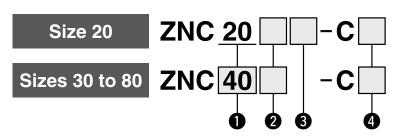
For grippers without a sensor: The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

## ZNC-C Series





#### **How to Order**



#### Body size

20	ø20 mm
30	ø30 mm
40	ø40 mm
60	ø60 mm
80	ø80 mm

#### 2 Body material

<b>—</b> =,		
Nil	Aluminum	
S	Stainless steel	

#### **3** Mounting plate

Nil	None	
T	Aluminum	
TS	Stainless steel	

- * The mounting plate is shipped together with the product but does not come assembled.
- * The piping methods for types with and without a mounting plate are shown in Table 1 below.

#### 4 Attachment

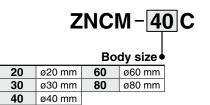
Nil	Without vibration suppression cover
V	With vibration suppression cover

 It is not possible to additionally install or remove the vibration suppression cover.

#### Table 1. Piping

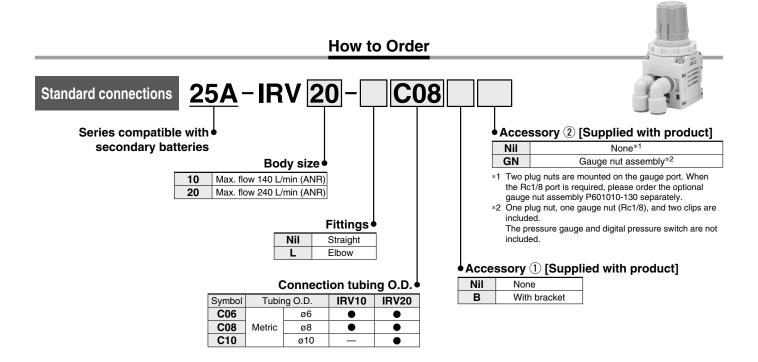
rabio iii ipiiig	
	Body ported (Requires no piping)
Without mounting plate	
	Can be used by connecting the piping inside the mounting surface with the supply port on the top surface of the product
	Top ported
With mounting plate	
	Can be used by mounting a fitting on the supply port on the top surface of the product and connecting

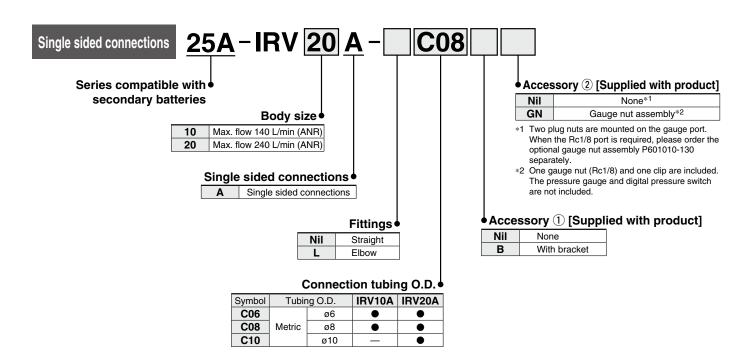
#### Coanda Grip Only / Part No.





## Vacuum Regulator 25A-IRV10/20 Series





- * This product cannot be used in environments containing chemical agents such as hydrofluoric acid, etc.
- * The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



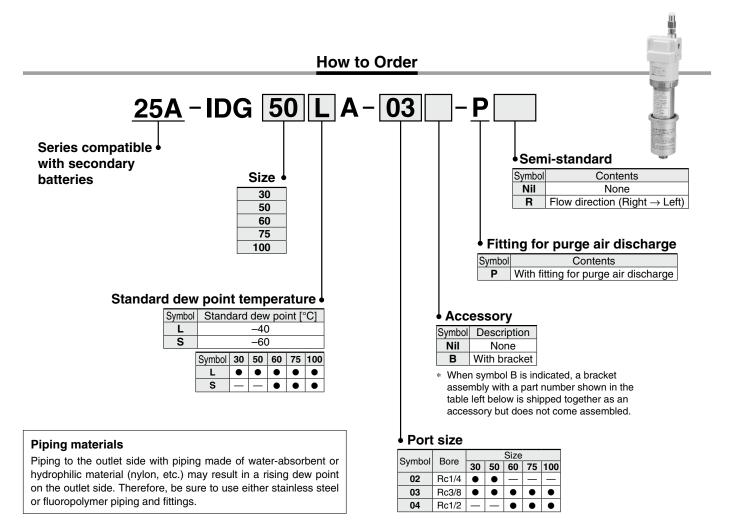


#### **Membrane Air Dryer**

## 25A-IDG Series

## Single Unit/Standard Dew Point –40°C/–60°C Specifications





#### **Bracket Assembly (Accessory) Part Nos.**

Part no.	Applicable model
25A-BM64	25A-IDG30LA, 50LA
25A-BM65	25A-IDG60LA, 75LA, 100LA

^{*} The assembly consists of a bracket and 2 mounting screws.

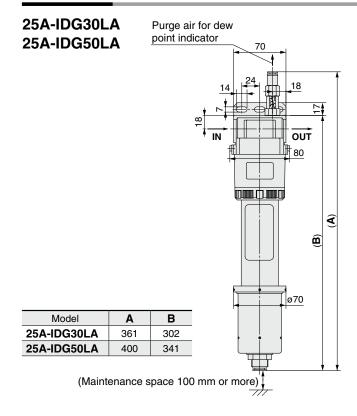
* Some parts have dimensions that are different from those of the standard model. Refer to page 228 for details. Other specifications are the same as those of the standard model.

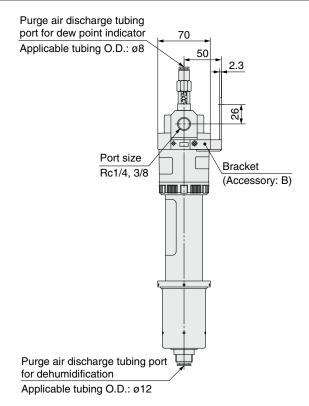
For details, refer to the Web Catalog.



#### Membrane Air Dryer 25A-IDG Series

#### **Dimensions**

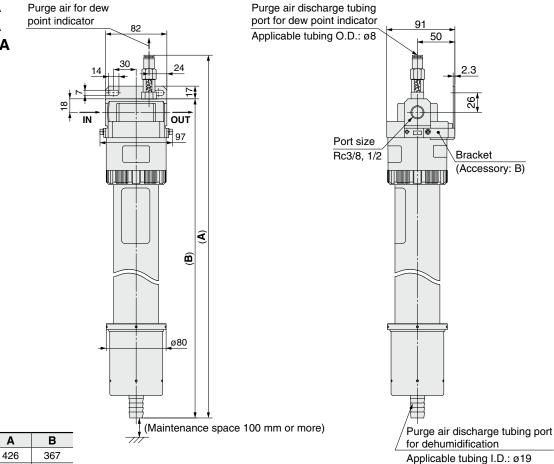




25A-IDG60LA 25A-IDG75LA 25A-IDG100LA

Model

25A-IDG60LA





## Compressed Air Preparation Filter Line Filter/Mist Separator/Micro Mist Separator

## 25A-AFF/AM/AMD-D Series

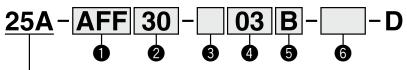








#### How to Order



Option/Semi-standard: Select one each for a to c. Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AM30-N03B-RZ-D

Series compatible with secondary batteries

					Description			2												
				Symbol			Body size													
					20	30	40	50	60											
				AFF	Nominal filtration rating: 1 μm															
				AFF	Water droplet removal ratio: 99%		_													
Ω			Filter type	AM	Nominal filtration rating: 0.1 μm															
v			riiter type	AW	Oil mist concentration on the outlet side: 1 mg/m ³		•													
				AMD	Nominal filtration rating: 0.01 μm															
				AMD	Oil mist concentration on the outlet side: 0.1 mg/m ³		•			•										
				+																
				Nil	Rc	•	•	•	•	•										
8	Thread type		Thread type	N	NPT	•	•	•	•	•										
			F	G	•	•	•	•	•											
				+																
		_			1/8	•	_	_	_	_										
					1/4	•	•	•	_	_										
A			Port size	03	3/8	_	•	•	_	_										
U		Port Size			1/2	_	_	•	_	_										
					3/4	_	_		•	_										
	•			10	1	_	_	_	•	•										
				+																
6	Option	а	Mounting	Nil	Without mounting option	•	•	•	•	•										
lacksquare	dO	a	a	а	a					a	<b>"</b>	a	Wounting	B*1	With bracket	•	•	•	•	•
				+																
	rg l	b	Flow direction	Nil	Flow direction: Left to right	•	•	•	•	•										
	nde		1 low direction	R	Flow direction: Right to left	•	•	•	•	•										
6	Semi-standard			+																
	emi	С	Unit	Nil	Name plate and caution plate for bowl in SI units: MPa, °C	•	•	•	•	•										
	\Q		Offic	<b>Z</b> *2	Name plate and caution plate for bowl in imperial units: psi, °F	○*3	○*3	○*3	○*3	○*3										

^{*1} Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of the bracket and 2 mounting screws.

This product is for overseas use only according to the new Measurement Act. (The SI unit type is provided for use in Japan.)

#### 25A-Bracket, Bowl Assembly/Part Nos.

Description	Size 20	Size 30	Size 40	Size 50	Size 60
Bracket assembly*1	25A-AF24P-070AS	25A-AF34P-070AS	25A-AF44P-070AS	25A-AF54P-070AS	
Bowl assembly	25A-C2SF-D	25A-C3SF-D	25A-C4SF-D	25A-AM54P-120AS	25A-AM64P-120AS

^{*1} The assembly consists of a bracket A/B and 2 mounting screws.



^{*2} For pipe thread type: NPT

^{*3} O: For pipe thread type: NPT only

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

#### **Compressed Air Preparation Filter**

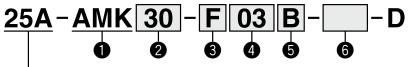
**Activated Carbon Filter** 

## 25A-AMK-D Series





#### **How to Order**



Option/Semi-standard: Select one each for a to c.
 Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
 Example) 25A-AMK30-N03B-RZ-D

Series compatible with secondary batteries

		Symbol	bol Description		Body size												
					20	30	40	50	60								
0			Filter type	AMK	Activated carbon filter	•	•	•	•	•							
				+													
				Nil	Rc	•	•	•	•	•							
8			Thread type	N	NPT	•	•	•	•	•							
				F	G	•	•	•	•	•							
				+ 01													
					1/8	•	_	_	_	_							
				02	1/4	•	•	•	_	_							
4		Port size			3/8		•	•	_	_							
•					1/2	_	_	•	_	_							
					3/4	_	_	_	•	_							
	10			10	1	_	_	_	•	•							
				+													
A	Option		Mounting	Nil	Without mounting option	•	•	•	•	•							
6	ď	а	a	u	a	"	a		wiountilly	Mounting	B*1	With bracket	•	•	•	•	•
				+													
	5	<b>b</b>	Flow direction	Nil	Flow direction: Left to right	•	•	•	•	•							
	nda	b	Flow direction	R	Flow direction: Right to left	•	•	•	•	•							
6	Semi-standard			+													
	Ë		Pressure unit	Nil	Name plate and caution plate in SI units: MPa/°C	•	•	•	•	•							
	S	С	Fressure unit	<b>Z</b> *2	Name plate and caution plate in imperial units: psi/°F	○*3	○*3	○*3	○*3	○*3							

^{*1} Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of the bracket and 2 mounting screws.

25A-Bracket, Bowl Assembly/Part Nos.

	or - received, - contract contract or							
Description	Size 20	Size 30	Size 40	Size 50	Size 60			
Bracket assembly*1	25A-AF24P-070AS	25A-AF34P-070AS	25A-AF44P-070AS	25A-AF54P-070AS				
Bowl assembly	25A-C2SF-D-X401	25A-C3SK-D	25A-C4SK-D	Equivalent to the standard product	Equivalent to the standard product			

^{*1} The assembly consists of a bracket A/B and 2 mounting screws.



^{*2} For pipe thread type: NPT

This product is for overseas use only according to the new Measurement Act. (The SI unit type is provided for use in Japan.)

^{*3} O: For pipe thread type: NPT only

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

### **Main Line Filter** 25A-AFF Series RoHS

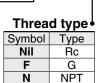






Series compatible with secondary batteries

#### Body size 2C 4C 8C 11C 22C



Port size

#### Ontion

Option				
	Symbol	Description		
	Nil	_		
		Drain guide 1/4 female threaded		
		IN-OUT reversal direction		
	Т	With element service indicator		

*5 Drain piping and piping for a stop valve such as ball valve are required.

#### Auto drain*4

Symbol	Description
Nil	Drain cock (Without auto drain)
С	N.C. auto drain
D	N.O. auto drain

*4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

#### Bracket Assembly Part Nos.*3

Applicable model	Part no.
25A-AFF2C	25A-AM-BM101
25A-AFF4C	25A-AM-BM102
25A-AFF8C	25A-AM-BM103
25A-AFF11C	25A-AM-BM104
25A-AFF22C	25A-AM-BM105

^{*3} The assembly consists of a bracket and 2 mounting screws.

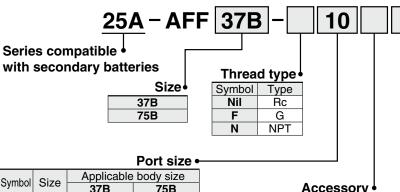
Symbol	Size	Applicable body size				
Syllibol	Size	2C	4C	8C	11C	22C
01	1/8		_	_	_	_
02	1/4			_	_	_
03	3/8	_			_	_
04	1/2	_	_			
06	3/4	_	_	_		
10	1	_	_	_		

#### Accessory

Symbol	Description
Nil	_
В	Bracket *2

*2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled

#### 25A-AFF37B/75B



Symbol	Cizo	Applicable body size			
Symbol	Size	37B	75B		
10	1	•	_		
14	11/2	•	•		
20	2	_	•		

#### Bracket Assembly Part Nos.*3

Applicable model	Part no.
25A-AFF37B	25A-BM56
25A-AFF75B	25A-BM57

*3 The assembly consists of a bracket and 2 mounting screws.

	Accessory
Symbol	Description
Nil	_
B	Bracket *1

*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

#### Option

	Symbol	Description
	Nil	_
	J*4,*5	Drain guide 1/4 female threaded (37B only)
R IN-OUT re		IN-OUT reversal direction
	T	With element service indicator

*5 Drain piping and piping for a stop valve such as ball valve are required.

#### ▲ Auto drain*4

Symbol	
Nil	Drain cock (Without auto drain) *2
D	N.O. auto drain (37B only)

- *2 Body size 75B is equipped with a ball valve (Rc 3/8 female threaded).
- *4 Body size 37B: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.
  - * The 25A- series specifications and dimensions

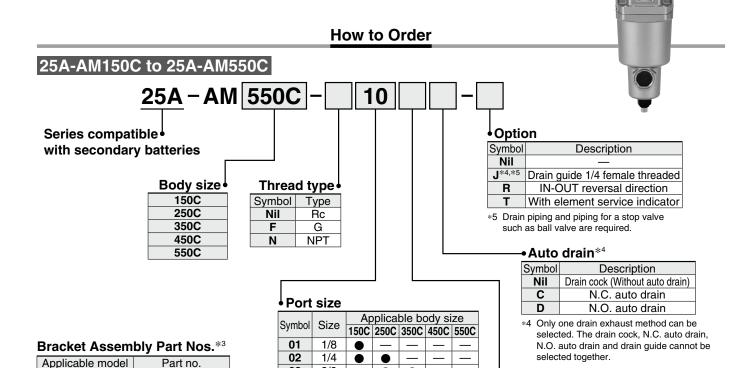
are the same as those of the standard model.



## Mist Separator 25A-AM Series







²⁵A-AM550C 25A-AM-BM105

*3 The assembly consists of a bracket and

25A-AM-BM101

25A-AM-BM102

25A-AM-BM103

25A-AM-BM104

#### 25A-AM650/850

25A-AM150C

25A-AM250C

25A-AM350C

25A-AM450C

# 25A - AM 650 - 10 Series compatible with secondary batteries Body size Thread type Symbol Type Nil Rc F G N NPT Port size Port size

03

04

06

10

3/8

1/2

3/4

1

Symbol	Size	Applicable body size	
Symbol		650	850
10	1	•	_
14	11/2	•	•
20	2	_	•

#### Bracket Assembly Part Nos.*3

Applicable model	Part no.
25A-AM650	25A-BM56
25A-AM850	25A-BM57

^{*3} The assembly consists of a bracket and 2 mounting screws.

#### Accessory

Symbol	Description
Nil	_
В	Bracket *1

*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

#### Accessory

Symbol	Description
Nil	_
В	Bracket *2

*2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

#### Option

Symbol	ol Description	
Nil	il —	
<b>J</b> *4,*5	Drain guide 1/4 female threaded (650 only	
R	IN-OUT reversal direction	
Т	With element service indicator	

*5 Drain piping and piping for a stop valve such as ball valve are required.

#### [↓]Auto drain*⁴

Symbol	Description
Nil	Drain cock (Without auto drain) *2
D N.O. auto drain (650 only	

- *2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).
- 4 Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.
  - * The 25A- series specifications and dimensions are the same as those of the standard model.



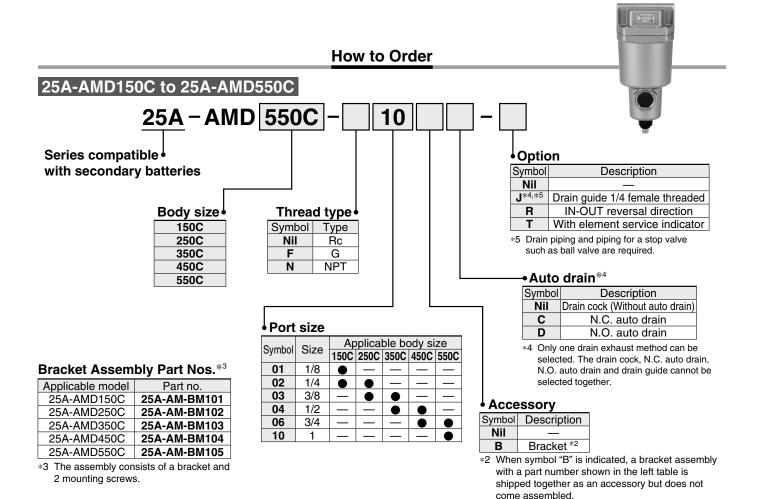


^{*3} The assembly consists of a bracket and 2 mounting screws.

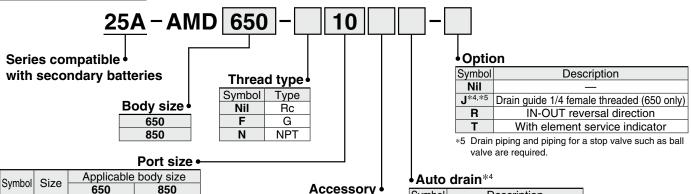
## **Micro Mist Separator**



## 25A-AMD Series



#### 25A-AMD650/850



Description

Bracket *1

#### 850 10 14 11/2 20 2

#### Bracket Assembly Part Nos.*3

Applicable model	Part no.
25A-AMD650	25A-BM56
25A-AMD850	25A-BM57

^{*3} The assembly consists of a bracket and 2 mounting screws.

Symbol

Nil

Symbol	
Nil Drain cock (Without auto drain)	
D	N.O. auto drain (650 only)

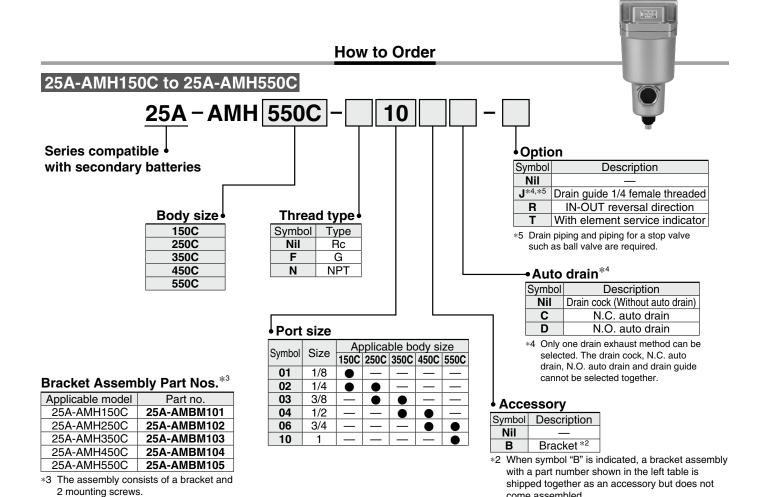
- *2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).
- Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

^{*1} When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

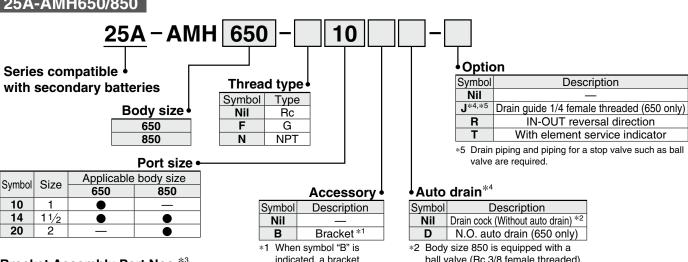
^{*} The 25A- series specifications and dimensions are the same as those of the standard model.







#### 25A-AMH650/850



#### Bracket Assembly Part Nos.*3

Applicable model	Part no.
25A-AMH650	25A-BM56
25A-AMH850	25A-BM57

^{*3} The assembly consists of a bracket and 2 mounting screws.

ball valve (Rc 3/8 female threaded).

come assembled.

Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.



indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

## **Clean Air Filter**

### SFD Series



### **Hollow Fiber Element**

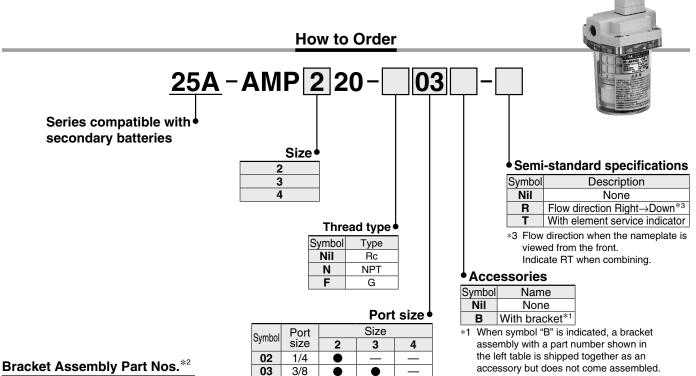
- Nominal filtration rating: **0 0 1** μm (filtration efficiency 99.99%)
- Initial pressure drop: 0 03 MPa (at inlet pressure 0.7 MPa, maximum flow)
- Maximum operating pressure: 1 0 MPa (at 20°C)



## **Exhaust Cleaner for Clean Room**

## 25A-AMP Series





04

06

1/2

3/4

Applicable model	Part no.
25A-AMP220	25A-BM66
25A-AMP320	25A-BM67
25A-AMP420	25A-BM68

^{*2} The assembly consists of a bracket and 2 mounting screws.



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

## **Clean Exhaust Filter**

### SFE Series

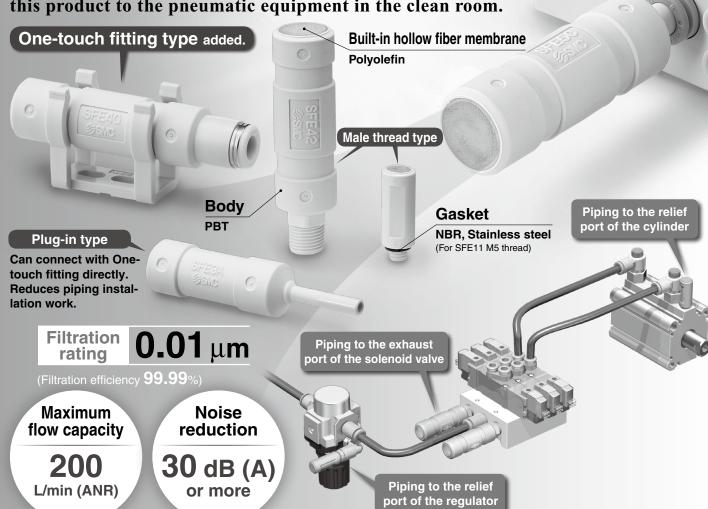
This product (standard product) is a secondary battery compatible product. For details, refer to the **Web Catalog**.



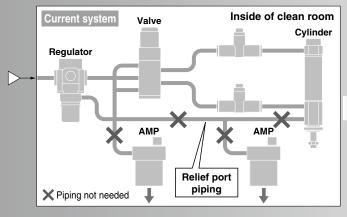


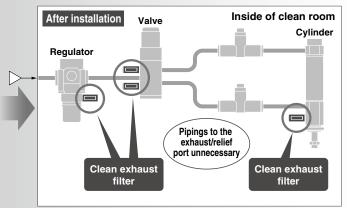
Air can be directly exhausted in a clean room only by mounting

this product to the pneumatic equipment in the clean room.



No need for piping for exhaust air and relief air. Reduces piping installation work and space.





# Modular Type Air Combination

## AC-D Series

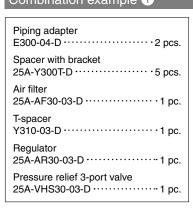
Modular connection units are available through the Simple Specials System.

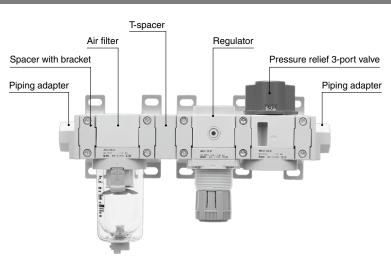
Please contact your local sales representative for more details.

### **Examples of Simple Specials**

#### Combination example 1

Please contact your local sales representative for ordering procedures.

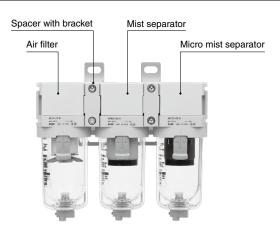




#### Combination example 2

* Please contact your local sales representative for ordering procedures.

Air filter 25A-AF30-03-D · · · · · · 1 pc.
Spacer with bracket 25A-Y300T-D ·······················2 pcs.
Mist separator 25A-AFM30-03-D · · · · · · · 1 pc.
Micro mist separator 25A-AFD30-03-D1 pc.

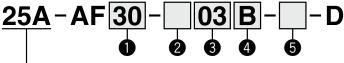




# Air Filter 25A-AF20-D to 25A-AF60-D



#### **How to Order**



Series compatible with secondary batteries

- Semi-standard: Select one each for a and b.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
   Example) 25A-AF30-N03B-RZ-D

	_		Symbol				0		
				Description	Body size				
					20	30	40	50	60
			Nil	Rc	•	•	•	•	•
2	F	Pipe thread type	N	NPT	•	•	•	•	•
			F	G	•	•	•	•	•
			+						
			01	1/8	•	_	_	_	_
		Port size	02	1/4	•		•		_
8			03	3/8	_	•	•	_	_
9			04	1/2	_	_	•	_	_
			06	3/4	_	_	•	•	—
			10	1	_	_		•	
			+						
4	Option	Mounting	Nil	Without mounting option		•	•		•
	8	Widuming	B*1	With bracket		•			
			+		1				
	ard	a Flow direction	Nil	Flow direction: Left to right			•		•
	Semi-standard	a i low direction	R	Flow direction: Right to left					
6	sta		+						
	Ë	<b>b</b> Unit	Nil	Unit on product label: MPa, °C		•	•		
	Se	D OILL	<b>Z</b> *2	Unit on product label: psi, °F	O*2	O*2	O*2	○*2	O*2

^{*1} Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of brackets and 2 mounting screws.

#### Bracket, Bowl Assembly Part Nos. for the 25A- Series

Ontion			Мо	del			
Option	25A-AF20-D	25A-AF30-D	25A-AF40-D	25A-AF40-06-D	25A-AF50-D	25A-AF60-D	
Bracket assembly*1	25A-AF24P-070AS	25A-AF34P-070AS	25A-AF44P-070AS	25A-AF49P-070AS	25A-AF54P-070AS		
Bowl assembly	owl assembly 25A-C2SF-D 25A-C3SF-D 25A-C4SF-D						

^{*1} The assembly consists of an A and B bracket and 2 mounting screws.



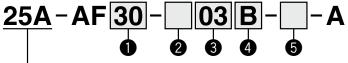
^{*2} O: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

# Air Filter 25A-AF20-A to 25A-AF60-A



#### **How to Order**



Series compatible with secondary batteries

- Semi-standard: Select one each for a and b.
  Semi-standard symbol: When more than one
- specification is required, indicate in alphanumeric order. Example) 25A-AF30-N03B- $\underline{RZ}$ -A

	_						0			
			Symbol	Description	Body size					
					20	30	40	50	60	
			Nil	Rc	•	•	•	•	•	
2	F	Pipe thread type	N	NPT	•	•	•	•	•	
			F	G	•	•	•	•	•	
			+							
			01	1/8		—	_	_	_	
		Port size	02	1/4			•	_	_	
3			03	3/8	_	•	•	_	_	
v		FUIT SIZE	04	1/2		_		_		
			06	3/4	—	_	•			
			10	1	_	_	_			
			+							
	Option	Mounting	Nil	Without mounting option	•	•	•	•		
U	ဝိ	Wiodriting	B*1	With bracket						
			+							
	ਬੂ <b>a</b> Flow direction		Nil	Flow direction: Left to right		•	•	•	•	
	lug	a i low direction	R	Flow direction: Right to left						
6	Semi-standard		+							
	<u> </u>	<b>b</b> Pressure unit	Nil	Name plate and caution plate for bowl in SI units: MPa		•	•	•	•	
	S	Pressure unit	<b>b</b> Pressure unit	<b>Z</b> *2	Name plate and caution plate for bowl in imperial units: psi, °F	O*2	O*2	O*2	○*2	○*2

st1 A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.

#### Bracket, Bowl Assembly Part Nos. for the 25A- Series

Model Option	25A-AF20-A	25A-AF30-A	25A-AF40-A	25A-AF40-06-A	25A-AF50-A 25A-AF60-A	
Bracket assembly*1	25A-AF22P-050AS	25A-AF32P-050AS	25A-AF42P-050AS	25A-AF42P-070AS	25A-AF52P-050AS	
Bowl assembly	25A-C2SF-A	25A-C3SF-A		25A-C4SF-A		

st 1 The assembly consists of a bracket and 2 mounting screws.

* The 25A- series specifications and dimensions are the same as those of the standard model.



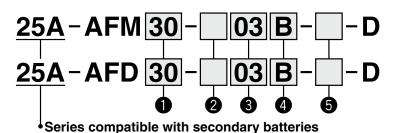
^{*2} O : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

# Mist Separator 25A-AFM20-D to 25A-AFM40-06-D Micro Mist Separator 25A-AFD20-D to 25A-AFD40-06-D

- 25A-AFM Series Nominal filtration rating: 0.3 μm
- 25A-AFD Series Nominal filtration rating: 0.01 μm

#### **How to Order**





Semi-standard: Select one each for a and b.
 Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
 Example) 25A-AFM30-N03B-RZ-D

	_					0	
		Symbol Description		Body size			
					20	30	40
			Nil	Rc	•	•	•
	Pipe	thread type	N	NPT	•	•	•
			F	G	•	•	•
			+				
			01	1/8	•	_	_
8				1/4	•	•	•
	F	Port size	03	3/8	_	•	•
				1/2	_	_	•
			06	3/4	_	_	•
			+				·
Ontion	5	Mounting	Nil	Without mounting option	•	•	•
3	5	Mounting	B*1	With bracket	•	•	•
			+				
ro		Elow direction	Nil	Flow direction: Left to right	•	•	•
Semi-standard	a	Flow direction	R	Flow direction: Right to left		•	•
) i	old		+				
3		Unit	Nil	Unit on product label: MPa, °C	•	•	•
Ser	[   <b>b</b>	Unit	<b>Z</b> *2	Unit on product label: psi, °F	O*2	O*2	O*2

^{*1} Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of brackets and 2 mounting screws.

#### Bracket, Bowl Assembly Part Nos. for the 25A- Series

		Mo	del	
Option	25A-AFM20-D 25A-AFD20-D	25A-AFM30-D 25A-AFD30-D	25A-AFM40-D 25A-AFD40-D	25A-AFM40-06-D 25A-AFD40-06-D
Bracket assembly*1	25A-AF24P-070AS	25A-AF34P-070AS	25A-AF44P-070AS	25A-AF49P-070AS
Bowl assembly	25A-C2SF-D	25A-C3SF-D	25A-C	4SF-D

 $[\]ast 1\,$  The assembly consists of an A and B bracket and 2 mounting screws.

* The 25A- series specifications and dimensions are the same as those of the standard model.

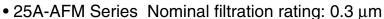


^{*2} O: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

## Mist Separator

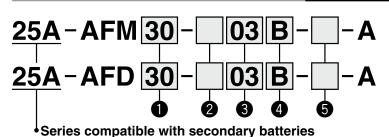
# 25A-AFM20-A to 25A-AFM40-A Micro Mist Separator





25A-AFD Series Nominal filtration rating: 0.01 μm

#### **How to Order**



<sup>Semi-standard: Select one each for a and b.
Semi-standard symbol: When more than one</sup> 

specification is required, indicate in alphanumeric order. Example) 25A-AFM30-N03B-RZ-A

		Symbol	Description		O Dodu siza	
		Symbol	Description	20	Body size	40
				20		
		Nil	Rc	•	•	•
2	Pipe thread type	N	NPT	•	•	•
		F	G	•	•	•
		+				
		01	1/8	•	_	_
		02	1/4	•	•	•
3	Port size	03	3/8	_	•	•
		04	1/2	_	_	•
		06	3/4	_	_	•
		+				
	ы	Nil	Without mounting option	•	•	•
4	Mounting	B*1	With bracket	•	•	•
		+				
	ը	Nil	Flow direction: Left to right	•	•	•
	a Flow direction  b Pressure unit	R	Flow direction: Right to left	•	•	•
6	star	+				
	· [ ]	Nil	Name plate and caution plate for bowl in SI units: MPa	•	•	•
	ទី <b>b</b> Pressure unit	<b>Z</b> *2	Name plate and caution plate for bowl in imperial units: psi, °F	O*2	O*2	O*2

^{*1} A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.

#### Bracket, Bowl Assembly Part Nos. for the 25A- Series

Model Option	25A-AFM20-A 25A-AFD20-A	25A-AFM30-A 25A-AFD30-A	25A-AFM40-A 25A-AFD40-A	25A-AFM40-06-A 25A-AFD40-06-A
Bracket assembly*1	25A-AF22P-050AS	25A-AF32P-050AS	25A-AF42P-050AS	25A-AF42P-070AS
Bowl assembly	25A-C2SF-A	25A-C3SF-A	25A-C	4SF-A

^{*1} The assembly consists of a bracket and 2 mounting screws.

* The 25A- series specifications and dimensions are the same as those of the standard model.



^{*2} O: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

#### Regulator

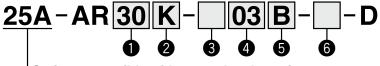
## 25A-AR20-D to 25A-AR60-D

**Regulator with Backflow Function** 

## 25A-AR20K-D to 25A-AR60K-D



#### **How to Order**



- Series compatible with secondary batteries
- Semi-standard: Select one each for a to e.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
   Example) 25A-AR30K-03B-1NR-D

	_							0		
				Symbol	Description			Body size	<del></del>	
						20	30	40	50	60
2			h backflow	Nil	Without backflow function		•	•	•	
9		1	function	<b>K</b> *1	With backflow function					
				+						
_				Nil	Rc					
<b>3</b>	F	Pipe	thread type	N	NPT					
				F	G					
				+						
				01	1/8		_	_	_	_
				02	1/4				_	_
A			Port size	03	3/8	_			_	_
U		Port size		04	1/2	_	_		_	_
				06	3/4	_	_	•		
				10	1	_		_		
				+						
	Option &			Nil	Without mounting option			•	•	•
6	흲	Mounting		<b>B</b> *3	With bracket					
	ဝီ			Н	With set nut (For panel fitting)				_	_
				+						
			C-t	Nil	0.05 to 0.85 MPa setting					•
		а	Set pressure	1*4	0.02 to 0.2 MPa setting		•	•	•	•
				+	· · · · · · · · · · · · · · · · · · ·					
			Exhaust	Nil	Relieving type		•		•	•
	힏	b	mechanism	N	Non-relieving type		•	•	•	•
	dal			+						
	a		<b>-</b>	NII	Flow direction: Left to right					
6	-st	С	Flow direction	R	Flow direction: Right to left			•	•	Ŏ
	Ē			+	<u> </u>					
	Semi-standard		17. 1	Nil	Downward			•		
		d	Knob	Y	Upward			•		
				+	- t					
				Nil	Unit on product label: MPa, Pressure gauge in SI units: MPa					
		е	Unit	<b>Z</b> *5	Unit on product label: psi, Pressure gauge: MPa/psi dual scale	O*5	O*5	O*5	O*5	O*5
		$\overline{}$		_	The production of the policy o					

- *1 Set the inlet pressure to at least 0.05 MPa higher than the set pressure.
- *2 Options B and H are not assembled and supplied loose at the time of shipment.
- *3 The assembly consists of a bracket and set nuts.
- *4 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
- *5 O: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

#### Bracket, Set Nut Part Nos. for the 25A- Series

		,,								
	Ontion	Model								
	Option	25A-AR20(K)-D	25A-AR30(K)-D	25A-AR40(K)-D	25A-AR40(K)-06-D	25A-AR50(K)-D	25A-AR60(K)-D			
	Bracket assembly*1	25A-AR23P-270AS	25A-AR33P-270AS	25A-AR40	25A-AR43P-270AS 25A-AR54		1P-270AS			
	Set nut	AR23P-260S	AR33P-260S	AR43F	P-260S	_	*2			

^{*1} The assembly consists of a bracket and set nuts. For the 25A-AR50(K)-D and 25A-AR60(K)-D, the assembly consists of an A and B bracket and 2 mounting screws.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.



^{*2} Please contact SMC regarding the set nuts for the 25A-AR50(K)-D and 25A-AR60(K)-D.

## Regulator

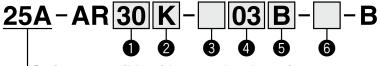
## 25A-AR20-B to 25A-AR60-B

### **Regulator with Backflow Function**

## 25A-AR20K-B to 25A-AR60K-B



#### **How to Order**



- Series compatible with secondary batteries
- Semi-standard: Select one each for a to e.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
   Example) 25A-AR30K-03B-1NR-B

	_	_									
	Symbol				Description			Body	size		
						20	25	30	40	50	60
<u> </u>		Wit	h backflow	Nil	Without backflow function			•			
2		1	function	K	With backflow function		•	•	•	•	
				+							
				Nil	Rc		•		•	•	
(3)	F	Pipe	thread type	N	NPT						
	Fipe tillead type		F	G							
				+							
				01	1/8	•	_	_	_	_	
		Port size		02	1/4		•	•	•	_	
4				03	3/8		•		•	_	_
•	FUIT SIZE		04	1/2		_	_	•			
				06	3/4		_	_	•		_
			10	1		_					
	+										
	*1			Nil	Without mounting option		•				
6	[읉	Mounting		<b>B</b> *2	With bracket		•		•		
	ŏ			Н	With set nut (For panel fitting)					_	
				+							
		а	Set pressure	Nil	0.05 to 0.85 MPa setting						
		a	Set pressure	<b>1</b> *3	0.02 to 0.2 MPa setting						
				+							
		b	Exhaust	Nil	Relieving type						
	2		mechanism	N	Non-relieving type						
	g			+							
	lan		Flow direction	Nil	Flow direction: Left to right		•	•	•	•	
6	<u> </u>	c Flow direction		R	Flow direction: Right to left			•	•		
	Semi-standard			+	-						
	Se	d	Knob	Nil	Downward		•	•	•	•	
		u	KIIOD	Υ	Upward			•		•	
				+							
			Dunna !*	Nil	Name plate in SI units: MPa	•	•	•	•	•	
		е	e Pressure unit	<b>Z</b> *4	Name plate in imperial units: psi	O*4	O*4	O*4	O*4	O*4	O*4

- *1 Options B and H are not assembled and supplied loose at the time of shipment.
- *2 The assembly consists of a bracket and set nuts (25A-AR20(K) to 25A-AR40(K)). Including 2 mounting screws for the 25A-AR50(K) and 25A-AR60(K).
- *3 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
- *4 O: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

#### Bracket, Set Nut Part Nos. for the 25A- Series

Model Option	25A-AR20(K)-B	25A-AR25(K)-B	25A-AR30(K)-B	25A-AR40(K)-B	25A-AR50(K)-B 25A-AR60(K)-B
Bracket assembly*1	25A-AR23P-270AS	25A-AR28P-270AS	25A-AR33P-270AS	25A-AR43P-270AS	25A-AR52P-270AS*2
Set nut	AR23P-260S	AR28P-260S	AR33P-260S	AR43P-260S	*3

- *1 The assembly consists of a bracket and set nuts.
- *2 The assembly consists of a bracket and 2 mounting screws.
- *3 Please contact SMC regarding the set nuts for the 25A-AR50(K) and 25A-AR60(K).
  - * The 25A- series specifications and dimensions are the same as those of the standard model.



### **Filter Regulator**

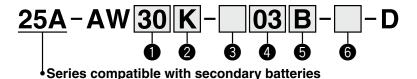
## 25A-AW20-D to 25A-AW60-D

**Filter Regulator with Backflow Function** 

## 25A-AW20K-D to 25A-AW60K-D



#### **How to Order**



- Semi-standard: Select one each for a to d.
- · Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
- Example) 25A-AW30K-03B-1N-D

	Sy		Symbol	Description		Body	size	
					20	30	40	60
<b>2</b> Wi	With backflow function		Nil	Without backflow function	•	•	•	•
Vilin backflow function		<b>K</b> *1	With backflow function	•	•	•		
			+					
			Nil	Rc		•	•	•
3	Pipe thread type N F			NPT		•	•	•
				G	•		•	
	+			1/2				1
			01	1/8	•	<del>  -</del>	_	
	Port size		02	1/4	<u> </u>	•	•	
4			03	3/8		•	•	_
			04	1/2	_		•	_
			06	3/4		_	•	
			10	1		_	_	
10	. —		+				_	
_   *2	*2 C		Nil	Without mounting option	•	•	•	
<b>5</b>   ₩	Mounting O	<b>B</b> *3	With bracket	•	•	•	•	
Įσ			Н	With set nut (For panel fitting)	•		•	_
	. —		+					
	a	Set pressure	Nil	0.05 to 0.85 MPa setting	•	•	•	•
	a	Set pressure	1*4	0.02 to 0.2 MPa setting	•		•	
			+				•	
arc	b	Exhaust	Nil	Relieving type	•	•	•	•
9 Semi-standard		mechanism	N	Non-relieving type	•		•	
			+					
<u> </u>	c	Flow direction	Nil	Flow direction: Left to right	•	•	•	
Sel		1 low direction	R	Flow direction: Right to left	•	•	•	•
			+					
	<b>d</b> Unit		Nil	Unit on product label: MPa, °C, Pressure gauge in SI units: MPa	•	•	•	•
	l u	Offic	<b>Z</b> *5	Unit on product label: psi, °F, Pressure gauge: MPa/psi dual scale	○*5	○*5	○*5	○*5

- *1 Set the inlet pressure to at least 0.05 MPa higher than the set pressure.
- *2 Options B and H are not assembled and supplied loose at the time of shipment.
- *3 The assembly consists of a bracket and set nuts
- *4 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
- *5 O: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

#### Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series

Diabitot, Cot Hat, Do	Wi Accountary i are	11001 101 1110 2071	001100	racket, out that, bown recombly that the line and both control									
Ontion			Model										
Option	25A-AW20(K)-D	25A-AW30(K)-D	25A-AW40(K)-D	25A-AW40(K)-06-D	25A-AW60(K)-D								
Bracket assembly*1	25A-AW23P-270AS	25A-AR33P-270AS	25A-AR4	25A-AR43P-270AS									
Set nut	AR23P-260S	AR33P-260S	AR43F	AR43P-260S									
Bowl assembly	25A-C2SF-D	25A-C3SF-D		25A-C4SF-D									



The assembly consists of a bracket and set nuts. For the 25A-AW60(K)-D, the assembly consists of an A and B bracket and 2 mounting screws. Please contact SMC regarding the set nuts for the 25A-AW60(K)-D.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

### **Filter Regulator**

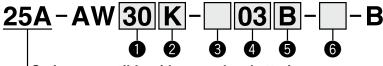
## 25A-AW20-B to 25A-AW60-B

### **Filter Regulator with Backflow Function**

## 25A-AW20K-B to 25A-AW60K-B



#### **How to Order**



Series compatible with secondary batteries

- Semi-standard: Select one each for a to d.
- · Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

Example) 25A-AW30K-03B-1N-B

	_	_				0			
				Symbol	Description		Body	size	
						20	30	40	60
2	\	م ما مان	ackflow function	Nil	Without backflow function	•	•	•	•
4	VVII	אלו וו.	acknow function	K	With backflow function	•	•	•	•
				+					
			Nil	Rc		•	•	•	
8	F	Pipe	thread type	N	NPT	•	•	•	•
			F	G	•	•	•		
				+					
			01	1/8	•	_	_	_	
				02	1/4	•	•	•	_
4	Port size 03 04 06 10		03	3/8	_	•	•		
•			04	1/2	_	_	•		
			06	3/4	_	_	•	•	
			10	1	_	_	_		
				+	· · · · · · · · · · · · · · · · · · ·		1	1	
	*1 <b>C</b>		Nil	Without mounting option	<u> </u>	•	•		
6	둱	Mounting		<b>B</b> *2	With bracket	•	•	•	•
	Õ			Н	With set nut (For panel fitting)	•			_
				+				1	
		а	Set pressure	Nil	0.05 to 0.85 MPa setting	<u> </u>	•	•	
			Cot procedio	1*3	0.02 to 0.2 MPa setting	•			
	_			+				1	
	arc	b	Exhaust	Nil	Relieving type	•	•	•	•
	and		mechanism	N	Non-relieving type	<u> </u>	•	•	
6	-Ste			+				r	
	Semi-standard	С	Flow direction	Nil	Flow direction: Left to right	•	•	•	•
	Se		cw anochon	R	Flow direction: Right to left	•			
				+				1	
		d	Pressure unit	Nil	Name plate and caution plate for bowl in SI units: MPa	•	•	•	
			i ressure unit	<b>Z</b> *4	Name plate and caution plate for bowl in imperial units: psi, °F	○*4	O*4	O*4	○*4

- *1 Options B and H are not assembled and supplied loose at the time of shipment.
- *2 The assembly consists of a bracket and set nuts (25A-AW20(K) to 25A-AW40(K)). Including 2 mounting screws for the 25A-AW60(K).
- *3 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
- *4 : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

#### Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series

Model Option	25A-AW20(K)-B	25A-AW30(K)-B	25A-AW40(K)-B	25A-AW60(K)-B	
Bracket assembly*1	25A-AW23P-270AS	25A-AR33P-270AS	25A-AR43P-270AS	25A-AW62P-270AS*2	
Set nut	AR23P-260S	AR33P-260S	AR43P-260S	*3	
Bowl assembly	25A-C2SF-A	25A-C3SF-A	25A-C4SF-A		

The assembly consists of a bracket and set nuts.

^{*2} The assembly consists of a bracket and 2 mounting screws. *3 Please contact SMC regarding the set nuts for the 25A-AW60(K).

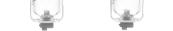
^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

#### **Mist Separator Regulator**

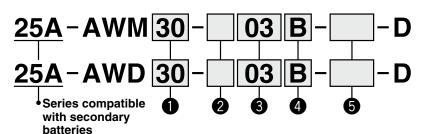
## 25A-AWM30, AWM40-D Micro Mist Separator Regulator 25A-AWD30, AWD40-D

- 25A-AWM Series Nominal filtration rating: 0.3 μm
- 25A-AWD Series Nominal filtration rating: 0.01 μm

#### **How to Order**



25A-AWD30-D



 Semi-standard: Select one each for a to d.
 Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
 Example) 25A-AWM30-F03B-1NR-D

25A-AWM30-D

	_						
		Symbol	Description	Body	size		
						30	40
				Nil	Rc	•	•
2	F	Pipe	thread type	N	NPT	•	•
		, ,,		F	G	•	•
				+			
				02	1/4	•	•
3	Port size 03 04		03	3/8	•	•	
			04	1/2	_	•	
	+						
	*1			Nil	Without mounting option	•	•
4	Option		Mounting	<b>B</b> *2	With bracket	•	•
	<del> </del>			Н	With set nut (for panel mount)	•	•
				+			
		a	Set pressure*3	Nil	0.05 to 0.85 MPa setting	•	•
		a	Set pressure	1	0.05 to 0.2 MPa setting	•	•
				+			
	힏	b	Exhaust	Nil	Relieving type	•	•
	nda		mechanism	N	Non-relieving type	•	•
6	Semi-standard			+			
	emi	С	Flow direction	Nil	Flow direction: Left to right	•	•
	Š		I low direction	R	Flow direction: Right to left	•	•
				+			
		4	Unit	Nil	Unit on product label: MPa, °C	•	•
		d	Offit	<b>Z</b> *4	Unit on product label: psi, °F	○*5	○*5

^{*1} Options B and H are not assembled and supplied loose at the time of shipment.

#### Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series

	,				
	Model				
Optional specifications	25A-AWM30-D	25A-AWM40-D			
	25A-AWD30-D	25A-AWD40-D			
Bracket assembly*1	25A-AR33P-270AS	25A-AR43P-270AS			
Set nut	AR33P-260S	AR43P-260S			
Bowl assembly	25A-C3SF-D	25A-C4SF-D			

^{*1} The assembly consists of a bracket and set nuts.



^{*2} The assembly consists of a bracket and set nuts.

^{*3} Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.

^{*4} For the pipe thread type: NPT

This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

^{*5} O: For the pipe thread type: NPT only

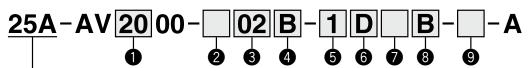
^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

# Soft Start-up Valve **25A-AV2000-A** to **25A-AV5000-A**





#### **How to Order**





Series compatible with secondary batteries*7

- Select one each for options "a" and semi-standard options "b" and "c.
   Option/Semi-standard symbol: When more than one specification is required, indicate in alphabetical order.
- Example) 25A-AV2000-N02B-1DB-<u>RZ</u>-A

*	CE/LIKCA	compliant:	

		Electrical entry						
	Grommet	DIN terminal	M12 connector					
AC	_	•	_					
DC	•	•	•					

						(		
		_	Symbol	Description			size	
					20	30	40	50
			Nil	Rc	•	•	•	•
2	Thread ty	vpe	N	NPT	•	•	•	•
			F	G	•	•	•	•
			+	-				
			02	1/4	•	I —	_	_
	5		03	3/8	_	•	_	_
3	Port siz		04	1/2	_	_	•	
	1(P), 2(A	4)	06	3/4	_	_	_	•
			10	1	_	_	_	•
			+					
	ioi a	untina	Nil	Without mounting option	•	•	•	•
4	moitd a Moi	unting	В	With bracket	•	•	•	•
			+				'	
			1	100 VAC	•	•	•	•
	Rated coil voltage	AC	2	200 VAC	•	•	•	•
		(50/60 Hz)	3	110 VAC [115 VAC]*1	•	•	•	•
6			4	220 VAC [230 VAC]*1	•	•	•	•
		DC	5	24 VDC	•	•	•	•
		DC	6	12 VDC	•	•	•	•
			+	·		•	•	
			G	Grommet (Lead wire length: 300 mm)	•	•	•	•
6	Electrical e	ntn.	D	Type D (DIN terminal/With connector)	•	•	•	•
	Electrical	eriti y	Υ	Type Y (DIN terminal/With connector)*2	•	•	•	•
			KO	M12 connector (Without cable)	O*3	○*3	○*3	O*3
			+					
7	Light/surge voltage	oupproces.	Nil	None	•	•	•	•
	Light/Surge voltage	suppressor	Z	With light/surge voltage suppressor	O*4	O*4	O*4	0*4
			+					
			Nil	Non-locking push type	•	•	•	•
8	Manual ove	erride	В	Push-turn locking slotted type	•	•	•	•
			С	Push-turn locking lever type		•	•	•
			+					
	b Flow direction  Flow direction  C Pressure unit		Nil	Flow direction: Left to right	•	•	•	•
			R	Flow direction: Right to left	•	•	•	•
<b>9</b>	sta		+					
	c Pressure unit		Nil	Unit on product label: MPa, Pressure gauge: MPa	•	•	•	•
	ਲ Press	uro uriit	<b>Z</b> *5	Unit on product label: psi, Pressure gauge: MPa/psi dual scale	O*6	○*6	○*6	○*6

- *1 The 110 VAC and the 115 VAC are interchangeable. The 220 VAC and the 230 VAC are interchangeable as well. The allowable voltage fluctuation is –15% to +5% of the rated voltage for the 115 VAC or the 230 VAC.
- *2 Type "Y" is a DIN terminal in compliance with EN-175301-803C (former DIN43650C).
- *3 When the electrical entry is "KO," only the DC specifications (5 or 6) can be selected for the rated coil voltage.
- *4 When it is "KO," only the "With light/surge voltage suppressor" option can be selected.
- *5 For the pipe thread type: NPT
- This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)
- *6 Pressure unit Z: For the pipe thread type: NPT only
- *7 Coils for pilot valve assemblies, connector pins, and lead wires are made of copper.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

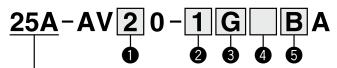


#### Bracket/Option Part Nos., Pilot Valve Assembly/Replacement Parts for the 25A- Series

Description	Series					
	25A-AV2000-A	25A-AV3000-A	25A-AV4000-A	25A-AV5000-A		
Bracket assembly*1	25A-AV22P-210AS	25A-AV32P-210AS	25A-AV42P-210AS	25A-AV52P-210AS		
Pilot valve assembly	Refer to the How to Order below.					

^{*1} Bracket: 1 pc., Mounting screw: 2 pcs. (3 pcs. for the 25A-AV5000-A)

#### **How to Order Pilot Valve Assembly**



Series compatible with secondary batteries

			Cumbal	Description		Applicable	body size	<del></del>
			Symbol Description		20	30	40	50
•	Dod	:	2	For the AV2000-A, AV3000-A	•	•	_	_
0	Body	size	4	For the AV4000-A, AV5000-A	_	_	•	•
			+					
			1	100 VAC	•	•	•	•
		AC	2	200 VAC	•	•	•	•
2	Rated coil	(50/60 Hz)	3	110 VAC [115 VAC]*1	•	•	•	•
•	voltage		4	220 VAC [230 VAC]*1	•	•	•	•
		DC	5	24 VDC	•	•	•	•
			6	12 VDC	•	•	•	•
			+					
			G	Grommet (Lead wire length: 300 mm)	•	•	•	•
3	Floatria	al antm	D	Type D (DIN terminal/With connector)	•	•	•	•
•	Electric	al entry	Υ	Type Y (DIN terminal/With connector)*2	•	•	•	•
			КО	M12 connector (Without cable)	○*3	○*3	○*3	○*3
			+					
4	Light/ourgo volt	aga allantagaar	Nil	None	•	•	•	•
•	Light/surge voltage suppressor		Z	With light/surge voltage suppressor	○*4	○*4	○*4	O*4
			+					
	Manual override		Nil	Non-locking push type	•	•	•	•
6			В	Push-turn locking slotted type	•	•	•	•
			С	Push-turn locking lever type	•	•	•	•

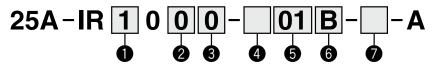
^{*1} The 110 VAC and the 115 VAC are interchangeable. The 220 VAC and the 230 VAC are interchangeable as well. The allowable voltage fluctuation is -15% to +5% of the rated voltage for the 115 VAC or the 230 VAC.

^{*2} Type "Y" is a DIN terminal in compliance with EN-175301-803C (former DIN43650C).

^{*3} When the electrical entry is "KO," only the DC specifications (5 or 6) can be selected for the rated coil voltage. *4 When it is "KO," only the "With light/surge voltage suppressor" option can be selected.

# Precision Regulator 25A-IR1000/2000/3000-A Series

#### **How to Order**





- Option/Semi-standard: Select one each for a, b, and c.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

							0	
	Sı		Symbol	Description		Body size		
			,	<u>'</u>	1	2	3	
				0	0.005 to 0.2 MPa	•	•	_
	؍ ا			0	0.01 to 0.2 MPa		_	•
2	٦	et p	ressure range	1	0.01 to 0.4 MPa	•	•	•
				2	0.01 to 0.8 MPa	•	•	•
				+			•	
				0	Bottom exhaust	•	•	•
8		Exha	aust direction	1	Front exhaust		_	•
				2	Rear exhaust		_	•
	•			+		<u> </u>		
				Nil	Rc	•	•	•
4		Pipe	thread type	N	NPT	•	•	•
		·	•	F	G	•	•	•
				+			•	,
				01	1/8	•	_	_
A			Port size	02	1/4		•	•
6			Port size	03	3/8		_	•
				04	1/2		_	•
				+				
				Nil	Without mounting option	•	•	•
		а	Mounting	<b>B</b> *2	With bracket	•	•	•
	*1			Н	With hexagon panel nut (for panel mount)	•	•	•
				+				
6	Option			EA	NPN open collector 1 output	•	•	•
	ΙŌΙ	la la	With digital	EB	PNP open collector 1 output	•	•	•
		b	pressure switch	EC	NPN open collector 2 outputs + Analog voltage output	•	•	•
				ED	NPN open collector 2 outputs + Analog current output	•	•	•
				+	· · · · · · · · · · · · · · · · · · ·			
			- Floor discostinu		Flow direction: Left to right	•	•	•
		С	Flow direction	R	Flow direction: Right to left	•	•	•
	ard _			+	-			
	Semi-standard	d	Knob	Nil	Upward	•	•	•
0			KIIOD	V	Downward		•	•
	盲			+				
	Se			Nil	Name plate and pressure gauge in imperial units: MPa	•	•	•
		е	Pressure unit*3	Z	Name plate and pressure gauge in imperial units: psi	•	•	•
				ZA	Digital pressure switch: With unit conversion function	•	•	•

- *1 Options are shipped together with the product but do not come assembled. B and H cannot be selected at the same time. The current bracket cannot be used for this product.
- *2 The assembly consists of a bracket and set nuts
- *3 See pressure unit table below.

	To dee pressure unit table below.					
	Pipe thread Name plate in Pressure switch in im		Pressure switch in imperial units	Sales*6		
	type	imperial units	EA, EB, EC, ED	Sales		
	Rc			Japan,		
Nil	NPT	MPa	Fixed SI unit	Overseas		
	G			Overseas		
	Rc	_	_			
<b>Z</b> *4	NPT	psi	With unit conversion function (Initial value psi)	Only overseas		
	G	_	_			
	Rc					
<b>ZA</b> *5	NPT	MPa	With unit conversion function	Only overseas		
	G					

- *4 For pipe thread type: NPT
- *5 For options: EA, EB, EC, ED
- *6 According to the new Measurement Law, only the SI unit type is provided for use in Japan.
  - * The 25A- series specifications and dimensions are the same as those of the standard model.

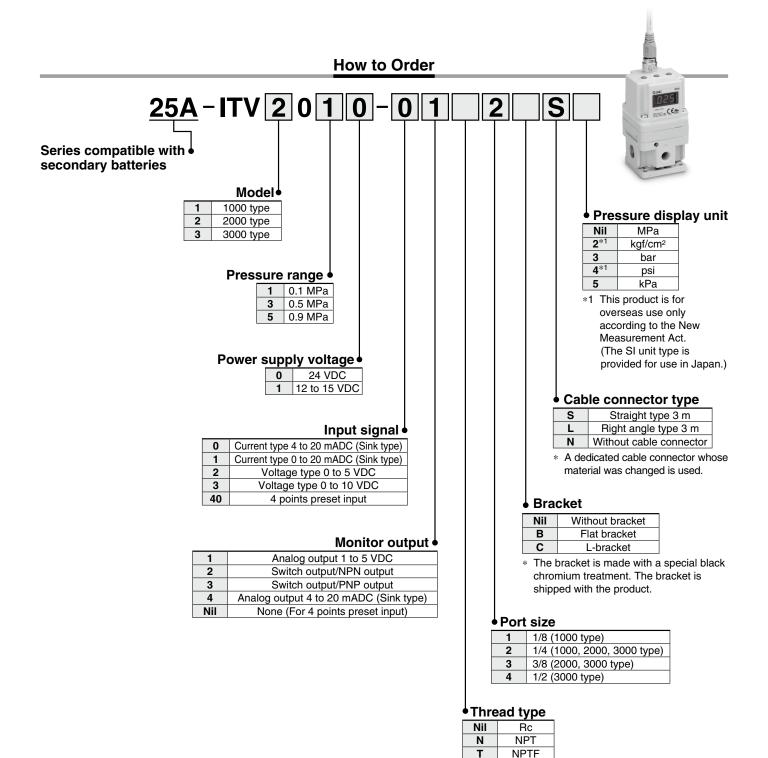
re the same as those of the standard model.





## **Electro-Pneumatic Regulator** 25A-ITV1000/2000/3000 Series





- * Since the lead wires and electrical circuits are used, this product is not completely copper-free. Only the wetted parts are copper-free.
- * Copper and zinc materials are used for solenoid valve coils, connector pins, and lead wire substrate.
- * The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



F

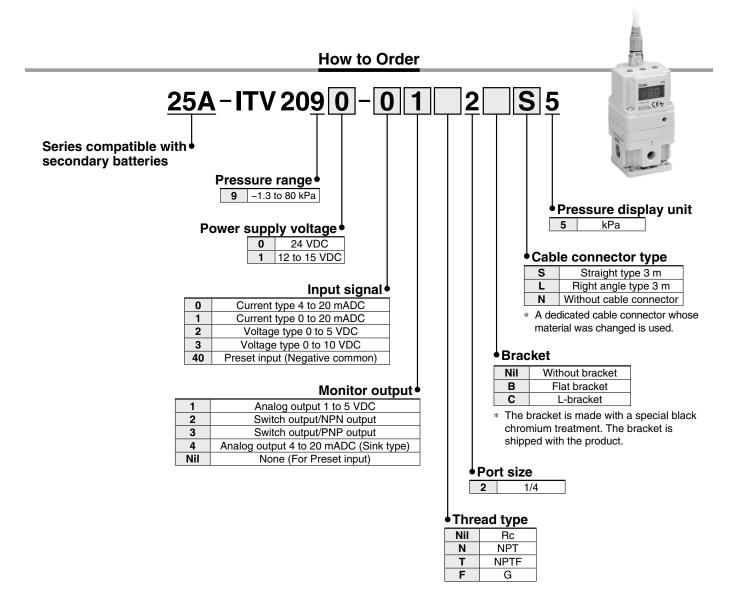
G

## 

## **Electronic Vacuum Regulator**



# 25A-ITV209 Series



- * Since the lead wires and electrical circuits are used, this product is not completely copper-free. Only the wetted parts are copper-free.
- Copper and zinc materials are used for solenoid valve coils, connector pins, and lead wire substrate.
- The 25A- series specifications and dimensions are the same as those of the standard model.



## **Booster Regulator**

## 25A-VBA Series ROHS



#### **How to Order**

25A - VBA 40A

Series compatible with secondary batteries

	•	Body size
10A	1/4", Handle-operated type	Broodure incresses
20A	3/8", Handle-operated type	Pressure increase ratio: Twice
40A	1/2", Handle-operated type	Tallo. Twice

Thread type*1 ◆

Symbol	Thread type
Nil	Rc
F	G
N	NPT
Т	NPTF

*1 Thread types apply to the IN, OUT, and EXH ports of the VBA10A and to the IN. OUT. EXH, and gauge ports of the VBA20A and VBA40A. The gauge ports of the VBA10A are Rc thread type regardless of the thread type indication.

#### Port size

Symbol	Port size	Applicable series
02	1/4	VBA10A
03	3/8	VBA20A
04	1/2	VBA40A

#### Option

Symbol Option			
Nil	None		
N	N Silencer		
S High-noise reduction silencer*1			
LN	LN Elbow silencer*1		
LS Elbow high-noise reduction silencer*			
	Nil N S LN		

- *1 Refer to "Combination of Thread Type and Options."
- * Pressure gauge is not available as an option.





**Combination of Thread Type and Options** 

			<u> </u>	•		
Pody size	Thread	Option				
Body size	type	Nil	N	S	LN	LS
	Nil	•	•	•	•	•
10A	F	•	•	•	•	•
IUA	N	•	•	_	•	_
	Т	•	•	_	•	_
	Nil	•	•	•		
20.4	F	•	•	•	]	
20A	N	•	•	•		
	Т	•	•	•		
40A	Nil	•	•	•		
	F	•	•	•		
	N	•	•	•	] //	-
	Т	•	•	•		

#### **⚠** Caution

- Not compatible with a low dew point
- VBA10A: Due to the close proximity of the IN and OUT sides of the gauge port and the handle of the booster regulator, a G43-10-01-X300/G46-SRB pressure gauge cannot be mounted as it will interfere with the handle. VBA20A/40A: The G43-10-01-X300/G46-SRB pressure gauge cannot be mounted as the mounting pitch of the IN and OUT sides of the gauge port of the booster regulator is smaller than the diameter of the pressure gauge. In order to mount the pressure gauge, piping which does not cause any interference must be prepared separately.

#### Air Tank Compatibility Chart

	patioiity			
Booster regulator	25A-VBA10A	25A-VBA20A	25A-VBA40A	
Air tank				
25A-VBAT05A1				
25A-VBAT05S1		_	_	
25A-VBAT10A1				
25A-VBAT10S1			_	
25A-VBAT20A1				
25A-VBAT20S1	_			
25A-VBAT38A1				
25A-VBAT38S1	_			

- * Refer to page 251 for details on air tanks.
- * The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.



# Air Tank 25A-VBAT Series



#### **How to Order**

- For the booster regulator, use the 25A-VBA.
- It can be used alone as a tank.



 The thread type for each port is Rc.



25A-VBAT 10 A 1

## Tank internal capacity

Symbol	Internal capacity
05	5 L
10	10 L
20	20 L
38	38 L

#### 

- SymbolMaterialACarbon steel (SS400)SStainless steel
- Order drain valve (VBAT-V2) separately.
- * Safety valve is not available as an option.

Series compatible with secondary batteries

#### **⚠** Caution

 When used as a single unit (not connected with a booster regulator) and pressurized at over 1 MPa at normal temperatures, the air tank falls under the scope of the "High Pressure Gas Safety Act" in Japan.

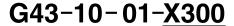
> * The 25A- series specifications and dimensions are the same as those of the standard model.

## **Pressure Gauge for General Purpose**

## G43-10-01-X300



#### **How to Order**



Internal/external parts copper-free type

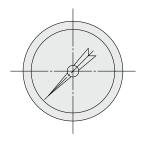
**Specifications** 

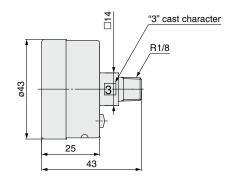
Type	Back side thread			
Thread type	R			
Pressure range	0-1.0 MPa			
Accuracy	±3% F.S			
Weight	82 g			

* The dimensions and shape may differ in some parts from those of the standard product.

#### **Dimensions**

#### G43-10-01-X300



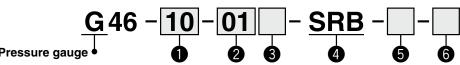


## Pressure Gauge for Clean Regulator/ With Limit Indicator

## G46-SRB



#### **How to Order**



		Symbol	Description	G46	
		+			
T		2	0.2 MPa	•	
		4	0.4 MPa	•	
V.	Max. display pressure	7	0.7 MPa	•	
1	wax. display pressure	10	1.0 MPa	•	
		P2 (1)	0.2 MPa, 30 psi	O (2)	
		P10 (1)	1.0 MPa, 150 psi	○ (2)	
_		+			
M.	Connection thread	01	R 1/8	•	
	Connection timead	02	R 1/4	•	
+					
	Option	Nil	_	•	
Option		M (3)	With M5 (Female thread)	•	
_		+			
	Grade	SRB	Component parts: General degreasing Assembly: General production line	•	
	•	+			
		Nil	Without cover ring assembly	•	
5	Attachment	С	Clear cover has no protrusion. (Clear cover is irremovable.)	•	
	Attacriment	C2	Clear cover has protrusion. (Clear cover is removable.) The wrench flats protrude.	•	
		+			
Special specification		Nil	_	•	
		X30	Both MPa and psi	○ (2)	

Note 1) This symbol must be used with Special specification "X30."



Note 2) Under the New Measurement Law, products for overseas use only (SI unit type for use in Japan)

Note 3) To use the pressure gauge with M5 (female thread), attach the joint when piping the tube. For combinations with the special specification products, please consult SMC separately.

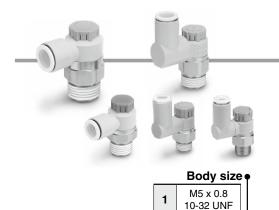
#### Speed Controller with One-touch Fitting Stainless Steel Type Push-lock Type

**Elbow Type/Universal Type** 

## S-FG Series **In-line Type** AS-FG Series

This product (standard product) is a secondary battery compatible product. For details on specifications and dimensions, refer to the Web Catalog.





**How to Order** 









#### Applicable tubing O.D. *1

06

#### Metric size 02 ø3.2 *2 04

Inch size 01 ø1/8" 03 ø5/32" 07 ø1/4"

Port size € **M5** M5 x 0.8 U10/32 10-32 UNF

*1 For selecting applicable tubing O.D., refer to the "Model" on the Web Catalog. The color of the release button is white (metric, inch).

*2 Ùse ø1/8" tube.

**Body size 1** 

Body size 2/3/4

AS 2 2 0 1 F G 06 S 01

#### Body size

2	1/8, 1/4		
3 3/8			
4	1/2		

	Type∙
2	Elbow
3	Universal

#### Control type *1 Meter-out Meter-in

*1 Meter-out and meter-in types can be visually identified by color of the knob. Meter-out: Gray Meter-in: Light blue

#### Stainless steel type (Stainless steel 303)

- * The material can be visually identified by color of the release
- Stainless steel type: White White is also used for inch size.

Thread type •

Nil	R
N	NPT
G	G

• Port size					
01	1/8				
02	1/4				
03	3/8				
04	1/2				

#### Seal method

- ocai illotiloa				
Nil	Without sealant			
S	With sealant			

Face seal method is used for the G thread type.

Push-lock type

Select "Nil/Without sealant." Example) AS2201FG-G01-06A

#### Applicable tubing O.D. *¹

#### Metric size

23	ø3.2 *2	0
04	ø4	0
06	ø6	0
08	ø8	0
10	ø10	1
12	ø12	1
16	ø16	

	Inch size *3				
٦	01	ø1/8"			
	03	ø5/32"			
	07	ø1/4"			
	09	ø5/16"			
	11	ø3/8"			
	13	ø1/2"			

*1 For selecting applicable tubing O.D., refer to the "Model" on the Web Catalog.

The color of the release button is white (metric, inch).

- *2 Use ø1/8" tube.
- *3 Only the metric size is available for the G thread type.



**How to Order** 





### AS 200 2 F G - 06 A

#### 

100	M5 standard		
200	1/8 standard		
205	1/4 standard		
300	3/8 standard		
400	1/2 standard		

With One-touch fittings

#### (Stainless steel 303)

The material can be visually identified by color of the release button.

Stainless steel type: White White is also used for inch size.

#### ◆Push-lock type

ø1/8"

ø5/32'

ø1/4"

ø5/16'

ø3/8"

ø1/2"

#### ♠ Applicable tubing O.D.*1 nch size

vietri	Inch	
23	ø3.2*2	01
04	ø4	03
06	ø6	07
08	ø8	09
10	ø10	11
12	ø12	13

*1	For selecting applicab	le
	tubing O.D., refer to th	16
	"Model" on the We	ı
	Catalog.	





**Speed Controller with Indicator Stainless Steel Series Elbow Type/Universal Type** 

S-FSG Series In-line Type AS-FSG Series

This product (standard product) is a secondary battery compatible product. For details on specifications and dimensions, refer to the Web Catalog.





**How to Order** 



8 Indicator window direction Elbow Universal





		P			<b>2</b>	<b>3</b>
Body size 1	AS	1 2 0	1F <u>S</u> <u>G</u>	<u>i</u>	M5 -	06
Body size 2/3/4	AS Z	2 2 0	1F \$ G		01 -	06 S
		9 6 6	With • Indicator	8 9	$\mathbf{\Phi}$	

#### Body size

4	M5 x 0.8
1	10-32 UNF

#### 2 Port size

M5	M5 x 0.8
U10/32	10-32 UNF

#### 6 Control type*1

0	Meter-out
1	Meter-in

*1 Meter-out and meter-in types can be visually identified by color of the knob. Meter-out: Gray Meter-in: Light blue

#### Applicable tubing O.D.*1

Wetric Size		Inch Size**		
23	ø3.2*2	01	ø1/8"	
04	ø4	03	ø5/32"	
06	ø6	07	ø1/4"	
08	ø8	09	ø5/16"	
10	ø10	11	ø3/8"	
12	ø12	13	ø1/2"	
16	ø16			

#### 3 Applicable tubing O.D.*1

Metric size		Inch size		
02	ø2	01	ø1/8"	
23	ø3.2*2	03	ø5/32"	
04	ø4	07	ø1/4"	
06	ø6			

- *1 For selecting applicable tubing O.D., refer to the "Model" on the Web Catalog. Metric size and inch size types can be visually identified by color of the release button. Stainless steel type: White White is also used for inch size.
- *2 Use ø1/8" tubing.

#### Stainless steel type

- * Metric size and inch size types can be visually identified by color of the release button. Stainless steel type: White
- White is also used for inch size.
  - *1 For selecting applicable tubing O.D., refer to the "Model" on the Web Catalog.
  - *2 Use ø1/8" tubing.
  - *3 Only the metric size is available for the G thread type.

#### 4 Body size

2	1/8, 1/4
3	3/8
4	1/2

Nil

1

2

3

0°

180°

90°

270°

Indicator window

#### Type

2	Elbow
3	Universal

#### 9 Thread type

	<b></b>
Nil	R
N	NPT
G	G

### Port size

_	
01	1/8
02	1/4
03	3/8
04	1/2
	., =

### Seal method

Nil	Without sealant		
S	With sealant		
Face (	and tune in upon		

Orientation of indicator direction is fixed when manufacturing, and cannot be changed by the user. In addition, the universal type is only available with 180° setting.

Face seal type is used for the G thread type. Select "Nil/Without sealant".

Example) AS2201FSG-G01-06







## **AS 200** indicator

#### Body size

100	M5 standard
200	1/8 standard
205	1/4 standard
300	3/8 standard
400	1/2 standard

#### Stainless steel type (Stainless steel 303)

- The material can be visually identified by color of the release button. Stainless steel type: White
- * White is also used for inch size.

#### 4 Applicable tubing O.D.*1

MELLI	C SIZE	IIICII SIZE					
23	ø3.2*2	08	ø8	01	ø1/8"	09	ø5/16"
04	ø4	10	ø10	03	ø5/32"	11	ø3/8"
06	ø6	12	ø12	07	ø1/4"	13	ø1/2"

*1 For selecting applicable tubing O.D., refer to the "Model" on the Web Catalog. *2 Use ø1/8" tubing.

	dicat	or direction			
Nil	0°	Index plate	2	90°	Index plate
1	180°	Indicator window Index plate	3	270°	Index plate



# Clean Speed Controller with One-touch Fitting

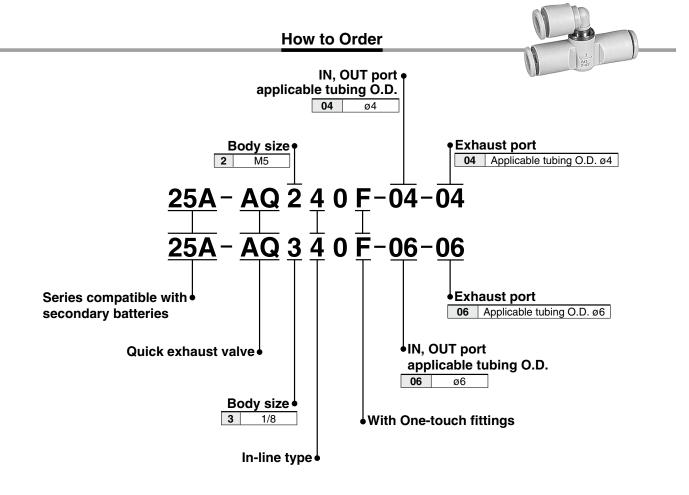
### AS-FPQ/AS-FPG Series





AS-FPQ: Brass (electroless nickel plated) and AS-FPG: Stainless steel 304 are now available as a series.

# Quick Exhaust Valve with One-touch Fittings 25A-AQ240F/340F Series



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

# Check Valve with One-touch Fittings

## 25A-AKH Series



#### **How to Order**

Straight type

**25A** - AKH **04** - 00

Series compatible with secondary batteries

♦ Applicable tubing O.D.

04	ø4
06	ø6
08	ø8
10	ø10
12	ø12

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



## **Rotary One-touch Fittings**

## 25A-KX Series



**High Speed Type** 

**How to Order** 

25A-KXH06-01S

Series compatible with secondary batteries

Rotary One-touch fittings High speed type

#### Model •

Symbol	Model
Н	Male connector
1	Male elbow

#### Bore size

Syn	nbol	Size
	M5	M5 x 0.8
tion	01S	R1/8
Thread	02S	R1/4
Thread connection	G01	G1/8
Ŭ	G02	G1/4

**♦** Applicable tubing O.D.

Symbol	Size	
04	ø4	
06	ø6	
08	ø8	
10	ø10	

#### **Applicable Tubing**

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø4, ø6, ø8, ø10

#### **KX Series**

Model	Connection thread	Applicable tubing O.D. [mm]						
iviodei	Connection timeau	ø <b>4</b>	ø <b>6</b>	ø <b>8</b>	ø <b>10</b>			
	T							
Male connector 25A-KXH	M5 x 0.8	•	•					
	R 1/8		•	<del>-</del>				
	R 1/4		•		<u> </u>			
	G 1/8		•	+	<del></del>			
	G 1/4		•	<del>-</del>	<u> </u>			
Male elbow 25A-KXL	M5 x 0.8	<del>-</del>	•					
	R ¹ /8		•	<del>-</del>				
	R 1/4		•		<u> </u>			
	G ¹ /8		•	<del>-</del>	<u> </u>			
	G 1/4		•	<del>-</del>	•			

^{*} The 25A- series specifications are the same as those of the standard model.

The G thread dimensions vary from those of the standard product. Refer to page 258-2 for details.

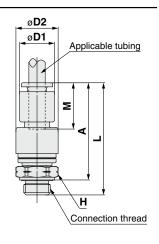


## Rotary One-touch Fittings 25A-KX Series

#### Male Connector: KXH (High speed)



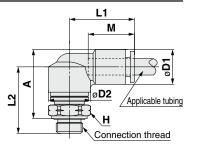
Applicable tubing O.D. [mm]	Connection thread	Model	(Width across flats)	ø <b>D</b> 1	ø <b>D2</b>	L	Α	М	Min. port size	Effectiv [mi		Weight [g]	
-	6	G1/8	25A-KXH06-G01	14	12.8	15.5	41.2	35.7	17	4	10.4	10.4	21
Ī	8	G1/8	25A-KXH08-G01	17	15.2	18	46.1	40.6	18.5	6	26.1	18	30
	10	G1/4	25A-KXH10-G02	22	18.5	24.5	55.1	48.6	21	7	36.3	29.5	67



#### Male Elbow: KXL (High speed)



oplicable oing O.D. [mm]	Connection thread	Model	(Width across flats)		ø <b>D2</b>	L1	L2	A	М	port	Effectiv [mi	m²]	(n)
6	G1/8	25A-KXL06-G01	14	12.8	15.5	24	24.5	25.4	17	4	8.6	8.6	21
8	G1/8	25A-KXL08-G01	17	15.2	18	27	28.5	30.6	18.5	6	21.6	14.9	30
10	G1/4	25A-KXL10-G02	22	18.5	24.5	32	35.2	37.9	21	7	30.5	25	68



## One-touch Fittings Stainless Steel

### KQ2-G Series



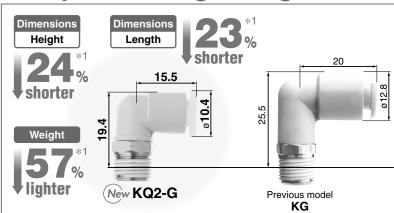
Metal material: Stainless steel 303

## Improved tube insertion/removal



*1: Tube removal strength is ensured to be equivalent to previous model.

## **Compact and lightweight**



*1: Previous KG series model: Male elbow, applicable tubing O.D. Ø6, connection thread R1/8

## Body type: total of **27** models



## Clean One-touch Fittings

## KP/KPQ/KPG Series



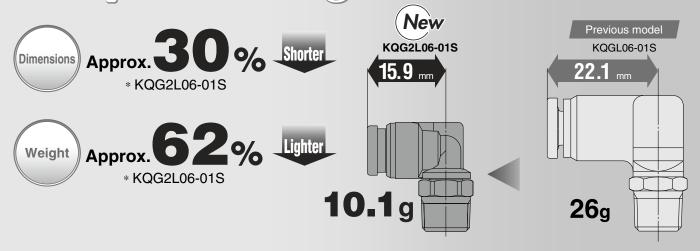


## Stainless Steel 316 Fittings

### KQG2 Series



## **Compact and Light**



#### **Material**

## Stainless steel 316

Seal parts: Special FKM

Fluid temperature

-**5** to **150**°c

Applicable tubing

Metric size, Inch size

**Connection thread** 

M, R, Rc, UNF, NPT

- O Grease-free/Can be used with steam.
- Certified to meet current Food Sanitation Law standards.

(Component materials have met apparatuses and container-packages standards.)



## Stainless Steel 316 Fittings

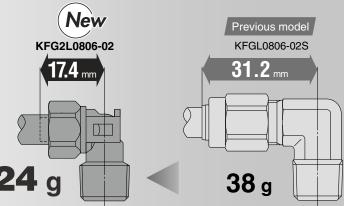
## KFG2 Series



## **Compact and Light**







**Material** 

# Stainless steel 316

Rubber material is not used. (Except swivel elbow)

Fluid temperature

-65 to 260°C (Swivel elbow: -5 to 150°C)

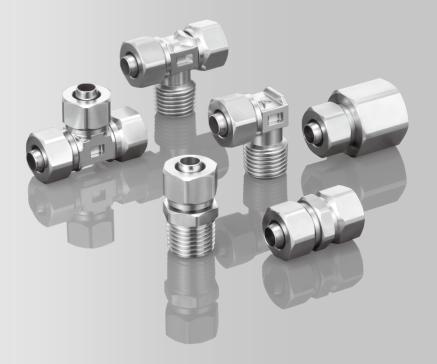
**Applicable tubing** 

Metric size, Inch size

**Connection thread** 

R, Rc, NPT

- O Grease-free/Can be used with steam.
- Certified to meet current Food Sanitation Law standards. (Component materials have met apparatuses and container-packages standards.)



## Miniature Fittings Stainless Steel 316

## MS Series



Applicable Tubes: Ø3.2, Ø4, Ø6 Connection Thread: M5, R 1/8

This product (standard product) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

## For use in corrosive environments Stainless steel 316

#### Compact piping space

Tube has a large retaining force. Hose nipple assures easy installation and removal.

#### Line up various types

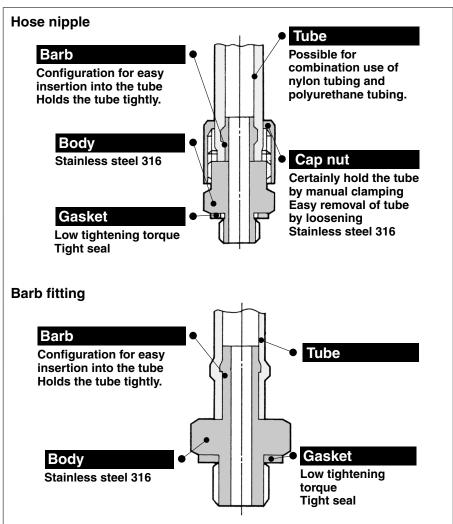
Possible for special tubing in the same direction. Accepts many types of plastic tubing

#### Hose nipple and hose elbow

Accepts nylon, soft nylon, and polyure-thane tubing.







#### **Specifications**

Applicable tubing material	Nylon	Nylon Soft nylon Po		Polyurethane	PFA (1)	FEP (2)	Modified PTFE (3)	Wear resistant polyurethane (4)	
Applicable tubing O.D./I.D.	ø4/ø2.5 ø6/ø4	ø3.18/ø2.18		ø3.18/ø2 ø4/ø2.5 ø6/ø4	ø4/ø2.5 ø6/ø4	ø4/ø2.5 ø6/ø4	ø4/ø2.5 ø6/ø4	ø4/ø2.5 ø6/ø4	
Fluid				Air, N2, W	Water (5, 6, 7)				
Maximum operating pressure (at 20°C)	1.5 MPa	1 MPa		0.8 MPa	1 MPa	1.5 MPa	1.4 MPa	0.8 MPa	
Ambient and fluid temperature			5 to 60°C,	Water: 0	to 40°C (No freezing)				
Connection size		M5,	R1/8		M5				
Thread		0205 (Me 03 (Taper		,	JIS B0205, Class 2 (Metric fine thread)				

Note 1) , Note 2) , Note 3) , Note 4) Applicable only for hose nipple type.

Note 5) Barb fitting, barb elbow and barb tee are not compatible with water.

Note 6) Deionized water is not recommended for use as it may affect the material used in the fittings. In addition, it is known to degrade the water quality.

Note 7) As the universal nipple comes with grease, it cannot be used when N2 is used as clean, dry air.

#### **Principal Parts Material**

Metarial	Body	Stainless steel 316				
Material	Gasket	PVC, Nylon 66, GF30%				



# Rectangular Multi-connector 25A-KDM Series

No. of Connecting Tubes: 20



#### **How to Order**

25A-KDM 20-06

Series compatible with secondary batteries

No. of connecting tubes

#### **Applicable Tubing**

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane	
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**♦** Tubing O.D.

#### Metric size

Symbol	Size	Color of release button	
23	ø3.2		
04	ø4	Blue	
06	ø6		

#### Inch size

Symbol	Size	Color of release button
01	ø1/8"	
03	ø5/32"	Red
07	ø1/4"	

* The 25A- series specifications and dimensions are the same as those of the standard model.



### S Couplers Stainless steel type

### KKA Series





Body material: Stainless steel 304

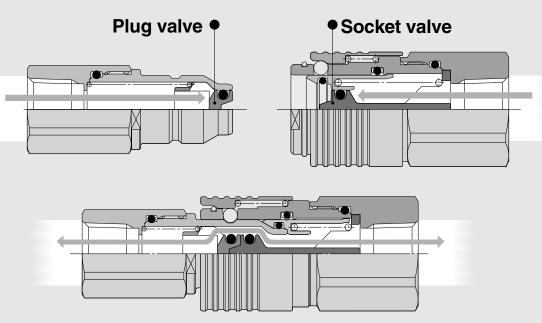
Seal material: Fluororubber (Special FKM)

Both plug and socket have an integral check valve.

Available with and without check valves depending on the operating conditions.

Reduces liquid dripping when the plug and socket are uncoupled.

Liquid dripping: 0.02 to 0.77 cm³ at each removal Aeration: 0.1 to 2.7 cm³ at each removal



Non-greased specification (standard)

Allows smooth installation and removal even without grease

- O-ring: Fluorine coated
- Sliding parts of plug and socket: Fluorine coated is used.
- Fluid: Water, Air
- Operating temperature range: -5 to 150°C

Note) This product should not be used with steam.





### **Nylon Tubing T**



- General pneumatic tubing
- Max. operating pressure: 3.0 MPa (T0604, at 20°C)

Series	Tubing O.D.		Color	Fluid
	Metric size	Inch size	Color	Fluid
T/TIA	ø4, ø6, ø8, ø10 ø12, ø16	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2"	Black, White, Red, Blue, Yellow, Green	Air, Water Turbine oil class 1 (ISO VG32)*1

^{*1} Refer to the catalog for more information on using the product.

### **Soft Nylon Tubing TS**



• Max. operating pressure: 1.7 MPa (TS0604, at 20°C)

Carios	Tubing O.D.		Color	Fluid	
Series	Metric size	Inch size	Color	Fiuld	
TS/TISA	ø4, ø6, ø8, ø10 ø12, ø16	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2"	Black, White, Red, Blue, Yellow, Green	Air, Water Turbine oil class 1 (ISO VG32)*1	

^{*1} Refer to the catalog for more information on using the product.

### Polyurethane Tubing TU



- Max. operating pressure: 0.8 MPa (at 20°C)
- Made to Order

100 m reel/Longer length reel/20 m roll (-X4)

Compatible with the Food Sanitation Law/FDA (U.S. Food and Drug Administration)/

Complies with the EU No 10/2011 dissolution test

Carias	Tubing O.D.		Color	Fluid
Series	Metric size	Inch size	Color	Fluid
TU/TIUB	ø2, ø4, ø6, ø8 ø10, ø12, ø16	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2"	Black, White, Red, Blue, Yellow, Green, Clear, Orange, and more (Total 29 colors)	Air, Water

### **Antistatic Soft Nylon Tubing TAS**



- Max. operating pressure: 1.2 MPa (at 20°C)
- For preventing static electricity

Series	Tubing O.D.	Color	Fluid	
Series	Metric size	Color	Fluid	
TAS	ø3.2, ø4, ø6, ø8, ø10, ø12	Black	Air	

### **Antistatic Polyurethane Tubing TAU**



- Max. operating pressure: 0.9 MPa (at 20°C)
- For preventing static electricity

Series	Tubing O.D.	Color	Fluid	
Series	Metric size	Color		
TAU	ø3.2, ø4, ø6, ø8, ø10, ø12	Black	Air	

### Fluoropolymer Tubing TL/TIL



- Max. operating pressure: 1.0 MPa (at 20°C)
- Operating temperature (fixed usage): -65 to 260°C
- Food Sanitation Law compliant
- Complies with the FDA (Food and Drug Administration) § 177.1550 dissolution test

Series	Tubin	Color	
	Metric size	Inch size	Coloi
TL/TIL	ø4, ø6, ø8, ø10 ø12, ø19	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2", ø3/4", ø1"	Translucent

### FEP Tubing (Fluoropolymer) TH/TIH



- Max. operating pressure: 2.3 MPa (at 20°C)*1
- Food Sanitation Law compliant
- Complies with the FDA (Food and Drug Administration) § 177.1550 dissolution test
- Operating temperature (fixed usage): Air, Inert gas: -65 to 200°C

Water: 0 to 100°C (No freezing)

*1 This may vary according to size.

Series	Tubing O.D.		Color	
	Metric size	Inch size	Coloi	
TH/TIH	ø4, ø6, ø8, ø10, ø12	ø1/8", ø3/16", ø1/4", ø3/8", ø1/2", ø3/4"	Translucent, Black, Red, Blue	

### **Soft Fluoropolymer Tubing TD/TID**



- Max. operating pressure: 1.6 MPa (at 20°C)*1
- Food Sanitation Law compliant
- Complies with the FDA (Food and Drug Administration) § 177.1550 dissolution test
- Operating temperature (fixed usage): Air, Inert gas: -65 to 260°C
   Water: 0 to 100°C (No freezing)
  - 1 This may vary according to size
- *1 This may vary according to size.

Series	Tubing O.D.		Color
Series	Metric size	Inch size	Color
TD/TID	ø4, ø6, ø8, ø10, ø12	ø1/8", ø3/16", ø1/4", ø3/8", ø1/2"	Translucent

### **Soft Polyolefin Tubing TPS**



- Max. operating pressure (at 20°C): 0.7 MPa (ø4 to ø12)
- Complies with the FDA (Food and Drug Administration) § 175.300 dissolution test (White, Blue, Yellow only)

Series	Applicable tubing O.D.	Color	Fluid
TPS	ø4, ø6, ø8, ø10, ø12	Black, White, Red, Blue, Yellow, Green	Air, Water, etc.

### **Moisture Control Tube IDK**

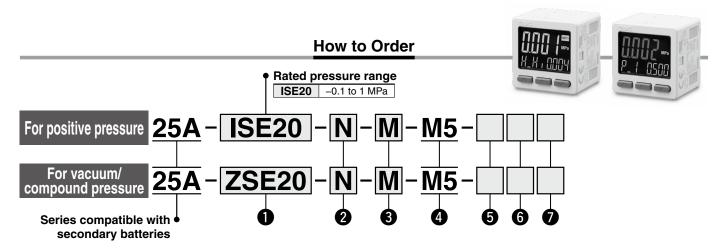


- Prevents condensation in piping for small cylinders/air grippers
- $\bullet$  Diffuses water vapor in the piping to the outside
- All you have to do is install the moisture control tube.
   Additional power supplies and works are not necessary.

Series	O.D./I.D. [mm]	Effective length [mm]	Applicable fittings
IDK02 (Linear shape)	2/1.2		KQ2
IDK04 (Linear shape)	4/2.5	100	KQ2
IDK06 (Linear shape)	6/4		KQ2
IDK04-100-C1 (Coil shape)	4/2.5	100	KQ2







### Rated pressure range

ZSE20	0 to -101 kPa
ZSE20F	-100 to 100 kPa

### 2 Output specification

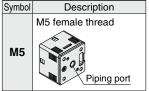
Symbol	Description
N	NPN open collector 1 output
Р	PNP open collector 1 output

### 3 Unit specification

Symbol	Description	
Nil	Units selection function*1	
M	SI unit only*2	
Р	Units selection function (Initial value psi)*1	

- *1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.
- *2 Fixed unit: kPa, MPa

### 4 Piping specification



**5** Option 1

Symbol	Description		
Nil	Without lead	l wire	
L	Lead wire with connector (3-core, 2 m lead wire)	Without waterproof cover	ZS-46-3L

**7** Option 3

Symbol	Operation manual*1	Calibration certificate*1
Nil	0	_
Υ	_	_
K	0	0
T	_	0

^{*1} All texts are in both English and Japanese.

### **6** Option 2

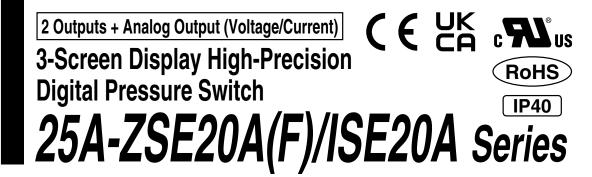
Symbol	Description	
Nil	None	
В	Panel mount adapter	ZS-46-B
D	Panel mount adapter + Front protection cover	ZS-46-D

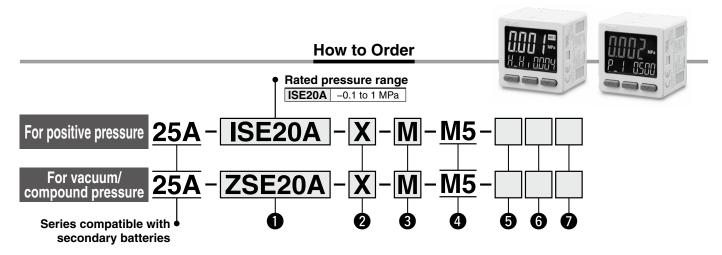
### Options/Part Nos.

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Description	Part no.	Note	
Panel mount adapter	ZS-46-B	_	
Panel mount adapter + Front protection cover	ZS-46-D	_	
Lead wire with connector	ZS-46-3L	3-core, 2 m, Non-waterproof (Without waterproof cover)	
Front protection cover	ZS-27-01	_	

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.







### Rated pressure range

	<u> </u>
ZSE20A	0 to -101 kPa
ZSE20AF	-100 to 100 kPa

### 2 Output specification

Symbol	Description	
R	NPN open collector 2 outputs + Analog voltage output *1	
S	NPN open collector 2 outputs + Analog current output *1	
T	PNP open collector 2 outputs + Analog voltage output *1	
V	PNP open collector 2 outputs + Analog current output *1	
X	NPN open collector 2 outputs + Copy function	
Υ	PNP open collector 2 outputs + Copy function	

*1 Can be switched to auto-shift or copy function

### **3** Unit specification

Symbol	Description	
Nil	Units selection function*1	
M	SI unit only*2	
Р	Units selection function (Initial value psi)*1	

- *1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.
- *2 Fixed unit: kPa, MPa

### 4 Piping specification

Symbol	Description	
	M5 female thread	
M5	Piping port	

### **5** Option 1

Symbol	Description		
Nil	Without lead	l wire	
J	Lead wire with connector (5-core, 2 m lead wire)	Without waterproof cover	ZS-46-5L

### Option 3

Symbol	Operation manual*1	Calibration certificate*1
Nil	0	_
Υ	_	_
K	0	0
Т	_	0

*1 All texts are in both English and Japanese.

### 6 Option 2

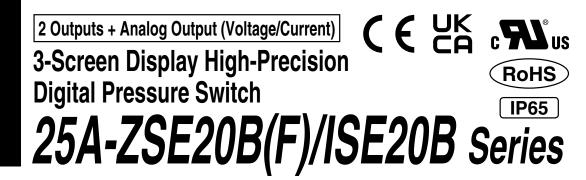
Symbol	Description	
Nil	None	
В	Panel mount adapter	ZS-46-B
D	Panel mount adapter + Front protection cover	ZS-46-D

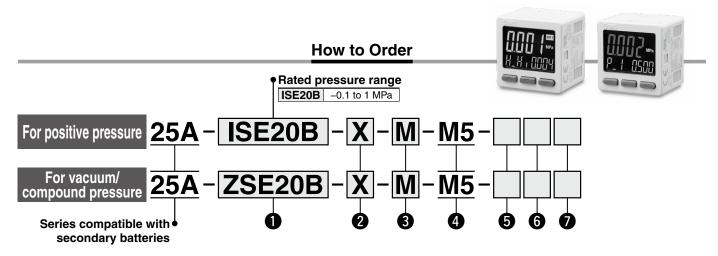
### Options/Part Nos.

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Description	Part no.	Note
Panel mount adapter	ZS-46-B	_
Panel mount adapter + Front protection cover	ZS-46-D	_
Lead wire with connector	ZS-46-5L	5-core, 2 m, Non-waterproof (Without waterproof cover)
Front protection cover	ZS-27-01	_

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.







### Rated pressure range

ZSE20B	0 to -101 kPa
ZSE20BF	-100 to 100 kPa

### 2 Output specification

Symbol	Description	
R	NPN open collector 2 outputs + Analog voltage output *1	
S	NPN open collector 2 outputs + Analog current output *1	
Т	PNP open collector 2 outputs + Analog voltage output *1	
V	PNP open collector 2 outputs + Analog current output *1	
Х	NPN open collector 2 outputs + Copy function	
Υ	PNP open collector 2 outputs + Copy function	

^{*1} Can be switched to auto-shift or copy function

### **3** Unit specification

Symbol	Description
Nil	Units selection function*1
M	SI unit only*2
Р	Units selection function (Initial value psi)*1

- *1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.
- *2 Fixed unit: kPa, MPa

### 4 Piping specification

Symbol	Description
	M5 female thread
М5	Piping port

### **5** Option 1

Symbol	Description		
Nil	Without lead	l wire	
w	Lead wire with connector (5-core, 2 m lead wire, With waterproof cover)	With waterproof cover	ZS-46-5F

### Option 3

Symbol	Operation manual*1	Calibration certificate*1
Nil	0	_
Υ	_	_
K	0	0
Т	_	0

^{*1} All texts are in both English and Japanese.

### 6 Option 2

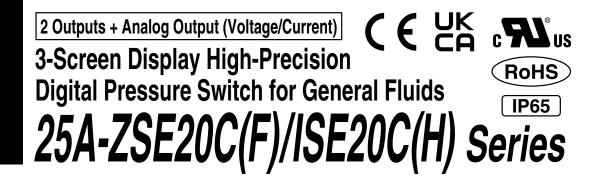
Symbol	Description	
Nil	None	
В	Panel mount adapter	ZS-46-B
D	Panel mount adapter + Front protection cover	ZS-46-D

### Options/Part Nos.

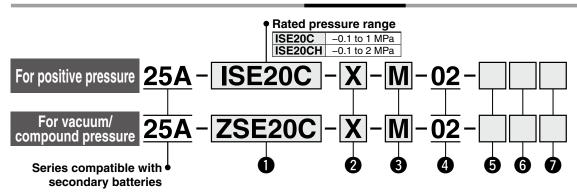
Description	Part no.	Note
Panel mount adapter	ZS-46-B	_
Panel mount adapter + Front protection cover	ZS-46-D	_
Lead wire with connector	ZS-46-5F	5-core, 2 m, Waterproof (With waterproof cover)
Front protection cover	ZS-27-01	_

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.





### **How to Order**



### Rated pressure range

ZSE20C	0 to -101 kPa
ZSE20CF	-100 to 100 kPa

### 2 Output specification

Symbol	Description	
R	NPN open collector 2 outputs + Analog voltage output*1	
S	NPN open collector 2 outputs + Analog current output*1	
T	PNP open collector 2 outputs + Analog voltage output*1	
V	PNP open collector 2 outputs + Analog current output*1	
X	NPN open collector 2 outputs + Copy function	
Y	PNP open collector 2 outputs + Copy function	

*1 Can be switched to auto-shift or copy function

### 3 Unit specification

Symbol	Description	
Nil	Units selection function*1	
М	SI unit only*2	
Р	Units selection function (Initial value psi)*1	

- *1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.
- *2 Fixed unit: kPa, MPa

### 4 Piping specification

Symbol	Description			
02	R1/4 (M5 female threaded)			

### **5** Option 1

Symbol		Description					
Nil	Without lead	wire					
w	Lead wire with connector, 5-core (2 m lead wire, With waterproof cover)	ZS-46-5F With waterproof cover					

Option 3

Symbol	Operation manual*1	Calibration certificate*1
Nil	0	_
Υ	_	_
K	0	0
Т	_	0

*1 All texts are in both English and Japanese.

### 6 Option 2

Symbol	Description			
Nil	None			
В	Panel mount adapter	ZS-46-B		
D	Panel mount adapter + Front protection cover	ZS-46-D		

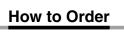
### Options/Part Nos.

Description	Part no.	Note
Panel mount adapter	ZS-46-B	Rear ported
Panel mount adapter + Front protection cover	ZS-46-D	Rear ported
Lead wire with connector	ZS-46-5F	5-core, 2 m, Waterproof (With waterproof cover)
Front protection cover	ZS-27-01	Rear ported

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.



# 2-Color Display Digital Flow Switch 25A-PF2M7 Series



25A-PF2M 7 10 -C6-A W-M atible Integrated display 0 0 0 0 0

Series compatible with secondary batteries

### Rated flow range

01	0.01 to 1 L/min
02	0.02 to 2 L/min
05	0.05 to 5 L/min
10	0.1 to 10 L/min

25	0.3 to 25 L/min
50	0.5 to 50 L/min
11	1 to 100 L/min
21	2 to 200 L/min

### 2 Piping entry direction

Symbol	Piping entry	Rated flow range							
Symbol	direction	1	2	5	10	25	50	100	200
Nil	Straight	•	•	•	•	•	•	•	•
L	Rear ported	•	•	•	•	•	•	•	•

### 3 Port size

Cumbal	Dort oizo	Rated flow range							
Symbol	Port size	1	2	5	10	25	50	100	200
01	Rc1/8	•	•	•	•		•	_	_
N1	<b>N1</b> NPT1/8		•	•	•	•	•	_	_
F1	<b>F1</b> G1/8		•	•	•	•	•	_	_
<b>02</b> Rc1/4		_	_	_	_	_	_	•	•
N2	<b>N2</b> NPT1/4		_	_	_	_	—	•	
<b>F2</b> G1/4		_	_	_	_	_	_	•	•
<b>C6</b> ø6		•	•	•	•	•	•	_	_
<b>C8</b> Ø8		—	_	_	_	_	_	•	

### **Piping variations**

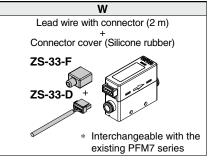
With One-touch fitting	Female thread
C6, C8	01, 02, N1, N2, F1, F2
Straight	Straight
0	
Rear ported	Rear ported

4 Output specification

Symbol	OUT1	OUT2		
Α	NPN	NPN		
В	PNP	PNP		
С	C NPN Analog 1 to 5 V ⇔ Analog 0 to 10 V*1			
D	NPN	Analog 4 to 20 mA		
E	PNP	Analog 1 to 5 V $\Leftrightarrow$ Analog 0 to 10 V*1		
F	PNP	Analog 4 to 20 mA		

 $*1\,$  1 to 5 V or 0 to 10 V can be selected by pressing the button. The default setting is 1 to 5 V.

### **6** Option 1



### 6 Unit specification

M	SI unit only*2
Nil	Unit selection function*3

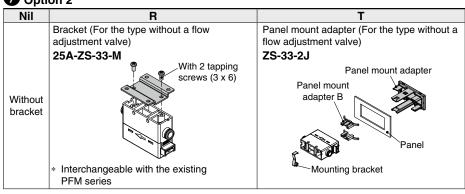
- *2 Fixed unit: Instantaneous flow: L/min Accumulated flow: L
- *3 This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)
  The unit can be changed.
  Instantaneous flow: L/min ⇔ cfm Accumulated flow: L ⇔ ft³

### 8 Calibration certificate*4

Nil	None
Α	Yes

*4 Made to order
The certificate is in both
English and Japanese.

### Option 2



* Options are shipped together with the product but do not come assembled.

* The 25A- series specifications and dimensions are the same as those of the standard model.

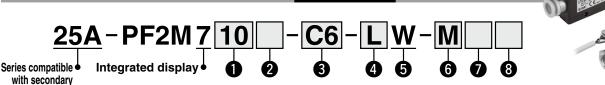




# 2-Color Display Digital Flow Switch RoHS

## 25A-PF2M7-L Series





batteries

Rated flow range

01	0.01 to 1 L/min
02	0.02 to 2 L/min
05	0.05 to 5 L/min
10	0.1 to 10 L/min

Pining entry direction

25	0.3 to 25 L/min
50	0.5 to 50 L/min
11	1 to 100 L/min
21	2 to 200 L/min

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Symbol	Piping entry		Rated flow range						
Symbol	direction	1	2	5	10	25	50	100	200
Nil	Straight	•	•	•	•	•	•	•	•
L	Rear ported	•	•	•	•	•	•	•	•

3 Port size

Symbol	Port size	Rated flow range							
Syllibol	FUIT SIZE	1	2	5	10	25	50	100	200
01	Rc1/8	•	•	•	•	•	lacktriangle	_	_
N1	NPT1/8	•	•	•	•	•	•	_	_
F1	G1/8		•	•	•		•	_	_
02	Rc1/4	_	_	_		_	_	•	
N2	NPT1/4	_	<u> </u>	_		_	_	•	
F2	G1/4	_	_	_	_	_	_	•	•
C6	ø6	•	•	•	•		•	_	_
C8	ø8	_	_	_	_		_	•	•

**Piping variations** 

With One-touch fitting	Female thread
C6, C8	01, 02, N1, N2, F1, F2
Straight	Straight
0	
Rear ported	Rear ported

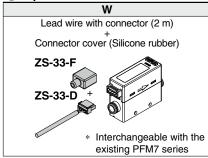
4 Output specification

Symbol	OUT1	OUT2
L	IO-Link/ NPN/PNP	_
L2	IO-Link/ NPN/PNP	NPN/PNP/External input
L3	IO-Link/ NPN/PNP	Analog 1 to 5 V ⇔ Analog 0 to 10 V*1
L4	IO-Link/ NPN/PNP	Analog 4 to 20 mA

^{*1 1} to 5 V or 0 to 10 V can be selected by pressing the button.

The default setting is 1 to 5 V.

**5** Option 1



6 Unit specification

М	SI unit only*2	
Nil	Unit selection function*3	

- *2 Fixed unit: Instantaneous flow: L/min Accumulated flow: L
- *3 This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)

  The unit can be changed.
  Instantaneous flow: L/min ⇔ cfm Accumulated flow: L ⇔ ft³

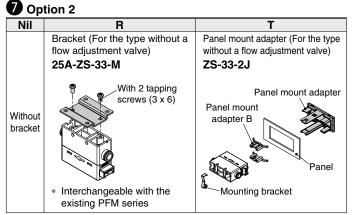
### 8 Calibration certificate*4

Nil	None
Α	Yes

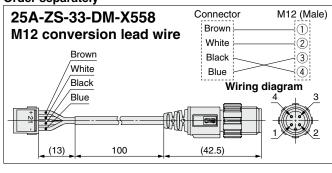
*4 Made to order

Order separately

The certificate is in both English and Japanese.



* Options are shipped together with the product but do not come assembled.



* The 25A- series specifications and dimensions are the same as those of the standard model.

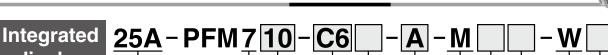


### 2-Color Display Digital Flow Switch Integrated display ( E UK



## 25A-PFM7 Series

### **How to Order**



Series compatible with secondary batteries

display

7 Integrated display

### Rated flow range (Flow rate range)

	0.2 to 10 (5) L/min
	0.5 to 25 (12.5) L/min
50	1 to 50 (25) L/min
11	2 to 100 (50) L/min

* ( ): Fluid: CO2

### Port size

Symbol	Description	Flow rate range			
Syllibol	Description	10	25	50	11
01	Rc1/8				_
02	Rc1/4	_	_	_	
N01	NPT1/8				_
N02	NPT1/4	_	_	_	
F01	G1/8				_
F02	G1/4	_	_	_	
C6	ø6 One-touch fitting				
C8	ø8 (5/16") One-touch fitting	_			

### Piping entry direction

Nil	Straight
L	Bottom

### Output specifications

Α	2 NPN outputs	
В	2 PNP outputs	
С	1 NPN output + Analog output (1 to 5 V)	
D	1 NPN output + Analog output (4 to 20 mA)	
E	1 PNP output + Analog output (1 to 5 V)	
F	1 PNP output + Analog output (4 to 20 mA)	
G	1 NPN output + External input*3	
Н	1 PNP output + External input*3	

^{*3} User can select from accumulated value external reset, auto-shift and auto-shift zero.

#### Unit specifications

Nil	With unit switching function*2
M	Fixed SI unit*1

- *1 Fixed unit: Instantaneous flow: L/min Accumulated flow: L
- *2 This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)

### Option 1 Lead wire with connector (2 m)

Rubber cover for connector (Silicon rubber)

### Calibration certificate

Nil	None	
A With calibration certifica		

The certificate is written in both English and Japanese. Other languages are available as specials.

### Operation manual

Nil	With operation manual (Japanese and English)
N	None

	Option 2
Nil	None
	Bracket (For the type without a flow adjustment valve) 25A-ZS-33-M
R	Mounting screw (Accessory)
	Panel mount adapter (For the type without a flow adjustment valve)  ZS-33-J  Panel mount adapter A
т	Panel mount adapter B
	Panel Mounting bracket

- * The 25A- series specifications and dimensions are the same as those of the standard model.
- * Digital flow switch with flow adjustment valve is not standard product. It can be supplied as Made-to-Order separately.



### 2-Color Display

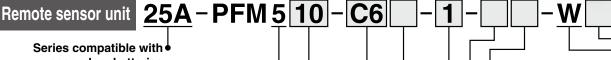


### Digital Flow Switch Remote sensor unit



# 25A-PFM5 Series

### **How to Order**



secondary batteries

Type • 5 Remote sensor unit

### Rated flow range (Flow rate range)

10	0.2 to 10 (5) L/min	
25	0.5 to 25 (12.5) L/min	
50	1 to 50 (25) L/min	
11	2 to 100 (50) L/min	

* (): Fluid: CO₂

### 

Nil	Straight
L	Bottom

### Output specification

l	No.	Description	Applicable display unit
ĺ	1	Analog output (1 to 5 V)	25A-PFM30□
ĺ	2	Analog output (4 to 20 mA)	25A-PFM31□

### Calibration certificate

Nil	None		
Δ	With calibration certificate		

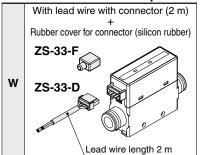
The certificate is written in both English and Japanese. Other languages are available as specials.

### Operation manual

Nil	With operation manual (Japanese and English)
N	None

### Option 1

Option 2



#### Port size

Cumbal	Description		Flow rate range				
Symbol	Description	10	25	50	11		
01	Rc1/8	•	•	•			
02	Rc1/4				•		
N01	NPT1/8		•	•			
N02	NPT1/4				•		
F01	G1/8* ¹		•	•			
F02	G1/4*1				•		
C6	ø6 One-touch fitting	•	•	•	•		
C8	ø8 (5/16") One-touch fitting		•	•	•		

*1 ISO 228-1 compliant

	Nil	R	T
		Bracket	Panel mount adapter
		(For the type without a flow adjustment valve)	(For the type without a flow adjustment valve)
		25A-ZS-33-M	<b>ZS-33-J</b> Panel mount
		Mounting screw	adapter A
	None	(accessory)	Panel mount adapter B
	140110		
			Panel
•			Mounting bracket

· Options are shipped together with the product but do not come assembled.

#### Pining Variations

riping variations					
	With One-touch fittings (C6, C8)		Female thread (01, 02, N01, N02, F01, F02)		
	Straight (Nil)	Bottom (L)	Straight (Nil)	Bottom (L)	
Without flow adjustment valve (Nil)					

### For 25A-PFM5

### **Flow Sensor Monitor**

### RoHS

## 25A-PFM3 Series

### **How to Order**



#### Output specification •

0	2 NPN outputs + 1 to 5 V output		
1	2 NPN outputs + 4 to 20 mA output		
2	2 NPN outputs + External input*1		
3	2 PNP outputs + 1 to 5 V output		
4	2 PNP outputs + 4 to 20 mA output		
5	2 PNP outputs + External input*1		

*1 User can select from accumulated value external reset, auto-shift and auto-shift zero. Operation manual

Nil	With operation manual (Japanese and English)
N	None

#### Calibration certificate

Odinbration continuate				
Nil None				
Δ	With calibration certificate			

 The certificate is written in both English and Japanese. Other languages are available as specials.

### 25A-PFM300-ML

Series compatible •
with secondary
batteries

3 Remote display unit

### Input specification

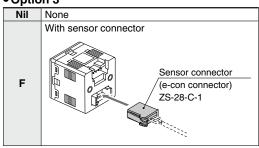
Symbol Content Applicable remote type s		Applicable remote type sensor unit
0	Voltage input	25A-PFM5□□-□-1-□
1	Current input	25A-PFM5□□-□-2-□

### Unit specification

Nil	With unit switching function*1	
М	Fixed SI unit*2	

- *1 Under the New Measurement Act, flow sensor monitors with the unit switching function are not permitted for use in Japan.
- *2 Fixed unit: Instantaneous flow: L/min Accumulated flow: L

### Option 3



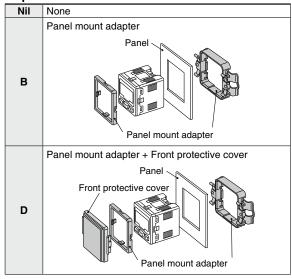
* The connector does not come connected, but it is shipped together with the product.

### Option 1

Nil	None
	Power supply/Output connector
L	Power supply/ Output connector ZS-28-A

 The cable does not come connected, but it is shipped together with the product.

### Option 2



Options are shipped together with the product but do not come assembled

### Options/Part Nos.

Description	Part no.	Note
Power supply/Output connector (2 m)	ZS-28-A	
Sensor connector	ZS-28-C-1	1 pc.
Panel mount adapter	ZS-46-B	
Panel mount adapter + Front protective cover	ZS-46-D	

* The 25A- series specifications and dimensions are the same as those of the standard model.

### 2-Color Display

### **Digital Flow Switch**

# 25A-PFMB7 Series

### **How to Order**

25A-PFMB7501-04-AW-M

Series compatible with secondary batteries

Rated flow range (Flow rate range)

~g~ \.		101111111111111111111111111111111111111	
501		5 to 500 L/min	
	102	10 to 1000 L/min	
	202	20 to 2000 L/min	

### Thread type

Nil	Rc
N	NPT
F	G *1

*1 ISO 228 compliant

#### Port size

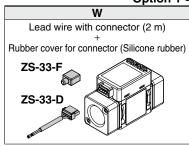
	Port	Rated flow range		
	size	501	102	202
04	1/2	•	•	_
06	3/4	_	_	•

Output specification

	OUT1	OUT2	Applicable monitor unit model
Α	NPN	NPN	_
В	PNP	PNP	_
С	NPN	Analog 1 to 5 V	PFG300 series
D	NPN	Analog 4 to 20 mA	PFG310 series
E*1	PNP	Analog 1 to 5 V	PFG300 series
F*1	PNP	Analog 4 to 20 mA	PFG310 series
G*1	NPN	External input *2	_
H*1	PNP	External input *2	_

- *1 Made to order
- *2 Accumulated flow value, peak/bottom flow value can be reset by external signal input.

#### Option 1

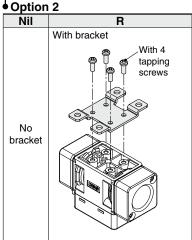


When only optional parts are required, refer to Option 1/Part Nos. below.

#### ◆Calibration certificate *1

Nil	None
<b>A</b> *2	With calibration certificate

- *1 The certificate is written in both English and Japanese.
- *2 Made to order



Options are shipped together with the product but do not come assembled. When only optional parts are required, refer to Option 2/Part Nos. below.

### Unit specification

M	SI unit only *1
Nil	Units selection function *2

- *1 Fixed unit: Instantaneous flow: L/min Accumulated flow: L
- *2 This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

The unit can be changed. Instantaneous flow:  $L/min \Leftrightarrow cfm$ Accumulated flow:  $L \Leftrightarrow ft^3$ 

Option i/Part Nos.			
Option	Part no.	Qty.	Note
Lead wire with connector	ZS-33-D	1	Lead wire: 2 m
Rubber cover (Silicone rubber)	ZS-33-F	1	For connector

### Option 2/Part Nos.

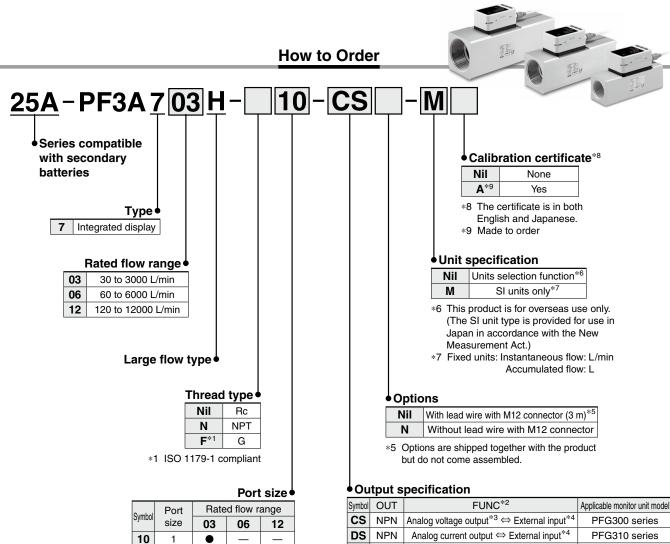
Option	Part no.	Qty.	Note
Bracket (for PFMB7201)	25A-ZS-33-M	1	With 2 tapping screws (3 x 6)
Panel mount adapter (for PFMB7201)	ZS-33-J	1	
Bracket (for PFMB7501/7102)	25A-ZS-42-C	1	With 4 tapping screws (3 x 6)
Bracket (for PFMB7202)	25A-ZS-42-D	1	With 4 tapping screws (3 x 6)

^{*} The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.

### **Body Ported Type**

# 3-Color Display Digital Flow Switch ( E CA 25A-PF3A7 H Series RoHS)





Symbol	OUT	FUNC*2	Applicable monitor unit model
CS	NPN	Analog voltage output*3 ⇔ External input*4	PFG300 series
DS	NPN	Analog current output ⇔ External input*4	PFG310 series
ES	PNP	Analog voltage output*3 $\Leftrightarrow$ External input*4	PFG300 series
FS	PNP	Analog current output ⇔ External input*4	PFG310 series

- *2 Analog output or external input can be selected by pressing the buttons. Analog output is set as default setting.
- 1 to 5 V or 0 to 10 V can be selected by pressing the button. The default setting is 1 to 5 V.
- *4 The accumulated value, peak value, and bottom value can be reset.

### Option/Part No.

When only optional parts are required, order with the part number listed below.

14

20

1 1/2

2

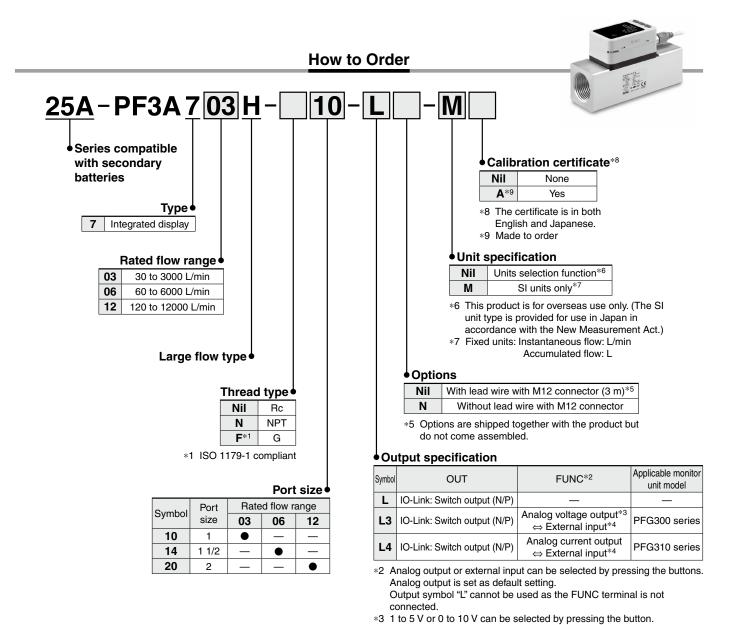
•

Part no.	Option	Note	
90-ZS-37-A-X258	Lead wire with M12 connector	Length: 3 m	

* The 25A- series specifications and dimensions are the same as those of the standard model.



# Body Ported Type IO-Link 3-Color Display Digital Flow Switch 25A-PF3A7 H-L Series RoHS



The default setting is 1 to 5 V.

### Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Part no.	Option	Note	
90-ZS-37-A-X258	Lead wire with M12 connector	Length: 3 m	

* The 25A- series specifications and dimensions are the same as those of the standard model.

*4 The accumulated value, peak value, and bottom value can be reset.



### **Integrated Display**

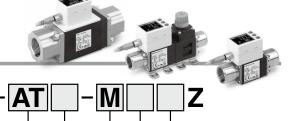


3-Color Display Digital Flow Switch for Water RoHS



## 25A-PF3W7-Z Series





Series compatible with secondary batteries

🚺 Туре 7 Integrated display

### Rated flow range (Flow range)

Symbol	Rated flow range
04	0.5 to 4 L/min
20	2 to 16 L/min
40	5 to 40 L/min
11	10 to 100 L/min

25A-PF3W7 04

### 3 Flow adjustment valve

Cumbal	With/without flow adjustment valve	F	Rated flo	w range	<del></del>
Symbol	adjustment valve	04	20	40	11
Nil	None	•	•	•	•
S	Yes	•	•	•	

- * 100 L/min type with flow adjustment valve is not available.
- * The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

### Thread type

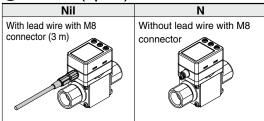
Timeau type					
Nil	Rc				
N	NPT				
F	G*1				

*1 ISO 228 compliant

### Port size

Symbol	Port	Rated flow range			
Symbol	size	04	20	40	11
03	3/8	•	•	_	_
04	1/2	_	•	•	_
06	3/4	_	_	•	•
10	1/1	_	_	_	•

### Lead wire (Option)



### 6 Output specification/Temperature sensor

Symbol	OUT1	OUT2			Temperature
Symbol	Flow rate	Flow rate		Temperature	sensor
Α	NPN	NPN		_	
В	PNP	PNP		_	
С	NPN	Analog 1 to 5 V		_	
D	NPN	Analog 4 to 20 mA		_	None
E	PNP	Analog 1 to 5 V		_	None
F	PNP	Analog 4 to 20 mA		_	
G	NPN	External input*1		_	
Н	PNP	External input*1		_	
AT	NPN	(NPN)	<b>*</b> 2	NPN	
BT	PNP	(PNP)	*2	PNP	With
СТ	NPN	(Analog 1 to 5 V)	<b>*2</b>	Analog 1 to 5 V	temperature
DT	NPN	(Analog 4 to 20 mA)	<del>*2</del>	Analog 4 to 20 mA	sensor
ET	PNP	(Analog 1 to 5 V)	<b>*2</b>	Analog 1 to 5 V	Scrisor
FT	PNP	(Analog 4 to 20 mA)	<del>*2</del>	Analog 4 to 20 mA	

- *1 External input: The accumulated value, peak value, and bottom value can be reset.
- *2 For units with temperature sensor, only OUT2 can be set as either temperature output or flow rate output. Setting when shipped is for temperature output.

### 8 Integrated display/Unit specification

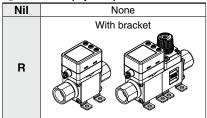
Symbol	Instantaneous flow	Accumulated flow	Temperature
M	L/min	L	°C
G	gal/min	gal	°C
F	gal/min	gal	°F
J	L/min	L	°F

- Under the New Measurement Act, units other than SI (symbol "M") cannot be used in Japan.
- G. F. J. Made to order

Reference: 1 [L/min] ← 0.2642 [gal/min] 1 [gal/min] ← 3.785 [L/min]

 $^{\circ}F = 9/5^{\circ}C + 32$ 

### Bracket (Option)



#### Calibration certificate (Only for flow rate)

Nil	None
Α	With calibration certificate

The certificate is written in both Japanese and English. Units with temperature sensor can only display the flow rate.

### Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

			<u> </u>	
Description	Part no.	Qty.	Note	
Bracket*1	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)
	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length: 3 m	

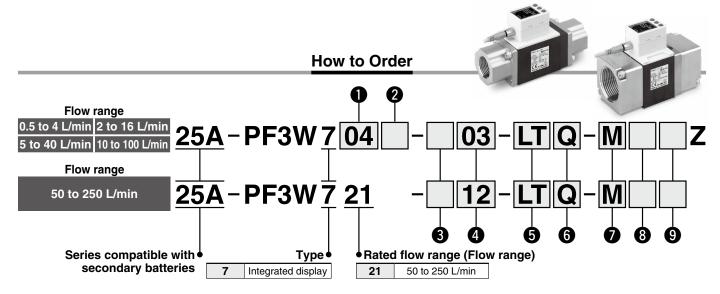
*1 For units with flow adjustment valve, 2 brackets are required.



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

# 3-Color Display Digital Flow Switch for Water RoHS

# 25A-PF3W7-L Series



### Rated flow range (Flow range)

04	0.5 to 4 L/min	
20	2 to 16 L/min	
40	5 to 40 L/min	
11	10 to 100 L/min	

### 2 Flow adjustment valve

C. made al	With/without flow adjustment valve	Rated flow range			
Symbol	adjustment valve	04	20	40	11
Nil	None	•	•	•	•
S	Yes	•	•	•	_

- * 100 L/min type with a flow adjustment valve is not available.
- * The flow adjustment valve of this product is not suitable for applications which require the constant adjustment of the flow rate.

### 3 Thread type

Tilleau type			
Nil	Rc		
N	NPT		
F	G*1		

*1 ISO 228 compliant

### 4 Piping port size

Symbol	Port	Rated flow range				
Symbol	size	04	20	40	11	21
03	3/8	•	•	_	_	_
04	1/2	_	•	•	_	_
06	3/4	_	_	•	•	_
10	1	_	_	_	•	_
12	1-1/4	_	_	_	_	•
14	1-1/2	_	_	_	_	•

### 6 Lead wire (Option)

Nil	With lead wire with M8 connector (3 m)			
N	None			
Q	With M12-M8 conversion lead wire (0.1 m)*1			

- st1 A 3 m lead wire is also available separately.
- * The lead wire with M8 connector and the M12-M8 conversion lead wire are interchangeable with the existing PF3W series.

### **5** Output specification/Temperature sensor

Symbol	OUT1	OUT2 Temperat		
Symbol	Flow rate/Temperature	Flow rate/Temperature	sensor	
L	IO-Link/Switch output (N/P)	_	Ness	
L2	IO-Link/Switch output (N/P)	Switch output (N/P)	None	
LT	IO-Link/Switch output (N/P)	_	Yes	
L2T	IO-Link/Switch output (N/P)	Switch output (N/P)	res	

- st Temperature output or flow output can be selected for the digital flow switch with a temperature sensor.
- * The output specification of L, L2, and L2T should be ordered as made to order.

### Integrated display/Unit specification

Symbol	Instantaneous flow	Accumulated flow	Temperature
Nil	With display unit switching function		°C
M	L/min	L	°C

* Under the New Measurement Act, units other than SI (symbol "M") cannot be used in Japan. Unit can be changed.

Instantaneous flow: L/min ↔ gal/min Accumulated flow: L ↔ gal

* Reference: 1 [L/min] ← 0.2642 [gal/min] 1 [gal/min] ← 3.785 [L/min]

### **Options/Part Nos.**

When only optional parts are required, order with the part numbers listed below

Whom only optional parts are required, order was the part numbers listed below.				
Description	Part no.	Qty.	Note	
Bracket*1	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)
	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length: 3 m	
M12-M8 conversion lead wire	25A-ZS-40-M12M8-A	1	Length 100 mm	

*1 For units with flow adjustment valve, 2 brackets are required.

### Brackets (Option)

_	· · · · ·
Nil	None
R	With brackets

Brackets are interchangeable with the existing PF3W series.

#### 9 Calibration certificate (Only for flow rate)

Nil	None		
Α	With calibration certificate		

The certificate is written in both Japanese and English. The integrated display type with a temperature sensor can only display the flow rate.

The temperature sensor is not calibrated.

* The 25A- series specifications and dimensions are the same as those of the standard model.



### **Remote Sensor Unit**

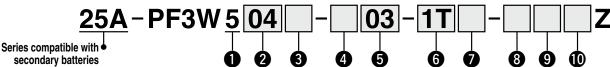


3-Color Display Digital Flow Switch for Water RoHS

# 25A-PF3W5-Z Series

### **How to Order**





### 🛈 Туре Remote sensor unit

### 2 Rated flow range (Flow range)

Symbol	Rated flow range
04	0.5 to 4 L/min
20	2 to 16 L/min
40	5 to 40 L/min
11	10 to 100 L/min

### 3 Flow adjustment valve

Cumbal	With/without flow	Rated flow range			
Symbol	With/without flow adjustment valve	04	20	40	11
Nil	None	•	•	•	•
S	Yes	•	•	•	_

- * 100 L/min type with flow adjustment valve is not available.
- The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

### Thread type

Timeda type			
Nil	Rc		
N	NPT		
F	G*1		

*1 ISO 228 compliant

### 6 Port size

Symbol	Port	Rated flow range			е
	size	04	20	40	11
03	3/8	•	•	_	_
04	1/2	_	•	•	_
06	3/4	_	_	•	•
10	1/1	_	_	_	•

### Lead wire (Option)

### 6 Output specification/Temperature sensor

Symbol	OUT1	OUT2	Temperature
Symbol	Flow rate	Temperature	sensor
1	Analog 1 to 5 V		
2 Analog 4 to 20 mA		_	None
1T	Analog 1 to 5 V	Analog 1 to 5 V	With temperature sensor

To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol "-1" or "-1T").

Nil	With lead wire with M8 connector (3 m)
N	Without lead wire with M8 connector

### Remote sensor unit/Unit printed on label

Symbol	Instantaneous flow	Temperature
Nil	L/min	°C
G*1	L/min (gal/min)	°C/°F

- *1 Under the New Measurement Act, units other than SI (symbol "Nil") cannot be used in Japan.
- * G: Made to order

Reference: 1 [L/min] ← 0.2642 [gal/min] 1 [gal/min] ↔ 3.785 [L/min] °F = 9/5°C + 32

### Bracket (Option)

O Diagnot (Option)				
Nil	None			
D	With bracket			

### (II) Calibration certificate (Only for flow rate)

(Only for now rate)				
Nil	None			
Α	With calibration certificate			

The certificate is written in both Japanese and English.

Units with temperature sensor can only display

### Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Qty.	Note	
	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)
Bracket*1	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length: 3 m	

*1 For units with flow adjustment valve, 2 brackets are required.



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

### 3-color display

### **Digital Flow Switch for Water**

# 25A-PF3W Series (€ ĽK



### **How to Order**

### Remote sensor unit

### Output specification/Temperature sensor •

	<u> </u>			
Cumbal	OUT1	OUT2	Tamparatura aanaar	
Symbol	Flow rate	Temperature	Temperature sensor	
1	Analog 1 to 5 V	_	None	
2	Analog 4 to 20 mA	_		
1T	Analog 1 to 5 V	Analog 1 to 5 V	With temperature sensor	

To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol "-1" or "-1T").

#### Remote sensor unit/Unit printed on label

Symbol	Instantaneous flow rate	Temperature
Nil	L/min	°C
<b>G</b> *1	L/min (gal/min)	°C/°F

*1 Under the New Measurement Act, units other than SI (symbol: "Nil") cannot be used in Japan.

G: Made to Order

Reference: 1 [L/min] ↔ 0.2642 [gal/min] 1 [gal/min] ↔ 3.785 [L/min] = 9/5°C + 32



25A-PF3W 5 04

<u>Integrated</u> display

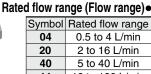
25A-PF3W 7 04

Series compatible with secondary batteries

5 Remote sensor unit 7 Integrated display

Nil Rc NPT N

G



Symbol	Rated flow range	
04	0.5 to 4 L/min	
20	2 to 16 L/min	
40	5 to 40 L/min	
11	10 to 100 L/min	
21	50 to 250 L/min	

21	30 to 230 L/IIIII	
Flow a	djustment valve	

Symbol	With/without flow		Rate	d flov	v rate	)
Syllibol	adjustment valve	04	20	40	11	21
Nil	None		•	•	•	
S	Yes	•	•	•	_	_

100 and 250 L/min types with flow adjustment valves are not available. The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate

### Port size Port Rated flow range size 04 20 40 11 21 Symbol

SIZC	04	20	40	11	<b>2</b> 1
3/8	•		_	_	_
1/2	_			_	_
3/4	_	_			_
1/1	_	_	—		<del></del>
1 1/4	_	_	_	_	
1 1/2	_	_	_	_	
	3/8 1/2 3/4 1/1 1 1/4	3/8 • 1/2 — 3/4 — 1/1 — 1 1/4 —	3/8	3/8	3/8

### Integrated display

### Output specification/ Temperature sensor

* The 25A- series specifications and dimensions are the same as those of the standard model.

#### For details, refer to the Web Catalog

- *1 External input: The accumulated value peak value, and bottom value can be reset.
- *2 For units with temperature sensor. OUT2 can be set as either temperature output or flow rate output. Setting when shipped is for temperature output.

	Symbol	OUT1	OUT2			Temperature	
	Syllibol	Flow rate	Flow rate		Temperature		sensor
	Α	NPN	NPN		_		
	В	PNP	PNP		_		
	C	NPN	Analog 1 to 5 V		_		
J.	D	NPN	Analog 4 to 20 mA		_		None
	Е	PNP	Analog 1 to 5 V		_		None
	F	PNP	Analog 4 to 20 mA		_		
n	G	NPN	External input*1		_		
	Н	PNP	External input*1		_		
	ΑT	NPN	(NPN)	*2	NPN		
	BT	PNP	(PNP)	<b>*</b> 2	PNP		With
ıt	СТ	NPN	(Analog 1 to 5 V)	<b>*</b> 2	Analog 1 to 5	٧	temperature
11	DT	NPN	(Analog 4 to 20 mA)	*2	Analog 4 to 20	mΑ	sensor
	ET	PNP	(Analog 1 to 5 V)	<u>*2</u>	Analog 1 to 5	٧	Serisoi
	FT	PNP	(Analog 4 to 20 mA)	*2 <b>←→</b>	Analog 4 to 20	mΑ	

#### Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no	Qty.	Note		
	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)	
Bracket*1	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)	
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)	
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length (3 m)		

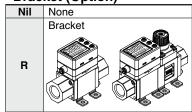
*1 For units with flow adjustment valve, 2 brackets are required.

### Calibration certificate (Only flow sensor)

	(Omy non concer)
Nil	None
Α	With calibration certificate

The certificate is written in both English and Japanese. Integrated display type with temperature sensor can only display flow rate.

### Bracket (Option)



With bracket is not available for 250 L/min type.

### Integrated display/Unit specification

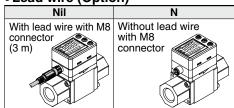
	<u> </u>		
Symbol	Instantaneous flow rate	Accumulated flow	Temperature
M	L/min	L	ô
G	gal/min	gal	°C
F	gal/min	gal	°F
J	L/min	L	°F

Under the New Measurement Act, units other than SI (symbol: "M") cannot be used in Japan.

G, F, J: Made to Order

Reference: 1 [L/min] ← 0.2642 [gal/min] 1 [gal/min]  $\leftrightarrow$  3.785 [L/min]  $^{\circ}$ F = 9/5 $^{\circ}$ C + 32

Lead wire (Option)



 The 25A- series specifications and dimensions are the same as those of the standard model.



### 3-color display

# Digital Flow Switch for PVC Piping 25A-PF3W Series (€ ₩



### **How to Order**

### Remote sensor unit

### Output specification

Out	put specification
Symbol	OUT1
1	Analog 1 to 5 V
2	Analog 4 to 20 mA

* To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol "-1").

### Remote sensor unit/Unit printed on label

Symbol	Instantaneous flow rate
Nil	L/min
<b>G</b> *1	L/min (gal/min)

*1 Under the New Measurement Act, units other than SI (symbol: "Nil") cannot be used in Japan.

G: Made to Order

Reference: 1 [L/min] ← 0.2642 [gal/min] 1 [gal/min] ← 3.785 [L/min]

### Calibration certificate (Only flow sensor)

, -	,
Nil	None
Α	With calibration certificate

* The certificate is written in both English and Japanese.



<u>25A</u>-PF3W <u>5 11</u>-<u>U 25</u>-

### Integrated display

25A-PF3W711-U25-A-M

Series compatible with secondary batteries



Type 

5 Remote sensor unit
7 Integrated display

### Rated flow range (Flow range)

	• •	
Symbol	Rated flo	w range
11	10 to 10	0 L/min
21	30 to 25	0 L/min

### Connection type

U PVC pipe

#### PVC pipe O.D.

Cumbal	Port	Rated flow range		Pipe O.D.*1
Symbol size		11	21	Pipe O.D.**
25	25A	•	_	32 mm
30	30A	_	•	38 mm

*1 JIS K 6742 equivalent

### Integrated display Output specification

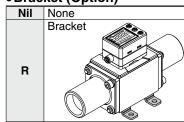
 The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Symbol	OUT1	OUT2	
Α	NPN	NPN	
В	PNP	PNP	
С	NPN	Analog 1 to 5 V	
D	NPN	Analog 4 to 20 mA	
E	PNP	Analog 1 to 5 V	
F	PNP	Analog 4 to 20 mA	
G	NPN	External input*1	
Н	PNP	External input*1	

*1 External input: The accumulated value, peak value, and bottom value can be reset.

### Bracket (Option)



With bracket is not available for 250 L/min type.

### Integrated display/Unit specification

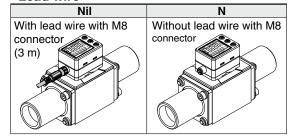
Symbol	Instantaneous flow rate	Accumulated flow
М	L/min	L
G	gal/min	gal

- Under the New Measurement Act, units other than SI (symbol: "M") cannot be used in Japan.
- * G: Made to Order

Reference: 1 [L/min] ↔ 0.2642 [gal/min]

1 [gal/min] ↔ 3.785 [L/min]

### **Lead wire**



### **Options/Part Nos.**

When only optional parts are required, order with the part numbers listed below.

Then only optional parts are required, order than the part named to listed below.				
Description	Part no.	Qty.	Note	
Bracket	25A-ZS-40-M	1	For PF3W711/511 With 4 tapping screws (4 x 10)	
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length (3 m)	

 The 25A- series specifications and dimensions are the same as those of the standard model.





# For 25A-PF3W5(-Z) 3-Color Display ( CA Digital Flow Monitor for Water RoHS)

## 25A-PF3W Series

### **How to Order**

### 25A -PF3W 30 A

Series compatible with secondary batteries

Type • 3 Remote monitor unit

For remote sensor units, select the analog output 1 to 5 V type.

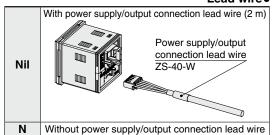
Applicable sensors: PF3W5□□-□□-1(T)

### Output specification

Symbol	OUT1	OUT2
Α	NPN	NPN
В	PNP	PNP
С	NPN	Analog 1 to 5 V
D	NPN	Analog 4 to 20 mA
E	PNP	Analog 1 to 5 V
F	PNP	Analog 4 to 20 mA
G	NPN	External input
Н	PNP	External input
J	Analog 1 to 5 V	Analog 1 to 5 V
K	Analog 4 to 20 mA	Analog 4 to 20 mA

In combination with remote sensor unit with temperature sensor, only OUT2 can be set for temperature sensor output.

#### 



The lead wire does not come connected, but it is shipped together with the product.

#### Remote monitor unit/Unit specification

Symbol	Instantaneous flow	Accumulated flow	Temperature
M	L/min	L	°C
G	gal/min	gal	°C
F	gal/min	gal	°F
J	L/min	L	°F

- * Under the New Measurement Act, units other than SI (symbol "M") cannot be used in Japan.
- G, F, J: Made to order

Reference: 1 [L/min] ← 0.2642 [gal/min]

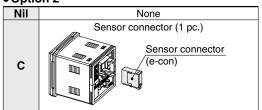
1 [gal/min] ← 3.785 [L/min] °F = 9/5°C + 32

### Calibration certificate (Only flow monitor)

Nil	None	
Α	With calibration certificate	

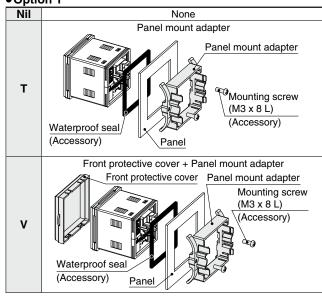
* The certificate is written in both Japanese and English.

#### Option 2



The connector does not come connected, but it is shipped together with the product.

#### Option 1



### Options/Part Nos.

Description	Part no.	Note
Panel mount adapter	25A-ZS-26-B	With waterproof seal and screws
Front protective cover + Panel mount adapter	25A-ZS-26-C	With waterproof seal and screws
Front protective cover only	ZS-26-01	Separately order panel mount adapter, etc.
Power supply/output connection lead wire	ZS-40-W	Lead wire length: 2 m
Sensor connector (e-con)	ZS-28-CA-4	1 pc.
Lead wire with connector for copying	ZS-40-Y	Connect up to 10 copy destination units

For Water
Air
Oil

# Direct Operated 2-Port Solenoid Valve

## 25A-JSX Series

Differs depending on the voltage and electrical entry. For details, refer to table 3 below.

RoHS

### **How to Order**

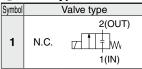


 Series compatible with secondary batteries

### 1 Size 2 Va

$\stackrel{\smile}{-}$	
Symbol	Size
1	10
2	20
3	30

<b>2</b> v	/alve	type
------------	-------	------



### 3 Body material

_	,
Symbol	Body material
S	Stainless steel

Size

20

30

10

lacktriangle

•

### 1(114)

Orifice diameter

[mmø]

1.6

2.4

3.2

4.0

5.6

7.1

101

201

301

302

303

402

403

502

503

702

703

Orifice diameter and port size

Port size

1/8

1/8

1/8

1/4

3/8

1/4

3/8

1/4

3/8

1/4

3/8

	4 Seal material			
Symbol	Seal material			
N	NBR			
F	FKM			
E	EPDM			

6 Thread type
---------------

Symbol	Thread type
R	Rc
N	NPT
F	G

### Rated voltage

Symbol Rated voltage

24 VDC

12 VDC

DC

AC			
Symb	Rated voltage	Symbol	Rated voltage
1	100 VAC	7	240 VAC
2	200 VAC	8	48 VAC
3	120 (110) VAC	В	24 VAC
4	220 VAC	J	230 VAC

### Oil-free option Option

Symbol	Option
Nil	None
D	Oil-free
_	

<b>—</b>	
Symbol	Option
Nil	None
В	With bracket*1
В	(Stainless steel)
	Symbol Nil B

*1 Refer to the **Web Catalog** for bracket assembly part nos.

### 8 Electrical entry

O	Electrical 1			Size		CE/UKCA-
Symbol	Electrical entry		10	20	30	compliant
)	C******1	0				24 VDC
G	Grommet*1		_			12 VDC
						100 VAC
	Grommet with PCB					24 VDC
GS	(With surge voltage				lacksquare	12 VDC
	suppressor)*2					48 VAC
						24 VAC
	Conduit					All
CS	(With surge voltage					voltages
	suppressor)					vollages
	DIN terminal					
DS	(With surge voltage		•			All
	suppressor)					voltages
	DIN terminal					
DZ	with light		•	•	•	All
	(With surge voltage suppressor)		-	-		voltages
	DIN terminal					
DN	without connector					All
	(With surge voltage suppressor)					voltages
	M12 connector/					All
WN	Without connector cable					voltages
	(With surge voltage suppressor)*3					voitages

- *1 DC voltage only
- *2 Although it is possible to manufacture products of any voltage, only the voltages listed in the table are CE/UKCA compliant.
- *3 The cable for the M12 connector is not included, so be sure to order it separately. In addition, note that the JSX cable part number in the "Option" section of the Web Catalog is not compatible with products with secondary battery specifications.

### Flow Rate Characteristics

	<u> </u>	Orifice	Flow	rate ch	aracter	ristics*	1	Max. operating		Weight*2
Size	Port size	diameter	A	ir		Wat	ter, Oil	pressure	Model	[g]
	Size	[mmø]	C [dm3/(s·bar)]	b	Cv	Kv	Conversion Cv	differential [MPa]		Stainless steel body*3
10	1/8	1.6	0.36	0.58	0.08	0.07	0.08	0.9	25A-JSX11-S□101	160
10	1/6	2.4	0.62	0.45	0.15	0.13	0.15	0.4	25A-JSX11-S□201	160
	1/8	3.2	1.35	0.48	0.35	0.30	0.35	0.7	25A-JSX21-S□301	320
		3.2	1.35	0.48	0.35	0.30	0.35	0.7	25A-JSX21-S□302	320
	1/4	4.0	2.02	0.48	0.52	0.45	0.52	0.3	25A-JSX21-S□402	320
	1/4	5.6	2.62	0.43	0.73	0.63	0.73	0.2	25A-JSX21-S□502	320
20		7.1	3.15	0.44	0.88	0.76	0.88	0.1	25A-JSX21-S□702 25A-JSX21-S□303	320
		3.2	1.35	0.48	0.35	0.30	0.35	0.7		320
	3/8	4.0	2.02	0.48	0.52	0.45	0.52	0.3	25A-JSX21-S□403	320
	3/0	5.6	2.62	0.43	0.73	0.63	0.73	0.2	25A-JSX21-S□503	320
		7.1	3.15	0.44	0.88	0.76	0.88	0.1	25A-JSX21-S□703	320
		4.0	2.02	0.48	0.52	0.45	0.52	1.0	25A-JSX31-S□402	450
	1/4	5.6	2.62	0.43	0.73	0.63	0.73	0.5	25A-JSX31-S□502	450
30		7.1	3.15	0.44	0.88	0.76	0.88	0.2	25A-JSX31-S□702	450
30		4.0	2.02	0.48	0.52	0.45	0.52	1.0	25A-JSX31-S□403	450
	3/8	5.6	2.62	0.43	0.73	0.63	0.73	0.5	25A-JSX31-S□503	450
		7.1	3.15	0.44	0.88	0.76	0.88	0.2	25A-JSX31-S□703	450

- *1 The flow rate characteristics of this product vary.
- *2 The values were calculated based on the combination of an Rc or NPT thread and a grommet. Add 20 g for the grommet type with PCB, 70 g for the conduit type, 50 g for the DIN terminal type, and 15 g for the M12 connector type.

*3 Add 30 g for the G thread (port size 3/8) type.

### Applicable Fluid Checklist

Applicable	e S	Seal material				
fluid	NBR	FKM	EPDM			
Air	•	•	•			
Water	•	•	•			
Oil	_	•	_			

* The list shows the compatibility between general fluids and the seal materials. Consider the operating environment and application sufficiently before selecting the seal material. Fluid and component compatibility should be checked before use. If something is not clear, please contact SMC.



### **Direct Operated** 2-Port Solenoid Valve

For Air

# 25A-JSX Series

and electrical entry. For details, refer to table 8 below.

### **How to Order**

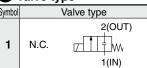
25A-JSX 2 1-AN 302 secondary batteries



### 1 Size

Symbol	Size
2	20
3	30

### 2 Valve type



### **3** Body material

Symbol	Body material
Α	Aluminum

### 4 Seal material

Symbol	Seal material
N	NBR
F	FKM

### 6 Thread type

Tilleau type					
Symbol	Thread type				
R	Rc				
N	NPT				
F	G				

### **5** Orifice diameter and port size

	Ouition diamontos		Size		
Symbol	Orifice diameter [mmø]	Port size	20	30	
			Aluminum body	Aluminum body	
301	0	1/8	•	_	
302	3	1/4	•	_	
402	4	1/4	_	•	
403		3/8	_	•	
501	5	1/8	•	_	
502		1/4	•	_	
702		1/4	_	•	
703	,	3/8	_	•	

### Rated voltage

v	nateu	voitage
AC		
Symbol	Rate	d voltage

Symbol	Rated voltage	Symbol	Rated voltage
1	100 VAC	7	240 VAC
2	200 VAC	8	48 VAC
3	120 (110) VAC	В	24 VAC
4	220 VAC	J	230 VAC

	DC
1	

5	24 VDC
6	12 VDC

### Oil-free option

<u> </u>	noo opnon
Symbol	Option
Nil	None
D	Oil-free

<b>(</b> 0	Option
------------	--------

Symbol	Symbol Option			
Nil	None			
В	With bracket*1			

^{*1} Bracket assembly part nos. For size 20: 90-VX021N-12A For size 30: 90-VX022N-12A

### 8 Electrical entry

O	Electrical 1	Si	ze	CE/UKCA-	
Symbol	Electrical entry	/	20	30	compliant
G	Grommet*1	0			24 VDC
_	Grommot				12 VDC
					100 VAC
	Grommet with PCB				24 VDC
GS	(With surge voltage		•	•	12 VDC
	suppressor)*2				48 VAC
					24 VAC
cs	Conduit (With surge voltage suppressor)		•	•	All voltages
DS	DIN terminal (With surge voltage suppressor)		•	•	All voltages
DZ	DIN terminal with light (With surge voltage suppressor)		•	•	All voltages
DN	DIN terminal without connector (With surge voltage suppressor)		•	•	All voltages
WN	M12 connector/Without connector cable (With surge voltage suppressor)*3		•	•	All voltages

^{*1} DC voltage only

### Flow Rate Characteristics

#### Aluminum Body Type

Additional Body Type									
Size		Port size Orifi	Orifice diameter	Flow rate characteristics*1		Max. operating pressure	Model	Weight*2	
Size	Size	FULL SIZE	[mmø]	C [dm3/(s·bar)]	b	Cv	differential [MPa]	Model	[g]
	20	1/8, 1/4	3	1.41	0.54	0.35	0.7	25A-JSX21-A□30□	240
	20		5	1.66	0.54	0.52	0.2	25A-JSX21-A□50□	240
	30	1/4. 3/8	4	1.57	0.59	0.52	1.0	25A-JSX31-A□40□	400
		1/4, 3/6	7	3.02	0.53	0.88	0.2	25A-JSX31-A□70□	400

^{*1} The flow rate characteristics of this product vary.

^{*2} Although it is possible to manufacture products of any voltage, only the voltages listed in the table are CE/UKCA compliant.

^{*3} The cable for the M12 connector is not included, so be sure to order it separately. In addition, note that the JSX cable part number in the "Option" section of the Web Catalog is not compatible with products with secondary battery specifications.

^{*2} Indicates case of grommet type

Add 20 g for the grommet type with PCB, 70 g for the conduit type, 50 g for the DIN terminal type, and 15 g for the

For Water
Air
Oil

### High Flow/ Power Saving Type

### **Direct Operated 2-Port Solenoid Valve**

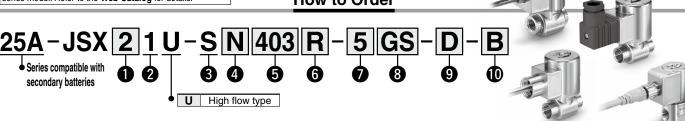
Differs depending on the voltage and electrical

(RoHS)

# 25A-JSX U U Series

The dimensions are the same as those of the standard JSX series model. Refer to the **Web Catalog** for details.

### **How to Order**



### 1 Size

_	
Symbol	Size
1	10
2	20
3	30

### 2 Valve type

		7.1					
Symbol	Valve type						
1	N.C.	2(OUT) 1 (IN)					
		, ,					

### 3 Body material

<u> </u>	Body material
Symbol	Body material
S	Stainless steel

### 4 Seal material

_	
Symbol	Seal material
N	NBR
F	FKM
E	EPDM

### **5** Orifice diameter and port size

Cumbal	Orifice diameter	Port size	Size			
Symbol	[mmø]	Port Size	10	20	30	
201	2.4	1/8	•	_	_	
402	4.0	1/4	_	•	_	
403	4.0	3/8	_	•		
702	7.1	1/4	_	•		
703	/.1	3/8	_	•	•	

### 6 Thread type

Symbol	Thread type
R	Rc
N	NPT
F	G

### Rated voltage

Symbol	Rated voltage
5	24 VDC
6	12 VDC

### Oil-free option

	nee option
Symbol	Option
Nil	None
D	Oil-free

### (I) Option

Symbol	Option
Nil	None
)	With bracket*1
В	(Stainless steel)

^{*1} Refer to the **Web Catalog** for bracket assembly part nos.

### 8 Electrical entry

	entry			C:		OF/UVOA
Symbol	Electrical entry	10	Size 20		CE/UKCA- compliant	
GS	Grommet with PCB (With surge voltage suppressor)		•	•	•	
cs	Conduit (With surge voltage suppressor)		_	•	•	
DS	DIN terminal (With surge voltage suppressor)		•	•	•	24 VDC
DZ	DIN terminal with light (With surge voltage suppressor)		•	•	•	12 VDC
DN	DIN terminal without connector (With surge voltage suppressor)		•	•	•	
WN	M12 connector/Without connector cable*1 (With surge voltage suppressor)		•	•	•	

- *1 The cable for the M12 connector is not included, so be sure to order it separately. In addition, note that the JSX cable part number in the "Option" section of the **Web Catalog** is not compatible with products with secondary battery specifications.
- * A grommet type is not available.

### Flow Rate Characteristics

Dout		Orifice	Flow rate characteristics*1			cs*1	Max. operating		Weight*2	
Size Port size	diameter	neter Air		Wa	Water, Oil pressi		Model	[g]		
	SIZE	[mmø]	С	b	Cv	Kv	Conversion Cv	differential [MPa]		Stainless steel body*3
10	1/8	2.4	0.62	0.45	0.15	0.13	0.15	0.9	25A-JSX11U-S□201	180
	1/4	4.0	2.02	0.48	0.52	0.45	0.52	1.0	25A-JSX21U-S□402	340
20	1/4	7.1	3.15	0.44	0.88	0.76	0.88	0.4	25A-JSX21U-S□702	340
20	3/8	4.0	2.02	0.48	0.52	0.45	0.52	1.0	25A-JSX21U-S□403	340
	3/0	7.1	3.15	0.44	0.88	0.76	0.88	0.4	25A-JSX21U-S□703	340
20	1/4	7.1	3.15	0.44	0.88	0.76	0.88	0.8	25A-JSX31U-S□702	470
30	3/8	7.1	3.15	0.44	0.88	0.76	0.88	0.8	25A-JSX31U-S□703	470

- *1 The flow rate characteristics of this product vary.
- *2 The values were calculated based on the combination of an Rc or NPT thread and a grommet with PCB. Add 50 g for the conduit type, 30 g for the DIN terminal type, and -5 g for the M12 connector type.
- *3 Add 30 g for the G thread (port size 3/8) type.

### **Applicable Fluid Checklist**

Applicable	Seal material							
fluid	NBR	FKM	EPDM					
Air	•	•	•					
Water	•	•	•					
Οil								

* The list shows the compatibility between general fluids and the seal materials. Consider the operating environment and application sufficiently before selecting the seal material. Fluid and component compatibility should be checked before use. If something is not clear, please contact SMC.



# **Direct Operated 2-Port Solenoid Valve** 25A-VX21/22/23 Series







### **How to Order (Single Unit)**

Fluid •

For air

25A-VX2 1 0 A A Series compatible with secondary batteries

0



Common Specifications							
Valve type	N.C.						
Seal material	NBR						
Coil insulation type	Class B						
Thread type	Rc						

1							
Size	e/Valve t	уре	Bod	Body material/Port size/Orifice diamete			
Symbol	Size	Valve type	Symbol	Body material	Port size	Orifice diameter	
			Α			2	
			В		1/8	3	
			С	Aluminum		5	
			D	Alullillulli		2	
		a	E		1/4	3	
1	Size 1	Single	F			5	
•	OIZC I	N.C.	Н			2	
			J		ø6 One-touch fitting	3	
			K	Resin		5	
			L	1100111		2	
			М		ø8 One-touch fitting	3	
			N			5	
	Size 2	Single	Α	Α	1/4	4	
			В	A1		7	
			D E H	Aluminum	3/8	4	
2						7	
		unit N.C.			ø8 One-touch fitting	4	
		14.0.	J	Resin		7	
			L	nesin	ø10 One-touch fitting	4	
			M			7	
			Α			5	
		Single unit	В		1/4	8	
			С			10	
			D	Aluminum		5	
			E		3/8	8	
			F			10	
3	Size 3		G		1/2	10	
		N.C.	Н		ø10 One-touch fitting	5	
			J			8	
				Danie		10	
			L	Resin		5	
			M		ø12 One-touch fitting	8	
		1			- 40		

		rical entry				
Symbol	Voltage	Electrical entry				
A	24 VDC	Grommet				
В	100 VAC	Grommet				
С	110 VAC	/With surge voltage				
D	200 VAC	\suppressor/				
Е	230 VAC					
F	24 VDC					
G	24 VDC	DIN terminal				
Н	100 VAC	/With surge voltage				
J	110 VAC	\suppressor/				
K	200 VAC					
L	230 VAC					
М	24 VDC	Conduit terminal				
N	100 VAC	With surge voltage				
Р	110 VAC	\suppressor// \suppressor//				
Q	200 VAC					
R	230 VAC					
S	24 VDC	Conduit				
Т	100 VAC	With surge voltage				
U	110 VAC	\suppressor/				
V	200 VAC					
W	230 VAC					
Y	24 VDC	Flat terminal				
	Other voltages and electrical options					

### For other special options, refer to the standard products.

i or other opeoid	optiono, reier to			
	24 VAC			
Special voltage	48 VAC			
	220 VAC			
	240 VAC			
	12 VDC			
DIN terminal with light				
Conduit terminal with light				
Without DIN connect	or			

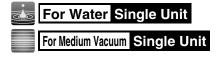
Low concentration ozone resistant (Seal material: FKM
Seal material: EPDM
Oil-free
G thread
NPT thread
With bracket (Aluminum body only)
Mounting holes on the bottom side of the body (Aluminum body only
Special electrical entry direction
<u> </u>

^{*} Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

# Direct Operated 2-Port Solenoid Valve







# 25A-VX21/22/23 Series

**How to Order (Single Unit)** 

### 25A - VX2 1 4 H A

Series compatible with secondary batteries

> Fluid • For water For medium vacuum

<b>♦Size/Valve type</b>				◆Body material/Port size/Orifice diameter			
Symbol	Size	Valve type		Symbol	Body material	Port size	Orifice diameter
				Н		1/8	2
				J			3
1	Size 1	Single		K	Stainless		5
'	Size i	unit N.C.		L	steel	1/4	2
				M			3
				N			5
			r	Н			4
	Size 2	Single unit N.C.		J	Stainless	1/4	7
2			L M	steel		4	
						3/8	7
		1		ш			-
				H	Stainless steel	3/8	5
		Single unit N.C.		J			8
				K			10
3	Size 3			L			5
			М	M			8
				N			10
			L	Р		1/2	10

For other speci	iai options, reie	r to the standard products.
	24 VAC	Applicable to deionized water (Seal material: FKM)
	48 VAC	Seal material: EPDM
Special voltage	220 VAC	Oil-free
	240 VAC	G thread
	12 VDC	NPT thread
DIN terminal with I	ight	With bracket
Conduit terminal w	vith light	Mounting holes on the bottom side of the body
Without DIN conne	ector	Special electrical entry direction

Using the oil-free specification in a low dew point environment may result in the reduced service life of the product.

Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.



oonmon opcomoations				
Valve type	N.C.			
Seal material	NBR (For water)			
Sear material	FKM (For medium vacuum)			
Coil insulation type	Class B			
Thread type	Rc			

<u>      Volt</u>	age/Electi	rical entry
Symbol	Voltage	Electrical entry
Α	24 VDC	Grommet
В	100 VAC	Grommet
С	110 VAC	/With surge voltage
D	200 VAC	\suppressor/
Е	230 VAC	
F	24 VDC	
G	24 VDC	DIN terminal
Н	100 VAC	With surge voltage
J	110 VAC	\suppressor/
K	200 VAC	
L	230 VAC	
М	24 VDC	Conduit terminal
N	100 VAC	With surge voltage
Р	110 VAC	\suppressor// \ \ \ \ \
Q	200 VAC	
R	230 VAC	
S	24 VDC	Conduit
Т	100 VAC	With surge voltage
U	110 VAC	\suppressor/
V	200 VAC	
W	230 VAC	
Y	24 VDC	Flat terminal
Z	Oth	ner voltages and electrical options

* The 25A- series specifications and dimensions are the same as those of the standard model.



## Pilot Operated 2-Port Solenoid Valve

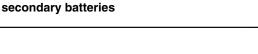
### For Air

## 25A-VXD Series



### **How to Order**





Fluid 

O For Air



#### **Common Specifications**

Common opcomounone						
Seal material	NBR					
Coil insulation type	Class B					
Thread type	Rc					

Size—Valve type Body material/Port size/Orifice diameter

		<i>,</i> .					
Symbol	Size	Valve type		Symbol	Body material	Port size	Orifice diameter
3	8A	N.C.		Α		1/4	
	10A		ł	В	Aluminum	3/8	10
Α	15A	N.O.	<u> </u>	С		1/2	
		1					
4	10A	N.C.		J	Stainless	3/8	15
В	15A	N.O.	<u> </u>	K	steel	1/2	15
		,					
5	20A	N.C.		8.4	Stainless	3/4	00
С	20A	N.O.	l	M	steel	3/4	20
6	25A	N.C.		Р	Stainless	4	25
D	ZOA	N.O.		P	steel	1	25

Voltage/Electrical entry

Symbol	Voltage	Electrical entry		
A	24 VDC	Grommet		
В	100 VAC	Grommet		
С	110 VAC	/With surge \ voltage		
D	200 VAC	\suppressor/		
E	230 VAC			
F	24 VDC			
G	24 VDC	DIN terminal		
Н	100 VAC	With surge voltage		
J	110 VAC	\suppressor/		
K	200 VAC			
L	230 VAC			
М	24 VDC	Conduit terminal		
N	100 VAC	With surge voltage		
Р	110 VAC	\suppressor/		
Q	200 VAC			
R	230 VAC			
S	24 VDC	Conduit		
Т	100 VAC	/With surge voltage		
U	110 VAC	\suppressor/		
V	200 VAC			
W	230 VAC			
Y	24 VDC	Flat terminal		
Z		Other special options		

### All other special options are the same as those of the standard model.

	24 VAC					
	48 VAC					
Special voltage	220 VAC					
	240 VAC					
	12 VDC					
DIN terminal with lig	ght					
Conduit terminal wi	th light					
Without DIN connec	ctor					
Low concentration	ozone resistant					
(Seal material: FKM	1)					
Seal material: EPDM						
Oil-free						
G thread	G thread					
NPT thread	NPT thread					
With bracket	With bracket					
Special electrical entry direction						
* Using the oil-free specification in a low						

dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

## **Pilot Operated 2-Port Solenoid Valve**

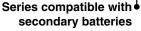
### **For Water**

# 25A-VXD Series



### **How to Order**





Fluid • For Water



#### **Common Specifications**

Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

◆Size—Valve type Body material/Port size/Orifice diameter

Tuito i	.,,,,,		- Body materially of tolego of moe diamete				
Size	Valve type		Symbol	Body material	Port size	Orifice diameter	
8A	N.C.		D		1/4		
10A			E		3/8	10	
15A	N.O.		F	31001	1/2		
10A	N.C.		J	Stainless	3/8	15	
15A	N.O.		K	steel	1/2	15	
20.4	N.C.		8.4	Stainless	2/4	20	
20A	N.O.		IVI	steel	3/4	20	
25.4	N.C.		D	Stainless	4	25	
∠SA	N.O.		Ρ.	steel	<b> </b>	25	
	Size 8A 10A 15A	Size   Valve type	Size Valve type  8A N.C. 10A N.O. 15A N	Size         Valve type         Symbol           8A 10A 15A N.C.         D.E.         E.E.           15A N.O.         F.         J.C.           15A N.O.         K.C.         M.C.           20A N.C.         N.C.         M.C.           25A N.C.         P.	Size         Valve type         Symbol material           8A 10A 15A N.C.         D E Stainless steel           10A 15A N.O.         J Stainless steel           10A N.C. 15A N.O.         J Stainless steel           20A N.C. N.O.         M Stainless steel           25A N.C. P Stainless	Size         Valve type         Symbol material         Body material         Port size           8A 10A 10A 15A N.O.         N.C. N.O.         E Stainless steel         3/8 1/2           10A 15A N.O.         J Stainless steel         3/8 1/2           15A N.O.         K Steel         1/2           20A N.C. N.O.         M Stainless steel         3/4           25A N.C.         P Stainless 1	

Voltage/Electrical entry					
Symbol	Voltage	Electrical entry			
A	24 VDC	Grommet			
В	100 VAC	Grommet			
С	110 VAC	With surge voltage			
D	200 VAC	\suppressor/			
Е	230 VAC				
F	24 VDC				
G	24 VDC	DIN terminal			
Н	100 VAC	With surge voltage			
J	110 VAC	\suppressor/			
K	200 VAC				
L	230 VAC	<b>S</b>			
M	24 VDC	Conduit terminal			
N	100 VAC	With surge voltage			
Р	110 VAC	\suppressor/			
Q	200 VAC				
R	230 VAC				
S	24 VDC	Conduit			
Т	100 VAC	With surge voltage			
U	110 VAC	\suppressor/			
٧	200 VAC				
W	230 VAC	<b>B</b> ILL			
Y	24 VDC	Flat terminal			
Z	Other	r voltages and electrical option			

#### All other special options are the same as those of the standard model.

	24 VAC				
Special voltage	48 VAC				
	220 VAC				
	240 VAC				
	12 VDC				
DIN terminal with lig	ght				
Conduit terminal with light					
Without DIN connector					
Applicable to deionized water					
(Seal material: FKM)					
Seal material: EPDM					
Oil-free					
G thread					
NPT thread					
With bracket					
Special electrical entry direction					
* Using the oil-free specification in a lov					

dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

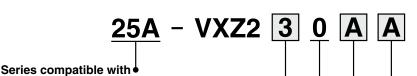
* The 25A- series specifications and dimensions are the same as those of the standard model.

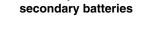
### **Zero Differential Pressure Type**

# Pilot Operated 2-Port Solenoid Valve/For Air ( E CA 25A-VXZ Series RoHS)



### How to Order (Single Unit)





Fluid • 0 For Air



### **Common Specifications**

Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

Size/Valve type Body material/Port size/Orifice diameter

Symbol	Body size	Valve type		Symbol	Body material	Port size	Orifice diameter
3	10A	N.C.		Α	Aluminum	1/4	10
Α	TUA	N.O.		В	Aluminum	3/8	10
4	15A	N.C.		G	Stainless	1/2	15
В	ISA	N.O.		G	steel	1/2	10
5	20A	N.C.		J	Stainless	3/4	20
С	204	N.O.		J	steel	3/4	20
6	25A	N.C.			Stainless	4	25
D	∠SA	N.O.		_	steel	Į.	25

Voltage/Electrical entry						
Symbol	Voltage	Electrical entry				
A	24 VDC	Grommet				
В	100 VAC	Grommet				
С	110 VAC	With surge voltage				
D	200 VAC	suppressor				
Е	230 VAC					
F	24 VDC					
G	24 VDC	DIN terminal				
Н	100 VAC	With surge voltage				
J	110 VAC	\suppressor /				
K	200 VAC					
L	230 VAC					
M	24 VDC	Conduit terminal				
N	100 VAC	With surge voltage				
Р	110 VAC	suppressor				
Q	200 VAC					
R	230 VAC					
S	24 VDC	Conduit				
Т	100 VAC	With surge voltage				
U	110 VAC	\suppressor /				
V	200 VAC					
W	230 VAC					
Y	24 VDC	Flat terminal				
Z	Other voltages					

#### All other special options are the same as those of the standard model.

	24 VAC				
	48 VAC				
Special voltage	220 VAC				
	240 VAC				
	12 VDC				
DIN terminal with lig	ght				
Conduit terminal wi	th light				
Without DIN connector					
Low concentration ozone resistant					
(Seal material: FKM)					
Seal material: EPDM					
Oil-free					
G thread					
NPT thread					
With bracket (Standard for resin body)					
Special electrical entry direction					
* Using the oil-free specification in a low					

dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.



^{*} The 25A- series specifications and dimensions are the same as those of the standard model.

### **Zero Differential Pressure Type**

# Pilot Operated 2-Port Solenoid Valve/For Water ( E CA 25A-VXZ Series RoHs)



### How to Order (Single Unit)

25A - VXZ2 3 2 C A

Series compatible with secondary batteries

> Fluid For Water



#### **Common Specifications**

- [ ;	Seal material	NBR
(	Coil insulation type	Class B
	Thread type	Rc

◆Size/Valve type ◆ Body material/Port size/Orifice diameter

Symbol	Body size	Valve type		Symbol	Body material	Port size	Orifice diameter
3	10A	N.C.		С	Stainless	1/4	10
Α	TUA	N.O.	L	D	steel	3/8	10
=							
4	15A	N.C.		G	Stainless	1/2	15
В	134	N.O.		G	steel	1/2	15
5	20A	N.C.		J	Stainless	3/4	20
С	204	N.O.		J	steel	3/4	20
=							
6	25A	N.C.			Stainless	1	25
D	ZSA	N.O.		_	steel	'	25

Voltage/Electrical entry						
Symbol	Voltage	Electrical entry				
A	24 VDC	Grommet				
В	100 VAC	Grommet				
С	110 VAC	With surge voltage				
D	200 VAC	suppressor				
E	230 VAC					
F	24 VDC					
G	24 VDC	DIN terminal				
Н	100 VAC	With surge voltage				
J	110 VAC	suppressor				
K	200 VAC					
L	230 VAC					
M	24 VDC	Conduit terminal				
N	100 VAC	With surge voltage				
Р	110 VAC	suppressor				
Q	200 VAC					
R	230 VAC					
S	24 VDC	Conduit				
Т	100 VAC	With surge voltage				
U	110 VAC	suppressor				
V	200 VAC					
W	230 VAC					
Y	24 VDC	Flat terminal				
Z	Other voltages					

#### All other special options are the same as those of the standard model.

	24 VAC				
	48 VAC				
Special voltage	220 VAC				
	240 VAC				
	12 VDC				
DIN terminal with lig	ght				
Conduit terminal wi	th light				
Without DIN connector					
Applicable to deionized water					
(Seal material: FKM)					
Seal material: EPDM					
Oil-free					
G thread	G thread				
NPT thread					
With bracket	With bracket				
Special electrical entry direction					
* Using the oil-free specification in a low					

dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

* The 25A- series specifications and dimensions are the same as those of the standard model.

### **Diaphragm Valve for Ultra High Purity Air Operated Type** RoHS AZ3542 & 4542 25A Series

 Suitable for UHP gas supply line Body material: 316L SS Pneumatically actuated normally closed **How to Order** (Inlet) (Outlet) AZ 3 542 S 2P MV4 25A Size Series compatible with Code Cv secondary batteries 3 0.29 4 0.5 Model • Connections Code Status Maximum operating pressure AZ3 AZ4 Size Normally closed 125 psig Code Connections 542 2PW 2P 2PW 2P Port (0.9 MPa) (N.C.) MV4 1/4 inch face seal (Male) Material FV4 1/4 inch face seal (Female) Code Body material TW4 1/4 inch tube weld 316L SS S MV6 3/8 inch face seal (Male) • 3/8 inch face seal (Female)

FV6

TW6

TW8

3/8 inch tube weld

1/2 inch tube weld

* 1) Fixed fitting (no rotating nut)

Only available with the same type fittings inlet and outlet.

Ports 4

Connection

Machined

Welded

### **Specifications**

Operating Parameters	AZ3542□25A	AZ4542□25A
Weight	0.26 kg *1)	

Code

2P

2PW

Ports

2 ports

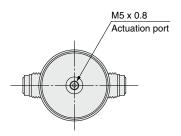
* Some parts have sizes and shapes that are different from the standard products.

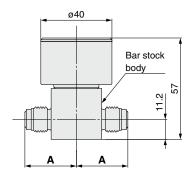
^{*1)} Weight for AZ3542S2PMV4MV4 including individual boxed weight. It may vary depending on connections or options.

### **Dimensions**

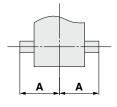
### AZ3542 & 4542

Ports: 2P (Machined)

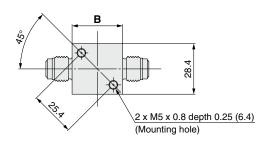




Connections: MV□

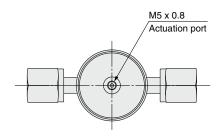


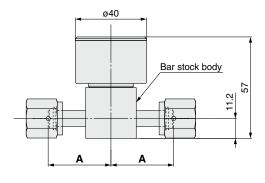
Connections: TW□



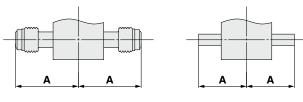
Ports	Connections	Α	В	
2P (Machined)	MV4	1.14 (29.0)	1 10 00 (00 4)	
	TW4	0.875 (22.2)	1.12 sq. (28.4)	
	MV6	1.5 (38.1)	1.48 sq. (37.6)	
	TW6	0.875 (22.2)	1 10 00 (00 4)	
	TW8	1.125 (28.6)	1.12 sq. (28.4)	

Ports: 2PW (Welded)

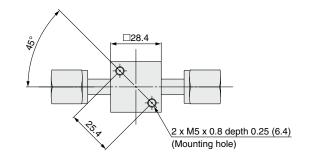




Connections: FV□



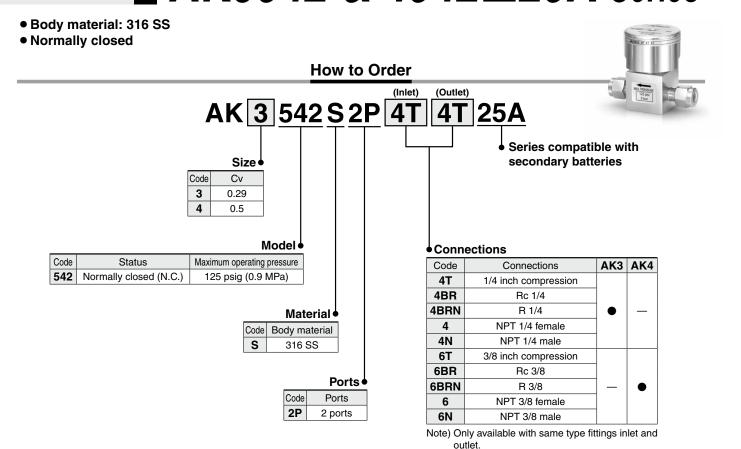
Connections: MV□ Connections: TW□



Ports	Connections	Α	
2PW (Welded)	MV4	1.39 (35.3)	
	FV4		
	TW4	1.06 (26.9)	
	MV6	1.93 (49.0)	
	FV6		
	TW6	1.325 (33.7)	



# Diaphragm Valves for General Applications Air Operated Type AK3542 & 4542 25A Series



^{*} Specifications and dimensions are the same as those of the standard model.

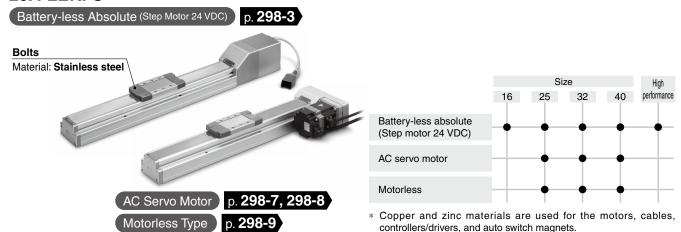


### Environment Secondary Battery Compatible

- Copper (Cu) and zinc (Zn) free*1
   *1 Excludes motors, cables, controllers/drivers
- Compatible with dew points as low as -70°C

Uses grease compatible with low dew points

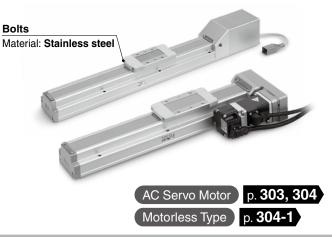
### High Rigidity and High Precision Slider Type 25A-LEKFS

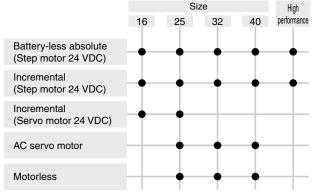


### Slider Type **Ball Screw Drive/25A-LEFS**

Battery-less Absolute (Step Motor 24 VDC) p. 298-10

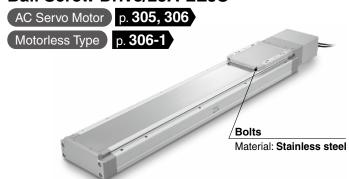
Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC)

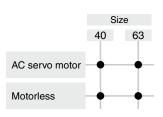




Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

### **High Rigidity Slider Type Ball Screw Drive/25A-LEJS**

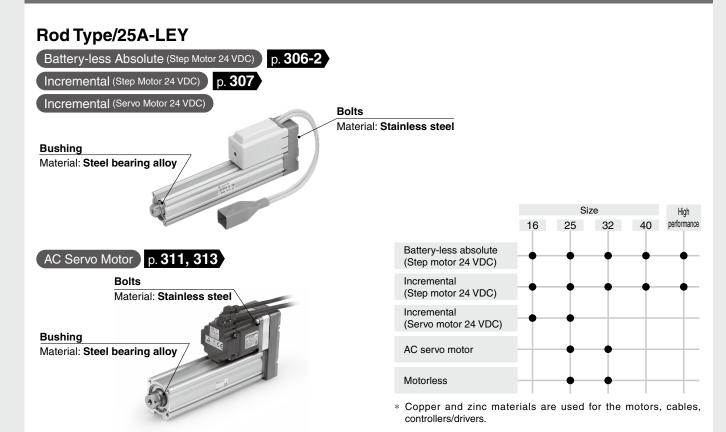




* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.



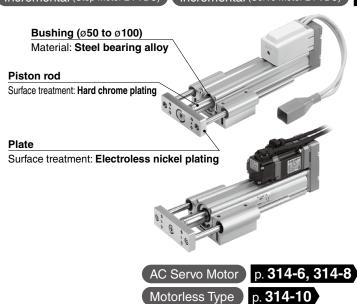
# Environment Secondary Battery Compatible

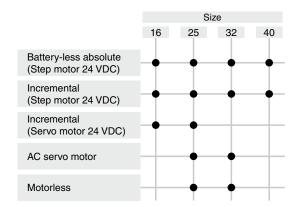


# **Guide Rod Type/25A-LEYG**



Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC)





* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# **High Rigidity and High Precision**

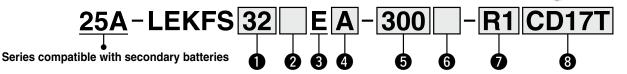
# Slider Type Secondary Battery Compatible



**25A-LEKFS Series** 25A-LEKFS16, 25, 32, 40 RoHS







# 1 Size 16 25 32 40

# **Motor mounting** position

Nil	In-line
R	Right side parallel
L	Left side parallel

# **3** Motor type

	· · · · · · · · · · · · · · · · · · ·
Е	Battery-less absolute
_	(Step motor 24 VDC)

# 4 Lead [mm]

Symbol	25A-LEKFS16	25A-LEKFS25	25A-LEKFS32	25A-LEKFS40					
Н	_	20	24	30					
Α	10	12	16	20					
В	5	6	8	10					

# Stroke*1

Size									Stroke								
Size	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
16	•	•	•	•	•	•	•	•	•	•	_	_	_	_	_	_	_
25	•	•	•	•	•	•	•	•	•	•	•	•	•	_	_	_	_
32	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	_	_
40	_	_	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

# 6 Motor option

Nil	Without option
R	With lock

# Actuator cable type/length

Robotic cable [n								
Nil	None	R8	8*2					
R1	1.5	RA	10*2					
R3	3	RB	15* ²					
R5	5	RC	20*2					

Solid state auto switches should be ordered separately. Click here for auto switch details.

## Applicable auto switches

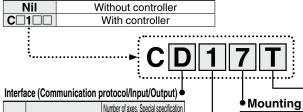
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

# **Replacement Parts/Grease Pack**

Applied portion	Order no.
Ball screw Rail guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

- * Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.
- * The 25A- series specifications and dimensions are the same as those of the standard model.





	_ '					
		Number of axes, Special specification				
Symbol	Type	Standard	With STO			
		Stariuaru	sub-function			
5	Parallel input (NPN)					
6	Parallel input (PNP)	•				
E	EtherCAT	•	•			
9	EtherNet/IP™	•	•			
Р	PROFINET	•	•			
D	DeviceNet®	•				
L	IO-Link	•	•			
M	CC-Link	•				

<ul><li>Mounting</li><li>7 Screw mounting</li></ul>				
7	Screw mounting			
<b>3</b> *3	DIN rail			
	Mou 7 8*3			

Number of axes, Special specification							
Symbol	Number of axes	Specification					
1	Single axis	Standard					
F	Single axis	With STO					
Г	Single axis	sub-function					

Communication plug connector, I/O cable*4

Symbol	Type	Applicable interface			
Nil	Without accessory	_			
S	Straight type communication plug connector	DeviceNet [®]			
Т	T-branch type communication plug connector	CC-Link Ver. 1.10			
1	I/O cable (1.5 m)	Parallal input (NIDNI)			
3	I/O cable (3 m)	Parallel input (NPN)			
5	I/O cable (5 m)	Parallel input (PNP)			

- *1 Please contact SMC for non-standard strokes as they are produced as special orders.
- *2 Produced upon receipt of order
- *3 The DIN rail is not included. It must be ordered separately.

# 

## [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEKFS series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

# [Precautions relating to differences in controller versions]

When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the Web Catalog.

## [UL-certified products]

The JXC series controllers used in combination with electric actuators are UL certified.

Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input. Select "Nil," "S," or "T" for DeviceNet® or CC-Link. Select "Nil," "1," "3," or "5" for parallel input.

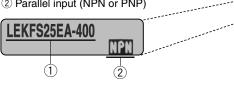
# The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

# <Check the following before use.>

1 Check the actuator label for the model number (after "25A This number should match that of the controller/driver.

2 Parallel input (NPN or PNP)



Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com

# ■ Trademark

EtherNet/IP® is a registered trademark of ODVA, Inc. DeviceNet® is a registered trademark of ODVA, Inc.

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

	Step data input type	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IP™ direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type
Туре											
Series	JXC51 JXC61	JXCE1	JXCEF	JXC91	JXC9F	JXCP1	JXCPF	JXCD1	JXCL1	JXCLF	JXCM1
Features	Parallel I/O	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input
Compatible motor				Bat	tery-less ab	solute (Step	motor 24 VI	DC)			
Max. number of step data		64 points									
Power supply voltage						24 VDC					

# **High Performance**



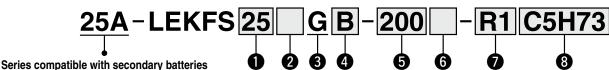
# High Rigidity and High Precision Slider Type Secondary Battery Compatible

25A-LEKFS□G Series

25A-LEKFS25, 32, 40







For details on controllers, refer to the next page.

# 1 Size 25 32

40

# 2 Motor mounting position

	<u> </u>
Nil	In-line
R	Right side parallel
L	Left side parallel

# **3** Motor type

Cumbal	Tymo			Compatible	
Symbol	Type	25A-LEKFS25	25A-LEKFS32	25A-LEKFS40	controllers
G	High performance (Battery-less absolute)	•	•	•	JXC5H JXC6H JXCEH JXC9H JXCPH

# 4 Lead [mm]

Symbol	25A-LEKFS25	25A-LEKFS32	25A-LEKFS40
Н	20	24	30
Α	12	16	20
В	6	8	10

# Stroke*1[mm]

Stroke	Note					
Stroke	Size	Applicable stroke				
50 to 800	25	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800				
50 to 1000	32	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000				
150 to 1200	40	150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200				

# **6** Motor option

Nil	Without option
В	With lock

# Actuator cable type/length

Robotic	cable		[m]
Nil	None	R8	8* ²
R1	1.5	RA	10* ²
R3	3	RB	15* ²
R5	5	RC.	20*2

# **Applicable Stroke Table**

Size	Stroke																
Size	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
25	•	•	•	•	•	•	•	•	•	•	•	•	•	_	_	_	_
32	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	_	_
40	_	_	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Solid state auto switches should be ordered separately. Click here for auto switch details.

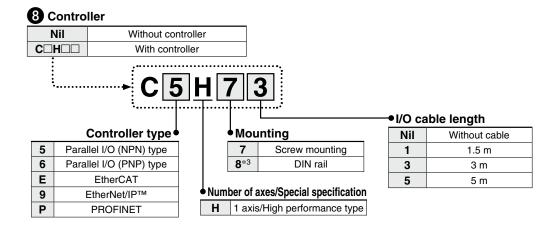
## Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

# **Replacement Parts/Grease Pack**

Applied portion	Order no.
Ball screw Rail guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

- * Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.
- * The 25A- series specifications and dimensions are the same as those of the standard model.



- *1 Please contact SMC for non-standard strokes as they are produced as special orders.
- *2 Produced upon receipt of order
- *3 The DIN rail is not included. It must be ordered separately.

# **⚠**Caution

# [CE/UKCA-compliant products]

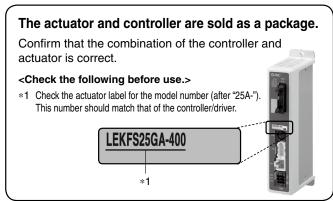
EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

# ■ Trademark

EtherNet/IP $^{\!@}$  is a registered trademark of ODVA, Inc.

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.



Refer to the Operation Manual for using the products.
 Please download it via our website: https://www.smcworld.com

Туре	Step data input type	EtherCAT direct input type	EtherNet/IP™ direct input type	PROFINET direct input type		
Series	JXC5H JXC6H	JXCEH	ЈХС9Н	ЈХСРН		
Features	Parallel I/O	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input		
Compatible motor	Step motor 24 VDC					
Max. number of step data	64 points					
Power supply voltage		24 \	/DC			

# High Rigidity and High Precision Slider Type

Ball Screw Drive Secondary Battery Compatible

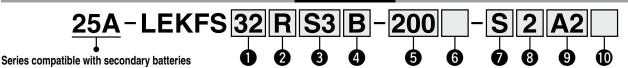


**25A-LEKFS** Series 25A-LEKFS25, 32, 40

(RoHS)

LECY□ Series p. 298-6

# How to Order



1 Size 25 32

40

# 2 Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

**3** Motor type

Symbol	Туре	Output [W]	1 Size	9 Driver type	Compatible drivers
S2*1	AC servo motor	100	25	A1/A2	LECSA□-S1
S3	(Incremental	200	32	A1/A2	LECSA□-S3
S4	encoder)	400	40	A2	LECSA2-S4
		100		B2	LECSB2-T5
T6*2				C2	LECSC2-T5
				S2	LECSS2-T5
	AC servo motor	200		B2	LECSB2-T7
T7	(Absolute			C2	LECSC2-T7
	encoder)			S2	LECSS2-T7
				B2	LECSB2-T8
T8		400	40	C2	LECSC2-T8
				S2	LECSS2-T8

- *1 For motor type S2, the compatible driver part number suffix is S1.
- *2 For motor type T6, the compatible driver part number is LECS□2-T5.

Lead [mm]

Symbol	25A-LEKFS25	25A-LEKFS32	25A-LEKFS40
Н	20	24	30
Α	12	16	20
В	6	8	10

# 5 Stroke [mm]

50	50
to	to
1200	1200

* For details, refer to the applicable stroke table below.

# 6 Motor option

Nil	Without option
В	With lock

# Cable type*1 *2

Nil	Without cable								
S	Standard cable								
R	Robotic cable (Flexible cable)								

- A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- *2 Standard cable entry direction is "(B) Counter axis side." For the right/left side parallel motor types of the ball screw drive, the cable entry direction is "(A) Axis side." (For details, refer to the **Web Catalog**.)

# 8 Cable length*1 [m]

Nil	Without cable
2	2
5	5
Α	10

The length of the encoder, motor and lock cables are the same.

# Driver type

	<u> </u>								
	Compatible	Power supply	Size						
	drivers	voltage [V]	25	32	40				
Nil	Without driver	_							
A1	LECSA1-S□	100 to 120			—				
A2	LECSA2-S□	200 to 230		•					
B2	LECSB2-T□	200 to 240	•	•	•				
C2	LECSC2-T□	200 to 230							
S2	LECSS2-T□	200 to 240	•						

* When a driver type is selected, a cable is included. Select the cable type and cable length. Example) S2S2: Standard cable (2 m) + Driver (LECSS2) S2: Standard cable (2 m)

Nil: Without cable and driver

# I/O cable length [m]*1

	Nil	Without cable
	Н	Without cable (Connector only)
	1	1.5

*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the Web Catalog. if an I/O cable is required.

Solid state auto switches should be ordered separately.

Click here for auto switch details.

## Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

# Applicable Stroke Table

# : Standard

Size Size Size																	
Size	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
25	•	•	•	•	•	•	•	•	•	•	•	•	•	_	_	_	_
32	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	_	_
40	_	_	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

* Please contact SMC for non-standard strokes as they are produced as special orders.

## Compatible Drivers

Compatible Drivers							
Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	type			
Series	LECSA	LECSB-T	LECSC-T	LECSS-T			
Number of point tables	Up to 7	Up to 255	Up to 255 (2 stations occupied)	_			
Pulse input	0	0	_	_			
Applicable network	_	_	CC-Link	SSCNET III/H			
Control encoder	Incremental	Absolute	Absolute	Absolute			
Control encoder	17-bit encoder	22-bit encoder	18-bit encoder	22-bit encoder			
Communication function	USB communication	USB communication,	RS422 communication	USB communication			
Power supply voltage [V]	100 to 120 VAC (50/60 Hz), 200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)			

## Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

- * Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.
- The 25A- series specifications and dimensions are the same as those of the standard model.

AC Servo Motor LECY Series

# High Rigidity and High Precision Slider Type

Ball Screw Drive Secondary Battery Compatible **25A-LEKFS Series** 25A-LEKFS25, 32, 40





LECS□ Series > p. 298-5

# **How to Order**



# 1 Size 25 32 40

# 2 Motor mounting position

	Nil	In-line			
	R	Right side parallel			
	L	Left side parallel			

# **3** Motor type

Symbol	Type	Output [W]	1 Size	9 Driver type	Compatible drivers
V6*1		100	25	M2	LECYM2-V5
V O ···		100	25	U2	LECYU2-V5
V7	AC servo motor	200	32	M2	LECYM2-V7
V /	(Absolute encoder)	200	200   32	U2	LECYU2-V7
V8		400	40	M2	LECYM2-V8
VO		400	40	U2	LECYU2-V8

^{*1} For motor type V6, the compatible driver part number suffix is V5.

# 4 Lead [mm]

Symbol	25A-LEKFS25	25A-LEKFS32	25A-LEKFS40
Н	20	24	30
Α	12	16	20
В	6	8	10

# 5 Stroke [mm]

50
to
1200

# 6 Motor option

	то: оршон
Nil	Without option
В	With lock

# Cable type

Nil Without cable								
S	Standard cable							
R	Robotic cable (Flexible cable)							

# **Actuator cable** length [m]

Nil	Without cable
3	3
5	5
Α	10
С	20

# 9 Driver type

	Compatible	Power supply
	drivers	voltage [V]
Nil	Without driver	_
M2	LECYM2-V□	200 to 230
U2	LECYU2-V□	200 to 230

When a driver type is selected, a cable is included. Select the cable type and cable length.

# I/O cable length [m]*1

Nil	Without cable
Н	Without cable (Connector only)
1	1.5

*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the Web Catalog. if an I/O cable is required.

Solid state auto switches should be ordered separately. Click here for auto switch details.

# Applicable auto switches D-M9N(V)-900, D-M9P(V)-900,

D-M9B(V)-900, D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

# Applicable Stroke Table

<del></del>																	
	Stroke																
Size	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
	-						-				-						
25	•	•	•	•	•	•	•			•	•	•	•	I —	_	_	l —
32	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	_	_
40																	

^{*} Please contact SMC for non-standard strokes as they are produced as special orders.

Compatible Drivers							
Driver type	MECHATROLINK-II type	MECHATROLINK-III type					
Series	LECYM	LECYU					
Applicable network	MECHATROLINK-Ⅱ	MECHATROLINK-Ⅲ					
Control encoder	Absolute						
Control effcodel	20-bit encoder						
Communication device	USB communication, RS-422 communication						
Power supply voltage [V]	200 to 230 VAC (50/60 Hz)						

## Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

- * Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.
- * The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

: Standard

Motorless Type

# **Electric Actuator/** High Rigidity and High Precision Slider Type Ball Screw Drive Secondary Battery Compatible RoHS

**25A-LEKFS Series** 25A-LEKFS25, 32, 40

# **How to Order**

25A-LEKFS|32

Series compatible with secondary batteries



40 2 Motor mounting

position						
Nil	In-line					
R	Right side					
n	parallel					
	Left side					
	parallel					

Mounting 4 Lead [mm]

цур	t
NZ	
NY	
NX	
NW	
NV	
NU	
NT	
NM1	
NM2	
NM3	

Symbol	25A-LEKFS25	25A-LEKFS32	25A-LEKFS40
Н	20	24	30
Α	12	16	20
В	6	8	10

5 Stroke [mm]

50	50
to	to
1200	1200

* Refer to the applicable stroke table.

Solid state auto switches should be ordered

Click here for auto switch details.

Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

# **Replacement Parts/Grease Pack**

Applied portion	Order no.
Ball screw Rail guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

# Applicable Stroke Table

Standard

C:	ze									Stroke								
01	ze	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
2	:5	•	•	•	•	•	•	•	•	•	•	•	•	•	_	_	_	_
3	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	_	_
4	0	_	_	•	•	•	•	•	•	•	•	•	•	•	•	•		

Compatible Motors and Mounting Types*5

Applicable n	notor model	Size/Mounting type														
Manufacturer	Series		25					32/40								
Manufacturer	Series	NZ	NY	NX	NM1	NM2	NM3	NZ	NY	NX	NW	NV	NU	NT	NM1	NM2
Mitsubishi Electric Corporation	MELSERVO JN/J4/J5	•	_	_	_	_	_	•	_	_	_	_	_	_		_
YASKAWA Electric Corporation	Σ-V/7/X	●*4	_	_	_	_	_	•	_	_	_	_	_	_	-	_
SANYO DENKI CO., LTD.	SANMOTION R	•	_	_	_	_	_	•	_	_	_	l —	_	_	_	_
OMRON Corporation	OMNUC G5/1S	•	_	_	_	_	_	_			_	<b>-</b>	_	_	_	_
Panasonic Corporation	MINAS A5/A6	(MHMF only)	•	_	_	_	_	_	•		_	_	_	_	_	_
FANUC CORPORATION	βis (-B)	•	_	_	_	_	_	(β1 only)	_	_	•	_	_	_	_	_
NIDEC SANKYO CORPORATION	S-FLAG	•	_	<u> </u>	_	_	_	•	_	_	_	<u> </u>	_	_	_	_
KEYENCE CORPORATION	SV/SV2	●*4	_	<u> </u>	_	_		•		<b>—</b>		<u> </u>	_	_	_	_
FUJI ELECTRIC CO., LTD. ALPHA7		•	_		_	_	_	•	_	_	_	_	_	_	_	_
MinebeaMitsumi Inc.	Hybrid stepping motors	_	_	<b>—</b>	●*1	_	●*3	_	_	_	_	—	_	_	●*2	_
Shinano Kenshi Co., Ltd.	CSB-BZ	_	_	_	●*1	_	●*3	_	_	_	_	—	_	_	_	_
ORIENTAL MOTOR Co., Ltd.	α STEP AR/AZ	_	_	_	_	(46 only)	_	_	_	_	_	_	_	_	_	●*2
FASTECH Co., Ltd.	Ezi-SERVO	_	_	<u> </u>	•	_	_		_	_	_	_	_	_	<b>●</b> *2	_
Rockwell Automation, Inc. (Allen-Bradley)	Kinetix MP/VP/TL	(TL only)	_	_	_	_	_	_	_	●*1 (MP/VP only)	_	_	_	(TL only)	_	_
Beckhoff Automation GmbH	AM 30/31/80/81	•	_	_	_	_	_	_	_	●*1 (80/81 only)	_	●*1 (30 only)	●*2 (31 only)	_	_	_
Siemens AG	SIMOTICS S-1FK7		_	•	_		_		_	<b>●</b> *1	_				_	
Delta Electronics, Inc.	ASDA-A2		_	_		_	_		_		_				_	
ANCA Motion	AMD2000	•	_	_			_		_	_	_	_	_		_	_

^{*1} Motor mounting position: In-line only *2 Only size 32 is available when the motor mounting position is right (or left) side parallel. *3 Motor mounting position: Right (or left) side parallel only

* The auto switch magnet contains copper and/or zinc.

^{*} The 25A- series specifications and dimensions are the same as those of the standard model.



^{*4} For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.
*5 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

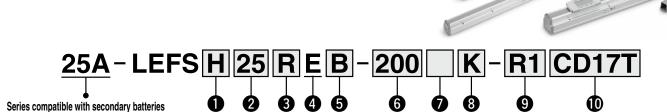
# Slider Type Ball Screw Drive Secondary Battery Compatible

**25A-LEFS** Series 25A-LEFS16, 25, 32, 40





**How to Order** 



For details on controllers, refer to the next page.

# Accuracy

	•
Nil	Basic type
Н	High-precision type

2 Siz	е
16	
25	
32	

40

# Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

# 4 Motor type

E	Battery-less absolute (Step motor 24 VDC)

# 5 Lead [mm]

Symbol	25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40
Н	_	20	24	30
Α	10	12	16	20
В	5	6	8	10

# 8 Positioning pin hole

Nil	Housing B bottom*2	Housing B bottom
K	Body bottom 2 locations	Body bottom

# 6 Stroke*1 [mm]

Stroke	Note						
Stroke	Size	Applicable stroke					
50 to 500	16	50, 100, 150, 200, 250, 300, 350, 400, 450, 500					
50 to 800	25	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800					
50 to 1000	32	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000					
150 to 1200	40	150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200					

# **7** Motor option

Nil	Without option
В	With lock

# Actuator cable type/length

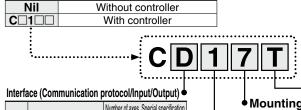
Robotic	cable	[m]	
Nil	None	R8	8*3
R1	1.5	RA	10*3
R3	3	RB	15* ³
R5	5	RC	20*3

# Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide	GR-D-005 (5 g) GR-D-010 (10 g)

- * Copper and zinc materials are used for the motors, cables, controllers/drivers.
- The 25A- series specifications and dimensions are the same as those of the standard model.





			Number of axes, S	pecial specification
Sym	nbol	Type	Standard	With STO
			Stariuaru	sub-function
5	5	Parallel input (NPN)	•	
6	;	Parallel input (PNP)	•	
E	Ε	EtherCAT	•	•
Ć	)	EtherNet/IP™	•	•
F	•	PROFINET	•	•
	)	DeviceNet®	•	
L	_	IO-Link	•	•
Λ	/	CC-Link	•	

<ul><li>Mounting</li></ul>				
7 Screw mounting				
8*4	DIN rail			

Number of axes, Special specification						
Symbol	Number of axes	Specification				
1	Single axis	Standard				
F	Single axis	With STO				
	Single axis	sub-function				

Communication plug connector, I/O cable*5

Symbol	Туре	Applicable interface
Nil	Without accessory	_
S	Straight type communication plug connector	DeviceNet [®]
Т	T-branch type communication plug connector	CC-Link Ver. 1.10
1	I/O cable (1.5 m)	Parallel input (NPN)
3	I/O cable (3 m)	Parallel input (PNP)
5	I/O cable (5 m)	raiallei lilput (PNP)

- *1 Please contact SMC for non-standard strokes as they are produced as special orders.
- *2 Refer to the body mounting example on the Web Catalog for the mounting method.
- *3 Produced upon receipt of order
- *4 The DIN rail is not included. It must be ordered separately.

*5 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel

Select "Nil," "S," or "T" for DeviceNet® or CC-Link. Select "Nil," "1," "3," or "5" for parallel input.

# **⚠** Caution

## [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

# [Precautions relating to differences in controller versions]

When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the Web Catalog.

## [UL certification]

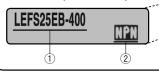
The JXC series controllers used in combination with electric actuators are UL certified.

# The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

# <Check the following before use.>

- 1) Check the actuator label for the model number (after "25A-This number should match that of the controller/driver.
- 2 Check that the Parallel I/O configuration matches (NPN or PNP).





Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com

	Step data input type	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IP™ direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type
Туре									rame Cont.		
Series	JXC51 JXC61	JXCE1	JXCEF	JXC91	JXC9F	JXCP1	JXCPF	JXCD1	JXCL1	JXCLF	JXCM1
Features	Parallel I/O	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input
Compatible motor		Battery-less absolute (Step motor 24 VDC)									
Max. number of step data		64 points									
Power supply voltage			24 VDC								

# Slider Type

Ball Screw Drive Secondary Battery Compatible



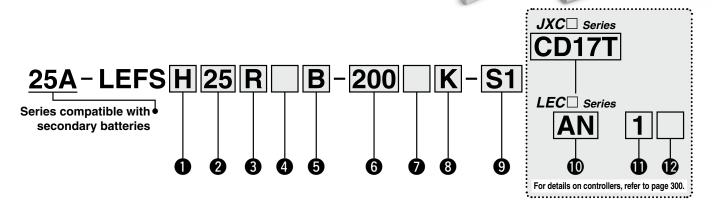
List" in the Web Catalog.

(RoHS)

**25A-LEFS Series** 25A-LEFS16, 25, 32, 40

Refer to the Web Catalog for model selection.

**How to Order** 



# Accuracy

Nil	Basic type
Н	High-precision type

# 3 Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

# 5 Lead [mm]

Symbol	25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40
Н	_	20	24	30
Α	10	12	16	20
В	5	6	8	10

# 4 Motor type

2 Size

16 32 40

Symbol	Type	Applicable size				Compatible	
Symbol	туре	25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40	controlle	rs/drivers
Nil	Step motor (Servo/24 VDC)	•	•	•	•	JXC51 JXC61 JXC91 JXC91 JXCD1 JXCD1 JXCL1 JXCM1	JXCEF JXC9F JXCPF JXCLF LECP1 LECPA
Α	Servo motor (24 VDC)	•	•	_	_	LEC	CA6

# 6 Stroke*1 [mm]

O otroke [iiiii]				
Stroke		Note		
Stroke	Size	Applicable stroke		
50 to 500	16	50, 100, 150, 200, 250, 300, 350, 400, 450, 500		
50 to 800	25	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800		
50 to 1000	32	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000		
150 to 1200	40	150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200		

# **1** Motor option

Nil	Without option
В	With lock

# 8 Positioning pin hole

Nil	Housing B bottom* ²	Housing B bottom
K	Body bottom 2 locations	Body bottom

# 9 Actuator cable type/length*4

Standard cable [m]		Robo	Robotic cable		
Nil	None	R1	1.5	RA	10* ³
S1	1.5* ⁶	R3	3	RB	15* ³
S3	3*6	R5	5	RC	20*3
S5	5* ⁶	R8	8*3		

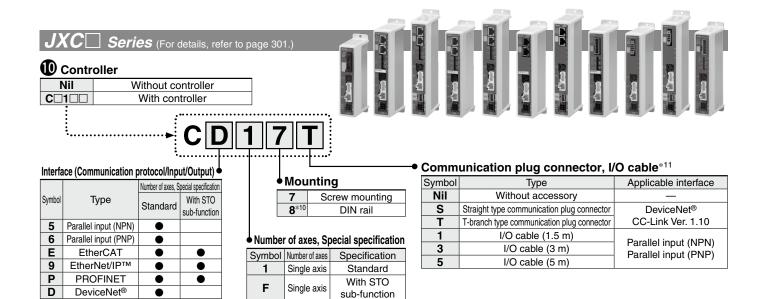
# Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide	GR-D-005 (5 g) GR-D-010 (10 g)

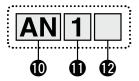
- * Copper and zinc materials are used for the motors, cables, controllers/drivers.
- * The 25A- series specifications and dimensions are the same as those of the standard model.



Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC) Secondary Battery Compatible







IO-Link

CC-Link

М

# Controller/Driver type*5

Nil	Without controller/driver		
6N	LECA6	NPN	
6P	(Step data input type)	PNP	
1N	LECP1*6	NPN	
1P	(Programless type)	PNP	
AN	LECPA*6 *7	NPN	
AP	(Pulse input type)	PNP	

# I/O cable length*8

Nil	Without cable (Without communication plug connector)
1	1.5 m
3	3 m* ⁹
5	5 m* ⁹

# **12** Controller/Driver mounting

<b>E</b>	intronon/Briver infoanting
Nil	Screw mounting
D	DIN rail*10

- *1 Please contact SMC for non-standard strokes as they are produced as special orders
- Refer to the body mounting example in the Web Catalog for the mounting method.
- *3 Produced upon receipt of order (Robotic cable only)
- The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable.
- Refer to the Web Catalog if only the actuator cable is required.
- *5 For details on controllers/drivers and compatible motors, refer to the compatible controllers/drivers on the next page.
- *6 Only available for the motor type "Step motor"
- When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) separately. (Refer to the **Web Catalog**.)
- *8 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. If an I/O cable is required, order the cable separately for each series. (For details, refer to the Web Catalog.)
- *9 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector
   *10 The DIN rail is not included. It must be ordered separately.
- *11 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel
  - Select "Nil," "S," or "T" for DeviceNet® or CC-Link. Select "Nil," "1," "3," or "5" for parallel input.

# **⚠** Caution

# [CE/UKCA-compliant products]

- ① EMC compliance was tested by combining the electric actuator LEF series and the controller LEC/JXC series.
  - The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.
- 2 For the incremental (servo motor 24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the Web Catalog for the noise filter set. Refer to the LECA series Operation Manual for installation.

## [UL-compliant products (For the LEC series)]

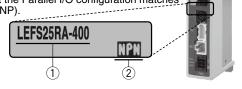
When compliance with UL is required, the electric actuator and controller/ driver should be used with a UL1310 Class 2 power supply.

# The actuator and controller/driver are sold as a package.

Confirm that the combination of the controller/driver and actuator is correct.

# <Check the following before use.>

- 1) Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver
- ② Check that the Parallel I/O configuration matches (NPN or PNP).



Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com



# **Compatible Controllers/Drivers**

		1	1	,
Туре	Step data input type	Step data input type	Programless type	Pulse input type
Series	JXC51 JXC61	LECA6	LECP1	LECPA
Features	Parallel I/O	Parallel I/O	Capable of setting up operation (step data) without using a PC or teaching box	Operation by pulse signals
		Servo motor (24 VDC)		motor 24 VDC)
Max. number of step data	64 points		14 points	_
Power supply voltage	24 VDC			

	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IP™ direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type
Туре							Second Clinia Control (SEC)			
Series	JXCE1	JXCEF	JXC91	JXC9F	JXCP1	JXCPF	JXCD1	JXCL1	JXCLF	JXCM1
Features	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input
Compatible motor	Step motor (Servo/24 VDC)									
Max. number of step data		64 points								
Power supply voltage	24 VDC									



Battery-less Absolute (Step Motor 24 VDC)

# High Performance Slider Type

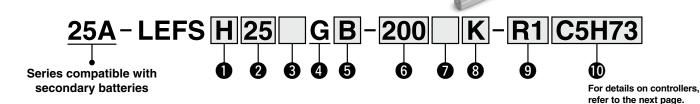
Ball Screw Drive Secondary Battery Compatible

**25A-LEFS G Series** 25A-LEFS16, 25, 32, 40

Web Catalog.

(RoHS)

**How to Order** 



Accuracy

Accuracy				
Nil	Basic type			
Н	High-precision type			

2 Siz	е
16	
25	1

32 40

4	Мо	tor	type

Cumbal	Tymo	Applicable size				Compatible
Symbol	Type	25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40	controllers
G	High performance (Battery-less absolute)	•	•	•	•	JXC5H JXC6H JXC9H JXCPH

Motor mounting position

	· · · · · · · · · · · · · · · · · · ·		
Nil	In-line		
R	Right side parallel		
L	Left side parallel		

**5** Lead [mm]

Symbol	25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40
Н	_	20	24	30
Α	10	12	16	20
В	5	6	8	10

8 Positioning pin hole

• · · · · · · · · · · · · · · · · · · ·						
Nil	Housing B bottom*2	Housing B bottom				
К	Body bottom 2 locations	Body bottom				

6 Stroke*1[mm]

Stroke		Note
Stroke	Size	Applicable stroke
50 to 500 16 50, 100, 150, 200, 250, 300, 35 450, 500		50, 100, 150, 200, 250, 300, 350, 400, 450, 500
50 to 800	25	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800
50 to 1000	32	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000
150 to 1200	40	150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200

**7** Motor option

Nil	Without option					
В	With lock					

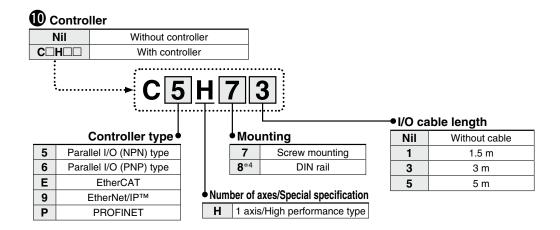
# 9 Actuator cable type/length

Robotic cable				
Nil	None	R8	8* ³	
R1	1.5	RA	10* ³	
R3	3	RB	15* ³	
R5	5	RC	20*3	

# **Replacement Parts/Grease Pack**

Applied portion	Order no.
Ball screw Rail guide	GR-D-005 (5 g) GR-D-010 (10 g)

- * Copper and zinc materials are used for the motors, cables, controllers/drivers.
- The 25A- series specifications and dimensions are the same as those of the standard model.



- *1 Please contact SMC for non-standard strokes as they are produced as special orders.
- *2 For details on the mounting method, refer to page 280.
- *3 Produced upon receipt of order
- *4 The DIN rail is not included. It must be ordered separately.

# **⚠** Caution

# [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

# ■ Trademark

EtherNet/IP® is a registered trademark of ODVA, Inc.

 $\label{eq:entropy} \mbox{EtherCAT}^{\&} \mbox{ is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.}$ 

# The actuator and controller are sold as a package. Confirm that the combination of the controller and actuator is correct. <Check the following before use.> *1 Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver. LEFS25GA-400 *1

* Refer to the Operation Manual for using the products.
Please download it via our website: https://www.smcworld.com

Туре	Step data input type	EtherCAT direct input type	EtherNet/IP™ direct input type	PROFINET direct input type
Series	JXC5H JXC6H	JXCEH	ЈХС9Н	ЈХСРН
Features	Parallel I/O	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input
Compatible motor	ompatible motor Step motor 24 VDC			
Max. number of step data	64 points			
Power supply voltage	24 VDC			



# High Performance Slider Type

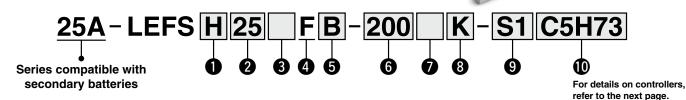
Ball Screw Drive Secondary Battery Compatible



**25A-LEFS F Series** 25A-LEFS16, 25, 32, 40

(RoHS)

# **How to Order**



Accuracy

Accuracy				
Nil	Basic type			
Н	High-precision type			

<b>2</b> Siz	е
16	
25	
32	
40	

Motor mounting position In-line

4 Motor type

Cumbal	Туре	Applicable size				Compatible
Symbol		25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40	controllers
F	High performance (Step motor 24 VDC)	•	•	•	•	JXC5H JXC6H JXCEH JXC9H JXCPH

**5** Lead [mm]

Symbol	25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40
Н	_	20	24	30
Α	10	12	16	20
В	5	6	8	10

Positioning pin hole

Positioning pin note				
Nil	Housing B bottom* ²	Housing B bottom		
K	Body bottom 2 locations	Body bottom		

6 Stroke*1[mm]

Stroke	Note		
Sticke	Size	Applicable stroke	
50 to 500	16	50, 100, 150, 200, 250, 300, 350, 400, 450, 500	
50 to 800	25	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800	
50 to 1000	32	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000	
150 to 1200	40	150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200	

**7** Motor option

Nil	Without option
В	With lock

# Actuator cable type/length*4

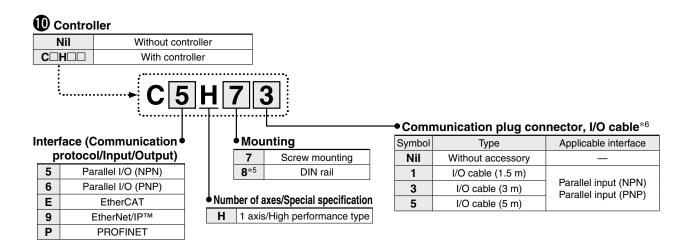
Standard cable [m]		
Nil None		
<b>S1</b> 1.5		
S3	3	
S5	5	

Robotic cable			[m]
R1	1.5	RA	10* ³
R3	3	RB	15* ³
R5	5	RC	20*3
R8	8* ³		

**Replacement Parts/Grease Pack** 

Applied portion	Order no.	
Ball screw Rail guide	GR-D-005 (5 g) GR-D-010 (10 g)	

- * Copper and zinc materials are used for the motors, cables, controllers/drivers.
- The 25A- series specifications and dimensions are the same as those of the standard model.



- *1 Please contact SMC for non-standard strokes as they are produced as special orders.
- *2 For details on the mounting method, refer to page 280.
- *3 Produced upon receipt of order (Robotic cable only)
- *4 The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable.
- *5 The DIN rail is not included. It must be ordered separately.
- *6 Select "Nil" for anything other than parallel input. Select "Nil," "1," "3," or "5" for parallel input.

# **∆** Caution

## [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

# ■ Trademark

EtherNet/IP® is a registered trademark of ODVA, Inc.

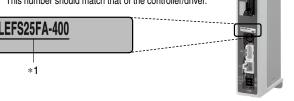
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# The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

# <Check the following before use.>

*1 Check the actuator label for the model number (after "25A-This number should match that of the controller/driver.



* Refer to the Operation Manual for using the products.
Please download it via our website: https://www.smcworld.com

# **Compatible Controllers**

- companion - contraction	Compatible Controllers				
Туре	Step data input type	EtherCAT direct input type	EtherNet/IP™ direct input type	PROFINET direct input type	
Series	JXC5H JXC6H	JXCEH	ЈХС9Н	ЈХСРН	
Features	Parallel I/O	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input	
Compatible motor	Step motor 24 VDC		Step motor (Servo/24 VDC)		
Max. number of step data	64 points		64 points		
Power supply voltage	24 VDC	24 VDC			

# Slider Type Ball Screw Drive Secondary Battery Compatible

**25A-LEFS** Series 25A-LEFS25, 32, 40

Refer to the Web Catalog for model selection.

LECY□ Series p. 304

**How to Order** 





25A-LEFS H 32 R S3 200 Series compatible with 6 secondary batteries

Accuracy			
Nil	Basic type		

High-precision type

# 2 Size 3 Motor mounting

poortion		
Nil	In-line	
R	Right side parallel	
L	Left side parallel	

# **5** Lead [mm]

Symbol	25A- LEFS25	25A- LEFS32	25A- LEFS40
Н	20	24	30
Α	12	16	20
В	6	8	10

Stroke [mm]		
50	50	
to	to	
1200	1200	

* For details, refer to the applicable stroke table below

<b>7</b> Mo	tor option
Nil	Without ontic

With lock

# Motor type

• meter type												
Symbol	Туре	Output [W]	2 Size	Driver type	Compatible drivers							
S2*1	AC servo motor	100	25	A1/A2	LECSA□-S1							
S3	(Incremental encoder)	200	32	A1/A2	LECSA□-S3							
S4	encoder)	400	40	A2	LECSA2-S4							
		100		B2	LECSB2-T5							
T6*2	AC servo motor		25	C2	LECSC2-T5							
				S2	LECSS2-T5							
				B2	LECSB2-T7							
T7	(Absolute	200	32	C2	LECSC2-T7							
	encoder)			S2	LECSS2-T7							
	,			B2	LECSB2-T8							
T8		400	40	C2	LECSC2-T8							
				S2	LECSS2-T8							

- *1 For motor type S2, the compatible driver part number suffix is S1.
- *2 For motor type T6, the compatible driver part number is LECS□2-T5.

# Positioning pin hole

Nil	Housing B bottom*1	Housing B bottom					
К	Body bottom 2 locations	Body bottom					

*1 Refer to the body mounting example for the mounting method. (Refer to the **Web Catalog**.)

# Cable length*1 [m]

Nil	Without cable								
2	2								
5	5								
Α	10								

*1 The length of the encoder, motor, and lock cables are the same.

# 9 Cable type*1 *2

	Nil	Without cable
	S	Standard cable
	R	Robotic cable

- *1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- *2 Standard cable entry direction is
  - Parallel: (A) Axis side
     In-line: (B) Counter axis
  - side

# **1** Driver type

	Compatible	Power supply	Size					
	drivers	voltage [V]	25	32	40			
Nil	Without driver	_			•			
A1	LECSA1-S□	100 to 120			_			
A2	LECSA2-S□	200 to 230	•	•	•			
B2	LECSB2-T□	200 to 240	•	•	•			
C2	LECSC2-T□	200 to 230			•			
S2	LECSS2-T□	200 to 240			•			

When a driver type is selected, a cable is included. Select the cable type and cable length. Example) S2S2: Standard cable (2 m) + Driver (LECSS2)

S2: Standard cable (2 m) Nil: Without cable and driver

# I/O cable length [m]*3

Nil	Without cable
Н	Without cable (Connector only)
1	1.5

*3 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. If an I/O cable is required, refer to the "Options" page in the Web Catalog.

Applicable Stroke lable •: St										Stan	dard											
Stroke [mm] Model		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1100	1200
25A-LEFS25			•	•			•	•	•	•			•	•		•	<b> </b> —	_	_	_	_	_
25A-LEFS32			•	•	•	•	•	•	•		•	•	•	•	•	•	•	•			_	
25A-LEFS40	<u> </u>	_	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

* Please contact SMC for non-standard strokes as they are produced as special orders.

* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.

Companible Drivers								
Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	type				
Series	LECSA	LECSB-T	LECSC-T	LECSS-T				
Number of point tables	Up to 7	Up to 255	Up to 255 (2 stations occupied)	_				
Pulse input	0	0	_	_				
Applicable network	_	_	CC-Link	SSCNET II/H				
Control encoder	Incremental 17-bit encoder	Absolute 22-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder				
Communication function	USB communication	USB communication, RS422 communication	USB communication, RS422 communication	USB communication				
Power supply voltage [V]	100 to 120 VAC (50/60 Hz) 200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)				

# **Replacement Parts/Grease Pack**

Applied portion	Order no.
Ball screw	GR-D-005 (5 g)
Rail guide	GR-D-010 (10 g)

^{*1} Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Slider Type

Ball Screw Drive Secondary Battery Compatible

**25A-LEFS Series** 25A-LEFS25, 32, 40

200

Refer to the Web Catalog for model selection.

LECS□ Series ▶ p. 303

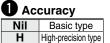
**How to Order** 

Refer to the "CE/UKCA

RoHS

UL-compliance List" in the Web Catalog.

# 25A-LEFS H 32 R V7 Series compatible with secondary batteries



25 32 40

2 Size 3 Motor mounting nocition

pooluon									
Nil	In-line								
R	Right side parallel								
L	Left side parallel								

# Lead [mm]

Symbol	25A-LEFS25	25A-LEFS32	25A-LEFS40
Н	20	24	30
Α	12	16	20
В	6	8	10

1	Stroke [mm]				
	50	50			
	to	to			
	1200	1200			
_					

* For details, refer to the applicable stroke table below

Motor option					
Nil	Without option				
В	With lock				

4 Motor type

Symbol	Type	Output [W]	2 Size	Driver type	Compatible drivers
V6*1		100	25	M2	LECYM2-V5
V 6*1	AC servo motor (Absolute encoder)		25	U2	LECYU2-V5
V7		200	32	M2	LECYM2-V7
				U2	LECYU2-V7
V8	encodery	400	40	M2	LECYM2-V8
VO		400	40	U2	LECYU2-V8

*1 For motor type V6, the compatible driver part number suffix is V5.

8 Positioning pin hole

Nil	Housing B bottom*1	Housing B bottom
K	Body bottom 2 locations	Body bottom

*1 Refer to the body mounting example in the Web Catalog for the mounting method.

# 9 Cable type*1 *2

Nil	Without cable
S	Standard cable
R	Robotic cable

- *1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- *2 Standard cable entry direction is
  - · Parallel: (A) Axis side
- · In-line: (B) Counter axis side

# Cable length*1 [m]

Applicable Stroke Table

50

•

Stroke

Model

25A-LEFS25

25A-LEFS32

Nil	Without cable		
3	3		
5	5		
Α	10		
С	20		

*1 The length of the encoder, motor, and lock cables are the same.

100 150 200 250 300 350 400 450 500 550 600 650 700 750

# Driver type

	Compatible drivers	Power supply voltage [V]
Nil	Without driver	_
M2	LECYM2-V□	200 to 230
U2	LECYU2-V□	200 to 230

800

: Standard

850 900 950 1000 1100 1200

# 1/O cable length [m]*3

Nil	Without cable
Н	Without cable (Connector only)
1	1.5

*3 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the Web Catalog if an I/O

25A-LEFS40 Please contact SMC for non-standard strokes as they are produced as special orders.

The 25A- series specifications and dimensions are the same as those of the standard model.

cable is required.

Compatible Drivers							
Driver type	MECHATROLINK-II type	MECHATROLINK-III type					
Series	LECYM	LECYU					
Applicable network	MECHATROLINK-Ⅱ	MECHATROLINK-Ⅲ					
Control encoder		olute encoder					
Communication device	USB communication, RS-422 communication						
Power supply voltage [V]	200 to 230 VAC (50/60 Hz)						
	•						

^{*} Copper and zinc materials are used for the motors, cables, controllers/drivers.



Re	pla	се	me	nt	Parts	/Gre	ase	Pack

Applied portion	Order no.
Ball screw	GR-D-005 (5 g)
Rail guide	GR-D-010 (10 g)

Motorless Type

# **Electric Actuator/Slider Type** Ball Screw Drive Secondary Battery Compatible



25A-LEFS Series 25A-LEFS25, 32, 40

How to Order

# 25A-LEFS H 25

Series compatible with secondary batteries

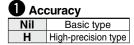












2 Siz	E
25	

40

ze	Wiotor mounting position									
	Nil	In-line								
	R	Right side parallel								
	L	Left side parallel								

Mounting type										
NZ	NV	NM2								
NY	NU	NM3								
NX	NT									
NW	NM1									

_	ad [mm]		
Symbol	25A-LEFS25	25A-LEFS32	25A-LEFS40
Н	20	24	30
Α	12	16	20
)	•	•	10

6 Stroke [mm]							
50	50						
to	to						
1200	1000						

Refer to the applicable

Ø	Positioning	pin	hole
---	-------------	-----	------

Nil	Housing B bottom*1	Housing B bottom
K	Body bottom 2 locations	Body bottom

*1 Refer to the body mounting example on the Web Catalog for the mounting method.

# Replacement Parts/Grease Pack

Applied portion	Order no.
II	R-D-005 (5 g) R-D-010 (10 g)

# Annlicable Stroke Table

Applicable 3	UONE	iab																			<b>•</b> . 31	iliualu
Stroke Model [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1100	1200
25A-LEFS25	•	•	•		•	•		•	•			•	•	•	•	•	_	_	_	—	_	_
25 A-I FFG32																						

^{*} Please contact SMC for non-standard strokes as they are produced as special orders.

# Compatible Motors and Mounting Types*5

## For details, refer to the Web Catalog.

Applicable motor model			Size/Mounting type													
Manufacturer	Series			2	:5							32/40				
Manufacturer	Series	NZ	NY	NX	NM1	NM2	NM3	NZ	NY	NX	NW	NV	NU	NT	NM1	NM2
Mitsubishi Electric Corporation	MELSERVO JN/J4/J5	•	_	_	_	_	ı	•	_	_	_	_	_	_	_	_
YASKAWA Electric Corporation	Σ-V/7/X	●*4	_	_	_	_	1	•	_	_	_	_	_	_	_	_
SANYO DENKI CO., LTD.	SANMOTION R	•	_	-	_	_	_	•	_	_	_	l —	_	_	_	_
OMRON Corporation	OMNUC G5/1S	•	_	l —		l —	_	_	•	_	_	I —	_	_	_	_
Panasonic Corporation	MINAS A5/A6	(MHMF only)	•	_	_	_	_	_	•	_	_	_	_	_	_	_
FANUC CORPORATION	βis (-B)	•	_	_	_	_	_	• (β1 only)	_	_	•	_	_		-	
NIDEC SANKYO CORPORATION	S-FLAG	•	_	_	_	_	_	•	_	_	_	_	_	_	_	_
KEYENCE CORPORATION	SV/SV2	<b>●</b> *4	_	_	_	_		•	_	_	_	—	_	_	_	_
FUJI ELECTRIC CO., LTD.	ALPHA7	•	_	_	_	_	_	•	_	_	_	_	_	_	_	_
MinebeaMitsumi Inc.	Hybrid stepping motors	_	_	_	●*1	_	●*3	_	_	_	_		_	_	<b>●</b> *2	_
Shinano Kenshi Co., Ltd.	CSB-BZ	_		_	●*1	_	●*3	_	_	_	_		_	_	_	_
ORIENTAL MOTOR Co., Ltd.	$\alpha$ STEP AR/AZ	_	_	_	_	(46 only)	_	_	_	_	_	_	_	_	_	●*2
FASTECH Co., Ltd.	Ezi-SERVO	_	_	<b>—</b>	•	<u> </u>	_	_	_	_	_	_	_	_	<b>●</b> *2	_
Rockwell Automation, Inc. (Allen-Bradley)	Kinetix MP/VP/TL	(TL only)	_	_	_	_	_	_	_	●*1 (MP/VP only)	_	_	_	(TL only)	_	_
Beckhoff Automation GmbH	AM 30/31/80/81	•	_	_	_	_	_	_	_	*1 (80/81 only)	_	●*1 (30 only)	●*2 (31 only)	_	_	_
Siemens AG	SIMOTICS S-1FK7	_	_	•	_	_	_	<b>—</b>	_	●*1	_	<u> </u>	_	_	_	_
Delta Electronics, Inc.	ASDA-A2	•	_	_	_	_	_	•	_	_	_		_	_	_	_
ANCA Motion	AMD2000	•	_	_	_	_	_	•	_	_	_	_	_	_	_	_

^{*1} Motor mounting position: In-line only 

*2 Only size 32 is available when the motor mounting position is right (or left) side parallel.

*4 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor

The 25A- series specifications and dimensions are the same as those of the standard model.

^{*5} The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

# **High Rigidity Slider Type**

Ball Screw Drive Secondary Battery Compatible

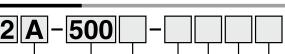
25A-LEJS Series LEJS40, 63

Refer to the Web Catalog for model selection.

LECY□ Series > p. 306

How to Order





Series compatible with secondary batteries

Accuracy

Nil	Basic type
ш	High-precision
• • • • • • • • • • • • • • • • • • • •	type



**3** Motor type

25A-LEJS H 40

Symbol	Туре	Output [W]	2 Size	9 Driver type	Compatible drivers
S2*1	AC servo motor	100	40	A1/A2	LECSA□-S1
S3	(Incremental encoder)	200	63	A1/A2	LECSA□-S3
				B2	LECSB2-T5
T6*2		100	40	C2	LECSC2-T5
	AC servo motor			S2	LECSS2-T5
	(Absolute encoder)			B2	LECSB2-T7
T7		200	63	C2	LECSC2-T7
				S2	LECSS2-T7

- *1 For motor type S2, the compatible driver part number suffix is S1.
- *2 For motor type T6, the compatible driver part number is LECS 2-T5.

4 Lead [mm]

Symbol	25A-LEJS40	25A-LEJS63
Н	24	30
Α	16	20
В	8	10

(	5 Stroke [mm]*3					
	200	*3	Refer to the			
	to		applicable stroke			
	1500		table for details.			

<b>6</b> Mo	tor option			
Nil	Without option			
В	With lock			

**7** Cable type*5, *6, *7

Nil	Without cable
S	Standard cable
R	Robotic cable

- *6 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- *7 Standard cable entry direction is "(A) Axis side."

Cable length [m]*5, *8

Nil	Without cable
2	2
5	5
Α	10

*8 The length of the motor. encoder, and lock cables are the same.

9 Driver type*5

	Compatible drivers	Power supply voltage [V]
Nil	Without driver	_
A1	LECSA1-S□	100 to 120
A2	LECSA2-S□	200 to 230
B2	LECSB2-T□	200 to 240
C2	LECSC2-T□	200 to 230
S2	LECSS2-T□	200 to 240

*5 When a driver type is selected, a cable is included. Select the cable type and cable length. Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2: Standard cable (2 m) Nil: Without cable and driver

I/O cable length [m]*9

Nil	Without cable
Н	Without cable (Connector only)
1	1.5

*9 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the Web Catalog if an I/O cable is required.

Appliachla Ctualca Table*

Applicable Stroke Table Standard											
Stroke Model [mm]		300	400	500	600	700	800	900	1000	1200	1500
25A-LEJS40											_
25A-LEJS63	_										

*4 Please contact SMC for non-standard strokes as they are produced as special orders.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Solid state auto switches should be

Click here for auto switch details.

ordered separately.

D-M9BW(V)-900

Applicable auto switches

Compatible Drivers					
Pulse input type/ Positioning type  Driver type		Pulse input type	CC-Link direct input type	type	
Series	LECSA	LECSB-T	LECSC-T	LECSS-T	
Number of point tables	Up to 7	Up to 255	Up to 255 (2 stations occupied)	_	
Pulse input	0	0	_	_	
Applicable network	oplicable network —		CC-Link	SSCNET III/H	
Control encoder	Incremental 17-bit encoder	Absolute 22-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder	
Communication function	mmunication function USB communication		USB communication, RS422 communication	USB communication	
Power supply voltage [V]	100 to 120 VAC (50/60 Hz) 200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	

Replacement Parts/Grease Pack

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900,

Applied portion Order no. GR-D-005 (5 g) Linear guide Dust seal band GR-D-010 (10 g) (Back side only)

Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

# **High Rigidity Slider Type**

Ball Screw Drive Secondary Battery Compatible

25A-LEJS Series LEJS40, 63

Refer to the Web Catalog for model selection.

LECS□ Series > p. 305

**How to Order** 

RoHS

25A-LEJS63

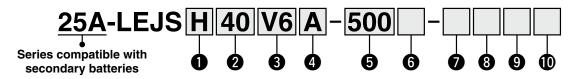
10

Without option

With lock

6 Motor option

the Web Catalog



# Accuracy

Nil	Basic type
Н	High-precision type



Nil

3	Motor	type	*1
---	-------	------	----

Symbol	Туре	Output [W]	2 Size	9 Driver type	Compatible drivers*2
V6		100	40	M2	LECYM2-V5
VO	AC servo motor (Absolute			U2	LECYU2-V5
V7	encoder)	200	63	M2	LECYM2-V7
V/	encoder)	200		U2	LECYU2-V7

- *1 For motor type V6, the compatible driver part number suffix is V5.
- *2 For details on the driver, refer to the Web Catalog.

# Cable type*5, *6, *7

Nil	Without cable
S	Standard cable
R	Robotic cable

- *6 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- *7 Standard cable entry direction is "(A) Axis side."

Without cable

Without cable (Connector only)

1.5

# 8 Cable length [m] *5, *8

Nil	Without cable					
3	3					
5	5					
Α	10					
С	20					

*8	The length of the motor, encoder,
	and lock cables are the same.

*9 When "Nil: Without driver" is selected for the driver

Refer to the Web Catalog if an I/O cable is required.

type, only "Nil: Without cable" can be selected.

## 1500 table for details.

5 Stroke [mm]*3

*3 Refer to the

applicable stroke

4 Lead [mm] Symbol

н

200

to

25A-LEJS40

9 Driver type *5									
	Compatible drivers	Power supply voltage [V]							
Nil	Without driver	_							
M2	LECYM2-V□	200 to 230							
U2	LECYU2-V□	200 to 230							

*5 When a driver type is selected, a cable is included. Select the cable type and cable length. Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2: Standard cable (2 m) Nil: Without cable and driver

## Applicable Stroke Table*4

I/O cable length [m]*9

Applicable Stroke Table • • Standard											
Stroke Model [mm]		300	400	500	600	700	800	900	1000	1200	1500
25A-LEJS40										•	_
25A-LEJS63	_	•	•			•				•	

*4 Please contact SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately. Click here for details on applicable auto switch models.

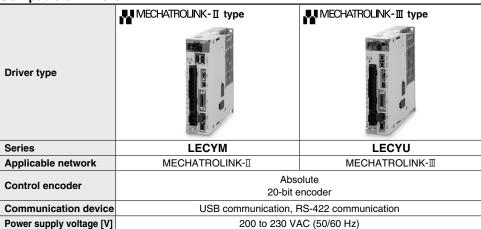
# Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

# **Compatible Drivers**



Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.



# **Replacement Parts/Grease Pack**

Applied portion	Order no.
Ball screw Linear guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)



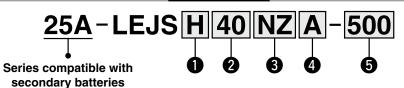
Motorless Type

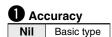
# **Electric Actuator/High Rigidity Slider Type**

Ball Screw Drive Secondary Battery Compatible

**25A-LEJS Series** 25A-LEJS40, 63

**How to Order** 





<b>2</b> Siz	е
40	
63	

<b>3</b> Mo	unting typ
NZ	
NY	
NX	
NW*1	
<b>NV</b> *1	

<b>3</b> Mo	unting type
NZ	
NY	
NX	
NW*1	
<b>NV</b> *1	
NU*1	

*1 Size 63 only

NT*1

				_		_
4)	П	e۵	Ы	ſη	nn	n1

<u> </u>	[]	
Symbol	25A-LEJS40	25A-LEJS63
Н	24	30
Α	16	20
В	8	10

Stroke [mm]

200
to
1500

For details, refer to the table below.

## Applicable Stroke Table

High-precision type

Applicable Stroke Table   ●: Standard											
Stroke Model [mm]	200	300	400	500	600	700	800	900	1000	1200	1500
25A-LEJS40	•	•	•	•	•	•	•	•	•	•	_
25A-LEJS63	_	•	•	•	•	•	•	•	•	•	•

* Please contact SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately. Click here for auto switch details.

# Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Compatible Motors and Mounting Types*2

Applicable motor model		Size/Mounting type									
Manufacturer	Series		40 63								
Manufacturer	Series	NZ	NY	NX	NZ	NY	NX	NW	NV	NU	NT
Mitsubishi Electric Corporation	MELSERVO JN/J4/J5	•	_		•	1	_	_	_	_	-
YASKAWA Electric Corporation	Σ-V/7/X	●*1	_	_	•	_	_	_	_	_	_
SANYO DENKI CO., LTD.	SANMOTION R	•	_	_	•	_	_	_	_	_	_
OMRON Corporation	OMNUC G5/1S	•	_	_	_	•	_	_	_	_	_
Panasonic Corporation	MINAS A5/A6	(MHMF only)	•	_		•	_	_	_		_
FANUC CORPORATION	βis (-B)	•	_	_	(β1 only)	_	_	•	_	_	_
NIDEC SANKYO CORPORATION	S-FLAG	•		_	•	_	_	_	_		_
KEYENCE CORPORATION	SV/SV2	●*1	_	_	•	_	_	_	_	_	_
FUJI ELECTRIC CO., LTD.	ALPHA7	•	_	-	•	1	_	_	_	_	-
Rockwell Automation, Inc. (Allen-Bradley)	Kinetix MP/VP/TL	(TL only)	_	_	_	_	● (MP/VP only)	_	_	_	● (TL only)
Beckhoff Automation GmbH	AM 30/31/80/81	•	_	_	_	_	(80/81 only)	_	(30 only)	(31 only)	_
Siemens AG	SIMOTICS S-1FK7	_	_	•	_	_	•	_	_	_	_
Delta Electronics, Inc.	ASDA-A2	•	_	_	•	_	_	_	_	_	_
ANCA Motion	AMD2000	•	_	_	•	_	_	_	_	_	_

- *1 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.
- *2 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Linear guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

- * The auto switch magnet contains copper and/or zinc.
- * The 25A- series specifications and dimensions are the same as those of the standard model.

# Rod Type Secondary Battery Compatible

**25A-LEY Series** 25A-LEY16, 25, 32, 40 (



Refer to the "CE/UKCA/UL-compliance List" in the Web Catalog.

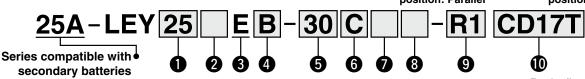






Motor mounting position: Parallel

Motor mounting position: In-line



For details on controllers, refer to the next page.

# 1 Size 16 25

32 40

# 2 Motor mounting position/Motor cover direction

Symbol	Motor mounting position	Motor cover direction
Nil	Top side parallel	_
D		*1
D1		Left*2
D2	In-line	Right*2
D3		Top*2
D4		Bottom*2

# Motor type

	Battery-less absolute
	(Step motor 24 VDC)

# 4 Lead [mm]

Symbol	LEY16	LEY25	LEY32/40
Α	10	12	16
В	5	6	8
C	2.5	3	4

# 5 Stroke*3 [mm]

Stroke		Note			
Stroke	Size	Applicable stroke			
30 to 300	16	30, 50, 100, 150, 200, 250, 300			
30 to 400	25	30, 50, 100, 150, 200, 250, 300, 350, 400			
30 to 500	32/40	30, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500			

# 6 Motor option*4

С	With motor cover			
W	With lock/motor cover			
	Motor			

# Rod end thread

Nil	Rod end female thread
М	Rod end male thread (1 rod end nut is included.)

# 8 Mounting*5

Symbol	Type	Motor mounting position	
Symbol	туре	Parallel	In-line
Nil	Ends tapped/ Body bottom tapped*6	•	•
L	Foot	•	_
F	Rod flange*6	●*8	•
G	Head flange*6	●*9	_
D	Double clevis*7	•	_

# Actuator cable type/length

Robotic	cable	[m]	
Nil	None	R8	8*10
R1	1.5	RA	10* ¹⁰
R3	3	RB	15* ¹⁰
R5	5	RC	20*10

# Mounting Bracket Part Nos. for the 25A- Series

	Applicable size	Foot*1	Flange	Double clevis
	16	25-LEY-L016	25-LEY-F016	25-LEY-D016
	25	25-LEY-L025	25-LEY-F025	25-LEY-D025
	32, 40	25-LEY-L032	25-LEY-F032	25-LEY-D032

*1 When ordering foot brackets, order 2 pieces per actuator.

*2 Parts included with each type of bracket are as follows. Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

# **Replacement Parts/Grease Pack**

Applied portion	Order no.				
Piston rod	GR-D-005 (5 g) GR-D-010 (10 g)				

Solid state auto switches should be ordered separately. Click here for auto switch details.

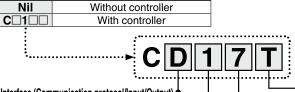
# Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

- * Copper and zinc materials are used for the motors, cables, controllers/drivers.
- * The 25A- series specifications and dimensions are the same as those of the standard model.



# (I) Controller



# Interface (Communication protocol/Input/Output)

		Number of axes, Special specification		
Symbol	Type	Standard	With STO	
		Stariuaru	sub-function	
5	Parallel input (NPN)			
6	Parallel input (PNP)	•		
Е	EtherCAT		•	
9	EtherNet/IP™	•	•	
Р	PROFINET	•	•	
D	DeviceNet®	•		
L	IO-Link	•	•	
M	CC-Link	•		

Mounting

Screw mounting DIN rail

Number of axes. Special specification

Italiiboi	realised of axee, openial openinoation						
Symbol Number of axes		Specification					
1	Single axis	Standard					
F	Cinalo ovio	With STO					
F*	Single axis	sub-function					

Communication plug connector, I/O cable*12

Symbol	Type	Applicable interface
Nil	Without accessory	_
S	Straight type communication plug connector	DeviceNet®
Т	T-branch type communication plug connector	CC-Link Ver. 1.10
1	I/O cable (1.5 m)	Parallel input (NPN)
3	I/O cable (3 m)	Parallel input (NPN)
5	I/O cable (5 m)	raialiei iliput (FINF)

- *1 Sizes 25, 32, and 40 only
- Size 16 only
- *3 Please contact SMC for non-standard strokes as they are produced as special orders
- *4 When "With lock/motor cover" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
- *5 The mounting bracket is shipped together with the product but does not come assembled.
- *6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range. • 25A-LEY25: 200 or less • 25A-LEY32/40: 100 or less
- For the mounting of the double clevis type, use the actuator within the following stroke range.
- · 25A-LEY16: 100 or less · 25A-LEY25: 200 or less · 25A-LEY32/40: 200 or less The rod flange type is not available for the 25A-LEY16 with strokes of 50 mm or less and 25A-LEY40 with strokes of 30 mm or less, and motor option "With lock/motor cover."
- The head flange type is not available for the 25A-LEY32/40.

- *10 Produced upon receipt of order *11 The DIN rail is not included. It must be ordered separately. *12 Select "Nii" for anything other than DeviceNet[®], CC-Link, or parallel
  - Select "Nil," "S," or "T" for DeviceNet® or CC-Link. Select "Nil," "1," "3," or "5" for parallel input.

# **_**Caution

# [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

# [Precautions relating to differences in controller versions]

When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the Web Catalog.

# [UL certification]

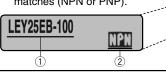
The JXC series controllers used in combination with electric actuators are UL certified.

# The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

# <Check the following before use.>

- 1 Check the actuator label for the model number (after "25A-This number should match that of the controller/driver.
- Check that the Parallel I/O configuration matches (NPN or PNP).





Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com

	Step data input type	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IPTM direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type
Туре											
Series	JXC51 JXC61	JXCE1	JXCEF	JXC91	JXC9F	JXCP1	JXCPF	JXCD1	JXCL1	JXCLF	JXCM1
Features	Parallel I/O	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input
Compatible motor		Battery-less absolute (Step motor 24 VDC)									
Max. number of		64 points									
step data		04 points									
Power supply voltage		24 VDC									

# **High Performance**

# Rod Type Secondary Battery Compatible



**25A-LEY** G Series 25A-LEY16, 25, 40

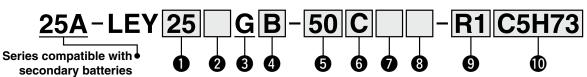






Motor mounting position: **Parallel** 

Motor mounting position: In-line



For details on controllers, refer to page 306-5.



# Motor mounting position/ Motor cover direction

motor cover amount							
Symbol	Motor mounting position	Motor cover direction					
Nil	Top side parallel	_					
D		*1					
D1		Left side*2					
D2	In-line	Right side*2					
D3		Top side*2					
D4		Bottom side*2					

# **3** Motor type

Symbol	Туре	Compatible controllers
G	High performance Battery-less absolute (Step motor 24 VDC)	JXC5H JXCEH JXC6H JXC9H JXCPH

# 4 Lead [mm]

Symbol	LEY16	LEY25	LEY40
Α	10	12	16
В	5	6	8
C	2.5	3	4

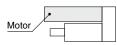
# 5 Stroke*3 [mm]

<b>9</b> 50	oke [iiiiii]	
30	30	
to	to	
500	500	

For details, refer to the applicable stroke table below.

# 6 Motor option*4

С	With motor cover
W	With lock/motor cover



# Rod end thread

Nil	Rod end female thread
М	Rod end male thread (1 rod end nut is included.)

# 8 Mounting*5

Cumbal	Time	Motor mounting position		
Symbol	Type	Parallel	In-line	
Nil	Ends tapped/ Body bottom tapped*6	•	•	
Body Bottom tapped				
L	Foot bracket	•	_	
F	Rod flange*6	●*8	•	
G	Head flange*6	●*9	_	
D	Double clevis*7	•	_	

# 9 Actuator cable type/length

Robotic	cable		[m]
Nil	None	R8	8* ¹⁰
R1	1.5	RA	10* ¹⁰
R3	3	RB	15* ¹⁰
R5	5	RC	20*10

# Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot*1	Flange	Double clevis
16	25-LEY-L016	25-LEY-F016	25-LEY-D016
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
40	25-LEY-L032	25-LEY-F032	25-LEY-D032

*1 When ordering foot brackets, order 2 pieces per actuator.

*2 Parts included with each type of bracket are as follows. Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

## Solid state auto switches should be ordered separately. Click here for auto switch details.

## Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

# Applicable Stroke Table

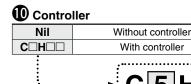
Size						S	troke [	mm]				
Size	30	50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range
16	•	•	•	•	•	•	•	_	_	_	_	10 to 300
25	•	•	•	•	•	•	•	•	•	_	_	15 to 400
40	•	•	•	•	•	•	•	•	•	•	•	20 to 500

# **Replacement Parts/Grease Pack**

Applied portion	Order no.
Piston rod	GR-D-005 (5 g) GR-D-010 (10 g)

- * Copper and zinc materials are used for the motors, cables, controllers/drivers.
- * The 25A- series specifications and dimensions are the same as those of the standard model.





Interface (Communication protocol/Input/Output)

5 Parallel I/O (NPN)
6 Parallel I/O (PNP)
E EtherCAT
9 EtherNet/IP™
P PROFINET

# Mounting 7 Screw mounting

Number of axes/
Special specification

8*11

H 1 axis/High performance type

DIN rail

# Communication plug connector, I/O cable*12

Symbol	Type	Applicable interface
Nil	Without accessory	_
1	I/O cable (1.5 m)	B # 44 + 44B40
3	I/O cable (3 m)	Parallel input (NPN) Parallel input (PNP)
5	I/O cable (5 m)	r araller input (i 14i )

- *1 Sizes 25 and 40 only
- *2 Size 16 only
- *3 Please contact SMC for non-standard strokes as they are produced as special orders.
- *4 When "With lock/motor cover" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
- *5 The mounting bracket is shipped together with the product but does not come assembled.
- *6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range. · 25A-LEY25: 200 or less · 25A-LEY40: 100 or less
- *7 For the mounting of the double clevis type, use the actuator within the following stroke range.
  - · 25A-LEY16: 100 or less · 25A-LEY25: 200 or less · 25A-LEY40: 200 or less
- *8 The rod flange type is not available for the 25A-LEY16 with strokes of 50 mm or less and 25A-LEY40 with strokes of 30 mm or less, and motor option "With lock/motor cover."
- *9 The head flange type is not available for the 25A-LEY40.
- *10 Produced upon receipt of order
- *11 The DIN rail is not included. It must be ordered separately.
- *12 Select "Nil" for anything other than parallel input. Select "Nil," "1," "3," or "5" for parallel input.

# **⚠** Caution

## [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

# ■ Trademark

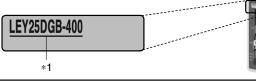
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EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

# The actuator and controller are sold as a package. Confirm that the combination of the controller and actuator is correct.

# <Check the following before use.>

*1 Check the actuator label for the model number (after "25A-" This number should match that of the controller/driver.



Refer to the Operation Manual for using the products.
 Please download it via our website: https://www.smcworld.com

## **Compatible Controllers**

Туре	Step data input type	EtherCAT direct input type	EtherNet/IP™ direct input type	PROFINET direct input type
Series	JXC5H JXC6H	JXCEH	ЈХС9Н	ЈХСРН
Features	Parallel I/O	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input
Compatible motor		Battery-less absolute	(Step motor 24 VDC)	
Max. number of step data		64 p	oints	
Power supply voltage		24 \	VDC	

# **High Performance**

# Rod Type Secondary Battery Compatible

Refer to the "CE/UKCA/UL-compliance List" in the Web Catalog.

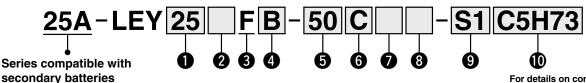
**25A-LEY F** Series 25A-LEY16, 25, 40 RoHS

# **How to Order**



Motor mounting position: Parallel

Motor mounting position: In-line



For details on controllers, refer to page 306-7.

# 1 Size

# 16 25 40

Motor mounting position/Motor cover direction

Symbol	Motor mounting position	Motor cover direction
Nil	Top side parallel	_
R	Right side parallel	_
L	Left side parallel	_
D		<u></u> *1
D1		Left side*2
D2	In-line	Right side*2
D3		Top side*2
D4		Bottom side*2

**3** Motor type

Symbol	Type	Compatible	controllers
F	High performance (Step motor 24 VDC)		JXCEH JXC9H JXCPH

6	Stroke*	³[mm]

30	30
to	to
500	500

 For details, refer to the applicable stroke table below.

# 4 Lead [mm]

Symbol	LEY16	LEY25	LEY40
Α	10	12	16
В	5	6	8
С	2.5	3	4

# 6 Motor option*4

C With motor cover	•				
	С	With motor cover			
W With lock/motor cove	W	With lock/motor cover			

•	
Motor	

# Rod end thread

Nil	Rod end female thread				
M	Rod end male thread (1 rod end nut is included.)				

# 8 Mounting*5

Symbol	Type	Motor mounting position		
Symbol	туре	Parallel	In-line	
Nil	Ends tapped/ Body bottom tapped*6	•	•	
L	Foot bracket	•	_	
F	Rod flange*6	●*8	•	
G	Head flange*6	●*9	_	
D	Double clevis*7	•	_	

# Actuator cable type/length

Standard cable [m]						
Nil	None					
S1	1.5					
S3	3					
S5	5					

Robotic cable [m						
R1	1.5	RA	10* ¹⁰			
R3	3	RB	15* ¹⁰			
R5	5	RC	20*10			
R8	8*10					

# Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot*1	Flange	Double clevis
16	25-LEY-L016	25-LEY-F016	25-LEY-D016
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
40	25-LEY-L032	25-LEY-F032	25-LEY-D032

- *1 When ordering foot brackets, order 2 pieces per actuator.
- Parts included with each type of bracket are as follows.
   Foot Flange: Body mounting bolt Double clevis: Cle

Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Solid state auto switches should be ordered separately. Click here for auto switch details.

# Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

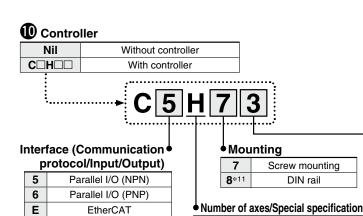
## Applicable Stroke Table

Size		Stroke [mm]										
Size	30	50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range
16	•	•	•	•	•	•	•	_	_	_	_	10 to 300
25	•	•	•	•	•	•	•	•	•	_	_	15 to 400
40	•	•	•	•	•	•	•	•	•	•	•	20 to 500

# **Replacement Parts/Grease Pack**

Applied portion	Order no.
Piston rod	GR-D-005 (5 g) GR-D-010 (10 g)

- * Copper and zinc materials are used for the motors, cables, controllers/drivers.
- * The 25A- series specifications and dimensions are the same as those of the standard model.



Communication plug connector, I/O cable*12

Symbol	Type	Applicable interface
Nil	Without accessory	_
1	I/O cable (1.5 m)	B (A.DA.))
3	I/O cable (3 m)	Parallel input (NPN) Parallel input (PNP)
5	I/O cable (5 m)	Taraner input (FINE)

*1 Sizes 25 and 40 only

EtherNet/IP™

**PROFINET** 

*2 Size 16 only

9

Р

*3 Please contact SMC for non-standard strokes as they are produced as special orders.

DIN rail

1 axis/High performance type

- *4 When "With lock/motor cover" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
- *5 The mounting bracket is shipped together with the product but does not come assembled.
- *6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range. 25A-LEY25: 200 or less 25A-LEY40: 100 or less

# ∕!∖ Caution

# [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

# ■ Trademark

EtherNet/IP® is a registered trademark of ODVA, Inc.

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

- *7 For the mounting of the double clevis type, use the actuator within the following stroke range.

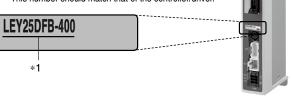
  · 25A-LEY16: 100 or less · 25A-LEY25: 200 or less

  - 25A-LEY40: 200 or less
- *8 The rod flange type is not available for the 25A-LEY16 with strokes of 50 mm or less and 25A-LEY40 with strokes of 30 mm or less, and motor option "With lock/motor cover."
- The head flange type is not available for the 25A-LEY40.
- *10 Produced upon receipt of order
- *11 The DIN rail is not included. It must be ordered separately.
- Select "Nil" for anything other than parallel input. Select "Nil," "1," "3," or "5" for parallel input.

# The actuator and controller are sold as a package. Confirm that the combination of the controller and actuator is correct.

# <Check the following before use.>

*1 Check the actuator label for the model number (after "25A-This number should match that of the controller/driver.



Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com

# **Compatible Controllers**

Companio Controlle						
Туре	Step data input type	EtherCAT direct input type	EtherNet/IP™ direct input type	PROFINET direct input type		
Series	JXC5H JXC6H	JXCEH	ЈХС9Н	ЈХСРН		
Features	Parallel I/O	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input		
Compatible motor	Step motor 24 VDC		Step motor (Servo/24 VDC)			
Max. number of step data	64 points	64 points				
Power supply voltage	24 VDC	24 VDC				

# Rod Type Secondary Battery Compatible



**25A-LEY Series** LEY16, 25, 32, 40

(RoHS)

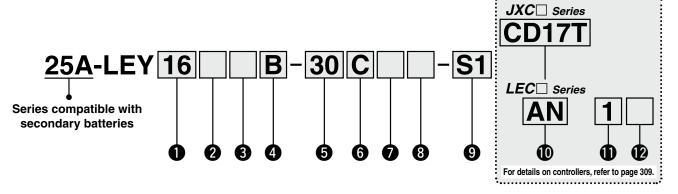
Refer to the Web Catalog for model selection.

# **How to Order**



Motor mounting position: **Parallel** 

Motor mounting position: In-line



# Size 16 25

32 40

# 2 Motor mounting position

Nil	Top side parallel
R	Right side parallel
L	Left side parallel
D	In-line

# **3** Motor type

Symbol	Cumbal		Applicable size				Compatible controllers/		
Symbol	туре	Type LEY16 LEY25		LEY32/40	drivers				
Nil	Step motor (Servo/24 VDC)	•	•	•	JXC51 JXC61 JXCE1 JXC91 JXCP1	JXCD1 JXCL1 JXCM1 JXCEF JXC9F	JXCPF JXCLF LECP1 LECPA		
Α	Servo motor (24 VDC)	•	•	_		LECA6			

# 4 Lead [mm]

Symbol	LEY16	LEY25	LEY32/40
Α	10	12	16
В	5	6	8
С	2.5	3	4

# 5 Stroke [mm]

30	30
to	to
500	500

* For details, refer to the applicable stroke table below.

# 6 Motor option*2

С	With motor cover
W	With lock/motor cover

•	
Motor	

# Rod end thread

Nil	Rod end female thread				
М	Rod end male thread				
IVI	(1 rod end nut is included.)				

# 8 Mounting*5

Symbol	Type	Motor mounting position				
Syllibol	туре	Parallel	In-line			
Nil	Ends tapped/Body					
INII	bottom tapped*6	_	•			
L	Foot	•	_			
F	Rod flange*6	●*8	•			
G	Head flange*6	●*9	_			
D	Double clevis*7	•	_			

# Actuator cable type/length*11

Standard	cable [m]	Rob
Nil	None	R
S1	1.5*12	R
S3	3*12	R
S5	5*12	R

Roboti	ic cable	!	[m]
R1	1.5	RA	10* ¹⁰
R3	3	RB	15* ¹⁰
R5	5	RC	20*10
R8	8* ¹⁰		

## Mounting Bracket Part Nos. for the 25A- Series*4

Applicable size	Foot*3	Flange	Double clevis
16	25-LEY-L016	25-LEY-F016	25-LEY-D016
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32, 40	25-LEY-L032	25-LEY-F032	25-LEY-D032
Surface treatment	RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

Solid state auto switches should be ordered separately. Click here for details on applicable auto switch models.

# Applicable auto switches

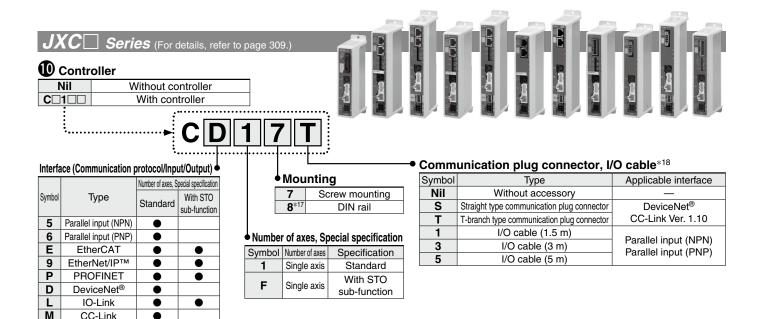
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Applicable Stroke	Tal	ole*										●: Standard
Stroke [mm]		50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range
25A-LEY16			•	•	•	•	•	_	_	_	_	10 to 300
25A-LEY25	•			•	•	•	•		•	_	_	15 to 400
25A-LEY32/40	•	•	•	•		•	•		•		•	20 to 500

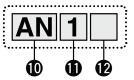
* The 25A- series specifications and dimensions are the same as those of the standard model.



Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC) Secondary Battery Compatible



# Series (For details, refer to page 309.



# Controller/Driver type*12

Nil	Without controller/driver		
6N	LECA6	NPN	
6P	(Step data input type)	PNP	
1N	LECP1*13	NPN	
1P	(Programless type)	PNP	
AN	LECPA*13 *14	NPN	
AP	(Pulse input type)	PNP	
		*	

# I/O cable length*15

Nil	Without cable (Without communication plug connector)			
1	1.5 m			
3	3 m* ¹⁶			
5	5 m* ¹⁶			

# Controller/Driver mounting

Nil	Screw mounting
D	DIN rail*17

- *1 Please contact SMC for non-standard strokes as they are produced as special orders.
   *2 When "With lock" or "With lock/motor cover" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 16/40 with strokes of 30 mm or less.
  Check for interference with workpieces before selecting a model.

  *3 When ordering foot brackets, order 2 pieces per actuator.

  *4 Parts included with each type of bracket are as follows.
- Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt
  The mounting bracket is shipped together with the product but does not come assembled.
  For the horizontal cantilever mounting of the rod flange, head flange, or
- ends tapped types, use the actuator within the following stroke range
- ends tapped types, use the actuator within the following stroke range.

  *LEY25: 200 mm or less ·LEY32/40: 100 mm or less

  *T For the mounting of the double clevis type, use the actuator within the following stroke range.

  *LEY16: 100 mm or less ·LEY25: 200 mm or less ·LEY32/40: 200 mm or less

  *The rod flange type is not available for the LEY16/40 with a 30 mm stroke and motor option "With lock," "With lock/motor cover."

  *9 The head flange type is not available for the LEY32/40.

  *10 Produced upon receipt of order (Robotic cable only)

- *11 The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable. Refer to the **Web Catalog** if only the actuator cable is required.
- For details on controllers/drivers and compatible motors, refer to the
- compatible controllers/drivers on the next page.

  *13 Only available for the motor type "Step motor"

  *14 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) separately. (Refer to the **Web Catalog**.)
- When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. If an I/O cable is required, order the cable separately for each series. (For details, refer to the **Web Catalog**.)
- When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector The DIN rail is not included. It must be ordered separately. Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel

Select "Nil," "S," or "T" for DeviceNet® or CC-Link. Select "Nil," "1," "3," or "5" for parallel input.

# **∕**∴Caution

# [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEY series and the controller LEC/JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

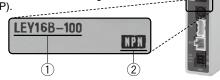
② For the incremental (servo motor 24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the Web Catalog for the noise filter set. Refer to the LECA series Operation Manual for installation.

[UL-compliant products (For the LEC series)] When compliance with UL is required, the electric actuator and controller/ driver should be used with a UL1310 Class 2 power supply.

# The actuator and controller/driver are sold as a package. Confirm that the combination of the controller/driver and actuator is correct. <Check the following before use.>

1) Check the actuator label for the model number (after "25A-" This number should match that of the controller/driver. ② Check that the Parallel I/O configuration matches

(NPN or PNP).



Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com



# **Compatible Controllers/Drivers**

Туре	Step data input type	Step data input type	Programless type	Pulse input type			
Series	JXC51 JXC61	LECA6	LECP1	LECPA			
Features	Parallel I/O	Parallel I/O	Capable of setting up operation (step data) without using a PC or teaching box	Operation by pulse signals			
Compatible motor	Step motor (Servo/24 VDC)	Servo motor (24 VDC)		motor 24 VDC)			
Max. number of step data	64 p	oints	14 points	_			
Power supply voltage		24 VDC					

	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IP™ direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type	
Туре							(SOCOR) (MAIN) (M. C.), (M. M.)				
Series	JXCE1	JXCEF	JXC91	JXC9F	JXCP1	JXCPF	JXCD1	JXCL1	JXCLF	JXCM1	
Features	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input	
Compatible motor					Step (Servo/2	motor 24 VDC)					
Max. number of step data		64 points									
Power supply voltage		24 VDC									



AC Servo Motor LECS□ Series

# Rod Type Secondary Battery Compatible

25A-LEY Series LEY25, 32 Size

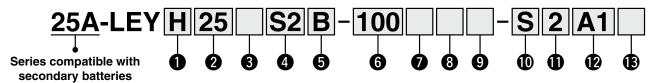
25, 32

(RoHS)

LECY□ Series > p. 313

Refer to the Web Catalog for model selection.

# **How to Order**



Accuracy

Basic type H High-precision type 2 Size

3 Motor mounting position

Nil	Top side parallel
R	Right side parallel
L	Left side parallel
D	In-line

4 Motor type

Symbol	Туре	Output [W]	2 Size	Driver type	Compatible drivers
S2*1	AC servo motor	100	25	A1/A2	LECSA□-S1
S3	(Incremental encoder)	200	32	A1/A2	LECSA□-S3
				B2	LECSB2-T5
T6*2		100	25	C2	LECSC2-T5
	AC servo motor			S2	LECSS2-T5
	(Absolute encoder)			B2	LECSB2-T7
T7		200	32	C2	LECSC2-T7
				S2	LECSS2-T7

- *1 For motor type S2, the compatible driver part number suffix is S1.
- *2 For motor type T6, the compatible driver part number is LECS□2-T5.
- * For details on the driver, refer to the Web Catalog.

6 Lead [mm]

Symbol	LEY25	LEY32*1
Α	12	16 (20)
В	6	8 (10)
C	3	4 (5)

*1 The values shown in ( ) are the leads for the size 32 top/right/left side parallel motor types. (Equivalent leads which include the pulley ratio [1.25:1])

8 Rod end thread

Applicable size

32

Surface

treatment

Nil	Rod end female thread						
М	Rod end male thread						
IVI	(1 rod end nut is included.)						

6 Stroke [mm]

<u> </u>	one [mm]
30	30
to	to
500	500

For details, refer to the applicable stroke table below.

Motor option

	10. op.10
Nil	Without option
В	With lock*1

*1 When "With lock" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.

Motor

9 Mounting*1

Symbol	Type	Motor mounting position			
Symbol	туре	Parallel	In-line		
Nil	Ends tapped/ Body bottom tapped	•	•		
L	Foot	•			
F	Rod flange*2	●*4	•		
G	Head flange*2	●*5	_		
D	Double clevis*3	•			

Double clevis

25-LEY-D025

25-LEY-D032

Coating (Size 16: Electroless nickel plating)

- The mounting bracket is shipped together with the product but does not come assembled.
- *2 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
  - · 25A-LEY25: 200 mm or less
  - · 25A-LEY32: 100 mm or less
- *3 For the mounting of the double clevis type, use the actuator within the following stroke range.
  - · 25A-LEY25: 200 mm or less 25A-LEY32: 200 mm or less
- *4 The rod flange type is not available for the 25A-LEY25 with a 30 mm stroke and motor option "With lock."
- The head flange type is not available for the 25A-LEY32.

Solid state auto switches should be ordered separately. Click here for details on applicable auto switch models.

*1 When ordering foot brackets, order 2 pieces per actuator.

Mounting Bracket Part Nos. for the 25A- Series

Foot*1

25-LEY-L025

25-LEY-L032

**RAYDENT®** 

Parts included with each type of bracket are as follows. Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Flange

25-LEY-F025

25-LEY-F032

**RAYDENT®** 

# Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

# Applicable Stroke Table

: Standard

Stroke [mm]		50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range [mm]
25A-LEY25	•	•	•	•	•	•	•	•	•	_	_	15 to 400
25A-LEY32	•	•	•	•	•	•	•	•	•	•	•	20 to 500

* Please contact SMC for non-standard strokes as they are produced as special orders.





Motor mounting position: **Parallel** 

Motor mounting position: In-line

# Cable type*1 *2

Nil	Without cable
S	Standard cable
R	Robotic cable

- *1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- *2 Standard cable entry direction is
  - · Parallel: (A) Axis side
  - · In-line: (B) Counter axis side

# I/O cable length [m]*1

Nil	Without cable						
Н	Without cable (Connector only)						
<b>1</b> 1.5							

*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected.

Refer to the Web Catalog if an I/O cable is required.

# Cable length*1 [m]

	<u> </u>
Nil	Without cable
2	2
5	5
Α	10

*1 The length of the encoder, motor, and lock cables are the same.

# Driver type*1

<u> </u>				
	Compatible drivers	Power supply voltage [V]		
Nil	Without driver	_		
A1	LECSA1-S□	100 to 120		
A2	LECSA2-S□	200 to 230		
B2	LECSB2-T□	200 to 240		
C2	LECSC2-T□	200 to 230		
S2	LECSS2-T□	200 to 240		

*1 When a driver type is selected, a cable is included. Select the cable type and cable length.

Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2: Standard cable (2 m) Nil: Without cable and driver

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

# **Compatible Drivers**

Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	type
Series	LECSA	LECSB-T	LECSC-T	LECSS-T
Number of point tables	Up to 7	Up to 255	Up to 255 (2 stations occupied)	_
Pulse input	0	0	_	
Applicable network	_	_	CC-Link	SSCNET III/H
Control encoder	Incremental 17-bit encoder	Absolute 22-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder
Communication function	USB communication	USB communication, RS422 communication	USB communication, RS422 communication	USB communication
Power supply voltage [V]	100 to 120 VAC (50/60 Hz) 200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)

^{*} Copper and zinc materials are used for the motors, cables, controllers/drivers.



AC Servo Motor LECY ☐ Series

# Rod Type Secondary Battery Compatible

25A-LEY Series LEY25, 32 Size

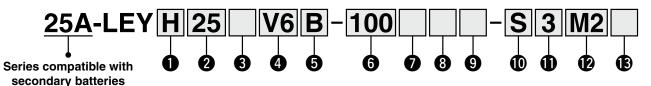
25, 32

(RoHS)

LECS□ Series ▶ p. 311

Refer to the Web Catalog for model selection.

#### **How to Order**



Accuracy Nil Basic type

High-precision type

2 Size 25 32

Motor mounting position

Nil	Top side parallel
R	Right side parallel
L	Left side parallel
D	In-line

Motor type

_		motor typo							
Sy	ymbol	Туре	Output [W]	2 Size	Driver type	Compatible drivers			
Ι,	V6*1 AC servo motor (Absolute encoder)	100	25	M2	LECYM2-V5				
		AC servo motor	100	25	U2	LECYU2-V5			
		(Absolute encoder)	200	32	M2	LECYM2-V7			
	V /	20	200	32	U2	LECYU2-V7			

*1 For motor type V6, the compatible driver part number suffix is V5.

#### 5 Lead [mm]

Symbol	25A-LEY25	25A-LEY32*1					
Α	12	16 (20)					
В	6	8 (10)					
С	3	4 (5)					

*1 The values shown in ( ) are the leads for the size 32 top/right/left side parallel motor types. (Equivalent leads which include the pulley ratio [1.25:1])

#### 6 Stroke [mm]

30	30
to	to
500	500

* For details, refer to the applicable stroke table below.

#### Motor option

Nil	Without option
В	With lock*1

*1 When "With lock" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.

#### Rod end thread

Nil	Rod end female thread
М	Rod end male thread (1 rod end nut is included.)

#### 9 Mounting*1

	<u> </u>			
Symbol	Typo	Motor moun	ting position	:
Syllibol	Type	Parallel	In-line	
Nil	Ends tapped/ Body bottom tapped *2	•	•	
L	Foot	•	_	
F	Rod flange*2	●*4	•	
G	Head flange*2	●*5	_	
D	Double clevis*3	•	_	1

- *1 The mounting bracket is shipped together with the product but does not come assembled.
- *2 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
- · LEY25: 200 mm or less · LEY32: 100 mm or less *3 For the mounting of the double clevis type, use the actuator within the following stroke range.
- · LEY25: 200 mm or less · LEY32: 200 mm or less *4 The rod flange type is not available for the LEY25
- with a 30 mm stroke and motor option "With lock."
- *5 The head flange type is not available for the

#### Mounting Bracket Part Nos. for the 25A- Series

Applicable :	size	Foot*1	Flange	Double clevis
25		25-LEY-L025	25-LEY-F025	25-LEY-D025
<b>32</b> 25-LEY-L032		25-LEY-F032	25-LEY-D032	
Surface treatme		RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

*1 When ordering foot brackets, order 2 pieces per actuator.

* Parts included with each type of bracket are as follows. Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, D-M9NW(V)-900, D-M9PW(V)-900, D-M9PW(V)-900 Body mounting bolt

Solid state auto switches should be ordered separately. Click here for details on applicable auto switch models.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900

#### Applicable Strake Table

Applicable Stroke Table												•: Standard
Stroke		50	100	150	200	250	300	350	400	450	500	Manufacturable
Model [mm]	30	50	100	130	200	250	300	330	400	450	300	stroke range [mm]
25A-LEY25	•	•	•	•	•	•	•	•	•	_	_	15 to 400
25A-LEY32	•	•	•	•	•	•	•	•	•	•	•	20 to 500

Please contact SMC for non-standard strokes as they are produced as special orders.





Motor mounting position: **Parallel** 

Motor mounting position: In-line

Cable type*1 *2

<b>W</b> oubic type							
	Nil	Without cable					
	S	Standard cable					
	R	Robotic cable					

- *1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- *2 Standard cable entry direction is
  - · Parallel: (A) Axis side
  - · In-line: (B) Counter axis side

Cable length [m]*1

	<u> </u>
Nil	Without cable
3	3
5	5
Α	10
С	20

*1 The length of the motor and encoder cables are the same. (For with lock)

Driver type*1

	Compatible drivers	Power supply voltage [V]			
Nil	Without driver	_			
M2	LECYM2-V□	200 to 230			
U2	LECYU2-V□	200 to 230			

*1 When a driver type is selected, a cable is included. Select the cable type and cable

I/O cable length [m]*1

Nil	Without cable
Н	Without cable (Connector only)
1	1.5

*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected.

Refer to the Web Catalog if an I/O cable is required.

> * The 25A- series specifications and dimensions are the same as those of the standard model.

> > For details, refer to the Web Catalog.

## **Compatible Drivers**

Driver type	MECHATROLINK-II type	MECHATROLINK-III type					
Series	LECYM	LECYU					
Applicable network	MECHATROLINK-Ⅱ	MECHATROLINK-Ⅲ					
Control encoder		Absolute 20-bit encoder					
Communication device	USB communication,	USB communication, RS-422 communication					
Power supply voltage [V]	200 to 230 V	AC (50/60 Hz)					

* Copper and zinc materials are used for the motors, cables, controllers/drivers.



# **Electric Actuator** Rod Type Secondary Battery Compatible

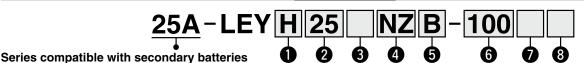




**25A-LEY Series** 25A-LEY25, 32

RoHS

#### **How to Order**



Accuracy							
Nil	Basic type						
Н	High-precision type						

25 32

2 Size 3 Motor mounting position Top side parallel Right side parallel Left side parallel D

4 Mounting type NZ NU NY NT NX NM1 NW NM2 NV NM3

**5** Lead [mm] Symbol LEY25 LEY32 16 (20) 12 В 6 8 (10) 4 (5)

The values shown in ( ) are the leads for the top/right/left side parallel motor types. Exmounting type NM1 (Equivalent leads which include the pulley ratio [1.25:1])

#### Stroke [mm]

Stroke [iiiii]						
30						
to						
500						

Refer to the applicable stroke table.

## Rod end thread

Nil	Rod end female thread
М	Rod end male thread (1 rod end nut is included.)

#### Mounting^{∗1}

Symbol	Tuno	Motor moun	ting position	
Symbol	Type	Parallel	In-line	ľ
Nil	Ends tapped/Body bottom tapped*2	•	•	
L	Foot	•	_	:
F	Rod flange*2	●*4	•	
G	Head flange*2	●*5		١,
D	Double clevis*3			١.

- The mounting bracket is shipped together with the product but does not come assembled. For the horizontal cantilever mounting with the ends tapped, rod flange, or head flange types, use the actuator within the following stroke range.

  25A-LEY25: 200 mm or less, 25A-LEY32: 100 mm or less
  For the mounting with the double clevis type, use the actuator
- within the following stroke range.

  25A-LEY25: 200 mm or less, 25A-LEY32: 200 mm or less If the stroke of the 25A-LEY25 is 30 mm or less, the rod flange may interfere with the motor.
- The head flange type is not available for the in-line type and the 25A-LEY32.

#### Applicable Stroke Table

Applicable Stroke Table   ●: Standa										: Standard		
Stroke [mm] Model	30	50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range
LEY25	•	•	•	•	•	•		•	•	_	_	15 to 400
LEY32	•	•	•		•	•	•	•	•	•	•	20 to 500
Bi contact in the second secon												

* Please contact SMC for non-standard strokes as they are produced as special orders.

#### Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot*1	Flange	Double clevis
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32	25-LEY-L032	25-I FY-F032	25-I FY-D032

- *1 When ordering foot brackets, order 2 pieces per actuator.
- * Parts included with each type of bracket are as follows. Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

#### Compatible Motors and Mounting Types*4

Applicable r	motor model	9 - 7						Size/N	Size/Mounting type							
Manufacturer	Series			2	5			32								
Manufacturer	Series	NZ	NY	NX	NM1	NM2	NM3	NZ	NY	NX	NW	NV	NU	NT	NM1	NM2
Mitsubishi Electric Corporation	MELSERVO JN/J4/J5	•	_	_	_	_	_	•	-	_	_	_	_	_	_	_
YASKAWA Electric Corporation	Σ-V/7/X	●*3	_	_	_	_	_	•	_	_	_	_	_	_	_	_
SANYO DENKI CO., LTD.	SANMOTION R	•	_	_	_	_	_	•		_	_	_		_	_	_
OMRON Corporation	OMNUC G5/1S		_	_	_		_	_	•	_	_	_	_	_	_	_
Panasonic Corporation	MINAS A5/A6	(MHMF only)	•	_	_	_	_	_	•	_	_	_	_	_	_	_
FANUC CORPORATION	βis (-B)	•	_	_	_	_	_	(β1 only)	_	_	•	_	_	_	_	_
NIDEC SANKYO CORPORATION	S-FLAG	•	_	_	_	_	_	•	_	_	_	_	_	_	_	_
KEYENCE CORPORATION	SV/SV2	●*3	_	_	_	_	_	•	_	_	_	_	_	_	_	_
FUJI ELECTRIC CO., LTD.	ALPHA7	•	_	_	_	_	_	•	_	_	_	_	_	_	_	_
MinebeaMitsumi Inc.	Hybrid stepping motors	_	_	_	●*1	_	●*2	_	_	_	_	_	_	_	•	_
Shinano Kenshi Co., Ltd.	CSB-BZ	_	_	_	●*1	_	●*2	_	_	_	_	_	_	_	_	_
ORIENTAL MOTOR Co., Ltd.	α STEP AR/AZ	_	_	_	_	AR/AZ (46 only)	_	_	_	_	_	_	_	_	_	•
FASTECH Co., Ltd.	Ezi-SERVO		_	_	•		_	_	_		_	_	_	_	•	
Rockwell Automation, Inc. (Allen-Bradley)	Kinetix MP/VP/TL	(TL only)	_	_	_	_	_	_	ı	●*1 (MP/VP only)	_	_	ı	(TL only)	_	_
Beckhoff Automation GmbH	AM 30/31/80/81	•	_	_	_		_	_	_	(AM80/ AM81 only)	_	●* ¹ (AM30 only)	(AM31 only)	_	_	_
Siemens AG	SIMOTICS S-1FK7	_	_	•	_	_	_	_	_	●* ¹	_	_	_	_	_	_
Delta Electronics, Inc.	ASDA-A2	•	_			_	_	•		_	_	_	_	_		_
ANCA Motion	AMD2000	•	_		_		_	•	_		_	_	_		_	

- *1 Motor mounting position: In-line only *2 Motor mounting position: Parallel only
- *3 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.
- *4 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

#### Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g) GR-D-010 (10 g)

Solid state auto switches should be ordered separately. Click here for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900 * The 25A- series specifications and dimensions are the same as those of the standard model.



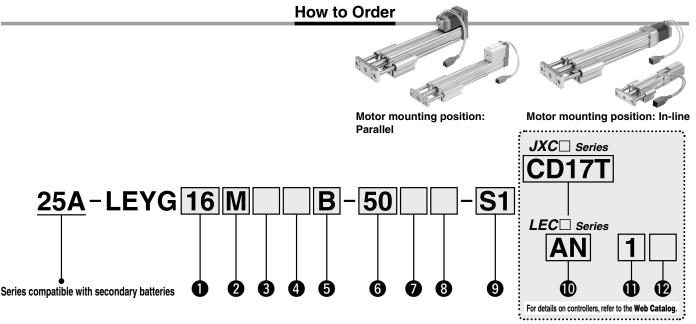
Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC)

# Guide Rod Type Secondary Battery Compatible

**25A-LEYG Series** 25A-LEYG16, 25, 32, 40



* For details, refer to the Web Catalog.



# 1 Size

16
25
32
40

2)	<b>Bearing</b>	type*

Doaring type						
М	Sliding bearing					
L	Ball bushing bearing					

#### Motor mounting position

	_	<u>_</u> .
Nil		Top side parallel
	D	In-line

#### 4 Motor type

Symbol	Time	Applicable size			Compatible controllers/		
Symbol	Type	LEYG16	LEYG25	LEYG32/40			
					JXC51	JXCD1	JXCPF
	Step motor (Servo/24 VDC)				JXC61	JXCL1	JXCLF
Nil		•	•	•	JXCE1	JXCM1	
					JXC91	JXCEF	LECP1
					JXCP1	JXC9F	LECPA
A	Servo motor (24 VDC)	•	•	_		LECA6	

#### Lead [mm]

Symbol	LEYG16	LEYG25	LEYG32/40
Α	10	12	16
В	5	6	8
С	2.5	3	4

#### 6 Stroke*2 *3 [mm]

30	30
to	to
300	300

For details, refer to the applicable stroke table below.

#### Motor option*4

Nil Without option			
С	With motor cover		
В	With lock		
W	With lock/motor cover		

#### 8 Guide option*5

Nil	Without option
F	With grease retaining function*15

*15 Only applicable for sizes 25, 32, and 40 with the sliding bearing

#### 9 Actuator cable type/length*7

Standard cable [m]				
Nil None				
S1	1.5*9			
S3	3*9			
S5	5*9			

Robotic	[m]		
R1	1.5	RA	10* ⁶
R3	3	RB	15* ⁶
R5	5	RC	20*6
R8	8*6		

#### Applicable Stroke Table*2

Applicable offore Table							•. Stariuaru	
Stroke								Manufacturable
[mm]	30	50	100	150	200	250	300	stroke range
Model								[mm]
LEYG16	•	•	•	•	•	_	_	10 to 200
LEYG25	•	•	•	•	•	•	•	15 to 300
LEYG32/40	•	•	•	•	•	•	•	20 to 300

Solid state auto switches should be ordered separately. Click here for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

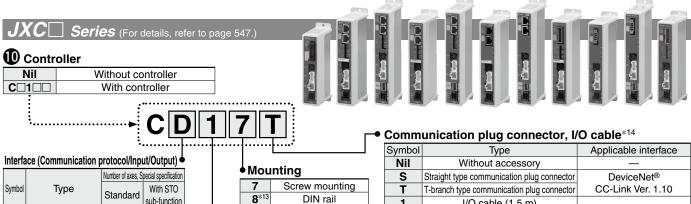
#### **Replacement Parts/Grease Pack**

Applied portion	Order no.
Piston rod	GR-D-005 (5 g)
Guide rod	GR-D-010 (10 g)

- * Copper and zinc materials are used for the motors, cables, controllers/drivers.
- The 25A- series specifications and dimensions are the same as those of the standard model.



Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC) Secondary Battery Compatible



		INUITIDET OF ANCO, O	peciai specilication	
Symbol	Type	Standard	With STO sub-function	
_	D	_	oub function	
5	Parallel input (NPN)			
6	Parallel input (PNP)	•		
Е	EtherCAT	•	•	
9	EtherNet/IP™	•	•	
Р	PROFINET	•	•	
D	DeviceNet®	•		
L	IO-Link	•	•	
M	CC-Link	•		

#### Number of axes, Special specification

- Humber of axee, openial openinoalion		
Symbol	Number of axes Specification	
1	Single axis	Standard
F	Single axis	With STO
		sub-function

#### I/O cable (1.5 m) 1 Parallel input (NPN) 3 I/O cable (3 m) Parallel input (PNP) I/O cable (5 m) 5

### **Series** (For details, refer to the Web Catalog.)



## Controller/Driver type*8

Nil	Without controller/driver	
6N	LECA6	NPN
6P	(Step data input type)	PNP
1N	LECP1*9	NPN
1P	(Programless type)	PNP
AN	LECPA*9 *10	NPN
AP	(Pulse input type)	PNP

## I/O cable length*11

Nil	Without cable (Without communication plug connector)
1	1.5 m
3	3 m* ¹²
5	5 m*12



Nil	Screw mounting
D	DIN rail*13

- *1 When [M: Sliding bearing] is selected, the max. speed of lead [A] is 400 mm/s (at no-load, horizontal mounting). The speed is also restricted with a horizontal/moment load. Refer to the "Model Selection" on the Web Catalog.
- *2 Please contact SMC for non-standard strokes as they are produced as special orders.
- *3 There is a limit for mounting the size 32/40 top side parallel motor
- types and strokes of 50 mm or less. Refer to the dimensions.
  *4 When "With lock" or "With lock/motor cover" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 16/40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.

  *5 Only available for size 25, 32, and 40 sliding bearings (Refer to the
- Construction" on the Web Catalog.)
- Produced upon receipt of order (Robotic cable only)
  The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable.

  Refer to the **Web Catalog** if only the actuator cable is required.
- *8 For details on controllers/drivers and compatible motors, refer to the

- compatible controllers/drivers on the next page.
- *9 Only available for the motor type "Step motor"
- When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) on separately.
- *11 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. Refer to the Web Catalog if an I/O cable is required.
- When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables u-able with open
- The DIN rail is not included. It must be ordered separately. Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel

Select "Nil," "S," or "T" for DeviceNet® or CC-Link. Select "Nil," "1," "3," or "5" for parallel input.

#### **∕**.\Caution

#### [CE/UKCA-compliant products]

- 1) EMC compliance was tested by combining the electric actuator LEY series and the controller LEC/JXC series.
  - The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.
- 2) For the incremental (servo motor 24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the Web Catalog for the noise filter set. Refer to the LECA series Operation Manual for installation.

#### [UL-compliant products (For the LEC series)]

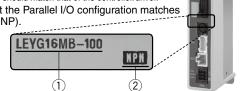
When compliance with UL is required, the electric actuator and controller/ driver should be used with a UL1310 Class 2 power supply.

#### The actuator and controller/driver are sold as a package. Confirm that the combination of the controller/driver and

actuator is correct.

#### <Check the following before use.>

- 1 Check the actuator label for the model number (after "25A-") This number should match that of the controller/driver.
- 2 Check that the Parallel I/O configuration matches (NPN or PNP).



Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com



# Guide Rod Type Secondary Battery Compatible

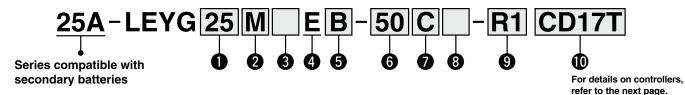
**25A-LEYG Series** 25A-LEYG16, 25, 32, 40



For details, refer to the Web Catalog.

#### **How to Order**





40

<b>SIZ</b>	е
16	
25	
32	

2	Bearing	type*1
---	---------	--------

М	Sliding bearing	
L	Ball bushing bearing	

Motor mounting position/Motor cover direction

Symbol	Motor mounting position	Motor cover direction
Nil	Top side parallel	_
D		*2
D1	In-line	Left*3
D2		Right*3
D3		Top*3
D4		Bottom*3

4 Motor type

Е	Battery-less absolute
	(Step motor 24 VDC)

**5** Lead [mm]

Symbol	LEYG16	LEYG25	LEYG32/40
Α	10	12	16
В	5	6	8
С	2.5	3	4

6 Stroke*4 *5 [mm]

Stroke		Note	
Slicke	Size	Applicable stroke	
30 to 200	16	30, 50, 100, 150, 200	
30 to 300	25/32/40	30, 50, 100, 150, 200, 250, 300	

Motor option*6

	-	
С	With motor cover	
W	With lock/motor cover	

8 Guide option*7

Nil	Without option	
F	With grease retaining function*11	

*11 Only applicable for sizes 25, 32, and 40 with the sliding bearing

Actuator cable type/length

Robotic	cable		[m]
Nil	None	R8	8*8
R1	1.5	RA	10*8
R3	3	RB	15*8
R5	5	RC	20*8

Solid state auto switches should be ordered separately. Click here for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

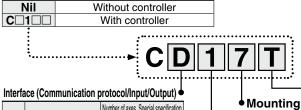
Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g)
Guide rod	GR-D-010 (10 g)

- * Copper and zinc materials are used for the motors, cables, controllers/drivers.
- The 25A- series specifications and dimensions are the same as those of the standard model.







		Number of axes, Special specification			
Symbol	Type	Standard	With STO		
		Standard	sub-function		
5	Parallel input (NPN)	•			
6	Parallel input (PNP)	•			
Е	EtherCAT		•		
9	EtherNet/IP™	•	•		
Р	PROFINET	•	•		
D	DeviceNet®	•			
L	IO-Link	•	•		
M	CC-Link	•			
		•			

Screw mounting **8***9 DIN rail

Number of axes, Special specification Symbol Number of axes | Specification

Single axis Standard With STO F Single axis sub-function Communication plug connector, I/O cable*10

Symbol	Type	Applicable interface		
Nil	Without accessory	_		
S	Straight type communication plug connector	DeviceNet®		
Т	T-branch type communication plug connector	CC-Link Ver. 1.10		
1	I/O cable (1.5 m)	Parallel input (NPN)		
3	I/O cable (3 m)	Parallel input (PNP		
5	I/O cable (5 m)	Parallel Input (PNP		

- *1 When [M: Sliding bearing] is selected, the maximum speed of lead [A] is 400 mm/s (at no-load, horizontal mounting). The speed is also restricted with a horizontal/moment load. Refer to the "Model Selection" on the Web Catalog.
- *2 Sizes 25, 32, and 40 only
- Size 16 only
- *4 Please contact SMC for non-standard strokes as they are produced as special orders.
- There is a limit for mounting size 16/32/40 top side parallel motor types and strokes of 50 mm or less. Refer to the dimensions.

  *6 When "With lock/motor cover" is selected for the top side parallel motor
- type, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
- Only available for size 25, 32, and 40 sliding bearings (Refer to the "Construction" on the Web Catalog.)
- Produced upon receipt of order
  The DIN rail is not included. It must be ordered separately.
- Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel
  - Select "Nil," "S," or "T" for DeviceNet® or CC-Link. Select "Nil," "1," "3," or "5" for parallel input.

#### 

#### [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

#### [Precautions relating to differences in controller versions]

When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the Web Catalog.

#### [UL certification]

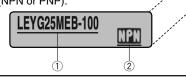
The JXC series controllers used in combination with electric actuators are UL certified.

#### The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

#### <Check the following before use.>

- Check the actuator label for the model number (after "25A-" This number should match that of the controller/driver.
- Check that the Parallel I/O configuration matches (NPN or PNP).



Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com

	Step data input type	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IP™ direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type
Туре											
Series	JXC51 JXC61	JXCE1	JXCEF	JXC91	JXC9F	JXCP1	JXCPF	JXCD1	JXCL1	JXCLF	JXCM1
Features	Parallel I/O	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input
Compatible motor	Battery-less absolute (Step motor 24 VDC)										
Max. number of		C4 points									
step data		64 points									
Power supply voltage			24 VDC								

AC Servo Motor LECS□ Series

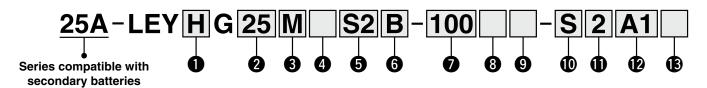
# Guide Rod Type Secondary Battery Compatible

25A-LEYG Series 25A-LEYG25, 32

LECY□ Series p. 314-8



#### **How to Order**



Accuracy

Nil Basic type High-precision type 2 Size

25

3 Bearing type

M	Sliding bearing	
L	Ball bushing bearing	

4 Motor mounting position

Nil	Top side parallel
D	In-line

#### 6 Motor type*1

Symbol	Туре	Output [W]	2 Size	Driver type	Compatible drivers*3
S2*1	AC servo motor	100	25	A1/A2	LECSA□-S1
S3	(Incremental encoder)	200	32	A1/A2	LECSA□-S3
	AC servo motor	100	25	B2	LECSB2-T5
T6*2				C2	LECSC2-T5
				S2	LECSS2-T5
	(Absolute encoder)	200	32	B2	LECSB2-T7
T7				C2	LECSC2-T7
				S2	LECSS2-T7

- *1 For motor type S2, the compatible driver part number suffix is S1.
- *2 For motor type T6, the compatible driver part number is LECS□2-T5.
- *3 For details on the driver, refer to the Web Catalog.

6 Lead [mm]

Symbol	LEYG25	LEYG32*1
Α	12	16 (20)
В	6	8 (10)
С	3	4 (5)

*1 The values shown in ( ) are the leads for the size 32 top side parallel motor type. (Equivalent leads which include the pulley ratio [1.25:1])

#### Stroke [mm]

30	30
to	to
300	300

- For details, refer to the applicable stroke table below.
- There is a limit for mounting the size 32 top side parallel motor type and strokes of 50 mm or less. Refer to the dimensions.

#### **8** Motor option

Nil	Without option
В	With lock

#### 9 Guide option

Nil	Without option
F	With grease retaining function*1

*1 Only available for sliding bearings

#### Cable type*1 *2

Nil	Without cable				
S	Standard cable				
R Robotic cable					

- *1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- *2 Standard cable entry direction is
  - · Top side parallel: (A) Axis side
  - · In-line: (B) Counter axis side (Refer to the Web Catalog for details.)

## Cable length*1 [m]

Nil         Without cable           2         2           5         5
<b>5</b> 5
<b>A</b> 10

*1 The length of the motor, encoder, and lock cables are the same.

#### Replacement Parts/Grease Pack

riopiacomone i are	, di cacc i ack
Applied portion	Order no.
Piston rod	GR-D-005 (5 g)
Guide rod	GR-D-010 (10 g)

Solid state auto switches should be ordered separately. Click here for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

#### Applicable Stroke Table

Applicable Stroke	e i abie	;						: Standard
Stroke Model [mm]	30	50	100	150	200	250	300	Manufacturable stroke range
LEYG25	•	•	•	•	•	•	•	15 to 300
LEYG32	•	•	•	•	•	•	•	20 to 300

- * Please contact SMC for non-standard strokes as they are produced as special orders.
- * Copper and zinc materials are used for the motors, cables, controllers/drivers.
- * The 25A- series specifications and dimensions are the same as those of the standard model.







Motor mounting position: Parallel

Motor mounting position: In-line

Driver type*1

	/ I	
	Compatible drivers	Power supply voltage [V]
Nil	Without driver	_
A1	LECSA1-S□	100 to 120
A2	LECSA2-S□	200 to 230
B2	LECSB2-T□	200 to 240
C2	LECSC2-T□	200 to 230
S2	LECSS2-T□	200 to 240

*1 When a driver type is selected, a cable is included. Select the cable type and cable length. Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2: Standard cable (2 m)
Nil: Without cable and driver

I/O cable length [m]*1

U i/O cable leligili [iii]					
Nil	Without cable				
H Without cable (Connector only)					
<b>1</b> 1.5					

*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if an I/O cable is required.

#### **Compatible Drivers**

Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	type type
Series	LECSA	LECSB-T	LECSC-T	LECSS-T
Number of point tables	Up to 7	Up to 255	Up to 255 (2 stations occupied)	_
Pulse input	0	0	_	_
Applicable network	_	_	CC-Link	SSCNET III/H
Control encoder	Incremental 17-bit encoder	Absolute 22-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder
Communication function	USB communication	USB communication, RS422 communication	USB communication, RS422 communication	USB communication
Power supply voltage [V]	100 to 120 VAC (50/60 Hz) 200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)



AC Servo Motor LECY Series

# Guide Rod Type Secondary Battery Compatible

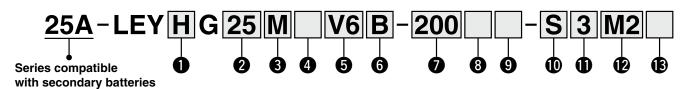
25A-LEYG Series 25A-LEYG25, 32



(RoHS)

LECS□ Series Pp. 314-6

#### **How to Order**



#### 

O 7 toour doy			
Nil	Basic type		
Н	High-precision type		

2 Size

3 Bearing type Sliding bearing Ball bushing bearing 4 Motor mounting position

Nil	Top side parallel
D	In-line

Motor type

	.oypo				
Symbol	Туре	Output [W]	<b>2</b> Size	<b>1</b> Driver type	Compatible drivers
V6*1	AC servo motor (Absolute encoder)	100	25	M2	LECYM2-V5
VO				U2	LECYU2-V5
V7		200	32	M2	LECYM2-V7
V /				U2	LECYU2-V7

^{*1} For motor type V6, the compatible driver part number suffix is V5.

6 Lead [mm]

Symbol	LEYG25	LEYG32*1
Α	12	16 (20)
В	6	8 (10)
С	3	4 (5)

*1 The values shown in ( ) are the leads for the top side parallel motor type. (Equivalent leads which include the pulley ratio [1.25:1])

Stroke [mm]

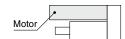
30	30
to	to
300	300

- For details, refer to the applicable stroke table
- There is a limit for mounting the size 32 top side parallel motor type and strokes of 50 mm or less. Refer to the dimensions.

**8** Motor option

Nil	Without option			
В	With lock			

When "With lock" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.



Guide option

Nil	Without option
F	With grease retaining function

* Only available for the sliding bearing

Cable type*1

Nil	Without cable				
S	Standard cable				
R	Robotic cable				

*1 A motor cable and encoder cable are included with the product.

The motor cable for lock option is included when the motor with lock option is selected.

Cable length [m]*1

<b>4</b> Ou	Touble length [m]			
Nil	Without cable			
3	3			
5	5			
Α	10			
С	20			

*1 The length of the motor and encoder cables are the same. (For with lock)

Solid state auto switches should be ordered separately. Click here for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Applicable Stroke Table   •: Standard								
Stroke [mm]	30	50	100	150	200	250	300	Manufacturable stroke range
LEYG25	•	•	•	•	•	•	•	15 to 300
LEYG32	•	•	•	•	•	•	•	20 to 300

* Please contact SMC for non-standard strokes as they are produced as special orders.

Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod Guide rod	GR-D-005 (5 g) GR-D-010 (10 g)

- * Copper and zinc materials are used for the motors, cables, controllers/drivers.
- The 25A- series specifications and dimensions are the same as those of the standard model.







Motor mounting position: Parallel

Motor mounting position: In-line

12 Driver type

	Compatible drivers	Power supply voltage [V]
Nil	Without driver	_
M2	LECYM2-V□	200 to 230
U2	LECYU2-V□	200 to 230

 When a driver type is selected, a cable is included. Select the cable type and cable length. I/O cable length [m]*1

<b>W</b> 1/0	cable length [m]
Nil	Without cable
Н	Without cable (Connector only)
1	1.5

*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if an I/O cable is required.

**Compatible Drivers** 

Driver type	MECHATROLINK-II type	MECHATROLINK-III type		
Series	LECYM	LECYU		
Applicable network	MECHATROLINK-II	MECHATROLINK-Ⅲ		
Control encoder		olute encoder		
Communication device	USB communication, RS-422 communication			
Power supply voltage [V]	200 to 230 V	AC (50/60 Hz)		

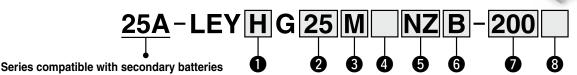


# **Electric Actuator** Guide Rod Type Secondary Battery Compatible



25A-LEYG Series 25A-LEYG25, 32

**How to Order** 



Accuracy

6 Lead [mm] Symbol LEYG25

ratio [1.25:1])

B

C

Nil Basic type High-precision type

6

3

The values shown in ( ) are the

leads for the size 32 top side

parallel motor type. Except mounting type NM1 (Equivalent

leads which include the pulley

<b>2</b>	Siz
2	5
3	2

LEYG32*1 16 (20)

8 (10)

4 (5)

<b>Siz</b>	E
25	
32	

Siz	E
25	
32	

<b>U</b>	Bea	a
IV	Λ	Γ
L	_	Г

O De	aring type
M	Sliding bearing
L	Ball bushing bearing

7 Str	oke [mm]
30	30
to	to
300	300

* Refer to the applicable stroke table.

## 4 Motor mounting position

Nil	Top side parallel
D	In-line
0	0

<b>G</b> u	ide option
Nil	Without option
F	With grease
	retaining function

Only available for sliding bearing : Standard

#### **Applicable Stroke Table**

Stroke Model [mm]	30	50	100	150	200	250	300	Manufacturable stroke range
LEYG25	•	•	•	•	•	•	•	15 to 300
LEYG32	•	•	•	•	•	•	•	20 to 300

* Please contact SMC for non-standard strokes as they are produced as special orders.

#### **6** Mounting type

NZ	
NY	
NX	
NW	
NV	
NU	
NT	
NM1	
NM2	
NM3	

* Refer to the "Compatible Motors."

#### **Replacement Parts/Grease Pack**

Applied portion	Order no.
Piston rod	GR-D-005 (5 g)
Guide rod	GR-D-010 (10 g)

Compatible Motors and Mounting Types*4

Applicable moto	or model			·	·			Size/N	/lountin	g type					·	·
Manufacturer	Series			2	5							32				
Manufacturer	Series	NZ	NY	NX	NM1	NM2	NM3	NZ	NY	NX	NW	NV	NU	NT	NM1	NM2
Mitsubishi Electric Corporation	MELSERVO JN/J4/J5	•	1		_	_		•	_		_	_	l	_	_	-
YASKAWA Electric Corporation	Σ-V/7/X	●*3	1	1	_	_	1	•	_		_	_	-	_	_	_
SANYO DENKI CO., LTD.	SANMOTION R	•	_	_	_	_	_	•	_	_	_	_	_	_	_	_
OMRON Corporation	OMNUC G5/1S	•	_	_	_	_	_	_	•	_	_	_	_	_	_	_
Panasonic Corporation	MINAS A5/A6	(MHMF only)	•	_	_	_	_	_	•		_	_	-	_	_	_
FANUC CORPORATION	βis (-B)	•	-	_	_	_	_	(β1 only)	_	-	•	_	_	_	_	_
NIDEC SANKYO CORPORATION	S-FLAG	•	1	_	_	_		•	_	_	_	_		_	_	_
KEYENCE CORPORATION	SV/SV2	●*3	_	_	_	_	_	•	_	_	_	_	_	_	_	_
FUJI ELECTRIC CO., LTD.	ALPHA7	•	_	_	_	_	_	•	_	_	_	_	_	_	_	_
MinebeaMitsumi Inc.	Hybrid stepping motors	_	_	_	<b>●</b> *1	_	●*2	_	_	_	_	_	_	_	•	_
Shinano Kenshi Co., Ltd.	CSB-BZ	_	_	_	<b>●</b> *1	_	●*2	_	_	_	_	_	_	_	_	_
ORIENTAL MOTOR Co., Ltd.	α STEP AR/AZ	_	1	_	_	AR/AZ (46 only)		_	_	_	-	_	-	_	_	•
FASTECH Co., Ltd.	Ezi-SERVO	_	_	_	•	_	_	_	_	_	_	_	_	_	•	_
Rockwell Automation, Inc. (Allen-Bradley)	Kinetix MP/VP/ TL	(TL only)	_	_	_	_	_	_	_	●*1 (MP/VP only)	_	_	_	(TL only)	_	_
Beckhoff Automation GmbH	AM 30/31/80/81	•	_	_	_	_	_	_	_	*1 (AM80/AM81 only)	_	●*1 (AM30 only)	(AM31 only)	_	_	_
Siemens AG	SIMOTICS S-1FK7	_	_	•	_	_	_	_	_	●*1	_	_	_	_	_	_
Delta Electronics, Inc.	ASDA-A2	•	_	_	_	_	_	•	_	_	_	_	_	_	_	_
ANCA Motion	AMD2000	•	_	_	_	_	_	•	_		_	_	_	_	_	_

*1 Motor mounting position: In-line only *2 Motor mounting position: Parallel only

*3 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.

*4 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

Solid state auto switches should be ordered separately. Click here for auto switch details.

Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900 * The 25A- series specifications and dimensions are the same as those of the standard model.

# 25A- Series

# **Applicable Auto Switches**

## **Applicable Cylinder Series**

				Aut	o switches	`										۸ir	ovline	loro					
				Aut	Electrical		l				Dro.wirod	Air cylinders  CDJP2   CD(B)J2   CD85   CDM2   CD(B)G1   MDB   C(P)6650   CDA2   CDS2											
Туре	Special	Electrical	Indicator	Wiring	entry	Auto switch		d wire								CDM2				l ' '			
Турс	function	entry	light	(Output)	direction	model	0.5 Nil		3 L	5 Z	SDPC	ø4 to ø16	ø10, ø16	ø8 to ø12	ø16 to ø25	ø20 to ø40	ø20 to ø63	ø <b>80</b> , ø100	ø32 to ø100	ø32 to ø125	ø40 to ø100	ø125 to ø160	
				3-wire (NPN)		D-M9N-900	INII	IVI	•	0	_	•	•	•	•	•	•		•	•	•	•	
				3-wire (PNP)	In-line	D-M9P-900	•	•	•	0	_		•	•		•	•		•		•	•	
				2-wire	1	D-M9B-900	•		•	0	_	•	•	•	•	•	•	_	•	•	•	•	
	_			3-wire (NPN)		D-M9NV-900	•	•	•	0	_		•	•	•	•	•	_	•		•	•	
				` ,	Perpendicular	D-M9PV-900	•	•	•	0	_	•	•	•	•	•	•	_	•	•	•	•	
				2-wire	1 '	D-M9BV-900	•	•	•	0	_	•	•	•	•	•	•	_	•	•	•	•	
				3-wire (NPN)		D-M9NW-900	•	•	•	0	_	•	•	•	•	•	•	_	•	•	•	•	
				3-wire (PNP)	In-line	D-M9PW-900	•	•	•	0	_	•	•	•	•	•	•	_	•	•	•	•	
	Diagnostic			2-wire	1	D-M9BW-900	•	•	•	0	0	•	•	•	•	•	•	_	•	•	•	•	
	indication (2-color indicator)			3-wire (NPN)		D-M9NWV-900	•	•	•	0	_	•	•	•	•	•	•	_	•	•	•	•	
	(2-color mulcalor)			3-wire (PNP)	Perpendicular	D-M9PWV-900	•	•	•	0	_	•	•	•	•	•	•	_	•	•	•	•	
				2-wire	<u></u>	D-M9BWV-900		•	•	0	0	•	•	•	•	•	•		•	•	•	•	
				3-wire (NPN)		D-Y59A-900	•		•	0	_	_	_	_					_		_		
				3-wire (PNP)	In-line	D-Y7P-900	•		•	0	_		_						_		_		
				2-wire		D-Y59B-900	•	_	•	0	_	_	_	_	_	_	_	_	_	_	_	_	
	-			3-wire (NPN)		D-Y69A-900	•	_	•	0	_	_	_	_	_	_	_		_	_	_	_	
				3-wire (PNP)	Perpendicular	D-Y7PV-900	•	_	•	0	_		_		_	_	_	_			_		
				2-wire		D-Y69B-900	•	_	•	0	_	_	_	_	_	_	_	_	_	_	_	_	
				3-wire (NPN)		D-Y7NW-900	•	_	•	0	_		_		_	_		_	_		_	_	
	Diagnostic			3-wire (PNP)	In-line	D-Y7PW-900	•	_	•	0	_	_	_	_	_	_	_	_	_	_	_	_	
Solid	indication			2-wire		D-Y7BW-900	•	_	•	0	_	—	_	_	—	_	_	_	_	—	_	_	
state		Grommet	Yes	3-wire (NPN)		D-Y7NWV-900	•	_	•	0	_	_	_	_	_	_	_	_	_		_		
auto	( ,				Perpendicular	D-Y7PWV-900	•	_	•	0	_	_	_	_	_	_	_	_	_	—	_	_	
switch				2-wire		D-Y7BWV-900	•	_	•	0	_	_	_	_	_	_	_	_	_	_	_	_	
				3-wire (NPN)		D-G59-900	•	_	•	0	_	_	_	_	_	<u> </u>	_	•	_	_	_	_	
	_			3-wire (PNP)		D-G5P-900	•	_	•	0	_	_	_	_	_	_	_	•	_	_	_	_	
				2-wire	In-line	D-K59-900	•	-	•	0	_	_	_	_	_	_	_	•	_	_	_	_	
	Diagnostic			3-wire (NPN)	-	D-G59W-900	•	_	•	0	_	-	_	_	_	<u> </u>	_	•	_	-	_	_	
	indication			3-wire (PNP)	-	D-G5PW-900	•	_	•	0	_	_	_	_	_	_	_	•	_	-	_	_	
	(2-color indicator)			2-wire		D-K59W-900	•	_	•	0	0	_		-	_	_	-	•		_	_		
				3-wire (NPN)	la Basa	D-F79-900	•	_	•	0	_	_			_	_		_		_	_		
				3-wire (PNP)	In-line	D-F7P-900 D-J79-900	•	-	•	0	_	_	_	-	-	-	-	-	_	_	_	_	
	_			2-wire 3-wire (NPN)		D-579-900 D-F7NV-900	•	$\vdash$		0	_	<del>  -</del>	_	_	-		_	$\vdash =$	_	<del>  -</del>	_	_	
				, ,	Dornandiaular	D-F7NV-900 D-F7PV-900	•	-	•	0		-		<del>-</del>	<del>  -</del>	-	$\vdash$	Η	_				
				2-wire	reiperialcular	D-F7PV-900 D-F7BV-900	•			0	_				=					$\vdash =$			
				3-wire (NPN)		D-F76V-900 D-F79W-900	•	$\vdash$	•	0		$\vdash \equiv$	_	$\vdash \equiv$	$\vdash =$		$\vdash \equiv$	$\vdash \equiv$		$\vdash \equiv$			
	Diagnostic			3-wire (PNP)	In-line	D-F79W-900 D-F7PW-900		E		0				H	H		H	H		ΗΞ			
	indication			2-wire	111-11116	D-J79W-900	•		•	0		=	_	$\vdash \equiv$	=			-		$\pm \equiv$			
	(2-color indicator)			3-wire (NPN)		D-F7NWV-900	•			0													
				2-wire	1	D-F7BWV-900	•	1_	•	0		<del>  _  </del>		<del>  _  </del>	+_	<u> </u>	<del>  _  </del>	+_	_	<b> </b>	_		
					Perpendicular	D-F8N-900	•	<u> </u>	•	0		<del> </del>			<del> </del>		<del>  _  </del>	<del> </del>	_	<b> </b>	_		
	_			3-wire (PNP)	- S.ps.idiodidi	D-F8P-900	•		•	0	_	<u> </u>	_	<u> </u>	<u> </u>	<b> </b>	<u> </u>	<u> </u>	_	<b> </b>	_	_	
				2-wire	†	D-F8B-900	•	_	•	0	_	<b> </b>	_	_	<b> </b>	<b> </b>	_	<b> </b>	_	<b> </b>	_	_	
			Yes	0		D-A93L-900		<u> </u>	•	_	_	<b>•</b> *1	•	_	•	•	•	<u> </u>	•	•	•	•	
	_			2-wire	In-line	D-A90L-900	<u> </u>	<u> </u>	•	_	_	<b>•</b> *1	•	_	•	•	•	l —	•	•	•	•	
Reed			No			D-Z80-900	_	_	•	_	_	-	_	_	<u> </u>	<u> </u>		<b> </b>	_	1_	_	_	
auto		Grommet	.,	3-wire (NPN equiv.)		D-E76A	•	_	•	_	_	<b> </b>	_	<b> </b>	<u> </u>	_	<b> </b>	<b> </b>	_	<b> </b>	_	_	
switch	_		Yes			D-E73A	•	<u> </u>	•	_	_	<b> </b>	_	<b> </b>	<b> </b>	<b> </b>	<b> </b>	<b>†</b> —	_	<b> </b>	_	_	
			No	2-wire		D-E80A	•	<u> </u>	•	_	_	<b> </b>	_	<b> </b>	<b> </b>	l —	<u> </u>	<b> </b>	_	<b> </b>	_	_	

^{*1} The D-A90L-900 and D-A93L-900 cannot be mounted on ø4. * Solid state auto switches marked with a "O" are produced upon receipt of order.

#### **Ordering the Auto Switches**

Please be aware that the order part numbers for the cylinder mounted and individual auto switches are different. (Example) Part number for ordering D-M9BWL-900:

- Cylinder mounted type: 25A-CDJ2L16-60Z-M9BWL-B (Omit the first "D-" and the last "-900" or "-901".)
- Individual auto switch: D-M9BWL-900

(Place the order with the part number for auto switch shown in the table above.)

* Lead wire length symbols: 0.5 m.....Nil (Example) M9NW

1 m..... M (Example) M9NWM 3 m..... L (Example) M9NWL



# Applicable Auto Switches 25A - Series

				Co	mpact	t cylinde	ers				Rodless cylinders   Rodl													
C95SD	CDUJ	CDU	CDUK	CDQS(W)	CDC	(W)	CD	BQ2	MDU	CD55		MY1B	3	MY	′1M	M	/1C	MY1H	MY2C	MY2H/HT	МҮЗ	CY	′3R	
ø160, ø200	ø6 to ø20	ø10 to ø32	2 ø16 to ø3	2 ø12 to ø25	ø12 to ø100	0125 to 0200	ø <b>20</b> , ø <b>2</b> 5	ø32 to ø100	ø25 to ø63	ø20 to ø100	ø16 to ø40	ø <b>50</b>	ø <b>63</b>	ø16, ø20	ø25 to ø63	ø16, ø20	ø <b>25 to</b> ø <b>6</b> 3	ø16 to ø40	ø16, ø25, ø40	ø16, ø25, ø40	ø16 to ø63	ø6 to ø20	ø <b>25 to</b> @	
•	•	•	•	•	•	•	•	•	•	•	•	_	•	•	•	•	•	•	•	•	•	•	•	
•	•	•	•	•	•	•	•	•	•	•	•	_	•	•	•	•	•	•	•	•	•	•	•	
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			+ =	$+ \equiv$					-			•								_		+=-		
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		$\equiv$	$+ \equiv$	$+ \equiv$			_				$\equiv$				$\vdash \equiv$	$\vdash$			_			$\vdash \equiv$		
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# 25A- Series

## **Applicable Cylinder Series**

				710	ito switches						I	
<b>T</b>	Special	Electrical	Indicator	Wiring	Electrical	A	ı	Lead wire	length [n	n]	Pre-wired	
Type	function	entry	light	(Output)	entry direction	Auto switch model	0.5	1	3	5	connector	
				3-wire (NPN)	direction	D-M9N-900	Nil	M	<u>L</u>	<b>Z</b>	- SDFC	
				3-wire (PNP)	In-line	D-M9P-900	•		•	0	_	
				2-wire		D-M9B-900	•	•	•	0	_	
	_			3-wire (NPN)		D-M9NV-900	•	•	•	0	_	
				3-wire (PNP)	Perpendicular	D-M9PV-900	•	•	•	0	_	
				2-wire	'	D-M9BV-900	•	•	•	0	_	
				3-wire (NPN)		D-M9NW-900	•	•	•	0	_	
				3-wire (PNP)	In-line	D-M9PW-900	•	•	•	0	_	
	Diagnostic			2-wire		D-M9BW-900	•	•	•	0	0	
	indication (2-color indicator)			3-wire (NPN)		D-M9NWV-900	•	•	•	0	_	
	(2-color indicator)			3-wire (PNP)	Perpendicular	D-M9PWV-900	•	•	•	0	_	
				2-wire		D-M9BWV-900	•	•	•	0	0	
				3-wire (NPN)		D-Y59A-900	•	_	•	0	_	
				3-wire (PNP)	In-line	D-Y7P-900	•	_	•	0	_	
				2-wire		D-Y59B-900	•	_	•	0	_	
	_			3-wire (NPN)		D-Y69A-900	•	_	•	0	_	
				3-wire (PNP)	Perpendicular	D-Y7PV-900	•	_	•	0	_	
				2-wire		D-Y69B-900	•	_	•	0	_	
				3-wire (NPN)		D-Y7NW-900	•	-	•	0	_	
	Diagnostic			3-wire (PNP)	In-line	D-Y7PW-900	•	-	•	0		
	indication			2-wire		D-Y7BW-900	•	-	•	0	_	
Solid state	(2-color indicator)	Grommet	Yes	3-wire (NPN)		D-Y7NWV-900	•	-	•	0		
auto switch	,	G. 5		3-wire (PNP)	Perpendicular	D-Y7PWV-900	•	_	•	0	_	
				2-wire		D-Y7BWV-900	•	_	•	0	_	
				3-wire (NPN)		D-G59-900	•	_	•	0	_	
	_			3-wire (PNP)		D-G5P-900	•	_	•	0	_	
				2-wire	In-line	D-K59-900	•	_	•	0	_	
	Diagnostic			3-wire (NPN)		D-G59W-900	•		•	0		
	indication			3-wire (PNP)		D-G5PW-900	•		•	0	_	
	(2-color indicator)			2-wire		D-K59W-900	•		•	0	0	
				3-wire (NPN)	la line	D-F79-900	•	<del>  -</del>	•	0	_	-
				3-wire (PNP)	In-line	D-F7P-900	•	-	•	0		
	_			2-wire (NDN)		D-J79-900	•	_	•	0	_	-
				3-wire (NPN) 3-wire (PNP)	Dornondiaulas	D-F7NV-900 D-F7PV-900	•	_	•	0	_	
				· , ,	Perpendicular	D-F7PV-900 D-F7BV-900	•	_	•	0	_	<del>                                     </del>
				2-wire		D-F7BV-900 D-F79W-900	•	<u> </u>	•	0	_	
	Diagnostic			3-wire (NPN)	In-line	D-F79W-900 D-F7PW-900		<del>                                     </del>		0		
	Diagnostic indication			3-wire (PNP) 2-wire	In-line	D-J79W-900	•	_	•	0		
	(2-color indicator)			3-wire (NPN)		D-579W-900 D-F7NWV-900	-	<u> </u>	•	0	<u> </u>	
	(= 55.51 1110104151)			2-wire		D-F7BWV-900	$\ddot{}$			0		
				3-wire (NPN)	Perpendicular		•		•	0	_	
				3-wire (NFN)	i erbenulculdi	D-F8P-900	•		<u> </u>	0	_	
				2-wire		D-F8B-900	•	_	<u> </u>	0	_	
	+		Yes	Z-VVIIC		D-A93L-900	_		•		_	
			100	2-wire	In-line	D-A90L-900			<u> </u>	$\vdash \equiv$		
Reed auto			No			D-Z80-900			•			
switch		Grommet		3-wire (NPN equiv.)		D-E76A	•		•			
OWITOIT			Yes	S .mo (iti it oquiv.)	In-line	D-E73A	•		•			
	_ !			2-wire				_				

# Applicable Auto Switches 25A - Series

		Tab	le cylin	ders						Guid	de cylin	ders				With	Lock	Cla	np/Stop	per
MXH	MXS	MXQ□	MXQ	MXF	MXW	MXP	MGJ	MGP	MGPK	MGG	CXSJ	cxs	CD	BXW	CDBPXW	MDWB	CDNS	MK	RSQ	RSF
ø6 to ø20	ø6 to ø25	ø6 to ø25	ø6 to ø25	ø8 to ø20	ø8 to ø25	ø6 to ø16	ø <b>6</b> , ø10	ø12 to ø100	ø12 to ø50	ø20 to ø50	ø6 to ø32	ø6 to ø32	ø10	ø16 to ø32	ø10 to ø32	ø32 to ø100	ø125 to ø160	ø12 to ø63	ø12 to ø50	ø <b>20</b> , ø3
•	•	•	•	•	•	•	_	•	•	•	•	_	_	_	_	•	•	•	•	•
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#### **Applicable Rotary Actuator Series**

				Au	to switches								Rotary a	ctuators	3
_	Special	Electrical	Indicator	Wiring	Electrical	Auto switch	Lea	ad wire	length	[m]	Pre-wired	MSQA MSQB	MSQ MSZ	MD	SUB
Type	function	entry	light	(Output)	entry direction	model	0.5 Nil	1 M	3 L	5 Z	connector	10 to 200		1, 3	7, 20
				3-wire (NPN)		D-M9N-900	•	•	-	0	_	•	•	_	_
				3-wire (PNP)	In-line	D-M9P-900	•	•		0	_	•	•		_
				2-wire		D-M9B-900	•	•	•	0	_	•	•		<u> </u>
	_			3-wire (NPN)		D-M9NV-900	•	•	•	0	† <u> </u>	•	•		<u> </u>
				3-wire (PNP)	l Perpendicular		•	•	•	0	<u> </u>	•	•		_
				2-wire		D-M9BV-900	•	•		0	<u> </u>	•	•		<u> </u>
				3-wire (NPN)		D-M9NW-900	•	•	•	0	† <u> </u>	•	•		<u> </u>
				3-wire (PNP)	In-line	D-M9PW-900	•	•	•	Ō	† <u> </u>	•	•	_	_
	Diagnostic			2-wire		D-M9BW-900	•	•	•	0	0	•	•		_
	indication			3-wire (NPN)		D-M9NWV-900	•	•		0	_	•	•		<u> </u>
	(2-color indicator)			3-wire (PNP)	Pernendicular	D-M9PWV-900	•	•	•	0	<u> </u>	•	•		<u> </u>
				2-wire	. o.po.iaioaiai	D-M9BWV-900	•	•	•	0	0	•	•	_	<u> </u>
				3-wire (NPN)		D-Y59A-900	•	_		0	_	_			<u> </u>
				3-wire (PNP)	In-line	D-Y7P-900	•			0	_	_			<u> </u>
				2-wire	3	D-Y59B-900	•		•	0	<u> </u>	_	_		_
	_			3-wire (NPN)		D-Y69A-900	•	_	•	0	_	_	_		_
				3-wire (PNP)	Pemendicular	D-Y7PV-900	•		•	0	<u> </u>	_			<u> </u>
				2-wire	Torportaloular	D-Y69B-900	•	_	•	0	<u> </u>	_			<u> </u>
				3-wire (NPN)		D-Y7NW-900	•	_	•	0	<u> </u>	_			_
				3-wire (PNP)	In-line	D-Y7PW-900	•	_	•	0	<b>+</b>	_			_
Solid state	Diagnostic			2-wire	111 11110	D-Y7BW-900	•	_	•	0	<u> </u>	_	_	_	l _
auto switch	indication	Grommet	Yes	3-wire (NPN)		D-Y7NWV-900	•			0					
aato omton	(2-color indicator)			3-wire (PNP)	4		•			0	<u> </u>				<del>-</del>
				2-wire	i erpendicular	D-Y7BWV-900	•			0					
				Z-WIIG		D-S991-901*1	•			0	$+ \equiv$			•	$\vdash$
				3-wire (NPN)		D-S992-901*1	•			0				÷	
						D-S9P1-901*1	•							÷	
				3-wire (PNP)	In-line	D-S9P2-901*1	•		•					÷	
						D-T991-901*1	•							÷	
				2-wire		D-T992-901*1	•			0				÷	
						D-S99V1-901*1	•			0	_			÷	
				3-wire (NPN)		D-999V2-901*1	•			0				•	$\vdash \equiv$
						D-S9PV1-901*1	•			0	+ =			•	$\vdash \equiv$
	_			3-wire (PNP)	Perpendicular	D-S9PV2-901*1					+=			÷	$\vdash \equiv$
						D-T99V1-901*1	•				+			÷	$\vdash$
				2-wire		D-199V1-901*1	•		•	0	_			•	$\vdash$
						D-199V2-901*1	•			_	+				_
				3-wire (NPN)		D-S791-901*1	•			0	_			_	•
					-	D-S792-901*1			•	0	<del>  -</del>	_		_	
				3-wire (PNP)	In-line	D-S7P1-901*1	•	_	•	0	<del>  -</del>	_	_	_	
					-		•		•	0	<del>  -</del>	_	_		•
				2-wire		D-T791-901*1	•	_	•	0	_		_		-
			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			D-T792-901*1	•	_	•	0	_				•
Reed auto	_	Grommet	Yes	2-wire	In-line	D-A93L-900	_	_	•	-	+	•	•		
switch			No			D-A90L-900	_	_	•	-	_	•	•	_	

^{*} Solid state auto switches marked with a "O" are produced upon receipt of order.

#### Ordering the Auto Switches

Please be aware that the order part numbers for the rotary actuator mounted and individual auto switches are different. (Example) Part number for ordering D-M9BWL-900:

- Rotary actuator mounted type: 25A-MSQB-10A-M9BWL (Omit the first "D-" and the last "-900" or "-901".)
- * Lead wire length symbols: 0.5 m.....Nil (Example) M9NW (Example) M9NWM 1 m..... M

• Individual auto switch: D-M9BWL-900

^{*1} Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.



Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2).

When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator. When the MHZ2-10, MHZL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper. When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 325.

⁽Place the order with the part number for auto switch shown in the table above.)

⁽Example) M9NWL 3 m..... L (Example) M9NWZ

#### **Applicable Air Gripper Series**

				Αl	ıto switche	·S									Air gr	ippers			
	0	<b></b>	la d'a stan	\A(!!	Electrical	A 4	Lea	d wire	lenati	n [m]	Pre-wired	JMHZ2	JMHZ2	JMHZ2 -X7460		MHZL2	MUZIO	MHZJ2	MHZL2
Type	Special function	Electrical entry	Indicator light	Wiring (Output)	entry	Auto switch model	0.5	1	3	5	connector	JIVINZZ	-X6900	-X7460	IVI TZZ	IVITZLZ	IVITZJZ	-X6100	-X5955
	Turicuon	Citity	iigiit	(Output)	direction	model	Nil	M	Ľ	Ž	SDPC	8 to 20	8 to 20	8 to 20	10 to 40	10 to 25	10 to 25	32, 40	10 to 20
				3-wire (NPN)		D-M9N-900	•	•	•	0	_	•	•	•	•	•	•	•	•
				3-wire (PNP)	In-line	D-M9P-900	•	•	•	0	_	•	•	•	•	•	•	•	•
	_			2-wire		D-M9B-900	•	•	•	0	_	•	•	•	•	•	•	•	•
				3-wire (NPN)		D-M9NV-900	•	•	•	0	<u> </u>	•	•	•	•	•	•	•	•
						D-M9PV-900	•	•	•	0	_	•	•	•	•	•	•	•	•
				2-wire		D-M9BV-900	•	•	•	0	_	•	•	•	•	•	•	•	•
				3-wire (NPN)		D-M9NW-900	•	•	•	0	_	•	•	•	•	•	•	•	•
	Diagnostic			3-wire (PNP)		D-M9PW-900	•	•	•	0	_	•	•	•	•	•	•	•	•
	indication			2-wire		D-M9BW-900	•	•	•	0	0	•	•	•	•	•	•	•	•
	(2-color indicator)			3-wire (NPN)		D-M9NWV-900	•	•	•	0	_	•	•	•	•	•	•	•	•
						D-M9PWV-900	•	•	•	0	<u> </u>	•	•	•	•	•	•	•	•
				2-wire		D-M9BWV-900	•	•	•	0	0	•	•	•	•	•	•	•	•
				3-wire (NPN)		D-Y59A-900	•		•	0	_				•	•	_	_	
				3-wire (PNP)		D-Y7P-900	•	_	•	0	_	_	_		•	•	_	_	_
	_			2-wire		D-Y59B-900	•		•	0	_	_	_	_	•	•	_	_	_
				3-wire (NPN)		D-Y69A-900	•		•	0	_		_		•	•	_	_	_
						D-Y7PV-900	•		•	0	_		_		•	•	_	_	_
				2-wire		D-Y69B-900	•	_	•	0	_	_	_	_	•	•	_	_	<u> </u>
				3-wire (NPN)		D-Y7NW-900	•		•	0	_	_	_	_	•	•	_	_	_
Solid	Diagnostic			3-wire (PNP)		D-Y7PW-900	•		•	0	_		_		•	•	_	_	₩
state auto	_	Grommet	Yes	2-wire		D-Y7BW-900	•	_	•	0	_		_		•	•	_	_	_
switch	(2-color indicator)			3-wire (NPN)		D-Y7NWV-900	•	_	•	0	_	_	_	_	•	•	_	_	_
						D-Y7PWV-900	•	_	•	0	_	_	_	_	•	•	_	_	_
				2-wire		D-Y7BWV-900	•		•	0	_	_	_	_	•	•	_	_	_
				3-wire (NPN)		D-S991-901*1	•		•	0	<u> </u>				_	-	_	_	_
						D-S992-901*1	•		•	0	_	_	_	_	_	_	_		_
				3-wire (PNP)	In-line	D-S9P1-901*1 D-S9P2-901*1	•		•	0			_		_	-		_	
						D-T991-901*1							_		_	-	_	$\vdash$	
				2-wire		D-T992-901*1			•	_			_			_	_	_	_
						D-S99V1-901*1			•	0									_
				3-wire (NPN)		D-999V2-901*1			•	0					+	$\vdash$		$\vdash$	
						D-S9PV1-901*1				0				<del>-</del>		Η_		+	
	_			3-wire (PNP)	Pernendicular l	D-S9PV1-901*1									+=				
						D-T99V1-901*1			•										
				2-wire		D-T99V2-901*1			•	0					$\pm$	$\vdash \equiv$		H	+ =
						D-199V2-901*1				0					+=	$\vdash$		$+ \equiv$	+
				3-wire (NPN)		D-S792-901*1			•										
						D-S7P1-901*1			•	0				_	_	<u> </u>	_	<u> </u>	
				3-wire (PNP)	In-line	D-S7P2-901*1	•		•	0									
						D-T791-901*1			•	0				_		<del>  _  </del>		<del>  _  </del>	
				2-wire		D-T792-901*1		_	•	0	_		_	_	_	<del> </del>	_	<del> </del>	_
Reed auto			Yes			D-A93L-900	_		•	<del>  _</del>	_	_	_	_	<b> </b>	<u> </u>	_	<u> </u>	_
switch	_	Grommet	No	2-wire	In-line	D-A90L-900		_	•	+_			_	_		<u> </u>		<u> </u>	

^{*} Solid state auto switches marked with a "O" are produced upon receipt of order.

#### Ordering the Auto Switches

Please be aware that the order part numbers for the air gripper mounted and individual auto switches are different. (Example) Part number for ordering D-M9BWL-900:

- Air gripper mounted type: 25A-MHZ2-16D-M9BWL (Omit the first "D-" and the last "-900" or "-901".)
- Individual auto switch: D-M9BWL-900 (Place the order with the part number for auto switch shown in the table above.)
- * Lead wire length symbols: 0.5 m......Nil (Example) M9NW 1 m......M (Example) M9NWM
  - 3 m...... L (Example) M9NWL
    5 m...... Z (Example) M9NWZ

^{*1} Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.



^{*} Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2).

When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.

When the MHZ2-10, MHZL2-10, MHL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper. When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 325.

#### **Applicable Air Gripper Series**

				Au	uto switche	s								Ai	r grippe	ers		
_	Special	Electrical	Indicator	Wiring	Electrical	Auto switch	Lea	d wire	length	n [m]	Pre-wired	MHL2-Z	MHL2	MHF2	MHS3 MHS4	MHSJ3	MHY2	MHW2
Type	function	entry	light	(Output)	entry direction	model	0.5 Nil	1 M	3 L	5 Z	connector			8 to 20				
				3-wire (NPN)		D-M9N-900	•	•	•	0	_	•	•	•	•	•	•	•
				3-wire (PNP)	In-line	D-M9P-900	•	•	•	0	<u> </u>	•	•	•	•	•	•	•
				2-wire		D-M9B-900	•	•	•	0	_	•	•	•	•	•	•	•
	_			3-wire (NPN)		D-M9NV-900	•	•	•	0	_	•	•	•	•	•	•	•
				3-wire (PNP)	Perpendicular	D-M9PV-900	•	•	•	0	<u> </u>	•	•	•	•	•	•	•
				2-wire		D-M9BV-900	•	•	•	0	<u> </u>	•	•	•	•	•	•	•
				3-wire (NPN)		D-M9NW-900	•	•	•	0	_	•	•	•	•	•	•	•
				3-wire (PNP)	In-line	D-M9PW-900	•	•	•	0	_	•	•	•	•	•	•	•
	Diagnostic			2-wire		D-M9BW-900	•	•	•	0	0	•	•	•	•	•	•	•
	indication (2-color indicator)			3-wire (NPN)		D-M9NWV-900	•	•	•	0	<u> </u>	•	•	•	•	•	•	•
	(2-color indicator)			3-wire (PNP)	Perpendicular	D-M9PWV-900	•	•	•	0	_	•	•	•	•	•	•	•
				2-wire		D-M9BWV-900	•	•	•	0	0	•	•	•	•	•	•	•
		1		3-wire (NPN)		D-Y59A-900	•	_	•	0	_	•	•	_	_	_	_	•
				3-wire (PNP)	In-line	D-Y7P-900	•	_	•	0		•	•	_	_	_	_	•
				2-wire		D-Y59B-900	•	_	•	0	_	•	•	_	_	_	_	•
	_			3-wire (NPN)		D-Y69A-900	•	_	•	0	_	•	•	_	_	_	_	•
				3-wire (PNP)	Perpendicular	D-Y7PV-900	•	_	•	0		•	•		_	_	_	•
				2-wire		D-Y69B-900	•	_	•	0	-	•	•	_	_	_	_	•
				3-wire (NPN)		D-Y7NW-900	•	_	•	0	_	•	•	-	_	_	_	•
0 " 1	D: ::			3-wire (PNP)	In-line	D-Y7PW-900	•	_	•	0	_	•	•	-	_	_	_	•
Solid state auto	Diagnostic indication	Grommet	Yes	2-wire		D-Y7BW-900	•	_	•	0	_	•	•	_	_	_	_	•
switch	(2-color indicator)	Cionine	163	3-wire (NPN)		D-Y7NWV-900	•	_	•	0	—	•	•	—	_	_	_	•
Ownor	(E dolor maloutor)			3-wire (PNP)	Perpendicular	D-Y7PWV-900	•	_	•	0	_	•	•	_	_	_	_	•
				2-wire		D-Y7BWV-900	•	_	•	0	_	•	•		_	_	_	•
				3-wire (NPN)		D-S991-901*1	•	_	•	0	<u> </u>	_	_	_	_	_	_	_
				o-wile (IVI IV)		D-S992-901*1	•	_	•	0	_	_	_	_	_	_	_	_
				3-wire (PNP)	ln₌lin≏	D-S9P1-901*1	•	_	•	0	—	_	_	_	_	_	_	_
				5-wile (Fivir)		D-S9P2-901*1	•	_	•	0	<u> </u>	_	_	_	_	_	_	_
				2-wire		D-T991-901*1	•	_	•	0	<u> </u>	_	_	_	_	_	_	_
				Z-WIIG		D-T992-901*1	•	_	•	0	_	_	_	_	_	_	_	_
				3-wire (NPN)		D-S99V1-901*1	•	_	•	0	_	_	_	_	_	_	_	_
				(141 14)	ł	D-999V2-901*1	•	_	•	0	<u> </u>	_			_		_	_
	_			3-wire (PNP)	Pernendicular	D-S9PV1-901*1	•	_	•	0		_	_	_	_	_	_	_
				- 1110 (1111)	'	D-S9PV2-901*1	•	_	•	0	—	_	_	-	_	_	_	_
				2-wire	l	D-T99V1-901*1	•	_	•	0	_	_	_		_	_	_	_
				,,,,		D-T99V2-901*1	•	_	•	0	<u> </u>			-	_	_	_	
				3-wire (NPN)		D-S791-901*1	•		•	0				-			_	_
				( 11)	ł	D-S792-901*1	•	_	•	0	<u> </u>	_	_	_	_	-	_	_
				3-wire (PNP)	In-lina	D-S7P1-901*1	•		•	0	_		_	_	_	_	_	_
						D-S7P2-901*1	•	_	•	0	_		_	_	_	_	_	_
				2-wire		D-T791-901*1	•	_	•	0					_	_	_	<u> </u>
						D-T792-901*1	•	_	•	0	<u> </u>	_	_	_	_	-	_	-
Reed auto	_	Grommet	Yes	2-wire	In-line	D-A93L-900	_		•	-	-		_	_	_	_	_	_
switch			No			D-A90L-900	—	_	•	<u>                                     </u>							_	

^{*} Solid state auto switches marked with a "O" are produced upon receipt of order.

(90-BMG2-012) are required. Order them separately. For details, refer to page 325.

#### **Ordering the Auto Switches**

Please be aware that the order part numbers for the air gripper mounted and individual auto switches are different. (Example) Part number for ordering D-M9BWL-900:

- Air gripper mounted type: 25A-MHZ2-16D-M9BWL (Omit the first "D-" and the last "-900" or "-901".)
- Individual auto switch: D-M9BWL-900 (Place the order with the part number for auto switch shown in the table above.)
- * Lead wire length symbols: 0.5 m.......Nil (Example) M9NW 1 m.......M (Example) M9NWM
  - 1 m........ M (Example) M9NWM
    3 m..... L (Example) M9NWL
    5 m..... Z (Example) M9NWZ

^{*1} Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.



^{*} Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2).

When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.

* When the MHZ2-10, MHZL2-10, MHZ2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper. When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets

## **Applicable Electric Actuator Series**

				Αι	ıto switches	3							Electric a	actuators	;
Tuno	Special	Electrical	Indicator	Wiring	Electrical	Auto switch	Lea	d wire	length	[m]	Pre-wired connector	LEJS	LEKFS	LEY	LEYG
Туре	function	entry	light	(Output)	entry direction	model	0.5 Nil	1 M	3 L	5 Z		40 to 63	16 to 40	16 to 40	16 to 40
				3-wire (NPN)		D-M9N-900	•	•	•	0	_	•	•	•	•
				3-wire (PNP)	In-line	D-M9P-900	•	•	•	0	_	•	•	•	•
				2-wire		D-M9B-900	•	•	•	0	_	•	•	•	•
	_			3-wire (NPN)		D-M9NV-900	•	•	•	0	_	•	•	•	•
				3-wire (PNP)	Perpendicular	D-M9PV-900	•	•	•	0	_	•	•	•	•
Solid state		C ====================================	Yes	2-wire		D-M9BV-900	•	•	•	0	_	•	•	•	•
auto switch		Grommet	res	3-wire (NPN)		D-M9NW-900	•	•	•	0	_	•	•	•	•
	<u>_</u>			3-wire (PNP)	In-line	D-M9PW-900	•	•	•	0	_	•	•	•	•
	Diagnostic			2-wire		D-M9BW-900	•	•	•	0	0	•	•	•	•
	indication (2-color indicator)			3-wire (NPN)		D-M9NWV-900	•	•	•	0	_	•	•	•	•
	(2-00101 illuloatol)			3-wire (PNP)	Perpendicular	D-M9PWV-900	•	•	•	0	_	•	•	•	•
				2-wire		D-M9BWV-900	•	•	•	0	0	•	•	•	•

- * Solid state auto switches marked with a "O" are produced upon receipt of order.
- * Auto switches cannot be ordered with the actuator part number. They should be ordered separately. Please refer below for ordering.

#### **Ordering the Auto Switches**

• Individual auto switch: D-M9BWL-900 (Place the order with the part number for auto switch shown in the table above.)

 $\ast\,$  Lead wire length symbols: 0.5 m.....Nil  $\,$  (Example) M9NW  $\,$ 

1 m.......... M (Example) M9NWM 3 m....... L (Example) M9NWL 5 m........ Z (Example) M9NWZ

# 25A- Series Auto Switch Mounting

#### **Band Mounting Type**

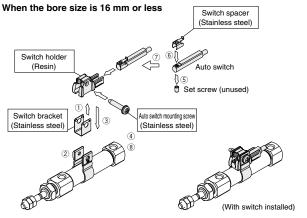
Refer to pages 315 to 322 for the cylinder series and auto switch combinations that are actually possible.

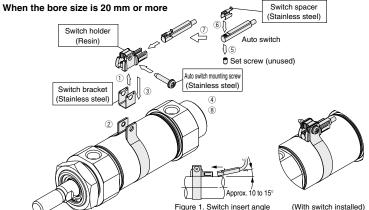
Target auto switches: D-M9□-900, D-M9□W-900, D-M9BWSDPC-900, D-M9BWVSDPC-900, D-A90L-900, D-A93L-900

#### **Auto Switch Mounting Bracket Part Nos.**

Cylinder					А	pplicable bo	ore size [mm	1]				
series	8	10	12	16	20	25	32	40	50	63	80	100
25A-CDJ2												
25A-CDJ2K 25A-CDBJ2	-	*1 25A-BJ7-010S	_	*1 25A-BJ7-016S	_	_	_	_	_	_	_	_
25A-CD85*4	25A-BJ7-008S	25A-BJ7-010S	25A-BJ7-012S	25A-BJ7-016S	25A-BM6-020S	25A-BM6-025S	1		_	_	_	_
25A-CDM2	1	_		-	*2 25A-BM6-020S	*2 25A-BM6-025S	*2 25A-BM6-032S	*2 25A-BM6-040S	_	_	_	_
25A-CDG1 25A-CDBG1	1	_	_	1	*3 25A-BMA4-020S	*3 25A-BMA4-025S	*3 25A-BMA4-032S	*3 25A-BMA4-040S	*3 25A-BMA4-050S	*3 25A-BMA4-063S	_	_
25A-MGG	1	_	_	1	*3 25A-BMA4-020S	*3 25A-BMA4-025S	*3 25A-BMA4-032S	*3 25A-BMA4-040S	*3 25A-BMA4-050S	_	_	_

- *1 The combination of the auto switch mounting band (BJ2-DDS/with a stainless steel screw) and the holder set (BJ3-1).
- *2 The combination of the auto switch mounting band (for BM2-UDD) and stainless steel screw (BBA4), and the holder set (BJ3-1).
- *3 The combination of the auto switch mounting band (for BMA2-DDD) and stainless steel screw (BBA4), and the holder set (BJ3-1).
- *4 D-A90L-900 and D-A93L-900 auto switches cannot be mounted on bore size ø8, ø10, or ø12 cylinders.





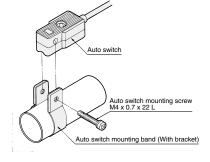
Applicable cylinder series: 25A-CDG1, 25A-CDBG1

Applicable auto switches: D-G5□-900, D-K59-900, D-G5□W-900,

D-K59W-900, D-K59WSDPC-900

#### Auto Switch Mounting Bracket Part Nos.

Cylinder	Applicable bo	ore size [mm]
series	80	100
25A-CDG1	BA-08S	BA-10S
25A-CDBG1	DA-005	DA-105



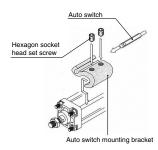
#### Tie-rod Mounting Type

Target auto switches: D-M9□-900, D-M9□V-900, D-M9□W-900, D-M9□WV-900, D-M9BWSDPC-900, D-M9BWVSDPC-900

: D-A90L-900, D-A93L-900

#### **Auto Switch Mounting Bracket Part Nos.**

Cylinder				Ap	plicable be	ore size [m	m]			
series	32	40	50	63	80	100	125	140	160	200
25A-MDB	90-BMB5-032	90-BMB5-032	90-BA7-040	90-BA7-040	90-BA7-063	90-BA7-063	_	_	_	_
25A-C96SD	90-BMB5-032	90-BMB5-032	90-BA7-040	90-BA7-040	90-BA7-063	90-BA7-063	90-BA7-080	_	_	_
25A-CDA2	_	90-BA7-040	90-BA7-040	90-BA7-063	90-BA7-080	90-BA7-080	_	_	_	_
25A-CDS2 25A-CDNS	_	_	_	_	_	_	25A-BS6-125	25A-BS6-125	25A-BS6-160	_
25A-MDWB	90-BMB5-032	90-BMB5-032	90-BA7-040	90-BA7-040	90-BA7-063	90-BA7-063	_	_	_	_
25A-C95SD	_	_	_	_	_	_	_	_	25A-BS6-160	25A-BS6-160





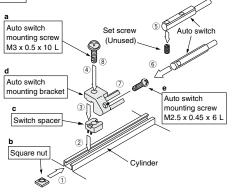
## **Rail Mounting Type**

Refer to pages 315 to 322 for the cylinder series and auto switch combinations that are actually possible.

Target auto switches: D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900, D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900, D-A90L-900

#### **Auto Switch Mounting Bracket Part No.**

Cylinder			Δ	pplicable bo	ore size [mm	n]		
series	20	25	32	40	50	63	80	100
25A-CDBQ2	_	_	2	25A-BQ2-03	2	_	_	_



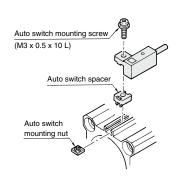
Target auto switches: D-F79-900, D-F7P-900, D-J79-900, D-F7NV-900,

D-F7PV-900, D-F7BV-900, D-F7PW-900, D-F7PW

D-J79W-900, D-F7NWV-900, D-F7BWV-900

#### Auto Switch Mounting Bracket Part No.

Cylinder			Δ	Applicable be	ore size [mn	ո]		
series	20	25	32	40	50	63	80	100
25A-CDBQ2	_	_			25A-	BQ-2		



Refer to pages 315 to 322 for the cylinder/air gripper series and auto switch combinations that are actually possible.

switch combinations that are actually possible. For combinations other than those shown in the table below, direct mounting without the use of auto switch mounting brackets is possible.

#### **Direct Mounting Type**

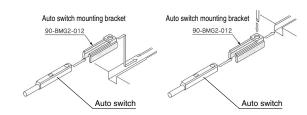
Target auto switches: D-M9□-900, D-M9□V-900, D-M9□W-900,

D-M9\(\to\)WV-900, D-M9\(\text{BWSDPC-900}\),

D-M9BWVSDPC-900

D-F8□-900

: D-A90L-900, D-A93L-900



#### **Auto Switch Mounting Bracket Part Nos.**

Cylinder series						Ар	plicable bo	ore size [m	nm]					
Air gripper series	4	6	10	12	15	16	20	25	32	40	50	63	80	100
25A-MDU	_	_	_	_	_	_	_	MUZ-025	MUZ-025	MUZ-025	MUZ-025	MUZ-025	_	_
25A-MY1B	_	_	_	_	_	Not required	Not required	BMY3-016	BMY3-016	BMY3-016	_	90- BMG2-012	_	_
25A-MY1M	_	_	_	_	_	Not required	Not required	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	_	_
25A-MY1C	_	_	_	_	_	Not required	Not required	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	_	_
25A-MY1H	_	_	_	_	_	Not required	Not required	BMY3-016	BMY3-016	BMY3-016	_	_	_	_
25A-MY3□	_	_	_	_	_	BMY3-016	_	_						
25A-CY3R	_	_	_	_	Not required	_	Not required	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	_	_
25A-RSH	_	_	_	_	_	_	90- BMG2-012	_	90- BMG2-012	_	_	_	_	_
25A-MHZ2	_	_	90- BMG2-012	_	_	*1	*1	*1	*1	*1	_	_	_	_
25A-MHZL2	_	_	90- BMG2-012	_	_	*1	*1	*1	_	_	_	_	_	_
25A-MHL2	_	_	90- BMG2-012	_	_	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	_	_	_	_
25A-MHS3 25A-MHS4	_	_	_	_	_	Not required	Not required	Not required	90- BMG2-012	_	_	_	_	_

^{*1} When mounting D-M9 type of auto switch onto the square groove of the side of the air gripper, the auto switch mounting bracket (90-BMG2-012) is required.



Be sure to read this before handling products.

#### **Precautions**

## **⚠** Caution

#### Change of material

For the 25A- series, there is a restriction on the use of copper and zinc as main components in the metal materials used. Keep in mind that the aluminum alloy, aluminum die cast, and some of the stainless steel materials contain traces of copper (Cu) and/or zinc (Zn) as an additive element.

However, copper is used in some parts—the coils of solenoid valves, the circuit boards, connector pins, and lead wires of electrical equipment and auto switches, and the motors, cables, and drivers of electric actuators-whose materials cannot be easily changed to alternative materials.

In addition, some magnets (including the surface treatment) contain copper (Cu) and/or zinc (Zn). However, due to their magnetic characteristics, it is impossible to use alternative materials.

#### ■ Particle generation (metallic contaminants)

Usage of metal stoppers and/or shock absorbers on an air slide table produces metal-to-metal collision and contact, and may generate wear particles. Do not use metal stoppers and/or shock absorbers in an environment where wear particles are problem.

When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

The following models of air gripper may generate dust particles, as metal-to-metal collisions occur when fingers are fully closed.

- · MHZ2
- · MHZL2 (Except -X5955)
- · MHF2
- · MHY2
- · MHW2

#### Static electricity

Refrain from using the electrical equipments including detection switches (e.g., pressure switches and flow switches) in electrostatically-charged environments. Otherwise, they may cause the system to fail or to malfunction.

#### Piping

Usage of nylon tubing and polyurethane tubing in environments with a low dew point may affect dew points of ambient air and inside of piping. Use fluoropolymer tubing (TL series) or stainless steel tubing (Supply it on your own) in environments with a low dew point.

#### ■ Chemical environment

Refrain from using the products in such environments as exposed to chemicals. Otherwise, resin parts may deteriorate.

If you want SMC to test the products for the effects of chemicals attached to them, send the products back to SMC after thoroughly cleaning them.

Consult your SMC sales representative for further details.

■ Trademark

DeviceNet® is a registered trademark of ODVA, Inc.

EtherNet/IP® is a registered trademark of ODVA, Inc.

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

#### **UL Approved Product**

## **∕** Caution

When conformity to UL is required, the product should be used with a UL1310 Class 2 power supply.

The product is a UL approved product only if it has a caus mark on the body.



# **Series Compatible with Secondary Batteries**

25A - Series









## **SMC Corporation**

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