

# Series Variation

## Regulators

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page
<b>Miniature Regulator</b> ARJ1020F	Direct operated relieving type with backflow function	M5	0.1 to 0.7	Manifold	952
<b>Miniature Regulator</b> ARJ210	Direct operated relieving type	M5 to 1/8	0.2 to 0.7	Bracket Pressure gauge	954
<b>Miniature Regulator</b> ARJ310	Compact and lightweight Short pitch mounting is possible	M5 1/8	0.2 to 0.7	Bracket Pressure gauge	957
<b>Pilot Operated Regulator</b> AR425 to 925 AR435 to 935	Internal pilot operated type relieving type	1/4 to 2	0.05 to 0.83 0.02 to 0.2	Bracket Pressure gauge	962
<b>Compact Regulator</b> ARX20	Compatible with inlet supply pressure of 2.0 MPa.	1/8, 1/4	Standard 0.05 to 0.85 MPa Low pressure 0.05 to 0.3 MPa	Bracket Pressure gauge Panel nut	965
<b>MR Unit</b> AMR3000 to 6000	Combined with mist separator and regulator. Filtration 0.3 µm	1/4 to 1	0.05 to 0.85	Adapter assembly Auto drain Pressure switch	970
<b>Compact Manifold Regulator</b> ARM5	Manifold (Common IN, Individual IN) Relieving type with backflow function	ø4 to ø8 ø5/32 to ø5/16	0.05 to 0.7 MPa	Pressure gauge	975
<b>Compact Manifold Regulator</b> ARM10/11	Manifold (Common IN, Individual IN) Relieving type with backflow function Compatible with digital pressure switch	ø4 to ø10 ø1/4 to ø3/8	0.05 to 0.7 MPa	Pressure gauge Digital pressure switch	999
<b>Regulator Manifold</b> ARM1000/2000	Manifold (Common IN, Individual IN) Direct operated relieving type with backflow function	1/8 to 1/4	0.08 to 0.7	Pressure gauge	1035
<b>Regulator Manifold</b> ARM2500/3000	Manifold (Common IN, Individual IN) Modular type	1/4, 3/8	0.05 to 0.85	Bracket Pressure gauge	1038

## Precision Regulators

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page
<b>Direct Operated Precision Regulator</b> ARP20/30/40	Setting sensitivity 0.2% F.S. or less Bleed type	1/8 to 1/2	0.005 to 0.4	Bracket Pressure gauge Digital pressure switch	1043
<b>Regulator</b> IR1200-A/2200-A/3200-A	Air consumption: Bleed air "0" High flow rate: Up to approx. twice (Compared to the current SMC product) Lightweight: Reduced by up to approx. 27% (Compared to the current SMC product) Repeatability: ±1% (Full span)	1/8 to 1/2	0.02 to 0.2 0.02 to 0.4 0.02 to 0.8	Bracket Hexagon panel nut Pressure gauge Digital pressure switch	1055
<b>Precision Regulator</b> IR1000-A/2000-A/3000-A	Air consumption: Reduced by up to approx. 90% (Compared to the current SMC product) High flow rate: Up to approx. twice (Compared to the current SMC product) Lightweight: Reduced by up to approx. 27% (Compared to the current SMC product) Sensitivity: 0.2% (Full span) Repeatability: ±0.5% (Full span)	1/8 to 1/2	(IR1000-A, 2000-A) 0.005 to 0.2 0.01 to 0.4 0.01 to 0.8 (IR3000-A) 0.01 to 0.2 0.01 to 0.4 0.01 to 0.8	Bracket Hexagon panel nut Pressure gauge Digital pressure switch	1075
<b>Precision Regulator</b> IR1000/2000/3000	Tension control Contact pressure control Setting sensitivity 0.2% F.S. Repeatability ±0.5% F.S.	1/8 to 1/2	(IR1000, 2000) 0.005 to 0.2 0.005 to 0.4 0.005 to 0.8 (IR3000) 0.01 to 0.2 0.01 to 0.4 0.01 to 0.8	Bracket Pressure gauge	1095
<b>Vacuum Regulator</b> IRV10/20	Allows adjustment of vacuum line pressure.	ø6 to ø10 ø1/4 to ø3/8	-100 to -1.3 KPa	Bracket Pressure gauge	1113
<b>Precision Regulator</b> VEX1□3 <sub>3</sub>	Large capacity exhaust regulator. Setting sensitivity: 0.2% F.S. Repeatability ±0.5% F.S.	M5 1/8 to 2	0.01 to 0.7 0.05 to 0.7	Bracket Foot Pressure gauge Silencer	1128

### Clean Regulators

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page
<b>Clean Regulator</b> SRH	Stainless steel regulator Wetted parts (Metal): Stainless steel 316	Rc 1/8 to 1/2 URJF 1/4, 3/8	0.02 to 0.2 0.05 to 0.7	Pressure gauge	1129
<b>Precision Clean Regulator</b> SRP	Stainless steel regulator Setting sensitivity: 0.3% F.S. Repeatability: 1% F.S.	M5 Rc 1/8	0.005 to 0.2 0.01 to 0.4	Bracket	1143
<b>Clean Regulator/ Fluororesin Type</b> SRF	Fluororesin Type Wetted parts Body: New PFA Diaphragm: PTFE	Refer to page 610.	0.02 to 0.4		1151

### Electro-Pneumatic Regulators

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page
<b>Compact Electro-Pneumatic Regulator</b> ITV0000	Realizes space savings and reduction of weight for manifold use.	For single unit ø4, ø5/32" For manifolds ø6 (SUP <sup>1</sup> , EXH <sup>3</sup> ), ø4 (OUT <sup>2</sup> ), ø1/4" (SUP <sup>1</sup> , EXH <sup>3</sup> ), ø5/32" (OUT <sup>2</sup> )	ITV001□: 0.001 to 0.1 MPa ITV003□: 0.001 to 0.5 MPa ITV005□: 0.001 to 0.9 MPa ITV009□: -1 to -100 kPa	Bracket Cable connectors	1174
<b>Electro-Pneumatic Regulator</b> ITV1000/2000/3000	Stepless control of vacuum pressure in proportion to electric signals Electrostatic painting	1/8 to 1/2	0.005 to 0.1 0.005 to 0.5 0.005 to 0.9	Bracket Cable connectors	1182
<b>Electronic Vacuum Regulator</b> ITV209□	Stepless control of vacuum pressure in proportion to electric signals	1/4	-1.3 to -80 kPa	Bracket Cable connectors	1215
<b>Controller for Electro-Pneumatic Regulator</b> IC	Converts digital input signal into analog output signal			Protective cover	1229
<b>3.0 MPa Maximum Supply Pressure</b> High Pressure Electro-Pneumatic Regulator ITVH	Maximum supply pressure: 3.0 MPa	1/4, 3/8	0.2 to 2.0	Bracket Cable connectors	1237
<b>5.0 MPa Maximum Supply Pressure</b> High Pressure Electro-Pneumatic Regulator ITVX	Maximum supply pressure: 5.0 MPa Laser beam machine, etc.	3/8	0.01 to 3.0	Bracket Cable connectors	1247

### Electro-Pneumatic Proportional Valves

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page
<b>Compact Proportional Solenoid Valve</b> PVQ	Direct operated poppet Repeatability: 3% or less Hysteresis: 10% or less	M5 1/8		Bracket	1257
<b>E-P HYREG®</b> VY1	Stepless control of pressure by use of electric signals Thrust control of cylinder Flow control of nozzle Pressure control of tank	M5 to 2	0.05 to supply pressure	Bracket Pressure gauge Silencer	1270

### Booster Regulators/Others

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page
<b>Booster Regulator</b> VBA	Can increase the factory air a maximum of 400 %, power supply not required.	1/4 to 1/2	0.2 to 2.0 (VBA111□) 0.2 to 1.0 (VBA20A/40A)	Pressure gauge Silencer	1274
<b>Air Tank</b> VBAT	Compact air tank that can be directly connected with a regulator.	3/8 to 3/4		Safety valve Valve for drain	1288
<b>Pressure Control Valve</b> AP100	Releases pressure over the set range into an atmosphere and constantly maintains the pressure in a pipe.	1/8, 1/4	0.05 to 0.69	Bracket	1307