# **Series Variation**

## Regulators

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page
Miniature Regulator ————————————————————————————————————	Direct operated relieving type — with backflow function	— M5 ————	— 0.1 to 0.7 —	— Manifold —————	668
Miniature Regulator ————ARJ210	Direct operated relieving type	— M5 to 1/8 ———	- 0.2 to 0.7 -	Bracket — Pressure gauge	670
Miniature Regulator ————ARJ310	Compact and lightweight     Short pitch mounting is possible	M5 ————————————————————————————————————	— 0.2 to 0.7 ———	Bracket      Pressure gauge	673
Pilot Operated Regulator 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	678
Compact Regulator 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	681
MR Unit ————————————————————————————————————	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	686
Compact Manifold ————— Regulator ARM5	Manifold (Common IN, Individual IN) Relieving type with backflow function	Ø4 to Ø8 ———————————————————————————————————	— 0.05 to 0.7 MPa ——	Pressure gauge ———	691
Compact Manifold ————————————————————————————————————	Manifold (Common IN, Individual IN) Relieving type with backflow function Compatible with digital pressure sv	Ø4 to Ø10 ———————————————————————————————————	— 0.05 to 0.7 MPa ——	Pressure gauge     Digital pressure switch	<del></del> 715
Regulator Manifold —————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 ———	751
Regulator Manifold ————ARM2500/3000	Manifold (Common IN, Individual IN)     Modular type	— 1/4, 3/8 ———	— 0.05 to 0.85 ———	Bracket     Pressure gauge	754

## **Precision Regulators**

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page
Direct Operated Precision Regulator 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	759
Regulator	— Air consumption: Bleed air "0" — High flow rate: Up to approx. Wixie (Compared to the current SMC product) Lightweight: Reduced by up to approx. 2 (Compared to the current SMC product) Repeatability: ±1% (Full span)		0.02 to 0.2 0.02 to 0.4 0.02 to 0.8	Bracket     Hexagon panel nut     Pressure gauge     Digital pressure switch	—— 771
Precision Regulator 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. wixee (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. 6.0% (Full span)	- 1/8 to 1/2	(IR1000-A, 2000-A) — 0.005 to 0.2   0.01 to 0.4   0.01 to 0.4   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	789
Precision Regulator 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	807
Vacuum Regulator ————IRV10/20	Allows adjustment of vacuum line pressure.	96 to Ø10 ——— Ø1/4 to Ø3/8	-100 to -1.3 KPa	Bracket — Pressure gauge	825
Precision Regulator ——— VEX1□330	Large capacity exhaust     regulator. Setting sensitivity: 0.2% F.S. Repeatability ±0.5% F.S.	- M5	0.01 to 0.7 0.05 to 0.7	Bracket Foot Pressure gauge Silencer	840
664		@SMC			



### Clean Regulators

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page
Clean Regulator ————————————————————————————————————	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	Pressure gauge ——	855
Precision Clean Regulator — SRP	Stainless steel regulator     Setting sensitivity: 0.3% F.S.     Repeatability: 1% F.S.	M5 ————————————————————————————————————	0.005 to 0.2 0.01 to 0.4	- Bracket -	869
Clean Regulator/ Fluororesin Type SRF	Fluororesin Type — Wetted parts	Refer to ———— page 610.	- 0.02 to 0.4 -		877
onr	Body: New PFA Diaphragm: PTFE				

# **ARJ**

### **Electro-Pneumatic Regulators**

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page	ARN
Compact ————————————————————————————————————	Realizes space savings ————————————————————————————————————	For single unit ø4 — For manifolds ø6	ITV003□: 0.001 to 0.5 MPa ITV005□: 0.001 to 0.9 MPa	Bracket Cable connectors	896	ARP
Electro-Pneumatic Regulator –	Stepless control of vacuum pressure —	1/4 to 1/2	ITV009□: -1 to -100 KPa 0.005 to 0.1	Bracket	904	IR□-A
ITV1000/2000/3000	in proportion to electric signals Electrostatic painting	174 10 172	0.005 to 0.5 0.005 to 0.9	Diacket	304	IR
Electronic Vacuum Regulator − ITV209□	Stepless control of vacuum pressure $-$ in proportion to electric signals $$	1/4	-1.3 to -80 kPa		935	IRV
Controller for Electro-Pneumatic Regulator — ${f IC}$	Converts digital input signal into analog output signal			Protective cover —	947	VEX
High Pressure	Maximum supply pressure: 3.0 MPa —	1/4, 3/8	0.2 to 2.0 ————	Bracket — Cable connectors	955	SRH
Electro-Pneumatic Regulator ITVH						SRP
5.0 MPa Maximum Supply Pressure —— High Pressure Electro-Pneumatic Regulator	Maximum suppply pressure: 5.0 MPa — Laser beam machine, etc.	3/8 ———	0.01 to 3.0	Bracket — Cable connectors	965	SRF
ITVX						

## AR425 to 935

**ARX** 

**AMR** ARM

ARP

IR□-A

IRV

VEX

SRH

SRP

SRF

ITV

IC

ITVH

ITVX

PVQ

VY1

VBA VBAT

AP100

### **Electro-Pneumatic Proportional Valves**

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page
Compact Proportional Solenoid Valve PVQ	Direct operated poppet Repeatability: 3% or less Hysteresis: 10% or less	- M5		Bracket	975
E-P HYREG® VY1 Series	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	989

## **Booster Regulators/Others**

Series	Applications/Features	Port size	Set pressure (MPa)	Option	Page
Booster Regulator ———VBA	Can increase the factory air a maximum — of 200 %, power supply not required.	1/4 to 1/2	0.2 to 2.0 (VBA111□) — 0.2 to 1.0 (VBA20A/40A)	Pressure gauge ————————————————————————————————————	1010
Air Tank ————VBAT	Compact air tank that can be directly connected with a regulator.	3/8 to 3/4		Safety valve —————Valve for drain	1022
Pressure Control Valve ——— AP100	Releases pressure over the set range — into an atmosphere and constantly	1/8, 1/4	0.05 to 0.69	Bracket	1039