

Air preparation



Air line

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Air dryers

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Water separators

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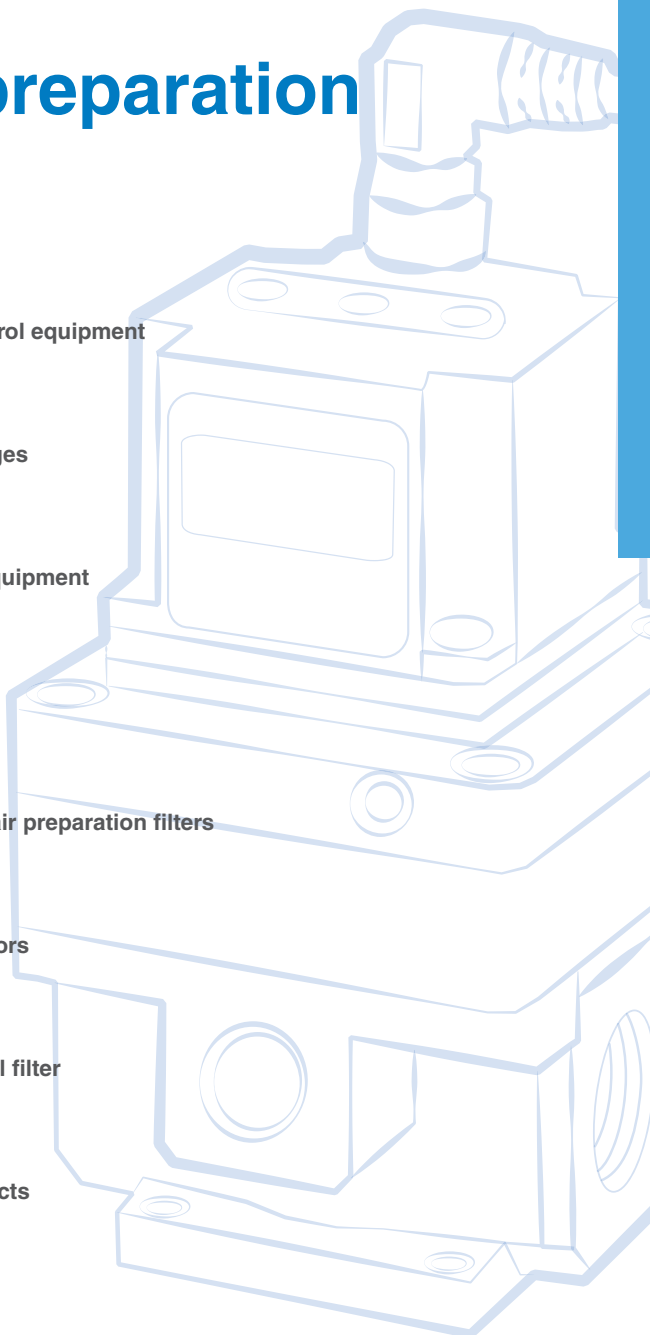
Odour removal filter

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Related products

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Air line



Air filter + Regulator + Lubricator
AC Series p.276



Filter-regulator + Lubricator
AC□A Series p.277



Air filter
AF Series p.278



Micro filter
AFM-A Series p.279



Sub micro filter
AFD-A Series p.279



Air regulator
AR Series p.280



Regulator with backflow function
AR□K Series p.280



Direct operated precision regulator
ARP Series p.281



Lubricator
AL Series p.281



Filter regulator
AW Series p.282



Filter regulator with backflow function
AW□K Series p.283



Regulator/Filter regulator
ARG/AWG Series p.284



Digital pressure switch
ISE35 Series p.285



Modular adapter
E210/310/410 Series p.285



Attachments
Y□, E□, AKM Series p.286



Pressure switch/Reed switch type
IS10M/E Series p.287



Pressure relief 3 port valve
VHS Series p.287



Residual pressure relief 3 port solenoid valve
VP517 Series p.288



Soft start-up valve
AV-A Series p.289



Large flow air filter
AF800/900 Series p.290

Pressure control equipment



Miniature regulator

ARJ Series p.290



Miniature regulator

ARJ310 Series p.291



Pilot operated pressure regulator

EAR Series p.291



Regulator for 2.0 MPa

ARX20 Series p.292



Compact manifold regulator

ARM5 Series p.292



Modular regulator

ARM10/11 Series p.293



Precision regulator

IR1000/2000/3000-A Series p.293



Regulator

IR1200/2200/3200-A Series p.294



Direct operated regulator (Relieving type)

VCHR30/40 Series p.294



Compact electro-pneumatic regulator

ITV0000 Series p.295



Electro-pneumatic regulator

ITV1000/2000/3000 Series p.296



Electro-pneumatic regulator Fieldbus compatibility

ITV1000/2000/3000 Series p.297



High pressure electro-pneumatic regulator

ITVX Series p.297



High pressure electro-pneumatic regulator, 3.0 MPa

ITVH Series p.298



Booster regulator

VBA Series p.299

Pressure gauges



Pressure gauge

G□ Series p.300



Pressure gauge with limit indicator

G36-L/G46-L Series p.300

Lubrication equipment



Large flow lubricator

AL800/900 Series p.301



D.P. lube unit

ALDU600/900 Series p.301



Booster lube

ALB900 Series p.302



Mist spray unit

LMU Series p.302



Mixing valve

LMV Series p.303



Impulse lubricator

ALI Series p.303

Air dryers



Refrigeration air dryer

IDFA Series p.304



Membrane air dryer

IDG Series p.305



Thermo-dryer

IDH Series p.306

Compressed air preparation filters



Main line filter

AFF Series p.306



Main line filter

AFF□□ Series p.307



Mist separator

AM Series p.307



Mist separator

AM□□ Series p.307



Micro-mist separator

AMD Series p.308



Micro-mist separator

AMD□□ Series p.308



Micro-mist separator with prefilter

AMH Series p.309



Super mist separator

AME Series p.309



Water separator



Water separator

AMG Series p.310

Odour removal filter



Odour removal

AMF Series p.311

Related products



Heavy duty auto drain

ADH4000 Series p.311



Clean exhaust filter

SFE Series p.312



Auto drain valve

AD402-A Series p.312



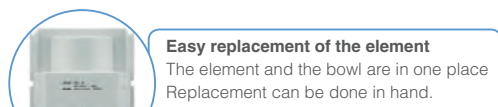
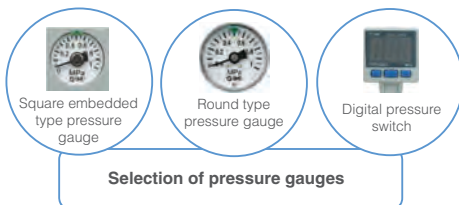
Our highlighted product for you

Modular F.R.L. units

AC Series



For more details
go to page 276



Lightweight and better resistance to rust or corrosion

► Reduced required maintenance space

* For AF40

Max. 46 % reduction



Better visibility & safer The bowl is covered with a transparent bowl guard!

- The inside is visible from 360°
- The bowl is completely protected from the environment. Safety improved
- * Body size: 30 or more.

Modular connection type

► Residual pressure relief 3 port solenoid valve (VP500/700 Series)



► Pressure relief 3 port valve (VHS Series)



Our highlighted product for you

Residual pressure relief 3 port solenoid valve VP517/717 Series

For more details
go to page 288

Low power consumption
of DC type: 0.35 W
Usable under continuous
energisation.

IP65 enclosure
- Dust-tight
- Water-jet proof.

The modular way to set air free

Selectable flow direction
"Left to right" or "Right to left".

Allows for space saving and
reduced piping labour



Modular connection type for
connecting to F.R.L. units.



- Internal pilot. Operating pressure range:
- Standard: 0.2 to 0.7 MPa
 - High-pressure type: 0.2 to 1 MPa.

► Applicable air combination

	AC25-A	AC30-A	AC40-A
VP500	●	●	
VP700			●

Soft start-up valve AV-A Series



For more details
go to page 289

Modular connection
for connecting to
F.R.L. units.



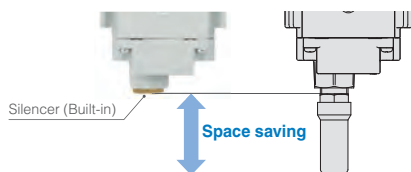
- ▶ **Power consumption reduced by up to 80 %**
(0.35 W with DC type)
- ▶ **Prevents air leakage** when the main valve is switched
(The main valve stays closed except during rapid supply conditions)
- ▶ **Rapid supply time reduced** by up to 50 %
- ▶ **Larger flow rate capacity** by up to 2.2 times
- ▶ **Exhaust time reduced** by up to 55 %.

Smooth in your consumption

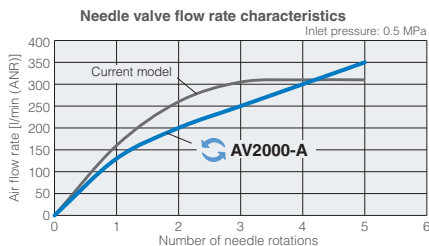
Built-in silencer

Built-in silencer
(Option)

When the silencer is
mounted afterward:




Better relationship between the needle rotations and the air flow.



Our highlighted product for you

Electro-pneumatic regulator ITV Series

 For more details
go to page 296

Stepless control of air pressure proportional to an electrical signal



ITV3000 Series
Maximum flow rate 4000 l/min (ANR)
- Set pressure: 0.6 MPa
- Supply pressure: 1.0 MPa



ITV2000 Series
Maximum flow rate 1500 l/min (ANR)
Set pressure: 0.6 MPa
Supply pressure: 1.0 MPa



ITV1000 Series
Maximum flow rate 200 l/min (ANR)
Set pressure: 0.6 MPa
Supply pressure: 1.0 MPa
Grease-free specification (wetted parts)



► **Added fieldbus compliant specifications**
Reduced wiring. Applicable Fieldbus protocols

CC-Link **DeviceNet** 

► **Added RS-232C** specification to serial communications!

- **Sensitivity:** Within 0.2 % (F.S.)
- **Linearity:** Within ± 1 % (F.S.)
- **Hysteresis:** Within 0.5 % (F.S.)
- **IP65**

► **Cable connections in 2 directions**

Straight type



Right angle type



Refrigerated air dryer

IDFA Series



For more details
go to page 304

High performance, reliable and trouble free compressed air treatment



Standard IDFA□E Series

- Air flow capacity Increased by 40 % at max. (SMC comparison)
- Power consumption Reduced by 40 % at max. (SMC comparison).

Large size IDFA□F Series

Tolerant of high temperature environment!

Can be used with ambient temperature 45 °C at max. and inlet air temperature 60 °C at max., making it top of its class in the industry for the large air-cooled type.

- Employs a heat exchanger made of high corrosion-resistant stainless steel.
- Stable outlet dew point with a minimum pressure drop across the dryer.
- Power supply voltage: Simple-phase 230 VAC
* IDFA□E only.
- Reduction of exhaust heat achieves down sizing and energy saving operation of the air conditioner!
* IDFA□F only.

- Power supply voltage: Three-phase 400 VAC
* IDFA□F only.
- Energy saving design: Reduces exhaust heat from dryer by 25 % at max.
Suppresses ambient temperature increase
Secondary heater reduces the load to the condenser, and reduces exhaust heat from dryer by 25 % at max. (comparison with other SMC products)
* IDFA□F only.

Air line

Our highlighted product for you


Air filter + Regulator + Lubricator

AC Series



- New and existing modular types can be connected
- Reduced time for mounting
- Interchangeable with the previous model
- Transparent bowl protection for a better visibility and security
- Bowl variations: polycarbonate, nylon, metal and metal with level gauge
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C
- High and low temperature, high pressure and other options available.

Manual drain



Part number	□ Gauge	Flow [Nl/min]	Port size	Set pressure [MPa]	Filtration degree [μm]	Symbol
AC10-M5□-A	-, G	75	M5	0.05 ~ 0.7	5	
AC20-F01□-B ●	-, G, E	300	G 1/8	0.05 ~ 0.85		
AC20-F02□-B ●	-, G, E		G 1/4			
AC30-F03□-B ●	-, G, E	1400	G 3/8			
AC40-F04□-B ●	-, G, E	2000	G 1/2			
AC40-F06□-B	-, G, E	1800	G 3/4			
AC50-F06□-B ●	-, G, E	2800	G 3/4			
AC60-F10□-B ●	-, G, E	4000	G 1			

Flow information at 0.6 MPa and 0.1 MPa pressure drop

□: Add suffix G for round gauge added or suffix E for square gauge added (square gauge not available for size 10)

Nothing (-), no gauge.

Automatic drain

Part number	 Gauge	Flow [Nl/min]	Port size	Set pressure [MPa]	Filtration degree [μm]	Drain type	Symbol
AC10-M5□-A	—, G	75	M5	0.05 ~ 0.7	5	Normally closed	
AC20-F01C□-B	—, G, E	300	G 1/8	0.05 ~ 0.85			
AC20-F02C□-B ●	—, G, E		G 1/4				
AC30-F03D□-B ●	—, G, E	1400	G 3/8			Normally open	
AC40-F04D□-B ●	—, G, E	2000	G 1/2				
AC40-F06D□-B	—, G, E	1800	G 3/4				
AC50-F06D□-B ●	—, G, E	2800	G 3/4				
AC60-F10D□-B ●	—, G, E	4000	G 1				

Flow information at 0.6 MPa and 0.1 MPa pressure drop

□: Add suffix G for round gauge added or suffix E for square gauge added (square gauge not available for size 10)

Nothing (-), no gauge.


















Filter-regulator + Lubricator

AC□□A Series



- New and existing modular types can be connected
- Reduced time for mounting
- Interchangeable with the previous model
- Transparent bowl protection for a better visibility and security
- Bowl variations: Polycarbonate, Nylon, Metal and Metal with level gauge
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C.

Manual drain

Part number	 Gauge	Flow [Nl/min]	Port size	Set pressure [MPa]	Filtration degree [μm]	Symbol
AC10A-M5  -A	-, G	75	M5	0.05 ~ 0.7	5	
AC20A-F01  -B	-, G, 	300	G 1/8	0.05 ~ 0.85		
AC20A-F02  -B	-, G, 		G 1/4			
AC30A-F03  -B	-, G, 	1400	G 3/8			
AC40A-F04  -B	-, G, 	2000	G 1/2			
AC40A-F06  -B	-, G, 	1800	G 3/4			
AC50A-F06  -B	-, G, 	2800	G 3/4			
AC60A-F10  -B	-, G, 	4000	G 1			

Flow information at 0.6 MPa and 0.1 MPa pressure drop

□: Add suffix G for round gauge added or suffix E for square gauge added (square gauge not available for size 10)

Nothing (-), no gauge.

Automatic drain

Part number	Gauge	Flow [Nl/min]	Port size	Set pressure [MPa]	Filtration degree [μm]	Drain type	Symbol
AC10A-M5C-A	-, G	75	M5	0.05 ~ 0.7	5	Normally closed	
AC20A-F01C-B	-, G, E	300	G 1/8	0.05 ~ 0.85			
AC20A-F02C-B	-, G, E		G 1/4				
AC30A-F03D-B	-, G, E	1400	G 3/8				
AC40A-F04D-B	-, G,	2000	G 1/2				
AC40A-F06D-B	-, G, E	1800	G 3/4				
AC50A-F06D-B	-, G, E	2800	G 3/4				
AC60A-F10D-B	-, G,	4000	G 1			Normally open	

Flow information at 0.6 MPa and 0.1 MPa pressure drop

□: Add suffix G for round gauge added or suffix E for square gauge added (square gauge not available for size 10)

Nothing (-), no gauge.










Air filter

AF Series












- To be used as stacking manifold or as single device
- Convenient maintenance of the filter element
- Interchangeable with the previous model
- Transparent bowl protection for a better visibility and security
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C.

Manual drain

Part number	Flow [Nl/min]	Port size	Bowl capacity [cm³]	Filtration degree [µm]	Symbol
AF10-M5-A 	200	M5	2.5	5	
AF20-F01-A 	1500	G 1/8	8		
AF20-F02-A 		G 1/4			
AF30-F03-A 	3150	G 3/8	25		
AF40-F04-A 	5200	G 1/2	45		
AF40-F06-A 	6000	G 3/4			
AF50-F06-A 	11000	G 3/4			
AF60-F10-A 	13000	G 1			

Flow information at 0.6 MPa and 0.1 MPa pressure drop.

Automatic drain

Part number	Flow [Nl/min]	Port size	Bowl capacity [cm³]	Drain type	Filtration degree [µm]	Symbol
AF10-M5C-A 	200	M5	2.5	Normally closed	5	
AF20-F01C-A 	1500	G 1/8	8			
AF20-F02C-A 		G 1/4				
AF30-F03D-A 	3150	G 3/8	25	Normally open		
AF40-F04D-A 	5200	G 1/2	45			
AF40-F06D-A 	6000	G 3/4				
AF50-F06D-A 	11000	G 3/4	45			
AF60-F10D-A 	13000	G 1	45			

Flow information at 0.6 MPa and 0.1 MPa pressure drop.

Accessories












Series	10 Series	20 Series	30 Series	40-F04 Series	40-F06 Series	50 Series	60 Series
Filter element	AF10P-060S	AF20P-060S	AF30P-060S	AF40P-060S	AF40P-060S	AF50P-060S	AF60P-060S
Bracket assembly	—	AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS	AF52P-050AS	

Micro filter

AFM-A Series



- Filtration degree 0.3 µm
- To be used as stacking manifold or as single device
- Oil mist removal rate of 99,9 %
- Filter element can be changed easily and quickly
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C.

Part number	Flow [Nl/min]	Port size	Drain type	Filtration degree [µm]	Oil mist removal rate [%]	Symbol
AFM20-F01C-A 	200	G 1/8	Automatic N.C.	0.3	99.9	
AFM20-F02C-A 		G 1/4				
AFM30-F03D-A 	450	G 3/8	Automatic N.O.			
AFM40-F04D-A 	1100	G 1/2				
AFM40-F06D-A 		G 3/4				
AFM20-F01-A 	200	G 1/8	Manual			
AFM20-F02-A 		G 1/4				
AFM30-F03-A 	450	G 3/8				
AFM40-F04-A 	1100	G 1/2				
AFM40-F06-A 		G 3/4				

Flow information at 0.7 MPa and 0.01 MPa pressure drop.

Accessories











Series	20 Series	30 Series	40-F04 Series	40-F06 Series
Filter element	AFM20P-060AS	AFM30P-060AS	AFM40P-060AS	AFM40P-060AS
Bracket assembly	AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS

Sub micro filter

AFD-A Series



- Filtration degree 0.01 µm
- To be used as stacking manifold or as single device
- Oil mist removal rate of 99,9%
- Filter element can be changed easily and quickly
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C.

Part number	Flow [Nl/min]	Port size	Drain type	Filtration degree [µm]	Oil mist removal rate [%]	Symbol
AFD20-F01C-A 	120	G 1/8	Automatic N.C.	0.01	99.99	
AFD20-F02C-A 		G 1/4				
AFD30-F03D-A 	240	G 3/8	Automatic N.O.			
AFD40-F04D-A 	600	G 1/2				
AFD40-F06D-A 		G 3/4				
AFD20-F01-A 	120	G 1/8	Manual			
AFD20-F02-A 	240	G 1/4				
AFD30-F03-A 	600	G 3/8				
AFD40-F04-A 		G 1/2				
AFD40-F06-A	120	G 3/4				

Flow information at 0.7 MPa and 0.01 MPa pressure drop.

Accessories

Series	20 Series	30 Series	40-F04 Series	40-F06 Series
Filter element	AFD20P-060AS	AFD30P-060AS	AFD40P-060AS	AFD40P-060AS
Bracket assembly	AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS

Air regulator

AR Series



- In stacking manifold or as single device
- Panel mounting possible
- Option: pressure regulation range 0,02 ~ 0,2 MPa
- Membrane-type regulator with secondary ventilation
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C.

Part number	□ Gauge	Port size	Port size pressure gauge	Set pressure [MPa]	Symbol
AR10-M5□-A ●	-, G	M5	G 1/16	0.05 ~ 0.7	
AR20-F01□-B ●	-, G, E	G 1/8	G 1/8	0.05 ~ 0.85	
AR20-F02□-B ●	-, G, E	G 1/4			
AR30-F03□-B ●	-, G, E	G 3/8			
AR40-F04□-B ●	-, G, E	G 1/2			
AR40-F06□-B ●	-, G, E	G 3/4			
AR50-F06□-B ●	-, G, E	G 3/4			
AR60-F10□-B ●	-, G, E	G 1			
AR10-M5□-1-A ●	-, G	M5	G 1/16	0.02 ~ 0.2	
AR20-F01□-1-B ●	-, G, E	G 1/8	G 1/8		
AR20-F02□-1-B ●	-, G, E	G 1/4			
AR30-F03□-1-B ●	-, G, E	G 3/8			
AR40-F04□-1-B ●	-, G, E	G 1/2			
AR40-F06□-1-B ●	-, G, E	G 3/4			

□: Add suffix G for round gauge added or suffix E for square gauge added (square gauge not available for size 10)

Nothing (-), no gauge.

Bracket assembly

10 Series	20 Series	30 Series	40 Series	50 Series	60 Series
AR12P-270AS	AR23P-270AS	AR33P-270AS	AR43P-270AS	AR52P-270AS	

Regulator with backflow function

AR□K Series



- In stacking manifold or as single device
- Dual pressure control for cylinder easily achieved
- Panel mounting possible
- Membrane-type regulator with secondary ventilation
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C.

Part number	□ Gauge	Port size	Port size pressure gauge	Set pressure [MPa]	Symbol
AR20K-F01□-B ●	-, G, E	G 1/8	G 1/8	0.05 ~ 0.85	
AR20K-F02□-B ●	-, G, E	G 1/4			
AR30K-F02□-B ●	-, G, E	G 1/4			
AR30K-F03□-B ●	-, G, E	G 3/8			
AR40K-F03□-B ●	-, G, E	G 3/8			
AR40K-F04□-B ●	-, G, E	G 1/2			
AR40K-F06□-B ●	-, G, E	G 3/4			
AR50K-F06□-B ●	-, G, E	G 3/4			
AR60K-F10□-B ●	-, G, E	G 1			

□: Add suffix G for round gauge added or suffix E for square gauge added

Nothing (-), no gauge.

Bracket Assembly

20 Series	30 Series	40 Series	50 Series	60 Series
AR23P-270AS	AR33P-270AS	AR43P-270AS	AR52P-270AS	

Direct operated precision regulator

ARP Series



- In stacking manifold or as single device
- Panel mounting possible
- Sensitivity max. 0.2 % F.S.
- Air consumption 0.8 l/min at 0.3 MPa
- Max. operating pressure 0.7 MPa
- Temperature range -5 to 60 °C (50 °C with digital pressure switch).

Part number	□ Gauge	Port size	Port size pressure gauge	Set pressure [MPa]	Sensitivity
ARP20-F01 □ ●	—, G, E	G 1/8	G 1/8	0.005 ~ 0.4	Within 0.2 % F.S.
ARP20-F02 □ ●	—, G, E	G 1/4			
ARP30-F03 □ ●	—, G, E	G 3/8			
ARP40-F04 □ ●	—, G, E	G 1/2	G 1/4		

□: Add suffix G at the end of reference for round gauge added or suffix E for square gauge added
Nothing (—), no gauge.

Bracket assembly

20 Series	30 Series	40 Series
AR20P-270AS	AR30P-270AS	AR40P-270AS













Lubricator

AL Series



- Lubricator to enrich the pressure air with lubricant
- Precise oil quantity adjustment with scale
- Transparent bowl protection for a better visibility and security
- Interchangeable with the previous model
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C.

Manual drain

Part number	Port size	Bowl capacity [cm³]	Recommended lubricant	Symbol
AL10-M5-A 	M5	7	Class 1 Turbine oil ISO VG32	
AL20-F01-A 	G 1/8	25		
AL20-F02-A 	G 1/4			
AL30-F02-A 	G 1/4	55		
AL30-F03-A 	G 3/8			
AL40-F03-A 	G 3/8	135		
AL40-F04-A 	G 1/2			
AL40-F06-A 	G 3/4			
AL50-F06-A 	G 3/4			
AL50-F10-A 	G 1			
AL60-F10-A 	G 1			

Accessories

Series	10 Series	20 Series	30 Series	40 Series	40-F06 Series	50 Series	60 Series
Bracket assembly	—	AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS	AF52P-050AS	












Filter regulator

AW Series



- Transparent bowl protection for a better visibility and security
- Convenient maintenance of the filter element
- Filter-regulator units are space-saving and require less piping installation labour
- Selection of pressure gauges available: Square embedded type, round type and digital pressure switch
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C.

Manual drain

Part number	 Gauge	Flow [Nl/min]	Port size	Port-size pressure gauge	Set pressure [MPa]	Filtration degree [µm]	Symbol	
AW10-M5  -A	—, G	110	M5	G 1/16	0.05 to 0.7	5		
AW20-F01  -B	—, G, E	500	G 1/8	G 1/8	0.05 ~ 0.85			
AW20-F02  -B	—, G, E		G 1/4					
AW30-F02  -B	—, G, E	1300	G 1/4					
AW30-F03  -B	—, G, E		G 3/8					
AW40-F04  -B	—, G, E	1800	G 1/2					
AW40-F06  -B	—, G, E	2400	G 3/4					
AW60-F06  -B	—, G, E	7600	G 3/4					
AW60-F10  -B	—, G, E		G 1					

Flow information at 0.6 MPa and 0.1MPa pressure drop
□: Add suffix G for round gauge added or suffix E for square gauge added (square gauge not available for size 10)
Nothing (—), no gauge.

Automatic drain

Part number	Gauge	Flow [Nl/min]	Port size	Port-size pressure gauge	Set pressure [MPa]	Filtration degree [µm]	Drain type	Symbol
AW10-M5C-A	—, G	110	M5	G 1/16	0.05 to 0.7	5	Normally closed	
AW20-F01C-B	—, G, E	500	G 1/8	G 1/8	0.05 ~ 0.85			
AW20-F02C-B	—, G, E		G 1/4					
AW30-F02D-B	—, G, E	1300	G 1/4					
AW30-F03D-B	—, G, E		G 3/8					
AW40-F04D-B	—, G, E	1800	G 1/2				Normally open	
AW40-F06D-B	—, G, E	2400	G 3/4					
AW60-F06D-B	—, G, E	7600	G 3/4					
AW60-F10D-B	—, G, E		G 1					

Flow information at 0.6 MPa and 0.1MPa pressure drop
□: Add suffix G for round gauge added or suffix E for square gauge added (square gauge not available for size 10)
Nothing (—), no gauge.

Accessories

Series	10 Series	20 Series	30 Series	40 Series	60 Series
Filter element	AF10P-060S	AF20P-060S	AF30P-060S	AF40P-060S	AW60P-060S
Bracket assembly	AR12P-270AS	AR23P-270AS	AR33P-270AS	AR43P-270AS	AW62P-270AS

Filter regulator with backflow function

AW□K Series



- With a mechanism to exhaust the air pressure in the outlet side reliably and quickly
- Transparent bowl protection for a better visibility and security
- Convenient maintenance of the filter element
- Filter-regulator units are space-saving and require less piping installation labour
- Selection of pressure gauges available: Square embedded type, round type and digital pressure switch
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C.

Manual drain



Part number	□ Gauge	Flow [Nl/min]	Port size	Port-size pressure gauge	Set pressure [MPa]	Filtration degree [µm]	Symbol
AW20K-F01□-B	-, G, E	500	G 1/8	G 1/8	0.05 ~ 0.85	5	
AW20K-F02□-B	-, G, E		G 1/4				
AW30K-F02□-B	-, G, E	1300	G 1/4				
AW30K-F03□-B	-, G, E		G 3/8				
AW40K-F04□-B	-, G, E	1800	G 1/2				
AW40K-F06□-B	-, G, E	2400	G 3/4				
AW60K-F06□-B	-, G, E	7600	G 3/4	G 1			
AW60K-F10□-B	-, G, E		G 1				

Flow information at 0.6 MPa and 0.1MPa pressure drop

□: Add suffix G for round gauge added or suffix E for square gauge added (square gauge not available for size 10)

Nothing (-), no gauge.

Automatic drain

Part number	 Gauge	Flow [Nl/min]	Port size	Port-size pressure gauge	Set pressure [MPa]	Filtration degree [µm]	Drain type	Symbol
AW20K-F01C-B	—, G, E	500	G 1/8	G 1/8	0.05 ~ 0.85	5	Normally closed	
AW20K-F02C-B	—, G, E		G 1/4					
AW30K-F02D-B	—, G, E	1300	G 1/4					
AW30K-F03D-B	—, G, E		G 3/8					
AW40K-F04D-B	—, G, E	1800	G 1/2					
AW40K-F06D-B	—, G, E	2400	G 3/4					
AW60K-F06D-B	—, G, E	7600	G 3/4					
AW60K-F10D-B	—, G, E		G 1					

Flow information at 0.6 MPa and 0.1MPa pressure drop

□: Add suffix G for round gauge added or suffix E for square gauge added (square gauge not available for size 10)

Nothing (-), no gauge.

Accessories

Series	20 Series	30 Series	40 Series	60 Series
Filter element	AF20P-060S	AF30P-060S	AF40P-060S	AW60P-060S
Bracket assembly	AR23P-270AS	AR33P-270AS	AR43P-270AS	AW62P-270AS

Regulator/Filter regulator

Regulator with Built-in Pressure Gauge (ARG)
Filter Regulator with Built-in Pressure Gauge (AWG)
ARG/AWG Series



- Visibility of pressure gauge is improved in various installation places
- Space saving, Labour saving: Panel-cut for pressure gauge is not necessary
- Installation and removal of pressure gauge cover is possible with one-touch
- Pressure gauge anti-revolving mechanism
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C.

Manual drain

Part number	Port size	Set pressure range [MPa]	Symbol
ARG20-F01G1H ●	G 1/8	0.05 to 0.85	<div>ARG</div> <div>AWG</div>
ARG20-F02G1H ●	G 1/4		
ARG30-F02G1H ●	G 1/4		
ARG30-F03G1H ●	G 3/8		
ARG40-F04G1H ●	G 1/2		
AWG20-F01G1H	G 1/8		
AWG20-F02G1H	G 1/4		
AWG30-F02G1H ●	G 1/4		
AWG30-F03G1H	G 3/8		
AWG40-F04G1H	G 1/2		

Accessories

Series	20 Series	30 Series	40 Series
Bracket assembly	ARG20P-270AS	ARG30P-270AS	ARG40P-270AS

Digital pressure switch

ISE35 Series



- Built-in pressure switch for AR/AW/ARM and AC series
- Switch replaceable
- 2 Colour display
- Enclosure: IP40.

Part number	□: Wiring entry ■: Accessories	Pressure range [MPa]	Switch output	Power supply voltage
ISE35-□-65-L-■ ●	N-A, N-B, R-A, R-B	0 to 1	PNP open collector 1 output	12 to 24 VDC

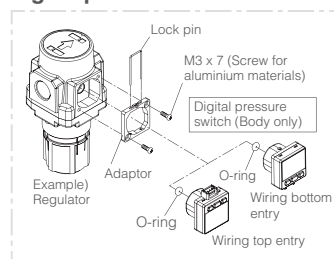
□: N = Wiring bottom entry

R = Wiring top entry

■: A = With accessories (AR/AW series)

B = With accessories (ARM10/11 series)

Digital pressure switch details



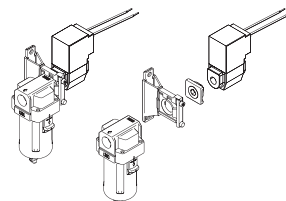
Modular adapter

E210/310/410 Series



- Can be connected to existing products such as 2 port valves as well as F.R.L. Unit
- Can be freely rotated, thus allowing a wide selection of mounting directions
- Can be connected to existing products of different size
- Can be connected/disconnected without rotation
- Fittings, tube, etc. are not required for connection.

Part number	Port size	Piping I.D.	Fluid	Max. operating pressure
E210-U01	1/8	Ø 6	Air	1.0 MPa
E210-U02	1/4	Ø 8		
E310-U02	1/4	Ø 8		
E310-U03	3/8	Ø 10		
E410-U02	1/4	Ø 8		
E410-U03	3/8	Ø 10		
E410-U04	1/2	Ø 12		



Ex.: Filter + 2 port valve

Attachments

Spacer



Type
Y□00-A

Model type Y□00T	Applicable model
Y100-A	10
Y200-A	20
Y300-A	30
Y400-A	40
Y500-A	40-F06
Y600-A	50 • 60

Spacer with bracket



Type
Y□00T-A

Model type Y□00T	Applicable model
Y100T-A	10
Y200T-A	20
Y300T-A	30
Y400T-A	40
Y500T-A	40-F06
Y600T-A	50 • 60

Cross Interface

- Pippings are possible in all 4 directions.



Model	Port size	Applicable model
Y14-M5-A	M5	10
Y24-F01-A	G 1/8	20
Y24-F02-A	G 1/4	20
Y34-F01-A	G 1/8	30
Y34-F02-A	G 1/4	30
Y44-F02-A	G 1/4	40
Y44-F03-A	G 3/8	40
Y54-F03-A	G 3/8	40-F06
Y54-F04-A	G 1/2	40-F06

T-interface

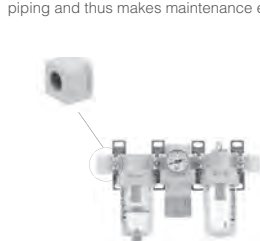
- Using a T-interface facilitates the redirection of air flow.



Model	Port size	Applicable model
Y110-M5-A	M5	10
Y210-F01-A	G 1/8	20
Y210-F02-A	G 1/4	20
Y310-F02-A	G 1/4	30
Y410-F03-A	G 3/8	40
Y510-F03-A	G 3/8	40-F06
Y610-F04-A	G 1/2	50 • 60

Piping adapter

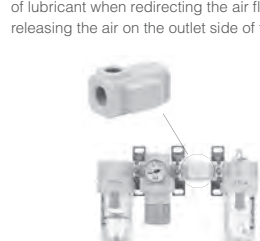
- A piping adapter allows installation/removal of the component without removing the piping and thus makes maintenance easier.



Model	Port size	Applicable model
E100-M5-A	M5	10
E200-F01-A	G 1/8	20
E200-F02-A	G 1/4	20
E300-F02-A	G 1/4	30
E300-F03-A	G 3/8	30
E400-F04-A	G 1/2	40
E400-F06-A	G 3/4	40
E500-F06-A	G 3/4	40-F06
E600-F06-A	G 3/4	50 • 60
E600-F10-A	G 1	50 • 60

Check valve

- A check valve with intermediate air release port can be easily installed to prevent a back flow of lubricant when redirecting the air flow and releasing the air on the outlet side of the regulator.



Model	Port size	Applicable model
AKM2000-F01-A	G 1/8	20
AKM2000-F02-A	G 1/4	20
AKM3000-F02-A	G 1/4	30
AKM4000-F03-A	G 3/8	40

Pressure switch/Reed switch type

IS10M/E Series



Type M



Type E



M:

- For assembly between two devices (not possible directly behind AV and AW)

E:

- For assembly at the end of a maintenance unit
- Lighter and smaller
- Function: N.O.
- Power consumption 2W/A
- Temperature range -5 to 60 °C.

Part number	Port size	Applicable model
IS10E-20F01-6L-A ●	G 1/8	AC20□
IS10E-20F02-6L-A ●	G 1/4	AR20□, AW20□ AWM20, AWD20
IS10E-20F03-6L-A	G 3/8	
IS10E-30F02-6L-A ●	G 1/4	AC25□, AC30□
IS10E-30F03-6L-A ●	G 3/8	AR25□, AR30□, AW30□ AWM30, AWD30
IS10E-30F04-6L-A	G 1/2	
IS10E-40F02-6L-A	G 1/4	
IS10E-40F03-6L-A	G 3/8	AC40□
IS10E-40F04-6L-A ●	G 1/2	AR40□, AW40□ AWM40, AWD40
IS10E-40F06-6L-A	G 3/4	

Set pressure range: 0.1~0.6 MPa. Lead wire length 3 m
Max. operating pressure 0.7 MPa.



Type E

Part number	Applicable model
IS10M-20-6L-A ●	AC20□
IS10M-30-6L-A ●	AC25□, AC30□
IS10M-40-6L-A ●	AC40□
IS10M-50-6L-A	AC40□-06
IS10M-60-6L-A	AC50□, AC55□, AC60□

Set pressure range: 0.1~0.6 MPa. Lead wire length 3 m
Max. operating pressure 0.7 MPa.



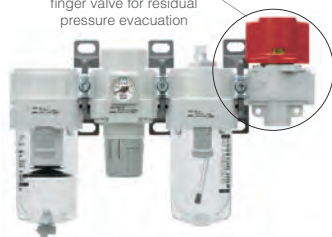
Type M

Pressure relief 3 port valve

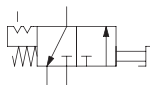
VHS Series



3 port manually operated
finger valve for residual
pressure evacuation



- To be used as stacking manifold or as single device
- Used to bleed the entire compressed air circuit
- Can be upgraded with a silencer
- Operating pressure range 0.1 to 1.0 MPa
- Temperature range -5 to 60 °C.



Part number	Port size IN, OUT	Port size exhaust	Effective flow [Cv] IN→OUT (OUT→EXH)	Adequate for series
VHS20-F01 ●	G 1/8	G 1/8	0.65 (0.69)	20
VHS20-F02 ●	G 1/4	G 1/8	0.88 (0.84)	20
VHS30-F03 ●	G 3/8	G 1/4	2.3 (1.9)	30
VHS40-F04 ●	G 1/2	G 3/8	3.8 (3.6)	40
VHS40-F06 ●	G 3/4	G 1/2	5.0 (4.8)	40-F06
VHS50-F06 ●	G 3/4	G 1/2	6.4 (5.9)	50 • 60
VHS50-F10 ●	G 1	G 1/2	8.6 (6.4)	50 • 60

□ : Add suffix A at the end of part number for handle material flame resistant PB7
Add suffix B at the end of part number for handle material aluminium.

● Stocked items. ● Partly stocked items, the stocked options are highlighted in green.
Stocked items and product information could be subject to change without prior notice.


Our highlighted product for you

Residual pressure relief 3 port solenoid valve

VP517/717 Series



- Modular connection type for connecting to F.R.L. units
- Power consumption: 0.35 W (DC type)
- Maximum flow rate: 3149 l/min [ANR]
- Internal pilot operating pressure range: 0.2 to 1 MPa
- Selectable flow direction: "Left to right" or "Right to left"
- IP65 enclosure.

Part number	Flow [l/min] ¹⁾ 1P→2A (2A→3R)	Operating pressure range [MPa]	Voltage	Electrical entry	Light/surge voltage suppressor	Manual override	Applicable air combination	Circuit symbol
VP517Y-5Y01 ●	2040 (1911)	0.2 to 0.7	24 VDC	Type Y (DIN (EN175301-803(C)) terminal without connector)	—	Non-locking push type	AC25, AC30	
VP517KY-5Y01 ●		0.2 to 1					AC40	
VP717Y-5Y01 ●	3149 (3056)	0.2 to 0.7					AC40	
VP717KY-5Y01 ●		0.2 to 1					AC40	
VP517Y-5YZ1	2040 (1911)	0.2 to 0.7		Type Y (DIN (EN175301-803(C)) terminal with connector)	With light/ surge voltage suppressor		AC25, AC30	
VP517KY-5YZ1		0.2 to 1					AC40	
VP717Y-5YZ1	3149 (3056)	0.2 to 0.7					AC40	
VP717KY-5YZ1		0.2 to 1					AC40	
VP517Y-5DZ1	2040 (1911)	0.2 to 0.7		Type D (DIN terminal with connector)		Non-locking push type	AC25, AC30	
VP517KY-5DZ1		0.2 to 1					AC40	
VP717Y-5DZ1	3149 (3056)	0.2 to 0.7					AC40	
VP717KY-5DZ1		0.2 to 1					AC40	

1) These values have been calculated according to ISO 6358 and indicate the flow rate under standard conditions with an inlet pressure of 0.6 MPa (relative pressure) and a pressure drop of 0.1 MPa.

Accessories

Part number	Model	Description
Y300-A ●	VP517	Spacer
Y400-A ●	VP717	
Y300T-A ●	VP517	Spacer with bracket
Y400T-A ●	VP717	
E300-□03-A ●	VP517	Piping Adapter (Port size 3/8)
E400-□04-A ●	VP717	Piping Adapter (Port size 1/2)
AN30-03 ●	VP517	Compact resin type silencer (Port size 3/8)
AN40-04 ●	VP717	Compact resin type silencer (Port size 1/2)
AN302-03 ●	VP517	High noise reduction type silencer (Port size 3/8)
AN402-04 ●	VP717	High noise reduction type silencer (Port size 1/2)

□: in model numbers indicates a pipe thread type. No indication is necessary for Rc; however, indicate N for NPT, and F for G.


Our highlighted product for you

Soft start-up valve

AV-A Series



- Maximum flow rate: 11908 l/min [ANR]
- Power consumption: 0.35 W (12/24 VDC)
- Rapid supply time reduced by up to 50 %
- Exhaust time reduced by up to 55 %
- Modular connection type for connecting to F.R.L. units
- Selectable flow direction: "Left to right" or "Right to left"
- IP65 enclosure (DIN terminal).

Part number	Port size 1(P), 2(A)	Flow [l/min] ¹⁾ 1P→2A (2A→3R)	Operating pressure range [MPa]	Voltage	Electrical entry	Light/surge voltage suppressor	Manual override	Applicable air combination	Circuit symbol	
AV2000-F02-5YOB-A	G 1/4	2433 (2504)	0.2 to 1.0	24 VDC	Type Y (DIN terminal without connector)	—	Push-turn locking slotted type	AC20		
AV3000-F03-5YOB-A	G 3/8	3269 (2660)						AC25, AC30		
AV4000-F04-5YOB-A	G 1/2	4945 (3100)						AC40		
AV5000-F06-5YOB-A	G 3/4	11908 (8199)						AC50, AC55		
AV5000-F10-5YOB-A	G 1	10778 (8199)						AC60		
AV2000-F02-5YZB-A	G 1/4	2433 (2504)			Type Y (DIN terminal with connector)	With light/ surge voltage suppressor		AC20		
AV3000-F03-5YZB-A	G 3/8	3269 (2660)						AC25, AC30		
AV4000-F04-5YZB-A	G 1/2	4945 (3100)						AC40		
AV5000-F06-5YZB-A	G 3/4	11908 (8199)						AC50, AC55		
AV5000-F10-5YZB-A	G 1	10778 (8199)						AC60		
AV2000-F02-5DZB-A	G 1/4	2433 (2504)			Type D (DIN terminal with connector)			AC20		
AV3000-F03-5DZB-A	G 3/8	3269 (2660)						AC25, AC30		
AV4000-F04-5DZB-A	G 1/2	4945 (3100)						AC40		
AV5000-F06-5DZB-A	G 3/4	11908 (8199)						AC50, AC55		
AV5000-F10-5DZB-A	G 1	10778 (8199)						AC60		

1) These values have been calculated according to ISO 6358 and indicate the flow rate under standard conditions with an inlet pressure of 0.6 MPa (relative pressure) and a pressure drop of 0.1 MPa.

Accessories

Part number	Model	Description
Y200-A ●	AV2000-A	Spacer
Y300-A ●	AV3000-A	
Y400-A ●	AV4000-A	
Y600-A ●	AV5000-A	
Y200T-A ●	AV2000-A	
Y300T-A ●	AV3000-A	Spacer with bracket
Y400T-A ●	AV4000-A	
Y600T-A ●	AV5000-A	
AV22P-210AS	AV2000-A	Bracket assembly
AV32P-210AS	AV3000-A	
AV42P-210AS	AV4000-A	
AV52P-210AS	AV5000-A	
VHS30PW-190AS ●	AV2000-A	Silencer assembly
VHS40PW-190AS ●	AV3000-A	
VHS40PW-190-06AS	AV4000-A	
AV52P-250AS	AV5000-A	
G36-10-□01 ●	AV2000-A	Pressure gauge
	AV3000-A	
	AV4000-A	
	AV5000-A	

□: of the pressure gauge part number will indicate the connecting screw type. No indication is necessary for R; however, indicate N for NPT.
Please contact SMC regarding the pressure gauge supply for psi unit specifications.

Large flow air filter

AF800/900 Series



- Superior flow capacity
- Filtration degree 5 µm (2, 10, 20, 40, 70, 100 µm on request)
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C
- Automatic drain.

Part number	Port size	Flow [l/min]	Bowl capacity
AF811-F14 ●	G1 1/2	8000	180 cm³
AF911-F20 ●	G 2	15000	

* at 0.7 MPa set pressure


Pressure control equipment

Miniature regulator

ARJ Series



- Piston-type regulator, relieving type
- Panel mounted
- Type ARJ1020F, can be fitted to manifold (max. 10 pieces)
- Max. operating pressure 0.8 MPa
- Temperature range -5 to 60 °C.

Part number	Port size		Set pressure range [MPa]	
	IN	OUT		
ARJ1020F-M5-04 ●	M5	Ø 4 mm tube	0.1 to 0.7	
ARJ1020F-M5-06 ●	M5	Ø 6 mm tube	0.1 to 0.7	
ARJ210-M5 ●	R 1/8, M5	M5	0.2 to 0.7	

Valve manifold for ARJ1020F

4 stations	6 stations	10 stations
ARJM10-4	ARJM10-6	ARJM10-10

Miniature regulator

ARJ310 Series



- With either threaded or one touch fitting at the outlet
- Over double the flow capacity compared with ARJ210
- Max. operating pressure 0.8 MPa
- Temperature range -5 to 60 °C
- ARJ310-01: 500 l/min
- ARJ310F-01-04: 190 l/min
- ARJ310F-01-06: 415 l/min.

Part number	Port size		Set pressure range [MPa]	Circuit symbol
	IN	OUT		
ARJ310-01 ●	R 1/8, M5	Rc 1/8	0.2 to 0.7	
ARJ310F-01-04 ●	R 1/8, M5	Ø 4 mm tube	0.2 to 0.7	
ARJ310F-01-06 ●	R 1/8, M5	Ø 6 mm tube	0.2 to 0.7	

Pilot operated pressure regulator

EAR Series



- Pilot operated pressure regulator
- Superior flow capacity and control precision
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C
- Port size up to 2".

Part number	Port size	Port size pressure gauge	Circuit symbol
0.05~0.85 MPa			
EAR425-F04 ●	G 1/2	G 1/4	
EAR625-F06 ●	G 3/4		
EAR625-F10 ●	G 1		
EAR825-F14 ●	G 1 1/2		
EAR925-F20 ●	G 2		

* at 0.7 MPa

Part number	Port size	Port size pressure gauge	Circuit symbol
0.02~0.2 MPa			
EAR435-F04 ●	G 1/2	G 1/4	
EAR635-F06 ●	G 3/4		
EAR635-F10 ●	G 1		
EAR835-F14 ●	G 1 1/2		
EAR935-F20 ●	G 2		

* at 0.2 MPa

Regulator for 2.0 MPa

ARX20 Series



- Compact design. 35 x 35 x 80 mm
- Practical, 3 outlets available
- Simple operation, ergonomic design
- Ideal for regulating: e.g. discharge pressure for small compressors or the pressure in air blowing applications
- Max. operating pressure 2.0 MPa
- Temperature range -5 to 60 °C.

Part number	Set pressure range [MPa]	Max. operating pressure [MPa]	Port size
ARX20-F01 ●	0.05 to 0.85	2.0	G 1/8
ARX21-F01 ●	0.05 to 0.30		G 1/4
ARX20-F02 ●	0.05 to 0.85		
ARX21-F02 ●	0.05 to 0.30		

Assembly materials

Mounting bracket	Panel mounting nut
1348112	1348110A

Compact manifold regulator

ARM5 Series



- 2 mounting types are available:
 - Direct mount
 - DIN rail mount
- Backflow function is equipped as standard
- Individual or centralised supply type
- Integrated pressure gauge available
- Width 14 mm
- Max. operating pressure 1.0 MPa
- Temperature range 5 to 60 °C.


Part number	Type	Port size		Set pressure range [MPa]
		IN [mm]	OUT [mm]	
ARM5SA-06-A ●	Single device with pressure gauge	4	4	0.05 ~ 0.7
ARM5SA-08-A ●		6	6	
ARM5SA-06 ●	Single device without pressure gauge	4	4	
ARM5SA-08 ●		6	6	

Modular regulator

ARM10/11 Series



- Available as single device or stacked on DIN rails (common or individual supply)
- 3 different control positions possible
- Integrated, replaceable one-touch fittings
- Broad range of accessories available (e.g.: 3 port shut-off valve, pressure switch,...)
- Flow from 150 to 300 l/min
- Max. operating pressure 1.0 MPa
- Temperature range 5 to 60 °C.

Part number	Port size		Set pressure range [MPa]	Accessories	Circuit symbol
	IN	OUT			
ARM10-06G	Ø 4 mm straight	Ø 4 mm straight	0.05 to 0.07	G: with pressure gauge BG: with bracket, pressure gauge and panel nut GP: with pressure gauge and panel nut	
ARM10-06BG					
ARM10-06GP					
ARM10-18G	Ø 4 mm elbow	Ø 4 mm elbow			
ARM10-18BG					
ARM10-18G					
ARM10-08G	Ø 6 mm straight	Ø 6 mm straight			
ARM10-08BG					
ARM10-08GP					
ARM10-20G	Ø 6 mm elbow	Ø 6 mm elbow			
ARM10-20BG					
ARM10-20GP					

Low pressure type (0.05 to 0.35 MPa) available on request
Manifold variations available on request.

Accessories











Part number	Description
GC3-4A-X2101 ●	Pressure gauge, 0.0 to 0.4 MPa indication range

Precision regulator

IR1000/2000/3000-A Series



- Setting sensitivity within 0.2 % of full span; repeatability within ± 0.5 % of full span
- Air consumption: 1 l/min (ANR) or less
- Maximum flow range: 5000 l/min (ANR)
- Port sizes: from 1/8 to 1/2
- Standard options: bracket; pressure gauge, hexagon panel nut, digital pressure switch.

Part number	Set pressure range	Port size	Setting sensitivity	Repeatability	Circuit symbol
IR1000-F01-A 	0.005 ~ 0.2 MPa	G 1/8	within 0.2 % of full span	within ±0.5 % of full span	
IR1010-F01-A 	0.01 ~ 0.4 MPa				
IR1020-F01-A 	0.01 ~ 0.8MPa				
IR2000-F02-A 	0.005 ~ 0.2 MPa	G 1/4			
IR2010-F02-A 	0.01 ~ 0.4 MPa				
IR2020-F02-A 	0.01 ~ 0.8 MPa				
IR3000-F03-A 	0.01 ~ 0.2 MPa	G 3/8			
IR3010-F03-A	0.01 ~ 0.4 MPa				
IR3020-F03-A	0.01 ~ 0.8 MPa				
IR3000-F04-A 	0.01 ~ 0.2 MPa	G 1/2			
IR3010-F04-A 	0.01 ~ 0.4 MPa				
IR3020-F04-A	0.01 ~ 0.8 MPa				


● Stocked items. ● Partly stocked items, the stocked options are highlighted in green.
Stocked items and product information could be subject to change without prior notice.

Regulator

IR1200/2200/3200-A Series



- Repeatability: within ± 1 % of full span
- Air consumption: bleed air "0"
- Maximum flow range: 5000 l/min (ANR)
- Port sizes: from 1/8 to 1/2
- Standard options: bracket; pressure gauge, hexagon panel nut, digital pressure switch.

Part number	Set pressure range	Port size	Repeatability	Circuit symbol
IR1200-F01-A	0.02 ~ 0.2 MPa	G 1/8	within ±1 % of full span	
IR1210-F01-A	0.02 ~ 0.4 MPa			
IR1220-F01-A	0.02 ~ 0.8 MPa			
IR2200-F02-A	0.02 ~ 0.2 MPa	G 1/4		
IR2210-F02-A	0.02 ~ 0.4 MPa			
IR2220-F02-A	0.02 ~ 0.8 MPa			
IR3200-F03-A	0.02 ~ 0.2 MPa	G 3/8		
IR3210-F03-A	0.02 ~ 0.4 MPa			
IR3220-F03-A	0.02 ~ 0.8 MPa			
IR3200-F04-A	0.02 ~ 0.2 MPa	G 1/2		
IR3210-F04-A	0.02 ~ 0.4 MPa			
IR3220-F04-A	0.02 ~ 0.8 MPa			

Direct operated regulator (Relieving type)

High pressure operation: up to 6.0 MPa

VCHR30/40 Series



- Suitable for Air
- Body material: Aluminium
- Seal material: Polyurethane elastomer
- Temperature range -5 to 60 °C.

















Part number	Regulating pressure range [MPa]	Max. operating pressure [MPa]	Port size
VCHR30-06G ●	0.5 to 5.0	6.0	G 3/4
VCHR30-10G ●			G 1
VCHR40-10G ●			G 1
VCHR40-14G ●			G 1 1/2

Compact electro-pneumatic regulator

ITV0000 Series



- Stepless control of air pressure proportional to an electrical signal
- Compact and lightweight
- Can be used alone or stacked with DIN rails
- Integrated one-touch fittings
- With error indicator LED
- High speed response: 0.1 s (without load)
- High stability
- Max. operating pressure 1.0 MPa (2.0 MPa for model with set pressure range 0.001~ 0.1 MPa)
- Enclosure IP65.

Type	Part number	Input signal	Output signal	Set pressure range	Port size	Flow [Nl/min]	
As single device	ITV0010-0N 	4 - 20 mA	Analogue 1 - 5 VDC	0.001~0.1 MPa	Push In for Ø 4 mm tube	3.5	
	ITV0010-3N 	0 - 10 VDC		0.001~0.5 MPa		6.0	
	ITV0030-0N 	4 - 20 mA				0.001~0.9 MPa	6.0
	ITV0030-3N 	0 - 10 VDC		-1.0 ~ 100 KPa			2.0
	ITV0050-0N 	4 - 20 mA				0.001~0.1 MPa	3.5
	ITV0050-3N 	0 - 10 VDC		0.001~0.5 MPa			6.0
For block mounting	ITV0090-0N 	4 - 20 mA				0.001~0.9 MPa	-1.0 ~ 100 KPa
	ITV0090-3N 	0 - 10 VDC		0.001~0.1 MPa			
	ITV0010-0MN 	4 - 20 mA				0.001~0.5 MPa	6.0
	ITV0010-3MN 	0 - 10 VDC					0.001~0.9 MPa
	ITV0030-0MN 	4 - 20 mA				-1.0 ~ 100 KPa	
	ITV0030-3MN 	0 - 10 VDC					
	ITV0050-0MN 	4 - 20 mA					
	ITV0050-3MN 	0 - 10 VDC					
ITV0090-0MN 	4 - 20 mA						
ITV0090-3MN 	0 - 10 VDC						

Accessories

Lead wire straight 3 m	M8-4DSX3MG4
Lead wire elbow 2 m	P398000-501-2
Flat bracket	P39800022
U bracket	P39800023
Manifold for 2 - 10 stations	IITV00 - ■ ■ Number of stations

Our highlighted product for you

Electro-pneumatic regulator

ITV1000/2000/3000 Series



- Stepless control of air pressure proportional to an electrical signal
- Compact and lightweight
- 2 monitor outputs:
 - Analogue 1-5 VDC/4-20 mA
 - PNP/NPN switch output
- Cable connections in 2 directions
- Non-grease model: ITV1000
- Max. operating pressure 1.0 MPa
(2.0 MPa for model with set pressure range 0.001~ 0.1 MPa)
- Enclosure IP65.

Part number *	Input signal/Output signal	Set pressure range [MPa]	Port size	Circuit symbol		
ITV1010-01F2N ●	4~20 mA/analogue 1~5 VDC	0.005~0.1	G 1/4			
ITV1010-03F2N ●	4~20 mA/PNP					
ITV1010-31F2N ●	0~10 VDC/analogue 1~5 VDC					
ITV1010-33F2N ●	0~10 VDC/PNP					
ITV1030-01F2N ●	4~20 mA/analogue 1~5 VDC	0.005~0.5				
ITV1030-31F2N ●	4~20 mA/PNP					
ITV1030-33F2N ●	0~10 VDC/analogue 1~5 VDC					
ITV1030-33F2N ●	0~10 VDC/PNP					
ITV1050-01F2N ●	4~20 mA/analogue 1~5 VDC	0.005~0.9				
ITV1050-03F2N ●	4~20 mA/PNP					
ITV1050-31F2N ●	0~10 VDC / analogue 1~5 VDC					
ITV1050-33F2N ●	0~10 VDC/PNP					
ITV2010-01F3N ●	4~20 mA/analogue 1~5 VDC	0.005~0.1	G 3/8			
ITV2010-03F3N ●	4~20 mA/PNP					
ITV2010-31F3N ●	0~10 VDC/analogue 1~5 VDC					
ITV2010-33F3N ●	0~10 VDC/PNP					
ITV2030-01F3N ●	4~20 mA/analogue 1~5 VDC	0.005~0.5				
ITV2030-03F3N ●	4~20 mA/PNP					
ITV2030-31F3N ●	0~10 VDC/analogue 1~5 VDC					
ITV2030-33F3N ●	0~10 VDC/PNP					
ITV2050-01F3N ●	4~20 mA/analogue 1~5 VDC	0.005~0.9				
ITV2050-03F3N ●	4~20 mA/PNP					
ITV2050-31F3N ●	0~10 VDC/analogue 1~5 VDC					
ITV2050-33F3N ●	0~10 VDC/PNP					
ITV3010-01F4N ●	4~20 mA/analogue 1~5 VDC	0.005~0.1	G 1/2			
ITV3010-03F4N ●	4~20 mA/PNP					
ITV3010-31F4N ●	0~10 VDC/analogue 1~5 VDC					
ITV3010-33F4N ●	0~10 VDC/PNP					
ITV3030-01F4N ●	4~20 mA/analogue 1~5 VDC	0.005~0.5				
ITV3030-03F4N ●	4~20 mA/PNP					
ITV3030-31F4N ●	0~10 VDC/analogue 1~5 VDC					
ITV3030-33F4N ●	0~10 VDC/PNP					
ITV3050-01F4N ●	4~20 mA/analogue 1~5 VDC	0.005~0.9				
ITV3050-03F4N ●	4~20 mA/PNP					
ITV3050-31F4N ●	0~10 VDC/analogue 1~5 VDC					
ITV3050-33F4N ●	0~10 VDC/PNP					

* other styles available

Accessories

Part number	Description
P398020-500-3	Connection cable with plug, straight
P398020-501-3	Connection cable with plug, elbow

Electro-pneumatic regulator

Fieldbus compatibility

ITV1000/2000/3000 Series



- Fieldbus compatibility added to series ITV1000/2000/3000 specifications
- Reduced wiring
- Now with RS-232C serial communications capability
- Max. operating pressure 1.0 MPa
(2.0 MPa for model with set pressure range 0.001~ 0.1 MPa)
- Enclosure IP65.

Part number		Cable connector
1 ITV20□0-DE■ 3	Power	P398020-500-3 (Straight)
		P398020-501-3 (Right angle)
	Communication	PCA-1557633 (Socket type)
		PCA-1557646 (Plug type)
1 ITV20□0-PR■ 3	Power	P398020-500-3 (Straight)
		P398020-501-3 (Right angle)
	Communication	PCA-1557688 (Socket type)
		PCA-1557691 (Plug type)
1 ITV20□0-RC■ 3	Power	P398020-500-3 (Straight)
		P398020-501-3 (Right angle)
	Communication	P398020-502-3 (Straight)
		P398020-503-3 (Right angle)
1 ITV20□0-CC■ 3	Power	P398020-500-3 (Straight)
		P398020-501-3 (Right angle)
	Communication	PCA-1567720 (Socket type)
		PCA-1567717 (Plug type)

Part number	Description
ITV10□0-■□□	Control signal ■:
ITV20□0-■□□	CC: CC-Link
	DE: DeviceNet™
	PR: PROFIBUS DP
ITV30□0-■□□	RC: RS-232C Communication

Communication cable (other than RS-232C) should be obtained separately. Consult SMC.

High pressure electro-pneumatic regulator

ITVX Series



- 5.0 MPa maximum supply pressure
- Maximum flow rate: 3000 l/min [ANR]
- Power consumption: 3W or less
- Fluid: Air, N₂, O₂, Ar
- Wetted parts: Fluorine grease

Part number	Input signal/Output signal	Set pressure range [MPa]	Port size	Circuit symbol
ITVX2030-01F3N ●	4~20 mA/analogue 1~5 VDC	0.01~3.0	G 3/8	
ITVX2030-03F3N ●	4~20 mA/PNP			
ITVX2030-04F3N ●	4~20 mA/4~20 mA			
ITVX2030-31F3N ●	0~10 VDC/analogue 1~5 VDC			
ITVX2030-33F3N ●	0~10 VDC/PNP			

Accessories

Part number	Description
P398020-600	Flat bracket assembly (including mounting screws)
P398020-601	L-bracket assembly (including mounting screws)
P398020-500-3	Power cable connector, straight type 3 m
P398020-501-3	Power cable connector, right angle type 3 m

High pressure electro-pneumatic regulator, 3.0 MPa

ITVH Series



- Maximum supply pressure: 3.0 MPa
- Set pressure range: 0.2 to 2.0 MPa
- Maximum flow rate: 3000 l/min [ANR]
- 2 monitor outputs:
 - Analogue 1-5 VDC / 4-20 mA
 - PNP/NPN switch output
- Power consumption: 3 W or less
- Linearity: $\pm 1\%$ F.S. or less
- Hysteresis: 1 % F.S. or less
- Repeatability: $\pm 1\%$ F.S. or less
- Parts in contact with fluid: Fluorine grease.

Part number	Input signal/ Output signal	Set pressure range [MPa]	Port size	Circuit symbol
ITVH2020-01F3N	4~20 mA/analogue 1 ~ 5 VDC	0.2 to 2.0	G 3/8	
ITVH2020-03F3N	4 ~ 20 mA / PNP			
ITVH2020-04F3N	4 ~ 20 mA/4 ~ 20 mA			
ITVH2020-31F3N	0 ~ 10 VDC/analogue 1 ~ 5 VDC			
ITVH2020-33F3N	0 ~ 10 VDC/PNP			

Accessories







Part number	Description
P398020-600	Flat bracket assembly (including mounting screws)
P398020-601 ●	L-bracket assembly (including mounting screws)
P398020-500-3 ●	Power cable connector, straight type 3 m
P398020-501-3 ●	Power cable connector, right angle type 3 m

Booster regulator

VBA Series



- Increases the main circuit pressure by up to 4 times
- No cooling required
- Easy installation (simple, insert the unit in the airline)
- No other energy source required (no power supply)
- Operating temperature: 2~50 °C
- Input pressure: 0.1~1 MPa
- Mounting position: horizontal.

Part number	Output range [MPa]	Flow [l/min]	Port size	Pressure ratio	Circuit symbol	
VBA11A-F02 	0.2 to 2.0	70	G 1/4	max. 4 : 1		
VBA10A-F02 		230		max. 2 : 1		
VBA20A-F03 	0.2 to 1.0	1000	G 3/8			
VBA22A-F03			G 1/2			
VBA40A-F04 	0.2 to 1.0	1900				
VBA42A-F04						
VBA43A-F04 	0.2 to 1.6	1600				

Accessories

Model	VBA10A-F02	VBA11A-F02	VBA20A-F03	VBA22A-F03	VBA40A-F04 VBA42A-F04	VBA43A-F04
Pressure gauge	G27-20-01		G36-10-01	KT-VBA22A-7	G36-10-01	G27-20-01
Silencer	AN20-02		AN30-03		AN40-04	
High noise reduction silencer	ANA1-02		ANA1-03		ANA1-04	
Air tank	VBAT05AF-SV-Q VBAT10AF-SV-Q		VBAT10AF-SV-Q VBAT20AF-RV-Q VBAT38AF-RV-Q		VBAT20AF-RV-Q VBAT38AF-RV-Q	

















Pressure gauges

Pressure gauge

G□ Series



- With limit indicator.

Part number	Pressure range [MPa]	Connection thread	Outside diameter [mm]	
G15-10-01 	0 to 1.0	R 1/8, M5 (Female thread)	Ø 15	
G27-10-R1 	0 to 1.0	R 1/16	Ø 26	
G36-2-01 	0 to 0.2	R 1/8	Ø 37.5	
G36-4-01 	0 to 0.4			
G36-7-01 	0 to 0.7			
G36-10-01 	0 to 1.0			
G46-2-01 	0 to 0.2	R 1/8	Ø 42.5	
G46-10-01 	0 to 1.0			
G46-15-01 	0 to 1.5			
G46-2-02 	0 to 0.2			
G46-10-02 	0 to 1.0	R 1/4		
G46-15-02 	0 to 1.5			
G46-2-01-C 	0 to 0.2	R 1/8	Ø 42.5 (For panel mount)	
G46-10-01-C 	0 to 1.0			
G46-2-02-C 	0 to 0.2	R 1/4		
G46-10-02-C 	0 to 1.0			

Pressure gauge with limit indicator

Colour zone type

G36-L/G46-L□ Series



- Red and green zones offer improved visibility of pressure control range
- The indicator adjusts to highlight preferred range.

Part number	□ Clear cover material	Pressure range [MPa]	Connection thread	Outside diameter [mm]
G36-2-01-L□ ●	-, N	0 to 0.2	R 1/8	Ø 37.5
G36-4-01-L□ ●	-, N	0 to 0.4		
G36-10-01-L□ ●	-, N	0 to 1.0		
G46-2-01-L□ ●	-, N	0 to 0.2	R 1/8	Ø 42.5
G46-4-01-L□ ●	-, N	0 to 0.4		
G46-10-01-L□ ●	-, N	0 to 1.0		
G46-2-02-L□ ●	-, N	0 to 0.2	R 1/4	
G46-4-02-L□ ●	-, N	0 to 0.4		
G46-10-02-L□ ●	-, N	0 to 1.0		

□: Nothing

(-): Polycarbonate

N: Nylon

Large flow lubricator

AL800/900 Series



- Individual lubrication
- Large flow type
- Max. operating pressure 1.0 MPa
- Temperature range -5 to 60 °C.

Part number	Port size	Min. operating flow [Nl/min]	Bowl capacity	Recommended lubricant
AL800-F14 ●	G 1 1/2	650	380 cm ³	ISO VG32
EAL900-F20 ●	G 2	1800		

* Conditions: inlet pressure 7 bar.

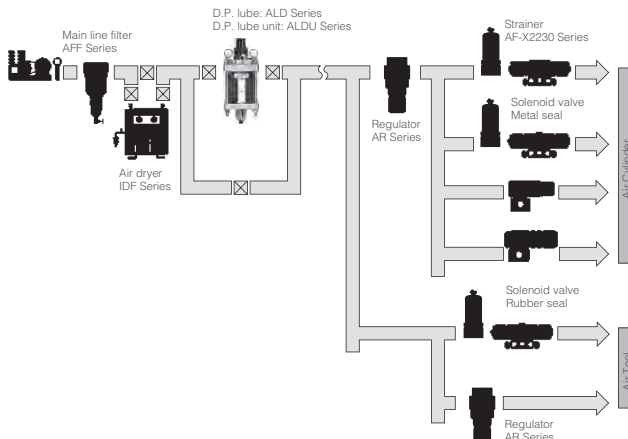
D.P. Lube unit

ALDU600/900 Series



- Creates a quality oil mist using adjustable differential pressure
- Oil consumption only approx. 10% compared to ordinary lubes
- Minimal environmental damage
- Operating pressure range 0.15 to 1.0 MPa
- Temperature range 5 to 60 °C.

Part number	Port size	Lube flow [Nl/min]	Amount in bowl
EALDU600-10 ●	Rc 1	90 to 6000	2 L
EALDU900-20 ●	Rc 2	250 to 15000	5 L

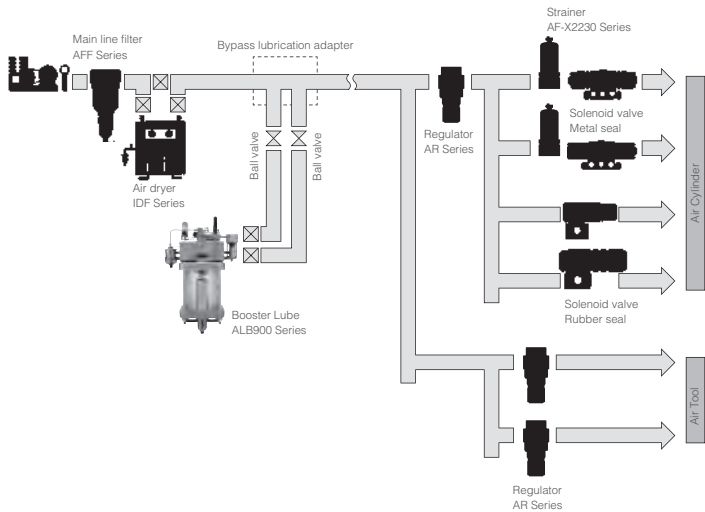


Booster lube ALB900 Series



- No pressure loss in main flow
- Low energy costs
- Oil consumption only approx. 10 % compared to ordinary lubes
- Minimal environmental damage
- Operating pressure range 0.4 to 1.0 MPa
- Temperature range 5 to 60 °C.


Part number	Port size	Rated flow range [Nl/min]	Amount in bowl
ALB900-00-14	IN: Rc 1/4 OUT: Rc 1/2	5000 to 60000	5 L



Mist spray unit LMU Series



- ON/OFF control unit with oil tank
- Manual or automatic operation
- Tank filling without disconnection
- Oil level sensor.

Part number	Air blow circuit	Rated voltage	Float switch	Inlet air pressure [MPa]	Oil tank set pressure range [MPa]
LMU100-53-Q	Available	24 VDC	Yes	0.1 to 1.0	0.05 to 0.2
LMU100-50-Q			No		
LMU200-53-Q 	Not available		Yes		
LMU200-50-Q			No		





Mixing valve

LMV Series



- Mixing valve
- Ambient and fluid temperature: 5 to 60 °C
- Flexible or rigid nozzle
- Nozzle tubing length: 200, 250, 300, 350 mm.



Part number	Nozzle tubing length [mm]	Air blow circuit	Nozzle tubing construction	Inlet air pressure [MPa]	Ambient and fluid temperature [°C]
LMV110-20 	200	Available	Flexible tubing	0.3	5 to 60
LMV110-35	350				
LMV210-20 	200	Not available			
LMV210-35 	350				
LMV120-20	200	Available	Copper tubing		
LMV120-35	350				
LMV220-20 	200	Not available			
LMV220-35	350				

Impulse lubricator

ALI Series



- Directly supplies a constant amount of oil just before the lubrication point
- Ambient and fluid temperature: 5 to 60 °C
- Oil viscosity: 2 to 460 cst (40 °C)
- Max. Number of stations: 10.



Impulse lubricator

Part number	Port size	Operating pressure range [MPa]	Oil feeding volume [cm ³]	Pressure range for oil [MPa]	Oil supply pressure
ALIP1000-01 ●	1/8	0.25 to 0.7	0 to 0.04	0 to 0.4	No pressurized / Pressurized
ALIP1100-01 ●				0.15 to 0.4	Pressurized

Impulse lubricator manifold

Part number	Port size	Operating pressure range [MPa]	Oil feeding volume [cm ³]	Pressure range for oil [MPa]	Oil supply pressure	Number of stations
ALIM1000-□	1/8	0.25 to 0.7	0 to 0.04	0 to 0.4	No pressurized/ Pressurized	2, 3, 4, 5, 6, 7, 8, 9, 10
ALIM1100-□				0.15 to 0.4	Pressurized	

□: Number of stations

Our highlighted product for you

Refrigeration air dryer

IDFA Series



- State of the art design ensures a constant 3 °C pressure dew point
- High efficiency heat exchanger
- Environmentally ozone friendly R134a and R407C refrigerant
- Conforms to stringent ISO 8573-1 standards (-, 4, -)
- Simple control system, incorporating an easy to read evaporator gauge
- Stainless steel heat exchanger providing long life and low pressure drops
- Compact design for ease of installation
- Ø 10 mm One-touch condensate drain port.

Part number	3 °C	7 °C	10 °C	3 °C	7 °C	10 °C
	l/min			m³/h		
IDFA3E-23 ●	200	250	280	12	15	17
IDFA4E-23 ●	400	510	560	24	31	34
IDFA6E-23-K ●	600	765	840	36	46	50
IDFA8E-23-K ●	1080	1375	1515	65	83	91
IDFA11E-23-K ●	1330	1690	1865	80	101	112
IDFA15EI-23-K ●	2000	2540	2800	120	152	168
IDFA22E-23-K ●	3030	3850	4235	182	231	254
IDFA37E-23-K ●	4550	5780	6360	273	347	382
IDFA55E-23-L ●	6500	7200	8500	390	432	510
IDFA75E-23-L ●	11000	12000	13700	660	720	822
IDFA100F-40 ●	14335	17335	20500	860	1050	1230
IDFA125F-40 ●	18335	22000	25835	1100	1320	1550
IDFA150F-40 ●	22335	28165	32000	1340	1640	1920

1) The standard condition (ANR) is under the conditions of 20 °C at atmospheric pressure and relative humidity of 65 %.

2) The performance data for pressure dew point is in accordance with the following operating conditions from ISO 7183: Inlet air pressure: 7 bar; Inlet air temperature: 35 °C (saturated); Cooling air temperature: 25 °C.

Standard specifications		IDFA3E-23	IDFA4E-23	IDFA6E-23-K	IDFA8E-23-K	IDF11E-23-K	IDFA15EI-23-K	IDFA22E-23-K	IDFA37E-23-K	IDFA55E-23-L	IDFA75E-23-L	IDFA100F-40	IDFA125F-40	IDFA150F-40	
Rated conditions	Inlet air pressure [bar]	7 bar													
	Inlet air temperature]	35 °C													
	Ambient temperature	25 °C													
Operating ranges	Inlet air pressure [bar]	1,5–10 bar													
	Inlet air temperature	5–50 °C											5–60 °C		
	Ambient temperature	2–40 °C (Relative Humidity of 85 % or less)											2–45 °C		
Air inlet/outlet port connection		Rc 3/8	Rc 1/2		Rc 3/4		Rc 1	R 1	R 1 1/2		R 2		R 2	R 2 1/2	DIN flange 80
Drain connection [mm]		10											1/2		
Elec- trical Spec	Power source	AC230 V (50 Hz)											Three-phase 400 VAC		
	Rated current [A]	1.2	1.2	1.2	1.4	2.7	3.0	4.3	4.3	5.4	7.9	4.5	5.3	5.9	
Refrigerant		HFC134a						HFC407c							
Dimen- sions	Height [mm]	470	495	495	565	565	578	623	623	800	900	1276	1276	1332	
	Width [mm]	266	270	270	270	270	300	290	290	470	470	670	700	950	
	Depth [mm]	390	435	435	465	465	603	775	855	855	855	1120	1120	1290	
Weight [kg]		18	22	23	27	28	46	54	62	100	116	245	270	350	

Membrane air dryer

IDG Series



- Ideal dryer with high functional reliability
- Application as single device or for integration in existing air preparation devices-combinations
- No external energy supply required
- Non-fluorocarbon
- The air is exchanged in the membrane and the air moisture is released via the purge air directly to the atmosphere
- Operating pressure range 0.3 to 0.85 (1.0 MPa in case of IDG30~100)
- Temperature range -5 to 55 °C (50 °C in case of IDG30~100).

Part number	Port size	Purge [l/min]	Outlet flow [l/min]	Applicable series	Atmospheric dew point [°C]
IDG1-F02 ●	G 1/4	2.5	10	—	-20
IDG3-F01	G 1/8	6	25	AC20	-15
IDG3H-F01	G 1/8	3	25		-20
IDG5-F02 ●	G 1/4	12	50		-15
IDG5H-F02 ●	G 1/4	6	50		-20
IDG10-F02 ●	G 1/4	25	100	AC30	-15
IDG10H-F02 ●	G 1/4	11	100		-20
IDG20-F02 ●	G 1/4	50	200		-15
IDG20H-F02	G 1/4	22	200		-20
IDG30A-F03 ●	G 3/8	60	300	AC40	-15
IDG30HA-F03	G 3/8	29	300		-40
IDG30LA-F03 ●	G 3/8	18	75		-20
IDG50A-F03 ●	G 3/8	86	500		-15
IDG50HA-F03	G 3/8	50	500		-40
IDG50LA-F03 ●	G 3/8	25	110		-20
IDG60-F04 ●	G 1/2	125	600	AMH350C	-15
IDG60H-F04	G 1/2	65	600	AC40	-40
IDG60LA-F04	G 1/2	54	170		-60
IDG60SA-F04	G 1/2	25	50	AMH450C	-20
IDG75-F04	G 1/2	150	750		-15
IDG75H-F04	G 1/2	80	750	AC40	-40
IDG75LA-F04	G 1/2	68	240		-60
IDG75SA-F04	G 1/2	40	100	AMH450C	-20
IDG100-F04 ●	G 1/2	190	1000		-15
IDG100H-F04	G 1/2	110	1000	AC40	-40
IDG100LA-F04	G 1/2	100	300		-60
IDG100SA-F04	G 1/2	80	150		

1) Rated conditions are 0.7 MPa of inlet air pressure and 25 °C of inlet air temperature.

Bracket assembly

Sizes	3	5	10	20	30	50	60	75	100
Mounting	BM59	BM59	BM61	BM63	BM64	BM64	BM65	BM65	BM65

Thermo-dryer

With air temperature adjustment function

IDH Series



- Supply compressed air with stable conditions of temperature, dew point, pressure and cleanliness
- All in one integrated unit:
 - Outlet air temperature adjustment range: 15 to 30 °C
 - Outlet air temperature stability: ± 0.1 °C
 - Outlet air set pressure range: 0.15 to 0.85 MPa
 - Outlet air pressure dew point: 10 °C
 - Nominal filtration rating: 0.01 μm
- Remote operation, stop and error signal outputs
- Control temperature failure alarm
- Operating pressure range 0.3 to 1.0 MPa
- Ambient temperature range 15 to 35 °C.

Part number	Temperature control method	Air flow capacity [l/min (ANR)]	Port size	Outlet air temperature adjustment range [°C]	Outlet air temperature stability [°C]	Filter nominal filtration rating
IDHA4-23	Heater operation	100 to 500	Rc 3/8	15 to 30 ¹⁾	± 0.1 ²⁾	0.01 μm (99.9 % filtration efficiency)
IDHA6-23	PID control	200 to 800	Rc 1/2			

1) Possible to extend depending on the conditions

2) Performance when the operation of each part is stable without fluctuations in operating conditions and power supply.

Compressed air preparation filters

Main line filter

AFF Series



- Series AFF is mounted to main piping to remove impurities like oil, water and particles in compressed air
- Fluid: compressed air
- Filtration rating: 3 μm (filtration efficiency: 99 %)
- Automatic drain standard (different versions possible)
- Modular connection
- Operating pressure range 0.1 to 1.0 MPa
- Temperature range 5 to 60 °C.

Part number	Port size	Rated flow [l/min]	Rated flow [m³/h]	Spare filter element
AFF2C-F02D	G 1/4	300	18	AFF-EL2B
AFF4C-F03D ●	G 3/8	750	45	AFF-EL4B
AFF8C-F04D ●	G 1/2	1500	90	AFF-EL8B
AFF11C-F06D ●	G 3/4	2200	132	AFF-E11B

Main line filter

AFF□D Series



- AFF series main line filter removes both water droplets and solid particles
- Fluid: compressed air
- Filtration rating: 1 μm (filtration efficiency: 99 %)
- Automatic drain standard
- Temperature range -5 to 60 °C (No freezing)
- Water droplet removal ratio: 99 %
- An element service indicator is fitted as standard.

Part number	Port size	Rated flow [m ³ /min]	Spare filter element	Max. operating pressure [MPa]
AFF70D-F10	G 1	7	AFF-EL70D	1
AFF80D-F14	G 1 1/2	11	AFF-EL80D	
AFF90D-F20	G 2	14.5	AFF-EL90D	
AFF70D-F10-H	G 1	7	AFF-EL70D	1,6
AFF80D-F14-H	G 1 1/2	11	AFF-EL80D	
AFF90D-F20-H	G 2	14.5	AFF-EL90D	

Mist separator

AM Series



- Fluid: compressed air
- Filtration rating: 0.3 μm (filtration efficiency: 99.9 %)
- Automatic drain standard (different versions possible)
- Modular connection
- Operating pressure range 0.1 to 1.0 MPa
- Temperature range 5 to 60 °C.

Part number	Port size	Rated flow [l/min]	Rated flow [m ³ /h]	Spare filter element
AM150C-F02D ●	G 1/4	300	18	AM-EL150
AM250C-F03D	G 3/8	750	45	AM-EL250
AM350C-F04D ●	G 1/2	1500	90	AM-EL350
AM450C-F06D ●	G 3/4	2200	132	AM-EL450

Mist separator

AM□D Series



- Fluid: compressed air
- Filtration rating: 0.1 μm (filtration efficiency: 95 %)
- Automatic drain standard
- Temperature range -5 to 60 °C (No freezing)
- Oil mist density at outlet: 1 mg/m³ or less
- An element service indicator is fitted as standard.

Part number	Port size	Rated flow [m ³ /min]	Spare filter element	Max. operating pressure [MPa]
AM70D-F10	G 1	7	AM-EL70D	1
AM80D-F14	G 1 1/2	11	AM-EL80D	
AM90D-F20	G 2	14.5	AM-EL90D	
AM70D-F10-H	G 1	7	AM-EL70D	1,6
AM80D-F14-H	G 1 1/2	11	AM-EL80D	
AM90D-F20-H	G 2	14.5	AM-EL90D	

Micro-mist separator

AMD Series



- Fluid: compressed air
- Filtration rating: 0.01 μm (filtration efficiency: 99.9 %)
- Automatic drain standard (different versions possible)
- Modular connection
- Operating pressure range 0.1 to 1.0 MPa
- Temperature range 5 to 60 °C.

Part number	Port size	Rated flow [l/min]	Rated flow [m ³ /h]	Spare filter element
AMD150C-F02D	G 1/4	200	12	AMD-EL150
AMD250C-F03D ●	G 3/8	500	30	AMD-EL250
AMD350C-F04D ●	G 1/2	1000	60	AMD-EL350
AMD450C-F06D ●	G 3/4	2000	120	AMD-EL450

Micro-mist separator

AMD□□ Series



- Fluid: compressed air
- Filtration rating: 0.01 μm (filtration efficiency: 99.9 %)
- Automatic drain standard
- Temperature range -5 to 60 °C (No freezing)
- Oil mist density at outlet: 0.1 mg/m³ or less
- An element service indicator is fitted as standard.

Part number	Port size	Rated flow [m ³ /min]	Spare filter element	Max. operating pressure [MPa]
AMD70D-F10	G 1	7	AMD-EL70D	1
AMD80D-F14	G 1 1/2	11	AMD-EL80D	
AMD90D-F20	G 2	14.5	AMD-EL90D	
AMD70D-F10-H	G 1	7	AMD-EL70D	1,6
AMD80D-F14-H	G 1 1/2	11	AMD-EL80D	
AMD90D-F20-H	G 2	14.5	AMD-EL90D	

Micro-mist separator with prefilter

AMH Series



- The conventional pneumatic pressure line AM + AMD series have been integrated to achieve a reduction in installation space, savings in piping installation labour, and reduced costs
- Fluid: Compressed air
- Filtration rating: 0.01 μm (Filtration efficiency: 99.9 %)
- With element service indicator
- Automatic drain standard (different versions possible)
- Modular connection (AMH150C to 550C)
- Operating pressure range 0.1 to 1.0 MPa
- Temperature range 5 to 60 °C.

Part number	Port size	Rated flow [l/min]	Rated flow [m ³ /h]	Spare filter element
AMH150C-F02D-T	G 1/4	200	12	AMH-EL150
AMH250C-F03D-T ●	G 3/8	500	30	AMH-EL250
AMH350C-F04D-T ●	G 1/2	1000	60	AMH-EL350
AMH450C-F06D-T ●	G 3/4	2000	120	AMH-EL450
AMH550C-F10D-T	G 1	3700	222	AMH-EL550
AMH650-F14D-T	G 1 1/2	6000	360	AMH-EL650
AMH850-F20D-T	G 2	12000	720	AMH-EL850

Super mist separator

AME Series



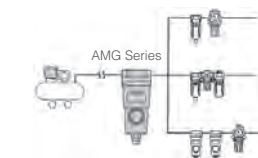
- Due to its special configuration, series AME indicates the life of the filter element by a colour change. Accordingly, the replacing time can be judged visually (a red colour indicates the replacing time)
- Filtration rating: 0.01 μm (Filtration efficiency: 99.9 %)
- Modular connection (AME150C to 550C)
- Operating pressure range 0.05 to 1.0 MPa
- Temperature range 5 to 60 °C.

Part number	Port size	Rated flow [l/min]	Rated flow [m ³ /h]	Spare filter element
AME150C-F02 ●	G 1/4	200	12	AME-EL150
AME250C-F03 ●	G 3/8	500	30	AME-EL250
AME350C-F04 ●	G 1/2	1000	60	AME-EL350
AME450C-F06 ●	G 3/4	2000	120	AME-EL450
AME550C-F10 ●	G 1	3700	222	AME-EL550
AME650-F14	G 1 1/2	6000	360	AME-EL650
AME850-F20	G 2	12000	720	AME-EL850

Water separator

Water separator

AMG Series



- Fluid: Compressed air
- Water separation rate 99 %
- Standard automatic drain
- Lower pressure drop
- Modular connection (AMG150C to 550C)
- Operating pressure range 0.1 to 1.0 MPa
- Temperature range 5 to 60 °C.

Part number	Port size	Rated flow [l/min]	Spare filter element
AMG150C-F01C ● *	G 1/8	300	AMG-EL150
AMG250C-F02D ●	G 1/4	750	AMG-EL250
AMG350C-F03D ●	G 3/8	1500	AMG-EL350
AMG350C-F04D ●	G 1/2	1500	AMG-EL350
AMG450C-F04D ●	G 1/2	2200	AMG-EL450
AMG550C-F06D ●	G 3/4	3500	AMG-EL550
AMG650-F10D ●	G 1	6000	AMG-EL650
AMG650-F14D ●	G 1 1/2	6000	AMG-EL650
AMG850-F20D ●	G 2	12000	AMG-EL850

* Operating pressure range 0.15 to 1.0 MPa.

Odour removal filter

Odour removal

AMF Series



- Active carbon filter for filtering odours
- Fluid: Compressed air
- Filtration rating: 0.01 µm (Filtration efficiency: 99.9 %)
- Modular connection (AMF150C to 550C)
- Operating pressure range 0.05 to 1.0 MPa
- Temperature range 5 to 60 °C.

Part number	Port size	Rated flow [l/min]	Rated flow [m³/h]	Spare filter element
AMF150C-F02 ●	G 1/4	200	12	AMF-EL150
AMF250C-F03 ●	G 3/8	500	30	AMF-EL250
AMF350C-F04 ●	G 1/2	1000	60	AMF-EL350
AMF450C-F06 ●	G 3/4	2000	120	AMF-EL450
AMF550C-F10 ●	G 1	3700	222	AMF-EL550
AMF650-F14	G 1 1/2	6000	360	AMF-EL650
AMF850-F20	G 2	12000	720	AMF-EL850

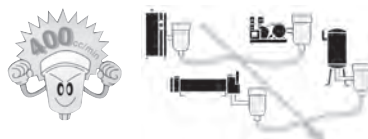
Related products

Heavy duty auto drain

ADH4000 Series



- Suitable for dirty water drain
- Easy maintenance
- No need for electric power and no waste of air.



Part number	Port size	Port size drain	Condensate quantity	Bracket set
ADH4000-F04 ●	G 1/2	G 1/2	400 cc/min	BM58

Clean exhaust filter

SFE Series



- High precision filtration:
 - Cleanliness class: 4. ISO14644-1
 - Filtration rating: 0.01 μm
 - Filtration efficiency: 99.99 %
- Includes silencer function. Noise reduction: 30 dB or more
- 3 mounting variations:
 - Male thread type
 - Plug-in type
 - One-touch fitting type
- Bracket available
- Flow capacity: from 3 to 200 l/min.

Part number	Port type	Port size	Max. flow capacity [l/min (ANR)]	Filtration rating ¹⁾ [μm]	Noise reduction [dB] ¹⁾	Differential pressure proof ²⁾ (Maximum operating pressure) [MPa]
SFE11 ●	Male thread	M5 x 0.8	3	0.01 (Trapping efficiency 99.99 %)	30	0.1
SFE42 ●		R 1/8	65			
SFE52 ●			130			
SFE53 ●		R 1/4	200			
SFE73 ●	Plug-in	Ø 4	30			
SFE3A ●		Ø 6	65			
SFE4B ●		Ø 8	130			
SFE5C ●		Ø 10	200			
SFE7D ●	One-touch fitting	Ø 4	30			
SFE3F ●		Ø 6	65			
SFE4G ●		Ø 8	130			
SFE5H ●		Ø 10	200			
SFE7J ●						

1) Based on SMC's measuring conditions

2) Pressure applied to SFE, and not supply pressure to the equipment that SFE is mounted to (e.g. solenoid valve, cylinder).

Accessories

Part number	Model	Description
SFE-BR3	SFE3	Bracket
SFE-BR4	SFE4	Bracket
SFE-BR5	SFE5	Bracket
SFE-BR7	SFE7	Bracket

Auto drain valve

AD402-A Series



- Drain type: float type
- Fluid: compressed air
- Operating pressure: from 0.1 to 1.0 MPa
- Bowl material: polycarbonate, metal, nylon
- Drain discharge: max. 100 cm³/cycle
- Maintenance: one-touch mounting, without using a tool.

Part number	Port size	Port size drain	Auto drain valve type
AD402-F02D-A	G 1/4	G 3/8	Normally open
AD402-F03D-A	G 3/8		
AD402-F04D-A	G 1/2		
AD402-F02C-A	G 1/4		Normally closed
AD402-F03C-A	G 3/8		
AD402-F04C-A	G 1/2		