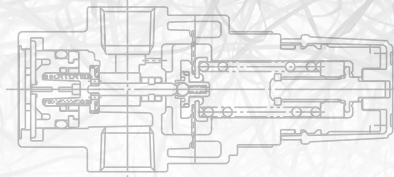


Modular F.R.L. Pressure Control Equipment



- 1** Indication of replacement of elements, inspection items p. 245
- 2** Troubleshooting p. 246

3 Details of replacement parts

		Replacement Parts	Replacement Procedure
AC-A	Air Combination	p. 249	p. 431
AC-B	Air Combination	p. 250	—
ACG	Air Combination	p. 251	—
AF10-A to AF60-A	Air Filter	p. 253	p. 434
AFM20-A to AFM40-A	Mist Separator	p. 254	p. 445
AFD20-A to AFD40-A	Micro Mist Separator	p. 254	p. 447
AR10-A to AR40-A	Regulator	p. 255	p. 449
AR20-B to AR60-B	Regulator	p. 256	p. 454
AR20K-B to AR60K-B	Regulator with Backflow Function	p. 256	p. 456
AL10-A to AL60-A	Lubricator	p. 257	p. 461
AW10-A to AW40-A	Filter Regulator	p. 258	p. 469
AW20-B to AW60-B	Filter Regulator	p. 259	p. 485
AW20K-B to AW60K-B	Filter Regulator with Backflow Function	p. 259	p. 488
AWM20 to AWM40	Mist Separator Regulator	p. 260	p. 497
AWD20 to AWD40	Micro Mist Separator Regulator	p. 260	p. 503
ARG20(K)/30(K)/40(K)	Regulator with Built-in Pressure Gauge	p. 261	p. 509
AWG20/30/40	Filter Regulator with Built-in Pressure Gauge	p. 262	p. 515
AWG20K/30K/40K	Filter Regulator with Built-in Pressure Gauge with Backflow Function	p. 263	—
AR425 to 935	Pilot Operated Regulator	p. 264	p. 522
AMR3000 to 6000	MR Unit (Regulator with Mist Separator)	p. 265	p. 526
ARM5A	Compact Manifold Regulator/Centralized Supply Type	p. 266	p. 527
ARM5B	Compact Manifold Regulator/Individual Supply Type	p. 267	p. 527
ARM5S	Regulator/Single Unit Type	p. 268	p. 527
ARM10	Regulator/Single Unit Type	p. 269	p. 531
ARM11A	Compact Manifold Regulator/Common Supply Type	p. 270	p. 531
ARM11B	Compact Manifold Regulator/Individual Supply Type	p. 271	p. 531
ARM11A/B	Compact Manifold Regulator/Options	p. 272	p. 531

Actuators

Modular F.R.L.
Pressure Control Equipment

Air Preparation
Equipment

Industrial Filters

Replacement
Procedure

Actuators

Modular F.R.L.
Pressure Control Equipment

Industrial Filters

Modular F.R.L. Pressure Control Equipment

1 Indication of replacement of elements, inspection items

The following describes the general contents of the element replacement and regular check.

Indication of replacement of air filter, inspection items

■ Replacement standards

<Element replacement>

The differential pressure (pressure drop) between the primary side and secondary side reaches 0.1 MPa. Even when any pressure differential does not occur, replace the element every two years.

■ Inspection items

1) Checking of external leak or case crack.

If the case is cracked, this may lead to a serious accident, such as case rupture. So, replace the case immediately and locate the cause. If the case is contaminated significantly and the internal status cannot be checked, clean the case with neutral detergent. At this time, never use solvent or machine cleaning solution.

2) Functional inspection of drain discharge mechanism

Check that the drain mechanism functions correctly without fail and that the drain is discharged periodically for manual type.

If the drain is produced excessively, a trouble may occur in the purification equipment on the upstream side.

■ Probable troubles (Reference)

Refer to the "Troubleshooting" for air filter/auto drain. (p. 246)

Regulator inspection items

■ Inspection items

Check the set pressure level before starting up the equipment. If the set pressure level is beyond the specified range, locate the cause.

(Be sure to locate the cause before starting the readjustment.) Additionally, check the following points during periodic inspection.

1) Functional inspection and grease-up of the valve body (including the valve guide)

2) Functional inspection and grease-up of the valve spring

Check for rust, breakage, or permanent settling.

3) Checking of setting function and relief function (Check the functions by increasing or decreasing the setting.)

■ Probable troubles (Reference)

Refer to the "Troubleshooting" for regulator. (p. 247)

Lubricator inspection items

■ Inspection items

① Inspection of dripping volume: Inspect this item when starting the equipment operation.

② Check the oil status inside the case. Check for drain entry.

③ Check for air leak inside the case or air backflow on the secondary side.

■ Probable troubles (Reference)

Refer to the "Troubleshooting" for lubricator. (p. 248)

2 Troubleshooting

The following describes the general contents of the troubleshooting.

[Air filter/Auto drain]

Trouble (Symptom)	Cause	Corrective action
The pressure drop is large and the specified flow rate cannot be obtained.	1. The element is clogged.	1. Replace the element.
The air leaks from the portion between the bowl and body.	1. The bowl O-ring is damaged.	1. Replace the bowl O-ring. Apply the grease to the bowl O-ring, and then assemble it into the bowl.
The air leaks from the bowl.	1. The bowl is damaged.	1. Replace the bowl assembly or replace the bowl with a metallic bowl.
The air leaks from the drain cock.	1. A foreign object is caught in the valve of the drain cock.	1. Open the drain cock for several seconds to blow out the foreign object.
	2. The drain cock seat is damaged.	2. Replace the bowl assembly.
The drain is not discharged even when the drain cock is opened.	1. The discharge port of the drain cock is clogged with solid foreign object.	1. Replace the bowl assembly.
An excessive amount of drain is discharged to the pipe at the outlet.	1. The drain level exceeds the baffle.	1. Open the drain cock to discharge the drain, and then replace the element.

Modular F.R.L. Pressure Control Equipment

2 Troubleshooting

The following describes the general contents of the troubleshooting.

[Regulator]

Trouble (Symptom)	Cause	Corrective action
The pressure cannot be regulated.	1. The regulator is installed in a direction opposite to the flow direction.	1. Check the flow direction. If the installation direction is opposite to the flow direction, reinstall the regulator.
	2. The spring is broken.	2. Replace the spring.
	3. The valve spring is broken.	3. Replace the valve spring.
	4. A foreign object is caught in the valve seat or valve O-ring.	4. Remove the valve guide, and then clean the valve, valve seat, and valve O-ring. At this time, apply the grease to the valve O-ring and sliding part after cleaning.
	5. The rubber lining surface of the valve is damaged.	5. Replace the valve.
	6. A foreign object is caught in the check valve seat. (AR20K to AR60K)	6. Replace the check valve assembly.
The set pressure level does not become zero (0) even when the knob is loosened.	1. A foreign object is caught in the valve seat or valve O-ring.	1. Remove the valve guide, and then clean the valve, valve seat, and valve O-ring. At this time, apply the grease to the valve O-ring and sliding part after cleaning.
	2. The rubber seat surface of the valve is damaged.	2. Replace the valve.
	3. The valve spring is broken.	3. Replace the valve spring.
	4. The valve is locked.	4. Clean the sliding surface of the valve O-ring and apply the grease.
	5. A foreign object is caught in the check valve seat. (AR20K to AR60K)	5. Replace the check valve assembly.
The air leaks from the exhaust port in the bonnet.	1. The diaphragm is damaged.	1. Replace the diaphragm assembly.
	2. The piston seal is damaged.	2. Replace the piston assembly or clean it. At this time, apply the grease to the piston seal and sliding surface.
	3. A foreign object is caught in the exhaust valve seat.	3. Clean the exhaust valve seat or replace the diaphragm assembly.
	4. A foreign object is caught in the valve seat or valve O-ring.	4. Remove the valve guide, and then clean the valve, valve seat, and valve O-ring. At this time, apply the grease to the valve O-ring and sliding part after cleaning.
	5. The rubber sheet surface of the valve is damaged.	5. Replace the valve.
	6. The back pressure exceeding the set pressure level is applied to the secondary side.	6. Review the air circuit so that the back pressure exceeding the set pressure level is not applied.
	7. A foreign object is caught in the check valve seat. (AR20K to AR60K)	7. Replace the check valve assembly.

[Regulator]

Trouble (Symptom)	Cause	Corrective action
The air leaks from the portion between the bonnet and body.	1. The bonnet screw is loose.	1. Retighten the bonnet screw.
	2. The diaphragm is damaged.	2. Replace the diaphragm assembly.
The air does not flow backward.	1. A foreign object is caught in the sliding part of the check valve, causing malfunction. (AR20K to AR60K)	1. Replace the check valve assembly.
	2. The check valve is locked. (AR20K to AR60K)	2. Replace the check valve assembly.

[Lubricator]

Trouble (Symptom)	Cause	Corrective action
The oil does not drop even when the air flows.	1. The equipment is not connected correctly.	1. Check the "IN", "OUT", and arrow marks on the equipment. If any incorrect connection is found, connect the equipment again.
	2. The oil volume inside the bowl is insufficient.	2. Supply the oil.
	3. The air consumption flow rate is insufficient.	3. Select an appropriate lubricator with a minimum dripping flow rate suitable for the flow rate to be used.
	4. The damper is damaged.	4. Replace the damper (assembly).
	5. The oil adjustment valve is closed.	5. Open the oil adjustment valve.
	6. The air leaks from the bowl or lubrication plug.	6. Replace the case O-ring or lubrication plug assembly.
	7. The element is clogged.	7. Replace the damper pushing air assembly.
	8. The air leaks from the sight dome.	8. Replace the sight dome assembly.
Air bubbles are mixed in the oil drop.	1. The oil passage pipe seal is damaged.	1. Replace the damper retainer air assembly.
	2. The oil volume inside the bowl is insufficient.	2. Supply the oil.
The air or oil leaks from the sight glass.	1. The sight dome is damaged.	1. Replace the sight dome assembly.
	2. The O-ring is damaged.	2. Replace the sight dome assembly.
The air leaks from the lubrication plug.	1. The O-ring is damaged.	1. Replace the lubrication plug assembly.
The air leaks from the portion between the bowl and body.	1. The bowl O-ring is damaged.	1. Replace the bowl O-ring. Apply the grease to the bowl O-ring and assemble it into the bowl.
The air leaks from the bowl	1. The bowl is damaged.	1. Replace the bowl assembly or replace the bowl with a metallic bowl.

AC-A Series



Air Filter + Regulator + Lubricator AC10-A to AC40-A

Options/Attachments Part No.

Section	Model		Options/Attachments part no.					
			AC10-A	AC20-A	AC25-A	AC30-A	AC40-A	AC40-06-A
			AC10A-A	AC20A-A	—	AC30A-A	AC40A-A	AC40A-06-A
Type		AC10B-A	AC20B-A	AC25B-A	AC30B-A	AC40B-A	AC40B-06-A	
		—	AC20C-A	AC25C-A	AC30C-A	AC40C-A	AC40C-06-A	
		—	AC20D-A	—	AC30D-A	AC40D-A	AC40D-06-A	
Option	Round type	Standard	G27-10-R1	G36-10-□01			G46-10-□01	
		0.02 to 0.2 MPa setting	G27-10-R1 <small>Note 2)</small>	G36-4-□01			G46-4-□01	
Pressure gauge (psi)	Round type (with color zone)	Standard	—	G36-10-□01-L			G46-10-□01-L	
		0.02 to 0.2 MPa setting	—	G36-4-□01-L			G46-4-□01-L	
Attachment	Spacer		Y100-A	Y200-A	Y300-A		Y400-A	Y500-A
	Spacer with bracket		Y100T-A	Y200T-A	Y300T-A		Y400T-A	Y500T-A
	Check valve <small>Note 3, 4)</small>		—	AKM2000-□01-A (□02)-A	AKM3000-(□01)-A □02-A		AKM4000-(□02)-A □03-A	—
	Pressure switch <small>Note 4)</small>		—	IS10M-20-A	IS10M-30-A		IS10M-40-A	IS10M-50-A
	T-spacer <small>Note 3, 4)</small>		Y110-M5-A	Y210-□01-A (□02)-A	Y310-(□01)-A □02-A		Y410-(□02)-A □03-A	Y510-(□02)-A □03-A
	Pressure relief 3 port valve <small>Note 4)</small>		—	VHS20-□01A □02A	VHS30-□02A □03A		VHS40-□03A □04A	VHS40-□06A
	Piping adapter <small>Note 4)</small>		E100-M5-A	□01-A E200-□02-A □03-A	□02-A E300-□03-A □04-A		□02-A E400-□03-A □04-A □06-A	E500-□06-A
	Pressure switch with piping adapter <small>Note 4)</small>		—	□01-A IS10E-20□02-A □03-A	□02-A IS10E-30□03-A □04-A		□02-A IS10E-40□03-A □04-A □06-A	—
Cross spacer <small>Note 4)</small>		Y14-M5-A	Y24-□01-A □02-A	Y34-□01-A □02-A		Y44-□02-A □03-A	Y54-□03-A □04-A	

Note 1) □ in round pressure gauge part numbers indicates a pipe thread type. No indication is necessary for R; however, indicate N for NPT.

Please contact SMC regarding the pipe thread type NPT and the supply of pressure gauge with psi unit display specifications.

Note 2) Standard pressure gauge

Note 3) For F.R.L. units, port sizes without () are standard specifications.

Note 4) Separate spacers are required for modular unit.

Air Combination

AC-B Series

Air Filter + Regulator + Lubricator AC20-B to AC60-B

Options/Attachments Part No.

Section	Model		Options/Attachments part no.								
			AC20-B	AC25-B	AC30-B	AC40-B	AC40-06-B	AC50-B	AC55-B	AC60-B	
			AC20A-B	AC25B-B	AC30B-B	AC40B-B	AC40B-06-B	AC50B-B	AC55B-B	AC60B-B	
Option	Pressure gauge (Note 1)	Round type	Standard			G36-10-□01			G46-10-□01		
		0.02 to 0.2 MPa setting	G36-4-□01						G46-4-□01		
	Round type (with color zone)	Standard	G36-10-□01-L						G46-10-□01-L		
		0.02 to 0.2 MPa setting	G36-4-□01-L						G46-4-□01-L		
	Square embedded type (Note 2)	Standard	GC3-10AS [GC3P-010AS (Pressure gauge cover only)]								
		0.02 to 0.2 MPa setting	GC3-4AS [GC3P-010AS (Pressure gauge cover only)]								
	Digital pressure switch	NPN output, Wiring bottom entry		ISE35-N-25-MLA [ISE35-N-25-M (Switch body only)] (Note 3)							
		NPN output, Wiring top entry		ISE35-R-25-MLA [ISE35-R-25-M (Switch body only)] (Note 3)							
		PNP output, Wiring bottom entry		ISE35-N-65-MLA [ISE35-N-65-M (Switch body only)] (Note 3)							
		PNP output, Wiring top entry		ISE35-R-65-MLA [ISE35-R-65-M (Switch body only)] (Note 3)							
Float type auto drain (Note 4)		N.O.	—	AD38-A				AD48-A			
		N.C.	AD27-A	AD37-A				AD47-A			
Attachment	Spacer		Y200-A	Y300-A	Y400-A	Y500-A	Y600-A				
	Spacer with bracket		Y200T-A	Y300T-A	Y400T-A	Y500T-A	Y600T-A				
	Check valve (Note 5, 6)		AKM2000-□01-A (□02)-A	AKM3000-(□01)-A □02-A	AKM4000-(□02)-A □03-A	—		—		—	
	Pressure switch (Note 6)		IS10M-20-A	IS10M-30-A	IS10M-40-A	IS10M-50-A	IS10M-60-A				
	T-spacer (Note 5, 6)		Y210-□01-A (□02)-A	Y310-(□01)-A □02-A	Y410-(□02)-A □03-A	Y510-(□02)-A □03-A	Y610-□03-A (□04)-A	Y610-(□03)-A □04-A			
	Pressure relief 3 port valve (Note 6)		VHS20-□01A □02A	VHS30-□02A □03A	VHS40-□03A □04A	VHS40-□06A	VHS50-□06A □10A	—			
	Piping adapter (Note 6)		□01-A E200-□02-A □03-A	□02-A E300-□03-A □04-A	□02-A E400-□03-A □04-A □06-A	E500-□06-A	E600-□06-A □10-A				
	Pressure switch with piping adapter (Note 6)		□01-A IS10E-20□02-A □03-A	□02-A IS10E-30□03-A □04-A	□02-A IS10E-40□03-A □04-A □06-A	—		—			
	Cross spacer (Note 6)		Y24-□01-A □02-A	Y34-□01-A □02-A	Y44-□02-A □03-A	Y54-□03-A □04-A	—				

Note 1) □ in part numbers for a round type pressure gauge indicates a pipe thread type. No indication is necessary for R; however, indicate N for NPT. Please contact SMC regarding the connection thread NPT and pressure gauge supply for psi unit specifications.

Note 2) Including one O-ring and 2 mounting screws

Note 3) Lead wire with connector (2 m), adapter, lock pin, O-ring (1 pc.), mounting screw (2 pcs.) are attached. []: Switch body only.
Also, regarding how to order the digital pressure switch, refer to the **Web Catalog**.

Note 4) Minimum operating pressure: N.O. type-0.1 MPa; N.C. type-0.1 MPa (AD27-A) and 0.15 MPa (AD37-A/AD47-A). Please consult with SMC separately for psi and °F unit display specifications.

Note 5) For F.R.L. units, port sizes without () are standard specifications.

Note 6) Separate spacers are required for modular unit.

Actuators

Modular F.R.L.
Pressure Control Equipment

Air Preparation
Equipment

Industrial Filters

Replacement
Procedure

Actuators

Modular F.R.L.
Pressure Control Equipment

Industrial Filters

Air Combination

ACG Series

Air Filter + Regulator + Lubricator ACG20/30/40

Options/Attachments Part No.

Description			Options/Attachments part no.		
		Model	ACG20	ACG30	ACG40
Pressure gauge <small>Note 1)</small>	Standard	0 to 1.0 MPa	GB2-10AS	GB3-10AS	GB4-10AS
	Optional	0 to 0.3 MPa	GB2-3AS	GB3-3AS	GB4-3AS
Float type auto drain <small>Note 2)</small>		N.C.	AD27	AD37	AD47
		N.O.	—	AD38	AD48
Attachments	Spacer		Y200	Y300	Y400
	Spacer with bracket		Y200T	Y300T	Y400T
	Check valve <small>Note 3, 4)</small>		AKM2000-□01, (□02)	AKM3000-(□01), □02	AKM4000-(□02), □03
	Pressure switch <small>Note 4, 5)</small>		IS10M-20	IS10M-30	IS10M-40
	Residual pressure relief 3 port valve <small>Note 4)</small>		VHS20-□01, □02	VHS30-□02, □03	VHS40-□02, □03, □04

Note 1) Contact SMC regarding pressure gauge supply for psi unit specifications.

Note 2) Minimum operating pressure: 0.1 MPa for N.O. type, 0.1 MPa for N.C. type (AD27) and 0.15 MPa for N.C. type (AD37 and 47). Contact SMC for psi and °F specifications.

Note 3) For F.R.L. units, port sizes not in () are for standard application.

Note 4) Separate spacers are required for modular unit.

Note 5) Pressure switch cannot be mounted on the inlet and outlet sides of an ARG with an upward facing knob (optional specification: -Y).

Filter Regulator + Lubricator ACG20A/30A/40A

Options/Attachments Part No.

Description			Options/Attachments part no.		
		Model	ACG20A	ACG30A	ACG40A
Pressure gauge <small>Note 1)</small>	Standard	0 to 1.0 MPa	GB2-10AS	GB3-10AS	GB4-10AS
	Optional	0 to 0.3 MPa	GB2-3AS	GB3-3AS	GB4-3AS
Float type auto drain <small>Note 2)</small>		N.C.	AD27	AD37	AD47
		N.O.	—	AD38	AD48
Attachments	Spacer <small>Note 3, 4)</small>		Y200	Y300	Y400
	Spacer with bracket		Y200T	Y300T	Y400T
	Check valve		AKM2000-□01, (□02)	AKM3000-(□01), □02	AKM4000-(□02), □03
	Residual pressure relief 3 port valve <small>Note 4)</small>		VHS20-□01, □02	VHS30-□02, □03	VHS40-□02, □03, □04

Note 1) Contact SMC regarding pressure gauge supply for psi unit specifications.

Note 2) Minimum operating pressure: 0.1 MPa for N.O. type, 0.1 MPa for N.C. type (AD27) and 0.15 MPa for N.C. type (AD37 and 47). Contact SMC for psi and °F specifications.

Note 3) For F.R.L. units, port sizes not in () are for standard application.

Note 4) Separate spacers are required for modular unit.

Air Filter + Regulator ACG20B/30B/40B

Options/Attachments Part No.

Description			Options/Attachments part no.		
		Model	ACG20B	ACG30B	ACG40B
Pressure gauge <small>Note 1)</small>	Standard	0 to 1.0 MPa	GB2-10AS	GB3-10AS	GB4-10AS
	Optional	0 to 0.3 MPa	GB2-3AS	GB3-3AS	GB4-3AS
Float type auto drain <small>Note 2)</small>		N.C.	AD27	AD37	AD47
		N.O.	—	AD38	AD48
Attachments	Spacer		Y200	Y300	Y400
	Spacer with bracket		Y200T	Y300T	Y400T
	Pressure switch <small>Note 3, 4)</small>		IS10M-20	IS10M-30	IS10M-40
	Residual pressure relief 3 port valve <small>Note 3)</small>		VHS20-□01, □02	VHS30-□02, □03	VHS40-□02, □03, □04

Note 1) Contact SMC regarding pressure gauge supply for psi unit specifications.

Note 2) Minimum operating pressure: 0.1 MPa for N.O. type, 0.1 MPa for N.C. type (AD27) and 0.15 MPa for N.C. type (AD37 and 47). Contact SMC for psi and °F specifications.

Note 3) Separate spacers are required for modular unit.

Note 4) Pressure switch cannot be mounted on the inlet and outlet sides of an ARG with an upward facing knob (optional specification: -Y).

ACG Series

Air Filter + Mist Separator + Regulator ACG20C/30C/40C

Options/Attachments Part No.

Description			Options/Attachments part no.		
		Model	ACG20C	ACG30C	ACG40C
Pressure gauge <small>Note 1)</small>	Standard	0 to 1.0 MPa	GB2-10AS	GB3-10AS	GB4-10AS
	Optional	0 to 0.3 MPa	GB2-3AS	GB3-3AS	GB4-3AS
Options Float type auto drain <small>Note 2)</small>		N.C.	AD27	AD37	AD47
		N.O.	—	AD38	AD48
Attachments	Spacer		Y200	Y300	Y400
	Spacer with bracket		Y200T	Y300T	Y400T
	Pressure switch <small>Note 3, 4)</small>		IS10M-20	IS10M-30	IS10M-40
	Residual pressure relief 3 port valve <small>Note 3)</small>		VHS20-□01, □02	VHS30-□02, □03	VHS40-□02, □03, □04

Note 1) Contact SMC regarding pressure gauge supply for psi unit specifications.

Note 2) Minimum operating pressure: 0.1 MPa for N.O. type, 0.1 MPa for N.C. type (AD27) and 0.15 MPa for N.C. type (AD37 and 47). Contact SMC for psi and °F specifications.

Note 3) Separate spacers are required for modular unit.

Note 4) Pressure switch cannot be mounted on the inlet and outlet sides of an ARG with an upward facing knob (optional specification: -Y).

Filter Regulator + Mist Separator ACG20D/30D/40D

Options/Attachments Part No.

Description			Options/Attachments part no.		
		Model	ACG20D	ACG30D	ACG40D
Pressure gauge <small>Note 1)</small>	Standard	0 to 1.0 MPa	GB2-10AS	GB3-10AS	GB4-10AS
	Optional	0 to 0.3 MPa	GB2-3AS	GB3-3AS	GB4-3AS
Options Float type auto drain <small>Note 2)</small>		N.C.	AD27	AD37	AD47
		N.O.	—	AD38	AD48
Attachments	Spacer		Y200	Y300	Y400
	Spacer with bracket		Y200T	Y300T	Y400T
	Residual pressure relief 3 port valve <small>Note 3)</small>		VHS20-□01, □02	VHS30-□02, □03	VHS40-□02, □03, □04

Note 1) Contact SMC regarding pressure gauge supply for psi unit specifications.

Note 2) Minimum operating pressure: 0.1 MPa for N.O. type, 0.1 MPa for N.C. type (AD27) and 0.15 MPa for N.C. type (AD37 and 47). Contact SMC for psi and °F specifications.

Note 3) Separate spacers are required for modular unit.

Actuators

Modular F.R.L.
Pressure Control Equipment

Air Preparation
Equipment

Industrial Filters

Replacement
Procedure

Actuators

Modular F.R.L.
Pressure Control Equipment

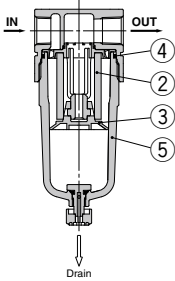
Industrial Filters

AF10-A to AF60-A

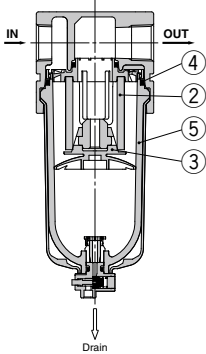


Construction

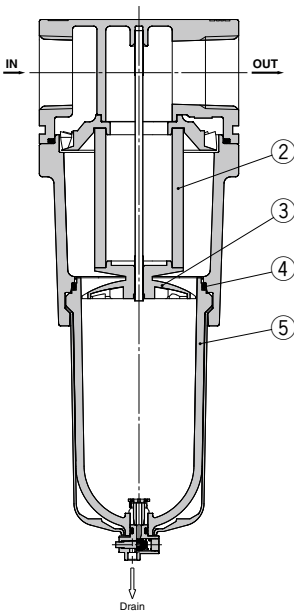
AF10-A/AF20-A



AF30-A to AF40-6-A



AF50-A/AF60-A



Replacement Parts

No.	Description	Material	Part no.					
			AF10-A	AF20-A	AF30-A	AF40-A	AF40-6-A	AF50-A
②	Filter element	Non-woven fabric	AF10P-060S	AF20P-060S	AF30P-060S	AF40P-060S	AF50P-060S	AF60P-060S
③	Baffle	PBT	AF10P-040S ^{Note 2)}	AF22P-040S	AF32P-040S	AF42P-040S	AF50P-040S	AF60P-040S
④	Bowl seal	NBR	C1SFP-260S	C2SFP-260S	C32FP-260S	C42FP-260S		
⑤	Bowl assembly ^{Note 1)}	Polycarbonate	C1SF-A	C2SF-A	C3SF-A	C4SF-A		

Note 1) Bowl seal is included for the AF20-A to AF60-A. Please contact SMC regarding the supply of bowl assembly with psi and °F unit display specifications.

Note 2) The baffle material for the AF10-A (AF10P-040S) only is polyacetal.

Options/Part No.

Optional specifications	Model						
	AF10-A	AF20-A	AF30-A	AF40-A	AF40-6-A	AF50-A	AF60-A
Bracket assembly ^{Note)}	—	AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS	AF52P-050AS	

Note) Assembly of a bracket and 2 mounting screws

Bowl Assembly Part No.

Bowl material	Drain discharge mechanism	Drain port	Other	Model					
				AF10-A	AF20-A	AF30-A	AF40-A	AF40-6-A	AF50-A
Polycarbonate	Manual discharge	With drain cock	—	C1SF-A	C2SF-A	—	—	—	—
		Drain cock with barb fitting	With bowl guard	—	C2SF-C-A	C3SF-A	—	C4SF-A	—
		With drain guide (without valve function)	With bowl guard	—	—	C3SF-W-A	—	C4SF-W-A	—
	Automatic discharge (Auto drain) ^{Note)}	Normally closed (N.C.)	With bowl guard	—	C2SF□-J-A	—	—	—	—
		Normally open (N.O.)	With bowl guard	—	AD27-A	—	—	—	—
		Normally open (N.O.)	With bowl guard	—	AD17-A	AD27-C-A	AD37□-A	AD47□-A	AD48□-A
Nylon	Manual discharge	With drain cock	—	C1SF-6-A	C2SF-6-A	—	—	—	
		Drain cock with barb fitting	With bowl guard	—	C2SF-6C-A	C3SF-6-A	—	C4SF-6-A	
		With drain guide (without valve function)	With bowl guard	—	—	C3SF-6W-A	—	C4SF-6W-A	
	Automatic discharge (Auto drain) ^{Note)}	Normally closed (N.C.)	With bowl guard	—	C2SF□-6J-A	—	—	—	
		Normally open (N.O.)	With bowl guard	—	C2SF□-6CJ-A	C3SF□-6J-A	—	C4SF□-6J-A	
		Normally open (N.O.)	With bowl guard	—	AD17-6-A	AD27-6-A	—	—	
Metal	Manual discharge	With drain cock	—	C1SF-2-A	C2SF-2-A	C3SF-2-A	—	C4SF-2-A	
		With drain guide (without valve function)	With level gauge	—	—	C3LF-8-A	—	C4LF-8-A	
		With level gauge	With level gauge	—	C2SF□-2J-A	C3SF□-2J-A	—	C4SF□-2J-A	
	Automatic discharge (Auto drain) ^{Note)}	Normally closed (N.C.)	With level gauge	—	—	C3LF-8J-A	—	C4LF□-8J-A	
		Normally open (N.O.)	With level gauge	—	AD17-2-A	AD27-2-A	AD37□-2-A	AD47□-2-A	
		Normally open (N.O.)	With level gauge	—	—	AD37□-8-A	—	AD47□-8-A	

Note) Minimum operating pressure: N.O. type—0.1 MPa (AD38-A, AD48-A); N.C. type—0.1 MPa (AD17-A, AD27-A) and 0.15 MPa (AD37-A, AD47-A).

Bowl assembly for the AF20-A to AF60-A models comes with a bowl seal.

□ in bowl assembly part numbers indicates a pipe thread type (applicable tubing for auto drain).

No indication is necessary for Rc thread; however, indicate N for NPT thread, and F for G thread.

(For auto drain, Nil: ø10, N: ø3/8")

Please consult with SMC separately for psi and °F unit display specifications.

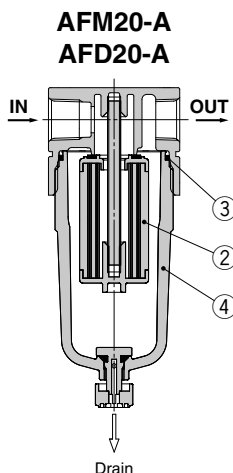
* The numbers correspond with those in the "Construction" of the AF series in the Best Pneumatics catalog.

Mist Separator / Micro Mist Separator

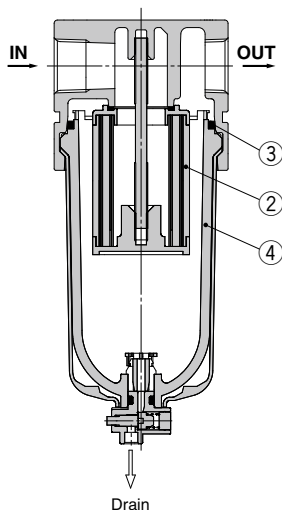
AFM20-A to AFM40-A / AFD20-A to AFD40-A

The Replacement Procedure is on p. 445

Construction



AFM30-A to AFM40-06-A / AFD30-A to AFD40-06-A



* The numbers correspond with those in the "Construction" of the AFM/AFD series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Material	Part no.			
			AFM20-A AFD20-A	AFM30-A AFD30-A	AFM40-A AFD40-A	AFM40-06-A AFD40-06-A
②	Element assembly	AFM20 to 40 AFD20 to 40	— —	AFM20P-060AS AFD20P-060AS	AFM30P-060AS AFD30P-060AS	AFM40P-060AS AFD40P-060AS
③	Bowl seal	NBR	C2SFP-260S	C32FP-260S	C42FP-260S	
④	Bowl assembly ^{Note)}	Polycarbonate	C2SF-A	C3SF-A	C4SF-A	

Note) Bowl seal is included. Please contact SMC regarding the supply of bowl assembly with psi and °F unit display specifications.

Options/Part No.

Optional specifications	Model			
	AFM20-A AFD20-A	AFM30-A AFD30-A	AFM40-A AFD40-A	AFM40-06-A AFD40-06-A
Bracket assembly ^{Note 1)}	AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS
Float type auto drain ^{Note 2, 3)}	N.C.	AD27-A	AD37-A	AD47-A
	N.O.	—	AD38-A	AD48-A

Note 1) Assembly of a bracket and 2 mounting screws

Note 2) Minimum operating pressure: N.O. type—0.1 MPa; N.C. type—0.1 MPa (AD27-A) and 0.15 MPa (AD37-A/AD47-A).

Please consult with SMC separately for psi and °F unit display specifications.

Note 3) Please consult with SMC for details on drain piping to fit NPT or G port sizes.

Bowl Assembly Part No.

Bowl material	Drain discharge mechanism	Drain port	Other	Model				
				AFM20-A AFD20-A	AFM30-A AFD30-A	AFM40-A AFD40-A	AFM40-06-A AFD40-06-A	
Polycarbonate	Manual discharge	With drain cock	—	C2SF-A	—	—	—	
		With bowl guard	With bowl guard	C2SF-C-A	C3SF-A	C4SF-A	—	
		Drain cock with barb fitting	With bowl guard	—	C3SF-W-A	C4SF-W-A	—	
	^{Note)} Automatic discharge (Auto drain)	With drain guide (without valve function)	With bowl guard	—	C2SF□-J-A	—	—	—
		With bowl guard	With bowl guard	C2SF□-CJ-A	C3SF□-J-A	C4SF□-J-A	—	
		Normally closed (N.C.)	With bowl guard	—	AD27-A	—	—	—
Nylon	Manual discharge	Normally open (N.O.)	With bowl guard	—	AD38□-A	—	AD48□-A	
		With drain cock	—	C2SF-6-A	—	—	—	
		With bowl guard	With bowl guard	C2SF-6C-A	C3SF-6-A	C4SF-6-A	—	
^{Note)} Automatic discharge (Auto drain)	Drain cock with barb fitting	With bowl guard	—	C3SF-6W-A	C4SF-6W-A	—	—	
	With drain guide (without valve function)	With bowl guard	—	C2SF□-6J-A	—	—	—	
	With bowl guard	With bowl guard	C2SF□-6CJ-A	C3SF□-6J-A	C4SF□-6J-A	—		
Metal	Manual discharge	Normally closed (N.C.)	With bowl guard	—	AD27-6-A	—	—	
		With bowl guard	With bowl guard	AD27-6C-A	AD37□-6-A	AD47□-6-A	—	
		Normally open (N.O.)	With bowl guard	—	AD38□-6-A	AD48□-6-A	—	
	^{Note)} Automatic discharge (Auto drain)	With drain cock	—	C2SF-2-A	C3SF-2-A	C4SF-2-A	—	
		With level gauge	—	C3LF-8-A	C4LF-8-A	—	—	
		With drain guide (without valve function)	With level gauge	—	C2SF□-2J-A	C3SF□-2J-A	C4SF□-2J-A	—
^{Note)} Automatic discharge (Auto drain)	With level gauge	With level gauge	—	C3LF□-8J-A	C4LF□-8J-A	—	—	
	With level gauge	With level gauge	—	AD27-2-A	AD37□-2-A	AD47□-2-A	—	
	With level gauge	With level gauge	—	AD37□-8-A	AD47□-8-A	—		
^{Note)} Automatic discharge (Auto drain)	With level gauge	With level gauge	—	AD38□-2-A	AD48□-2-A	—	—	
	With level gauge	With level gauge	—	AD38□-8-A	AD48□-8-A	—	—	

Note) Minimum operating pressure: N.O. type—0.1 MPa (AD38-A, AD48-A); N.C. type—0.1 MPa (AD17-A, AD27-A) and 0.15 MPa (AD37-A, AD47-A).

Bowl assembly for the AFM20-A to AFM40-06-A, AFD20-A to AFD40-06-A models comes with a bowl seal.

□ in bowl assembly part numbers indicates a pipe thread type (applicable tubing for auto drain). No indication is necessary for Rc thread; however, indicate N for NPT thread, and F for G thread. (For auto drain, Nil: ø10, N: ø3/8")

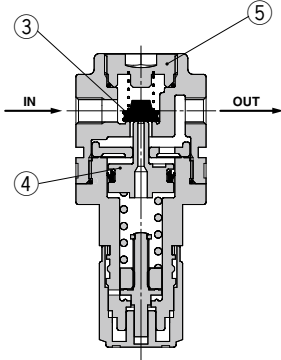
Please consult with SMC separately for psi and °F unit display specifications.

AR10-A to AR40-A

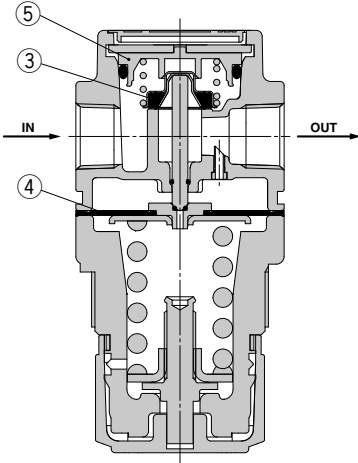


Construction

AR10-A



AR20-A to 40-06-A



* The numbers correspond with those in the "Construction" of the AR series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Material	Part no.					
			AR10-A	AR20-A	AR25-A	AR30-A	AR40-A	AR40-06-A
③	Valve assembly	Stainless steel/HNBR	AR10P-090S	AR22P-060AS	AR32P-060AS	AR42P-060AS		
④	Diaphragm assembly	Weatherable NBR	AR10P-150AS ^{Note 1)}	AR22P-150AS	AR32P-150AS	AR42P-150AS		
⑤	Valve guide assembly	Polyacetal	131329	AR22P-050AS	AR32P-050AS	AR42P-050AS		

Note) The AR10-A is a piston type. Assembly of a piston and a seal (KSYP-13).

Options/Part No.

Optional specifications		Model					
		AR10-A	AR20-A	AR25-A	AR30-A	AR40-A	AR40-06-A
Bracket assembly ^{Note 1)}		AR12P-270AS	AR22P-270AS	AR27P-270AS	AR32P-270AS	AR42P-270AS	AR42P-270AS
Set nut		AR12P-260S	AR22P-260S	AR22P-260S	AR32P-260S	AR42P-260S	AR42P-260S
Pressure gauge	Round type ^{Note 2)}	Standard	G27-10-R1	G36-10-□01		G46-10-□01	
		0.02 to 0.2 MPa setting	G27-10-R1 ^{Note 3)}	G36-4-□01		G46-4-□01	
	Round type (with color zone) ^{Note 2)}	Standard	—	G36-10-□01-L		G46-10-□01-L	
		0.02 to 0.2 MPa setting	—	G36-4-□01-L		G46-4-□01-L	

Note 1) Assembly of a bracket and set nuts

Note 2) □ in round pressure gauge part numbers indicates a pipe thread type. No indication is necessary for R; however, indicate N for NPT.

Please contact SMC regarding the pipe thread type NPT and the supply of pressure gauge with psi unit display specifications.

Note 3) Standard pressure gauge

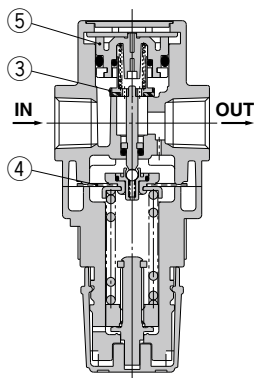
Regulator Regulator with Backflow Function

AR20-B to AR60-B / AR20K-B to AR60K-B

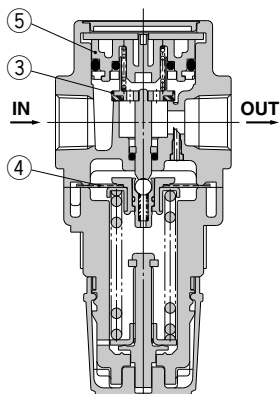
The Replacement Procedure is on p. 454

Construction

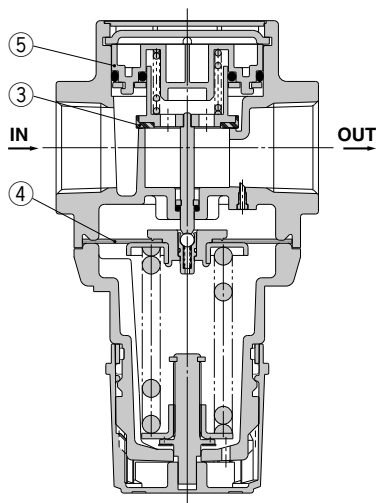
AR20(K)-B/AR25(K)-B



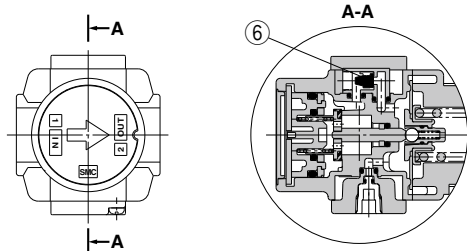
AR30(K)-B/AR40(K)-B



AR50(K)-B/AR60(K)-B



AR20K-B to AR60K-B (Regulator with Backflow Function)



* The numbers correspond with those in the "Construction" of the AR series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Material	Part no.					
			AR20(K)-B	AR25(K)-B	AR30(K)-B	AR40(K)-B	AR40(K)-06-B	AR50(K)-B
③	Valve	Brass/HNBR	AR20P-410S	AR25P-410S	AR30P-410S	AR40P-410S	AR50P-410S	AR60P-410S
④	Diaphragm assembly	Weatherable NBR	AR20P-150AS	AR25P-150AS	AR30P-150AS	AR40P-150AS	AR50P-150AS	
⑤	Valve guide assembly	Polyacetal	AR20P-050AS	AR25P-050AS	AR30P-050AS	AR40P-050AS	AR50P-050AS	AR60P-050AS
⑥	Check valve assembly ^{Note)}	—	AR23KP-020AS					

Note) Check valve assembly is applicable for a regulator with backflow function (AR20K-B to AR60K-B) only. Assembly of a check valve cover, check valve body assembly and 2 mounting screws

Options/Part No.

Option		Model	AR20(K)-B	AR25(K)-B	AR30(K)-B	AR40(K)-B	AR40(K)-06-B	AR50(K)-B	AR60(K)-B
Bracket assembly ^{Note 1)}			AR23P-270AS	AR28P-270AS	AR33P-270AS	AR43P-270AS		AR52P-270AS	
Set nut			AR23P-260S	AR28P-260S	AR33P-260S	AR43P-260S		— ^{Note 2)}	
Pressure gauge	Round type ^{Note 3)}	Standard		G36-10-□01			G46-10-□01		
		0.02 to 0.2 MPa setting		G36-4-□01			G46-4-□01		
	(with color zone) ^{Note 3)}	Standard		G36-10-□01-L			G46-10-□01-L		
		0.02 to 0.2 MPa setting		G36-4-□01-L			G46-4-□01-L		
Square embedded type ^{Note 4)}	Standard		GC3-10AS [GC3P-010AS (Pressure gauge cover only)]						
	0.02 to 0.2 MPa setting		GC3-4AS [GC3P-010AS (Pressure gauge cover only)]						
Digital pressure switch ^{Note 5)}	NPN output, Wiring bottom entry		ISE35-N-25-MLA [ISE35-N-25-M (Switch body only)]						
			ISE35-R-25-MLA [ISE35-R-25-M (Switch body only)]						
	PNP output, Wiring bottom entry		ISE35-N-65-MLA [ISE35-N-65-M (Switch body only)]						
			ISE35-R-65-MLA [ISE35-R-65-M (Switch body only)]						

Note 1) Assembly of a bracket and set nuts. Including 2 mounting screws for the AR50(K)-B and AR60(K)-B

Note 2) Please consult with SMC regarding the set nuts for the AR50(K)-B and AR60(K)-B.

Note 3) □ in part numbers for a round pressure gauge indicates a pipe thread type. No indication is necessary for R; however, indicate N for NPT.

Please contact SMC regarding the pressure gauge supply for psi unit specifications.

Note 4) Including one O-ring and 2 mounting screws. []: Pressure gauge cover only

Note 5) In addition to the pressure switch body, lead wire with connector (2 m), adapter, lock pin, O-ring (1 pc.), mounting screw (2 pcs.) are attached.

[]: Switch body only. (Regarding how to order the digital pressure switch, refer to the **Web Catalog**.)

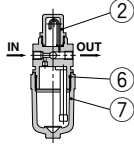
Actuators
 Modular FRL Pressure Control Equipment
 Air Preparation Equipment
 Industrial Filters
 Replacement Procedure
 Actuators
 Modular FRL Pressure Control Equipment
 Industrial Filters

AL10-A to AL60-A

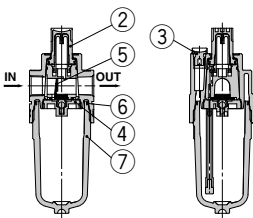


Construction

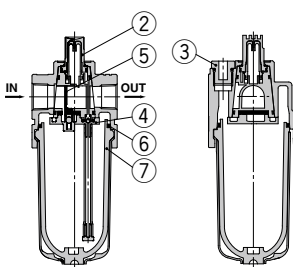
AL10-A



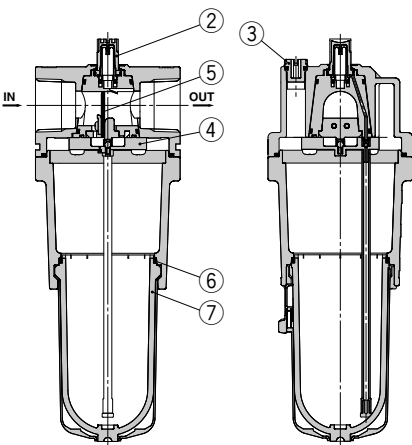
AL20-A



AL30-A/AL40-A



AL50-A/AL60-A



Replacement Parts

No.	Description	Material	Part no.						
			AL10-A	AL20-A	AL30-A	AL40-A	AL40-06-A	AL50-A	AL60-A
②	Sight dome assembly	Polycarbonate	AL10P-080AS	AL20P-080AS					
③	Lubrication plug assembly	—	—	AL22P-060AS	AL32P-060AS	AL42P-060AS			
④	Bumper retainer assembly	—	—	AL20P-030AS	AL30P-030AS	AL40P-030AS	AL50P-030AS	AL60P-030AS	
⑤	Bumper (assembly)	Synthetic resin	—	AL20P-040S	AL30P-040S	AL40P-040S	AL50P-040AS	AL60P-040AS	
⑥	Bowl seal	NBR	C1SFP-260S	C2SFP-260S	C32FP-260S	C42FP-260S			
⑦	Bowl assembly ^(Note)	Polycarbonate	C1SL-A	C2SL-A	C3SL-A	C4SL-A			

Note) · Bowl seal is included for the AL20-A to AL60-A. Please consult with SMC separately for psi and °F unit display specifications.
 · Bowl assembly for the AL30-A to AL60-A models comes with a bowl guard (Material: Polycarbonate).

Options/Part No.

Optional specifications	Model						
	AL10-A	AL20-A	AL30-A	AL40-A	AL40-06-A	AL50-A	AL60-A
Bracket assembly ^(Note)	—	AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS	AF52P-050AS	

Note) Assembly of a bracket and 2 mounting screws

Bowl Assembly Part No.

Bowl material	Lubricant exhaust port	Other	Model					
			AL10-A	AL20-A	AL30-A	AL40-A	AL40-06-A	AL50-A
Polycarbonate	Without drain cock	—	C1SL-A	C2SL-A	—	—		
	With drain cock	With bowl guard	—	C2SL-C-A	C3SL-A	C4SL-A		
		With bowl guard	—	C1SL-3-A	C2SL-3-A	—	—	
Nylon	Without drain cock	—	C1SL-6-A	C2SL-6-A	—	—		
	With drain cock	With bowl guard	—	C2SL-3C-A	C3SL-3-A	C4SL-3-A		
		With bowl guard	—	C1SL-6-A	C2SL-6-A	—	—	
Metal	Without drain cock	—	C1SL-2-A	C2SL-2-A	C3SL-2-A	C4SL-2-A		
	With drain cock	With bowl guard	—	C2SL-6C-A	C3SL-6-A	C4SL-6-A		
		With bowl guard	—	C1SL-36-A	C2SL-36-A	C3SL-36-A	C4SL-36-A	
Metal	Without drain cock	—	C1SL-2-A	C2SL-2-A	C3SL-2-A	C4SL-2-A		
	With drain cock	With level gauge	—	—	C3SL-36W-A	C4SL-36W-A		
		With level gauge	—	—	C3SL-8-A	C4LL-8-A		
Metal	Without drain cock	—	C1SL-23-A	C2SL-23-A	C3SL-23-A	C4SL-23-A		
	With drain cock	With level gauge	—	—	C3LL-8-A	C4LL-38-A		

Note) · Bowl seal is included for the AL20-A to AL60-A.
 · Please consult with SMC separately for psi and °F unit display specifications.

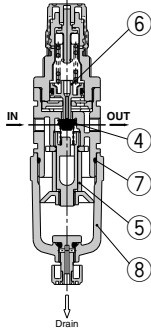
* The numbers correspond with those in the "Construction" of the AL series in the Best Pneumatics catalog.

AW10-A to AW40-A

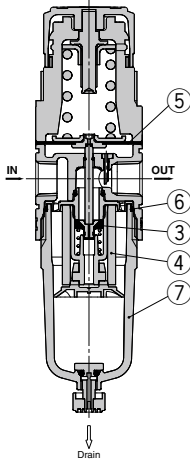


Construction

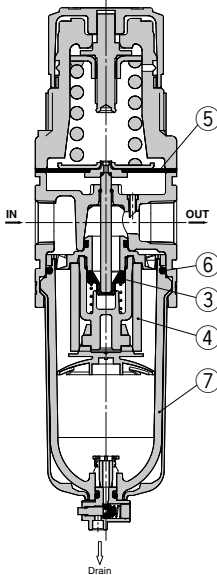
AW10-A



AW20-A



AW30-A to AW40-06-A



Replacement Parts

No.	Description	Material	Part no.				
			AW10-A	AW20-A	AW30-A	AW40-A	AW40-06-A
③	Valve assembly	Stainless steel/HNBR	AR10P-090S	AW22P-060AS	AW32P-060AS	AW42P-060AS	
④	Filter element	Non-woven fabric	AF10P-060S	AF20P-060S	AF30P-060S	AF40P-060S	
⑤	Diaphragm assembly	Weatherable NBR	AR10P-150AS ^{Note 1)}	AR22P-150AS	AR32P-150AS	AR42P-150AS	
⑥	Bowl seal	NBR	C1SFP-260S	C2SFP-260S	C32FP-260S	C42FP-260S	
⑦	Bowl assembly ^{Note 2)}	Polycarbonate	C1SF-A	C2SF-A	C3SF-A	C4SF-A	

Note 1) The AW10-A is a piston type. Assembly of a piston and a seal (KSYP-13).

Note 2) Bowl seal is included for the AW20-A to AW40-06-A. Please contact SMC regarding the supply of bowl assembly with psi and °F unit display specifications.

Options/Part No.

Optional specifications	Model				
	AW10-A	AW20-A	AW30-A	AW40-A	AW40-06-A
Bracket assembly ^{Note 1)}	AR12P-270AS	AR22P-270AS	AR32P-270AS	AR42P-270AS	
Set nut	AR12P-260S	AR22P-260S	AR32P-260S	AR42P-260S	
Round type ^{Note 2)}	Standard	G27-10-R1	G36-10-□01	G46-10-□01	
	0.02 to 0.2 MPa setting	G27-10-R1 ^{Note 3)}	G36-4-□01	G46-4-□01	
Pressure gauge ^{Note 2)}	Round type	—	G36-10-□01-L	G46-10-□01-L	
	Round type (with color zone)	—	G36-4-□01-L	G46-4-□01-L	

Note 1) Assembly of a bracket and set nuts

Note 2) □ in round pressure gauge part numbers indicates a pipe thread type. No indication is necessary for R; however, indicate N for NPT.

Please contact SMC regarding the pipe thread type NPT and the supply of pressure gauge with psi unit display specifications.

Note 3) Standard pressure gauge

Bowl Assembly Part No.

Bowl material	Drain discharge mechanism	Drain port	Other	Model					
				AW10-A	AW20-A	AW30-A	AW40-A	AW40-06-A	
Polycarbonate	Manual discharge	With drain cock	—	C1SF-A	C2SF-A	—	—		
		With bowl guard	—	C2SF-C-A	C3SF-A	C4SF-A			
		Drain cock with barb fitting	With bowl guard	—	—	C3SF-W-A	C4SF-W-A		
	Automatic discharge (Auto drain)	With drain guide (without valve function)	With bowl guard	—	—	C2SF□-J-A	—	—	
		—	—	—	AD17-A	AD27-A	—	—	
		Normally closed (N.C.)	With bowl guard	—	—	AD27-C-A	AD37□-A	AD47□-A	
Nylon	Manual discharge	Normally open (N.O.)	With bowl guard	—	—	AD38□-A	AD48□-A		
		With drain cock	—	C1SF-6-A	C2SF-6-A	—	—		
		With bowl guard	—	C2SF-6C-A	C3SF-6-A	C4SF-6-A			
	Automatic discharge (Auto drain)	Drain cock with barb fitting	With bowl guard	—	—	C3SF-6W-A	C4SF-6W-A		
		With drain guide (without valve function)	With bowl guard	—	—	C2SF□-6J-A	—	—	
		With bowl guard	—	—	C2SF□-6CJ-A	C3SF□-6J-A	C4SF□-6J-A		
Metal	Manual discharge	Normally closed (N.C.)	—	AD17-6-A	AD27-6-A	—	—		
		With bowl guard	—	—	AD27-6C-A	AD37□-6-A	AD47□-6-A		
		Normally open (N.O.)	With bowl guard	—	—	AD38□-6-A	AD48□-6-A		
	Automatic discharge (Auto drain)	With drain cock	—	C1SF-2-A	C2SF-2-A	C3SF-2-A	C4SF-2-A		
		With level gauge	With level gauge	—	—	C3LF-8-A	C4LF-8-A		
		With drain guide (without valve function)	With level gauge	—	—	C2SF□-2J-A	C3SF□-2J-A	C4SF□-2J-A	
Automatic discharge (Auto drain)	With level gauge	With level gauge	—	—	C3LF□-8J-A	C4LF□-8J-A			
	Normally closed (N.C.)	—	AD17-2-A	AD27-2-A	AD37□-2-A	AD47□-2-A			
	With level gauge	—	—	—	AD37□-8-A	AD47□-8-A			
Automatic discharge (Auto drain)	Normally open (N.O.)	—	—	—	AD38□-2-A	AD48□-2-A			
	With level gauge	—	—	—	AD38□-8-A	AD48□-8-A			

Note) Minimum operating pressure: N.O. type—0.1 MPa (AD38-A, AD48-A); N.C. type—0.1 MPa (AD17-A, AD27-A) and 0.15 MPa (AD37-A, AD47-A).

Bowl assembly for the AW10-A to AW40-06-A models comes with a bowl seal.

□ in bowl assembly part numbers indicates a pipe thread type (applicable tubing for auto drain).

No indication is necessary for Rc thread; however, indicate N for NPT thread, and F for G thread. (For auto drain, Nil: ø10, N: ø3/8")

Please consult with SMC separately for psi and °F unit display specifications.

* The numbers correspond with those in the "Construction" of the AW series in the Best Pneumatics catalog.

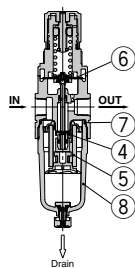
Filter Regulator Filter Regulator with Backflow Function

AW20-B to AW60-B / AW20K-B to AW60K-B

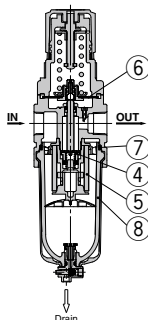
The Replacement Procedure is on p. 485

Construction

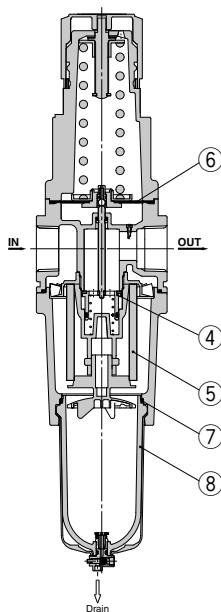
AW20(K)-B



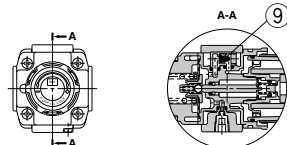
AW30(K)-B/AW40(K)-B



AW60(K)-B



AW20K-B to AW60K-B (Filter Regulator with Backflow Function)



* The numbers correspond with those in the "Construction" of the AW series in the Best Pneumatics catalog.

Note) Minimum operating pressure: N.O. type—0.1 MPa (AD38-A, AD48-A); N.C. type—0.1 MPa (AD27-A) and 0.15 MPa (AD37-A, AD47-A).
Bowl assembly comes with a bowl seal.
□ in bowl assembly part numbers indicates a pipe thread type (applicable tubing for auto drain).
No indication is necessary for Rc thread; however, indicate N for NPT thread, and F for G thread. (For auto drain, Nil: ø10, N: ø3/8")
Please consult with SMC separately for psi and °F unit display specifications.

Replacement Parts

No.	Description	Material	Part no.				
			AW20(K)-B	AW30(K)-B	AW40(K)-B	AW40(K)-06-B	AW60(K)-B
4	Valve assembly	Brass/HNBR	AW20P-340AS	AW30P-340AS	AW40P-340AS	AW40P-060AS	AW60P-090AS
5	Filter element	Non-woven fabric	AF20P-060S	AF30P-060S	AF40P-060S	AF40P-060S	AW60P-060S
6	Diaphragm assembly	Weatherable NBR	AR20P-150AS	AR30P-150AS	AR40P-150AS	AR40P-150AS	AR50P-150AS
7	Bowl seal	NBR	C2SFP-260S	C32FP-260S	C42FP-260S		
8	Bowl assembly ^{Note 1)}	Polycarbonate	C2SF-A	C3SF-A ^{Note 2)}	C4SF-A ^{Note 2)}		
9	Check valve assembly ^{Note 3)}	—	AR23KP-020AS				

Note 1) Bowl assembly comes with a bowl seal. Please consult with SMC separately for psi and °F unit display specifications.

Note 2) Bowl assembly for the AW30(K)-B to AW60(K)-B models comes with a bowl guard (Material: Polycarbonate).

Note 3) Check valve assembly is applicable for a filter regulator with backflow function (AW20K to 60K-B) only. Assembly of a check valve cover, check valve body assembly and 2 mounting screws

Options/Part No.

Optional specifications		Model				
		AW20(K)-B	AW30(K)-B	AW40(K)-B	AW40(K)-06-B	AW60(K)-B
Bracket assembly ^{Note 1)}		AW23P-270AS	AR33P-270AS	AR43P-270AS	AR43P-270AS	AW62P-270AS
Set nut		AR23P-260S	AR33P-260S	AR43P-260S	AR43P-260S	— ^{Note 2)}
Pressure gauge	Round type ^{Note 3)}	Standard	G36-10-□01	G46-10-□01		
		0.02 to 0.2 MPa setting	G36-4-□01	G46-4-□01		
	Round type ^{Note 3)} (with color zone)	Standard	G36-10-□01-L	G46-10-□01-L		
		0.02 to 0.2 MPa setting	G36-4-□01-L	G46-4-□01-L		
Square embedded type ^{Note 4)}	Standard	GC3-10AS [GC3P-010AS (Pressure gauge cover only)]				
	0.02 to 0.2 MPa setting	GC3-4AS [GC3P-010AS (Pressure gauge cover only)]				
Digital pressure switch ^{Note 5)}	NPN output, Wiring bottom entry	ISE35-N-25-MLA [ISE35-N-25-M (Switch body only)]				
	NPN output, Wiring top entry	ISE35-R-25-MLA [ISE35-R-25-M (Switch body only)]				
	PNP output, Wiring bottom entry	ISE35-N-65-MLA [ISE35-N-65-M (Switch body only)]				
	PNP output, Wiring top entry	ISE35-R-65-MLA [ISE35-R-65-M (Switch body only)]				

Note 1) Assembly of a bracket and set nuts. Including 2 mounting screws for the AW60(K)-B

Note 2) Please consult with SMC regarding the set nuts for the AW60(K)-B.

Note 3) □ in part numbers for a round type pressure gauge indicates a pipe thread type.

No indication is necessary for R; however, indicate N for NPT.

Please contact SMC regarding the pressure gauge supply for psi unit specifications.

Note 4) Including one O-ring and 2 mounting screws. []: Pressure gauge cover only

Note 5) In addition to the pressure switch body, lead wire with connector (2 m), adapter, lock pin, O-ring (1 pc.), mounting screw (2 pcs.) are attached.

[]: Switch body only. (Regarding how to order the digital pressure switch, refer to the [Web Catalog](#).)

A pressure switch can be mounted on the AW60(K)-B, with a special mounting adapter (Pressure switch adapter assembly: AW63P-310AS) and mounting screws (M3 x 0.5 x 14) which are delivered with the mounting adapter.

Bowl Assembly Part No.

Bowl material	Drain discharge mechanism	Drain port	Other	Model				
				AW20-B	AW30-B	AW40-B	AW40-06-B	AW60-B
Polycarbonate	Manual discharge	With drain cock	—	C2SF-A	—	—	—	—
		With bowl guard	With bowl guard	C2SF-C-A	C3SF-A	—	C4SF-A	—
		Drain cock with barb fitting	With bowl guard	—	C3SF-W-A	—	C4SF-W-A	—
	Automatic discharge (Auto drain) ^{Note)}	With drain guide (without valve function)	With bowl guard	—	C2SF□-J-A	—	—	—
		With bowl guard	With bowl guard	—	C2SF□-CJ-A	C3SF□-J-A	—	C4SF□-J-A
		Normally closed (N.C.)	With bowl guard	—	AD27-A	—	—	—
Nylon	Manual discharge	Normally open (N.O.)	With bowl guard	—	AD27-C-A	AD37□-A	—	AD47□-A
		With bowl guard	With bowl guard	—	AD38□-A	—	AD48□-A	
		With drain cock	—	C2SF-6-A	—	—	—	
	Automatic discharge (Auto drain) ^{Note)}	With bowl guard	With bowl guard	—	C2SF-6C-A	C3SF-6-A	—	C4SF-6-A
		With bowl guard	With bowl guard	—	C3SF-6W-A	—	C4SF-6W-A	
		With drain cock with barb fitting	With bowl guard	—	C2SF□-6J-A	—	—	
Metal	Manual discharge	With drain guide (without valve function)	With bowl guard	C2SF□-6CJ-A	C3SF□-6J-A	—	C4SF□-6J-A	
		With bowl guard	With bowl guard	—	AD27-6-A	—	—	
		Normally closed (N.C.)	With bowl guard	AD27-6C-A	AD37□-6-A	—	AD47□-6-A	
	Automatic discharge (Auto drain) ^{Note)}	Normally open (N.O.)	With bowl guard	—	AD38□-6-A	—	AD48□-6-A	
		With bowl guard	With bowl guard	—	C2SF-2-A	C3SF-2-A	—	C4SF-2-A
		With drain cock	With level gauge	—	C3LF-8-A	—	C4LF-8-A	
Manual discharge	With drain guide (without valve function)	With level gauge	—	C2SF□-2J-A	C3SF□-2J-A	—	C4SF□-2J-A	
	With bowl guard	With level gauge	—	C3LF□-8J-A	—	C4LF□-8J-A		
	Normally closed (N.C.)	With level gauge	—	AD27-2-A	AD37□-2-A	—	AD47□-2-A	
Automatic discharge (Auto drain) ^{Note)}	Normally open (N.O.)	With level gauge	—	AD37□-8-A	—	AD47□-8-A		
	With level gauge	With level gauge	—	AD38□-2-A	—	AD48□-2-A		
	With level gauge	With level gauge	—	AD38□-8-A	—	AD48□-8-A		

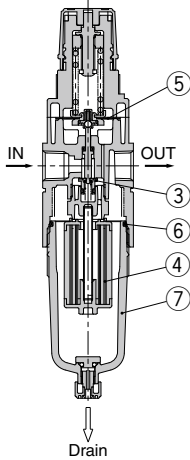
Mist Separator Regulator/Micro Mist Separator Regulator

AWM(D)20 to AWM(D)40

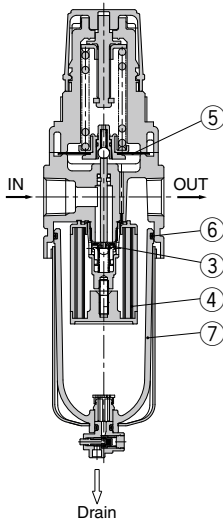
The Replacement Procedure is on p. 497, 503

Construction

**AWM20
AWD20**



**AWM30/40
AWD30/40**



* The numbers correspond with those in the "Construction" of the AW□ series in the Best Pneumatics catalog.

- Note 1) Assembly of a bracket and set nuts
 Note 2) □ in part numbers for a round pressure gauge indicates a type of connection thread. No indication is necessary for R; however, indicate N for NPT. Please contact SMC regarding the connection thread NPT and pressure gauge supply for psi unit specifications.
 Note 3) Including one O-ring and 2 mounting screws. []: Pressure gauge cover only
 Note 4) Lead wire with connector (2 m), adapter, lock pin, O-ring (1 pc.), mounting screw (2 pcs.) are attached.
 Note 5) Switch body only. Also, regarding how to order the digital pressure switch, refer to the Best Pneumatics catalog. A separate pressure switch adapter assembly (AW60P-310AS) is required only for AW60(K). For mounting, please use the included mounting screws (M3 x 0.5 x 14).
 The mounting screw (M3 x 0.5 x 7)

Replacement Parts

No.	Description	Material	Part no.		
			AWM20 AWD20	AWM30 AWD30	AWM40 AWD40
③	Valve assembly	Brass, HNBR	AWM20P-090AS	AWM30P-090AS	AWM40P-090AS
④	Element assembly	AWM20 to AWM40	AFM20P-060AS	AFM30P-060AS	AFM40P-060AS
		AWD20 to AWD40	AFD20P-060AS	AFD30P-060AS	AFD40P-060AS
⑤	Diaphragm assembly	Weather resistant NBR	AR20P-150AS	AR30P-150AS	AR40P-150AS
⑥	Bowl O-ring	NBR	C2SFP-260S	C3SFP-260S	C4SFP-260S
⑦	Bowl assembly ^{Note 1)}	Polycarbonate	C2SF ^{Note 2)}	C3SF ^{Note 2)}	C4SF ^{Note 2)}

Note 1) Bowl O-ring is included. Please contact SMC regarding the bowl assembly supply for psi and "F" unit specifications.

Note 2) Bowl assembly for the AWM30/40, AWD30/40 comes with a bowl guard (steel band material).

Options/Part No.

Optional specifications		Model		
		AWM20 AWD20	AWM30 AWD30	AWM40 AWD40
Bracket assembly ^{Note 1)}		AW20P-270AS	AR30P-270AS	AR40P-270AS
Set nut		AR20P-260S	AR30P-260S	AR40P-260S
Pressure gauge	Round type ^{Note 2)}	Standard	G36-10-□01	G46-10-□02
		0.02 to 0.2 MPa setting	G36-2-□01	G46-2-□02
	Round type ^{Note 2)}	Standard	G36-10-□01-L	G46-10-□02-L
	(with color zone)	0.02 to 0.2 MPa setting	G36-2-□01-L	G46-2-□02-L
	Square embedded type ^{Note 3)}	Standard	GC3-10AS [GC3P-010AS (Pressure gauge cover only)]	GC3-2AS [GC3P-010AS (Pressure gauge cover only)]
		0.02 to 0.2 MPa setting	GC3-2AS [GC3P-010AS (Pressure gauge cover only)]	GC3-2AS [GC3P-010AS (Pressure gauge cover only)]
Digital pressure switch ^{Note 4)}		NPN output/Wiring bottom entry	ISE35-N-25-MLA [ISE35-N-25-M (Switch body only)]	ISE35-R-25-MLA [ISE35-R-25-M (Switch body only)]
		NPN output/Wiring top entry	ISE35-R-25-MLA [ISE35-R-25-M (Switch body only)]	ISE35-N-65-MLA [ISE35-N-65-M (Switch body only)]
		PNP output/Wiring bottom entry	ISE35-N-65-MLA [ISE35-N-65-M (Switch body only)]	ISE35-R-65-MLA [ISE35-R-65-M (Switch body only)]
		PNP output/Wiring top entry	ISE35-R-65-MLA [ISE35-R-65-M (Switch body only)]	ISE35-N-65-MLA [ISE35-N-65-M (Switch body only)]
Float type auto drain ^{Note 5) Note 6)}		N.C.	AD27	AD37
		N.O.	—	AD38

Semi-standard/Bowl Assembly Part No.

Semi-standard specifications					Model			
Bowl material	Note 5) Note 6)	Note 6)	With drain guide	With barb fitting	With bowl guard	AWM20 AWD20	AWM30 AWD30	AWM40 AWD40
	Float type auto drain	With						
Polycarbonate	—	—	—	—	●	C2SF-C	—	—
	●	—	—	—	●	AD27-C	—	—
	—	—	●	—	—	C2SF-J	C3SF-J	C4SF-J
	—	—	—	●	—	—	C3SF-W	C4SF-W
	—	—	●	—	●	C2SF-CJ	—	—
	—	—	—	—	—	C2SF-6	C3SF-6	C4SF-6
Nylon	—	—	—	—	●	C2SF-6C	—	—
	●	—	—	—	—	AD27-6	AD37-6	AD47-6
	—	●	—	—	—	—	AD38-6	AD48-6
	●	—	—	—	●	AD27-6C	—	—
Metal	—	—	—	—	—	C2SF-6J	C3SF-6J	C4SF-6J
	—	—	●	—	—	—	C3SF-6W	C4SF-6W
	—	—	—	—	●	C2SF-6CJ	—	—
	—	—	—	—	—	C2SF-2	C3SF-2	C4SF-2
Metal bowl with level gauge	●	—	—	—	—	AD27-2	AD37-2	AD47-2
	—	●	—	—	—	—	AD38-2	AD48-2
	—	—	●	—	—	C2SF-2J	C3SF-2J	C4SF-2J
	—	—	—	—	—	—	C3LF-8	C4LF-8
	●	—	—	—	—	—	AD37-8	AD47-8
	—	●	—	—	—	—	AD38-8	AD48-8
	—	—	●	—	—	—	C3LF-8J	C4LF-8J

attached to the digital pressure switch assembly will not be required.

Note 5) Minimum operating pressure: N.O. type—0.1 MPa; N.C. type—0.1 MPa (AD27) and 0.15 MPa (AD37/47). Please contact SMC for psi and "F" unit specifications.

Note 6) Please consult SMC for details on drain piping to fit NPT or G port sizes.

Note 7) Including O-ring.

- Bowl assembly for the AWM30/40, AWD30/40 comes with a bowl guard (steel band material). (except when the bowl material is metal)

Regulator with Built-in Pressure Gauge

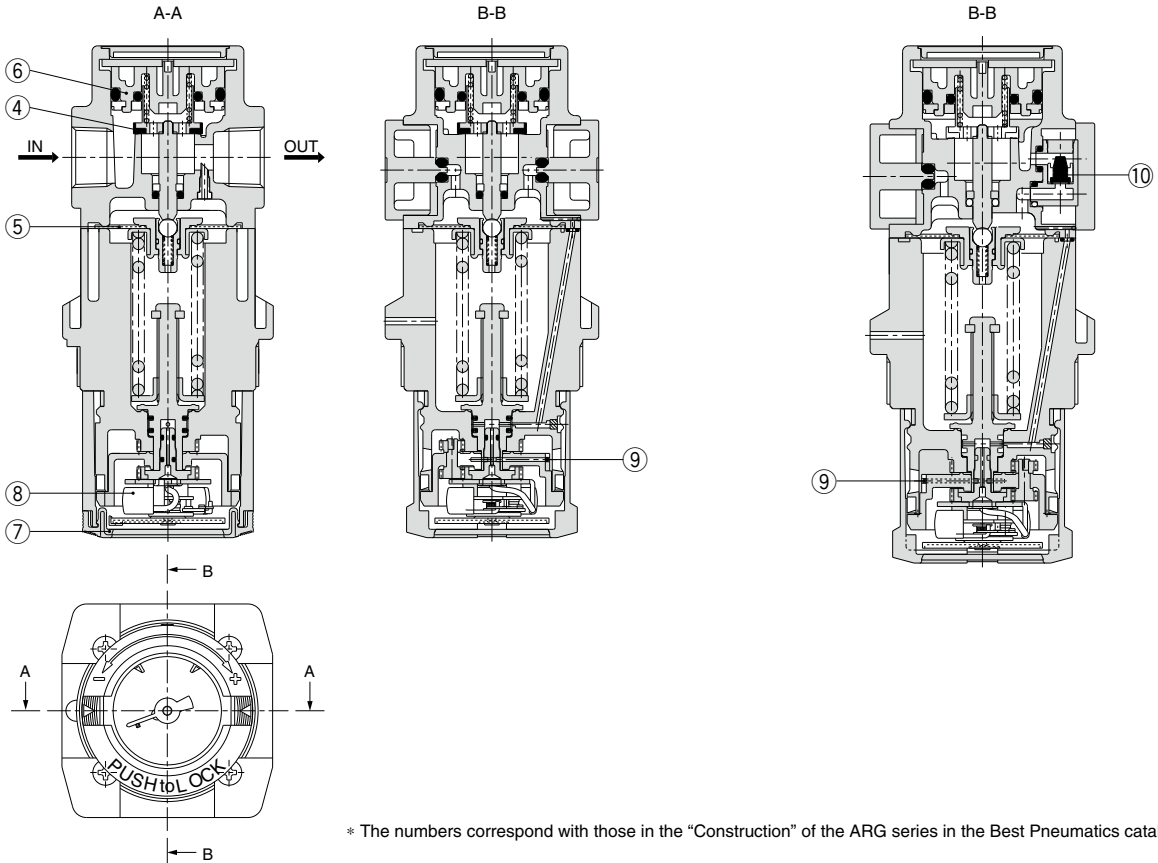
ARG20(K)/30(K)/40(K)

The Replacement Procedure is on p. 509

Construction

ARG20/30/40

ARG20K/30K/40K



* The numbers correspond with those in the "Construction" of the ARG series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Material	Qty.	Part no.			Note
				ARG20(K)	ARG30(K)	ARG40(K)	
4	Valve	Brass, HNBR	1	AR20P-410S	AR30P-410S	AR40P-410S	
5	Diaphragm assembly	Weather resistant NBR	1	AR20P-150AS	AR30P-150AS	AR40P-150AS	
6	Valve guide assembly	POM, NBR	1	AR20P-050AS	AR30P-050AS	AR40P-050AS	
7	Pressure gauge cover	PC	1	ARG20P-400S	ARG30P-400S	ARG40P-400S	
8	Pressure gauge ^{Note 1)}	—	1	GB2-10AS	GB3-10AS	GB4-10AS	
9	Clip	Stainless steel	1	ARG20P-420S	ARG30P-420S	ARG40P-420S	
10	Check valve assembly ^{Note 2)}	—	1	AR20KP-020AS			ARG20K, 30K, 40K

Note 1) Only the standard part numbers are listed for the pressure gauges.

Note 2) Check valve assembly contains check valve, check valve cover and its screws (2 pcs).

Options/Part No.

		Applicable model		ARG20(K)	ARG30(K)	ARG40(K)
Option						
Bracket assembly ^{Note 1)}				ARG20P-270AS	ARG30P-270AS	ARG40P-270AS
Set nut				ARG20P-260S	ARG30P-260S	ARG40P-260S
Pressure gauge	Pressure gauge display range	Standard	0 to 1.0 MPa	GB2-10AS	GB3-10AS	GB4-10AS
			0 to 0.3 MPa	GB2-3AS	GB3-3AS	GB4-3AS
		Optional	0 to 150 psi	GB2-P10AS	GB3-P10AS	GB4-P10AS
			0 to 45 psi	GB2-P3AS	GB3-P3AS	GB4-P3AS

Note 1) Assembly includes a bracket and set nuts.

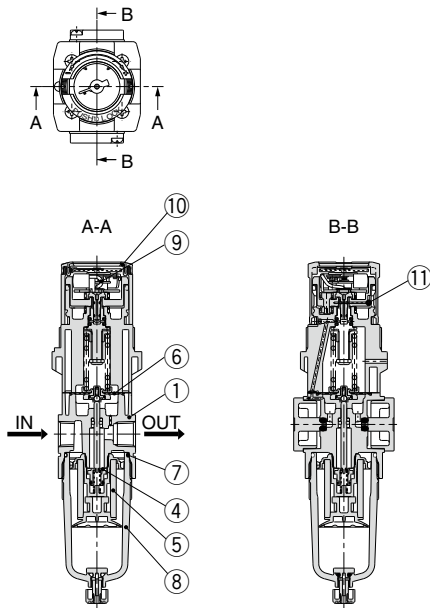
Filter Regulator with Built-in Pressure Gauge

AWG20/30/40

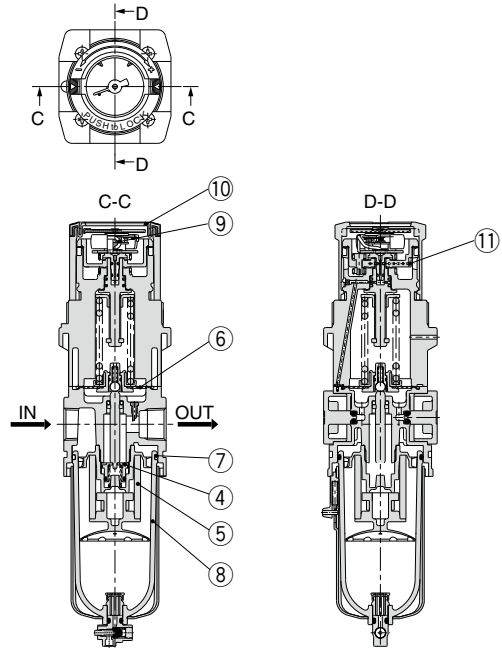
The Replacement Procedure is on p. 515

Construction

AWG20



AWG30/40



* The numbers correspond with those in the "Construction" of the AWG series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Material	Qty.	Part no.			Note
				AWG20	AWG30	AWG40	
4	Valve assembly	Brass, HNBR	1	AW20P-340AS	AW30P-340AS	AW40P-340AS	
5	Filter element	Non-woven fabric	1	AF20P-060S	AF30P-060S	AF40P-060S	
6	Diaphragm assembly	Weather resistant NBR	1	AR20P-150AS	AR30P-150AS	AR40P-150AS	
7	Bowl O-ring	NBR	1	C2SFP-260S	C3SFP-260S	C4SFP-260S	
8	Bowl assembly ^{Note 1)}	PC	1	C2SF	C3SF ^{Note 2)}	C4SF ^{Note 2)}	
9	Pressure gauge ^{Note 3)}	—	1	GB2-10AS	GB3-10AS	GB4-10AS	
10	Pressure gauge cover	PC	1	ARG20P-400S	ARG30P-400S	ARG40P-400S	
11	Clip	Stainless steel	1	ARG20P-420S	ARG30P-420S	ARG40P-420S	

Note 1) Including O-ring. Contact SMC regarding the bowl assembly supply for psi and °F unit specifications.

Note 2) Bowl assembly for AWG30/40 includes a bowl guard (steel band material).

Note 3) Only the standard part numbers are listed in the pressure gauges. For the semi-standard part numbers, refer to the optional part numbers.

Options/Part No.

Option		Applicable model		AWG20	AWG30	AWG40
Bracket assembly ^{Note 1)}				ARG20P-270AS	ARG30P-270AS	ARG40P-270AS
Set nut				ARG20P-260S	ARG30P-260S	ARG40P-260S
Pressure gauge	Pressure gauge display range	Standard	0 to 1.0 MPa	GB2-10AS	GB3-10AS	GB4-10AS
			0 to 0.3 MPa	GB2-3AS	GB3-3AS	GB4-3AS
		Optional	0 to 150 psi	GB2-P10AS	GB3-P10AS	GB4-P10AS
			0 to 45 psi	GB2-P3AS	GB3-P3AS	GB4-P3AS
Float type auto drain ^{Note 2)}			N.O.	—	AD38	AD48
			N.C.	AD27	AD37	AD47

Note 1) Assembly includes a bracket and set nuts.

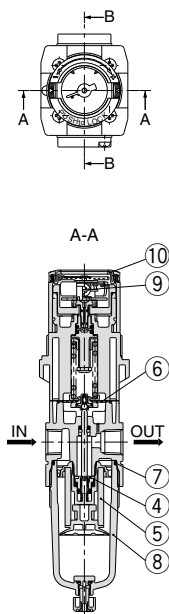
Note 2) Minimum operating pressure: N.O. type—0.1 MPa; N.C. type—0.1 MPa (AD27) and 0.15 MPa (AD37/47). Contact SMC regarding the specifications for psi unit and °F.

Filter Regulator with Built-in Pressure Gauge with Backflow Function

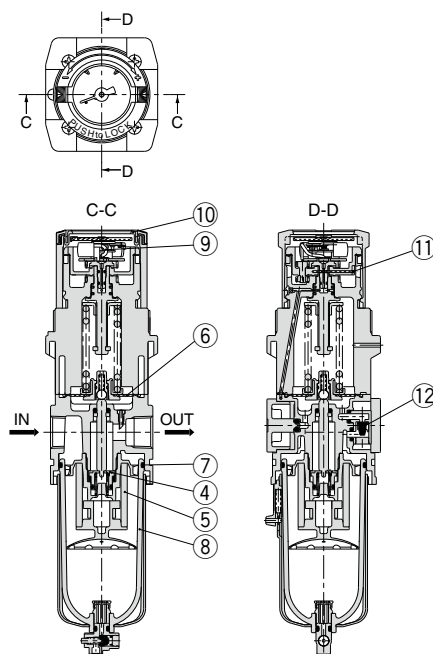
AWG20K/30K/40K

Construction

AWG20K



AWG30K/40K



* The numbers correspond with those in the "Construction" of the AWG series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Material	Qty.	Part no.			Note
				AWG20K	AWG30K	AWG40K	
4	Valve assembly	Brass, HNBR	1	AW20P-340AS	AW30P-340AS	AW40P-340AS	
5	Filter element	Non-woven fabric	1	AF20P-060S	AF30P-060S	AF40P-060S	
6	Diaphragm assembly	Weather resistant NBR	1	AR20P-150AS	AR30P-150AS	AR40P-150AS	
7	Bowl O-ring	NBR	1	C2SFP-260S	C3SFP-260S	C4SFP-260S	
8	Bowl assembly ^{Note 1)}	PC	1	C2SF	C3SF ^{Note 2)}	C4SF ^{Note 2)}	
9	Pressure gauge ^{Note 3)}	—	1	GB2-10AS	GB3-10AS	GB4-10AS	
10	Pressure gauge cover	PC	1	ARG20P-400S	ARG30P-400S	ARG40P-400S	
11	Clip	Stainless steel	1	ARG20P-420S	ARG30P-420S	ARG40P-420S	
12	Check valve assembly	—	1	AR20KP-020AS			

Note 1) Including O-ring. Contact SMC regarding the bowl assembly supply for psi and °F unit specifications.

Note 2) Bowl assembly (AWG30K/40K) includes a bowl guard (steel band material).

Note 3) Only the standard part numbers are listed for the pressure gauges. For the semi-standard part numbers, refer to the optional part numbers.

Options/Part No.

Option		Applicable model		AWG20K	AWG30K	AWG40K
Bracket assembly ^{Note 1)}				ARG20P-270AS	ARG30P-270AS	ARG40P-270AS
Set nut				ARG20P-260S	ARG30P-260S	ARG40P-260S
Pressure gauge	Pressure gauge display range	Standard	0 to 1.0 MPa	GB2-10AS	GB3-10AS	GB4-10AS
			0 to 0.3 MPa	GB2-3AS	GB3-3AS	GB4-3AS
		Optional	0 to 150 psi	GB2-P10AS	GB3-P10AS	GB4-P10AS
			0 to 45 psi	GB2-P3AS	GB3-P3AS	GB4-P3AS
Float type auto drain ^{Note 2)}			N.O.	—	AD38	AD48
			N.C.	AD27	AD37	AD47

Note 1) Assembly includes a bracket and set nuts.

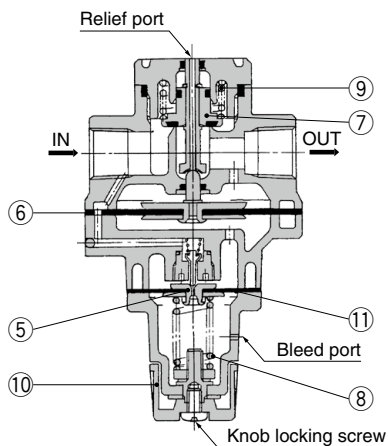
Note 2) Minimum operating pressure: N.O. type—0.1 MPa; N.C. type—0.1 MPa (AD27) and 0.15 MPa (AD37/47). Contact SMC regarding the specifications for psi unit and °F.

Pilot Operated Regulator

AR425 to 935

The Replacement Procedure is on p. 522

Construction



* The numbers correspond with those in the "Construction" of the AR series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Material	Qty.	Part no.				Note
				AR425/435	AR625/635	AR825/835	AR925/935	
5, 11	Exhaust valve assembly ^{Note 1)}	—	1	132586A	132586A	132586A	132586A	
6	Main valve side diaphragm assembly	—	1	132581A	132659A	13275A	13285A	
7	Valve assembly	—	1	132572A	132653A	132752A	132829A	
8	Adjusting spring	Steel wire	1	135053(AR425) 135025(AR435)	135053(AR625) 135025(AR635)	135053(AR825) 135025(AR835)	135053(AR925) 135025(AR935)	
9	Valve spring	Stainless steel	1	135211	132656	132713	13289	
10	Knob	ABS	1	13414				

Note 1) Diaphragm is included.

Options/Part No.

Description	Model	Part no.			
		AR4□5	AR6□5	AR8□5	AR9□5
Bracket		B24P	B25P	—	—
Pressure gauge with limit indicator ^{Note 1)}		G46-10-□02 (Max. 1.0 MPa), G46-2-□02 (Max. 0.2 MPa)			

Note 1) • In the gauge part no. (e.g. G46-10-□02), □ indicate kind of the connecting thread. Put nothing for Rc and "N" for NPT thread.

• Please consult with SMC for NPT pressure gauge.

Note 2) Use caution not to tighten excessively when mounting a pressure gauge, otherwise it may result in a breakdown. Use a pipe tape for sealing.
Recommended torque: 12 to 14 N·m.

Actuators

Modular F.R.L.
Pressure Control Equipment

Air Preparation
Equipment

Industrial Filters

Replacement
Procedure

Actuators

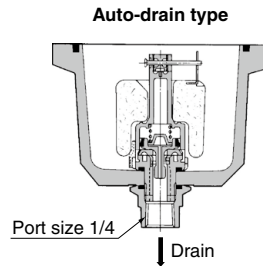
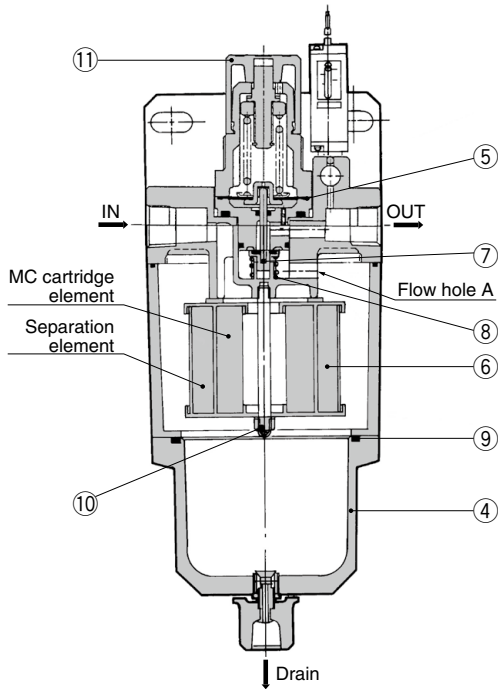
Modular F.R.L.
Pressure Control Equipment

Industrial Filters

AMR3000 to 6000



Construction



* The numbers correspond with those in the "Construction" of the AMR series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Material	Qty	Part no.				Note
				AMR3000	AMR4000	AMR5000	AMR6000	
4	Bowl assembly	Aluminum die-casted	1	13573A	13553A	13583A	13563A	
5	Diaphragm assembly	Weather resistant NBR	1	1349161A	131515A	131515A	131614A	
6	Element ^{Note)}	—	1	13579	135511	13589	13569	
7	Valve assembly	Brass, HNBR	1	135711A	13154A	135811A	135614-1A	
8	Valve spring	Stainless steel	1	135011	131514	131613	135413	
9	O-ring	NBR	1	KA00064	KA00466	KA00452	KA00455	
10	Gasket	Fiber	1	135714	635327	635327	63555	
11	Knob	POM	1	1349167	131534	131534	131634	

Note) The MC cartridge element and the separation element are integrated.

Accessory (Standard)/Part No.

Model name	Model	AMR3000	AMR4000	AMR5000	AMR6000
Bracket		13576	13556	13587	13568
Pressure gauge ^{Note 5, 6)}	1.0MPa	G36-10-□01		G46-10-□02	

Accessory (Option)/Part No.

Model name	Model	AMR3000	AMR4000	AMR5000	AMR6000
Adapter assembly ^{Note 7)}		1/4: E3-02□ 3/8: E3-03□	1/4: E4-02□ 3/8: E4-03□ 1/2: E4-04□	1/2: E5-04□ 3/4: E5-06□	3/4: E6-06□ 1: E6-10□
Float type auto drain (AMR□100) ^{Note 8)}		AD33-X203	AD33-X202	AD33-X210	AD33-X201
Compact pressure switch		IS10-01 (0.4 MPa setting)			
Elbow (R x Rc) ^{Note 9)}		135510		135613	

Note 5) □ in the gauge part number (e.g. G36-10-□01) indicates thread. Specify no symbol for "Rc", and "N" for "NPT".

• Please consult with SMC if "NPT" gauge is required.

Note 6) Use caution not to tighten excessively when mounting a pressure gauge, otherwise it may result in a breakdown. Use a pipe tape for sealing.

Recommended tightening torque for pressure regulator: R 1/8 = 7 to 9 N·m, R 1/4 = 12 to 14 N·m

Note 7) Piping adapter, O-ring, Hexagon socket bolt, Hexagon socket bolt assembly. These are shipped together with products. "□" in the gauge part number indicates thread type. Specify no symbol for "Rc", "N" for "NPT", and "G" for "F".

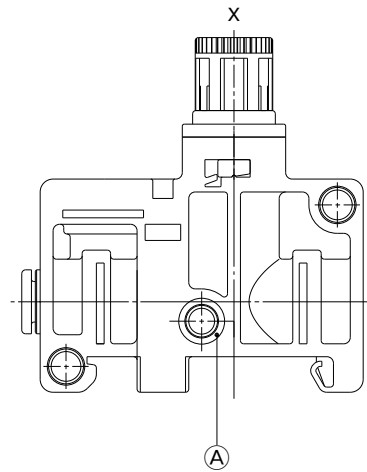
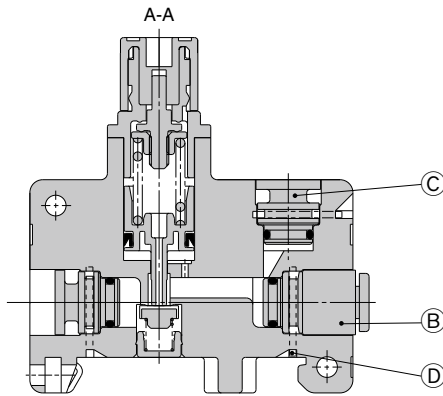
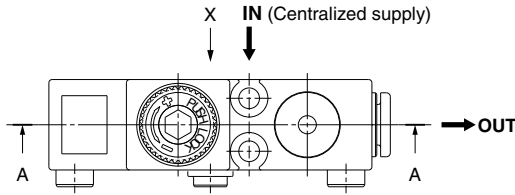
Note 8) Min. operating pressure = 0.1 MPa

Note 9) If a compact pressure switch is mounted later on, an elbow (R x Rc) is necessary.

ARM5A Series

The Replacement Procedure is on p. 527

Construction



Replacement Parts

No.	Description	Material	Qty.	Part no.
A	O-ring	NBR	1	136019
B	Fitting assembly	—	1	See below
C	Port plug	PBT, HNBR	1	See below
D	Clip	Stainless steel	3	136010

* The numbers correspond with those in the "Construction" of the ARM5A series in the Best Pneumatics catalog.

One-touch Fittings for Centralized Supply Block

VVQ1000-51A - [] C6

One-touch fittings for centralized supply block

Fitting type

Nil	Straight
L1	Elbow

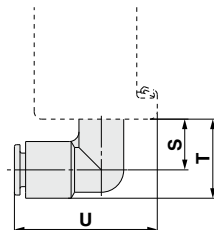
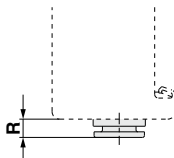
Fitting size

Symbol	Size
C6	ø6
C8	ø8
N7	ø1/4
N9	ø5/16



Straight type

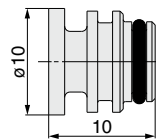
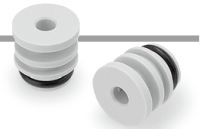
Elbow type



Port Plug

VVQ0000-58A

Single unit regulator/
Port plug for regulator block



Note) The O-ring is attached. Refer to page 527 for details of the replacement.

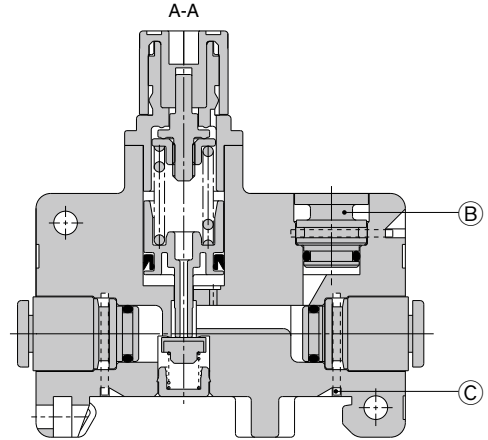
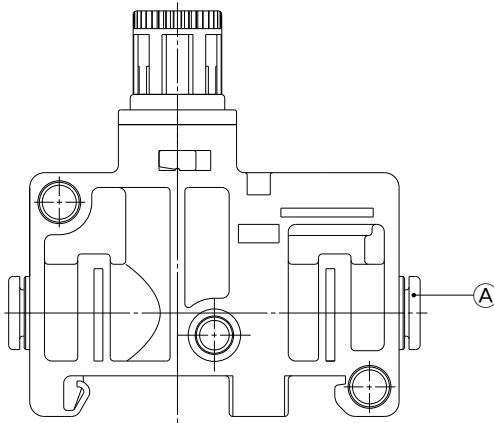
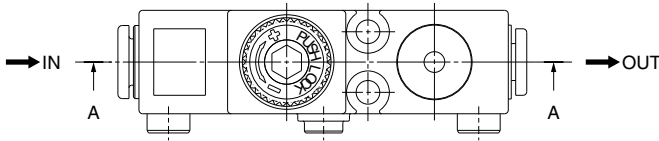
Fitting size	One-touch fittings for centralized supply block			
	Straight	Elbow	Elbow	Elbow
	R	S	T	U
ø4, ø5/32	—	—	—	—
ø6	3	12.5	19	35.5
ø1/4	3	12.5	19	35.5
ø8, ø5/16	5	13.5	21	38.5

Note) The O-ring is attached. Refer to page 528 for details of the replacement.

ARM5B Series



Construction



Replacement Parts

No.	Description	Material	Qty.	Part no.
A	Fitting assembly	—	2	See below
B	Port plug	PBT, HNBR	1	See below
C	Clip	Stainless steel	3	136010

* The numbers correspond with those in the "Construction" of the ARM5B series in the Best Pneumatics catalog.

One-touch Fittings for Regulator Block

VVQ1000-50A - [] C4

One-touch fittings for regulator block

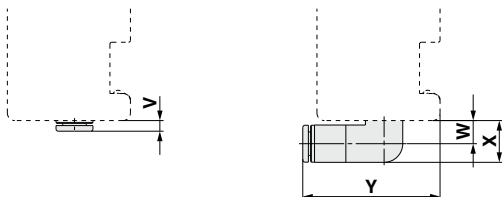
Fitting type	
Nil	Straight
L1	Elbow



Straight type

Fitting size	
Symbol	Size
C4	ø4
C6	ø6
N3	ø5/32
N7	ø1/4

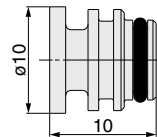
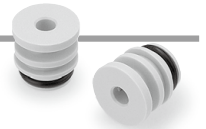
Elbow type



Port Plug

VVQ000-58A

Single unit regulator/
Port plug for regulator block



Note) The O-ring is attached. Refer to page 527 for details of the replacement.

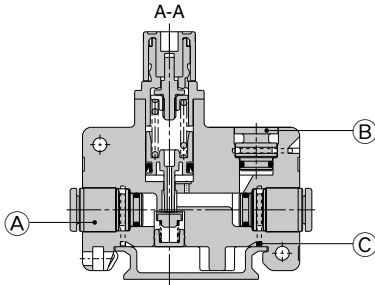
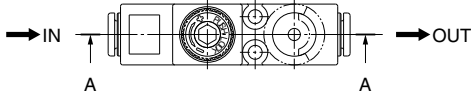
Fitting size	One-touch fittings for regulator block			
	Straight	Elbow	Elbow	Elbow
	V	W	X	Y
ø4, ø5/32	2.5	6	11	35.5
ø6	3	6.5	11	36
ø1/4	6.5	6	11.5	38.5
ø8, ø5/16	—	—	—	—

Note) The O-ring is attached. Refer to page 528 for details of the replacement.

ARM5S Series

The Replacement Procedure is on p. 527

Construction



* The numbers correspond with those in the "Construction" of the ARM5S series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Material	Qty.	Part no.
A	Fitting assembly	—	2	See below
B	Port plug	PBT, HNBR	1	See below
C	Clip	Stainless steel	3	136010

One-touch Fittings for Regulator

VVQ1000-50A - [] C4

One-touch fittings for regulator

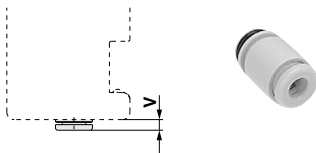
Fitting type

Nil	Straight
L1	Elbow

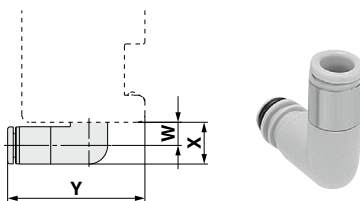
Fitting size

C4	ø4
C6	ø6
N3	ø5/32
N7	ø1/4

Straight type



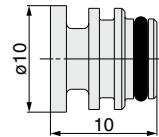
Elbow type



Port Plug

VVQ0000-58A

Single unit regulator/
Port plug for regulator block



Note) The O-ring is attached.
Refer to page 527 for details of the replacement.

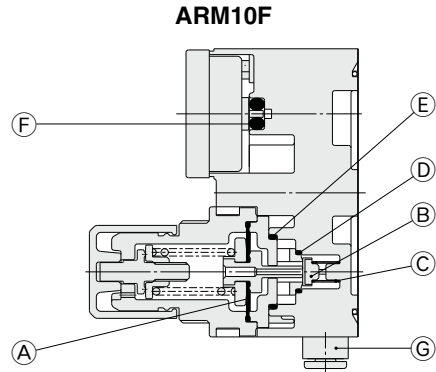
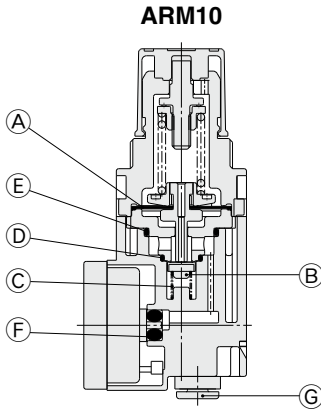
Fitting size	One-touch fittings for regulator			
	Straight	Elbow	Elbow	Elbow
	V	W	X	Y
ø4, ø5/32	2.5	6	11	35.5
ø6	3	6.5	11	36
ø1/4	6.5	6	11.5	38.5
ø8, ø5/16	—	—	—	—

Note) The O-ring is attached.
Refer to page 528 for details of the replacement.

ARM10 Series



Construction

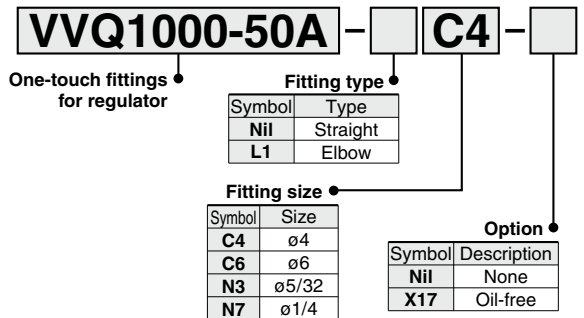


Replacement Parts

No.	Description	Material	Part no.	Note
A	Diaphragm assembly	Weather resistant	136126A	Relieving type
		NBR, POM	136126-1A	Non-relieving type
B	Valve	HNBR, Aluminum alloy	136127-30#1	
C	Valve spring	Stainless steel	136131	
D	O-ring	NBR	136146	Standard model
		HNBR	136146-30	Oil-free specification
E	O-ring	NBR	136147	Standard model
		HNBR	136147-30	Oil-free specification
F	O-ring	NBR	136148	Standard model
		HNBR	136148-30	Oil-free specification
		NBR	KA01731	Standard model for digital pressure switch
		HNBR	KA01613	Oil-free spec. for digital pressure switch
G	Fitting assembly	—	The right reference	

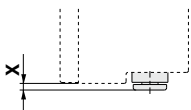
* The numbers correspond with those in the "Construction" of the ARM10 series in the Best Pneumatics catalog.

One-touch Fittings for Regulator



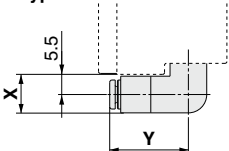
ARM10

Straight type



Fitting size	X
ø4, ø5/32	2
ø6	2
ø1/4	6

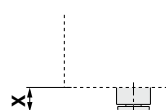
Elbow type



Fitting size	X	Y
ø4, ø5/32	10.5	21.5
ø6	10.5	22
ø1/4	10.5	24.5

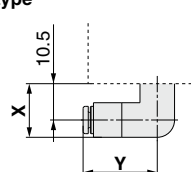
ARM10F

Straight type



Fitting size	X
ø4, ø5/32	7
ø6	7
ø1/4	11

Elbow type

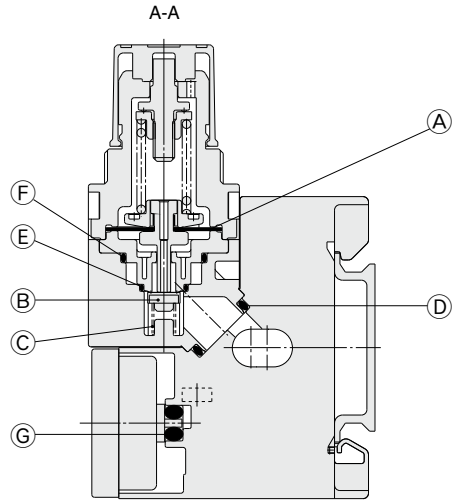
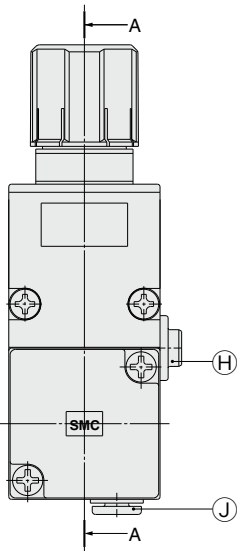
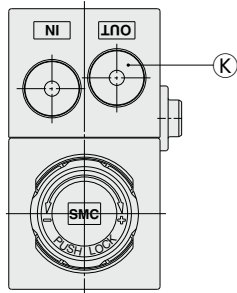


Fitting size	X	Y
ø4, ø5/32	15.5	21.5
ø6	15.5	22
ø1/4	15.5	24.5

ARM11A Series



Construction



* The numbers correspond with those in the "Construction" of the ARM11A series in the Best Pneumatics catalog.

Replacement Parts

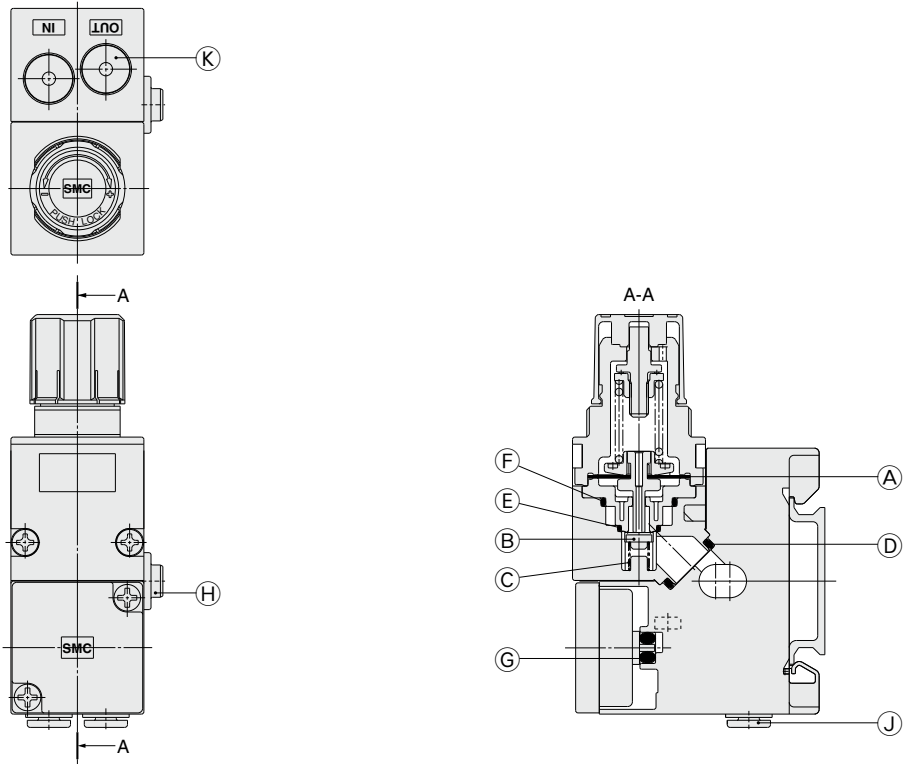
No.	Description	Material	Part no.	Note
A	Diaphragm assembly	Weather resistant NBR, POM	136126A	Relieving type
			136126-1A	Non-relieving type
B	Valve	HNBR, Aluminum alloy	136127-30#1	
C	Valve spring	Stainless steel	136131	
D	Gasket	HNBR	136137-30	
E	O-ring	NBR	136146	Standard model
		HNBR	136146-30	Oil-free specification
F	O-ring	NBR	136147	Standard model
		HNBR	136147-30	Oil-free specification
G	O-ring	NBR	136148	Standard model
		HNBR	136148-30	Oil-free specification
		NBR	KA01731	Standard model for digital pressure switch
		HNBR	KA01613	Oil-free spec. for digital pressure switch
H	O-ring	NBR	136149	Standard model
		HNBR	136149-30	Oil-free specification
J	Fitting assembly	—	Refer to page 272.	
K	Port plug	PBT/HNBR	Refer to page 272.	

Compact Manifold Regulator/Individual Supply Type

ARM11B Series

The Replacement Procedure is on p. 531

Construction



* The numbers correspond with those in the "Construction" of the ARM11B series in the Best Pneumatics catalog.

Replacement Parts

No.	Description	Material	Part no.	Note
A	Diaphragm assembly	Weather resistant NBR, POM	136126A	Relieving type
			136126-1A	Non-relieving type
B	Valve	HNBR, Aluminum alloy	136127-30#1	
C	Valve spring	Stainless steel	136131	
D	Gasket	HNBR	136137-30	
E	O-ring	NBR	136146	Standard model
		HNBR	136146-30	Oil-free specification
F	O-ring	NBR	136147	Standard model
		HNBR	136147-30	Oil-free specification
G	O-ring	NBR	136148	Standard model
		HNBR	136148-30	Oil-free specification
		NBR	KA01731	Standard model for digital pressure switch
		HNBR	KA01613	Oil-free spec. for digital pressure switch
H	O-ring	NBR	136149	Standard model
		HNBR	136149-30	Oil-free specification
J	Fitting assembly	—	Refer to page 272.	
K	Port plug	PBT/HNBR	Refer to page 272.	

Compact Manifold Regulator *ARM11A/B Series*

Options

The Replacement Procedure is on p. 531

One-touch Fittings for Regulator Block

VVQ1000-50A - **C4** -

One-touch fittings for regulator block

Fitting type

Symbol	Type
Nil	Straight
L1	Elbow

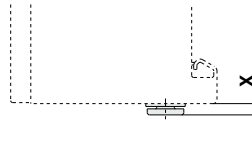
Fitting size

Symbol	Size
C4	ø4
C6	ø6
N3	ø5/32
N7	ø1/4

Semi-standard

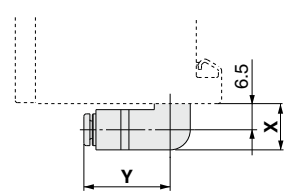
Symbol	Description
Nil	None
X17	Oil-free

Straight type



Fitting size	X
ø4, ø5/32	3
ø6	3
ø1/4	7

Elbow type



Fitting size	X	Y
ø4, ø5/32	11.5	19
ø6	11.5	19.5
ø1/4	11.5	22

One-touch Fittings for Common Supply Block

VVQ2000-51A - **C6** -

One-touch fittings for regulator

Fitting type

Symbol	Type
Nil	Straight
L1	Elbow

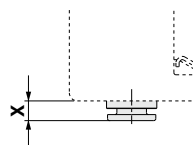
Fitting size

Symbol	Size
C6	ø6
C8	ø8
C10	ø10
N7	ø1/4
N9	ø5/16
N11	ø3/8

Semi-standard

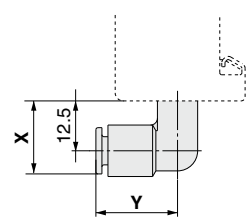
Symbol	Description
Nil	None
X17	Oil-free

Straight type



Fitting size	X
ø6	5
ø8, ø5/16	5
ø10, ø3/8	5.5
ø1/4	5

Elbow type



Fitting size	X	Y
ø6	19	20
ø8, ø5/16	20	23
ø10, ø3/8	22	26
ø1/4	19	20.5

Port Plug

VVQ0000-58A -

Single unit regulator/
Port plug for regulator block

Semi-standard

Symbol	Description
Nil	None
X17	Oil-free

