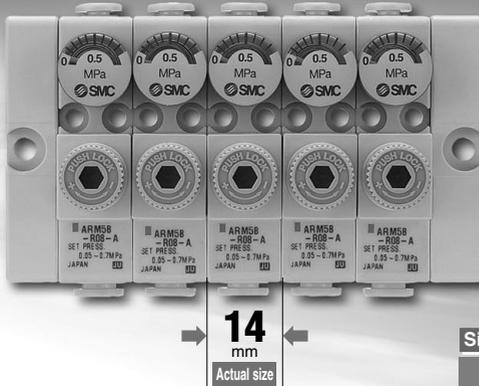


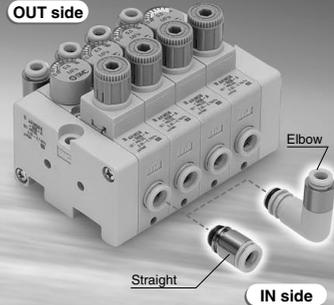
Compact Manifold Regulator

Series ARM5

Width **14 mm**



The One-touch fitting size can be changed.



2 mounting types are available.

- Direct mount
- DIN rail mount

Backflow function is equipped as a standard.

Common supply and individual supply. Mixed mounting of different fittings is possible (Compatible with Simple Specials).

Single Unit / Individual Supply Type

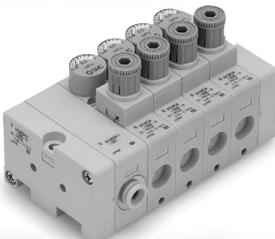
Port location	Fitting type	Applicable tubing O.D.					
		Metric		Inch			
IN side	Straight / Elbow	○	○	—	○	○	—
OUT side	Straight / Elbow	○	○	—	○	○	—

Centralized Supply Type

Port location	Fitting type	Applicable tubing O.D.					
		Metric		Inch			
IN side	Straight / Elbow	—	○	○	—	○	○
OUT side	Straight / Elbow	○	○	—	○	○	—

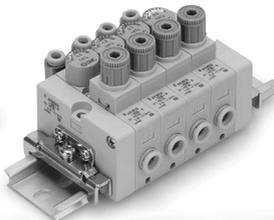
Manifold

Centralized supply type



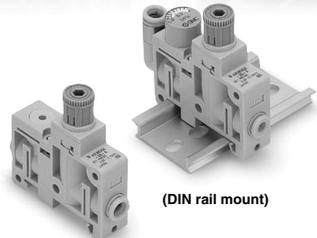
(Direct mount)

Individual supply type



(DIN rail mount)

Single Unit



(Direct mount)

(DIN rail mount)

ARJ

AR425 to 935

ARX

AMR

ARM

ARP

IR

IRV

VEX

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF VEP

VER

VEA

VY1

VBA VBAT

AP100

Compact Manifold Regulator Centralized Supply Type Series **ARM5A**

How to Order

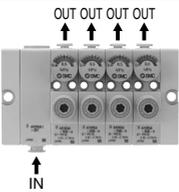
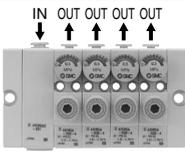
ARM5 A **A** **1** - **4** **07** - **A**

Centralized supply type • ① ② ③ ④ ⑤ ⑥ ⑦

1. Manifold Mounting

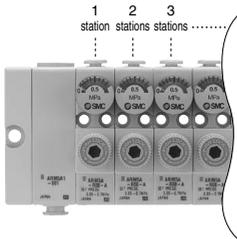
Symbol	A	B
How to mount	Direct mount	DIN rail mount
Appearance		

2. Centralized Supply (IN) Piping Position

Symbol	1	2
Piping position	Bottom	Top
Appearance		

3. Regulator Block Stations

Symbol	Stations
1	1 station
2	2 stations
3	3 stations
4	4 stations
5	5 stations
6	6 stations
7	7 stations
8	8 stations
9	9 stations
M	10 stations



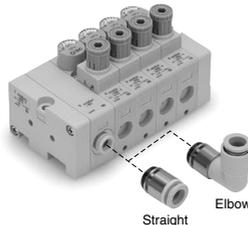
4. IN/OUT Fitting Type (Refer to the figure below.)

Metric size

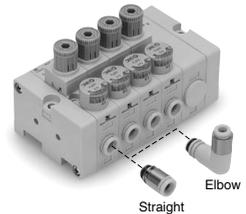
Mounting position	Fitting type	IN side				OUT side			
		Straight		Elbow		Straight		Elbow	
		Symbol	ø6	ø8	ø6	ø8	ø4	ø6	ø4
07	•					•			
08	•					•	•		
09		•				•			
10			•				•		
19				•					•
20				•					•
21					•				•
22					•				•
26	•								•
27	•								•
28		•							•
29		•							•
33			•			•			
34			•			•			
35				•		•	•		
36				•		•	•		

Inch size

Mounting position	Fitting type	IN side				OUT side			
		Straight		Elbow		Straight		Elbow	
		Symbol	ø1/4	ø5/16	ø1/4	ø5/16	ø3/32	ø1/4	ø5/32
57	•					•			
58	•					•	•		
59		•				•			
60			•				•		
69				•					•
70				•					•
71					•				•
72					•				•
76	•								•
77	•								•
78		•							•
79		•							•
83			•			•			
84			•			•			
85				•		•	•		
86				•		•	•		

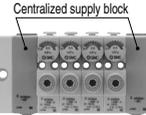


IN side



OUT side (Back side)

5. Accessories

Symbol	Pressure gauge ^(Note)		Centralized supply block mounting position		
	Yes	None	L side (Left)	R side (Right)	B side (Both)
					
A	●		●		
B	●			●	
C	●				●
D		●	●		
E		●		●	
F		●			●

Note) Pressure gauges are not compatible with copper-free and fluorine-free specifications.

6. Semi-standard

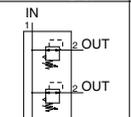
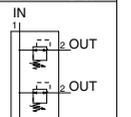
Symbol	None	0.35 MPa setting ^(Note)	Non-relieving
NII	●		
1		●	
2			●
3		●	●

Note) A pressure gauge with a full span of 0.8 MPa is attached.

7. Unit Representation

Symbol	Description
NII	Display unit for product name plate and pressure gauge: MPa
Z ^(Note)	Display unit for product name plate and pressure gauge: psi

Note) This option is available for use outside Japan only. (The SI units must be used in Japan.)

Symbol	
Relieving type	Non-relieving type
	

Note) A standard model is equipped with a backflow function. A main valve opens when the inlet pressure is released, and then an outlet pressure backflows into the inlet side.

Standard Specifications

Model		ARM5A
Regulator construction		Direct acting
Working principle		Piston type
Relief mechanism	Standard	Relieving type
	Semi-standard	Non-relieving type
Backflow function		Within (Unbalanced type)
IN side tubing O.D.		ø6, ø8, ø1/4", ø5/16"
OUT side tubing O.D.		ø4, ø6, ø5/32", ø1/4"
Proof pressure		1.5 MPa
Maximum operating pressure		1.0 MPa
Set pressure range	Standard	0.05 to 0.7 MPa
	Semi-standard	0.05 to 0.35 MPa (Low pressure type)
Fluid		Air
Ambient and fluid temperature		5 to 60°C

Note) 0.1 MPa or greater set pressure is required when used in the reverse flow.

ARJ

AR425 to 935

ARX

AMR

ARM

ARP

IR

IRV

VEV

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

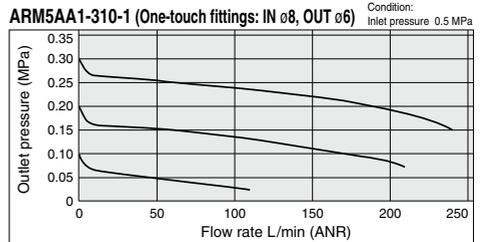
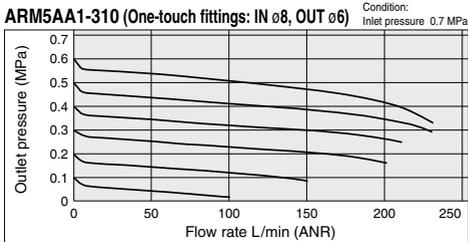
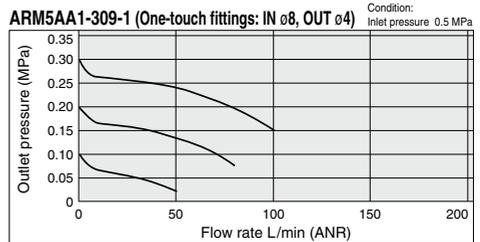
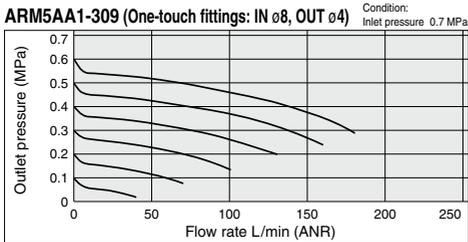
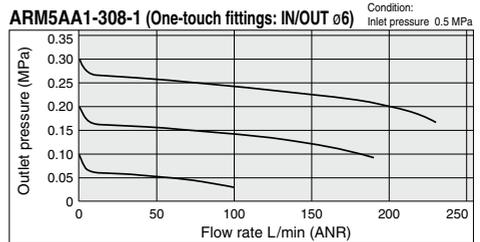
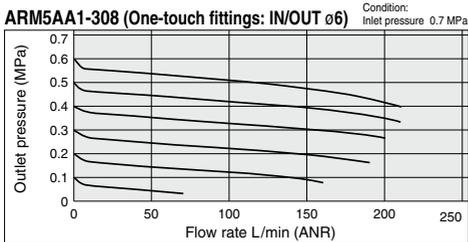
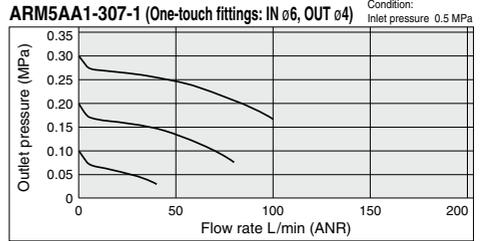
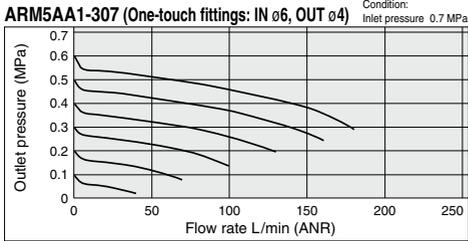
VY1

VBA
VBAT

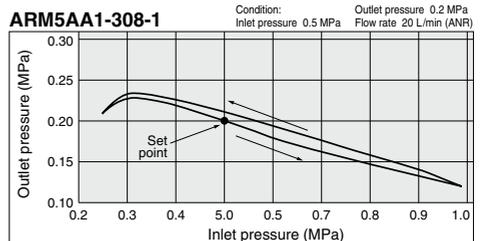
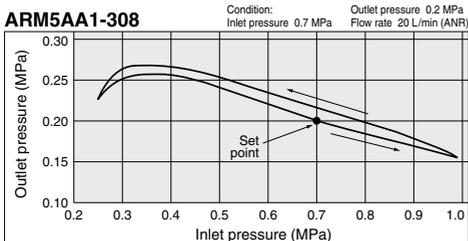
AP100

Series ARM5A

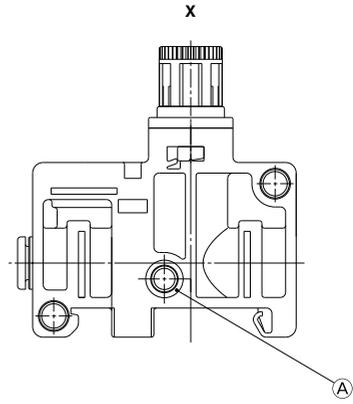
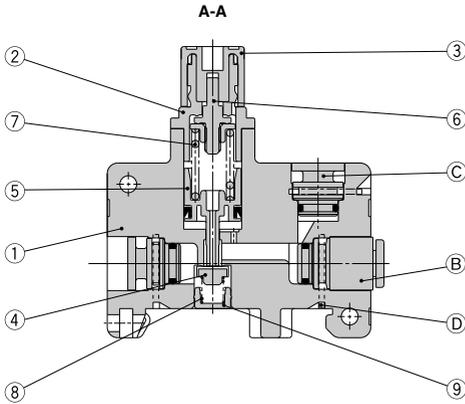
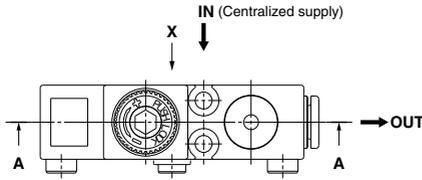
Flow Characteristics (Representative Value)



Pressure Characteristics (Representative Value)



Construction (Centralized Supply Type Regulator Block)



Component Parts

No.	Description	Material
1	Body (for centralized supply)	PBT
2	Bonnet	PBT
3	Handle	POM
4	Valve	HNBR, Aluminum alloy
5	Piston assembly	POM, NBR
6	Adjusting screw assembly	—
7	Adjusting spring	Stainless steel
8	Valve spring	Stainless steel
9	Valve guide	Brass, With electroless nickel plated

Replacement Parts

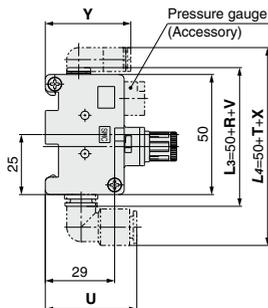
No.	Description	Material	Qty.	Part no.
A	O-ring	NBR	1	136019
B	Fitting assembly	—	1	Refer to page 646.
C	Port plug	PBT, HNBR	1	Refer to page 647.
D	Clip	Stainless steel	3	136010

ARJ
AR425 to 935
ARX
AMR
ARM
ARP
IR
IRV
VEX
SRH
SRP
SRF
VCHR
ITV
IC
ITVX
PVQ
VEF
VEP
VER
VEA
VY1
VBA
VBAT
AP100

Series ARM5A

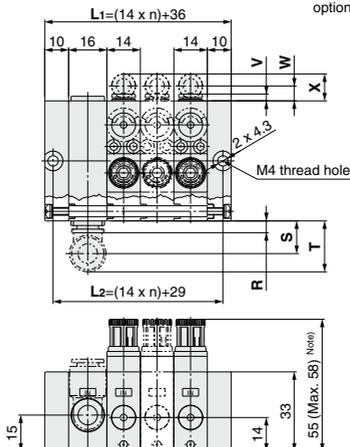
Dimensions

ARM5AA □ Centralized supply type (Direct mount)



* n = Number of stations for regulator block

For dimensions of One-touch fittings and manifold options, please refer to pages 643 through to 647.

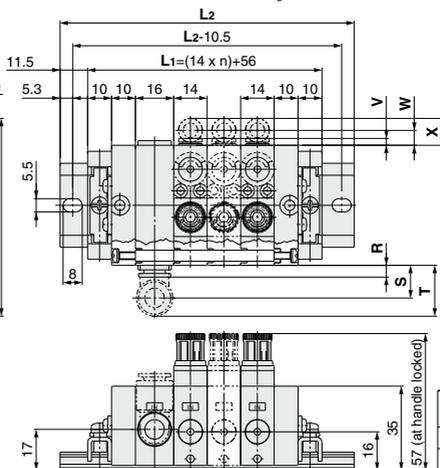
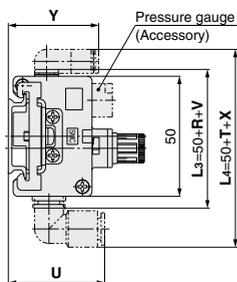


Note) Max. dimension is the size when the handle is unlocked.

Fitting size	IN side				OUT side			
	Straight	Elbow	Elbow	Elbow	Straight	Elbow	Elbow	Elbow
	R	S	T	U	V	W	X	Y
ø4, ø5/32	—	—	—	—	2.5	6	11	35.5
ø6	3	12.5	19	35.5	3	6.5	11	36
ø1/4	3	12.5	19	35.5	6.5	6	11.5	38.5
ø8, ø5/16	5	13.5	21	38.5	—	—	—	—

ARM5AB □ Centralized supply type (DIN rail mount)

* n = Number of stations for regulator block



Fitting size	IN side				OUT side			
	Straight	Elbow	Elbow	Elbow	Straight	Elbow	Elbow	Elbow
	R	S	T	U	V	W	X	Y
ø4, ø5/32	—	—	—	—	2.5	6	11	37.5
ø6	3	12.5	19	37.5	3	6.5	11	38
ø1/4	3	12.5	19	37.5	6.5	6	11.5	40.5
ø8, ø5/16	5	13.5	21	40.5	—	—	—	—

Stations	DIN rail part no.	L2 dimension
1	VVQ1000-90-7	98
2	VVQ1000-90-8	110.5
3	VVQ1000-90-9	123
4	VVQ1000-90-11	148
5	VVQ1000-90-12	160.5
6	VVQ1000-90-13	173
7	VVQ1000-90-14	185.5
8	VVQ1000-90-15	198
9	VVQ1000-90-16	210.5
M	VVQ1000-90-17	223

Compact Manifold Regulator Individual Supply Type Series **ARM5B**

How to Order

ARM5 B **A** - **4** **07** -

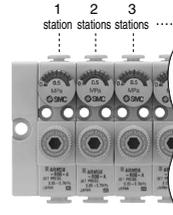
Individual supply type • ① ② ③ ④ ⑤ ⑥

1. Manifold Mounting

Symbol	A	B
How to mount	Direct mount	DIN rail mount
Appearance		

2. Regulator Block Stations

Symbol	Stations
1	1 station
2	2 stations
3	3 stations
4	4 stations
5	5 stations
6	6 stations
7	7 stations
8	8 stations
9	9 stations
M	10 stations



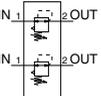
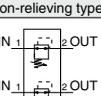
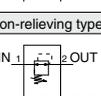
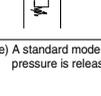
3. IN/OUT Piping Position

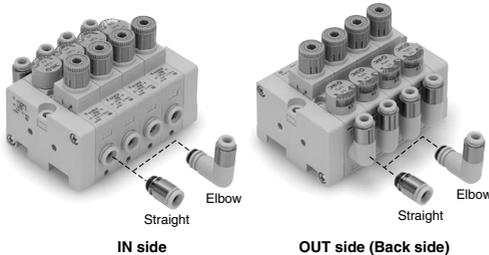
Metric size

Mounting position	IN side				OUT side				
	Straight		Elbow		Straight		Elbow		
	Symbol	ø4	ø6	ø4	ø6	ø4	ø6	ø4	ø6
06	●								
07		●			●				
08		●				●			
18			●				●		
19				●			●		
20				●				●	
25	●							●	
26		●						●	
27		●							●
32			●		●				
33				●	●				
34				●		●			

Inch size

Mounting position	IN side				OUT side				
	Straight		Elbow		Straight		Elbow		
	Symbol	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4
56	●								
57		●			●				
58		●				●			
68			●				●		
69				●			●		
70				●				●	
75	●							●	
76		●						●	
77		●							●
82			●		●				
83				●	●				
84				●		●			

Symbol	Relieving type	Non-relieving type
IN 1		
IN 1		



Note) A standard model is equipped with a backflow function. A main valve opens when the inlet pressure is released, and then an outlet pressure backflows into the inlet side.

4. Accessory

Symbol	Pressure gauge ^{Note)}	Configuration
NII	None	
A	Yes	

Note) Pressure gauges are not compatible with copper-free and fluorine-free specifications.

6. Semi-standard

Symbol	None	0.35 MPa setting ^{Note)}	Non-relieving
NII	●		
1		●	
2			●
3		●	●

Note) A pressure gauge with a full span of 0.8 MPa is attached.

7. Unit Representation

Symbol	Description
NII	Display unit for product name plate and pressure gauge: MPa
Z ^{Note)}	Display unit for product name plate and pressure gauge: psi

Note) This option is available for use outside Japan only. (The SI units must be used in Japan.)

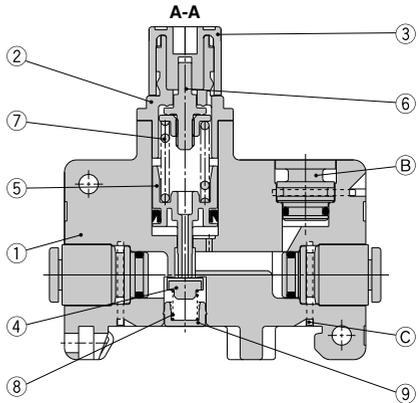
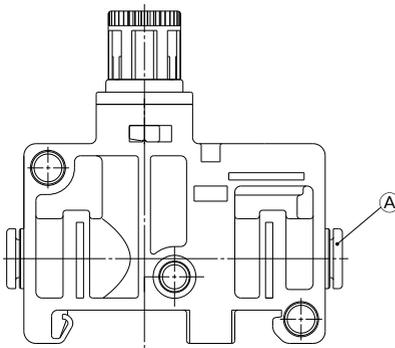
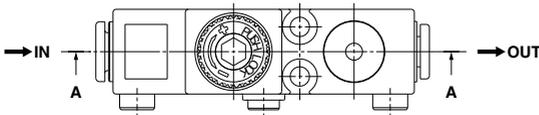
Series ARM5B

Standard Specifications

Model		ARM5B
Regulator construction		Direct acting
Working principle		Piston type
Relief mechanism	Standard	Relieving type
	Semi-standard	Non-relieving type
Backflow function		Within (Unbalanced type)
IN side tubing O.D.		ø4, ø6, ø5/32", ø1/4"
OUT side tubing O.D.		ø4, ø6, ø5/32", ø1/4"
Proof pressure		1.5 MPa
Maximum operating pressure		1.0 MPa
Set pressure range	Standard	0.05 to 0.7 MPa
	Semi-standard	0.05 to 0.35 MPa (Low pressure type)
Fluid		Air
Ambient and fluid temperature		5 to 60°C

Note) 0.1 MPa or greater set pressure is required when used in the reverse flow.

Construction (Individual Supply Type Regulator Block)



Component Parts

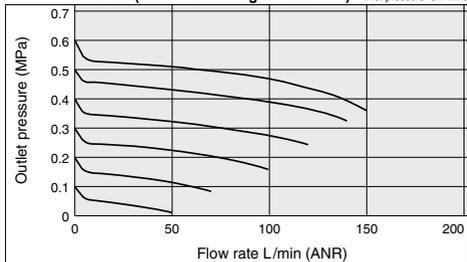
No.	Description	Material
1	Body (for individual supply)	PBT
2	Bonnet	PBT
3	Handle	POM
4	Valve	HNBR, Aluminum alloy
5	Piston assembly	POM, NBR
6	Adjusting screw assembly	—
7	Adjusting spring	Stainless steel
8	Valve spring	Stainless steel
9	Valve guide	Brass, With electroless nickel plated

Replacement Parts

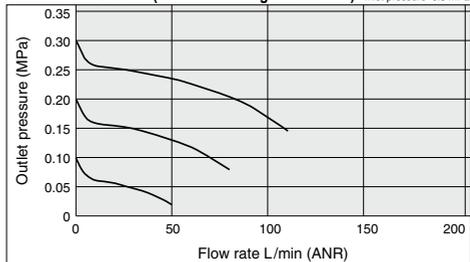
No.	Description	Material	Qty.	Part no.
A	Fitting assembly	—	2	Refer to page 646.
B	Port plug	PBT, HNBR	1	Refer to page 647.
C	Clip	Stainless steel	3	136010

Flow Characteristics (Representative Value)

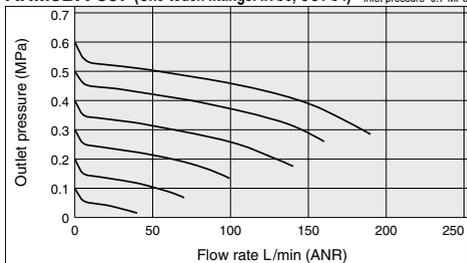
ARM5BA-306 (One-touch fittings: IN/OUT $\phi 4$) Condition: Inlet pressure 0.7 MPa



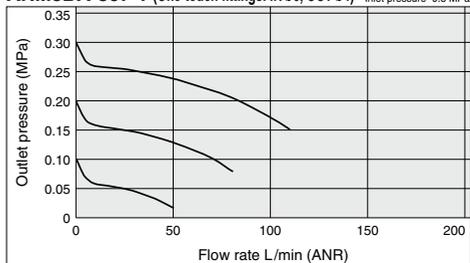
ARM5BA-306-1 (One-touch fittings: IN/OUT $\phi 4$) Condition: Inlet pressure 0.5 MPa



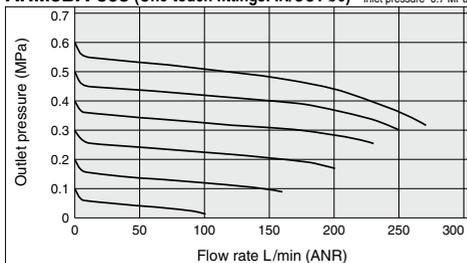
ARM5BA-307 (One-touch fittings: IN $\phi 6$, OUT $\phi 4$) Condition: Inlet pressure 0.7 MPa



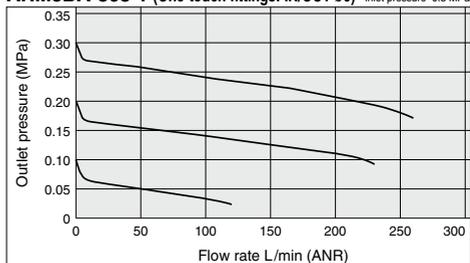
ARM5BA-307-1 (One-touch fittings: IN $\phi 6$, OUT $\phi 4$) Condition: Inlet pressure 0.5 MPa



ARM5BA-308 (One-touch fittings: IN/OUT $\phi 6$) Condition: Inlet pressure 0.7 MPa

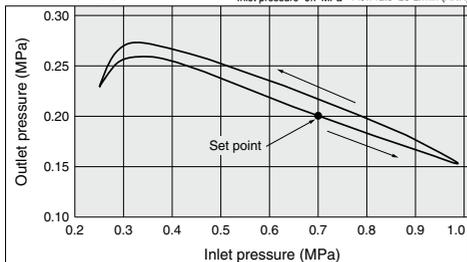


ARM5BA-308-1 (One-touch fittings: IN/OUT $\phi 6$) Condition: Inlet pressure 0.5 MPa

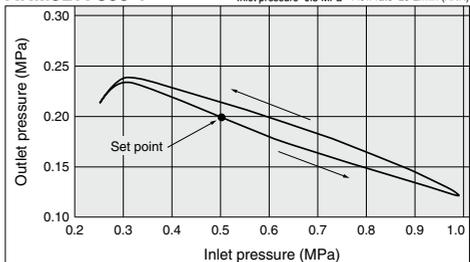


Pressure Characteristics (Representative Value)

ARM5BA-306 Condition: Inlet pressure 0.7 MPa, Outlet pressure 0.2 MPa, Flow rate 20 L/min (ANR)



ARM5BA-306-1 Condition: Inlet pressure 0.5 MPa, Outlet pressure 0.2 MPa, Flow rate 20 L/min (ANR)



ARJ

AR425 to 935

ARX

AMR

ARM

ARP

IR

IRV

VEX

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF

VEP

VER

VEA

VY1

VBA

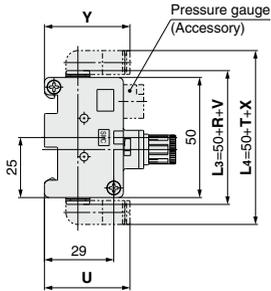
VBAT

AP100

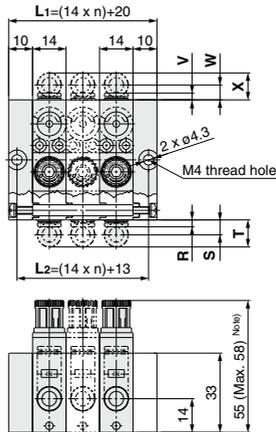
Series ARM5B

Dimensions

ARM5BA Individual supply type (Direct mount)



* n = Number of regulator block stations

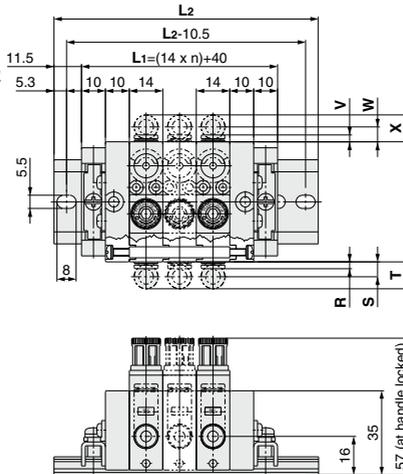
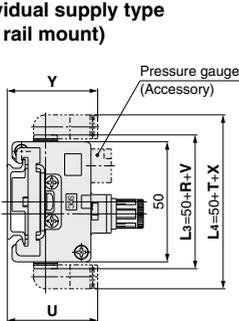


(Note) Max. dimension is the size when the handle is unlocked.

Fitting size	IN side				OUT side			
	Straight R	Elbow S	Elbow T	Elbow U	Straight V	Elbow W	Elbow X	Elbow Y
ø4, ø5/32	2.5	6	11	35.5	2.5	6	11	35.5
ø6	3	6.5	11	36	3	6.5	11	36
ø1/4	6.5	6	11.5	38.5	6.5	6	11.5	38.5

ARM5BB Individual supply type (DIN rail mount)

* n = Number of regulator block stations

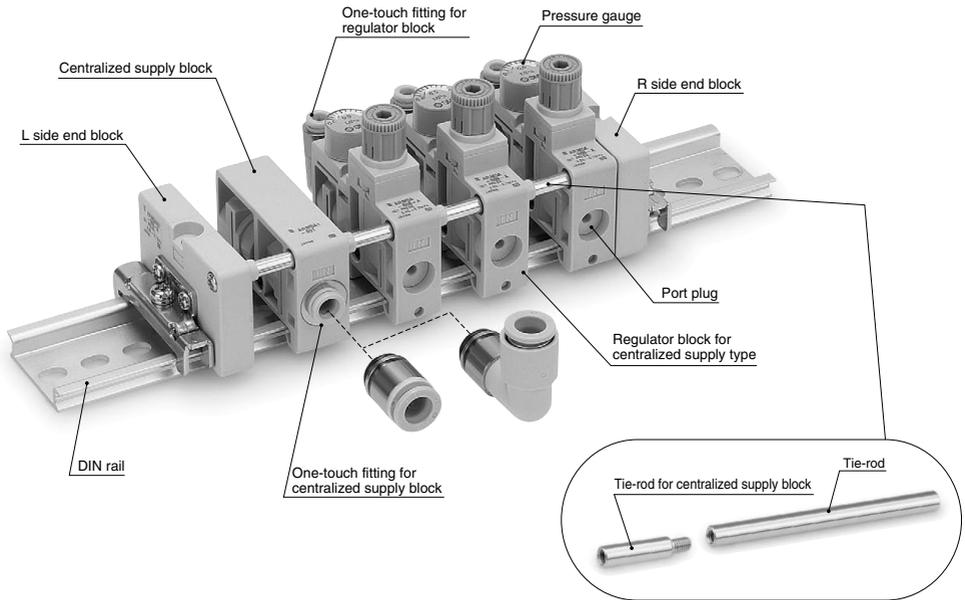


Fitting size	IN side				OUT side			
	Straight R	Elbow S	Elbow T	Elbow U	Straight V	Elbow W	Elbow X	Elbow Y
ø4, ø5/32	2.5	6	11	37.5	2.5	6	11	37.5
ø6	3	6.5	11	38	3	6.5	11	38
ø1/4	6.5	6	11.5	40.5	6.5	6	11.5	40.5

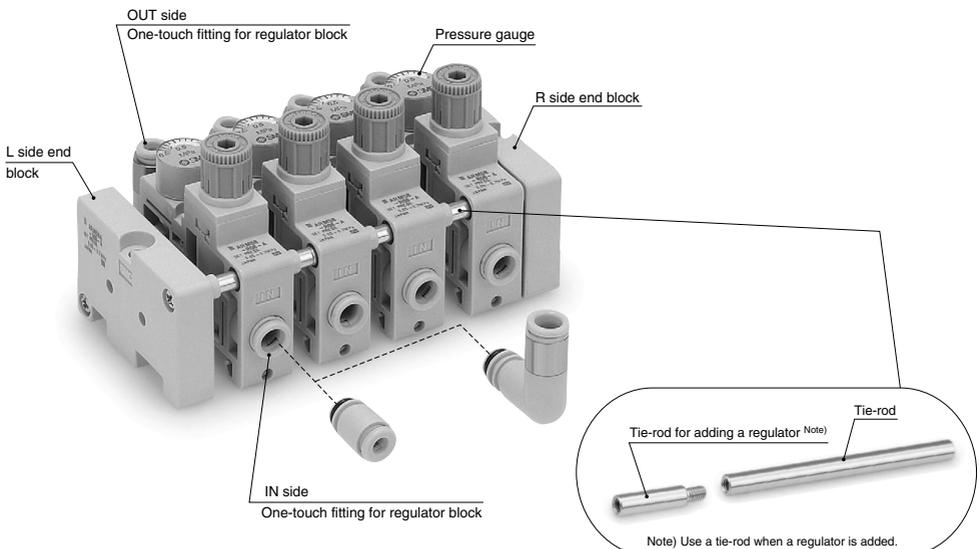
Stations	DIN rail part no.	L2 dimension
1	VVQ1000-90-6	85.5
2	VVQ1000-90-7	98
3	VVQ1000-90-8	110.5
4	VVQ1000-90-9	123
5	VVQ1000-90-10	135.5
6	VVQ1000-90-12	160.5
7	VVQ1000-90-13	173
8	VVQ1000-90-14	185.5
9	VVQ1000-90-15	198
M	VVQ1000-90-16	210.5

Compact Manifold Regulator Options

Centralized Supply Type



Individual Supply Type



ARJ

AR425
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEV

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

VY1

VBA
VBAT

AP100

Regulator Block

Centralized Supply Type ARM5A-R 04 - A

① ② ③ ④

1. OUT Fitting Type

Metric size

Symbol	Straight		Elbow	
	ø4	ø6	ø4	ø6
04	●			
05		●		
16			●	
17				●

Inch size

Symbol	Straight		Elbow	
	ø5/32	ø1/4	ø5/32	ø1/4
54	●			
55		●		
66			●	
67				●

4. Unit Representation

Symbol	Description
Nil	Display unit for product name plate and pressure gauge: MPa
Z ^{Note)}	Display unit for product name plate and pressure gauge: psi

Note) This option is available for use outside Japan only. (The SI units must be used in Japan.)

2. Accessories

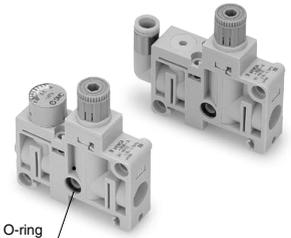
Symbol	Pressure gauge ^{Note)}		Extension tie-rod	
	Yes	None	Yes	None
A	●		●	
B	●			●
C		●	●	
D		●		●

Note) Pressure gauges are not compatible with copper-free and fluorine-free specifications.

3. Semi-standard

Symbol	None	0.35 MPa setting ^{Note)}	Non-relieving
Nil	●		
1		●	
2			●
3		●	●

Note) A pressure gauge with a full span of 0.8 MPa is attached.



Note) The O-ring is attached to the manifold connection.

Individual Supply Type ARM5B-R 06 - A

① ② ③ ④

1. IN/OUT Fitting Type

Metric size

Symbol	IN side				OUT side			
	Straight		Elbow		Straight		Elbow	
	ø4	ø6	ø4	ø6	ø4	ø6	ø4	ø6
06	●				●			
07		●			●			
08	●					●		
18			●				●	
19				●				●
20				●				●
25	●							●
26		●						●
27	●							●
32			●		●			
33				●		●		
34				●			●	

Inch size

Symbol	IN side				OUT side			
	Straight		Elbow		Straight		Elbow	
	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4
56	●				●			
57		●			●			
58	●					●		
68			●				●	
69				●				●
70				●				●
75	●							●
76		●						●
77	●							●
82			●		●			
83				●		●		
84				●			●	

3. Semi-standard

Symbol	None	0.35 MPa setting ^{Note 1)}	Non-relieving
Nil	●		
1		●	
2			●
3		●	●

Note) A pressure gauge with a full span of 0.8 MPa is attached.

4. Unit Representation

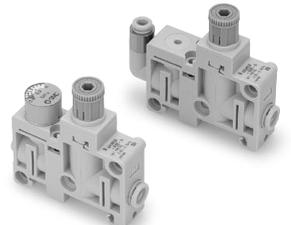
Symbol	Description
Nil	Display unit for product name plate and pressure gauge: MPa
Z ^{Note)}	Display unit for product name plate and pressure gauge: psi

Note) This option is available for use outside Japan only. (The SI units must be used in Japan.)

2. Accessories

Symbol	Pressure gauge ^{Note)}		Extension tie-rod	
	Yes	None	Yes	None
A	●		●	
B	●			●
C		●	●	
D		●		●

Note) Pressure gauges are not compatible with copper-free and fluorine-free specifications.



Centralized Supply Block

ARM5A 1 - **S** 01 -

① ② ③

1. Centralized Supply (IN) Piping Position

Symbol	1	2
Piping position	Bottom	Top
Appearance		

2. IN Fitting Type

Metric size

Symbol	IN side			
	Straight		Elbow	
	ø6	ø8	ø6	ø8
01	●			
02		●		
13			●	
14				●

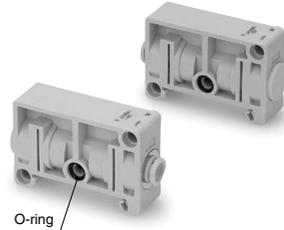
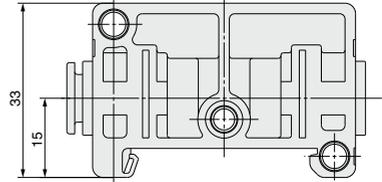
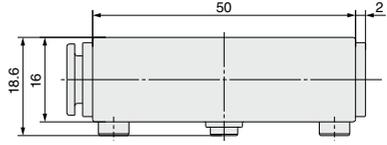
Inch size

Symbol	IN side			
	Straight		Elbow	
	ø1/4	ø5/16	ø1/4	ø5/16
51	●			
52		●		
63			●	
64				●

3. Tie-rod for Centralized Supply Block ^(Note)

Symbol	Description
Nil	Without tie-rod
T	With tie-rod

(Note) For details, refer to page 647.



(Note) The O-ring is attached to the manifold connection.

End Block

ARM5EAL -

End block

Manifold mounting

Symbol	Mounting
A	Direct mount
B	DIN rail mount

Mounting position

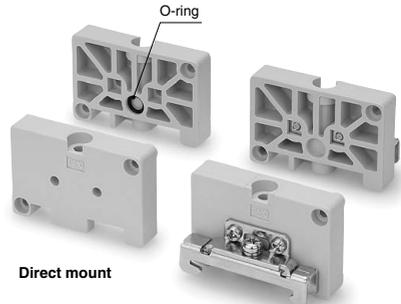
Symbol	Mounting position
L	Left
R	Right

Air supply specification

Symbol	Air supply specification
1	Centralized supply
2	Individual supply

*1 Applicable for the end block on the right side only. Enter nothing for the end block on the left side.

*2 For the centralized air supply specification, the O-ring is attached to the end block on the right side.

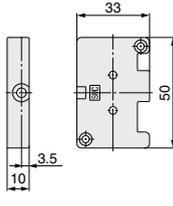
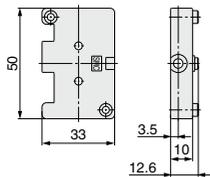


Direct mount

DIN rail mount

L side end block

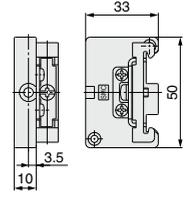
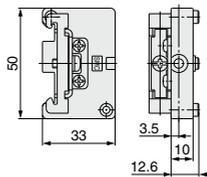
R side end block



Direct mount

L side end block

R side end block



DIN rail mount

ARJ

AR425
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEX

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

VY1

VBA
VBAT

AP100

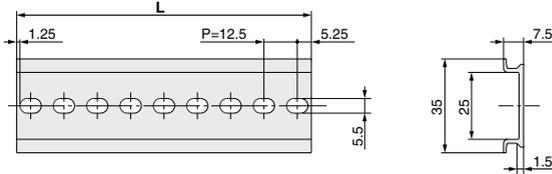
Series ARM5A/B

DIN Rail

VVQ1000-90-7

↓ L dimension

Enter the No. for the desired L dimension from the table below.



L Dimension

$L=12.5 \times n+10.5$

No.	1	2	3	4	5	6	7	8	9	10
L dimension	23	35.5	48	60.5	73	85.5	98	110.5	123	135.5

No.	11	12	13	14	15	16	17	18	19	20
L dimension	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5

No.	21	22	23	24	25	26	27	28	29	30
L dimension	273	285.5	298	310.5	323	335.5	348	360.5	373	385.5

No.	31	32	33	34	35	36	37	38	39	40
L dimension	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5

One-touch Fittings for Centralized Supply Block

VVQ1000-51A - C6

One-touch fittings for centralized supply block

Fitting type

Nll	Straight
L1	Elbow

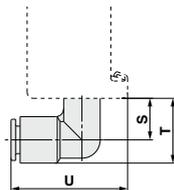
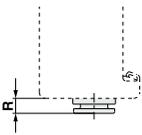
Fitting size

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



Straight type

Elbow type



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.

For details on how to replace, refer to page 655.

One-touch Fittings for Regulator Block

VVQ1000-50A - C4

One-touch fittings for regulator block

Fitting type

Nll	Straight
L1	Elbow

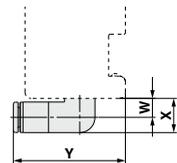
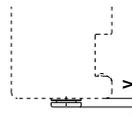
Fitting size

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



Straight type

Elbow type



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.

For details on how to replace, refer to page 655.

Pressure Gauge

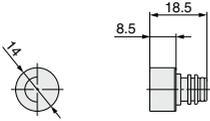
G14-□ 8-JA

● Indication unit

Symbol	Indication unit	Pressure gauge indication range
Nil	MPa	0 to 0.8 MPa
P	psi	0 to 120 psi

Note) The O-ring is attached.

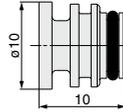
For details on how to replace, refer to page 655.



Port Plug

VVQ000-58A

Single unit regulator / Port plug for regulator block



Note) The O-ring is attached.

For details on how to replace, refer to page 655.

Tie-rod

The length of tie-rod will vary corresponding to the number of stations.

● For Regulator Block

Regulator block stations	Tie-rod part no.	Length
1	136016-1A	14
2	136016-2A	28
3	136016-3A	42
4	136016-4A	56
5	136016-5A	70
6	136016-6A	84
7	136016-7A	98
8	136016-8A	112
9	136016-9A	126
10	136016-10A	140

For adding a regulator	Tie-rod part no.	Length
For adding 1 station	136020A	14

Note 1) When adding the regulator block, please use the correct length of tie-rod that corresponds to the number of required stations, or add the extension tie-rod.

Note 2) The part number is for a pair of pieces.

● For Centralized Supply Block

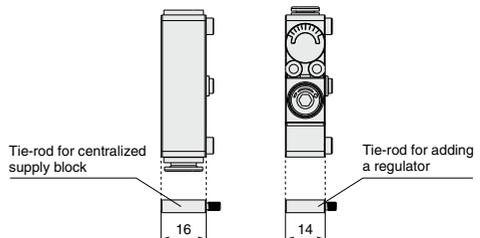
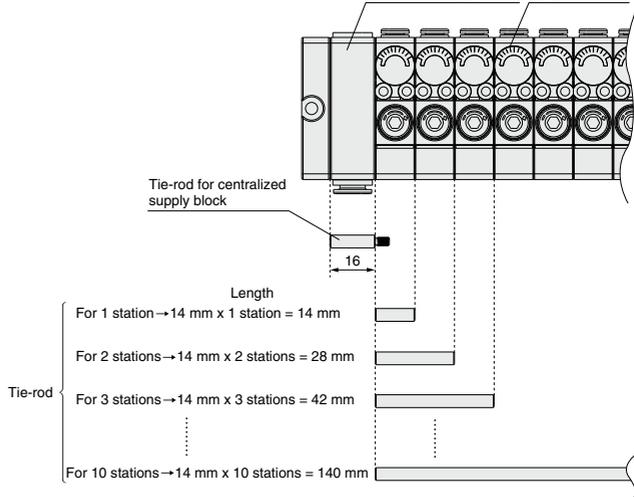
Centralized supply block qty.	Tie-rod part no.	Length
1	136017-1A	16
2	136017-2A	32

Note 1) When adding the centralized air supply block, add the tie-rod for centralized air supply to the regulator block tie-rod. Please pay special attention to its length as this differs from the one for the regulator extension tie-rod.

Note 2) The part number is for a pair of pieces.



Centralized supply block Regulator block



ARJ

AR425 to 935

ARX

AMR

ARM

ARP

IR

IRV

VEV

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

VY1

VBA
VBAT

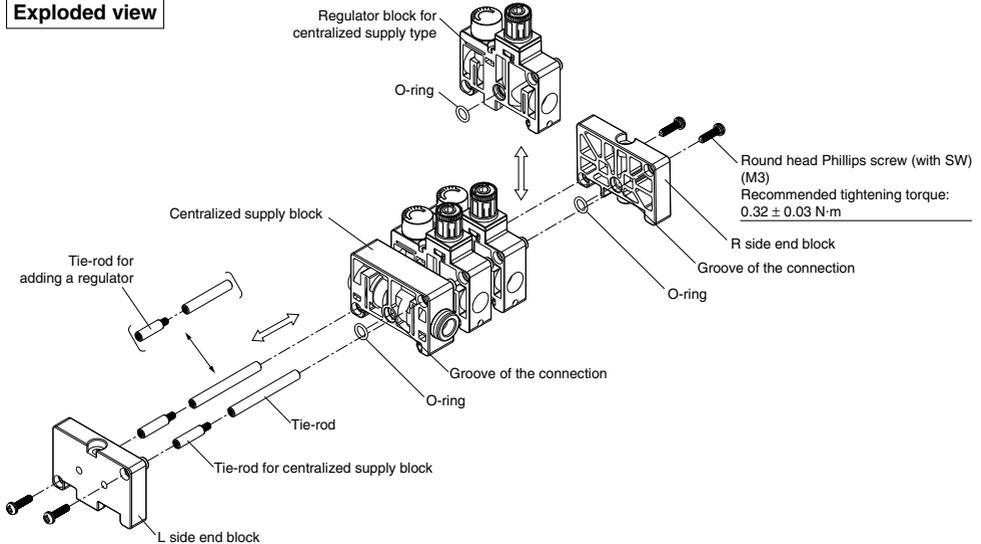
AP100

How to Add Manifold

● In case of the centralized air supply type

It's possible to add the centralized air supply block or regulator block and also alter the position.

Exploded view



1 Disassembly

- ① Loosen the 4 round head Phillips screws at the corners of the end block. (Each 2 locations on both the right and left side)
- ② Remove the tie-rod from the end block, centralized air supply block, and regulator block.

2 Additional parts (Please prepare separately.)

- ① Centralized supply block, Regulator block
- ② Tie-rod
Note) A tie-rod, which is corresponding to the regulator block stations, or additional tie-rod for increasing the station will be required.

3 Assembly

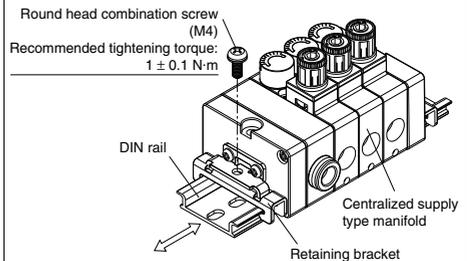
- ① Connect the tie-rods.
- ② Insert the tie-rod to the end block on the L side, and temporarily tighten the round head Phillips screws. (2 screws)
- ③ Check the O-ring is fitted in the groove of the connection on each manifold block and then insert each block to the tie-rod.
- ④ Temporarily tighten the round head Phillips screws on the R side. (2 screws)
- ⑤ Additionally tighten the round head Phillips screws on both sides of the manifold with the recommended tightening torque.

⚠ Caution

- ① Before disassembly, be sure to check that no inlet or outlet pressure is applied and exhaust the internal pressure thoroughly before starting the job.
- ② After assembly, if the connection between each block, or the tightened tie-rod screws are insufficient, air leakage may occur. Before use, only connect the air after confirming that all the components are securely fixed and that there is no air leakage.

● How to remove DIN rail for DIN rail mount type

Exploded view



1 Disassembly

- ① Loosen the round head combination screws. (located on both the right and left side)
- ② Remove the DIN rail, sliding it horizontally.
- ③ Remove the retaining bracket.

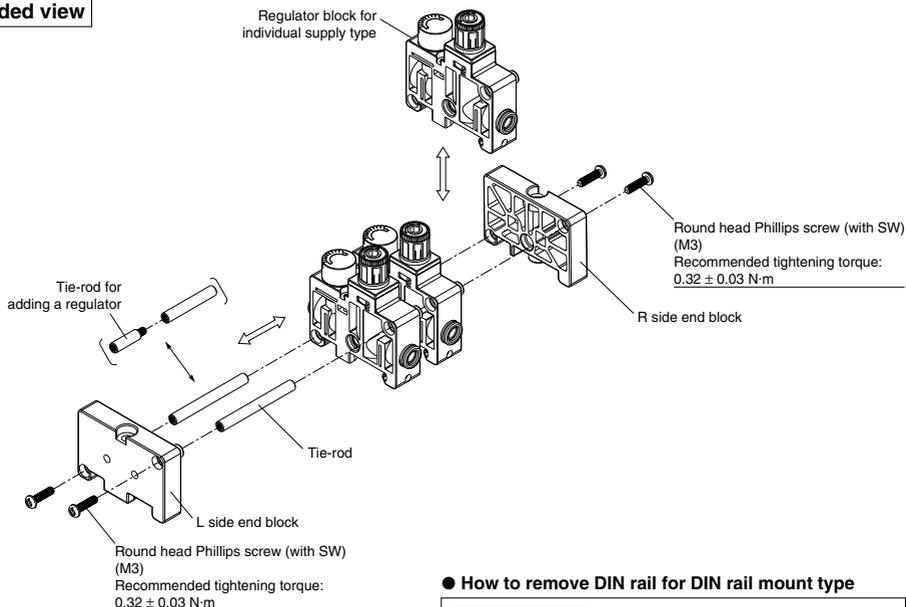
2 Assembly

- ① Set the retaining bracket to the original position.
- ② Insert the DIN rail.
- ③ Tighten the round head combination screw with the recommended tightening torque. (located on both the right and left side)

● In case of the Individual air supply type

It's possible to add the regulator block and also alter the position.

Exploded view



1 Disassembly

- ① Loosen the 4 round head Phillips screws at the corners of the end block. (Each 2 locations on both the right and left side)
- ② Remove the tie-rod from the end block and regulator block.

2 Additional parts (Please prepare separately.)

- ① Regulator block
- ② Tie-rod
Note) A tie-rod, which is corresponding to the regulator block stations, or additional tie-rod for increasing the station will be required.

3 Assembly

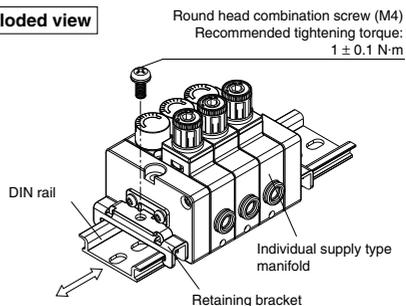
- ① Connect the tie-rods.
- ② Insert the tie-rod to the end block on the L side, and temporarily tighten the round head Phillips screws. (2 screws)
- ③ Insert each block to the tie-rod.
- ④ Temporarily tighten the round head Phillips screws on the R side. (2 screws)
- ⑤ Additionally tighten the round head Phillips screws on both sides of the manifold with the recommended tightening torque.

⚠ Caution

- ① Before disassembly, be sure to check that no inlet or outlet pressure is applied and exhaust the internal pressure thoroughly before starting the job.

● How to remove DIN rail for DIN rail mount type

Exploded view



1 Disassembly

- ① Loosen the round head combination screws. (located on both the right and left side)
- ② Remove the DIN rail, sliding it horizontally.
- ③ Remove the retaining bracket.

2 Assembly

- ① Set the retaining bracket to the original position.
- ② Insert the DIN rail.
- ③ Tighten the round head combination screw with the recommended tightening torque. (located on both the right and left side)

ARJ

AR425
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEV

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

VY1

VBA
VBAT

AP100

Regulator Single Unit Type Series **ARM5S**

How to Order

ARM5 S **A** - **07** - - -

Single unit type ① ② ③ ④ ⑤

1. Regulator Mounting

Symbol	A	B
How to mount	Direct mount	DIN rail mount ^(Note)
Appearance		

(Note) Both the square nut and the hexagon socket head screw are attached for the DIN rail mount type. (DIN rail is not attached.) Refer to the page 654 for handling.

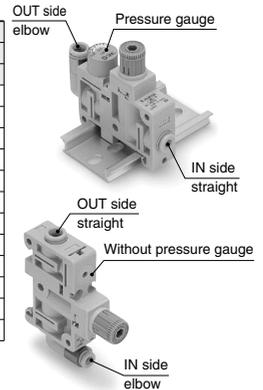
2. IN/OUT Fitting Type

Metric size

Mounting position	IN side				OUT side			
	Straight		Elbow		Straight		Elbow	
Fitting type	ø4	ø6	ø4	ø6	ø4	ø6	ø4	ø6
06	●							
07		●			●			
08		●				●		
18			●				●	
19				●			●	
20				●				●
25	●						●	
26		●					●	
27		●						●
32			●		●			
33				●	●			
34				●		●		

Inch size

Mounting position	IN side				OUT side			
	Straight		Elbow		Straight		Elbow	
Fitting type	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4
56	●					●		
57		●				●		
58		●				●		
68			●				●	
69				●			●	
70				●				●
75	●						●	
76		●					●	
77		●						●
82			●		●			
83				●	●			
84				●		●		



3. Accessory

Symbol	Accessory
Nil	Without pressure gauge
A	With pressure gauge

4. Semi-standard

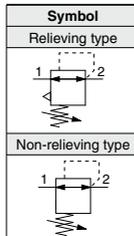
Symbol	None	0.35 MPa setting ^(Note)	Non-relieving
Nil	●		
1		●	
2			●
3		●	●

(Note) A pressure gauge with a full span of 0.8 MPa is attached.

5. Unit Representation

Symbol	Description
Nil	Display unit for product name plate and pressure gauge: MPa
Z ^(Note)	Display unit for product name plate and pressure gauge: psi

(Note) This option is available for use outside Japan only. (The SI units must be used in Japan.)



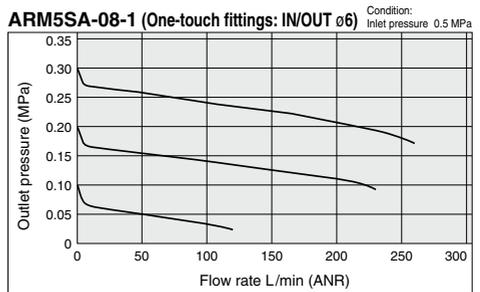
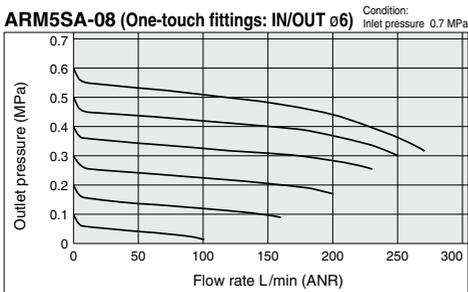
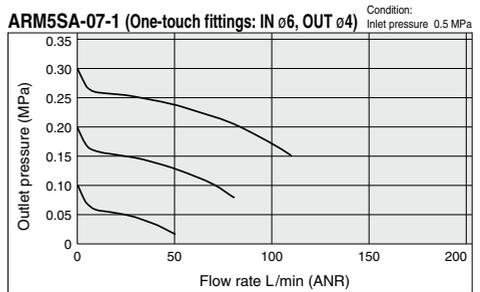
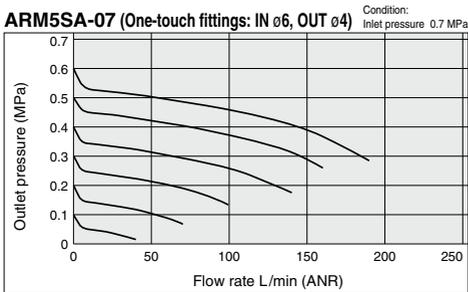
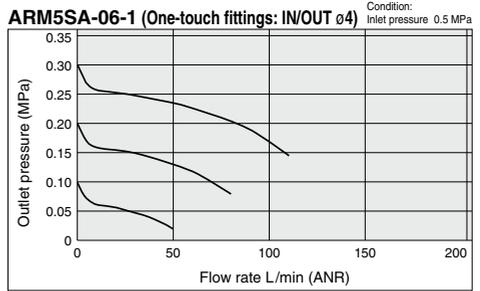
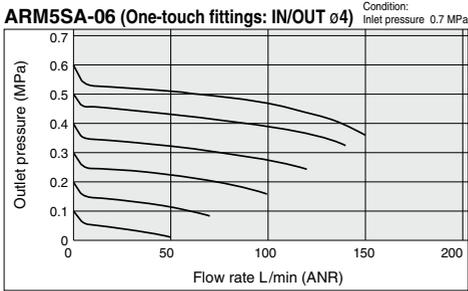
(Note) A standard model is equipped with a backflow function. A main valve opens when the inlet pressure is released, and then an outlet pressure backflows into the inlet side.

Standard Specifications

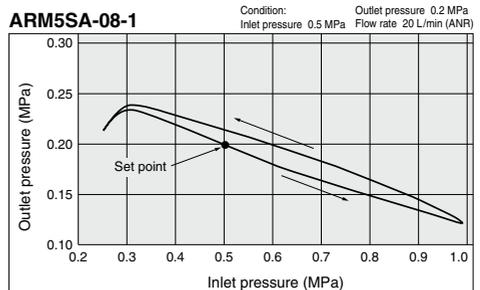
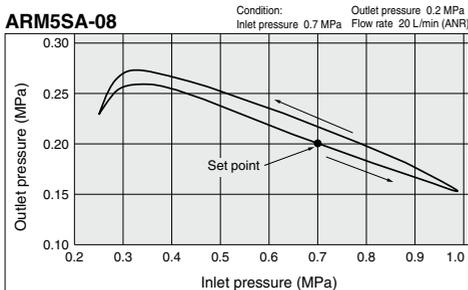
Model		ARM5S
Regulator construction		Direct acting
Working principle		Piston type
Relief mechanism	Standard	Relieving type
	Semi-standard	Non-relieving type
Backflow function		Within (Unbalanced type)
IN side tubing O.D.		ø4, ø6, ø5/32", ø1/4"
OUT side tubing O.D.		ø4, ø6, ø5/32", ø1/4"
Proof pressure		1.5 MPa
Maximum operating pressure		1.0 MPa
Set pressure range	Standard	0.05 to 0.7 MPa
	Semi-standard	0.05 to 0.35 MPa (Low pressure type)
Fluid		Air
Ambient and fluid temperature		5 to 60°C
Weight (at ARM5SA-08-A)		33 g

(Note) 0.1 MPa or greater set pressure is required when used in the reverse flow.

Flow Characteristics (Representative Value)



Pressure Characteristics (Representative Value)



ARJ

AR425 to 935

ARX

AMR

ARM

ARP

IR

IRV

VEV

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

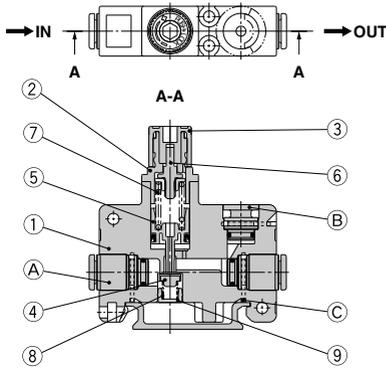
VY1

VBA
VBAT

AP100

Series ARM5S

Construction (Regulator)



Component Parts

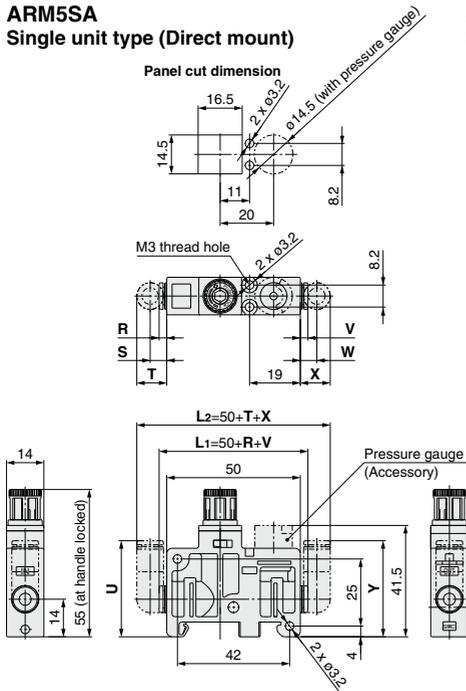
No.	Description	Material
1	Body (for single unit)	PBT
2	Bonnet	PBT
3	Handle	POM
4	Valve	HNBR, Aluminum alloy
5	Piston assembly	POM, NBR
6	Adjusting screw assembly	—
7	Adjusting spring	Stainless steel
8	Valve spring	Stainless steel
9	Valve guide	Brass, With electroless nickel plated
10	Clip	Stainless steel

Replacement Parts

No.	Description	Material	Qty.	Part no.
A	Fitting assembly	—	2	Refer to page 653.
B	Port plug	PBT, HNBR	1	Refer to page 647.
C	Clip	Stainless steel	3	136010

Dimensions

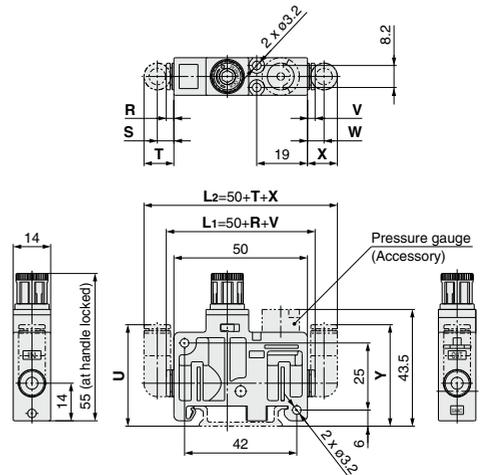
ARM5SA Single unit type (Direct mount)



Fitting size	IN side				OUT side			
	Straight	Elbow	Elbow	Elbow	Straight	Elbow	Elbow	Elbow
ø4, ø5/32	2.5	6	11	35.5	2.5	6	11	35.5
ø6	3	6.5	11	36	3	6.5	11	36
ø1/4	6.5	6	11.5	38.5	6.5	6	11.5	38.5

ARM5SB Single unit type (DIN rail mount)

For dimensions of One-touch fittings and accessories, please refer to page 653.



Fitting size	IN side				OUT side			
	Straight	Elbow	Elbow	Elbow	Straight	Elbow	Elbow	Elbow
ø4, ø5/32	2.5	6	11	37.5	2.5	6	11	37.5
ø6	3	6.5	11	38	3	6.5	11	38
ø1/4	6.5	6	11.5	40.5	6.5	6	11.5	40.5

Regulator/Single Unit Type Options

Pressure Gauge

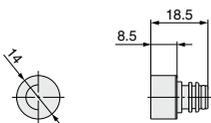
G14- 8-JA



Indication unit

Symbol	Indication unit	Pressure gauge indication range
NII	MPa	0 to 0.8 MPa
P	psi	0 to 120 psi

Note) The O-ring is attached.
For details on how to replace, refer to page 655.



One-touch Fittings for Regulator

VVQ1000-50A- C4

One-touch fittings
for regulator

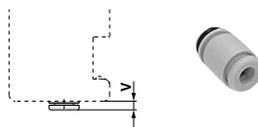
Fitting type

NII	Straight
L1	Elbow

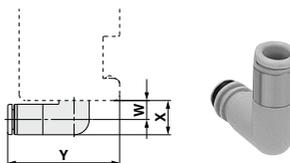
Fitting size

C4	ø4
C6	ø6
N3	ø5/32
N7	ø1/4

Straight type



Elbow type



Fitting size	One-touch fittings for regulator			
	Straight V	Elbow W	Elbow X	Elbow 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.
For details on how to replace, refer to page 655.

ARJ

AR425
to 935

ARX

AMR

ARM

ARP

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IRV

VEX

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SRF

VCHR

ITV

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ITVX

PVQ

VEF
VEP

VER

VEA

VY1

VBA
VBAT

AP100



Series ARM5 Blocks/Specific Product Precautions 1

Be sure to read before handling. Refer to front matter 43 for Safety Instructions and pages 365 to 369 for Precautions on every series.

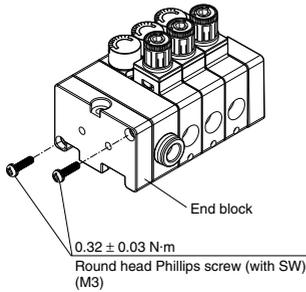
Handling

Warning

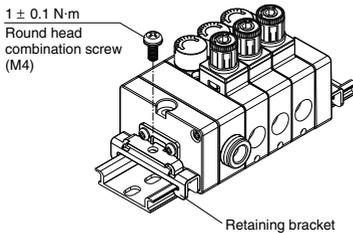
Observe the proper screw tightening torque in installation.

Tightening beyond the proper tightening torque may damage the mounting screws, blocks or switches. If the force is below the tightening torque range, the threaded joint can come loose.

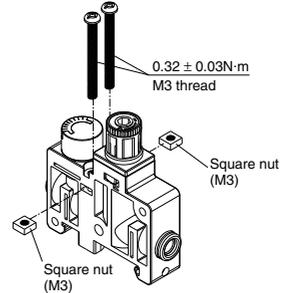
1. Tightening torque for round head Phillips screws for tie-rods of the regulator manifold.



2. Tightening torque for round head combination screws for DIN rail of the regulator manifold

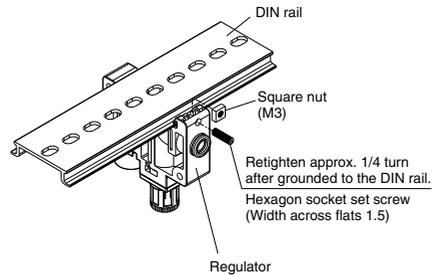


3. Tightening torque for set screws for direct mounting regulator manifold



Note) M3 threads and square nuts are not included.

3. Tightening torque for hexagon socket set screws for DIN rail of the regulator manifold





Series ARM5 Blocks/Specific Product Precautions 2

Be sure to read before handling. Refer to front matter 43 for Safety Instructions and pages 365 to 369 for Precautions on every series.

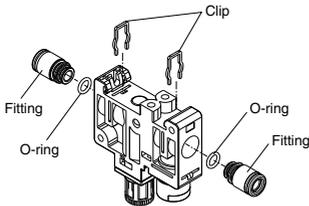
Handling

⚠ Caution

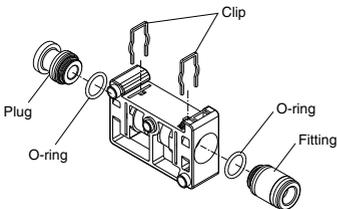
One-touch fitting replacement

For the ease of replacement, One-touch fittings are installed as the cassette type. One-touch fittings are retained with clips inserted from the directions illustrated blow. Remove the clips with a flat head screw driver to replace the One-touch fittings. When installing, insert each One-touch fitting deeply to the end and reinsert the clip to the specified position.

1. Regulator block



2. Centralized supply block



Note 1) Before replacing, be sure to confirm that no inlet or outlet pressure is applied and that the internal pressure is fully exhausted. Replacing with the pressure kept inside is dangerous.

Note 2) Gently remove the clip by hand. Pulling forcibly may cause the clip to pop out, resulting in dangerous replacement.

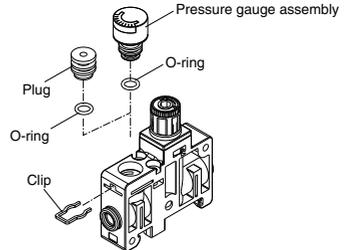
Note 3) When removing the straight type One-touch fitting from each block, remove the clip, connect a tube or plug (KQ2P-□) with the One-touch fitting, and pull out by supporting the tube (or plug). The bushing may be damaged, if released by supporting the release bushing of the One-touch fitting.

Note 4) Insert the clip thoroughly after replacement parts are inserted completely. If using with the clip inserted insufficiently, it may cause the clip to be released, resulting in dangerous operation.

Note 5) When inserting a tube into the elbow type One-touch fitting, hold the fitting body in your hand and insert the tube. If the tube is inserted without support, an unreasonable force may be applied on the blocks or One-touch fittings, resulting in air leakage or product failure.

Pressure gauge and port plug replacement

Possible to replace the pressure gauge and port plug the same as the One-touch fitting replacement.



Note 1) Before replacing, be sure to confirm that no inlet or outlet pressure is applied and that the internal pressure is fully exhausted. Replacing with the pressure kept inside is dangerous.

Note 2) Gently remove the clip by hand. Pulling forcibly may cause the clip to pop out, resulting in dangerous replacement.

Note 3) Lightly screw a M3 screw, etc. in the port plug hole and pull it to remove the port plug.

Note 4) Insert the clip thoroughly after replacement parts are inserted completely. If using with the clip inserted insufficiently, it may cause the clip to be released, resulting in dangerous operation.

ARJ

AR425
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEX

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

VY1

VBA
VBAT

AP100



Series ARM5

Blocks/Specific Product Precautions 3

Be sure to read before handling. Refer to front matter 43 for Safety Instructions and pages 365 to 369 for Precautions on every series.

Adjustment

Warning

Regulators

1. Set the regulator while confirming the inlet pressure and the outlet pressure displayed on the pressure gauge. Rotating the handle excessively may damage internal parts.
2. Rotate the pressure adjustment handle only after unlocking. If rotated while locked, the connecting part between the body and the bonnet may be damaged.
3. For pressure adjustment handle operation, a hexagon wrench can be used in the direction of the pressure increase. If it is used in the direction of pressure decrease, the handle may be damaged. Operate the handle manually.

Caution

Regulators

1. Set the regulator while carefully confirming the inlet pressure.
2. The outlet pressure range must be 85% or less than the inlet pressure. However, it must be within the set pressure range.
3. Release the lock to adjust the pressure. After the adjustment, engage the lock. Failure to observe this procedure could damage the handle or cause the outlet pressure to fluctuate.
4. Turn the pressure adjustment handle clockwise to increase the outlet pressure and counterclockwise to decrease the pressure. (To set the pressure, do so in the direction of pressure increase.)

Pressure gauge and One-touch fittings

1. Both the pressure gauge and the One-touch fittings are a cassette type, so that it is possible to rotate them freely. Rotate them after confirming that there is no pressure inside and exhausting air completely.

Compact Manifold Regulator

Series ARM10/11

Manifold Type		Single Unit Type	
Common supply	Individual supply	Standard	Front handle
			
P.658	P.668	P.681	P.682

Example of panel mounting

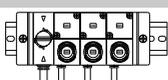
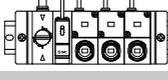


Front handle type is newly added to the single unit specifications.

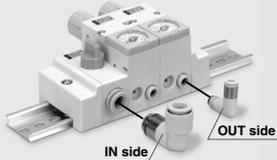
Allows high degree of freedom in selection according to the installation conditions.

- Handle position: Top, Front, Bottom
- Piping direction: Top ported, Bottom ported
- One-touch fitting types: Straight, Elbow

Installation example

Upper space is limited.	Lower space is limited.
	
Front handle/Bottom ported	Front handle/Top ported

Types and sizes of the One-touch fittings can be changed.



	Fitting type	Applicable tubing O.D. (mm)			
		4	6	8	10
IN side	Straight, Elbow	●	●	●	●
OUT side	Straight, Elbow	●	●	●	●

Also available in inch sizes.

Reverse flow function is equipped as a standard.

Can control thrust of the actuator.

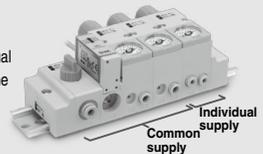
Four types of supply blocks (for common supply)

The mounting position of the supply block can be selected from the right, left and both sides of the manifold.

Supply block	With 3-way pressure relief valve	With pressure switch	With 3-way pressure relief valve + Pressure switch
			

Mixed manifold

Common exhaust type and individual exhaust type can be mounted on the same manifold base.
(Available as Simple Specials)



Pressure gauge with limit indicator.

Opening and closing lens cover makes adjustment easy.

Compatible with units with a digital pressure switch

Individual lines can be controlled with electric signals.



ARJ
AR425 to 935
ARX
AMR
ARM
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PVQ
VEF
VEP
VER
VEA
VY1
VBA
VBAT
AP100

Compact Manifold Regulator

Common Supply Type

Series ARM11A



Made to Order
(Refer to page 688 for details.)

How to Order

ARM11A **A** **1** - **3** **07** - **M** **Z** - **N**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧



1. Handle Position

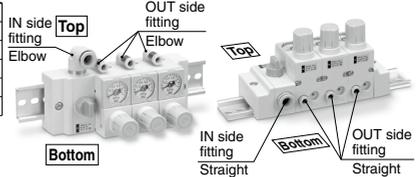
Symbol	Position
A	Top
B	Front
C	Bottom

Top | **Front** | **Bottom**



2. IN/OUT Piping Position

Position Symbol	IN side		OUT side	
	Bottom	Top	Bottom	Top
1	●			
2		●		
3	●		●	
4			●	●



3. Regulator Block Stations

Symbol	Stations
1	1 station
2	2 stations
3	3 stations
4	4 stations
5	5 stations
6	6 stations
7	7 stations
8	8 stations
9	9 stations
M	10 stations

4. IN/OUT Fitting Type (Refer to the figure below.)

Metric size

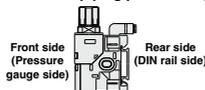
Mounting position Fitting type Symbol	IN side					OUT side				
	Straight		Elbow			Straight		Elbow ^(Note)		
	ø6	ø8	ø10	ø6	ø8	ø10	ø4	ø6	ø4	ø6
07	●									
08	●							●		●
09		●								
10		●								●
11		●								
12		●								●
19				●						●
20				●						●
21				●						●
22				●						●
23				●						●
24				●						●
26	●									●
27	●									●
28		●								●
29		●								●
30		●								●
31		●								●
33			●							●
34			●							●
35			●							●
36			●							●
37			●							●
38			●							●

Inch size

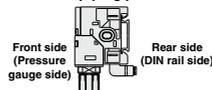
Mounting position Fitting type Symbol	IN side					OUT side				
	Straight		Elbow			Straight		Elbow ^(Note)		
	ø1/4	ø5/16	ø3/8	ø1/4	ø5/16	ø3/8	ø5/32	ø1/4	ø5/32	ø1/4
57	●									
58	●							●		●
59		●								
60		●								●
61		●								●
62		●								●
69				●						●
70				●						●
71				●						●
72				●						●
73				●						●
74				●						●
76	●									●
77	●									●
78		●								●
79		●								●
80		●								●
81		●								●
83			●							●
84			●							●
85			●							●
86			●							●
87			●							●
88			●							●

Note) When the handle and the OUT piping are located on the same side, the elbow fitting is directed to the rear side (DIN rail side). Use caution to ensure the connector is not disturbed, depending on piping direction, when choosing to attach a digital pressure switch.

Handle position: Top
OUT piping position: Top



Handle position: Bottom
OUT piping position: Bottom



Compact Manifold Regulator Common Supply Type *Series ARM11A*

5. Accessories

Symbol	Pressure display ^{Note 1, 2)}		Supply block type ^{Note 3)}				Supply block mounting position		
	Without pressure display	With pressure display	Common supply block	Common supply block with pressure switch	3-way valve common supply block	3-way valve common supply block + Pressure switch block	L side (Left)	R side (Right)	B side (Both)
NII	●		●				●		
A	●			●			●		
B	●				●				
C	●					●	●		
D	●		●					●	
E	●			●				●	
F	●				●			●	
G	●					●		●	
H	●		●						●
J		●	●				●		
K		●		●			●		
L		●			●		●		
M		●				●	●		
N		●	●					●	
O		●		●				●	
P		●			●			●	
Q		●				●		●	
R		●	●						●

Note 1) Pressure display means a pressure gauge or digital pressure switch is attached.

When choosing to attach a digital pressure switch is chosen for attachment, be sure to enter the symbol, referring to table 8, "Digital Pressure Switch Output Specifications". Otherwise, a pressure gauge will come with the regulator.

Note 2) Pressure gauges are not compatible with copper-free and fluorine-free specifications.

Note 3) Pressure switches are not available with the oil-free specification.

6. Semi-standard

Symbol	None	0.35 MPa setting ^{Note 1)}	Non-relieving	^{Note 2)} Oil-free
Nil	●			
1		●		
2			●	
3				●
4		●	●	
5		●		●
6			●	●
7		●	●	●

Note 1) A pressure gauge with a full span of 0.4 MPa is attached.

Note 2) The oil-free specification is grease-free in the fluid contact area.

7. Unit Representation

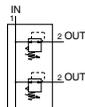
Symbol	Description
NII	Display unit for product name plate and pressure gauge: MPa
Z ^{Note 1, 2)}	Display unit for product name plate and pressure gauge: psi
ZA ^{Note 1, 3)}	Digital pressure switch: with unit switching (MPa is initially set.)

Note 1) This option is available for use outside Japan only. (The SI unit has to be used in Japan.) Additionally, the pressure switch offers dual unit presentation in MPa and psi.

Note 2) The digital pressure switch is equipped with unit switching and initially set to psi.

Note 3) This option is available with the digital pressure switch.

Symbol

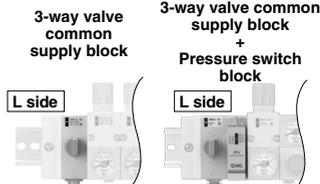
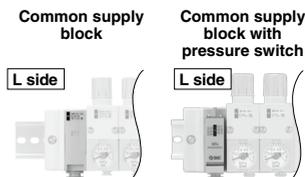
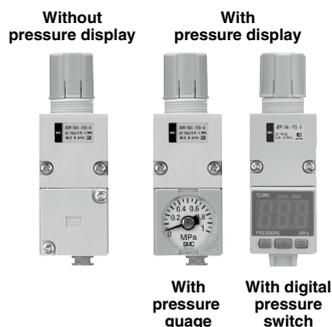


Note) A standard model is equipped with a backflow function. Main valve opens when the inlet pressure is released, and then the outlet pressure backflows into the inlet side.

8. Digital Pressure Switch Output Specifications ^{Note)}

Symbol	Details
NII	None
N	NPN open collector
P	PNP open collector

Note) When a digital pressure switch is attached, the "pressure display" in table 5 "Accessories" will be equipped. The electrical entry is positioned on the side opposite the handle.



Specifications

Manifold (Regulator block, Common supply block, 3-way valve common supply block)

Regulator construction	Direct acting	
Working principal	Diaphragm regulator	
Relief mechanism	Standard	Relief type
	Optional	Non-relieving type
Backflow function ^{Note 1)}	Within (Unbalance type)	
IN side tubing O.D.	ø6, ø8, ø10, ø1/4, ø5/16, ø3/8	
OUT side tubing O.D.	ø4, ø6, ø5/32, ø1/4	
Proof pressure	1.5 MPa	
Maximum operating pressure	1.0 MPa	
Set pressure range	Standard	0.05 to 0.7 MPa
	Optional	0.05 to 0.35 MPa (Low pressure type)
Fluid	Air	
Ambient and operating fluid temperature ^{Note 2)}	5 to 60°C	

Note 1) 0.1 MPa or greater set pressure is required when used in the reverse flow.

Note 2) 5 to 50°C when the digital pressure switch will be used.

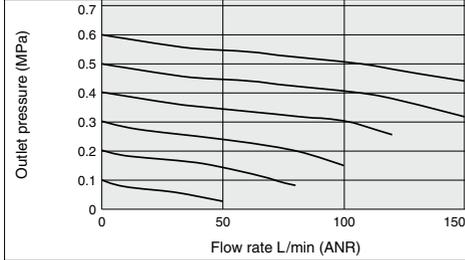
Refer to pages 676 and 678 for the digital pressure switch and pressure switch specifications.

ARJ
AR425 to 935
ARX
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ARM
ARP
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IC
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VEF
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VER
VEA
VY1
VBA
VBAT
AP100

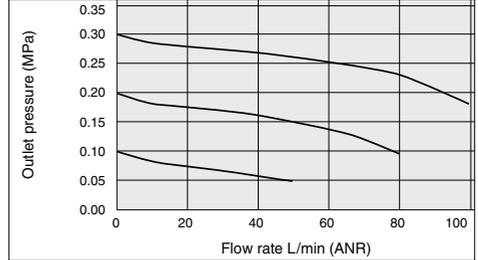
Series ARM11A

Flow Characteristics (Representative Values)

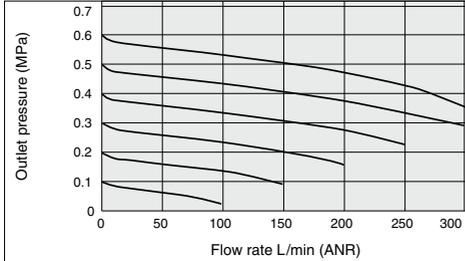
ARM11AA1-307 (One-touch fittings: IN ϕ 6, OUT ϕ 4) Condition: Inlet pressure 0.7 MPa



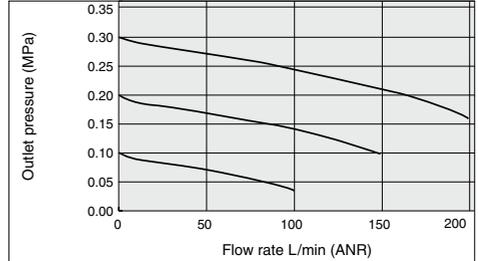
ARM11AA1-307-1 (One-touch fittings: IN ϕ 6, OUT ϕ 4) Condition: Inlet pressure 0.5 MPa



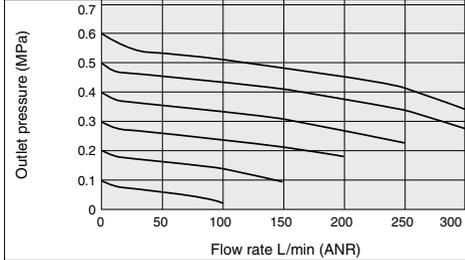
ARM11AA1-310 (One-touch fittings: IN ϕ 8, OUT ϕ 6) Condition: Inlet pressure 0.7 MPa



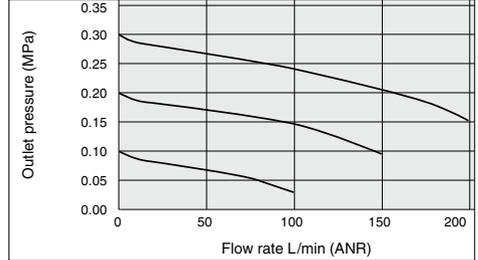
ARM11AA1-310-1 (One-touch fittings: IN ϕ 8, OUT ϕ 6) Condition: Inlet pressure 0.5 MPa



ARM11AA1-312 (One-touch fittings: IN ϕ 10, OUT ϕ 6) Condition: Inlet pressure 0.7 MPa

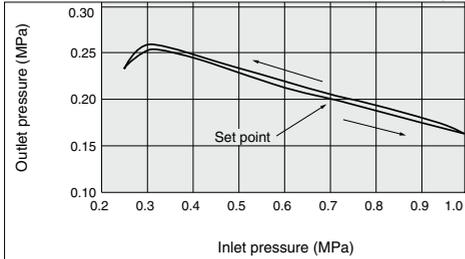


ARM11AA1-312-1 (One-touch fittings: IN ϕ 10, OUT ϕ 6) Condition: Inlet pressure 0.5 MPa

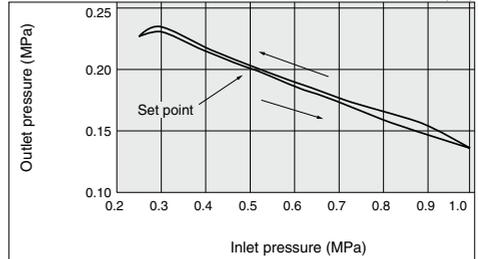


Pressure Characteristics (Representative Values)

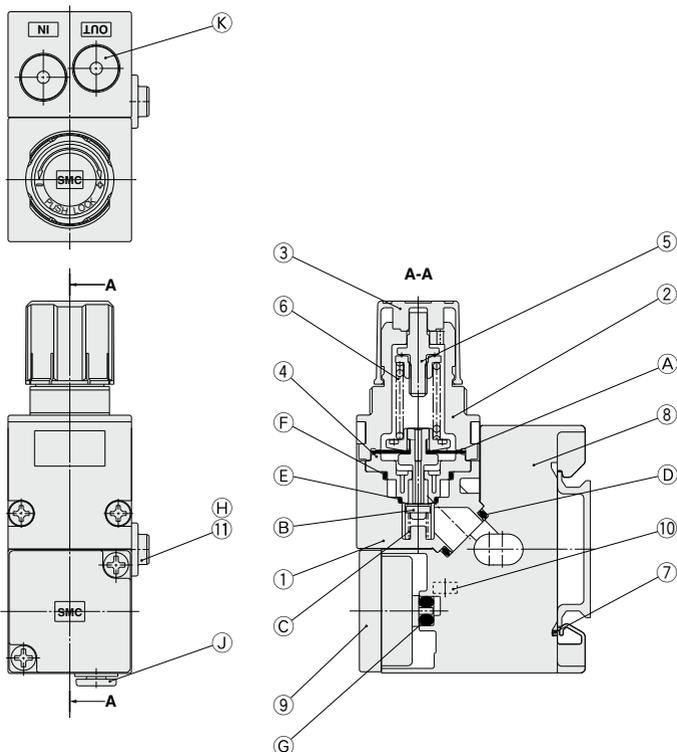
ARM11AA1-307 Conditions: Inlet pressure 0.7 MPa
Outlet pressure 0.2 MPa
Flow rate 20 L/min (ANR)



ARM11AA1-307-1 Conditions: Inlet pressure 0.5 MPa
Outlet pressure 0.2 MPa
Flow rate 20 L/min (ANR)



Construction



Component Parts

No.	Description	Material
1	Body for regulator block	PBT
2	Bonnet	PBT
3	Handle	POM
4	Valve seat	POM
5	Adjusting screw assembly	Reinforced steel
6	Adjustment spring	Steel wire
7	Regulator clip	Stainless steel
8	Manifold block	PBT
9	Blanking plate assembly	—
10	Square nut	Steel
11	Common exhaust bushing	POM

Replacement Parts

No.	Description	Material	Part no.	Note
A	Diaphragm assembly	Weatherproof NBR, POM	136126A	Relieving type
B	Valve	HNBR, Aluminum alloy	136126-1A	Non-relieving type
C	Valve spring	Stainless steel	136131	
D	Gasket	HNBR	136137-30	
E	O-ring	NBR	136146	Standard model
F	O-ring	HNBR	136146-30	Oil-free specification
		NBR	136147	Standard model
G	O-ring	HNBR	136147-30	Oil-free specification
		NBR	136148	Standard model
		HNBR	136148-30	Oil-free specification
		NBR	KA01731	Standard model for digital pressure switch
H	O-ring	HNBR	KA01613	Oil-free spec. for digital pressure switch
		NBR	136149	Standard model
		HNBR	136149-30	Oil-free specification
J	Fitting assembly	—	Refer to page 679.	
K	Port plug	PBT/HNBR	Refer to page 680.	

ARJ

AR425
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEV

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

VY1

VBA
VBAT

AP100

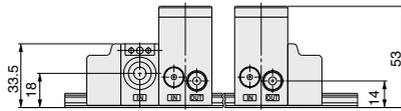
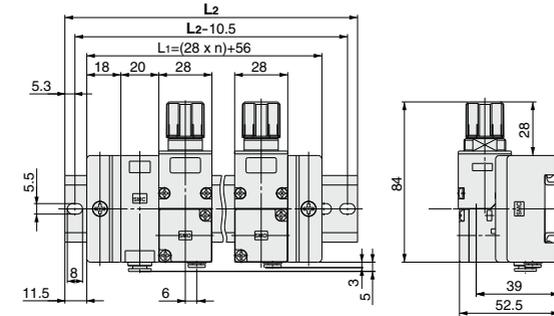
Series ARM11A

Dimensions

ARM11AA1-□12

Handle position: Top / Common supply block

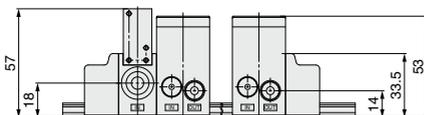
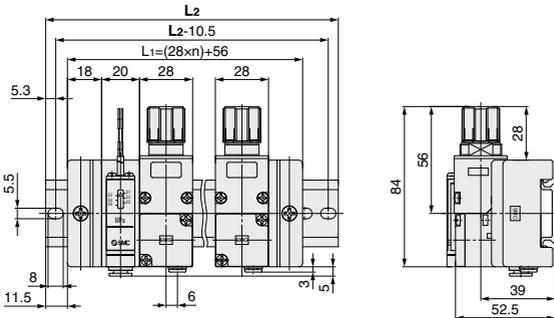
For One-touch fittings part and manifold option dimensions, refer to pages 673 to 680.



Stations	DIN rail part no. (for L and R sides)	L ₂ dimension
1	AXT100-DR-9	123
2	AXT100-DR-11	148
3	AXT100-DR-13	173
4	AXT100-DR-16	210.5
5	AXT100-DR-18	235.5
6	AXT100-DR-20	260.5
7	AXT100-DR-22	285.5
8	AXT100-DR-25	323
9	AXT100-DR-27	348
M	AXT100-DR-29	373

ARM11AA1-□12-A

Handle position: Top / Common supply block with pressure switch



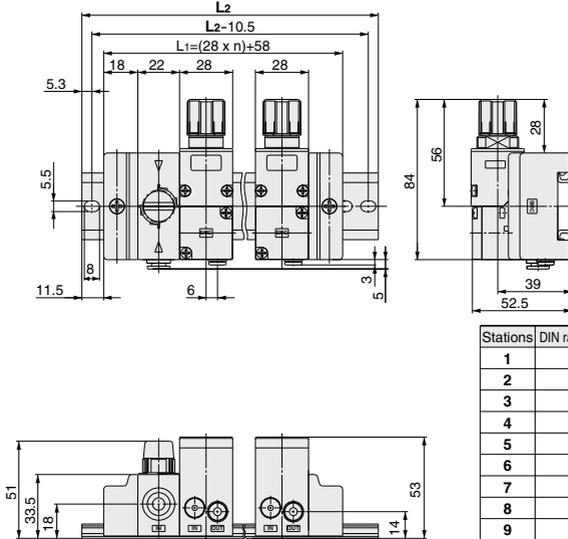
Stations	DIN rail part no. (for L and R sides)	L ₂ dimension
1	AXT100-DR-9	123
2	AXT100-DR-11	148
3	AXT100-DR-13	173
4	AXT100-DR-16	210.5
5	AXT100-DR-18	235.5
6	AXT100-DR-20	260.5
7	AXT100-DR-22	285.5
8	AXT100-DR-25	323
9	AXT100-DR-27	348
M	AXT100-DR-29	373

Dimensions

ARM11AA1-□12-B

Handle position: Top / 3-way valve common supply block

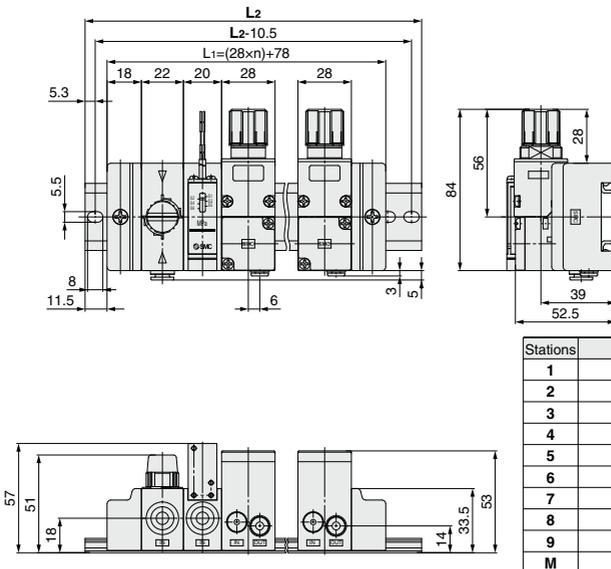
For One-touch fittings part and manifold option dimensions, refer to pages 673 to 680.



Stations	DIN rail part no. (for L and R sides)	L2 dimension
1	AXT100-DR-9	123
2	AXT100-DR-11	148
3	AXT100-DR-13	173
4	AXT100-DR-16	210.5
5	AXT100-DR-18	235.5
6	AXT100-DR-20	260.5
7	AXT100-DR-22	285.5
8	AXT100-DR-25	323
9	AXT100-DR-27	348
M	AXT100-DR-29	373

ARM11AA1-□12-C

Handle position: Top / 3-way valve common supply block + Pressure switch block



Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-11	148
2	AXT100-DR-13	173
3	AXT100-DR-15	198
4	AXT100-DR-17	223
5	AXT100-DR-19	248
6	AXT100-DR-22	285.5
7	AXT100-DR-24	310.5
8	AXT100-DR-26	335.5
9	AXT100-DR-28	360.5
M	AXT100-DR-31	398

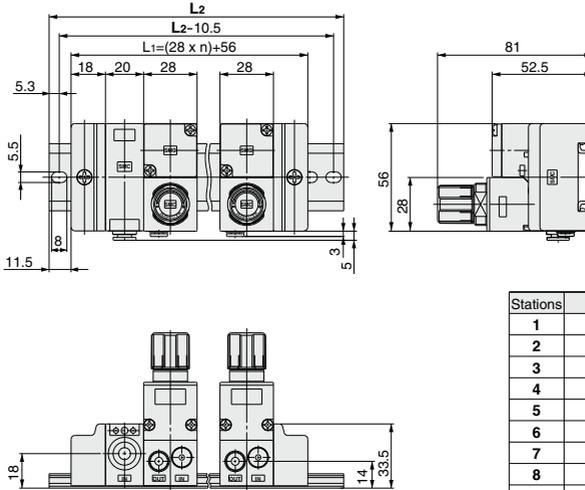
Series ARM11A

Dimensions

ARM11AB1-□12

Handle position: Front / Common supply block

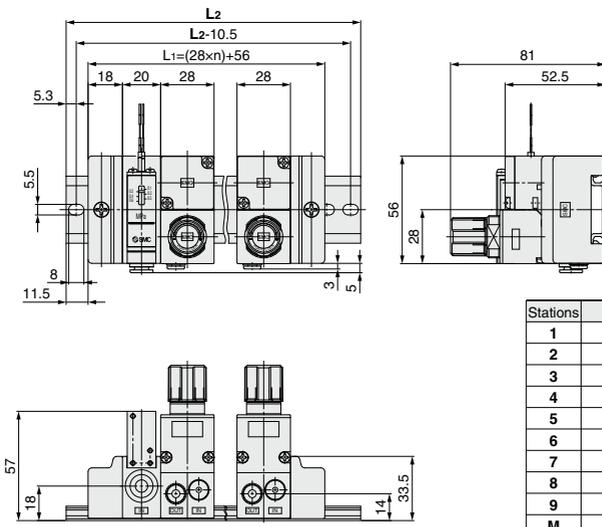
For One-touch fittings part and manifold option dimensions, refer to pages 673 to 680.



Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-9	123
2	AXT100-DR-11	148
3	AXT100-DR-13	173
4	AXT100-DR-16	210.5
5	AXT100-DR-18	235.5
6	AXT100-DR-20	260.5
7	AXT100-DR-22	285.5
8	AXT100-DR-25	323
9	AXT100-DR-27	348
M	AXT100-DR-29	373

ARM11AB1-□12-A

Handle position: Front / Common supply block with pressure switch



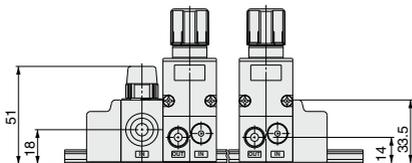
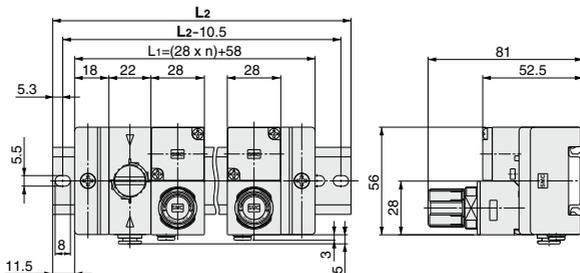
Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-9	123
2	AXT100-DR-11	148
3	AXT100-DR-13	173
4	AXT100-DR-16	210.5
5	AXT100-DR-18	235.5
6	AXT100-DR-20	260.5
7	AXT100-DR-22	285.5
8	AXT100-DR-25	323
9	AXT100-DR-27	348
M	AXT100-DR-29	373

Dimensions

ARM11AB1-□12-B

Handle position: Front / 3-way valve common supply block

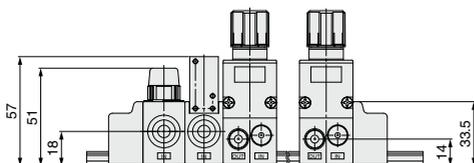
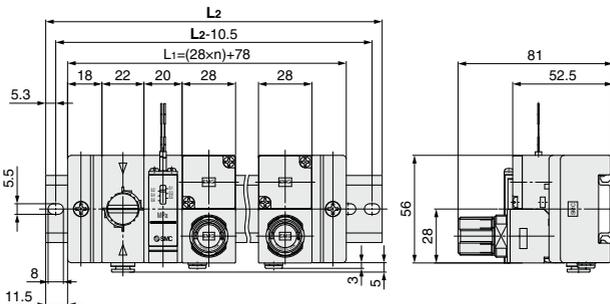
For One-touch fittings part and manifold option dimensions, refer to pages 673 to 680.



Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-9	123
2	AXT100-DR-11	148
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4	AXT100-DR-16	210.5
5	AXT100-DR-18	235.5
6	AXT100-DR-20	260.5
7	AXT100-DR-22	285.5
8	AXT100-DR-25	323
9	AXT100-DR-27	348
M	AXT100-DR-29	373

ARM11AB1-□12-C

Handle position: Front / 3-way valve common supply block + Pressure switch block



Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-11	148
2	AXT100-DR-13	173
3	AXT100-DR-15	198
4	AXT100-DR-17	223
5	AXT100-DR-19	248
6	AXT100-DR-22	285.5
7	AXT100-DR-24	310.5
8	AXT100-DR-26	335.5
9	AXT100-DR-28	360.5
M	AXT100-DR-31	398

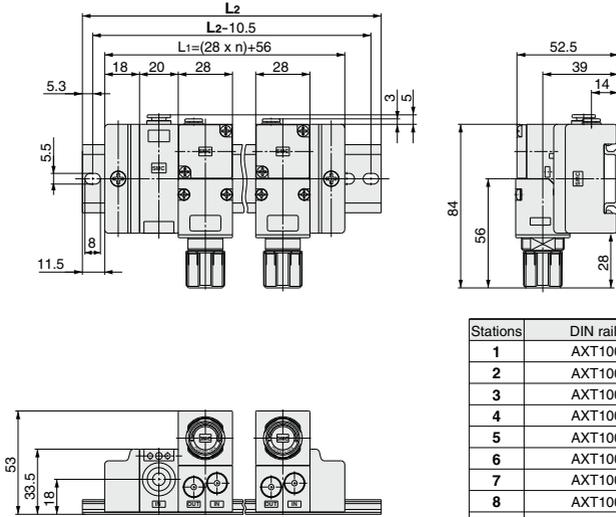
Series ARM11A

Dimensions

ARM11AC2-□12

Handle position: Bottom / Common supply block

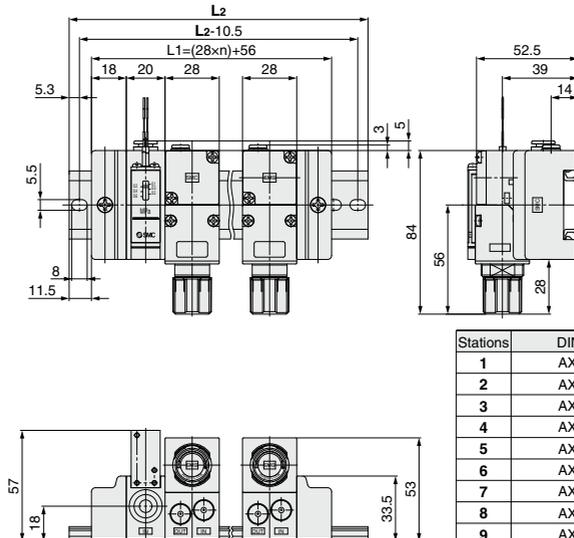
For One-touch fittings part and manifold option dimensions, refer to pages 673 to 680.



Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-9	123
2	AXT100-DR-11	148
3	AXT100-DR-13	173
4	AXT100-DR-16	210.5
5	AXT100-DR-18	235.5
6	AXT100-DR-20	260.5
7	AXT100-DR-22	285.5
8	AXT100-DR-25	323
9	AXT100-DR-27	348
M	AXT100-DR-29	373

ARM11AC2-□12-A

Handle position: Bottom / Common supply block with pressure switch



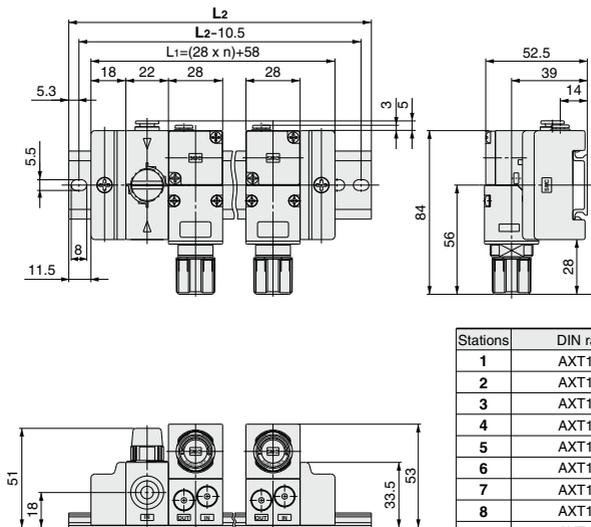
Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-9	123
2	AXT100-DR-11	148
3	AXT100-DR-13	173
4	AXT100-DR-16	210.5
5	AXT100-DR-18	235.5
6	AXT100-DR-20	260.5
7	AXT100-DR-22	285.5
8	AXT100-DR-25	323
9	AXT100-DR-27	348
M	AXT100-DR-29	373

Dimensions

ARM11AC2-□12-B

Handle position: **Bottom / 3-way valve common supply block**

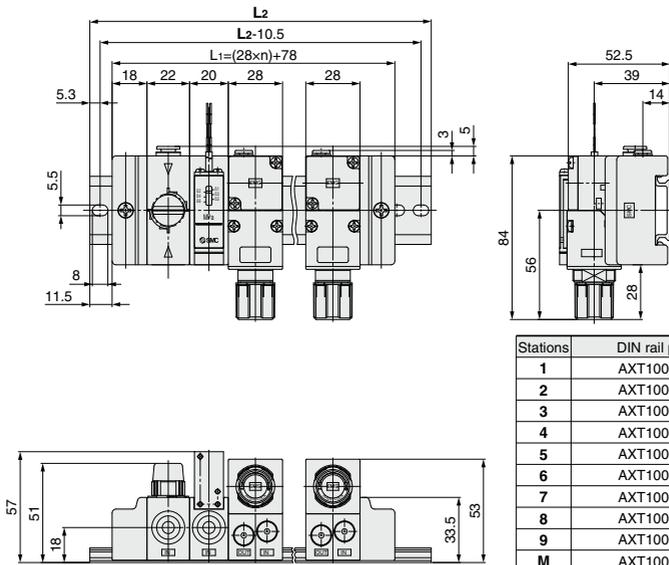
For One-touch fittings part and manifold option dimensions, refer to pages 673 to 680.



Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-9	123
2	AXT100-DR-11	148
3	AXT100-DR-13	173
4	AXT100-DR-16	210.5
5	AXT100-DR-18	235.5
6	AXT100-DR-20	260.5
7	AXT100-DR-22	285.5
8	AXT100-DR-25	323
9	AXT100-DR-27	348
M	AXT100-DR-29	373

ARM11AC2-□12-C

Handle position: **Bottom / 3-way valve common supply block + Pressure switch block**



Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-11	148
2	AXT100-DR-13	173
3	AXT100-DR-15	198
4	AXT100-DR-17	223
5	AXT100-DR-19	248
6	AXT100-DR-22	285.5
7	AXT100-DR-24	310.5
8	AXT100-DR-26	335.5
9	AXT100-DR-28	360.5
M	AXT100-DR-31	398

- ARJ
- AR425 to 935
- ARX
- AMR
- ARM**
- ARP
- IR
- IRV
- VEV
- SRH
- SRP
- SRF
- VCHR
- ITV
- IC
- ITVX
- PVQ
- VEF
- VEP
- VER
- VEA
- VY1
- VBA
- VBAT
- AP100

Compact Manifold Regulator

Individual Supply Type

Series ARM11B

How to Order

ARM11B **B** **1** - **3** **06** - **A** **Z** - **N**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧



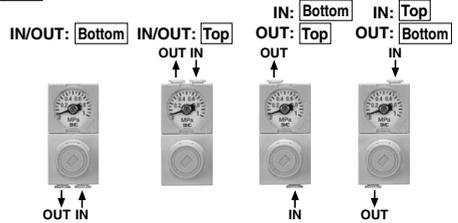
1. Handle Position

Symbol	Position
A	Top
B	Front
C	Bottom



2. IN/OUT Piping Position

Position Symbol	IN side		OUT side	
	Bottom	Top	Bottom	Top
1	●		●	
2		●		●
3	●			
4		●	●	



3. Regulator Block Stations

Symbol	Stations
1	1 station
2	2 stations
3	3 stations
4	4 stations
5	5 stations
6	6 stations
7	7 stations
8	8 stations
9	9 stations
M	10 stations

4. IN/OUT Fitting Type (Refer to the figure below.)

Metric size

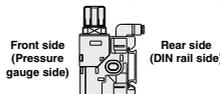
Mounting position Fitting type Symbol	IN side				OUT side			
	Straight		Elbow <small>(Note)</small>		Straight		Elbow <small>(Note)</small>	
	ø4	ø6	ø4	ø6	ø4	ø6	ø4	ø6
06	●				●			
07		●				●		
08		●					●	
18			●				●	
19			●				●	
20				●				●
25	●							●
26		●						●
27		●						●
32			●			●		
33				●		●		
34				●		●		

Inch size

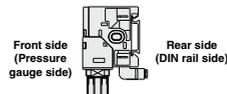
Mounting position Fitting type Symbol	IN side				OUT side			
	Straight		Elbow <small>(Note)</small>		Straight		Elbow <small>(Note)</small>	
	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4
56	●				●			
57		●				●		
58		●					●	
68			●				●	
69			●				●	
70				●				●
75	●							●
76		●						●
77		●						●
82			●			●		
83				●		●		
84				●		●		

(Note) When the handle and the OUT piping are located on the same side, the elbow fitting is directed to the rear side (DIN rail side). Use caution to ensure the connector is not disturbed, depending on piping direction, when choosing to attach a digital pressure switch.

Handle position: Top
OUT piping position: Top



Handle position: Bottom
OUT piping position: Bottom



Compact Manifold Regulator Individual Supply Type *Series ARM11B*

5. Accessory (Pressure Display)

Symbol	Accessory
Nil	Without pressure display
A <small>Note 1, 2)</small>	With pressure display

Note 1) Pressure display means a pressure gauge or digital pressure switch is attached.

When choosing to attach a digital pressure switch is chosen for attachment, be sure to enter the symbol, referring to table 8, "Digital Pressure Switch Output Specifications". Otherwise, a pressure gauge will come with the regulator.

Note 2) Pressure gauges are not compatible with copper-free and fluorine-free specifications.

Without pressure display With pressure display



With pressure gauge With digital pressure switch

7. Unit Representation

Symbol	Description
Nil	Display unit for product name plate and pressure gauge: MPa
Z <small>Note 1, 2)</small>	Display unit for product name plate and pressure gauge: psi
ZA <small>Note 1, 3)</small>	Digital pressure switch: with unit switching (MPa is initially set.)

Note 1) This option is available for use outside Japan only. (The SI unit has to be used in Japan.)

Note 2) The digital pressure switch is equipped with unit switching and initially set to psi.

Note 3) This option is available with the digital pressure switch.

8. Digital Pressure Switch Output Specifications Note)

Symbol	Details
Nil	None
N	NPN open collector
P	PNP open collector

Note) When a digital pressure switch is attached, the "pressure display" in table 5 "Accessory" will be equipped. The electrical entry is positioned on the side opposite the handle.

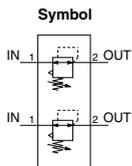
6. Semi-standard

Symbol	None	0.35 MPa setting <small>Note 1)</small>	Non-relieving	<small>Note 2)</small> Oil-free
Nil	●			
1		●		
2			●	
3				●
4		●	●	
5		●		●
6			●	●
7		●	●	●

Note 1) A pressure gauge with a full span of 0.4 MPa is attached.

Note 2) The oil-free specification is grease-free in the fluid contact area.

Specifications



Note) A standard model is equipped with a backflow function. Main valve opens when the inlet pressure is released, and then the outlet pressure backflows into the inlet side.

Regulator construction		Direct acting
Working principal		Diaphragm regulator
Relief mechanism	Standard	Relief type
	Optional	Non-relieving type
Backflow function <small>Note 1)</small>		Within (Unbalance type)
IN side tubing O.D.		ø4, ø6, ø5/32, ø1/4
OUT side tubing O.D.		ø4, ø6, ø5/32, ø1/4
Proof pressure		1.5 MPa
Maximum operating pressure		1.0 MPa
Set pressure range	Standard	0.05 to 0.7 MPa
	Optional	0.05 to 0.35 MPa (Low pressure type)
Fluid		Air
Ambient and operating fluid temperature <small>Note 2)</small>		5 to 60°C

Note 1) 0.1 MPa or greater set pressure is required when used in the reverse flow.

Note 2) 5 to 50°C when the digital pressure switch will be used.

Refer to page 676 for the digital pressure switch specifications.



Specific Product Precautions

Be sure to read before handling.

Refer to front matter 43 for Safety Instructions and pages 365 to 369 for Precautions on every series.

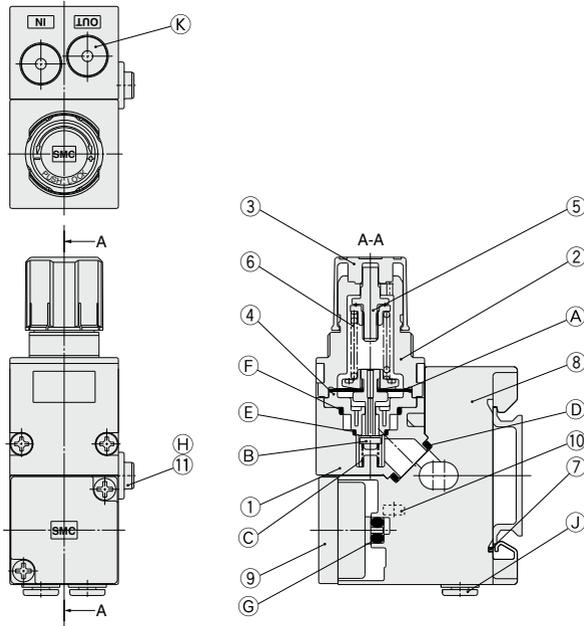
Maintenance

Warning

1. Make sure to perform a periodic inspection of the pressure gauge when the compact manifold regulator is installed between a solenoid valve and an actuator. Sudden pressure changes could happen and the durability of the product could be reduced. Using an electronic style pressure gauge is recommended, depending on the situation.

Series ARM11B

Construction



Component Parts

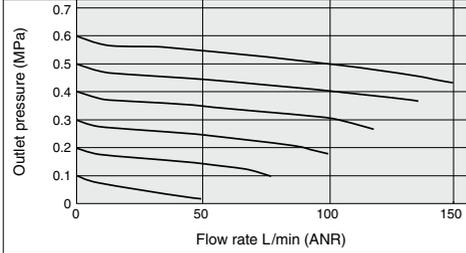
No.	Description	Material
1	Body for regulator block	PBT
2	Bonnet	PBT
3	Handle	POM
4	Valve seat	POM
5	Adjusting screw assembly	Reinforced steel
6	Adjustment spring	Steel wire
7	Regulator clip	Stainless steel
8	Manifold block	PBT
9	Blanking plate assembly	—
10	Square nut	Steel
11	Individual supply bushing	POM

Replacement Parts

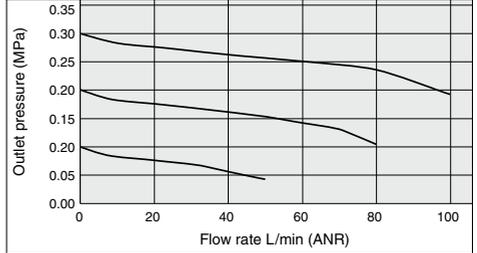
No.	Description	Material	Part no.	Note
A	Diaphragm assembly	Weatherproof NBR, POM	136126A	Relieving type
			136126-1A	Non-relieving type
B	Valve	HNBR, Aluminum alloy	136127-30#1	
C	Valve spring	Stainless steel	136131	
D	Gasket	HNBR	136137-30	
E	O-ring	NBR	136146	Standard model
		HNBR	136146-30	Oil-free 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
H	O-ring	HNBR	KA01613	Oil-free spec. for digital pressure switch
		NBR	136149	Standard model
J	Fitting assembly	—	Refer to page 679.	
		HNBR	136149-30	Oil-free specification
K	Port plug	PBT/HNBR	Refer to page 680.	

Flow Characteristics (Representative Values)

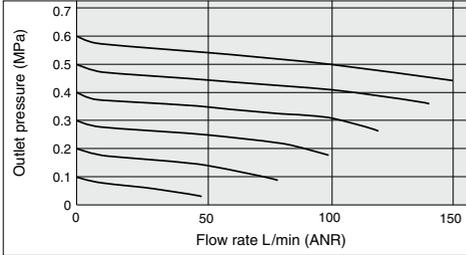
ARM11BA1-306 (One-touch fittings: IN/OUT $\phi 4$) Condition: Inlet pressure 0.7 MPa



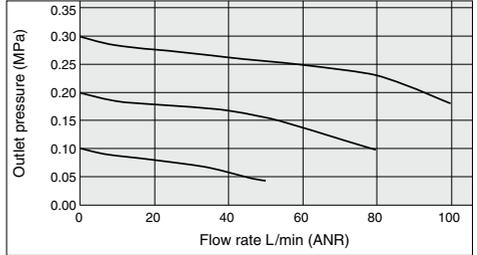
ARM11BA1-306-1 (One-touch fittings: IN/OUT $\phi 4$) Condition: Inlet pressure 0.5 MPa



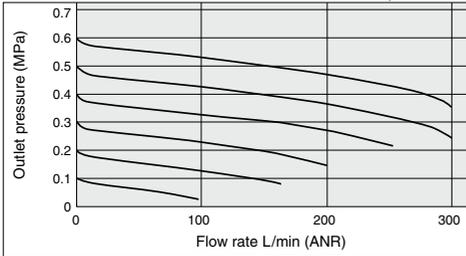
ARM11BA1-307 (One-touch fittings: IN $\phi 6$, OUT $\phi 4$) Condition: Inlet pressure 0.7 MPa



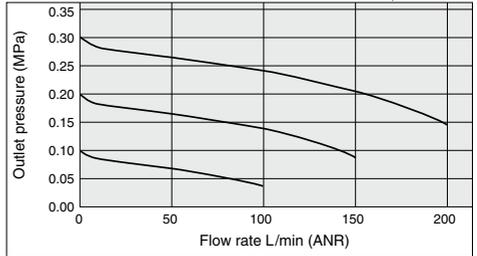
ARM11BA1-307-1 (One-touch fittings: IN $\phi 6$, OUT $\phi 4$) Condition: Inlet pressure 0.5 MPa



ARM11BA1-308 (One-touch fittings: IN/OUT $\phi 6$) Condition: Inlet pressure 0.7 MPa

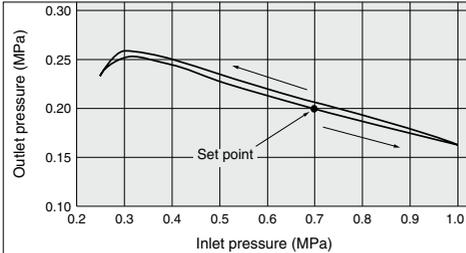


ARM11BA1-308-1 (One-touch fittings: IN/OUT $\phi 6$) Condition: Inlet pressure 0.5 MPa

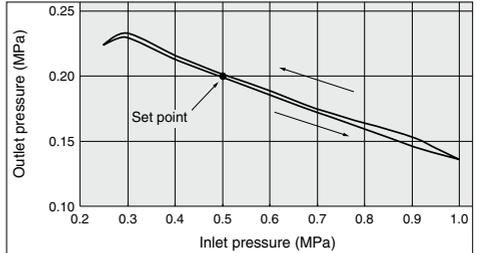


Pressure Characteristics (Representative Values)

ARM11BA1-306 Conditions: Inlet pressure 0.7 MPa
Outlet pressure 0.2 MPa
Flow rate 20 L/min (ANR)



ARM11BA1-306-1 Conditions: Inlet pressure 0.5 MPa
Outlet pressure 0.2 MPa
Flow rate 20 L/min (ANR)



ARJ

AR425
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEV

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

VY1

VBA
VBAT

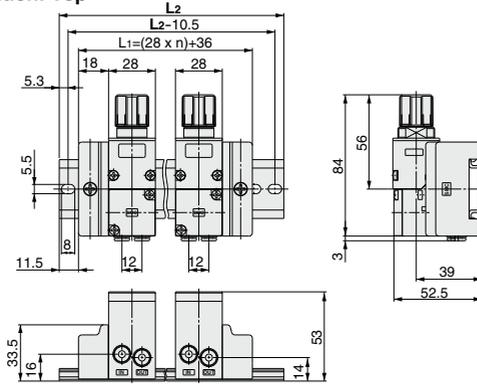
AP100

Series ARM11B

Dimensions

ARM11BA1-□08

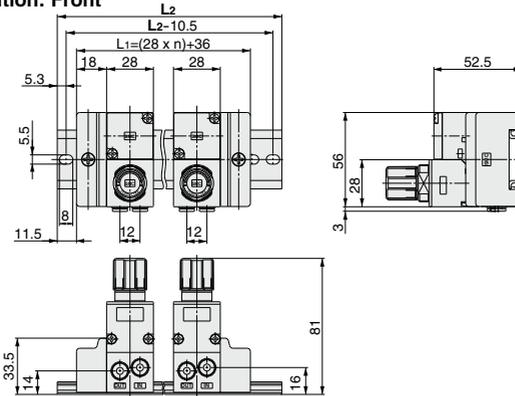
Handle position: Top



Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-8	110.5
2	AXT100-DR-10	135.5
3	AXT100-DR-12	160.5
4	AXT100-DR-14	185.5
5	AXT100-DR-16	210.5
6	AXT100-DR-19	248
7	AXT100-DR-21	273
8	AXT100-DR-23	298
9	AXT100-DR-25	323
M	AXT100-DR-28	360.5

ARM11BB1-□08

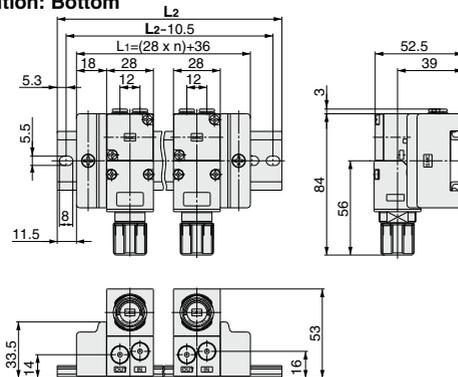
Handle position: Front



Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-8	110.5
2	AXT100-DR-10	135.5
3	AXT100-DR-12	160.5
4	AXT100-DR-14	185.5
5	AXT100-DR-16	210.5
6	AXT100-DR-19	248
7	AXT100-DR-21	273
8	AXT100-DR-23	298
9	AXT100-DR-25	323
M	AXT100-DR-28	360.5

ARM11BC2-□08

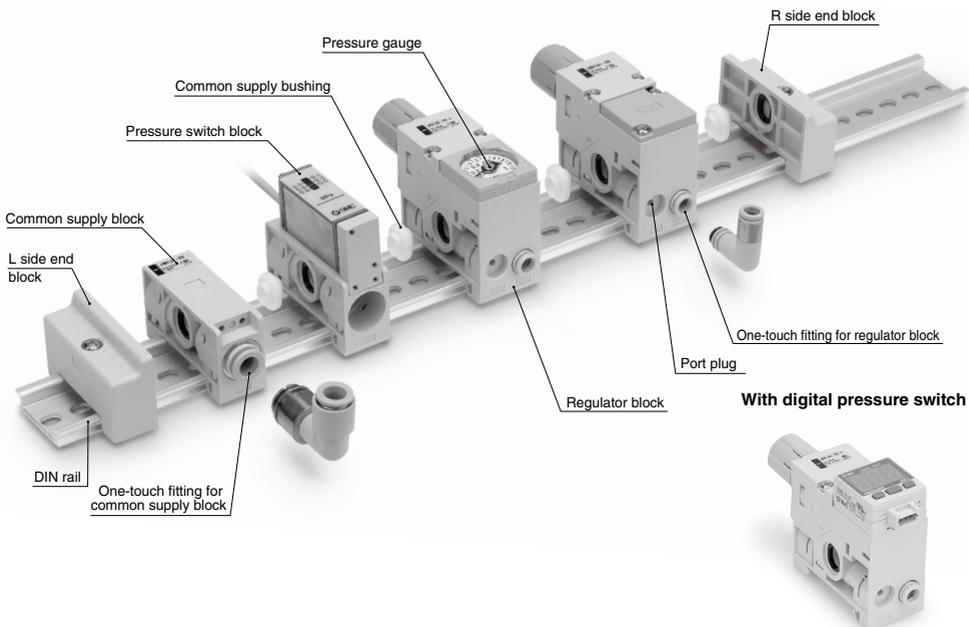
Handle position: Bottom



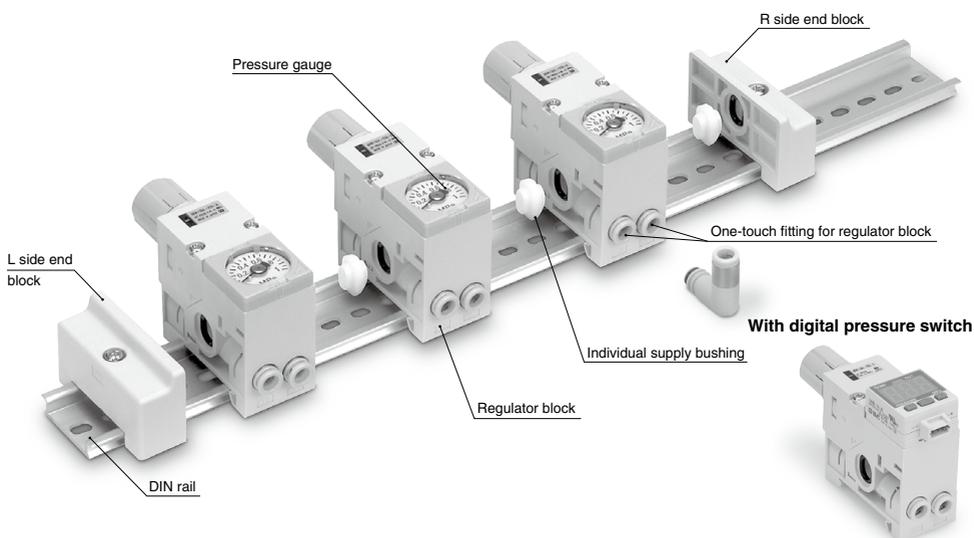
Stations	DIN rail part no.	L2 dimension
1	AXT100-DR-8	110.5
2	AXT100-DR-10	135.5
3	AXT100-DR-12	160.5
4	AXT100-DR-14	185.5
5	AXT100-DR-16	210.5
6	AXT100-DR-19	248
7	AXT100-DR-21	273
8	AXT100-DR-23	298
9	AXT100-DR-25	323
M	AXT100-DR-28	360.5

Compact Manifold Regulator Options

Common Supply Type



Individual Supply Type



ARJ

AR425
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEV

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

VY1

VBA
VBAT

AP100

Series ARM11A/B

Regulator Block

Common Supply Type

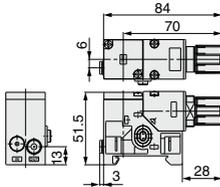
ARM11A **A** **1** - R **04** - **A** **Z** - **N**

① ② ③ ④ ⑤ ⑥ ⑦

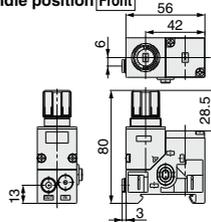
1. Handle Position

Symbol	Position
A	Top
B	Front
C	Bottom

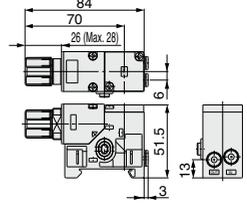
Handle position **Top**



Handle position **Front**



Handle position **Bottom**



2. OUT Piping Position

Symbol	Position
1	Bottom
2	Top

3. OUT Fitting Type

Metric size

Fitting type Symbol	Straight		Elbow	
	ø4	ø6	ø4	ø6
04	●			
05		●		
16			●	
17				●

Inch size

Fitting type Symbol	Straight		Elbow	
	ø5/32	ø1/4	ø5/32	ø1/4
54	●			
55		●		
66			●	
67				●

4. Accessory (Pressure Display)

Symbol	Accessory
Nil	Without pressure display
A <small>Note 1, 2)</small>	With pressure display

Note 1) Pressure display means a pressure gauge or digital pressure switch is attached.

When choosing to attach a digital pressure switch is chosen for attachment, be sure to enter the symbol, referring to table 7, "Digital Pressure Switch Output Specifications". Otherwise, a pressure gauge will come with the regulator.

Note 2) Pressure gauges are not compatible with copper-free and fluorine-free specifications.

5. Semi-standard

Symbol	None	0.35 MPa setting <small>Note 1)</small>	Non-relieving	Oil-free <small>Note 2)</small>
Nil	●			
1		●		
2			●	
3				●
4		●	●	
5		●		●
6			●	●
7		●	●	●

Note 1) A pressure gauge with a full span of 0.4 MPa is attached.

Note 2) The oil-free specification is grease-free in the fluid contact area.

6. Unit Representation

Symbol	Description
Nil	Display unit for product name plate and pressure gauge: MPa
Z <small>Note 1, 2)</small>	Display unit for product name plate and pressure gauge: psi
ZA <small>Note 1, 3)</small>	Digital pressure switch: with unit switching (MPa is initially set.)

Note 1) This option is available for use outside Japan only. (The SI unit has to be used in Japan.) Additionally, the pressure switch offers dual unit presentation in MPa and psi.

Note 2) The digital pressure switch is equipped with unit switching and initially set to psi.

Note 3) This option is available with the digital pressure switch.

7. Digital Pressure Switch Output Specifications Note)

Symbol	Details
Nil	None
N	NPN open collector
P	PNP open collector

Note) When a digital pressure switch is attached, the "pressure display" in table 4 "Accessory" will be equipped. The electrical entry is positioned on the side opposite the handle.

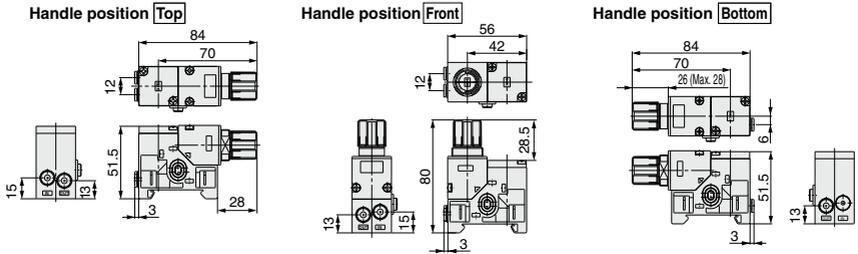
Regulator Block

Individual Supply Type **ARM11B** A 1 - R 06 - A Z - N

1
2
3
4
5
6
7

1. Handle Position

Symbol	Position
A	Top
B	Front
C	Bottom



2. IN/OUT Piping Position

Position Symbol	IN side		OUT side	
	Bottom	Top	Bottom	Top
1	●		●	
2		●		●
3	●			●
4		●	●	

3. IN/OUT Fitting Type

Metric size

Mounting position	IN side				OUT side			
	Straight		Elbow		Straight		Elbow	
	Symbol	ø4	ø6	ø4	ø6	ø4	ø6	
06	●				●			
07		●						
08		●				●		
18			●				●	
19				●			●	
20				●			●	
25	●						●	
26		●					●	
27		●					●	
32			●		●			
33			●		●			
34			●		●			

Inch size

Mounting position	IN side				OUT side			
	Straight		Elbow		Straight		Elbow	
	Symbol	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4	
56	●				●			
57		●						
58		●				●		
68			●				●	
69				●			●	
70				●			●	
75	●						●	
76		●					●	
77		●					●	
82			●		●			
83			●		●			
84			●		●			

4. Accessory (Pressure Display)

Symbol	Accessory
Nil	Without pressure display
A <small>Note 1, 2)</small>	With pressure display

Note 1) Pressure display means a pressure gauge or digital pressure switch is attached.

When choosing to attach a digital pressure switch is chosen for attachment, be sure to enter the symbol, referring to table 7, "Digital Pressure Switch Output Specifications".

Otherwise, a pressure gauge will come with the regulator.

Note 2) Pressure gauges are not compatible with copper-free and fluorine-free specifications.

5. Semi-standard

Symbol	None	0.35 MPa setting <small>Note 1)</small>	Non-relieving	<small>Note 2)</small> Oil-free
Nil	●			
1		●		
2			●	
3				●
4		●	●	
5		●		●
6			●	●
7		●	●	●

Note 1) A pressure gauge with a full span of 0.4 MPa is attached.

Note 2) The oil-free specification is grease-free in the fluid contact area.

6. Unit Representation

Symbol	Description
Nil	Display unit for product name plate and pressure gauge: MPa
Z <small>Note 1, 2)</small>	Display unit for product name plate and pressure gauge: psi
ZA <small>Note 1, 3)</small>	Digital pressure switch: with unit switching (MPa is initially set.)

Note 1) This option is available for use outside Japan only. (The SI unit has to be used in Japan.) Additionally, the pressure switch offers dual unit presentation in MPa and psi.

Note 2) The digital pressure switch is equipped with unit switching and initially set to psi.

Note 3) This option is available with the digital pressure switch.

7. Digital Pressure Switch Output Specifications Note)

Symbol	Details
Nil	None
N	NPN open collector
P	PNP open collector

Note) **When a digital pressure switch is attached, the "pressure display" in table 4 "Accessory" will be equipped.** The electrical entry is positioned on the side opposite the handle.

ARJ

AR425 to 935

ARX

AMR

ARM

ARP

IR

IRV

VEV

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

VY1

VBA
VBAT

AP100

Digital Pressure Switch

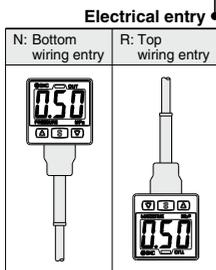
Specifications

Rated pressure range	0 to 1 MPa
Display/Set pressure range	-0.1 to 1 MPa
Withstand pressure	1.5 MPa
Display/Minimum setting unit	0.01 MPa
Applicable fluid	Air, Non-corrosive gas, Non-flammable gas
Power supply voltage	12 to 24 VDC $\pm 10\%$, Ripple (p-p) 10% or less (With power supply polarity protection)
Current consumption	55 mA or less (at no load)
Switch output	NPN or PNP open collector output: 1 output
Max. load current	80 mA
Max. applied voltage	30 V (With NPN output)
Residual voltage	1 V or less (With load current of 80 mA)
Response time	1 s (0.25, 0.5, 2, 3 selections)
Short circuit protection	Yes
Repeatability	$\pm 1\%$ F.S.
Hysteresis	Adjustable (can be set from 0)
Hysteresis mode	
Window comparator mode	
Display	3-digit, 7-segment display, 2-color display (Red/Green) A switch can be operated simultaneously.
Display accuracy	$\pm 2\%$ F.S. ± 1 digit (at 25°C $\pm 3^\circ\text{C}$ ambient temperature)
Indicator light	Illuminates when output is ON. (Green)
Environmental resistance	IP40
Enclosure	
Operating temperature range	- 5 to 50°C (No freezing or condensation)
Lead wire with connector ^{Note)} (Option: L)	$\phi 3.4$ 3-wire 25 AWG 2 m With connector cover
Weight	Approx. 14g (body only)/Approx. 38g (including lead wire with connector)
Standards	CE, UL, CSA, RoHS

Note) Refer to the Operation Manual in SMC's website (<http://www.smcworld.com>) for wiring.

Model

ISE35 - N - 25 - M - X501



Output specification

Symbol	Details
25	NPN output
65	PNP output

Unit specification

Symbol	Description
M	Fixed SI unit
N ^(Note)	With unit switching (Initial value: MPa)
P ^(Note)	With unit switching (Initial value: psi)

Note) This option is available for use outside Japan only. (The SI unit has to be used in Japan.) A unit plate is attached.

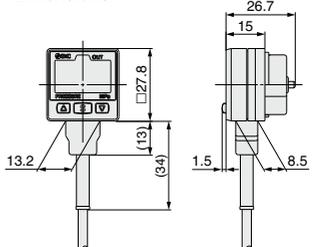
Option/Part No

When optional parts are required separately, use the following part numbers to place an order.

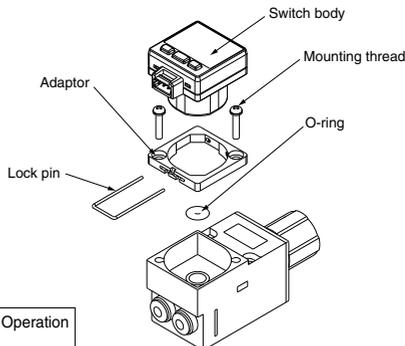
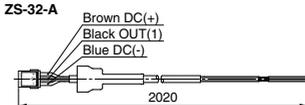
Part no.	Options
ZS-32-A	Lead wire with connector (2m)
ZS-32-D	Accessories (adapter, O-ring (1 pc.), mounting screw (2 pcs.), lock pin)

Refer to Best Pneumatics No. 6 for Pressure Switch Precautions, and the Operation Manual on SMC's website for Specific Product Precautions.

Dimensions



Lead wire with connector



Common Supply Block

ARM11A 1 - S 01 - 3 A Z

①
②
③
④
⑤
⑥

1. IN Piping Position

Symbol	Position
1	Bottom
2	Top

3. IN Fitting Type

Metric size							Inch size						
Fitting type	Straight			Elbow			Fitting type	Straight			Elbow		
Symbol	ø6	ø8	ø10	ø6	ø8	ø10	Symbol	ø1/4	ø5/16	ø3/8	ø1/4	ø5/16	ø3/8
01	●						51	●					
02		●					52		●				
03			●				53			●			
13				●			63				●		
14					●		64					●	
15						●	65						●

4. Option

Symbol	Description
NII	None
3	Oil-free

(Note) The oil-free type has non-greased fluid contact areas.

5. Accessory

Symbol	Description
NII	Pressure switch lead wire length: 0.5 m
A	Pressure switch lead wire length: 3.0 m

(Note) Leave the field blank for types without pressure switch.

6. Unit Representation

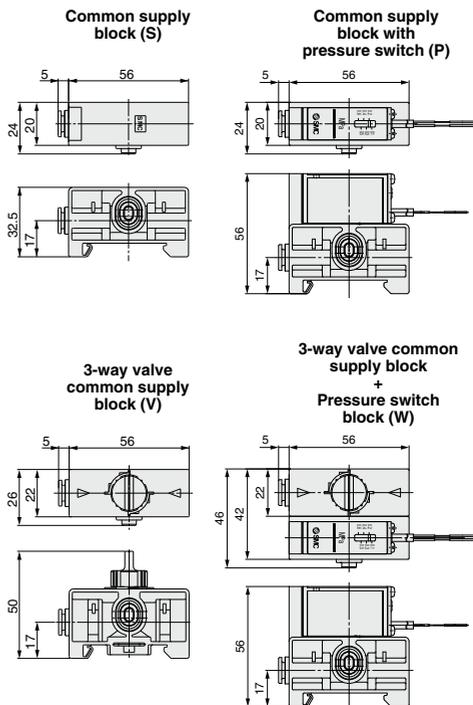
Symbol	Description
NII	Display unit for product name plate: MPa
Z ^(Note)	Display unit for product name plate: psi

(Note) This option is available for use outside Japan only. (The SI unit has to be used in Japan.) Additionally, the pressure switch offers dual unit presentation in MPa and psi.

2. Common Supply Block Type

Symbol	Description
S	Common supply block
P	Common supply block with pressure switch
V	3-way valve common supply block
W	3-way valve common supply block + Pressure switch block

(Note) The oil-free specification is not available for P and W types of common supply blocks (types with pressure switch).



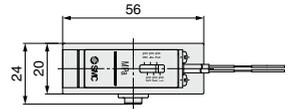
- ARM
- ARJ
- AR425 to 935
- ARX
- AMR
- ARM
- ARP
- IR
- IRV
- VEX
- SRH
- SRP
- SRF
- VCHR
- ITV
- IC
- ITVX
- PVQ
- VEF
- VEP
- VER
- VEA
- VY1
- VBA
- VBAT
- AP100

Series ARM11A/B

Pressure Switch Block

ARM11AW-**A****Z**

① ②



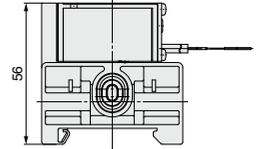
1. Accessory

Symbol	Description
NII	Pressure switch lead wire length: 0.5 m
A	Pressure switch lead wire length: 3.0 m

2. Unit Representation

Symbol	Description
NI	Display unit for product name plate: MPa
Z ^{Note)}	Display unit for product name plate: psi

Note) This option is available for use outside Japan only. (The SI unit has to be used in Japan.) Additionally, the pressure switch offers dual unit presentation in MPa and psi.



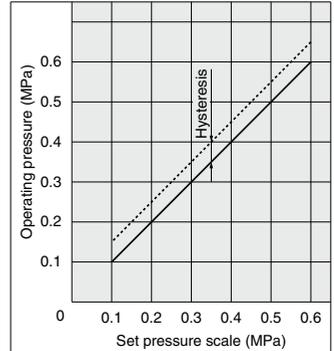
Specifications

Pressure switch (Common supply block with pressure switch, 3-way valve common supply block plus pressure switch block)

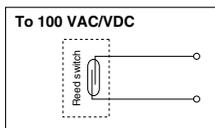
Contact type	Reed type		
Contact construction	Reed switch type		
Contact component	1a		
Reed switch action	Piston type (built-in magnet)		
Wiring specification	Grommet type		
Wiring length	0.5 m (standard model)		
Proof pressure	1.0 MPa		
Maximum operating pressure	0.7 MPa		
Set pressure range	0.1 to 0.6 MPa		
Hysteresis	0.08 MPa or less		
Repeatability	±0.05 MPa		
Maximum contact capacity	AC 2 VA, DC 2 W		
Operating voltage AC, DC	24 V or less	48 V	100 V
Max. operating current and range	50 mA	40 mA	20 mA
Impact resistance	30 G		
Environmental resistance Enclosure	IP40		

Set Pressure Range

..... ON pressure — OFF pressure



Electric Circuit



DIN Rail

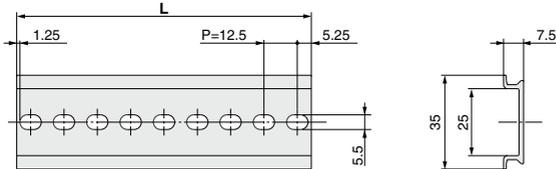
When only DIN rail is required:

DIN rail part no.

AXT100-DR-7

↳ **L dimension**

Select L dimension from the table below and enter an applicable symbol.



L Dimension

$L=12.5 \times n + 10.5$

Symbol	1	2	3	4	5	6	7	8	9	10
L	23	35.5	48	60.5	73	85.5	98	110.5	123	135.5

Symbol	11	12	13	14	15	16	17	18	19	20
L	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5

Symbol	21	22	23	24	25	26	27	28	29	30
L	273	285.5	298	310.5	323	335.5	348	360.5	373	385.5

Symbol	31	32	33	34	35	36	37	38	39	40
L	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5

One-touch Fittings for Regulator Block

VVQ1000-50A - **C4**

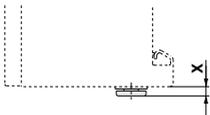
One-touch fittings for regulator block

Fitting type	
Symbol	Type
NII	Straight
L1	Elbow

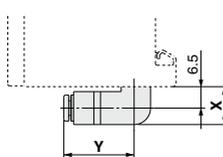
Fitting size	
Symbol	Size
C4	ø4
C6	ø6
N3	ø5/32
N7	ø1/4

Semi-standard	
Symbol	Description
NII	None
X17	Oil-free

Straight type



Elbow type



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

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
NII	Straight
L1	Elbow

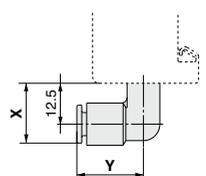
Fitting size	
Symbol	Size
C6	ø6
C8	ø8
C10	ø10
N7	ø1/4
N9	ø5/16
N11	ø3/8

Semi-standard	
Symbol	Description
NII	None
X17	Oil-free

Straight type



Elbow type



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

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

Series ARM11A/B

End Block

ARM11E L -

End block

End block type

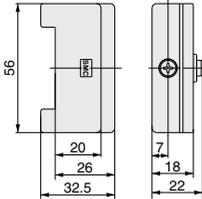
Symbol	Mounting position
L	Left side
R	Right side

Semi-standard

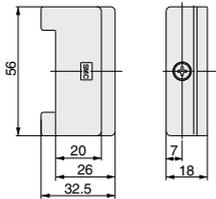
Symbol	Description
Nil	None
3	Oil-free

Note) Since the L side end block is oil-free, leave the field blank for it.

L side end block



R side end block

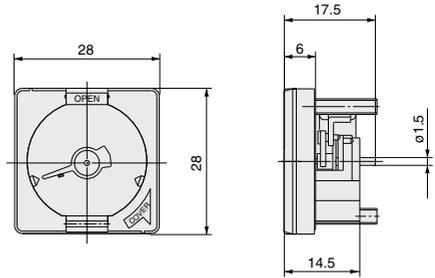


Pressure Gauge

Part no.	Pressure gauge indication range	Indication unit
GC3-4A-X2101	0 to 0.4 MPa	MPa
GC3-10A-X2101	0 to 1.0 MPa	
GC3-P4A-X2101	0 to 60 psi	psi
GC3-P10A-X2101	0 to 150 psi	

Specifications

Display accuracy	±3%F.S. (Full Span)
Calibration angle	230°
Limit indicator	With limit indicator



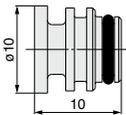
Port Plug

VVQ0000 -58A -

Single unit regulator /
Port plug for regulator block

Semi-standard

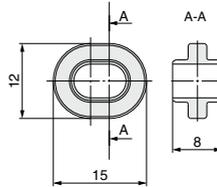
Symbol	Description
Nil	None
X17	Oil-free



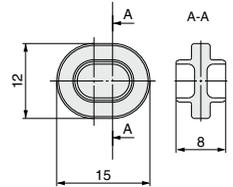
Bushing

Part no.	Description
136144-S	Common supply bushing
136144-K	Individual supply bushing

136144-S



136144-K



Regulator

Single Unit Type

Series ARM10

How to Order

Standard Type ARM10 - **06** - **B** - **1** - **Z** - **N**

① ② ③ ④ ⑤

1. IN/OUT Fitting Type

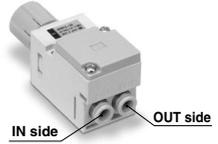
Metric size

Mounting position Fitting type Symbol	IN side				OUT side			
	Straight		Elbow (Note)		Straight		Elbow (Note)	
	ø4	ø6	ø4	ø6	ø4	ø6	ø4	ø6
06	●				●			
07		●				●		
08			●				●	
18				●				●
19					●			●
20				●				●
25	●							●
26		●						●
27			●					●
32				●		●		
33					●	●		
34					●		●	

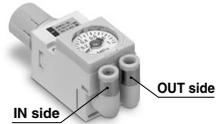
Inch size

Mounting position Fitting type Symbol	IN side				OUT side			
	Straight		Elbow (Note)		Straight		Elbow (Note)	
	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4
56	●				●			
57		●				●		
58			●				●	
68				●				●
69					●			●
70				●				●
75	●							●
76		●						●
77			●					●
82				●		●		
83					●	●		
84					●		●	

Straight



Elbow



Note) Use caution to ensure the connector is not disturbed, depending on piping direction, when choosing to attach a digital pressure switch.

2. Accessories

Symbol	None	Note 1)		Panel nut
		Bracket	Pressure gauge	
NII	●			
B		●		(●)
G			●	
P				●
BG		●	●	(●)
GP			●	●

Note 1) In case of a type with bracket, the panel nut is included.

Note 2) Pressure display means a pressure gauge or digital pressure switch is attached.

When choosing to attach a digital pressure switch is chosen for attachment, be sure to enter the symbol, referring to table 5, "Digital Pressure Switch Output Specifications". Otherwise, a pressure gauge will come with the regulator. Additionally, pressure gauges are not compatible with copper-free and fluorine-free specifications.



3. Semi-standard

Symbol	None	Note 1)		Note 2)
		0.35 MPa setting	Non-relieving	
NII	●			
1		●		
2			●	
3				●
4		●	●	
5		●		●
6			●	●
7		●	●	●

Note 1) A pressure gauge with a full span of 0.4 MPa is attached.

Note 2) The oil-free specification is grease-free in the fluid contact area.

4. Unit Representation

Symbol	Description
NII	Display unit for product name plate and pressure gauge: MPa
Z (Note 1, 2)	Display unit for product name plate and pressure gauge: psi
ZA (Note 1, 3)	Digital pressure switch: with unit switching (MPa is initially set.)

Note 1) This option is available for use outside Japan only. (The SI unit has to be used in Japan.) Additionally, the pressure switch offers dual unit presentation in MPa and psi.

Note 2) The digital pressure switch is equipped with unit switching and initially set to psi.

Note 3) This option is available with the digital pressure switch.

5. Digital Pressure Switch Output Specifications ^{Note)}

Symbol	Details
NII	None
N	NPN open collector
P	PNP open collector

Note) When a digital pressure switch is attached, the "pressure display" in table 2 "Accessories" will be equipped.

The electrical entry is positioned on the side opposite the handle.

- ARJ
- AR425 to 935
- ARX
- AMR
- ARM
- ARP
- IR
- IRV
- VEV
- SRH
- SRP
- SRF
- VCHR
- ITV
- IC
- ITVX
- PVQ
- VEF
- VEP
- VER
- VEA
- VY1
- VBA
- VBAT
- AP100



Made to Order
(Refer to page 688 for details.)

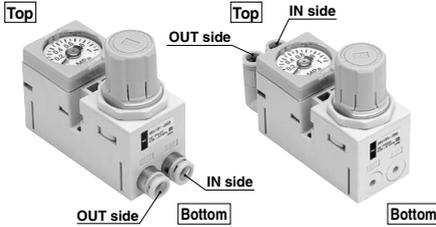
How to Order

Front Handle Type **ARM10F** 1 - 06 B - Z - N

① ② ③ ④ ⑤ ⑥

1. IN/OUT Piping Position

Position Symbol	IN side		OUT side	
	Bottom	Top	Bottom	Top
1	●		●	
2		●		●
3	●			●
4		●	●	



Example of panel mounting



2. IN/OUT Fitting Type

Metric size

Mounting position Fitting type Symbol	IN side				OUT side			
	Straight		Elbow ^{Note 1)}		Straight		Elbow ^{Note 1)}	
	ø4	ø6	ø4	ø6	ø4	ø6	ø4	ø6
06	●					●		
07		●				●		
08		●					●	
18			●					●
19				●				●
20				●				●
25	●							●
26		●						●
27		●						●
32			●					●
33				●		●		
34				●			●	

Inch size

Mounting position Fitting type Symbol	IN side				OUT side			
	Straight		Elbow ^{Note 1)}		Straight		Elbow ^{Note 1)}	
	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4	ø5/32	ø1/4
56	●					●		
57		●				●		
58		●					●	
68			●					●
69				●				●
70				●				●
75	●							●
76		●						●
77		●						●
82			●					●
83				●		●		
84				●			●	

Note) Use caution to ensure the connector is not disturbed, depending on piping direction, when choosing to attach a digital pressure switch.

3. Accessories

Symbol	None	Note 1)		Note 2)		Panel nut	Note 3)	
		Bracket	Pressure display	Pressure display	Decorative cover			
NII	●							
B		●				●		
G				●				
BG		●		●		●		
GP				●		●		
GPC ^{Note 4)}				●		●		●

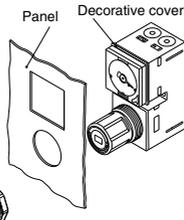
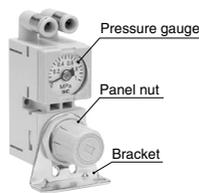
Note 1) In case of a type with bracket, the panel nut is included.
Note 2) Pressure display means a pressure gauge or digital pressure switch is attached.

When choosing to attach a digital pressure switch is chosen for attachment, be sure to enter the symbol, referring to table 6, "Digital Pressure Switch Output Specifications". Otherwise, a pressure gauge will come with the regulator.

Additionally, pressure gauges are not compatible with copper-free and fluorine-free specifications.

Note 3) Not attachable to a model with digital pressure switch.

Note 4) Please note that the dimensions will be bigger when GPC is selected.



4. Semi-standard

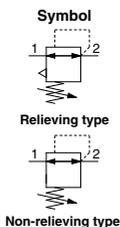
Symbol	None	0.35 MPa setting ^{Note 1)}	Non-relieving	^{Note 2)} Oil-free
NII	●			
1		●		
2			●	
3				●
4		●	●	
5		●		●
6			●	●
7		●	●	●

Note 1) A pressure gauge with a full span of 0.4 MPa is attached.
 Note 2) The oil-free specification is grease-free in the fluid contact area.

6. Digital Pressure Switch Output Specifications ^{Note)}

Symbol	Details
NII	None
N	NPN open collector
P	PNP open collector

Note) When a digital pressure switch is attached, the "pressure display" in table 3 "Accessories" will be equipped.
 The electrical entry is positioned on the side opposite the handle.



Note) A standard model is equipped with a backflow function. Main valve opens when the inlet pressure is released, and then the outlet pressure backflows into the inlet side.

5. Unit Representation

Symbol	Description
NII	Display unit for product name plate and pressure gauge: MPa
Z ^{Note 1, 2)}	Display unit for product name plate and pressure gauge: psi
ZA ^{Note 1, 3)}	Digital pressure switch: with unit switching (MPa is initially set).

Note 1) This option is available for use outside Japan only. (The SI unit has to be used in Japan.)
 Note 2) The digital pressure switch is equipped with unit switching and initially set to psi.
 Note 3) This option is available with the digital pressure switch.

Specifications

Model		ARM10	ARM10F
Regulator construction		Direct acting	
Working principal		Diaphragm regulator	
Relief mechanism	Standard	Relief type	
	Optional	Non-relieving type	
Backflow function ^{Note 1)}		Within (unbalance type)	
IN side tubing O.D.		ø4, ø6, ø5/32, ø1/4	
OUT side tubing O.D.		ø4, ø6, ø5/32, ø1/4	
Proof pressure		1.5 MPa	
Maximum operating pressure		1.0 MPa	
Set pressure range	Standard	0.05 to 0.7 MPa	
	Optional	0.05 to 0.35 MPa (Low pressure type)	
Fluid		Air	
Ambient and operating fluid temperature ^{Note 2)}		5 to 60°C	
Weight		60 g	72 g

Note 1) 0.1 MPa or greater set pressure is required when used in the reverse flow.
 Note 2) 5 to 50°C when the digital pressure switch will be used.

Refer to page 676 for the digital pressure switch specifications.



Specific Product Precautions

Be sure to read before handling.
 Refer to front matter 43 for Safety Instructions and pages 365 to 369 for Precautions on every series.

Maintenance

⚠ Warning

1. Make sure to perform a periodic inspection of the pressure gauge when the compact manifold regulator is installed between a solenoid valve and an actuator. Sudden pressure changes could happen and the durability of the product could be reduced. Using an electronic style pressure gauge is recommended, depending on the situation.

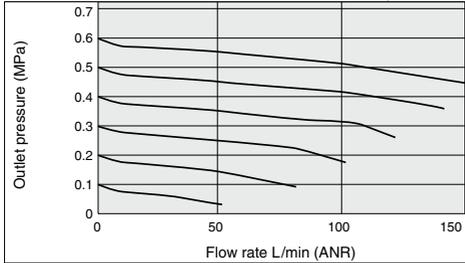
ARJ
AR425 to 935
ARX
AMR
ARM
ARP
IR
IRV
VEV
SRH
SRP
SRF
VCHR
ITV
IC
ITVX
PVQ
VEF
VEP
VER
VEA
VY1
VBA
VBAT
AP100

Series ARM10

Flow Characteristics (Representative Values)

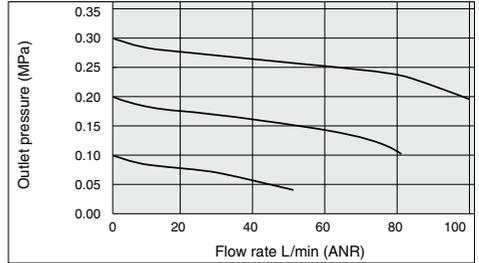
ARM10F□-06

ARM10-06 (One-touch fittings: IN/OUT $\phi 4$) Condition: Inlet pressure 0.7 MPa



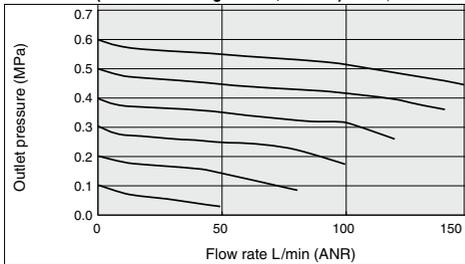
ARM10F□-06-1

ARM10-06-1 (One-touch fittings: IN/OUT $\phi 4$) Condition: Inlet pressure 0.5 MPa



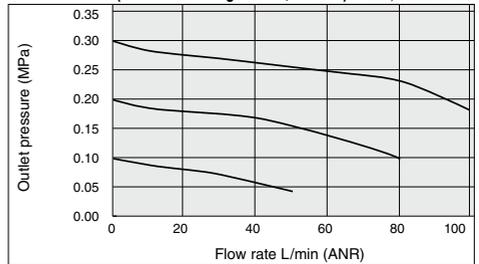
ARM10F□-07

ARM10-07 (One-touch fittings: IN $\phi 6$, OUT $\phi 4$) Condition: Inlet pressure 0.7 MPa



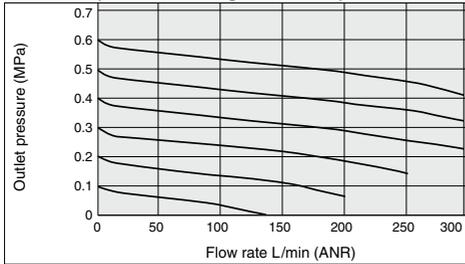
ARM10F□-07-1

ARM10-07-1 (One-touch fittings: IN $\phi 6$, OUT $\phi 4$) Condition: Inlet pressure 0.5 MPa



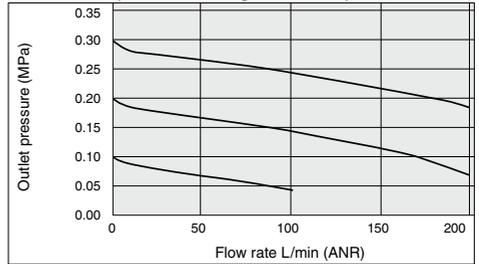
ARM10F□-08

ARM10-08 (One-touch fittings: IN/OUT $\phi 6$) Condition: Inlet pressure 0.7 MPa



ARM10F□-08-1

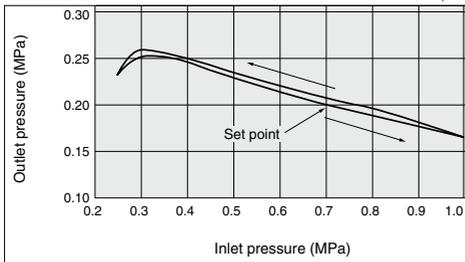
ARM10-08-1 (One-touch fittings: IN/OUT $\phi 6$) Condition: Inlet pressure 0.5 MPa



Pressure Characteristics (Representative Values)

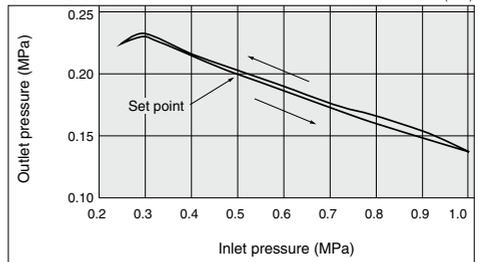
ARM10F□-06

ARM10-06 Conditions: Inlet pressure 0.7 MPa, Outlet pressure 0.2 MPa, Flow rate 20 L/min (ANR)

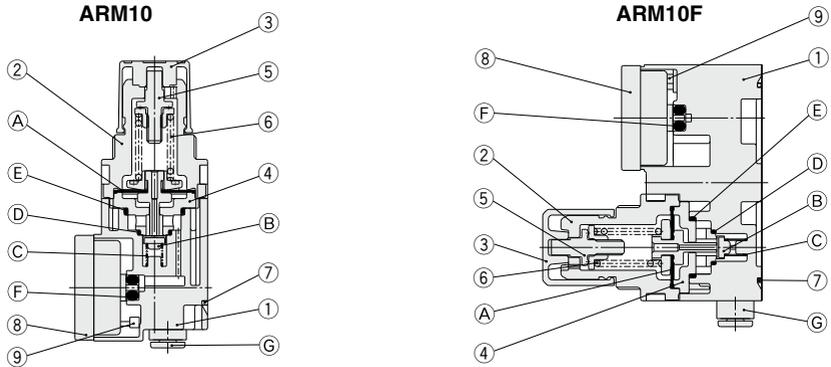


ARM10F□-06-1

ARM10-06-1 Conditions: Inlet pressure 0.5 MPa, Outlet pressure 0.2 MPa, Flow rate 20 L/min (ANR)



Construction



Component Parts

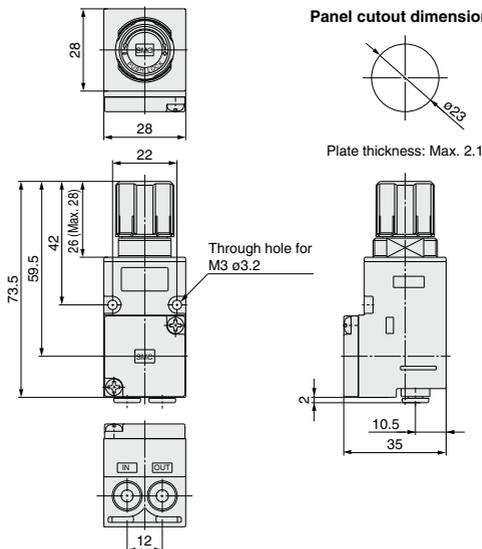
No.	Description	Material
1	Body	PBT
2	Bonnet	PBT
3	Handle	POM
4	Valve seat	POM
5	Adjusting screw assembly	Reinforced steel
6	Adjustment spring	Steel wire
7	Regulator clip	Stainless steel
8	Blanking plate assembly	—
9	Square nut	Steel

Replacement Parts

No.	Description	Material	Part no.	Note	
A	Diaphragm assembly	Weatherproof 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	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	—	Refer to page 687.		

Dimensions

ARM10-06
ARM10-08



Panel cutout dimensions

For dimensions and accessories of One-touch fittings, please refer to page 687.

Plate thickness: Max. 2.1

ARJ

AR425
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEX

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

VY1

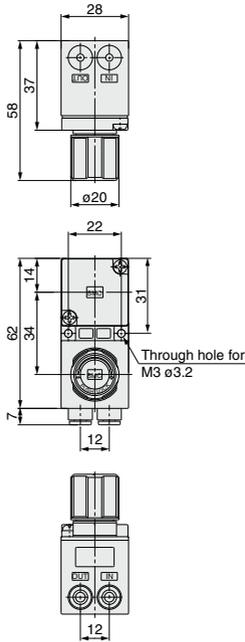
VBA
VBAT

AP100

Series ARM10

Dimensions

ARM10F1-06
08



Panel cutout dimensions

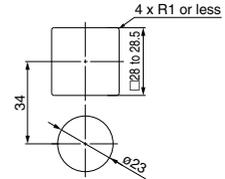
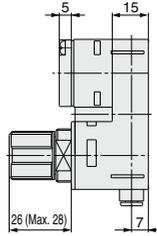
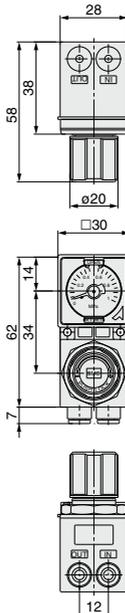


Plate thickness: Max. 2.1



ARM10F1-06GPC
08GPC



Panel cutout dimensions

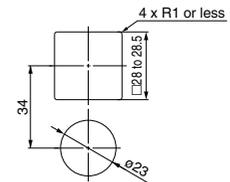
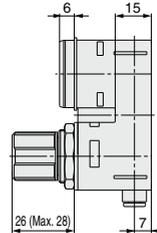


Plate thickness: Max. 2.1



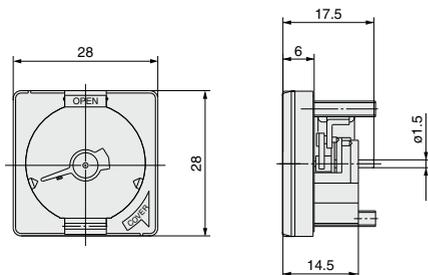
Regulator/Single Unit Type Options

Pressure Gauge

Part no.	Pressure gauge indication range	Indication unit
GC3-4A-X2101	0 to 0.4 MPa	MPa
GC3-10A-X2101	0 to 1.0 MPa	
GC3-P4A-X2101	0 to 60 psi	psi
GC3-P10A-X2101	0 to 150 psi	

Specifications

Display accuracy	±3% F.S. (Full Span)
Calibration angle	230°
Limit indicator	With limit indicator
Weight	17 g

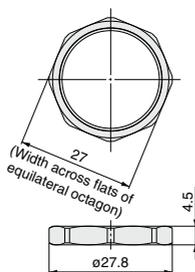


Digital Pressure Switch

Refer to page 676.

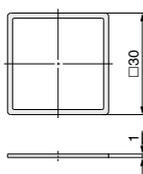
Panel Nut

Part no.	136133
Material	POM
Weight	1 g

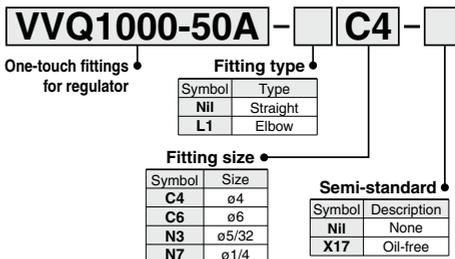


Decorative Cover

Part no.	136155
Material	PBT
Weight	0.5 g



One-touch Fittings for Regulator



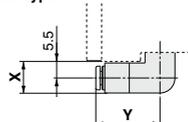
ARM10

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

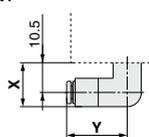
ARM10F

Straight type



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

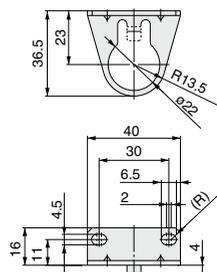
Elbow type



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

Bracket

Part no.	136134
Material	Nickel plated steel
Weight	17 g





Regulator Single Unit Front Handle Type/ For Manifold

Specifications

Regulator construction		Direct acting
Working principal		Diaphragm regulator
Relief mechanism	Standard	Relief type
	Optional	Non-relieving type
Backflow function		Within (Unbalance type)
IN/OUT air passage diameter		ø4
IN/OUT gasket sealing O.D.		ø7
Proof pressure		1.5 MPa
Maximum operating pressure		1.0 MPa
Set pressure range	Standard	0.05 to 0.7 MPa
	Optional	0.05 to 0.35 MPa (Low pressure type)
Fluid		Air
Ambient and fluid temperature		5 to 60°C
Weight		73 g

Note 1) Two mounting bolts and two O-rings are attached.

Note 2) 0.1 MPa or greater set pressure is required when used in the reverse flow.

Note 3) 5 to 50°C when the digital pressure switch will be used. Refer to page 676 for the digital pressure switch specifications.



How to Order

ARM10F - **A** **Z** - **N** - X201
 ① ② ③ ④
 • For manifold

1. Accessory (Pressure Display)

Enter symbol for when the model requires a digital pressure switch.

Symbol	Accessory
NII	Without pressure display
A	With pressure display

Note 1) Pressure display means a pressure gauge or digital pressure switch is attached.

When choosing to attach a digital pressure switch is chosen for attachment, be sure to enter the symbol, referring to table 4, "Digital Pressure Switch Output Specifications". Otherwise, a pressure gauge will come with the regulator.

Note 2) Pressure gauges are not compatible with copper-free and fluorine-free specifications.

2. Semi-standard

Symbol	None	0.35 MPa setting ^{Note 1)}	Non-relieving	Oil-free ^{Note 2)}
NII	●			
1		●		
2			●	
3				●
4		●	●	
5		●		●
6			●	●
7		●	●	●

Note 1) A pressure gauge with a full span of 0.4 MPa is attached.

Note 2) The oil-free type has non-greased fluid contact areas.

3. Unit Representation

Symbol	Description
NII	Display unit for product name plate and pressure gauge: MPa
Z ^{Note 1, 2)}	Display unit for product name plate and pressure gauge: psi
ZA ^{Note 1, 3)}	Digital pressure switch: with unit switching (MPa is initially set.)

Note 1) This option is available for use outside Japan only. (The SI unit has to be used in Japan.)

Note 2) The digital pressure switch is equipped with unit switching and initially set to psi.

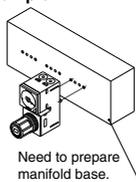
Note 3) This option is available with the digital pressure switch.

4. Digital Pressure Switch Output Specifications

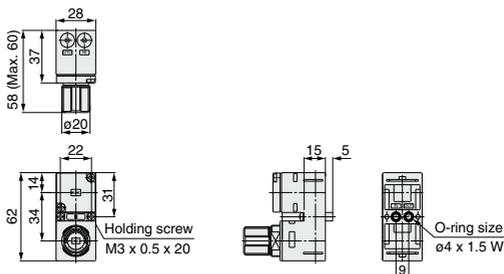
Symbol	Details
NII	None
N	NPN open collector
P	PNP open collector

Note) When a digital pressure switch is attached, the "pressure display" in table 1 "Accessory" will be equipped. The electrical entry is positioned on the side opposite the handle.

Example



Dimensions





Series ARM10/11 Blocks/Specific Product Precautions 1

Be sure to read before handling. Refer to front matter 43 for Safety Instructions and pages 365 to 369 for Precautions on every series.

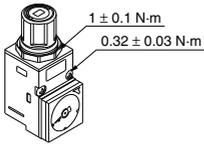
Handling

Warning

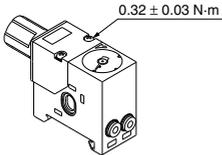
Observe the proper screw tightening torque in installation.

Tightening beyond the proper tightening torque may damage the mounting screws, blocks or switches. If the force is below the tightening torque range, the threaded joint can come loose.

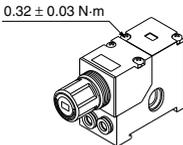
1. Tightening torque for fixing screws and panel nuts of a single unit regulator



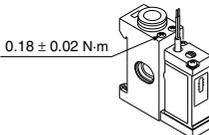
2. Tightening torque for regulator assembly fixing screws on regulator block



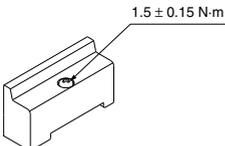
3. Tightening torque for blanking plates and pressure gauge fixing screws on regulator block



4. Tightening torque for pressure switch fixing screws on common supply block with pressure switch and pressure switch block



5. Tightening torque for DIN rail clamp screws on end block



Warning

● Digital Pressure Switch
Mount it with the proper screw-tightening torque.

Overtightening may damage the regulator body or adaptor, etc. Meanwhile, insufficient tightening may loosen the connecting threads.

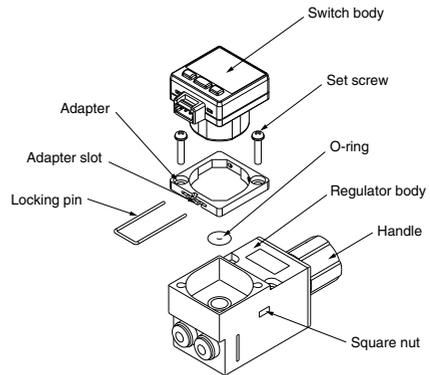
1. Attach an O-ring to the regulator O-ring slit.

2. Attach the adaptor with the 2 set screws by positioning the adaptor slot on the opposite side of the handle and keeping the 2 square nuts (right/left) attached.
Tightening torque: 0.32 ± 0.03 N·m

3. Attach the switch body.

4. Fully insert the locking pin into the adaptor slot.

The switch body can be replaced by attaching/removing the locking pin.



ARJ
AR425 to 935
ARX
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IRV
VEX
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SRF
VCHR
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PVQ
VEF
VEP
VER
VEA
VY1
VBA
VBAT
AP100



Series ARM10/11 Blocks/Specific Product Precautions 2

Be sure to read before handling. Refer to front matter 43 for Safety Instructions and pages 365 to 369 for Precautions on every series.

Handling

Warning

Mounting and Removal of Manifold with DIN Rail

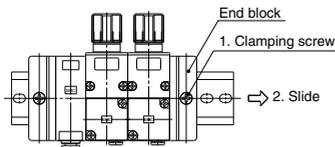
Be sure to shut off the power and air supplies before disassembly. Furthermore, since air may remain inside the actuator, piping and manifold, confirm that the air is completely exhausted before performing any work.

When disassembly and assembly are performed, air leakage may result if connections between blocks and tightening of the end block's holding screw are inadequate.

Before supplying air, confirm that there are no gaps between blocks, and that manifold blocks are securely fastened to the DIN rail. Then supply air and confirm that there is no air leakage before operating.

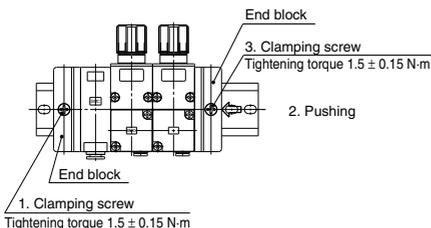
Removing blocks from DIN rail

1. Loosen the end plate clamping screws on the side until they turn freely. (The screws do not come out.)
2. Remove it by sliding it to the side (in the direction of the arrow).



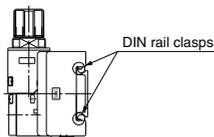
Mounting blocks on DIN rail

1. Confirm that the clamping screws of the end block on one side are securely tightened.
2. Install blocks sliding them from the side. Push the end plate on the opposite side so that there will be no gap between blocks.
3. Tighten the end plate clamping screws on the opposite side.



Confirming DIN rail clasp

Confirm that the DIN rail clasps are securely hooked into the DIN rail.

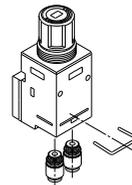


Caution

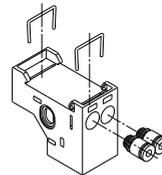
One-touch fitting replacement

For the ease of replacement, One-touch fittings are installed as the cassette type. One-touch fittings are retained with clips inserted from the directions illustrated below. Remove the clips with a flat head screw driver to replace the One-touch fittings. When installing, insert each One-touch fitting deeply to the end and reinsert the clip to the specified position.

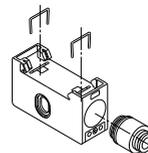
1. Single unit regulator



2. Regulator block

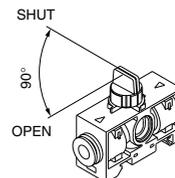


3. Various common supply blocks



Pressure supply of 3-way valve common supply block

Make sure that the handle is set at the OPEN or SHUT position in operation. The block cannot be used for the purpose of containing pressure because it allows a small amount of leakage.





Series ARM10/11 Blocks/Specific Product Precautions 3

Be sure to read before handling. Refer to front matter 43 for Safety Instructions and pages 365 to 369 for Precautions on every series.

Handling

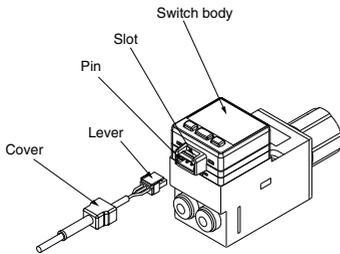
⚠ Caution

● Digital Pressure Switch How to attach a connector

Insert the connector vertically onto the pins, pinching the lever and connector with your fingers. Insert the lever into the switch body slot until it is locked. Cover the connector with a cover.

How to remove a connector

Displace the cover and pull the lever straight forward by pushing its claw to remove it from the slot.



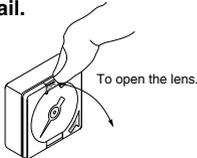
Adjustment

⚠ Caution

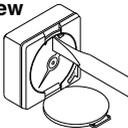
How to adjust indicator of the pressure gauge.

Make sure to follow the instruction when opening the lens cover to adjust the pressure gauge.

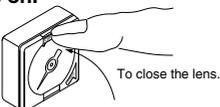
1. Open the lens cover to the arrow's direction with finger nail.



2. Adjust the gauge needle with for example, a flat head screw driver.



3. Close the lens cover to the arrow's direction until it snaps on.



ARJ

AR425
to 935

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VBA
VBAT

AP100



Series ARM10/11 Pressure Switch Blocks Specific Product Precautions

Be sure to read before handling. Refer to front matter 43 for Safety Instructions and pages 365 to 369 for Precautions on every series.

Design & Selection

⚠ Warning

- Operate the switch only within the specified voltage.**
Use of the switch outside the range of the specified voltage can cause malfunction and damage to the switch, it may also increase the risks of electrical shocks or fire.
- Never apply a load above the maximum load capacity.**
It can damage the switch or shorten the service life.
- Be sure to observe the set pressure range and maximum operating pressure.**
Use of the switch outside the set pressure range can cause failure and use beyond the maximum operating pressure can damage the switch.

Mounting

⚠ Warning

- Do not use the switch unless the equipment operates normally.**
After installation, repair or reform, connect air and electricity and conduct appropriate function and leakage tests to confirm proper installation.
- Do not apply a tensile force to a cord.**
Be sure to hold the body to handle the product.
Applying a tensile force to a cord may cause damage to the product.
- Do not drop or bump the product.**
Dropping or bumping while handling may cause damage to the product.

Pressure Supply

⚠ Warning

- Do not use the switch with corrosive gas or liquid.**
Do not use the switch with corrosive gas or liquid. Such gas or fluid may cause damage to the switch.
- Do not use the switch at a vacuum pressure.**
If used in a vacuum pressure range, the switch will suction the outer air and become unable to operate.

Pressure Setting

⚠ Caution

- The switching setting indication scale shows the set value for pressure decrease.**
- When the ON pressure signal is to be detected, the ON signal comes on at the pressure found by adding the hysteresis to the pressure set on the scale plate.**
- The pressure indication on the scale plate is provided as a guideline. Use a pressure gauge to measure the precise settings.**

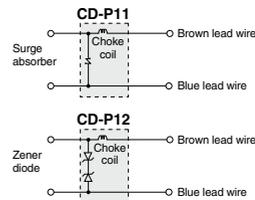
Wiring

⚠ Warning

- Connect the load**
Be sure to connect the load to the pressure switch before connecting the power supply.
- Use a contact protection box.**
If the load driven by the pressure switch is an induction load or connected with a lead wire of 5 m or longer, use a contact protection box in the following table.

Contact protection box	Operating voltage	Lead wire length
CD-P11	100 VAC	Switch connection side: 0.5 m
CD-P12	24 VDC	Lead connection side: 0.5 m

3. Contact protection box internal circuit



4. Contact protection box/Connection method

To connect the switch body and the contact protection box, connect the lead wire of the contact protection box on the side marked with "SWITCH" and the lead wire from the switch body. Connect the switch body and the contact protection box with a lead wire of 1 m or shorter and arrange them as close as possible.

5. Lead wire dimensions

Covering: $\phi 3.4$
Insulator: $\phi 1.1$
Conductor: $\phi 0.64$

Operating Environment

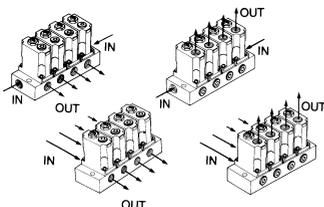
⚠ Warning

- Never use in the presence of explosive gases.**
These switches are not rated as explosion proof. Never use in the presence of an explosive gas as this may cause a serious explosion.
- Do not use in an environment where a strong magnetic field is present.**
The influence of the external magnetic field may cause the switch to malfunction.
- Do not use in an environment where the switch is exposed to water or oil splashes.**
Because the switch has an open type construction, ingress of water or oil can corrode the electric circuit, resulting in malfunction and damage.
- Do not apply vibration to the switch.**
If vibration is applied, malfunction or setting errors may result.

Manifold Regulator

Series ARM1000/2000

4 connection methods



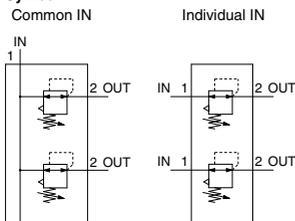
Small size pressure gauge $\varnothing 15$

Backflow function available on the standard model

Space-saving



Symbol



Note) A standard model is equipped with a backflow function. A main valve opens when the inlet pressure is released, and then an outlet pressure backflows into the inlet side.

Standard Specifications

Fluid	Air
Proof pressure	1.2 MPa
Maximum operating pressure	0.8 MPa
Regulating pressure range	Standard: 0.05 to 0.7 MPa 0.2 MPa setting: 0.05 to 0.2 MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Fluid	Air
Cracking pressure (Valve)	0.02 MPa
Construction	Relieving type

Port Size/Weight

Model	Piping	Port size		Weight (g)	
		IN side	OUT side	Total weight (n: stations)	Regulator (Except manifold)
ARM1000	Common IN	$\frac{1}{8}$	$\frac{1}{8}$	$(80 \times n) + 23$	57
	Individual IN	$\frac{1}{8}$	$\frac{1}{8}$	$(79 \times n) + 25$	
ARM2000	Common IN	$\frac{1}{4}$	$\frac{1}{8}$	$(188 \times n) + 43$	136
	Individual IN	$\frac{1}{8}$	$\frac{1}{8}$	$(187 \times n) + 45$	

How to Order

ARM 1000 - 5 A1 - 01 G -

- Regulator for manifold**: ARM 1000
- Number of stations**: 5
- Body size**: A1 (1 station), B1 (10 stations)
- Piping**: A1 (Common), B1 (Individual)
- Port size (OUT side)**: 01 ($\frac{1}{8}$)
- Thread type**: G (NPT)
- Accessory**: Nil

Nil	0.7 MPa setting (Standard)
1	0.2 MPa setting

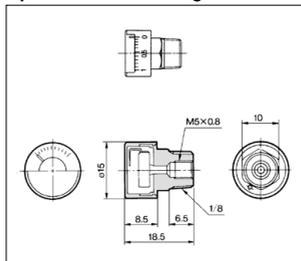
Note 1) Pressure gauge for 1.0 MPa is used.
Note 2) Compared with standard specifications, its adjusting spring has only been changed. It is not the product which does not allow the pressure more than 0.2 MPa. Adjusting spring is not replaceable.

Symbol	IN	OUT
A1	Common	Manifold side
A2	Common	Body side
B1	Individual	Manifold side
B2	Individual	Body side

Note 1) In the case of A1 and B1, a pressure gauge or a plug is mounted on the body side, while in case of A2 and B2, on the manifold side.

Note 2) When mounting a pressure gauge on the body side, its front faces the adjusting screw.

Option / Pressure Gauge: G15-10-01



● Precautions—When drain or oil, etc. gets into the gauge, an error may occur for pressure indication.

How to Order

G15-10-01

- Max. display pressure**: 10 (1.0 MPa)
- Thread type**: Nil (Rc), N (NPT)
- Connecting thread**: 01 ($\frac{1}{8}$ male thread, M5 female thread)

Note) Use caution not to tighten excessively when mounting a pressure gauge, otherwise it may result in a breakdown. Tightening torque recommended (M5: 1.5 to 2 N·m, R1/8: 7 to 9 N·m) For sealing, use a pipe tape.

ARJ

AR425 to 935

ARX

AMR

ARM

ARP

IR

IRV

VEX

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SRP

SRF

VCHR

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PVQ

VEF

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VEA

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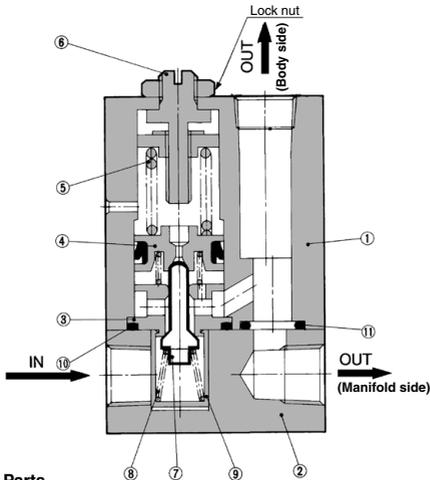
VBA

VBAT

AP100

Series ARM1000/2000

Construction (Individual IN)



Component Parts

No.	Description	Material	Note
1	Body	Aluminum die-casted	Chromate treated
2	Manifold	Aluminum alloy	Chromate treated
3	Valve guide	Brass	
4	Piston	Brass	
5	Adjusting spring	Steel wire	Zinc chromated
6	Adjusting screw	Steel	Electroless nickel plated

Replacement Parts

No.	Description	Material	Part no.	
			ARM1000	ARM2000
7	Valve	Brass, HNBR	134819-30#1	13626-30#1
8	Valve spring	Stainless steel	13615	13625
9	Valve guide	Polyacetal	13614	13624
10	O-ring	NBR	KA00347	KA00361
			16.5 x 13.5 x 1.5	23 x 20 x 1.5
11	O-ring	NBR	KA00476	KA00087
			JIS B 2401 P7	JIS B 2401 P8

Setting

1. Make sure to check the inlet pressure before setting the outlet pressure. Turning the pressure adjustment handle clockwise increases the outlet pressure and turning it counterclockwise decreases the pressure. (To set the pressure, do so in the direction of pressure increase.)
2. Set the outlet pressure to 85% or less of the inlet pressure.

⚠️ Precautions

Be sure to read before handling.
Refer to front matter 43 for Safety Instructions and pages 365 to 369 for Precautions on every series.

Mounting/Adjustment

⚠️ Warning

1. In the case of the common IN style, supply pressure from the two IN ports from both ends. Failure to observe this procedure could result in an excessive pressure drop.

⚠️ Caution

1. Release the lock to adjust the pressure. After the adjustment, engage the lock. Failure to observe this procedure could damage the handle or cause the outlet pressure to fluctuate.
 <Lock operating method>
 Loosen the lock nut to unlock it, and tighten it to lock it.
2. This product can be used as a regulator with a check valve by installing it between solenoid valve and actuator.

Maintenance

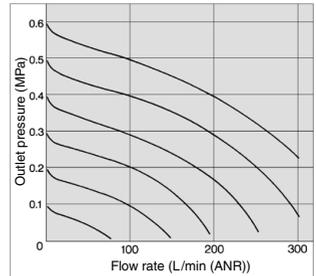
⚠️ Warning

1. Make sure to perform a periodic inspection of the pressure gauge when it is used by installing it between a solenoid valve and an actuator, etc. Sudden pressure changes could happen and the durability of the product could be reduced. Using an electronic style pressure gauge is recommended, depending on the situation.

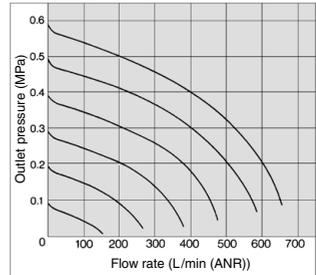
Flow Characteristics (Representative value)

ARM1000

Inlet pressure: 0.7 MPa



ARM2000



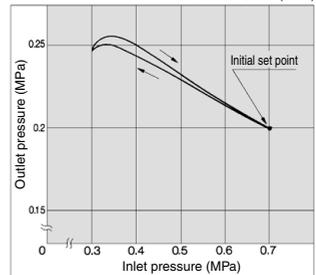
Pressure Characteristics (Representative value)

(Initial setting) Inlet pressure: 0.7 MPa

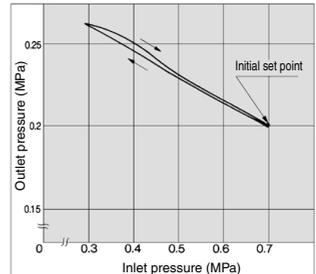
Outlet pressure: 0.2 MPa

Flow rate: 10 L/min (ANR)

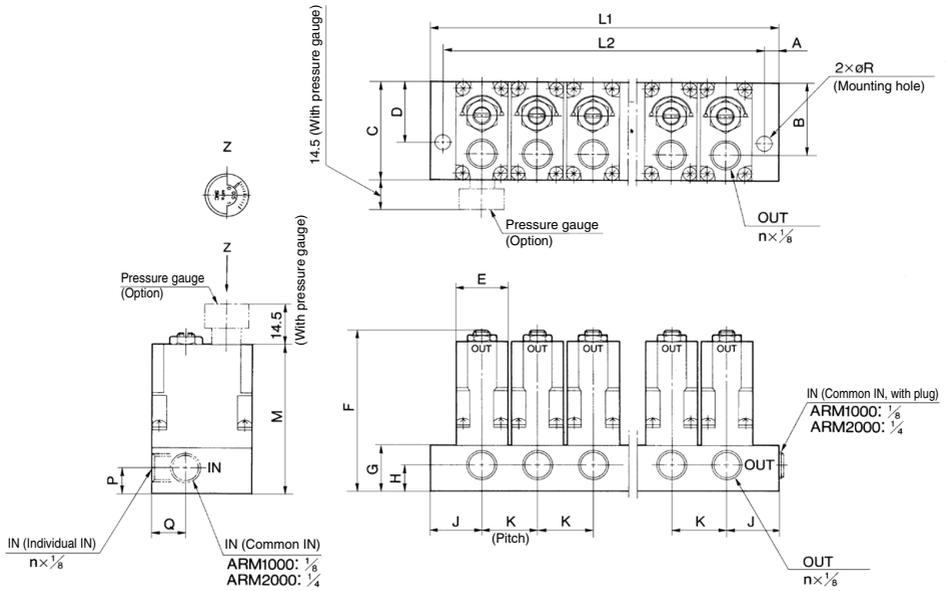
ARM1000



ARM2000



Dimensions



Dimensions

Model	Symbol	A	B	C	D	E	F	G	H	J	K	M	P	Q	R
ARM1000		4.5	25	34	21	18	56	16	9	18	19	52	9	11.5	4.8
ARM2000		4.5	34.5	43	28	27	70	20	11.5	24	28	66	11.5	16.5	4.8

Dimensions by the Number of Stations

Model	Symbol	Manifold stations (n)									
		1	2	3	4	5	6	7	8	9	10
ARM1000	L1	36	55	74	93	112	131	150	169	188	207
	L2	27	46	65	84	103	122	141	160	179	198
ARM2000	L1	48	76	104	132	160	188	216	244	272	300
	L2	39	67	95	123	151	179	207	235	263	291

ARJ

AR425
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEX

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SRF

VCHR

ITV

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ITVX

PVQ

VEF
VEP

VER

VEA

VY1

VBA
VBAT

AP100

Manifold Regulator Modular Type Series ARM2500/3000

- A modular type that can be freely mounted on a manifold station.
- Optimal for central pressure control.
- Easily set up using the new handle. Also has a One-touch lock system.



ARM3000



ARM2500

How to Order

ARM 2500 — 05 A — 02 G1

Regulator for manifold

Body size

2500
3000

Number of stations

02	2 stations
⋮	⋮
10	10 stations

Made to Order

Nil	None
X216	With backflow function

Accessory (Pressure gauge)

Nil	None (With plug)
G1	Back side thread: G33-10-□01
G2	Vertical side thread: GA33-10-□01

* Pressure gauges are shipped together (but not assembled).

Port size (OUT side)

Symbol	Port size	Applicable model
02	1/4	ARM2500
03	3/8	ARM3000

Thread type

Nil	Rc
N	NPT
F	G

Piping

Symbol	Type	IN
A	Common IN	From end plate
B	Individual IN	From OUT port or G port

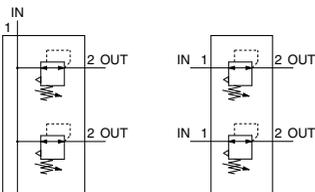
Standard Specifications

Proof pressure	1.5 MPa
Maximum operating pressure	1.0 MPa
Regulating pressure range	0.05 to 0.85 MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Fluid	Air
Construction	Relieving type

Symbol

Common IN

Individual IN



JIS Symbol

With backflow function

Port Size/Weight

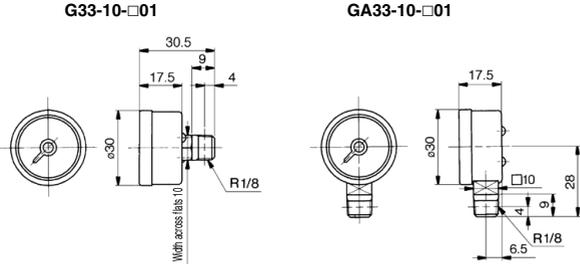
Model	Piping	Port size			Pressure gauge port size	Weight (kg)	
		IN side		OUT side		Regulator	End plate
		Body	End plate				
ARM2500	Common IN	—	3/8	1/4	1/8	0.26	0.06
	Individual IN	1/4	—	1/4	1/8		
ARM3000	Common IN	—	1/2	3/8	1/8	0.47	0.11
	Individual IN	3/8	—	3/8	1/8		

Weight by the Number of Stations

(kg)

Model	Stations	2	3	4	5	6	7	8	9	10
ARM2500		0.68	0.96	1.23	1.51	1.78	2.06	2.33	2.61	2.89
ARM3000		1.25	1.75	2.25	2.75	3.26	3.76	4.26	4.76	5.26

Option: Pressure Gauge (Max. pressure indication: 1.0 MPa)



Note 1) □ in the gauge part no. (e.g. G33-10- □01) indicates the type of threads used for connection. For Rc, leave the symbol blank, and for NPT, enter "N".
Please consult with SMC for the supply of a pressure gauge with NPT port threads.
Note 2) Use caution not to tighten excessively when mounting a pressure gauge, otherwise it may result in a breakdown. For sealing, use a pipe tape. Torque recommended: (R 1/8: 7 to 9 N·m).

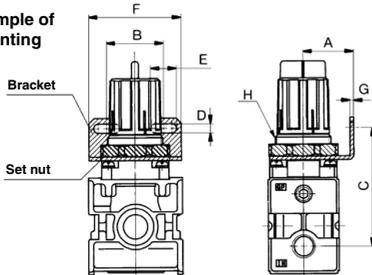
Option/Mounting Bolt Assembly

Model	Part no.	Dimensions	Qty.	Note
ARM2500	136313	Hexagon socket head cap screw (M5 x 70)	4	With flat washer
ARM3000	136413	Hexagon socket head cap screw (M6 x 85)	4	With flat washer

Option/Bracket Assembly

Individual IN type can be used as a single unit regulator.

Example of mounting

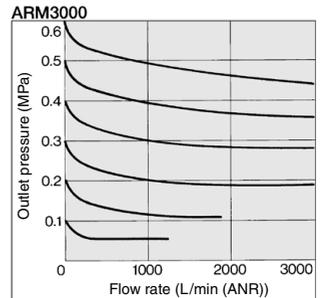
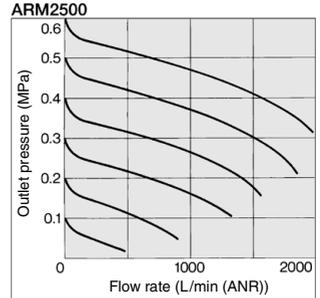


Model	Part no.	Composition of assembly	A	B	C	D	E	F	G	H
ARM2500	136314	Set nut (1349172)	30	34	70	5.4	15.4	55	2.3	M33 x 1.5
		Bracket (B220)								
ARM3000	136414	Set nut (131532)	41	40	75.5	6.5	8	53	2.3	M42 x 1.5
		Bracket (B320)								

Note) Tighten the set nut securely and fix it.
Recommended torque for set nut
ARM2500: 17.5 ± 3.5 N·m
ARM3000: 22.5 ± 4.5 N·m

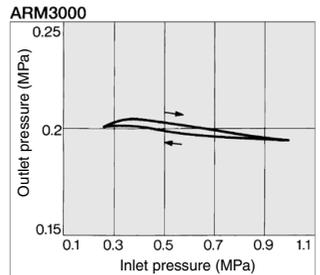
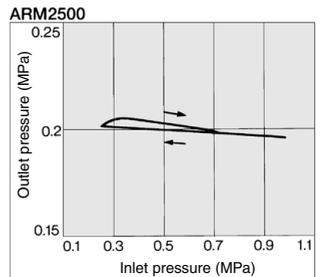
Flow Characteristics (Representative Value)

Initial pressure: = 0.7 MPa



Pressure Characteristics (Representative Value)

Initial setting
P1 = 0.7 MPa P2 = 0.2 MPa
Q = 20 L/min (ANR)



ARJ

AR425
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEV

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

VEA

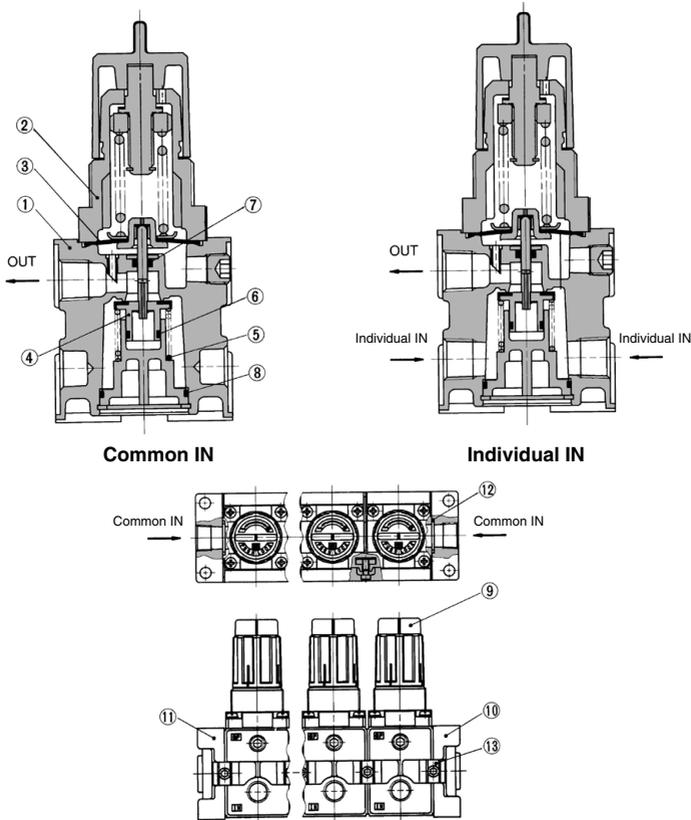
VY1

VBA
VBAT

AP100

Series ARM2500/3000

Construction



Component Parts

No.	Description	Material	Note
1	Body	Aluminum die-casted	Chromate treated/Platinum silver painted
2	Bonnet	Polycetal	

Replacement Parts

No.	Description	Material	Part no.	
			ARM2500	ARM3000
3	Diaphragm assembly	Weather resistant NBR	1349161A	131515A
4	Valve assembly	Brass, HNBR	13639A	13649A
5	Valve spring	Stainless steel	136310	136410
6	Valve O-ring	NBR	KA00892 11.5 x 8.5 x 1.5	KA00904 14.5 x 10.5 x 2
7	O-ring	NBR	KA00078 JIS B 2401 P3	KA00083 JIS B 2401 P5
8	O-ring	NBR	KA00299 28 x 25 x 1.5	KA00961 35 x 31 x 2

Component Parts

Description	No.	Assembly		Part no.			
		Component	Qty.	ARM2500		ARM3000	
				Common IN	Individual IN	Common IN	Individual IN
Regulator	9	Regulator	1	ARM2500-A-02	ARM2500-B-02	ARM3000-A-03	ARM3000-B-03
End plate assembly	10	End plate R	1				
	11	End plate L	1				
	12	O-ring	1	13636A	13636B (Except O-ring)	13646A	13646B (Except O-ring)
Bracket assembly	13	Bracket A Bracket B Hex. socket head cap screw	2 1 set 2				
	12	O-ring	1				
	13	Bracket A Bracket B Hex. socket head cap screw	2 1 set 2	136312		136412	

How to order

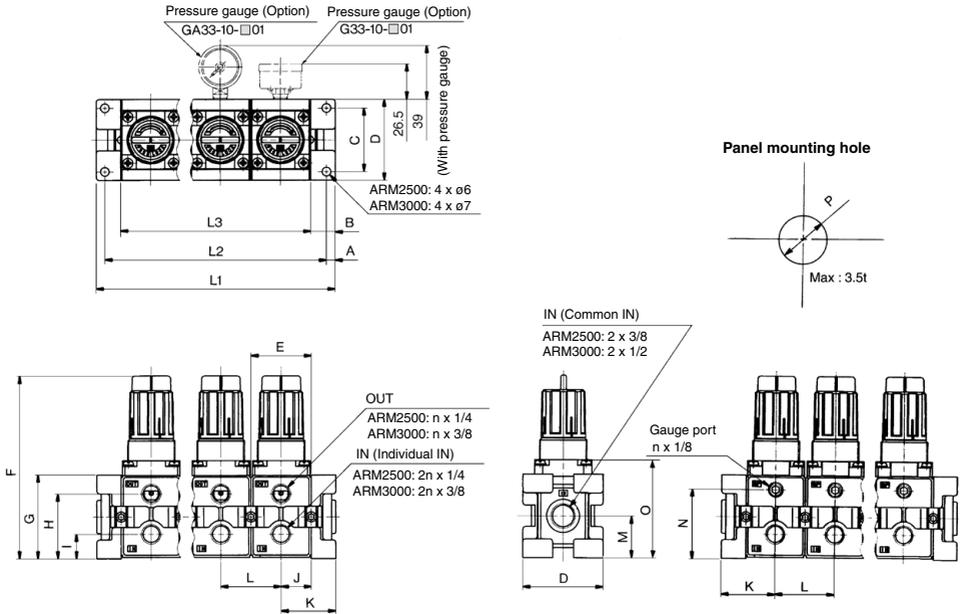
(1) When adding n stations to ARM ²⁵⁰⁰/₃₀₀₀ - □□^A_B

- Regulator n pcs.
- Bracket assembly n pcs.

(2) When regulators, end plate assembly and bracket assembly are assembled to make the manifold of n stations.

- Regulator n pcs.
- Bracket assembly n pcs.
- End plate assembly 1 pc.

Dimensions



Dimensions

* For products with pressure gauge, pressure gauges are shipped together with product.

Model	Symbol	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
		ARM2500	6	17	44	56	42	126.5	58	45	17	21	38	42	29	48	68
ARM3000	7	21	54	68	55	153.5	70	53	23.5	27.5	48.5	55	35	59	85.5	42.5	

Dimensions by the Number of Stations

Model	Symbol	Manifold stations									
		2	3	4	5	6	7	8	9	10	
ARM2500	L1	118	160	202	244	286	328	370	412	454	
	L2	106	148	190	232	274	316	358	400	442	
	L3	84	126	168	210	252	294	336	378	420	
ARM3000	L1	152	207	262	317	372	427	482	537	592	
	L2	138	193	248	303	358	413	468	523	578	
	L3	110	165	220	275	330	385	440	495	550	

ARJ

AR425
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEV

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF
VEP

VER

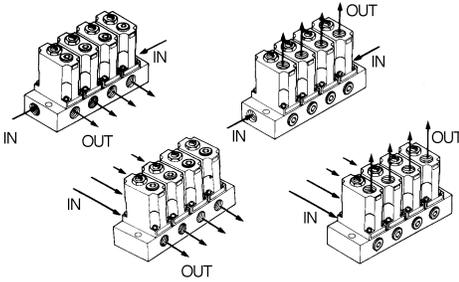
VEA

VY1

VBA
VBAT

AP100

4 Ways of Connection



Small Size Pressure Gauge
ø15mm
Reverse flow function available on the standard model

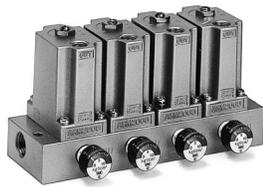
Space Saving



NARM1000-6A1-N01G

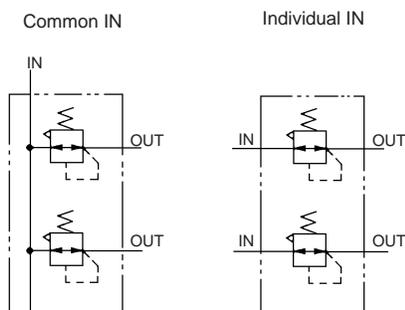


NARM2000-4B2



NARM2000-4A2-N01G

Symbol



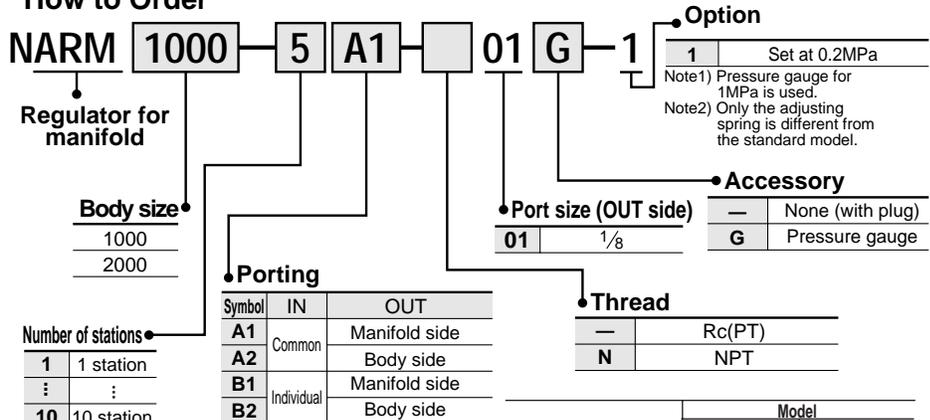
Standard Specifications

Fluid	Air
Proof pressure psig (MPa)	175 (1.2)
Max. operating pressure psig (MPa)	120 (0.8)
Set pressure range psig (MPa)	7~100 (0.05 to 0.7)
Ambient and fluid temperature	23°~140°F (-5 to 60°C) (No freezing)
Fluid	Air
Cracking pressure (Valve) psig (MPa)	3 (0.02)
Construction	Relief style

Port size/Weight

Model	Porting	Port size		Weight lb (g)	
		IN	OUT	Total weight (n: stations)	Regulator (Except manifold)
NARM1000	Common IN	1/8	1/8	(80 X n) + 23	.13 (57)
	Individual IN	1/8	1/8	(79 X n) + 25	
NARM2000	Common IN	1/4	1/8	(188 X n) + 43	.3 (136)
	Individual IN	1/8	1/8	(187 X n) + 45	

How to Order



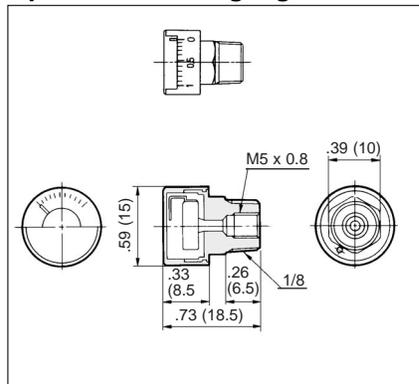
Note1) In case of A1 and B1, a pressure gauge or a plug is mounted at the body side, while in case of A2 and B2, at the manifold side.

Note2) Pressure gauges mounted in body are oriented so that the 6 o'clock position of the gauge is at the pressure adjusting screw.

Part Name	Model	
	NARM1000	NARM2000
Regulator w/o mflid	NARM1000A	NARM2000A
Pressure gauge	G15-P10-N01	G15-P10-N01
Blanking plate kit (plate, screws, and o-ring)	136114A	136214A
Manifold base, Common IN (A1, A2)	13612*-N	13622*-N
Manifold base, Individual IN (B1, B2)	13613*-N	13623*-N

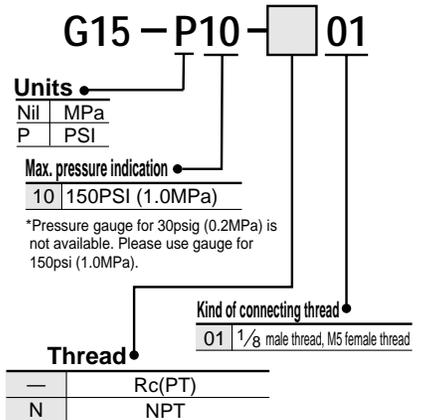
* Denotes number of stations: 2-10 available.

Option: Pressure gauge G15-10-01



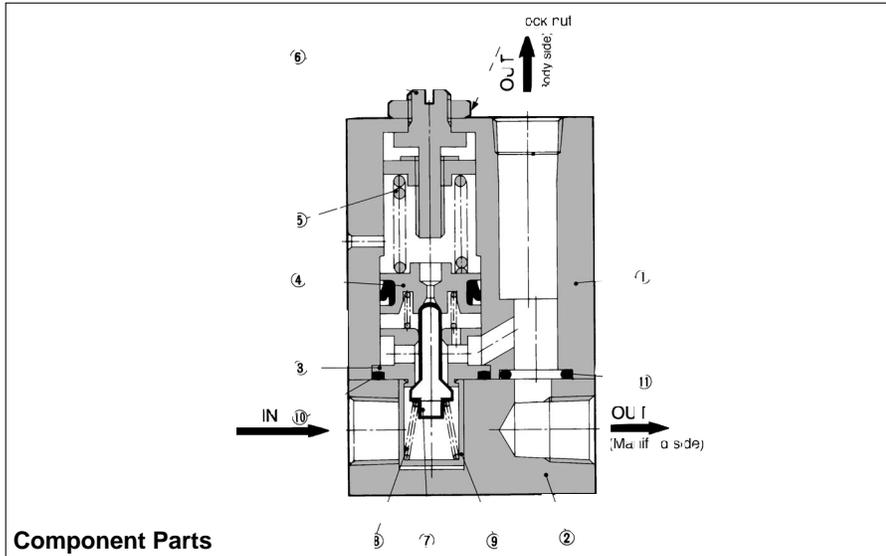
•Precautions:

How to Order



Regulator for Manifold
NARM1000, 2000

Construction (Individual IN)



Component Parts

No.	Description	Material	Note
①	Body	ADC	Chromate
②	Manifold	Aluminum alloy	Chromate
③	Valve guide	Brass	
④	Piston	Brass	
⑤	Adjusting spring	Steel wire	Zinc chromate
⑥	Adjusting screw	Steel	Electroless nickel plating

Replacement Parts

No.	Description	Material	Part no.	
			NARM1000	NARM2000
⑦	Valve	Brass/NBR	134819	13626
⑧	Valve spring	Stainless steel	13615	13625
⑨	Valve retainer	POM	13614	13624
⑩	O-ring	NBR	16.5 x 13.5 x 1.5	23 x 20 x 1.5
⑪	O-ring	NBR	P7	P8

Setting

- Make sure to check the primary pressure before setting the secondary pressure. Turning the pressure adjustment handle clockwise increases the secondary pressure and turning it counterclockwise decreases the pressure. (To set the pressure, do so in the direction of pressure increase.)
- The secondary pressure must be set to 85% or less of the primary pressure.

⚠ Precautions

Be sure to read before handling.
Refer to page 6 for Safety Instructions and precautions common to the products mentioned in this volume and refer to pages 7 and 8 for more detailed precautions of every series.

Mounting/Adjustment

⚠ Warning

- In the case of the common IN type, supply pressure from the two IN ports from both ends. Failure to observe this procedure could lead to an excessive pressure drop.
- Set up the regulator while verifying the pressure that is indicated on the primary and the secondary pressure gauges. Turning the handle excessively could damage the internal parts.

⚠ Caution

- Release the lock to adjust the pressure. After the adjustment, engage the lock. Failure to observe this procedure could damage the handle or cause the secondary pressure to fluctuate.

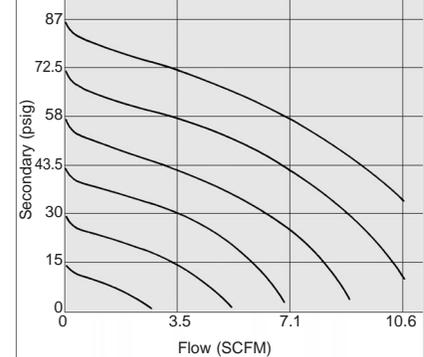
Maintenance

⚠ Warning

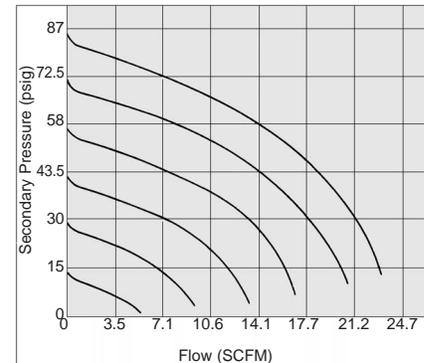
- Make sure to perform a periodic inspection of the pressure gauge when it is used by installing it between a solenoid valve and an actuator, etc. Because of the possibility of creating sudden pressure fluctuations, the durability of the product could be shortened. Under certain circumstances, the use of an electronic type pressure gauge is recommended.

Flow Characteristics

NARM1000 Supply pressure: 100 psig



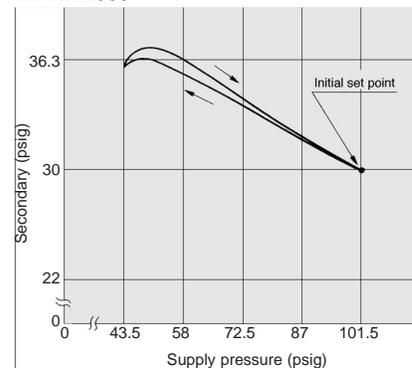
NARM2000



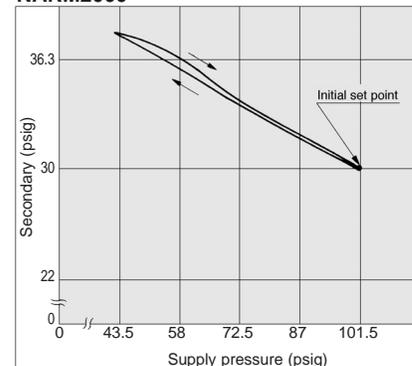
Pressure Characteristics

Initial setting Supply pressure: 0.7MPa(7.1kgf/cm²)
Secondary pressure: 0.2MPa(2.0kgf/c
Flow: .4 SCFM

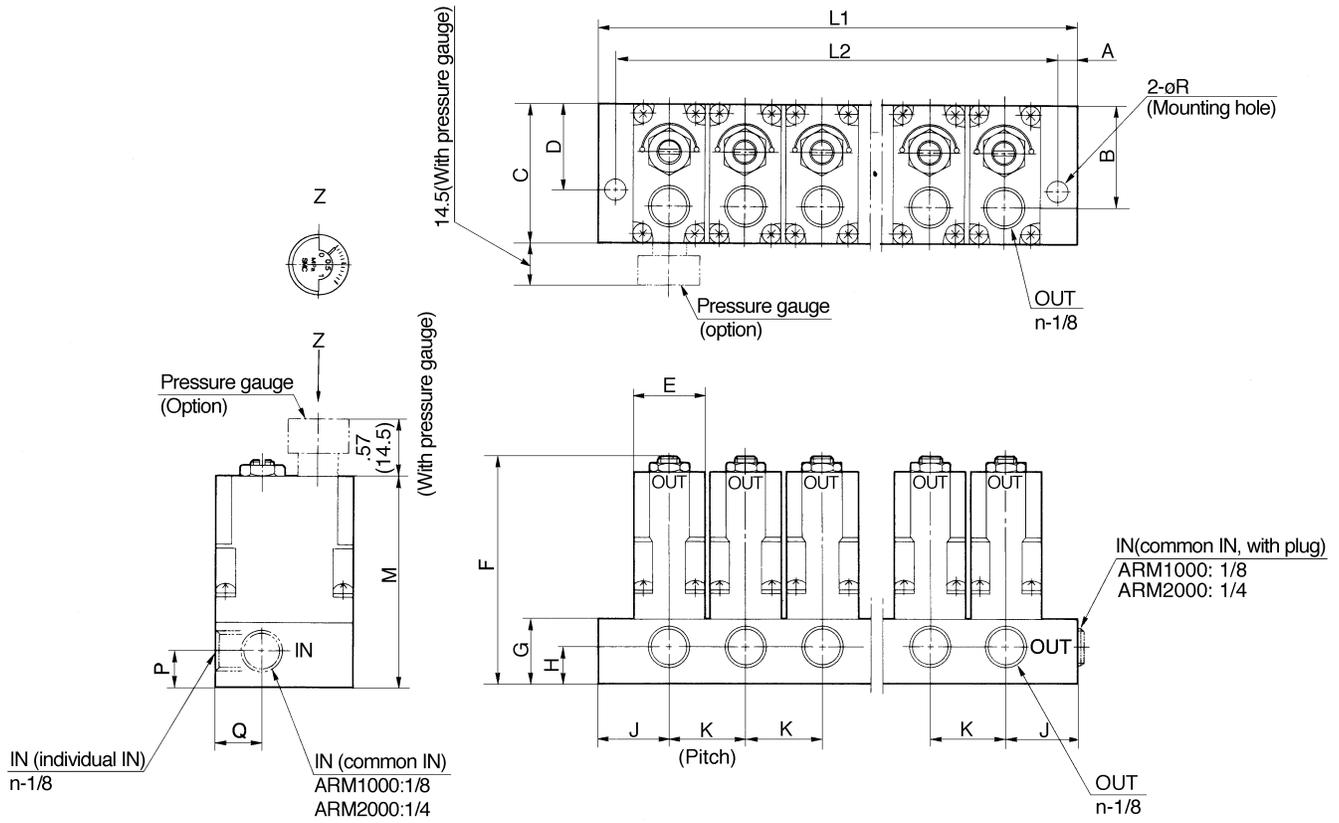
NARM1000



NARM2000



Dimensions



Dimensions

Model	Symbol	A	B	C	D	E	F	G	H	J	K	M	P	Q	R
NARM1000		.18	.98	1.34	.83	.71	2.20	.63	.35	.71	.75	2.05	.35	.45	.19
		(4.5)	(25)	(34)	(21)	(18)	(56)	(16)	(9)	(18)	(19)	(52)	(9)	(11.5)	(4.8)
NARM2000		.18	1.36	1.69	1.10	1.06	2.76	.79	.45	.94	1.10	2.60	.45	.65	.19
		(4.5)	(34.5)	(43)	(28)	(27)	(70)	(20)	(11.5)	(24)	(28)	(66)	(11.5)	(16.5)	(4.8)

Dimensions by number of stations

Model	Symbol	A	C	E	F	G	H	J	K	M	P
NARM1000	L1	1.42 (36)	2.17 (55)	2.91 (74)	3.66 (93)	4.41 (112)	5.16 (131)	5.91 (150)	6.65 (169)	7.40 (188)	8.15 (207)
	L2	1.06 (27)	1.81 (46)	2.56 (65)	3.31 (84)	4.06 (103)	4.80 (122)	5.55 (141)	6.30 (160)	7.05 (179)	7.80 (198)
NARM2000	L1	1.89 (48)	2.99 (76)	4.09 (104)	5.20 (132)	6.30 (160)	7.40 (188)	8.50 (216)	9.61 (244)	10.71 (272)	11.81 (300)
	L2	1.54 (39)	2.64 (67)	3.74 (95)	4.84 (123)	5.94 (151)	7.05 (179)	8.15 (207)	9.25 (235)	10.35 (263)	11.46 (291)

Regulator for Manifold
NARM2500, 3000

A modular type that can easily be mounted in a manifold station.

Optimal for central pressure control.

Pressure easily set using the new handle.
One-touch lock system.



NARM3000



NARM2500

How to Order

NARM **2500** **05** **A** **02** **G1**

Regulator for manifold

Body size

2500
3000

Number of stations

02	2 stations
⋮	⋮
10	10 stations

Accessory

—	None (with plug)
G1	K40A-MP1.0-N01M
G2	K40A-MP1.0-N01M

Port size (OUT side)

Symbol	Port size	Applicable model
02	NPT 1/4	NARM2500
03	NPT 3/8	NARM3000

Piping

Symbol	Type	IN
A	Common IN	From end plate
B	Individual IN	Below: OUT port or G port

Standard Specifications

Proof pressure psig (MPa)	220 (1.5)
Max. operating pressure psig (MPa)	150 (1.0)
Set pressure range psig (MPa)	7~120 (0.05 to 0.85)
Ambient and fluid temperature	23~140 (-5 to 60°C) (No freezing)
Fluid	Air
Construction	Relief type

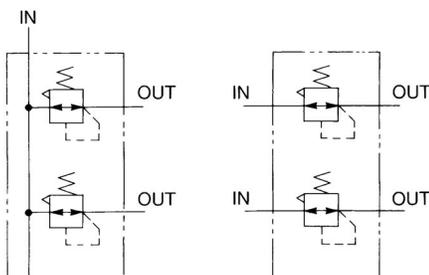
Port size/Weight

Model	Piping	Port size NPT			Pressure gauge port size NPT	Weight lb (kg)	
		IN		OUT		Regulator	End plate
		Body	End plate				
NARM2500	Common IN	—	3/8	1/4	1/8	.57 (0.26)	.13 (0.06)
	Individual IN	1/4	—	1/4	1/8		
NARM3000	Common IN	—	1/2	3/8	1/8	1.04 (0.47)	.24 (0.11)
	Individual IN	3/8	—	3/8	1/8		

Symbol

Common IN

Individual IN



Weight by number of stations

lb (kg)

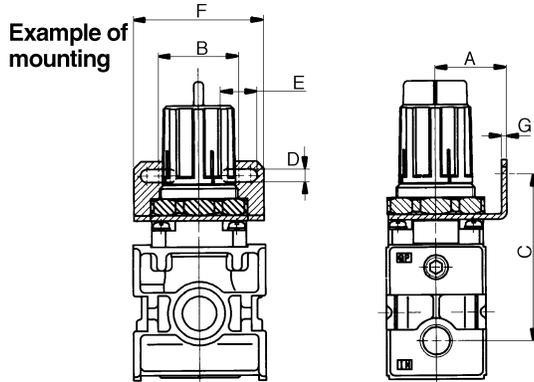
Model	Stations	2	3	4	5	6	7	8	9	10
NARM2500		1.50 (0.68)	2.12 (0.96)	2.71 (1.23)	3.33 (1.51)	3.92 (1.78)	4.54 (2.06)	5.14 (2.33)	5.75 (2.61)	6.37 (2.89)
		2.67 (1.25)	3.86 (1.75)	4.96 (2.25)	6.06 (2.75)	7.19 (3.26)	8.29 (3.76)	9.39 (4.26)	10.49 (4.76)	11.6 (5.26)

Option: Mounting bolt ass'y

Model	Part no.	Dimensions	Qty.	Note
NARM2500	136313	Hexagon socket head cap screw (M5 x 70)	4	With flat washer
NARM3000	136413	Hexagon socket head cap screw (M6 x 85)	4	With flat washer

Option: Bracket assembly

Individual IN type can be used as a single regulator.



Model	Part no.	A	B	C	D	E	F	G
NARM2500	136314	1.18 (30)	1.34 (34)	2.76 (70)	.21 (5.4)	.61 (15.4)	2.17 (55)	.09 (2.3)
NARM3000	136414	1.61 (41)	1.57 (40)	2.97 (75.5)	.26 (6.5)	.31 (8)	2.09 (53)	.09 (2.3)

⚠️ Precautions

Be sure to read before handling.
Refer to page 6 for Safety Instructions and precautions common to the products mentioned in this volume and refer to pages 7 and 8 for more detailed precautions of every series.

Mounting/Adjustment

⚠️ Warning

- The adjustment handle must be operated manually. Using a tool to turn the handle could lead to damage.
- Set up the regulator while verifying the pressure that is indicated on the primary and the secondary pressure gauges. Turning the handle excessively could damage the internal parts.

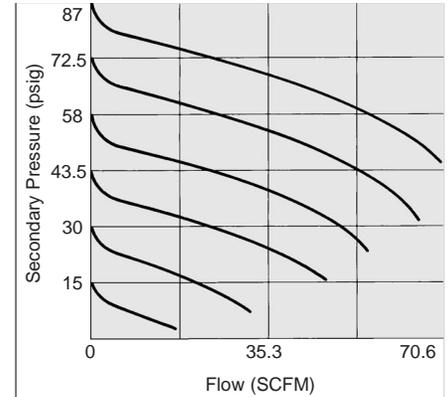
⚠️ Caution

- Release the lock to adjust the pressure. After the adjustment, engage the lock. Failure to observe this procedure could damage the handle or cause the secondary pressure to fluctuate.
 - On the NARM2500, pull the adjustment handle to release the lock and push the adjustment handle to engage the lock. If it does not lock easily, turn the handle slightly clockwise or counterclockwise before pushing it.

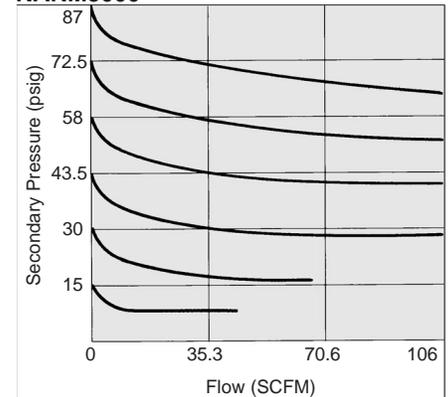
- On the NARM3000, pull the adjustment handle to release the lock. (An orange colored line is provided at the bottom of the adjustment handle for visual checking.) Push the adjustment handle to engage the lock. If it does not lock easily, turn the handle slightly clockwise or counterclockwise; then, push it until the orange colored line is no longer visible.
- Turning the pressure adjustment handle clockwise increases the secondary pressure and turning it counterclockwise decreases the pressure.
- Make sure to check the primary pressure before setting the pressure. The secondary pressure must be set to 85% or less of the primary pressure. Failure to observe this procedure could cause the secondary pressure to fluctuate.
- In the case of the common IN type, supply pressure from the two IN ports from both ends. Failure to observe this procedure could lead to an excessive pressure drop.

Flow Characteristics Supply pressure: 100 psig

NARM2500



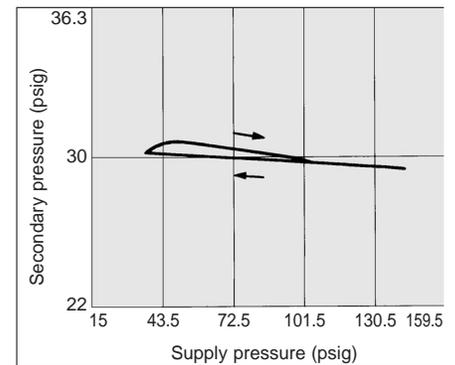
NARM3000



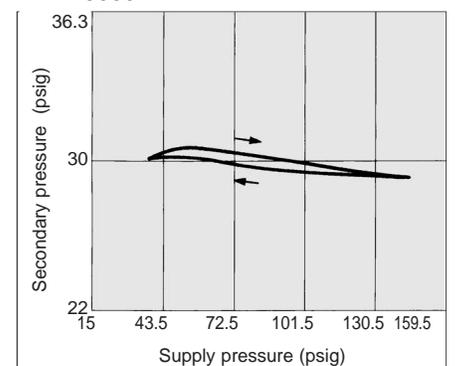
Supply pressure 100 psig
Secondary pressure 30 psig
Flow rate .7 SCFM

Pressure Characteristics

NARM2500

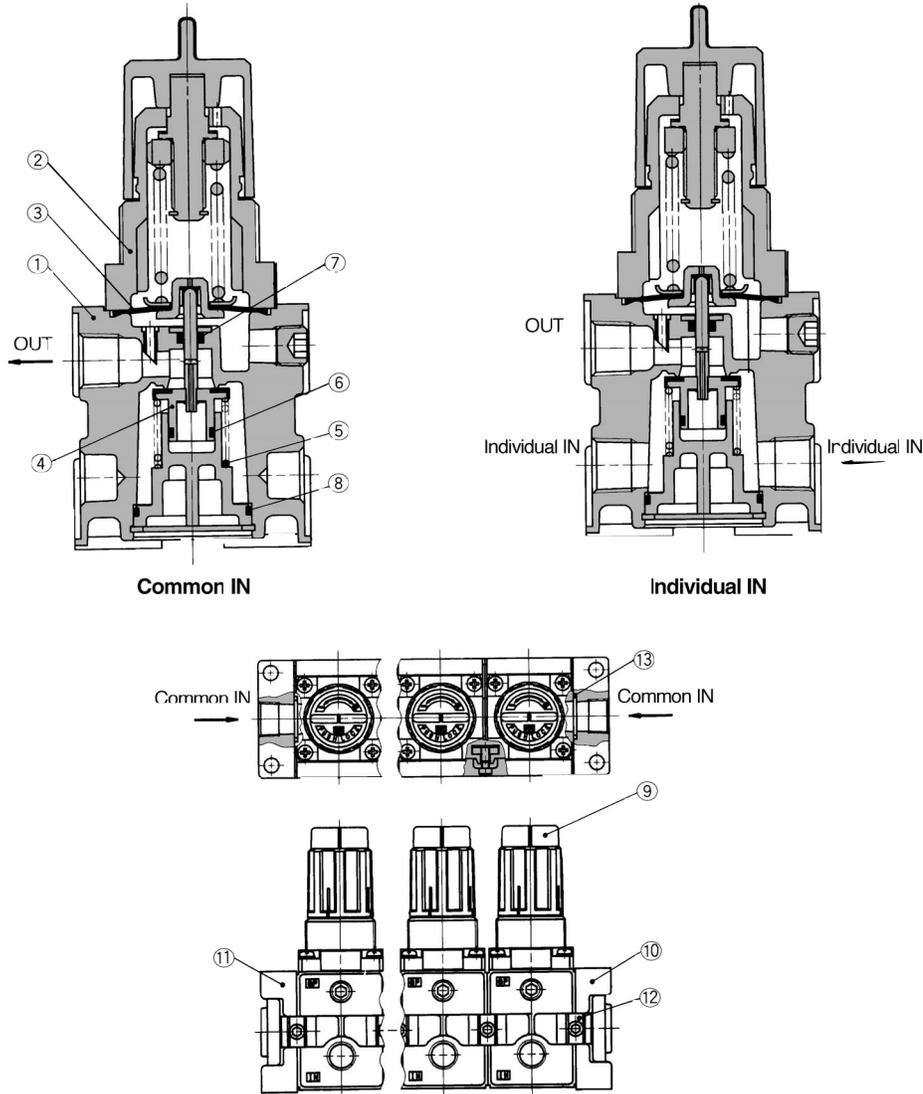


NARM3000



Regulator for Manifold
NARM2500, 3000

Construction



Main Parts

No.	Description	Material	Note
①	Body	Aluminum die casting	Chromate/Platinum silver painting
②	Bonnet	Polyacetal	

Component Parts

No.	Description	Material	Part no.	
			NARM2500	NARM3000
③	Diaphragm ass'y	NBR	1349161A	131515A
④	Valve ass'y	Brass/NBR	13639A	13649A
⑤	Valve spring	Stainless steel	136310	136410
⑥	Valve O-ring	NBR	11.5 X 8.5 X 1.5	14.5 X 10.5 X 2
⑦	O-ring	NBR	P3	P5
⑧	O-ring	NBR	28 X 25 X 1.5	35 X 31 X 2

Component Parts

Description	No.	Assembly		Part no.				
		Component	Qty.	NARM2500		NARM3000		
				Common IN	Individual IN	Common IN	Individual IN	
Regulator	⑨	Regulator	1	NARM2500-A-N02	NARM2500-B-N02	NARM3000-A-N03	NARM3000-B-N03	
End plate ass'y	⑩	End plate R	1	13636A	13636B (Except for O-ring)	13646A	13646B (Except for O-ring)	
	⑪	End plate L	1					
	⑫	O-ring	1					
	⑬	Bracket	Bracket A					2
Bracket B			2					
Hexagon socket head cap screw			2					
Bracket ass'y	⑭	O-ring	1	136312		136412		
	⑮	Bracket	Bracket A					2
			Bracket B					2
			Hexagon socket head cap screw					2

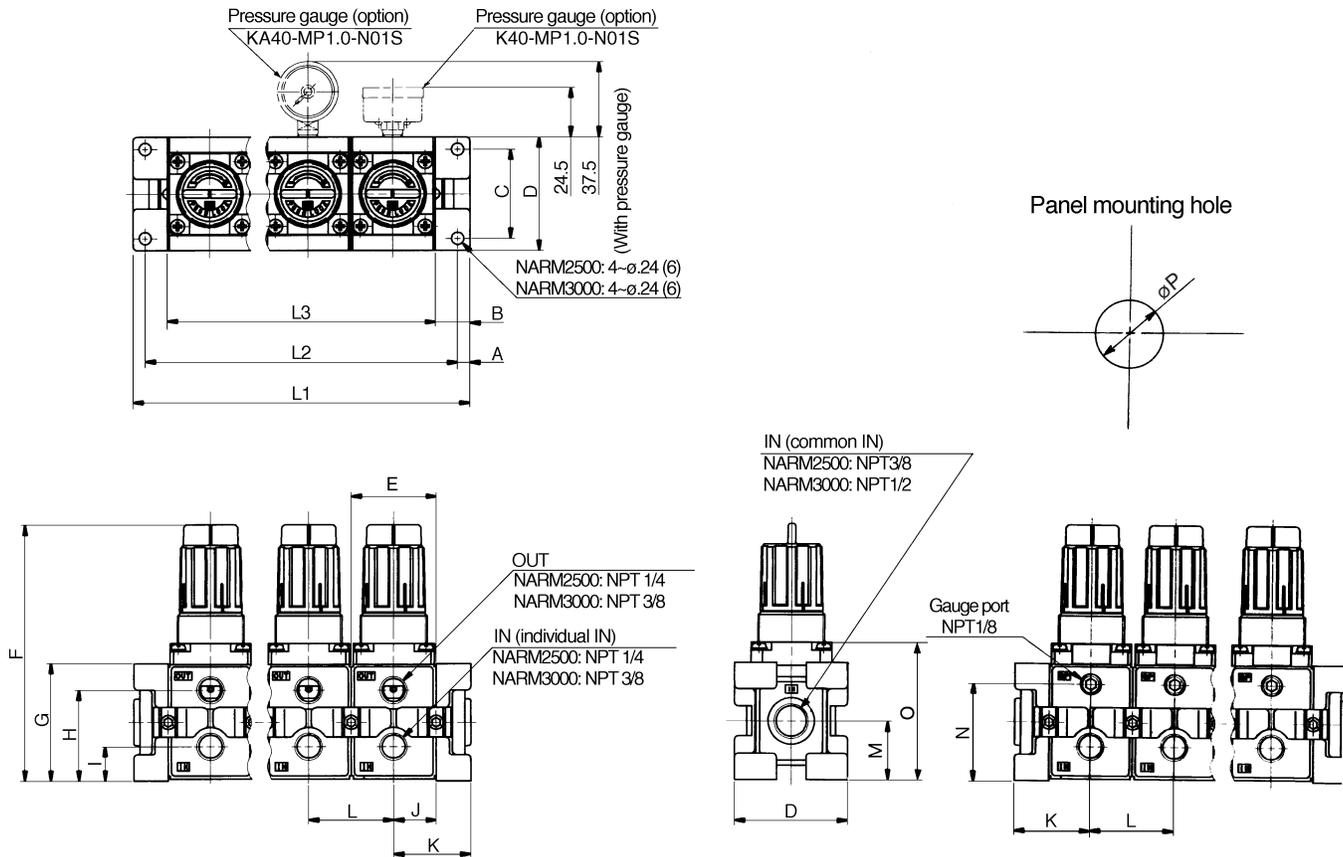
How to Order

(1) When adding n stations to ARM $\frac{2500}{3000} * * A, B$

- Regulator n pcs.
- Bracket ass'y n pcs.

(2) When ordering regulators, end plate assembly and bracket assembly are assembled to make the manifold of n stations.

- Regulator n pcs.
- Bracket ass'y n pcs.
- End plate ass'y 1 pc.



Dimensions

Model	Symbol	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
NARM2500		.24	.67	1.73	2.20	1.65	4.98	2.28	1.77	.67	.83	1.50	1.65	1.14	1.89	2.68	1.32
		(6)	(17)	(44)	(56)	(42)	(126.5)	(58)	(45)	(17)	(21)	(38)	(42)	(29)	(48)	(68)	(33.5)
NARM3000		.28	.83	2.13	2.68	2.17	6.04	2.76	2.09	.93	1.08	1.91	2.17	1.38	2.32	3.37	1.67
		(7)	(21)	(54)	(968)	(55)	(153.5)	(70)	(53)	(23.5)	(27.5)	(48.5)	(55)	(35)	(59)	(85.5)	(42.5)

Dimensions by number of stations

Model	Symbol	2	3	4	5	6	7	8	9	10
NARM2500	L1	4.66 (118)	6.30 (160)	7.95 (202)	9.61 (244)	11.26 (286)	12.91 (328)	14.57 (370)	16.22 (412)	17.87 (454)
	L2	4.17 (106)	5.83 (148)	7.48 (190)	9.13 (232)	10.79 (274)	12.44 (316)	14.09 (358)	15.75 (400)	17.40 (442)
	L3	3.31 (84)	4.96 (126)	6.61 (168)	8.27 (210)	9.92 (252)	11.57 (294)	13.23 (336)	14.88 (378)	16.54 (420)
NARM3000	L1	5.98 (152)	8.15 (207)	10.31 (262)	12.48 (317)	14.65 (372)	16.81 (427)	18.98 (482)	21.14 (537)	23.31 (592)
	L2	5.43 (138)	7.60 (193)	9.76 (248)	11.93 (303)	14.10 (358)	16.26 (413)	18.43 (468)	20.59 (523)	22.76 (578)
	L3	4.33 (110)	6.50 (165)	8.66 (220)	10.83 (275)	12.99 (330)	15.16 (385)	17.32 (440)	19.49 (495)	21.65 (550)