



Air operated valve for chemical liquids

AMD0¹/₂² Series

The standard type uses special PPS to handle hydrofluoric acid

● Orifice size: ø3 to ø4



Specifications

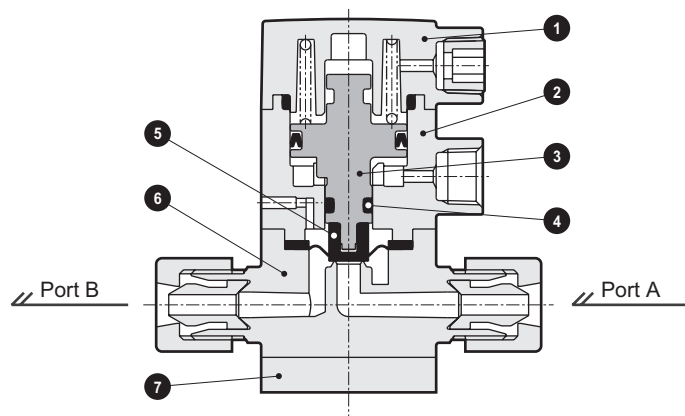
Descriptions		AMD0 ¹ / ₂ ² 2*-4	
Working fluid		Pure water, chemical liquids, air, N ₂ gas (*1)	
Fluid temperature °C		5 to 100 (*2)	
Proof pressure MPa		1	
Working pressure (A→B) MPa		0 to 0.5	
Working pressure (B→A) MPa		0 to 0.3	
Valve seat leakage cm ³ /min		0 (water pressure)	
Back pressure MPa		0 to 0.3	
Ambient temperature °C		0 to 60	
Frequency		30 times/min. or less	
Mounting orientation		Unrestricted	
Connection		Rc1/8, O.D. ø6 tube connection (fitting integrated), O.D. 1/4" tube connection (fitting integrated)	
Orifice size		ø3.5	ø4
Cv		0.28	0.32
Operating section	Oper. Press. MPa	NC/NO 0.35 to 0.5, double acting 0.3 to 0.4 (0.2 to 0.3 for fluid code "P")	
	Operating port	Rc1/8	

*1: Check the compatibility of product structural materials, working fluids and atmosphere. (Refer to the compatibility check list on Intro Page 15.)

*2: For use with hydrofluoric acid, or when the fluid temperature exceeds 40°C, consult with CKD.

*3: Refer to pages 123 and 124 for flow characteristics.

Internal structure and parts list

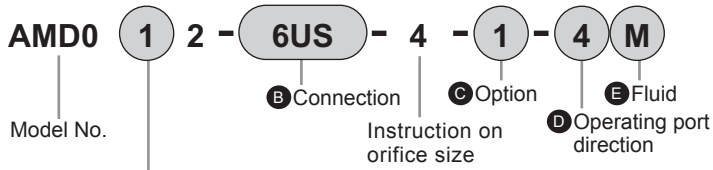


No.	Part name	Material (by fluid code)		
		Standard	M	P
1	Cover	PPS		PP
2	Cylinder	PPS		PP
3	Piston rod	PPS		PVDF
4	O-ring	FKM	EPDM	FKM
5	Diaphragm	PTFE		
6	Body	PFA, PTFE		
7	Mounting plate	PPS		PP

The material and structure may vary depending on the model number. Contact CKD for details.

Always read the precautions on Intro Pages 7 to 16 before use.

How to order



A Actuation	
1	NC (normally closed)
2	NO (normally open)
3	Double acting

		B Connection											
		6	6US	8BUS	6UP	8BUP	6UF	8BUF	6UR	8BUR	6UK	8BUK	8BUW
Rc	1/8	Super Pillar fitting integrated		Super 300 Pillar fitting P Series integrated		F-LOCK 20 Series fitting integrated		F-LOCK 60 Series fitting integrated		Final Lock fitting integrated		Flaretek fitting integrated	
		ø6 x ø4 tube connection	1/4" x 5/32" tube connection	ø6 x ø4 tube connection	1/4" x 5/32" tube connection	ø6 x ø4 tube connection	ø6.35 x ø4.3 tube connection	ø6 x ø4 tube connection	1/4" x 5/32" tube connection	ø6 x ø4 tube connection	1/4" x 5/32" tube connection	ø6 x ø4 tube connection	1/4" x 5/32" tube connection

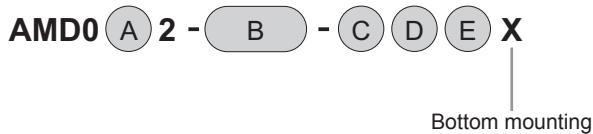
Code	Content	Orifice size	Body material											
		ø4	PFA: PFA molded body, PTFE: PTFE cut body											
C Option			Body material											
0	ON/OFF only		PFA: PFA molded body, PTFE: PTFE cut body											
1	With flow rate adjustment		PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PTFE	
6	ON/OFF / with indicator		PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PTFE	

D Operating port direction													
4	<p>With valve viewed from above, ← indicates fluid flow direction and ⇌ operating port direction.</p>	●	●	●	●	●	●	●	●	●	●	●	●
1		●	●	●	●	●	●	●	●	●	●	●	●
2		●	●	●	●	●	●	●	●	●	●	●	●
3		●	●	●	●	●	●	●	●	●	●	●	●

E Fluid code													
Blank	Standard	●	●	●	●	●	●	●	●	●	●	●	●
M	For ammonia	●	●	●	●	●	●	●	●	●	●	●	●
P	For nitric acid	●	●	●	●	●	●	●	●	●	●	●	●

* PTFE cut products will be manufactured per order.

- Bottom mounting model No. (hyphens between C D and indication of orifice size are not required)

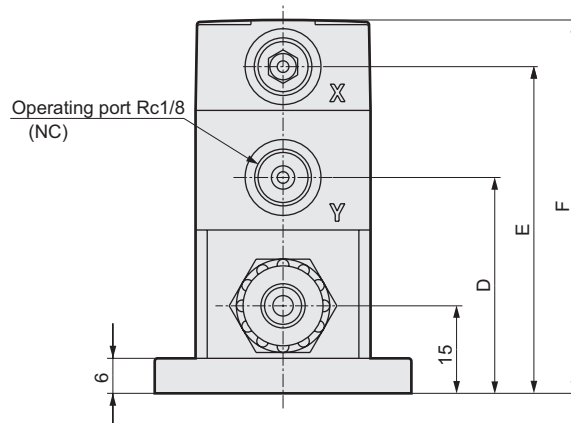
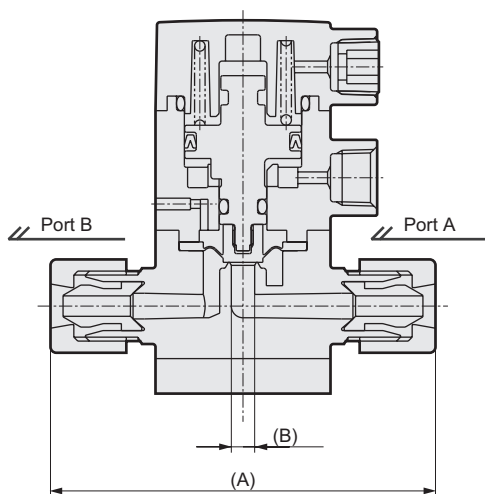
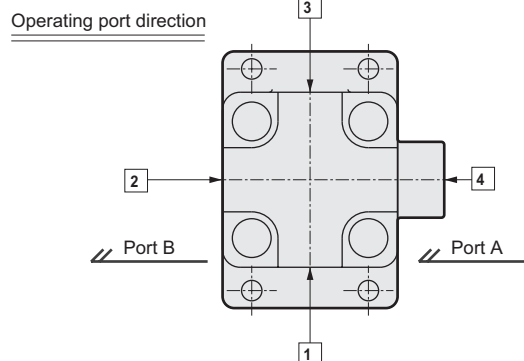
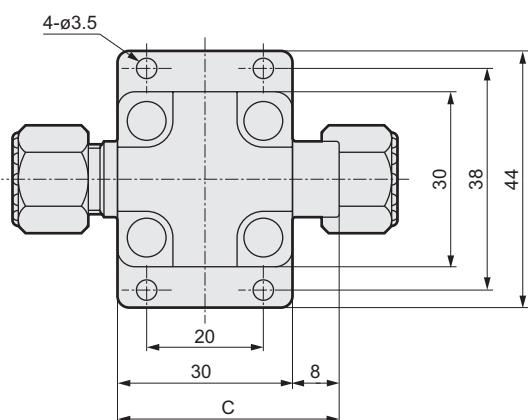


AMDO³/_R
AMDO³/_R
AMDO
AMDO²/₂
AMDO¹/₂
SUS 304
AMDO³/₂
AMDO¹/_H
AMDO¹/_M
AMGZ0R
AMG03R
AMG00
AMGZ0
AMG-02
GAMD³/_R
GAMD³/_R
GAMD²/_A
GAMD²/₂
High pressure specification
AMD
Flow characteristics
MMD¹/₀₂
MMD¹/_{0H}
MMD¹/_{0M}
GMMD¹/₀₂
MMD¹/₀
TMMD¹/₀₂
FMID00
MNV
AMS
AMDS
Fine regulator
KMIL
Others
Related

Dimensions

● ON/OFF only

• AMD0¹/₂/₃2-[*1]-4-0-□



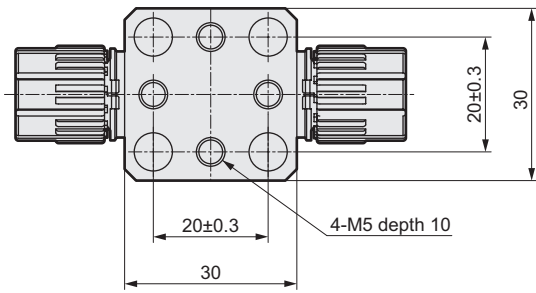
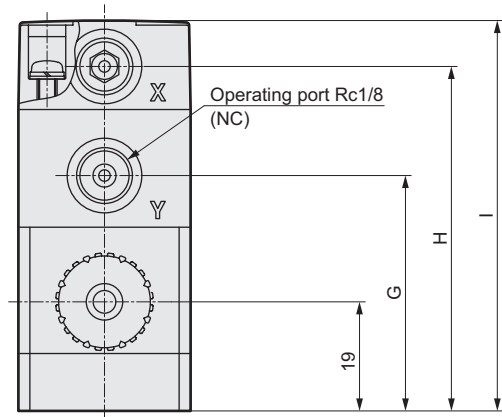
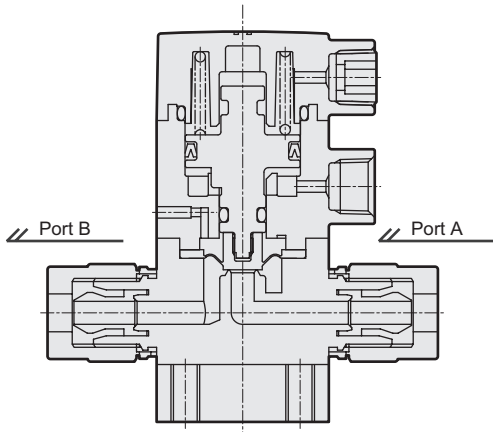
*1 Connector No.	A	B
6	36	4
6US	66	4
8BUS	66	4
6UP	68	4
8BUP	68	4

*1 Connector No.	A	B
6UF	64	4
8BUF	64	4
6UR	90	3.5
8BUR	92	3.5
6UK	71	4
8BUK	71	4
8BUW	86	3

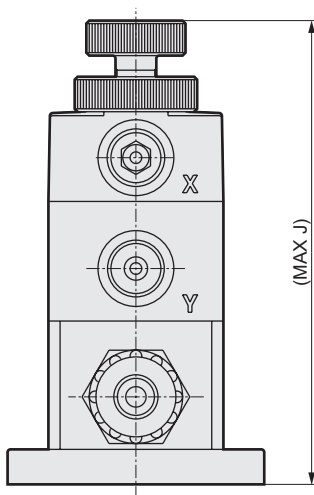
Fluid code	C	D	E	F
Blank/M	38	37	56	64
P	35	36	57	65

Dimensions

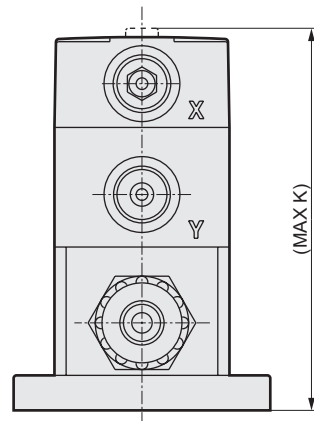
● Bottom mounting



● With flow rate adjustment



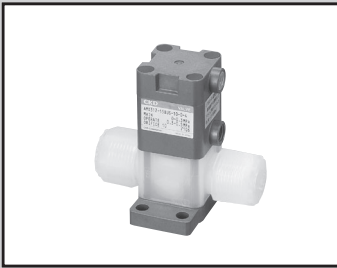
● With indicator



Fluid code	G	H	I	J	K
Blank/M	41	60	68	81	66
P	40	61	69	87	67

When bottom mounting is selected, dimensions J and K will be 4 mm higher.

AMDZ 3R
AMD0 3R
AMD0
AMDZ
AMD0 2
AMD 3/2
SUS 304
AMD 3/2
AMD 1H
AMD 1M
AMG20R
AMG03R
AMG03R
AMG00
AMGZ0
AMG 02
GAMD 3R
GAMD 3R
GAMD 2A
GAMD 2
High pressure specification
AMD
Flow characteristics
MMD 02
MMD 0H
MMD 0M
GMMD 02
MMD 0
TMD 02
FNVD00
MNV
AMS
AMDS
Fine regulator
KMIL
Others
Related



Air operated valve for chemical liquids

AMD3¹/₂2/AMD4¹/₂2/AMD5¹/₂2 Series

● Orifice size: ø6.3 to ø20



Export controlled items

* Target: AMD4*2, 5*2

Specifications

Descriptions	AMD3 ¹ / ₂ 2-* ⁻⁸				AMD3 ¹ / ₂ 2-* ⁻¹⁰		
Working fluid	Chemical liquid, pure water (*1)						
Fluid temperature °C	5 to 90 (For high temperature: 5 to 160) (*5)						
Proof pressure MPa	0.9						
Working pressure (A→B) MPa	0 to 0.3 (*3)						
Working pressure (B→A) MPa	0 to 0.1 (*3)						
Valve seat leakage cm ³ /min	0 (water pressure)						
Back pressure MPa	0 to 0.1 (*3)						
Ambient temperature °C	0 to 60						
Frequency	30 times/min. or less						
Mounting orientation	Unrestricted						
Connection	O.D. ø10 tube connection (fitting integrated) O.D. 3/8" tube connection (fitting integrated)				O.D. ø12 tube connection (fitting integrated) O.D. 1/2" tube connection (fitting integrated)		
Orifice size	ø6.3	ø6.4	ø7.5	ø8	ø9.4	ø9.5	ø10
Cv	0.8		1.25		1.8		
Bypass orifice size (with bypass)	ø2.3						
Operating section	Oper.Press. MPa	NC 0.3 to 0.5, NO 0.3 to 0.5 (0.3 to 0.35 for high temperature), double acting 0.3 to 0.4 (0.2 to 0.25 for high temperature)					
	Operating port	Rc1/8 (*2)					

Descriptions	AMD4 ¹ / ₂ 2-* ⁻¹⁶				AMD5 ¹ / ₂ 2-* ⁻²⁰		
Working fluid	Chemical liquid, pure water (*1)				Chemical liquid, pure water (*1)		
Fluid temperature °C	5 to 90 (For high temperature: 5 to 160) (*5)				5 to 90 (*6)		
Proof pressure MPa	0.9				0.9		
Working pressure (A→B) MPa	0 to 0.3 (*3)				0 to 0.3 (*3)		
Working pressure (B→A) MPa	0 to 0.1 (*3)				0 to 0.1 (*3)		
Valve seat leakage cm ³ /min	0 (water pressure)				0 (water pressure)		
Back pressure MPa	0 to 0.1 (*3)				0 to 0.1 (*3)		
Ambient temperature °C	0 to 60				0 to 60		
Frequency	20 times/min. or less				20 times/min. or less		
Mounting orientation	Unrestricted				Unrestricted		
Connection	O.D. 3/4" tube connection (fitting integrated)				O.D. ø25 tube connection (fitting integrated)/ O.D. 1" tube connection (fitting integrated) Nominal 16/20 (PVC union fitting integrated)		
Orifice size	ø16				ø20		
Cv	5				8		
Bypass orifice size (with bypass)	ø6				ø6		
Operating section	Operating pressure MPa	NC: 0.3 to 0.5, NO: 0.3 to 0.5 (0.3 to 0.35 for high temperature), Double acting: 0.3 to 0.4 (0.2 to 0.25 for high temperature)			NC/NO: 0.3 to 0.5, double acting: 0.3 to 0.4		
	Operating port	Rc1/8 (*2)			Rc1/8 (*7)		

*1: Check the compatibility of product structural materials, working fluids and atmosphere. (Refer to the compatibility check list on Intro Page 15.)

*2: Use a resin fitting for connection to the operating port.

(When using a metal fitting, select one with reinforcing ring. However, a reinforcing ring is not required for those with fluid code P for nitric acid and hydrofluoric acid.)

*3: Refer to page 112 for high-pressure specifications.

*4: Refer to page 123 and 124 for flow characteristics.

*5: For use with hydrofluoric acid, or when the fluid temperature exceeds 40°C, consult with CKD.

*6: 5 to 50°C when the integrated PVC unit fitting is used for connection.

For use with hydrofluoric acid, or when the fluid temperature exceeds 40°C, consult with CKD.

*7: Use a resin fitting for connection to the operating port.

(When using a metal fitting, select one with reinforcing ring. However, a reinforcing ring is not required for those with fluid code P for nitric acid and hydrofluoric acid.)

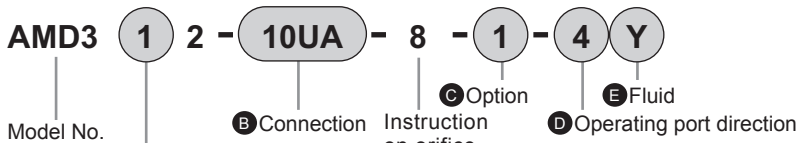
However, since the integrated PVC unit fitting comes with reinforcing ring, a metal fitting can also be used.

! Always read the precautions on Intro Pages 7 to 16 before use.

AMD3¹/₂²/AMD4¹/₂²/AMD5¹/₂² Series

How to order

●AMD3*2 Series (connection: ø10, 3/8" tube connection)



A Actuation	
1	NC (normally closed)
2	NO (normally open)
3	Double acting

B Connection											
10US	10BUS	10UP	10BUP	10UA	10BUA	10UR	10BUR	10UK	10BUK	10BUW	
Super Pillar fitting integrated		Super 300 Pillar fitting P Series integrated		F-LOCK 20A Series fitting integrated		F-LOCK 60 Series fitting integrated		Final Lock fitting integrated		Flaretek fitting integrated	
ø10 x ø8 tube connection		ø10 x ø8 tube connection		ø10 x ø8 tube connection		ø10 x ø8 tube connection		ø10 x ø8 tube connection		ø10 x ø8 tube connection	
3/8" x 1/4" tube connection		3/8" x 1/4" tube connection		3/8" x 1/4" tube connection		3/8" x 1/4" tube connection		3/8" x 1/4" tube connection		3/8" x 1/4" tube connection	
ø8		ø8		ø8		ø7.5		ø6.4		ø7.5	ø6.3

Code	Content	Orifice size									
C Option		Body material									
		PFA: PFA molded body, PTFE: PTFE cut body									
0	ON/OFF only	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA
1	With flow rate adjustment	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA
2	With bypass	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
3	With flow rate adjustment/bypass	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
6	ON/OFF / with indicator	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA
7	With bypass/with indicator	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE

D Operating port direction												
4	<p>With valve viewed from above, ← indicates fluid flow direction and ⇐ operating port direction.</p>	●	●	●	●	●	●	●	●	● (*1)	● (*1)	
1		●	●	●	●	●	●	●	●	●	●	●
2		●	●	●	●	●	●	●	●	●	● (*1)	● (*1)
3		●	●	●	●	●	●	●	●	●	●	●

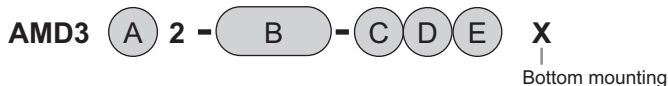
E Fluid code											
Blank	Standard	●	●	●	●	●	●	●	●	●	●
M	For ammonia	●	●	●	●	●	●	●	●	●	●
P	For nitric acid, for hydrofluoric acid (*3)	●	●	●	●	●	●	●	●	●	●
Y	For high temperature (5 to 160°C) (*2)	●	●	●	●	●	●	●	●	●	●
E	For high temperature (5 to 160°C), PTFE cut body (*2)	●	●	●	●	●	●	●	●	●	●

* PTFE cut products will be manufactured per order.

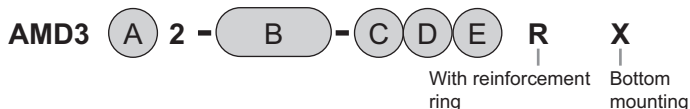
●Model No. of operating port with reinforced ring (hyphen between **C** and **D** is not required)



●Bottom mounting model No. (hyphens between **C** **D** and indication of orifice size are not required)



●Operating port with reinforced ring + bottom mounting model No. (hyphens between **C** **D** and indication of orifice size are not required)



⚠ Precautions for model No. selection

*1: Since the Final Lock fitting nut and operating air piping may interfere, be sure to check the dimensions before making the selection.

*2: It is not available if the option in **C** is 2 (with bypass), 3 (with flow rate adjustment/bypass) or 7 (with bypass/with indicator).

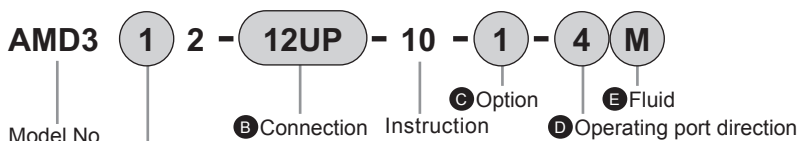
It cannot be used for nitric acid, hydrofluoric acid or hydrochloric acid.

*3: If P is selected in **E**, R with reinforcing ring cannot be selected.

It is not available if the option in **C** is 2 (with bypass), 3 (with flow rate adjustment/bypass) or 7 (with bypass/with indicator).

How to order

● AMD3*2 Series (connection: ø12, 1/2" tube connection)



A Actuation	
1	NC (normally closed)
2	NO (normally open)
3	Double acting

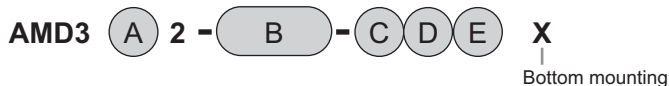
B Connection		12US	15BUS	12UP	15BUP	12UA	15BUA	12UR	15BUR	12UK	15BUK	15BUW				
	Super Pillar fitting integrated	Super 300 Pillar fitting P Series integrated		F-LOCK 20A Series fitting integrated		F-LOCK 60 Series fitting integrated		Final Lock fitting integrated		Flaretek fitting integrated						
		ø12 x ø10 tube connection	1/2" x 3/8" tube connection	ø12 x ø10 tube connection	1/2" x 3/8" tube connection	ø12 x ø10 tube connection	1/2" x 3/8" tube connection	ø12 x ø10 tube connection	1/2" x 3/8" tube connection	ø12 x ø10 tube connection	1/2" x 3/8" tube connection	1/2" x 3/8" tube connection				
Code	Content	Orifice size		ø10		ø10		ø10		ø9.5		ø10		ø9.4		
C Option (*1)		Body material														
		PFA: PFA molded body, PTFE: PTFE cut body														
0	ON/OFF only	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	
1	With flow rate adjustment	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	
2	With bypass	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	
3	With flow rate adjustment/bypass	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	
6	ON/OFF / with indicator	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	
7	With bypass/with indicator	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	PTFE	PFA	
D Operating port direction																
4		●	●	●	●	●	●	●	●	●	●	●	●	●	●	
1		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
3		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
E Fluid																
Blank	Standard	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
M	For ammonia	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
P	For nitric acid, for hydrofluoric acid (*3)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Y	For high temperature (5 to 160°C) (*2)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
E	For high temperature (5 to 160°C), PTFE cut body (*2)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

* PTFE cut products will be manufactured per order.

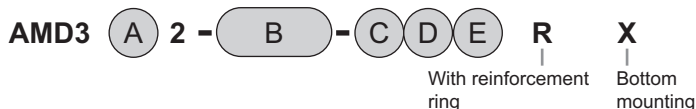
● Model No. of operating port with reinforced ring (hyphen between **C** and **D** is not required)



● Bottom mounting model No. (hyphens between **C** **D** and indication of orifice size are not required)



● Operating port with reinforced ring + bottom mounting model No. (hyphens between **C** **D** and indication of orifice size are not required)



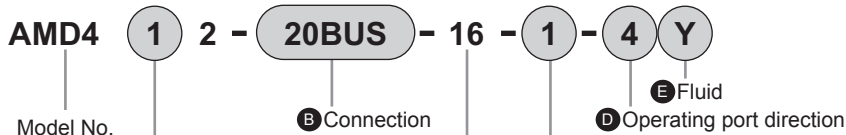
⚠ Precautions for model No. selection

- *1: Since the Final Lock fitting nut and operating air piping may interfere, be sure to check the dimensions before making the selection.
- *2: It is not available if the option in **C** is 2 (with bypass), 3 (with flow rate adjustment/bypass) or 7 (with bypass/with indicator). It cannot be used for nitric acid, hydrofluoric acid or hydrochloric acid.
- *3: If P is selected in **E**, R with reinforcing ring cannot be selected. It is not available if the option in **C** is 2 (with bypass), 3 (with flow rate adjustment/bypass) or 7 (with bypass/with indicator).

AMD3R
AMD3R
AMD0
AMD0-2
AMD3-2
SIS 0001
AMD3-2
AMD-1H
AMD-1M
AMG03R
AMG03R
AMG00
AMGZ0
AMG-02
GAMD3R
GAMD3R
GAMD02A
GAMD-2
High pressure specification
AMD
Flow characteristics
MMD-02
MMD-0H
MMD-0M
GMD-02
MMD-0
TMD-02
FMD00
MNV
AMS
AMDS
Fine regulator
KML
Others
Related

AMD3¹₂²/₃/AMD4¹₂²/₃/AMD5¹₂²/₃ Series

How to order



A Actuation	
1	NC (normally closed)
2	NO (normally open)
3	Double acting

Instruction on orifice size

B Connection					
20BUS	20BUP	20BUA	20BUR	20BUK	20BUW
Super pillar fitting integrated	Super 300 Pillar fitting P Series integrated	F-LOCK 20A Series fitting integrated	F-LOCK 60 Series fitting integrated	Final Lock fitting integrated	Flaretek fitting integrated
3/4" x 5/8" tube connection					

Code	Content	Orifice size					
		ø16	ø16	ø16	ø15.9	ø16	ø14.7
C Option		Body material					
		PFA: PFA molded body, PTFE: PTFE cut body					
0	ON/OFF only	PFA	PFA	PTFE	PFA	PTFE	PFA
1	With flow rate adjustment						
2	With bypass	PFA	PFA	PTFE	PTFE	PTFE	PTFE
3	With flow rate adjustment/bypass						
6	ON/OFF / with indicator	PFA	PFA	PTFE	PFA	PTFE	PFA
7	With bypass/with indicator	PFA	PFA	PTFE	PTFE	PTFE	PTFE

D Operating port direction							
4		●	●	●	●	●	●
1		●	●	●	●	●	●
2		●	●	●	●	●	●
3		●	●	●	●	●	●

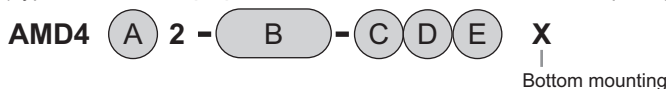
E Fluid							
Blank	Standard	●	●	●	●	●	●
M	For ammonia	●	●	●	●	●	●
P	For nitric acid, for hydrofluoric acid (*2)	●	●	●	●	●	●
Y	For high temperature (5 to 160°C) (*1)	●	●	●		●	
E	For high temperature (5 to 160°C), PTFE cut body (*1)	●	●	●		●	

* PTFE cut products will be manufactured per order.

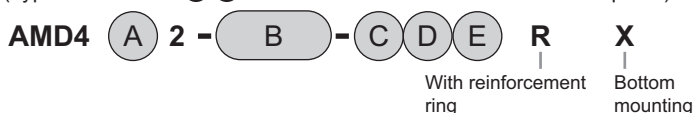
- Model No. of operating port with reinforced ring (hyphen between (C) and (D) is not required)



- Bottom mounting model No. (hyphens between (C) (D) and indication of orifice size are not required)



- Operating port with reinforced ring + bottom mounting model No. (hyphens between (C) (D) and indication of orifice size are not required)



⚠ Precautions for model No. selection

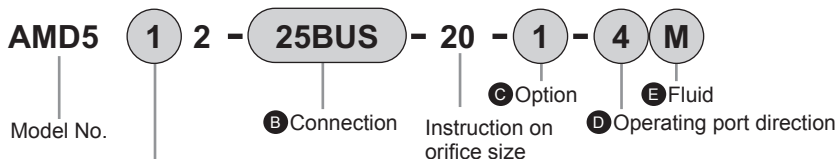
*1: It is not available if the option in (C) is 2 (with bypass), 3 (with flow rate adjustment/bypass) or 7 (with bypass/with indicator).

It cannot be used for nitric acid, hydrofluoric acid or hydrochloric acid.

*2: If P is selected in (E), R with reinforcing ring cannot be selected.

It is not available if the option in (C) is 2 (with bypass), 3 (with flow rate adjustment/bypass) or 7 (with bypass/with indicator).

How to order



A Actuation	
1	NC (normally closed)
2	NO (normally open)
3	Double acting

B Connection		25US	25BUS	25UP	25BUP	25BUA	25UR	25BUR	25UK	25BUK	25BUW	15AU	20AU
		Super Pillar fitting integrated		Super 300 Pillar fitting P Series integrated		F-LOCK 20A Series fitting integrated	F-LOCK 60 Series fitting integrated		Final Lock fitting integrated		Flaretek fitting integrated	PVC union fitting integrated	
		ø25 x ø22 tube connection	1" x 7/8" tube connection	ø25 x ø22 tube connection	1" x 7/8" tube connection	1" x 7/8" tube connection (*1)	ø25 x ø22 tube connection	1" x 7/8" tube connection	ø25 x ø22 tube connection	1" x 7/8" tube connection	1" x 7/8" tube connection	Nominal 16	Nominal 20
Code	Content	Orifice size											
		ø20		ø20		ø20	ø20		ø20		ø20		ø20

C Option		Body material											
		PFA: PFA molded body, PTFE: PTFE cut body											
0	ON/OFF only	PFA	PFA	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PFA	
1	With flow rate adjustment												
2	With bypass												
3	With flow rate adjustment/bypass	PTFE	PFA	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	(*3)	
6	ON/OFF / with indicator	PFA	PFA	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PFA	
7	With bypass/with indicator	PTFE	PFA	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	(*3)	

D Operating port direction													
4	<p>With valve viewed from above, ← indicates fluid flow direction and ⇐ operating port direction.</p>	●	●	●	●	●	●	●	●	●	●	●	●
1		●	●	●	●	●	●	●	●	●	●	●	●
2		●	●	●	●	●	●	●	●	●	●	●	●
3		●	●	●	●	●	●	●	●	●	●	●	●

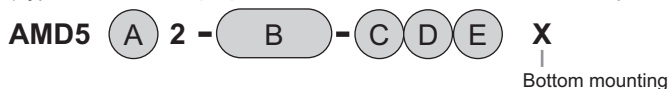
E Fluid													
Blank	Standard	●	●	●	●	●	●	●	●	●	●	●	●
M	For ammonia	●	●	●	●	●	●	●	●	●	●	●	●
P	For nitric acid, for hydrofluoric acid (*2)	●	●	●	●	●	●	●	●	●	●	●	●

* PTFE cut products will be manufactured per order.

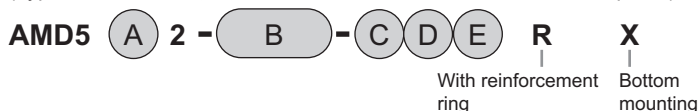
- Model No. of operating port with reinforced ring (hyphen between **C** and **D** is not required)



- Bottom mounting model No. (hyphens between **C** **D** and indication of orifice size are not required)



- Operating port with reinforced ring + bottom mounting model No. (hyphens between **C** **D** and indication of orifice size are not required)



Precautions for model No. selection

- *1: Can also be used for ø25 x ø22 tube connection.
- *2: If 15AU or 20AU is selected in **B** or P is selected in **E**, R with reinforcing ring cannot be selected. It is not available if the option in **C** is 2 (with bypass), 3 (with flow rate adjustment/bypass) or 7 (with bypass/with indicator).
- *3: Select from the AMD41L Series (Catalog No. CC-816A).

AMD3R
AMD3R
AMD3R
AMD0
AMD0-2
AMD3-2
AMD3-2
SIS 0007
AMD3-2
AMD-1H
AMD-1M
AMG20R
AMG20R
AMG03R
AMG00
AMG20
AMG-02
GAMD3R
GAMD3R
GAMD3R
GAMD02A
GAMD-2
High
pressure
specification
AMD
Flow
characteristics
MMD-02
MMD-0H
MMD-0M
GMMD-02
MMD-0
TMD-02
FMD00
MNV
AMS
AMDS
Fine
regulator
KMIL
Others
Related

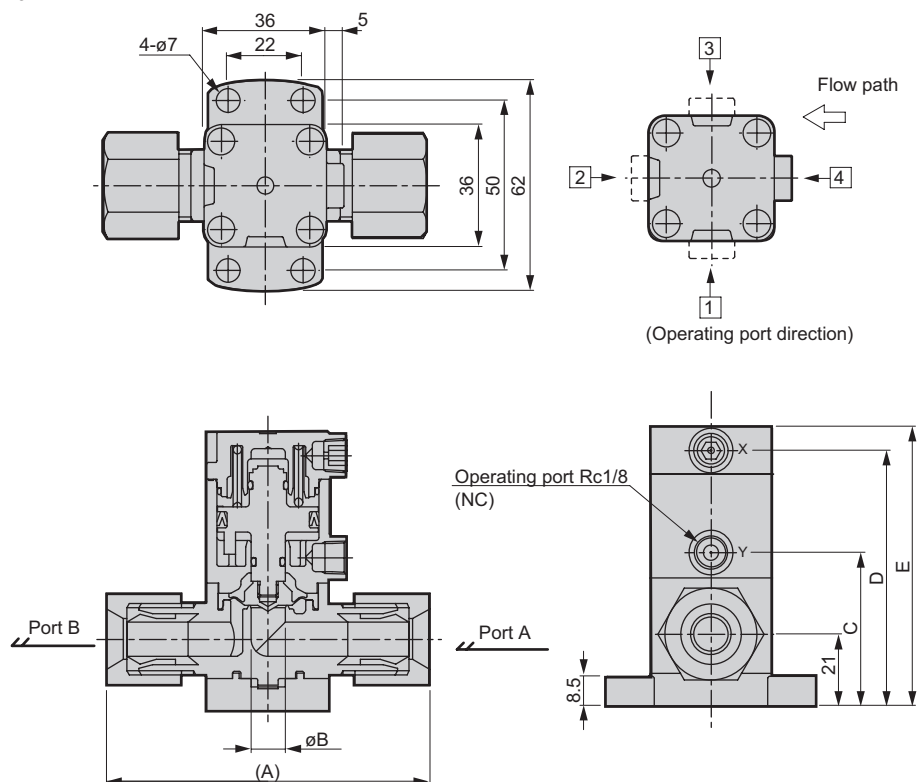
AMD3¹/₃2/AMD4¹/₃2/AMD5¹/₃2 Series

Dimensions

● ON/OFF only

• AMD3¹/₃2-[*1]-8

• AMD3¹/₃2-[*1]-10

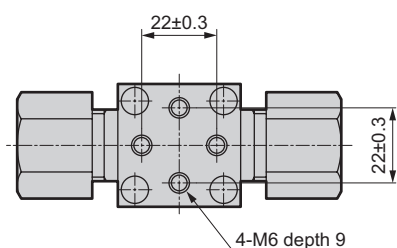


*1 (Connector No.)	A	B
10US	86	8
10BUS	86	8
10UP	86	8
10BUP	86	8
10UA	78	8
10BUA	78	8
10UR	110	7.5
10BUR	114	6.4
10UK	96	7.5
10BUK	96	7.5
10BUW	101	6.3

*1 (Connector No.)	A	B
12US	95	10
15BUS	95	10
12UP	94	10
15BUP	94	10
12UA	86	10
15BUA	86	10
12UR	110	9.5
15BUR	114	9.5
12UK	102	10
15BUK	102	10
15BUW	103	9.4

Fluid code	C	D	E
Blank/M/P/Y	45	75	82
E	49	79	86

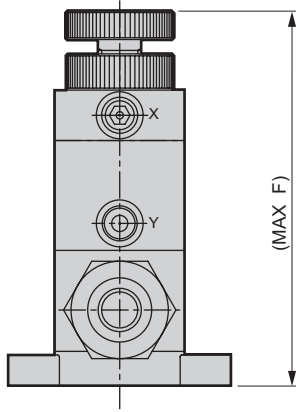
● Bottom mounting



Dimensions

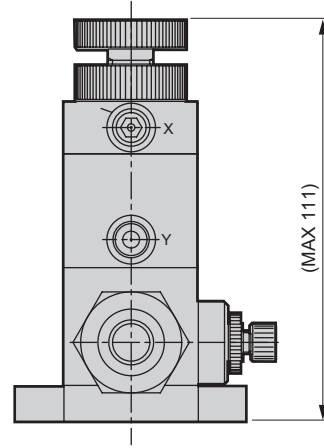
● With flow rate adjustment

- AMD3¹/₂²/₃-*-*-1



● With flow rate adjustment bypass

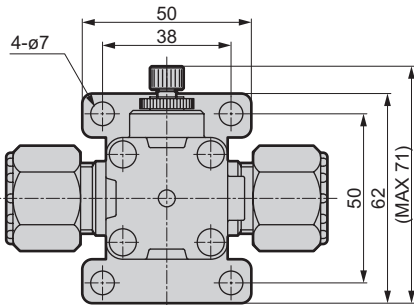
- AMD3¹/₂²/₃-*-*-3



(For other dimensions, refer to the dimensions with bypass.)

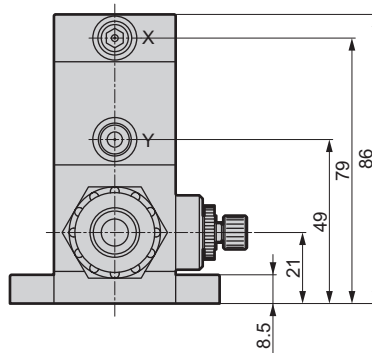
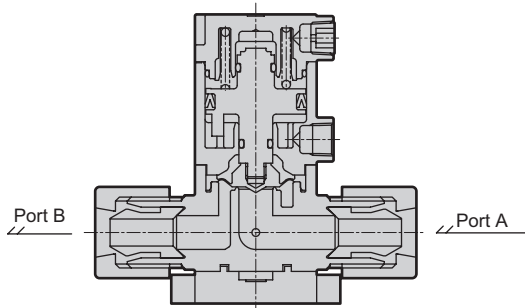
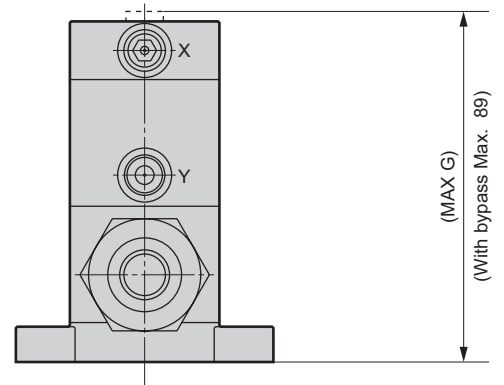
● With bypass

- AMD3¹/₂²/₃-*-*-2/7



● With indicator

- AMD3¹/₂²/₃-*-*-6/7



Fluid code	F	G
Blank/M/P/Y	107	85
E	111	89

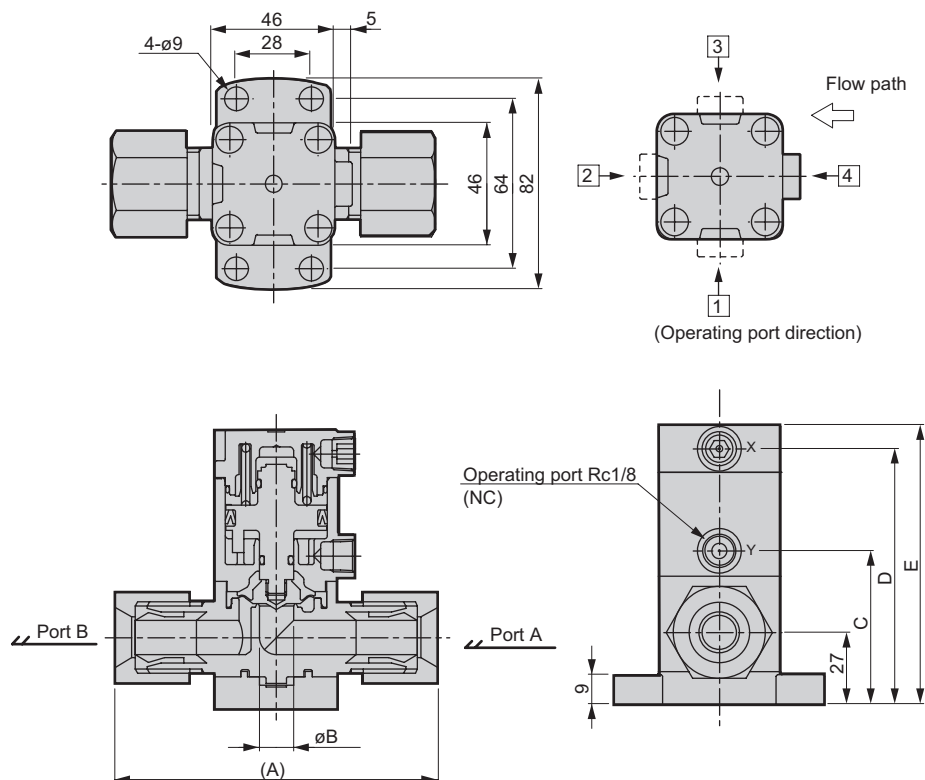
AMD3R
AMD3R
AMD3R
AMDZ
AMD0
AMD02
AMD32
AMD32
SUS 304
AMD1H
AMD1M
AMG20R
AMG03R
AMG03R
AMG00
AMG02
GAMD3R
GAMD3R
GAMD2A
GAMD2
High pressure specification
AMD
Flow characteristics
MMD02
MMD0H
MMD0M
GMMD02
MMD0
TMD02
FIND00
NNV
AMS
AMDS
Fine regulator
KML
Others
Related

AMD3¹/₃2/AMD4¹/₃2/AMD5¹/₃2 Series

Dimensions

●ON/OFF only

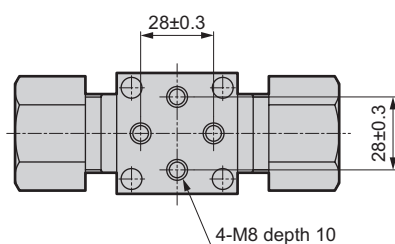
• AMD4¹/₃2-*1-16



*1 (Connector No.)	A	B
20BUS	124	16
20BUP	118	16
20BUA	108	16
20BUR	134	15.9
20BUK	119	16
20BUW	122	14.7

Fluid code	C	D	E
Blank/M/Y	60	97	106
P	60	97	107
E	64	101	110

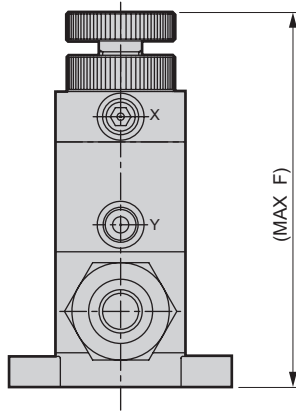
●Bottom mounting



Dimensions

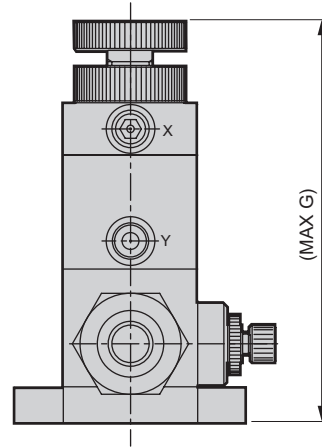
● With flow rate adjustment

- AMD4¹/₂²/₃-*-16-1



● With flow rate adjustment bypass

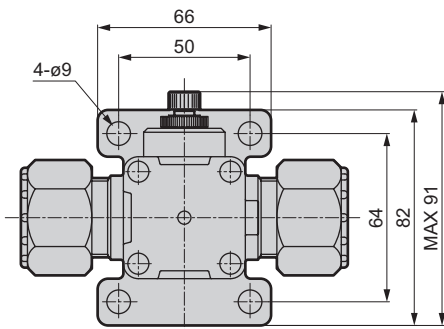
- AMD4¹/₂²/₃-*-16-3



(For other dimensions, refer to the dimensions with bypass.)

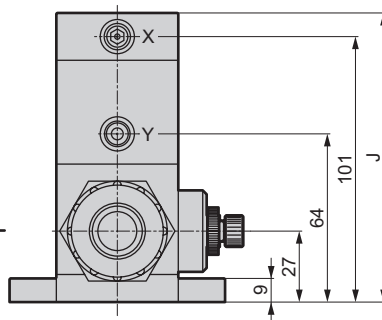
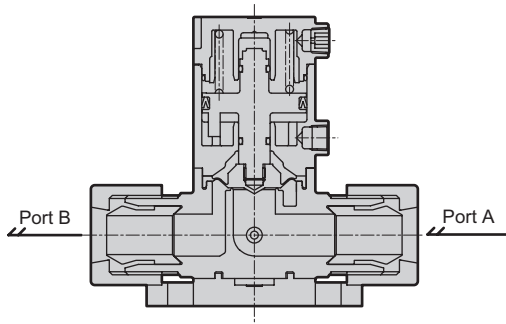
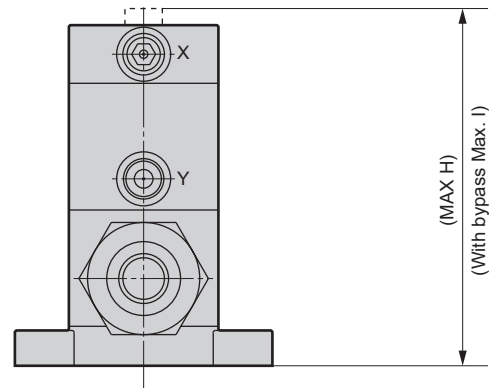
● With bypass

- AMD4¹/₂²/₃-*-16-2/7



● With indicator

- AMD4¹/₂²/₃-*-16-6/7



Fluid code	F	G	H	I	J
Blank/M	130	134	110	114	110
P	133	137	111	115	111
Y	130		110		
E	134		114		

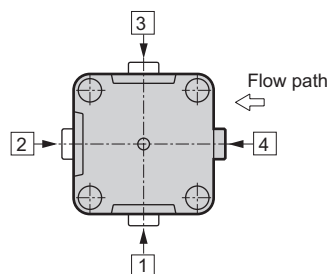
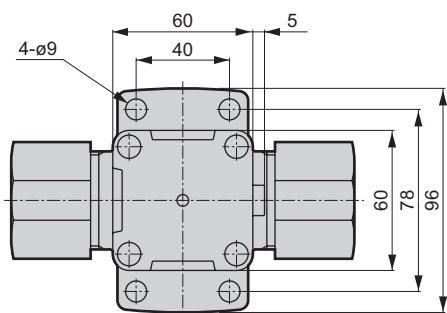
- AMD3R
- AMD3R
- AMD3R
- AMD0
- AMD0-2
- AMD3¹/₂²/₃
- AMD3¹/₂²/₃ SIS 0001
- AMD1H
- AMD1M
- AMG20R
- AMG20R
- AMG20R
- AMG00
- AMG20
- AMG-02
- GAMD3R
- GAMD3R
- GAMD02A
- GAMD-2
- High pressure specification
- AMD
- Flow characteristics
- MMD-02
- MMD-0H
- MMD-0M
- GMMD-02
- MMD-0
- TMD-02
- FMD00
- MNV
- AMS
- AMDS
- Fine regulator
- KMIL
- Others
- Related

AMD3¹/₂²/₃/AMD4¹/₂²/₃/AMD5¹/₂²/₃ Series

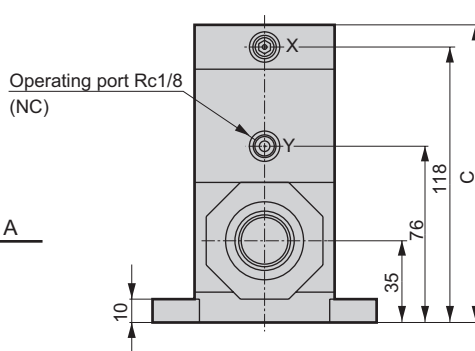
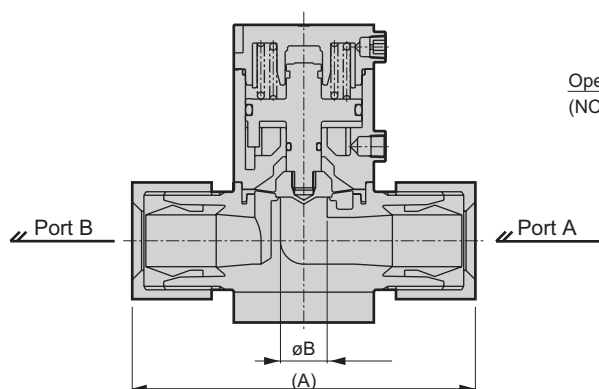
Dimensions

● ON/OFF only

• AMD5¹/₂²/₃-[*1]-20



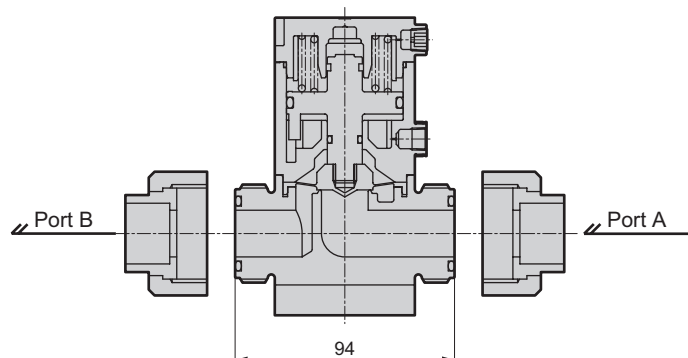
(Operating port direction)



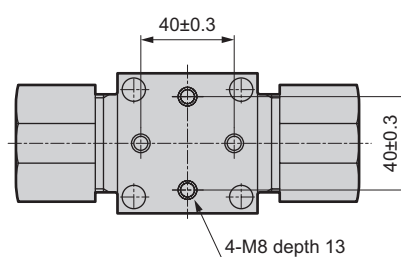
*1 (Connector No.)	A	B
25US	147	20
25BUS	147	20
25UP	146	20
25BUP	146	20
25BUA	140	20
25UR	159	20
25BUR	162	20
25UK	141	20
25BUK	141	20
25BUW	156	20

Fluid code	C
Blank/M	128
P	132

● PVC union fitting integrated



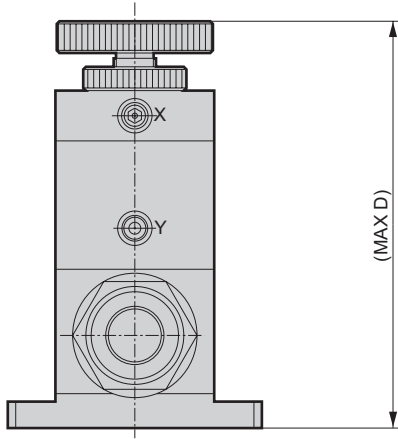
● Bottom mounting



Dimensions

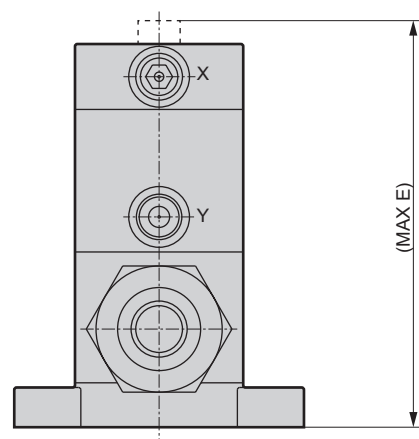
● With flow rate adjustment

- AMD5¹/₂²/₃-*-20-1



● With indicator

- AMD5¹/₂²/₃-*-20-6/7

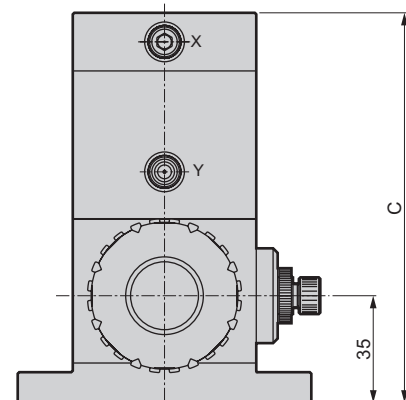
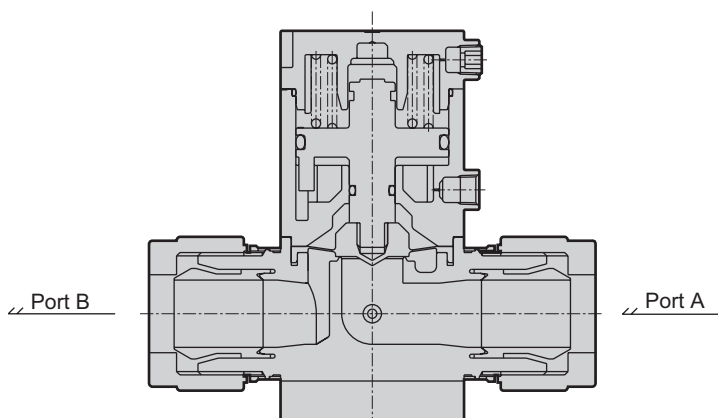
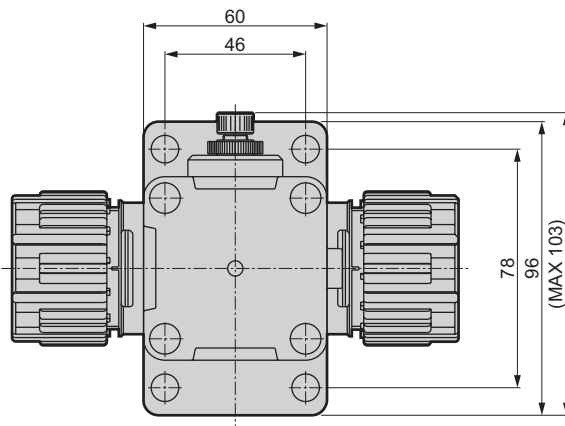


Fluid code	D	E
Blank/M	159	133
P	166	137

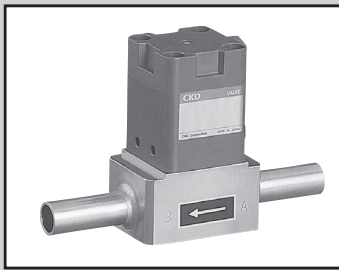
The dimensions are the same with bypass.

● With bypass

- AMD5¹/₂²/₃-*-20-2/7



- AMD3R
- AMD3R
- AMD3R
- AMD0
- AMD0-2
- AMD3¹/₂²/₃
- AMD3¹/₂²/₃ SIS 000/1
- AMD3¹/₂²/₃
- AMD-1H
- AMD-1M
- AMG03R
- AMG03R
- AMG03R
- AMG00
- AMG-02
- GAMD3R
- GAMD3R
- GAMD02A
- GAMD*-2
- High pressure specification
- AMD
- Flow characteristics
- MMD-02
- MMD-0H
- MMD-0M
- GMMD-02
- MMD-0
- TMMD-02
- FMD00
- MNV
- AMS
- AMDS
- Fine regulator
- KML
- Others
- Related



Stainless steel body air operated valve for chemical liquids

AMD3¹/₂2/AMD4¹/₂2/AMD5¹/₂2 Series

● Orifice size: ø8 to ø20



Specifications

Descriptions	AMD3 ¹ / ₂ 2-8/3BT/6S	AMD3 ¹ / ₂ 2-10/4BT/8S
Working fluid	Chemical liquid, pure water (*1)	
Fluid temperature °C	5 to 120	
Proof pressure MPa	0.9	
Working pressure (A→B) MPa	0 to 0.3 (*2)	
Working pressure (B→A) MPa	0 to 0.1 (*2)	
Valve seat leakage cm ³ /min	0 (water pressure)	
Back pressure MPa	0 to 0.1 (*2)	
Ambient temperature °C	0 to 60	
Frequency	30 times/min. or less	
Mounting orientation	Unrestricted	
Connection	Rc1/4 3/8" SUS tube Double barbed fitting for 3/8" (*3)	Rc3/8 1/2" SUS tube Double barbed fitting for 1/2" (*3)
Orifice size	ø8	ø10
Operating section	Oper.Press. MPa	NC/NO 0.3 to 0.5, double acting 0.3 to 0.4
	Operating port	Rc1/8

Descriptions	AMD4 ¹ / ₂ 2-15/6BT/12S	AMD5 ¹ / ₂ 2-8BT/16S
Working fluid	Chemical liquid, pure water (*1)	Chemical liquid, pure water (*1)
Fluid temperature °C	5 to 120	5 to 120
Proof pressure MPa	0.9	0.9
Working pressure (A→B) MPa	0 to 0.3 (*2)	0 to 0.3 (*2)
Working pressure (B→A) MPa	0 to 0.1 (*2)	0 to 0.1 (*2)
Valve seat leakage cm ³ /min	0 (water pressure)	0 (water pressure)
Back pressure MPa	0 to 0.1 (*2)	0 to 0.1 (*2)
Ambient temperature °C	0 to 60	0 to 60
Frequency	20 times/min. or less	20 times/min. or less
Mounting orientation	Unrestricted	Unrestricted
Connection	Rc1/2 / 3/4" SUS tube / Double barbed fitting for 3/4" (*3)	1" SUS tubing Double barbed fitting for 1" (*3)
Orifice size	ø16	ø20
Operating section	Oper.Press. MPa	NC/NO 0.3 to 0.5, double acting 0.3 to 0.4
	Operating port	Rc1/8

*1: Check the compatibility of product structural materials, working fluids and atmosphere. (Refer to the compatibility check list on Intro Page 15.)

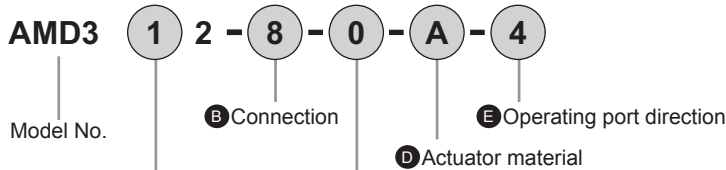
*2: Refer to page 112 for high-pressure specifications.

*3: For double barbed fitting, fluorine-based lubricant is applied to the sliding surface between the front ferrule and fitting body.

Always read the precautions on Intro Pages 7 to 16 before use.

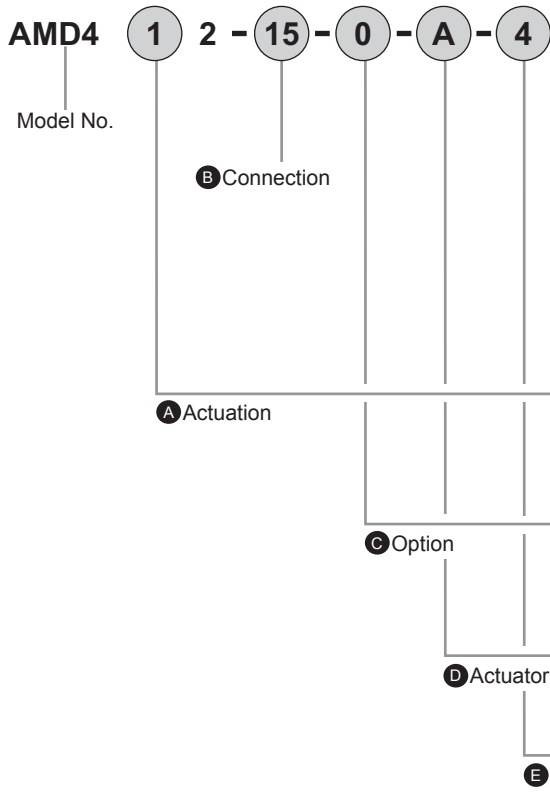
AMD3¹₂²₃/AMD4¹₂²₃/AMD5¹₂²₃ Series

How to order



B Connection					
8	3BT	6S	10	4BT	8S
Rc1/4	3/8" x t1.0 SUS tube	3/8" tube connection Double barbed fitting	Rc3/8	1/2" x t1.24 SUS tube	1/2" tube connection Double barbed fitting

Code	Content	Orifice size					
		ø10	ø8			ø10	
A Actuation							
1	NC (normally closed)	●	●	●	●	●	●
2	NO (normally open)	●	●	●	●	●	●
3	Double acting	●	●	●	●	●	●
C Option							
0	ON/OFF only	●	●	●	●	●	●
1	With flow rate adjustment	●	●	●	●	●	●
6	With indicator	●	●	●	●	●	●
D Actuator material							
Blank	PPS	●	●	●	●	●	●
A	A5056	●	●	●	●	●	●
E Operating port direction							
4	<p>With valve viewed from above, ← indicates fluid flow direction and ⇐ operating port direction.</p>	●	●	●	●	●	●
1		●	●	●	●	●	●
2		●	●	●	●	●	●
3		●	●	●	●	●	●



B Connection		
15	6BT	12S
Rc1/2	3/4" x t1.24 SUS tube	3/4" tube connection Double barbed fitting

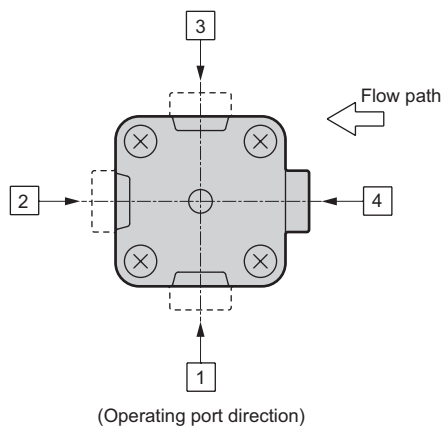
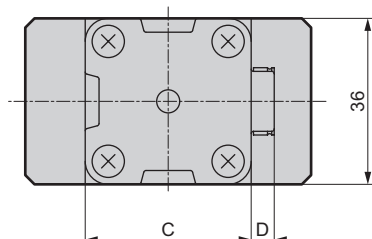
Code	Content	Orifice size		
		ø16		
A Actuation				
1	NC (normally closed)	●	●	●
2	NO (normally open)	●	●	●
3	Double acting	●	●	●
C Option				
0	ON/OFF only	●	●	●
1	With flow rate adjustment	●	●	●
6	With indicator	●	●	●
D Actuator material				
Blank	PPS	●	●	●
A	A5056	●	●	●
E Operating port direction				
4	<p>With valve viewed from above, ← indicates fluid flow direction and ⇐ operating port direction.</p>	●	●	●
1		●	●	●
2		●	●	●
3		●	●	●

AMD3¹/₃2/AMD4¹/₃2/AMD5¹/₃2 Series

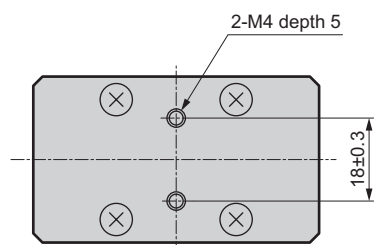
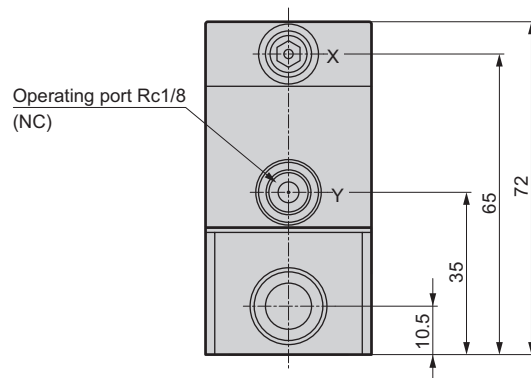
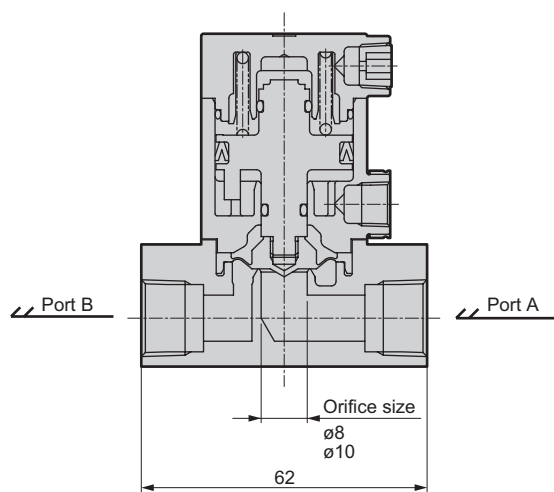
Dimensions

● Rc thread

• AMD3¹/₃2-8/10



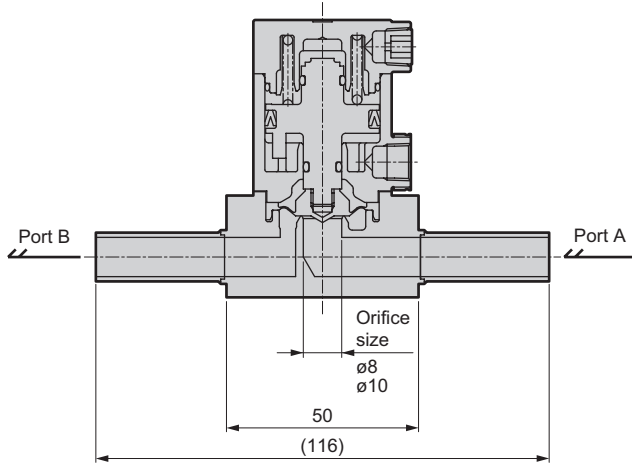
Actuator material	C	D
Blank	38	5
A	44	0



Dimensions

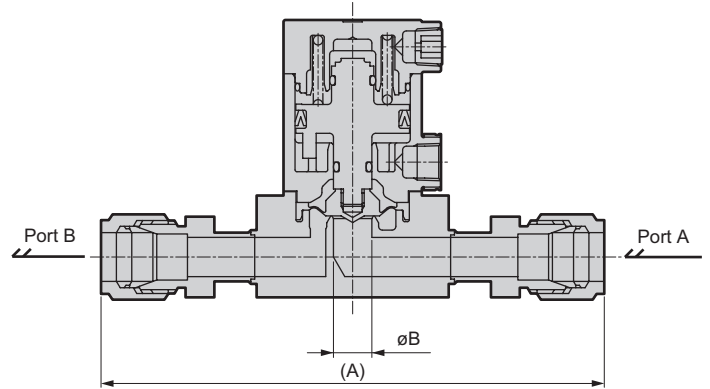
● SUS tube

- AMD3¹/₂²-3BT/4BT



● Double barbed fitting

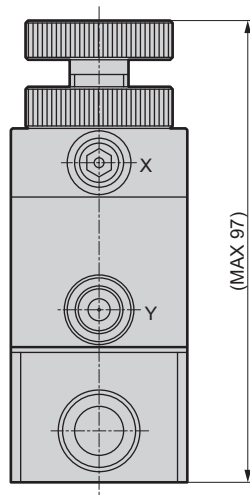
- AMD3¹/₂²-6S/8S



Dimensions Model No.	A	B
AMD3*2-6S	116	8
AMD3*2-8S	130	10

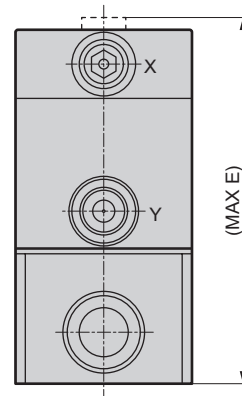
● With flow rate adjustment

- AMD3¹/₂²-*-1



● With indicator

- AMD3¹/₂²-*-6



Actuator material	E
Blank	75
A	74

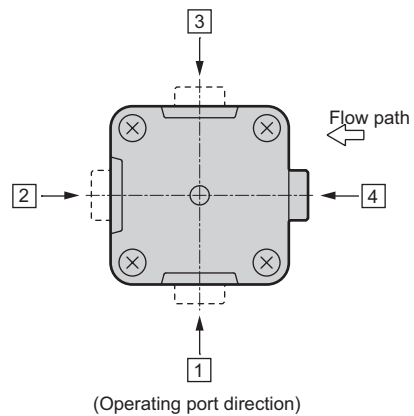
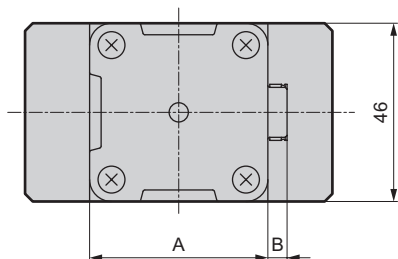
AMDZ-3R
AMD0-3R
AMD0
AMD0-2
AMD¹/₂²
AMD¹/₂²
AMD-1H
AMD-1M
AMG03R
AMG03R
AMG00
AMGZ0
AMG-02
GAMDZ-3R
GAMD0-3R
GAMD0-2A
GAMD*-2
High
pressure
specification
AMD
Flow
characteristics
MMD-02
MMD-0H
MMD-0M
GMMD-02
MMD-0
TMD-02
FMID00
NNV
AMS
AMDS
Fine
regulator
KMIL
Others
Related

AMD3¹/₂²/₃/AMD4¹/₂²/₃/AMD5¹/₂²/₃ Series

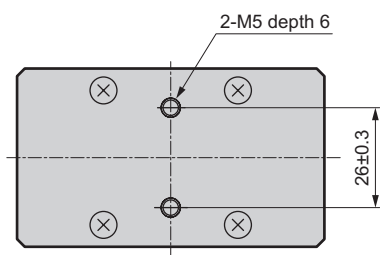
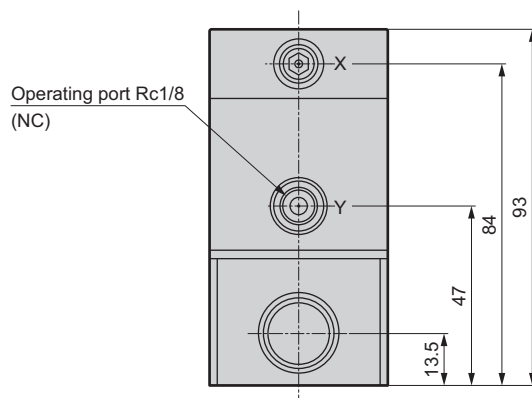
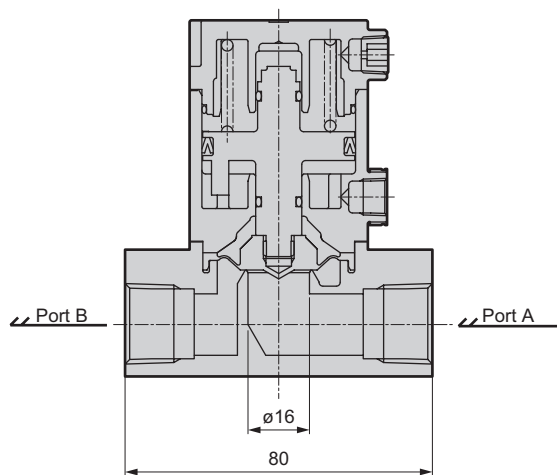
Dimensions

● Rc thread

• AMD4¹/₂²/₃-15



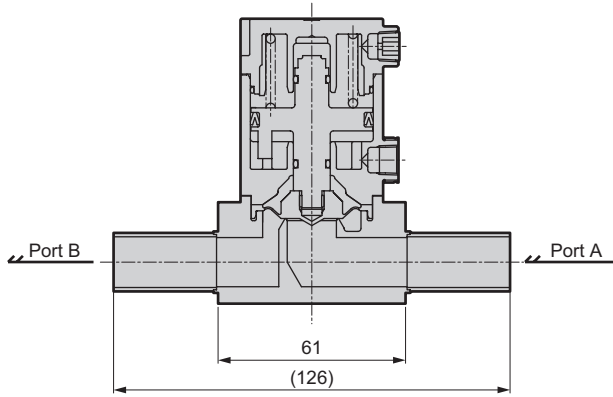
Actuator material	A	B
Blank	46	5
A	56	0



Dimensions

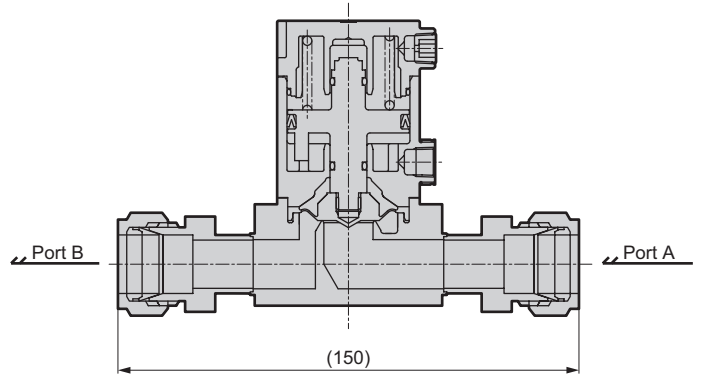
● SUS tube

- AMD4¹/₂²-6BT



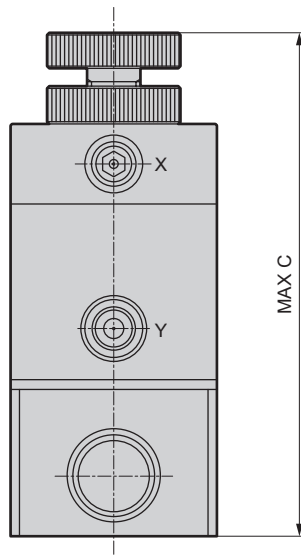
● Double barbed fitting

- AMD4¹/₂²-12S



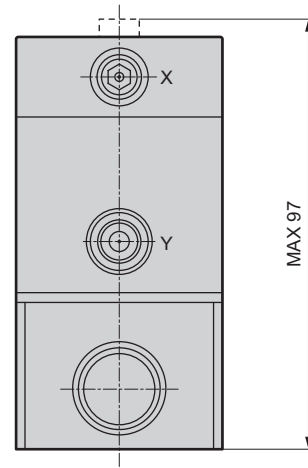
● With flow rate adjustment

- AMD4¹/₂²-*-1



● With indicator

- AMD4¹/₂²-*-6



Actuator material	C
Blank	117
A	119

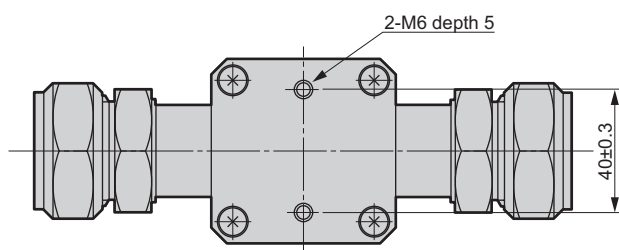
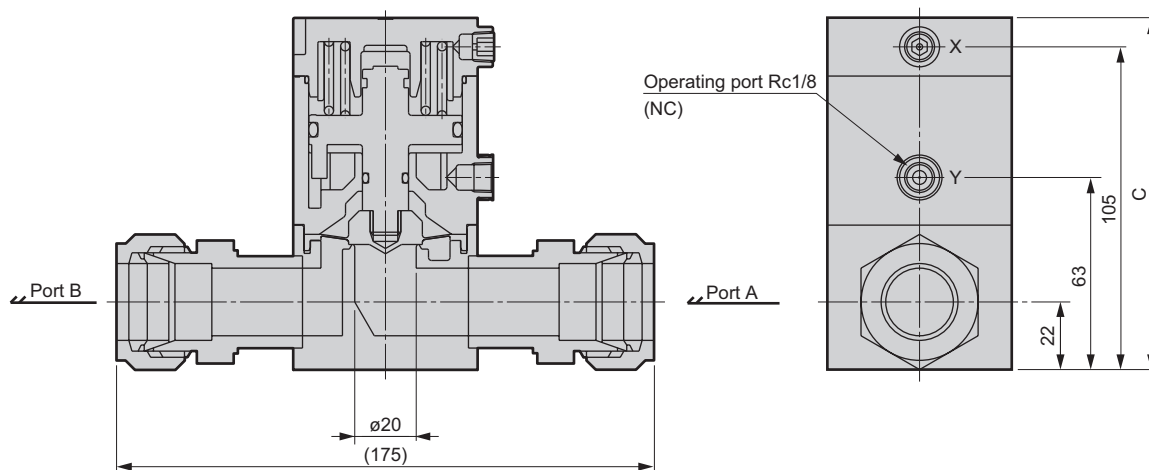
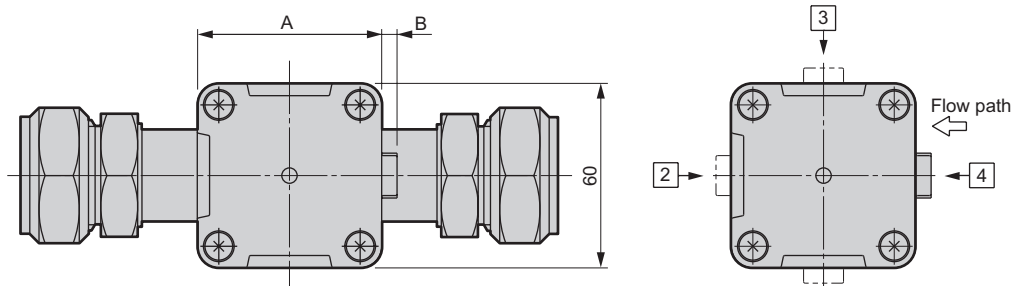
AMDZ3R AMD03R AMD3R
AMDZ AMD0
AMD02 AMD ¹ / ₂ ²
AMD ¹ / ₂ ² AMD ¹ / ₂ ²
AMD1H AMD1M
AMG03R AMG03R AMG03R
AMGZ0 AMG00
AMG02 AMG02
GAMDZ3R GAMD03R GAMD3R
GAMD02A GAMD02
High pressure specification AMD
Flow characteristics MMD02 MMD0H MMD0M GMMD02 MMD0 TMD02
FMD00 MNV
AMS
AMDS Fine regulator
KMIL
Others
Related

AMD3¹/₃²/₂/AMD4¹/₃²/₂/AMD5¹/₃²/₂ Series

Dimensions

● Double barbed fitting

- AMD5¹/₃²/₂-16S



Actuator material	A	B	C
Blank	60	5	115
A	70	0	114

