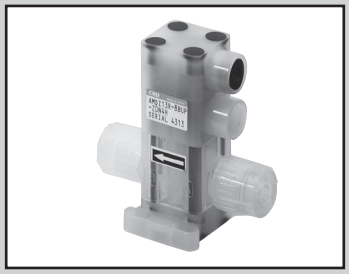


Air operated valve for chemical liquids

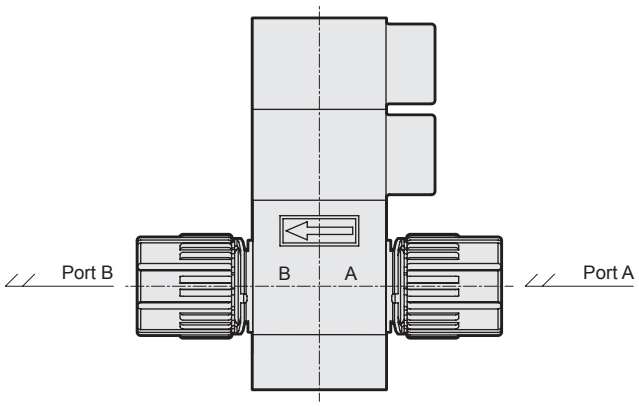
AMDZ*3R Series

Specifications

Descriptions			AMDZ*3R		
Working fluid			Pure water, chemical liquids, air, N_2 gas (*1)		
Fluid temperature		°C	5 to 120 (*2, *3)		
Proof pressure		MPa	1.0		
Working pressure (A→B)		MPa	0 to 0.5		
Working pressure (B→A)		MPa	0 to 0.5		
Valve seat leakage		cm^3/min	0 (water pressure)		
Back pressure		MPa	0 to 0.5		
Ambient temperature		°C	0 to 60		
Frequency			30 times/min. or less		
Mounting orientation			Unrestricted		
Connection			O.D. 1/8” tube connection (fitting integrated) O.D. ø6 tube connection (fitting integrated) O.D. 1/4” tube connection (fitting integrated)		
Orifice size			ø2	ø4	ø3.5
Cv		(*4)	0.07	0.25	0.22
Operating section	Operating pressure	MPa	NC/NO: 0.4 to 0.5, double acting: 0.3 to 0.4		
	Operating port		Rc1/8 (operation ports used NC: port Y NO: port X Double acting: ports X, Y)		

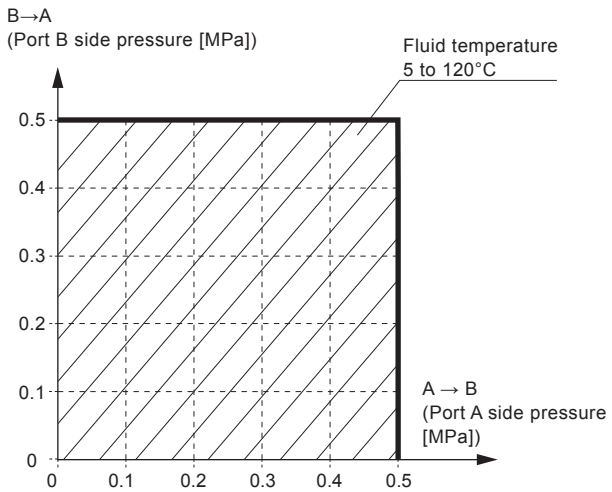
*1: Check the compatibility of product structural materials, working fluids and atmosphere. (Refer to the compatibility check list on Intro Page 15.)
*2: For hydrofluoric acid or chemical liquids containing hydrofluoric acid, use within the range of 5 to 80°C.
*3: 5 to 100°C when the connector is F-LOCK 60 Series fitting.
*4: Cv when the temperature is 23°C.

Structure and parts list



Part name	Material
Actuator	PVDF and others
Diaphragm	PTFE
Body	PFA, PTFE
Mounting plate	PVDF

Working pressure



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

How to order

AMDZ **1** 3R - **6UP** - **Z0** **N** **4** **X**

- Model No.
- Ⓐ Actuation
- Ⓑ Connection
- Ⓒ Actuator option
- Ⓓ Body option
- Ⓔ Operating port direction
- Ⓕ Mounting method

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

Ⓑ Connection (Note)				
6BUP	**6UP**	**8BUP**	**6UR**	**8BUR**
Super 300 Pillar fitting P Series integrated	Super 300 Pillar fitting P Series integrated		F-LOCK 60 Series fitting integrated	
1.8" x 0.086" 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	ø2	ø4		ø3.5	
Ⓒ Actuator option						
Z0	ON/OFF only	●	●	●	●	●
Ⓓ Body option		**Body material**				
N	Normal body	PFA	PFA		PTFE	
Ⓔ Operating port direction						
4	With valve viewed from above, ← indicates fluid flow direction and ⇦ operating port direction.	●	●	●	●	●
1		●	●	●	●	●
2		●	●	●	●	●
3		●	●	●	●	●
Ⓕ Mounting method						
X	Bottom mounting	●	●	●	●	●
H	4-point flange mounting	●	●	●	●	●

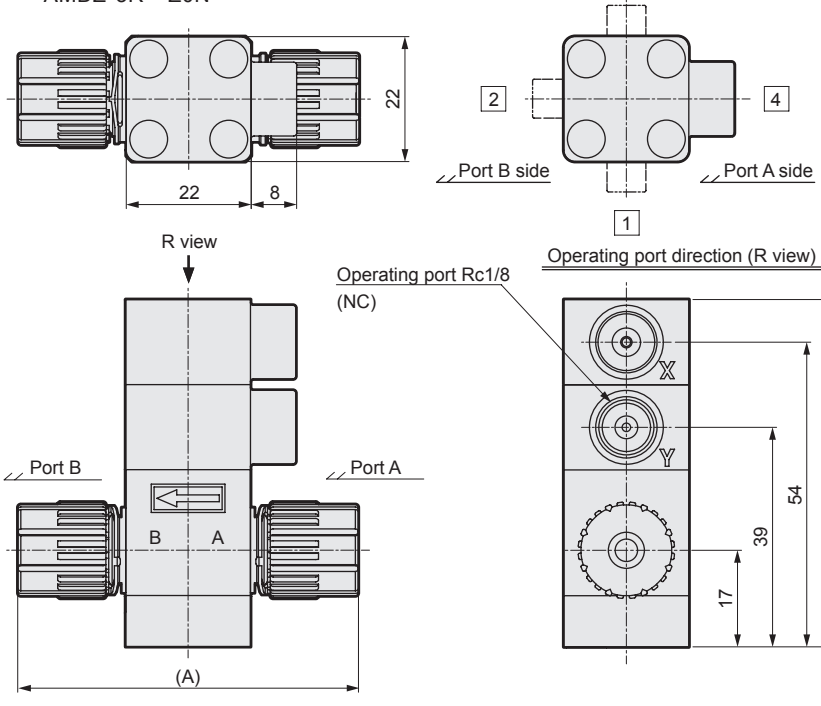
Precautions for model No. selection

Note: Custom order product when fitting is F-LOCK60 Series.
Contact CKD for other connection methods.

Dimensions

● Z0 ON/OFF only + N normal body

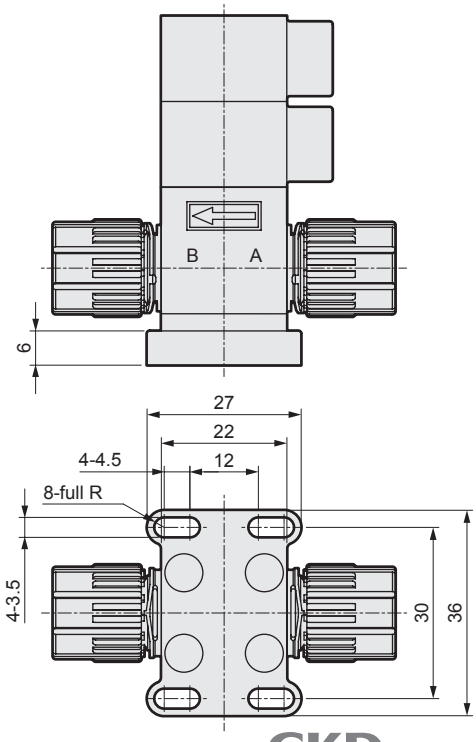
• AMDZ*3R-*-Z0N**



Connection	A
6BUP	50
6UP	60
8BUP	60
6UR	82
8BUR	84

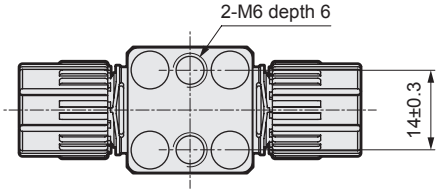
● H 4-point flange mounting

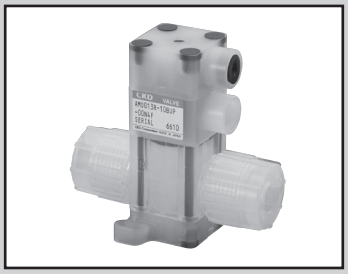
• AMDZ*3R-*-***H



● X Bottom mounting

• AMDZ*3R-*-***X





Air operated valve for chemical liquids

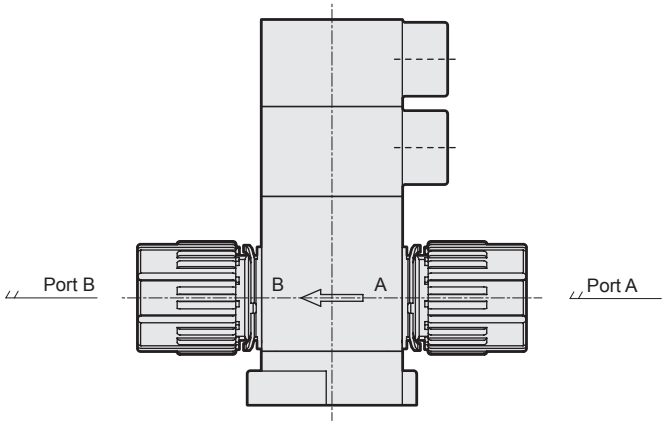
AMD0*3R Series

Specifications

Descriptions		AMD0*3R				
Working fluid		Chemical liquids, pure water, air, N_2 gas (*1)				
Fluid temperature	°C	5 to 120 (*3, *4)				
Proof pressure	MPa	1.0				
Working pressure (A→B)	MPa	0 to 0.5				
Working pressure (B→A)	MPa	0 to 0.5				
Valve seat leakage	cm^3/min	0 (water pressure)				
Back pressure	MPa	0 to 0.5				
Ambient temperature	°C	0 to 60				
Frequency		30 times/min. or less				
Mounting orientation		Unrestricted				
Connection		O.D. ø6/ø8/ø10 tube connection (fitting integrated) O.D. 1/4" / 3/8" tube connection (fitting integrated)				
Orifice size	(*5)	ø3.5	ø4	ø6	ø7	ø8
Cv	(*6)	0.28	0.34	0.64	0.7	0.8
Operating section	Operating pressure MPa	NC/NO: 0.35 to 0.5 Double acting: 0.3 to 0.4				
	Operating port	Rc1/8 (operation ports used NC: port Y NO: port X Double acting: ports X, Y)				

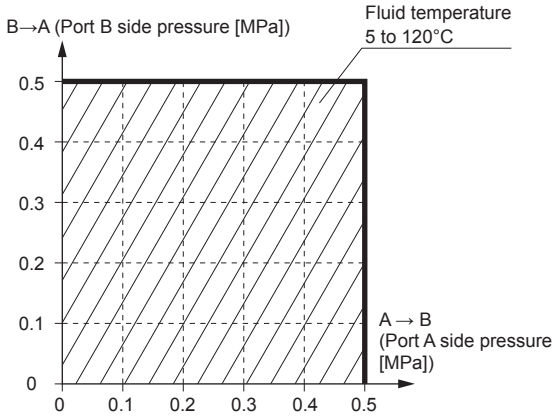
*1: Check the compatibility of product structural materials, working fluids and atmosphere. (Refer to the compatibility check list on Intro Page 15.)
*2: Refer to page 122 for flow characteristics.
*3: For hydrofluoric acid or chemical liquids containing hydrofluoric acid, use within the range of 5 to 80°C.
*4: 5 to 100°C when the connector is F-LOCK 60 Series fitting.
*5: Check the orifice size of each model in How to order.
*6: Cv when the temperature is 23°C.

Structure and parts list



Part name	Material
Actuator	PVDF and others
Diaphragm	PTFE
Body	PFA, PTFE
Mounting plate	PVDF

Working pressure



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

How to order

AMD0 (1) 3R - (10UP) - (00) (N) (4) (F)

- Model No.
- (A) Actuation
- (B) Connection
- (C) Actuator option
- (D) Body option
- (E) Operating port direction
- (F) Mounting method

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

Code	Content \ Orifice size	(B) Connection (*1)									
		6UP	8BUP	8UP	10UP	10BUP	6UR	8BUR	8UR	10UR	10BUR
		Super 300 Pillar fitting P Series integrated					F-LOCK 60 Series fitting integrated				
		ø6 x ø4 tube connection	1/4" x 5/32" tube connection	ø8 x ø6 tube connection	ø10 x ø8 tube connection	3/8" x 1/4" tube connection	ø6 x ø4 tube connection	1/4" x 5/32" tube connection	ø8 x ø6 tube connection	ø10 x ø8 tube connection	3/8" x 1/4" tube connection
		ø4		ø6	ø8		ø3.5		ø6	ø7	ø6
(C) Actuator option											
00	ON/OFF only (with indicator)	●	●	●	●	●	●	●	●	●	●
10	With flow rate adjustment	●	●	●	●	●	●	●	●	●	●
(D) Body option		**Body material**									
N	Normal body	PFA					PTFE				
(E) Operating port direction (*2)											
4	With valve viewed from above, ← indicates fluid flow direction and ⇦ operating port direction.	●	●	●	●	●	●	●	●	●	●
1		●	●	●	●	●	●	●	●	●	●
2		●	●	●	●	●	●	●	●	●	●
3		●	●	●	●	●	●	●	●	●	●
(F) Mounting method (*2)											
F	Flange mounting	●	●	●	●	●	●	●	●	●	●
H	4-point flange mounting	●	●	●	●	●	●	●	●	●	●
X	Bottom mounting	●	●	●	●	●	●	●	●	●	●

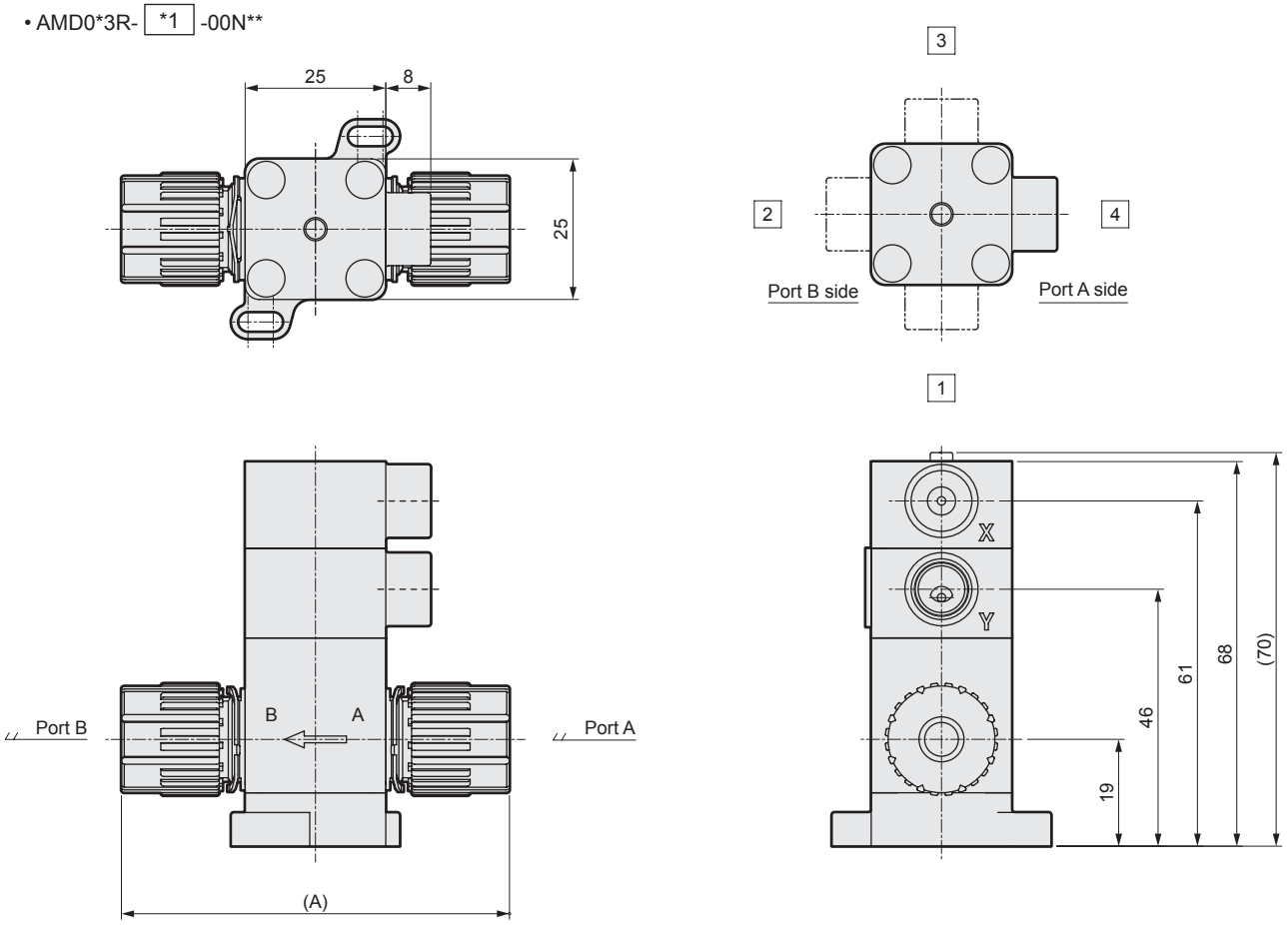
Precautions for model No. selection

*1: Custom order product if F-LOCK60 Series fitting and body material are PTFE. Contact CKD for other connection methods.
*2: Refer to dimensions for operating port direction and mounting plate.
*3: Actuator sensor options: Contact CKD for types with sensors.

Dimensions

● 00 ON/OFF only (with indicator)

• AMD0*3R- *1 -00N**

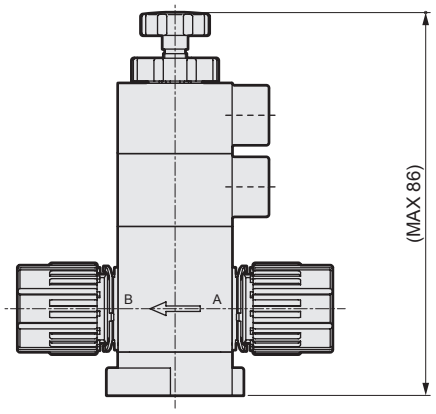


*1 (Connection)	A
6UP	63
8BUP	63
8UP	69
10UP	75
10BUP	75
6UR	85
8BUR	87
8UR	87
10UR	99
10BUR	103

Dimensions

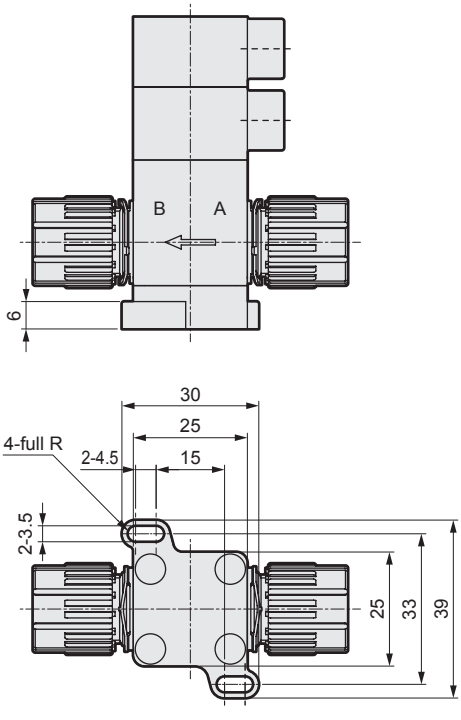
● 10 With flow rate adjustment

• AMD0*3R-*-10N**



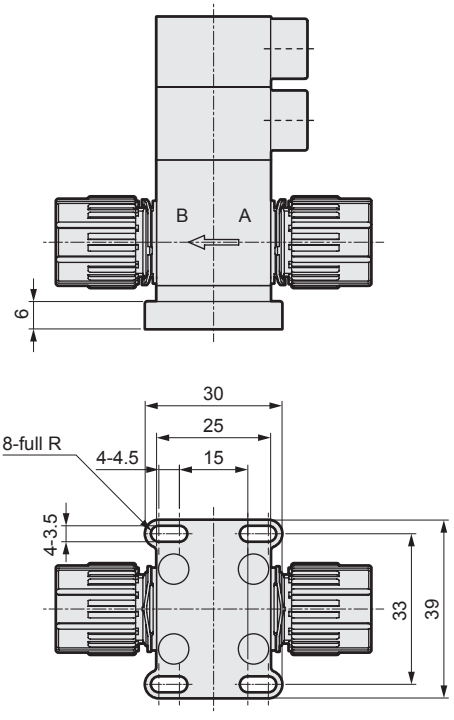
● F Flange mounting

• AMD0*3R-*-***F



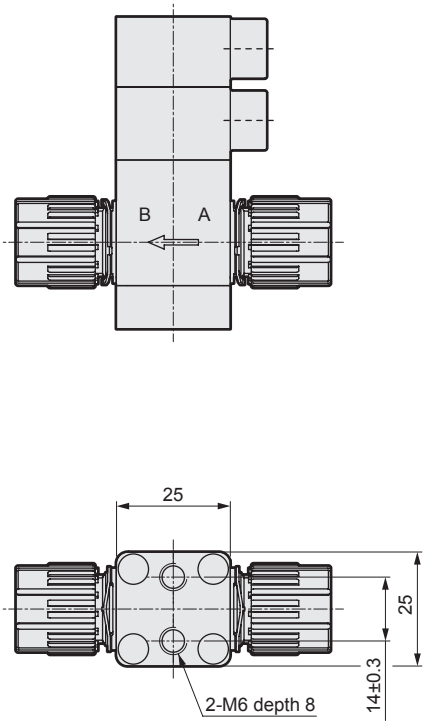
● H 4-point flange mounting

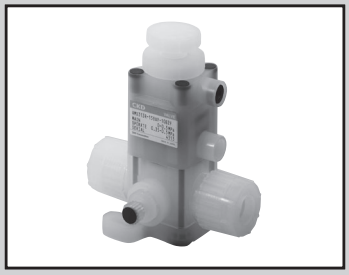
• AMD0*3R-*-***H



● X Bottom mounting

• AMD0*3R-*-***X





Air operated valve for chemical liquids

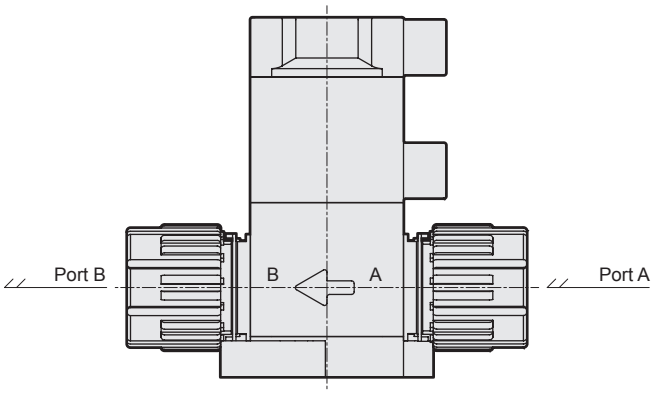
AMD3*3R Series

Specifications

Descriptions		AMD3*3R				
Body option		**N (normal body)**			**B (body with bypass)**	
Working fluid		Chemical liquids, pure water, air, N_2 gas (*1)				
Fluid temperature	°C	5 to 120 (*3, *4)			5 to 90	
Proof pressure	MPa	1.0				
Working pressure (A→B)	MPa	0 to 0.5			Refer to figure below for “Working pressure”	
Working pressure (B→A)	MPa	0 to 0.5			Refer to figure below for “Working pressure”	
Valve seat leakage	cm^3/min	0 (water pressure)				
Back pressure	MPa	0 to 0.5			Refer to figure below for “Working pressure”	
Ambient temperature	°C	0 to 60 (0 to 50 when sensor attached)				
Frequency		30 times/min. or less				
Mounting orientation		Unrestricted				
Connection		O.D. ø10/ø12 tube connection (fitting integrated) O.D. 3/8” / 1/2” tube connection (fitting integrated)				
Orifice size	(*5)	ø6	ø7	ø8	ø9	ø10
Cv	(*6)	0.7	1	1.25	1.6	1.8
Bypass orifice size		-			ø2.3	
Operating section	Operating pressure MPa	NC/NO: 0.35 to 0.5 Double acting: 0.3 to 0.4				
	Operating port	Rc1/8 (operation ports used NC: port Y NO: port X Double acting: ports X, Y)				
Sensor		Refer to pages 20 and 21.				

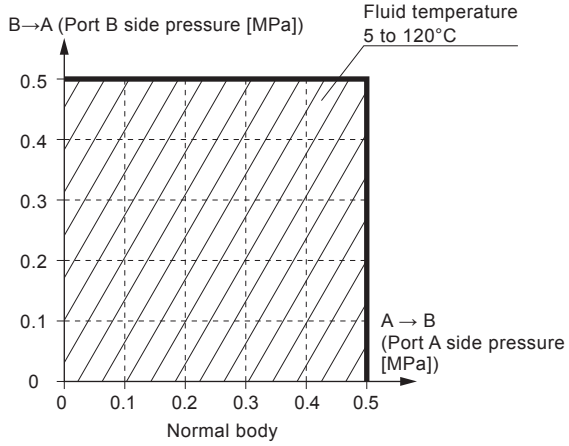
*1: Check the compatibility of product structural materials, working fluids and atmosphere. (Refer to the compatibility check list on Intro Page 15.)
Body with bypass cannot be used for hydrofluoric acid or chemical liquids containing hydrofluoric acid.
*2: Refer to page 122 for flow characteristics.
*3: For hydrofluoric acid or chemical liquids containing hydrofluoric acid, use within the range of 5 to 80°C.
*4: 5 to 100°C when the connector is F-LOCK 60 Series fitting.
*5: Check the orifice size of each model in How to order.
*6: Cv when the temperature is 23°C.

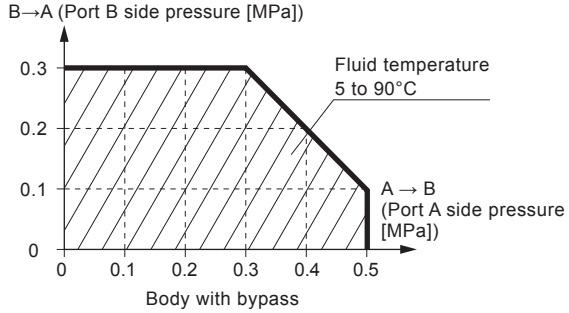
Structure and parts list



Part name	Material
Actuator	PVDF and others
Diaphragm	PTFE
Body	PFA, PTFE
Mounting plate	PVDF

Working pressure





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

How to order

AMD3 (1) 3R - (10UP) - (00) (N) (4) (F)

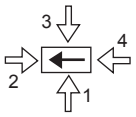
- Model No.
- (A) Actuation
- (B) Connection
- (C) Actuator option
- (D) Body option
- (E) Operating port direction
- (F) Mounting method

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

Code	Content	Orifice size	(B) Connection (*1) 10UP ø10 x ø8 tube connection	10UP 3/8" x 1/4" tube connection	12UP ø12 x ø10 tube connection	12UP 1/2" x 3/8" tube connection	10UR ø10 x ø8 tube connection	10BUR 3/8" x 1/4" tube connection	12UR ø12 x ø10 tube connection	15BUR 1/2" x 3/8" tube connection
			10BUP / 15BUP: Super 300 Pillar fitting P Series integrated				10UR / 10BUR / 12UR / 15BUR: F-LOCK 60 Series fitting integrated			
			ø8		ø10		ø7	ø6	ø9	
(C) Actuator option										
00	ON/OFF only (with indicator)		●	●	●	●	●	●	●	●
10	With flow rate adjustment		●	●	●	●	●	●	●	●
With sensor	Transistor	Cable direction (*2) / Cable length								
A1	NPN	Operating port side, 1m	●	●	●	●	●	●	●	●
A3	NPN	Operating port side, 3m	●	●	●	●	●	●	●	●
B1	NPN	Opposite side to operating port, 1m	●	●	●	●	●	●	●	●
B3	NPN	Opposite side to operating port, 3m	●	●	●	●	●	●	●	●
C1	PNP	Operating port side, 1m	●	●	●	●	●	●	●	●
D1	PNP	Opposite side to operating port, 1m	●	●	●	●	●	●	●	●

(D) Body option		Body material			
N	Normal body	PFA	PFA	PTFE	PTFE
B	Body with bypass	PTFE	PFA	PTFE	PTFE

(E) Operating port direction (*2)



With valve viewed from above, ← indicates fluid flow direction and ⇦ operating port direction.

4		●	●	●	●	●	●	●	●
1		●	●	●	●	●	●	●	●
2		●	●	●	●	●	●	●	●
3		●	●	●	●	●	●	●	●

(F) Mounting method (*2)									
F	Flange mounting	●	●	●	●	●	●	●	●
H	4-point flange mounting	●	●	●	●	●	●	●	●
X	Bottom mounting	●	●	●	●	●	●	●	●

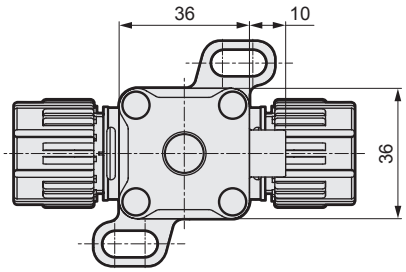
Precautions for model No. selection

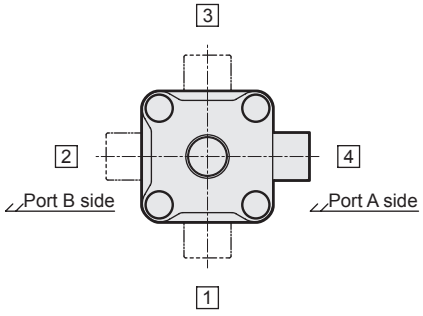
*1: Custom order product if F-LOCK60 Series fitting and body material are PTFE.
Contact CKD for other connection methods.
*2: Refer to dimensions for operating port direction, sensor cable direction, and mounting plate.

Dimensions

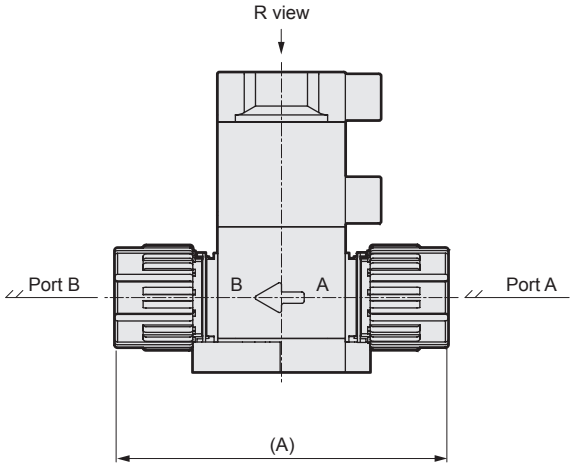
● 00 ON/OFF only (with indicator) + N normal body

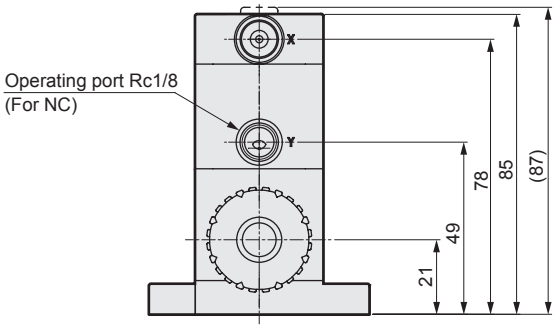
• AMD3*3R- *1 -00N**





Operating port direction (R view)

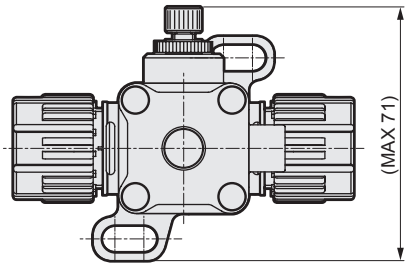


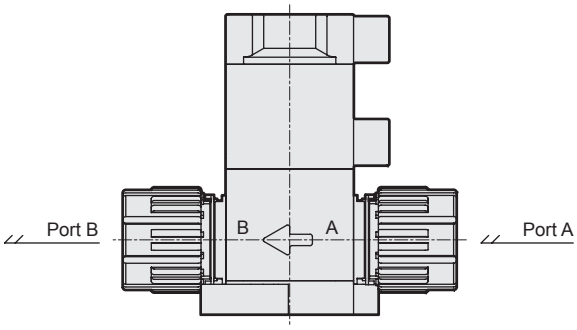


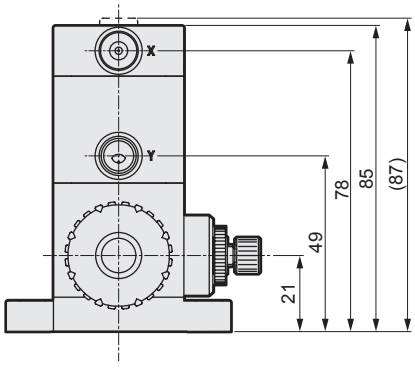
*1 (Connection)	A
10UP	86
10BUP	86
12UP	94
15BUP	94
10UR	110
10BUR	114
12UR	110
15BUR	114

● 00 ON/OFF only (with indicator) + B body with bypass

• AMD3*3R-*-00B**



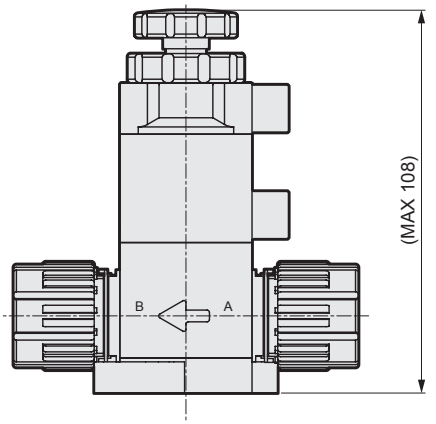




Dimensions

● 10 With flow rate adjustment

• AMD3*3R-*-10***

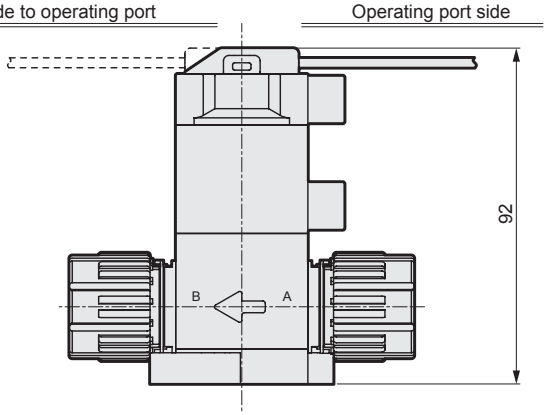


● A* B* C* D* With sensor

• AMD3*3R-*-$^{A\,B\,C\,D}$****

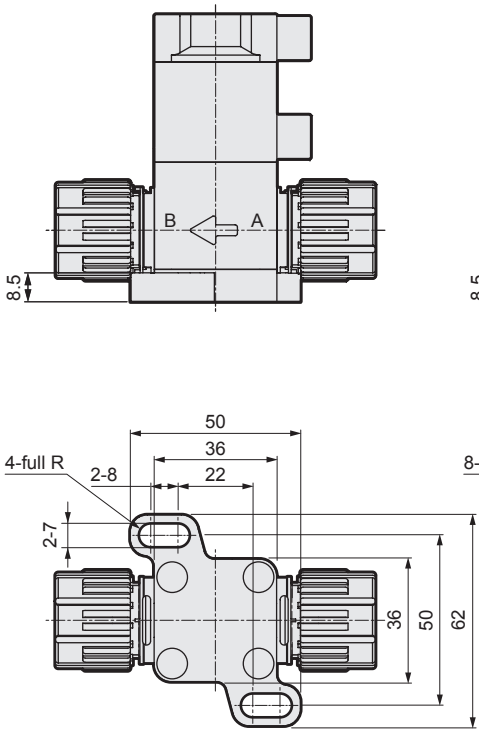
B* D* Cable direction: Opposite side to operating port

A* C* Cable direction: Operating port side



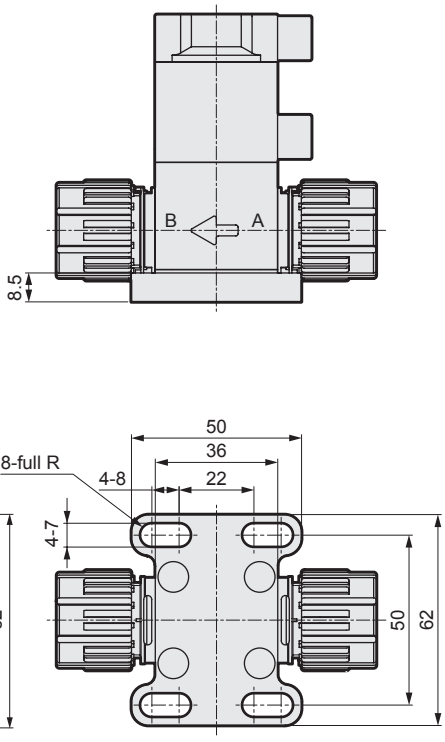
● F Flange mounting

• AMD3*3R-*-***F



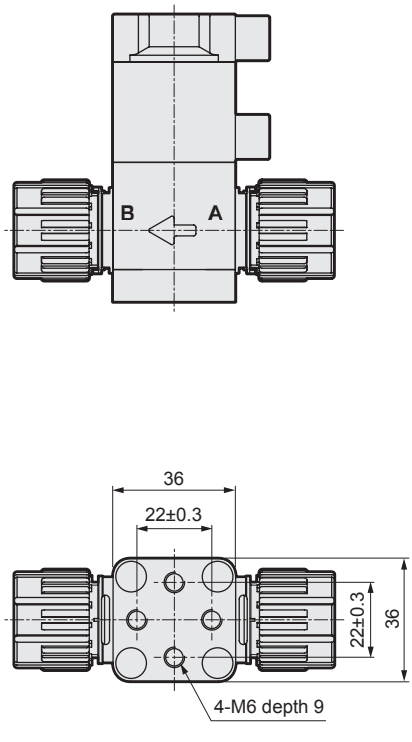
● H 4-point flange mounting

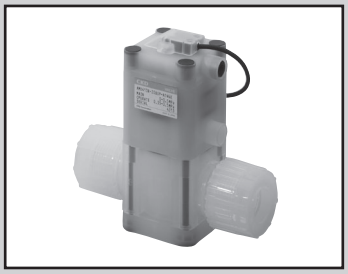
• AMD3*3R-*-***H



● X Bottom mounting

• AMD3*3R-*-***X





Air operated valve for chemical liquids

AMD4*3R Series

RoHS CAD

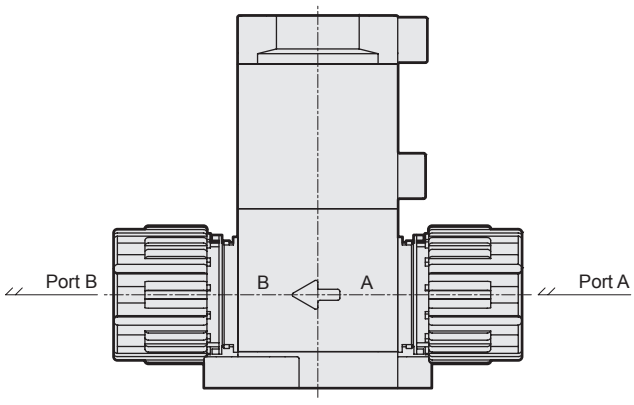
Export controlled items

Specifications

Descriptions		AMD4*3R	
Body option		**N (normal body)**	**B (body with bypass)**
Working fluid		Chemical liquids, pure water, air, N_2 gas (*1)	
Fluid temperature	°C	5 to 120 (*3, *4)	5 to 90
Proof pressure	MPa	1.0	
Working pressure (A→B)	MPa	0 to 0.5	Refer to figure below for “Working pressure”
Working pressure (B→A)	MPa	0 to 0.5	Refer to figure below for “Working pressure”
Valve seat leakage	cm^3/min	0 (water pressure)	
Back pressure	MPa	0 to 0.5	Refer to figure below for “Working pressure”
Ambient temperature	°C	0 to 60 (0 to 50 when sensor attached)	
Frequency		20 times/min. or less	
Mounting orientation		Unrestricted	
Connection		O.D. 3/4” tube connection (fitting integrated)	
Orifice size	(*5)	ø15	ø16
Cv	(*6)	4.5	5
Bypass orifice size		-	ø6
Operating section	Operating pressure MPa	NC/NO: 0.35 to 0.5 Double acting: 0.3 to 0.4	
	Operating port	Rc1/8 (operation ports used NC: port Y NO: port X Double acting: ports X, Y)	
Sensor		Refer to pages 20 and 21.	

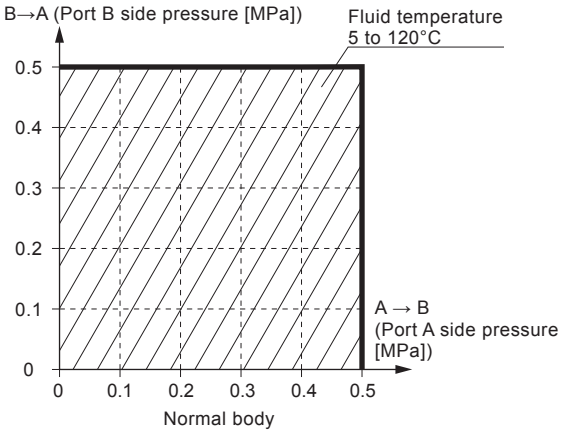
*1: Check the compatibility of product structural materials, working fluids and atmosphere. (Refer to the compatibility check list on Intro Page 15.)
Body with bypass cannot be used for hydrofluoric acid or chemical liquids containing hydrofluoric acid.
*2: Refer to page 122 for flow characteristics.
*3: For hydrofluoric acid or chemical liquids containing hydrofluoric acid, use within the range of 5 to 80°C.
*4: 5 to 100°C when the connector is F-LOCK 60 Series fitting.
*5: Check the orifice size of each model in How to order.
*6: Cv when the temperature is 23°C.

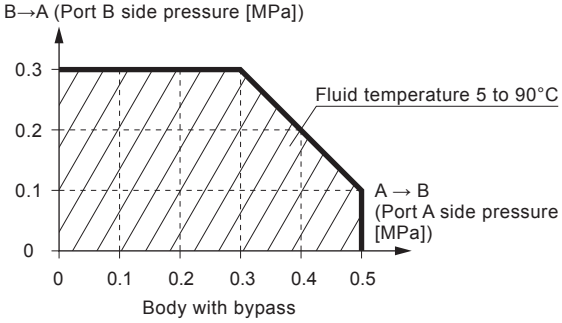
Structure and parts list



Part name	Material
Actuator	PVDF and others
Diaphragm	PTFE
Body	PFA, PTFE
Mounting plate	PVDF

Working pressure





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

How to order

AMD4 (1) 3R - (20BUP) - (00) (N) (4) (F)

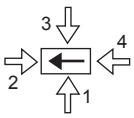
- Model No.
- (A) Actuation
- (B) Connection
- (C) Actuator option
- (D) Body option
- (E) Operating port direction
- (F) Mounting method

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

(B) Connection (*1)	20BUP	20BUR
	Super 300 Pillar fitting P Series integrated	F-LOCK 60 Series fitting integrated
	3/4" x 5/8" tube connection	3/4" x 5/8" tube connection
Code / Content \ Orifice size	ø16	ø15
(C) Actuator option		
00 ON/OFF only (with indicator)	●	●
10 With flow rate adjustment	●	●

With sensor	Transistor	Cable direction (*2)	Cable length		
A1	NPN	Operating port side	1 m	●	●
A3			3 m	●	●
B1		Opposite side to operating port	1 m	●	●
B3			3 m	●	●
C1	PNP	Operating port side	1 m	●	●
D1		Opposite side to operating port	1 m	●	●

(D) Body option		Body material	
N	Normal body	PFA	PTFE
B	Body with bypass	PFA	PTFE

(E) Operating port direction (*2)			
4	 With valve viewed from above, ← indicates fluid flow direction and ⇦ operating port direction.	●	●
1		●	●
2		●	●
3		●	●

(F) Mounting method (*2)			
F	Flange mounting	●	●
H	4-point flange mounting	●	●
X	Bottom mounting	●	●

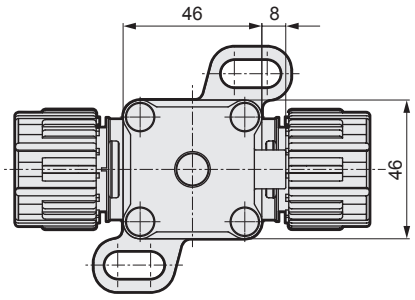
Precautions for model No. selection

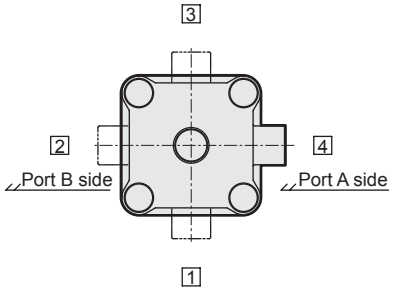
*1: Custom order product when fitting is F-LOCK60 Series.
Contact CKD for other connection methods.
*2: Refer to dimensions for operating port direction, sensor cable direction, and mounting plate.

Dimensions

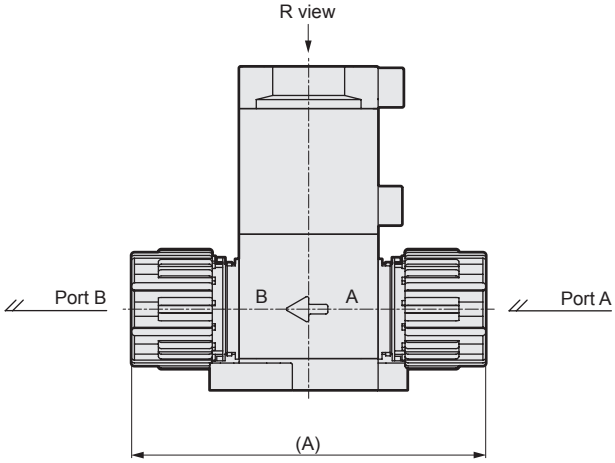
● 00 ON/OFF only (with indicator) + N normal body

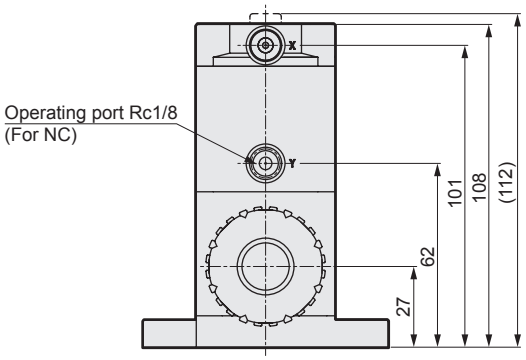
• AMD4*3R- *1 -00N**





Operating port direction (R view)

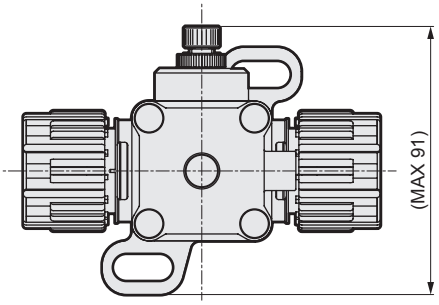


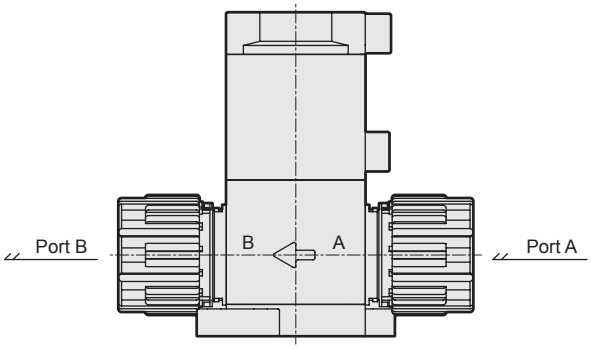


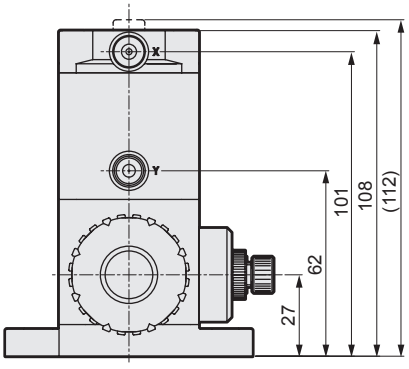
*1 (Connection)	A
20BUP	118
20BUR	134

● 00 ON/OFF only (with indicator) + B body with bypass

• AMD4*3R-*-00B**







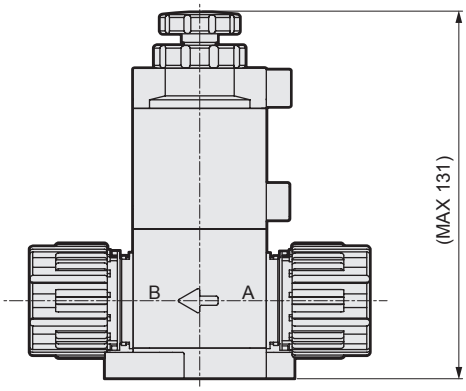
Dimensions

● 10 With flow rate adjustment

• AMD4*3R-*-10***

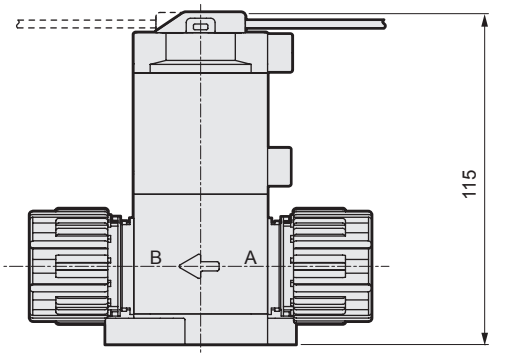
● A* B* C* D* With sensor

• AMD4*3R-*-$^{A}_{B}{}^{C}_{D}$****



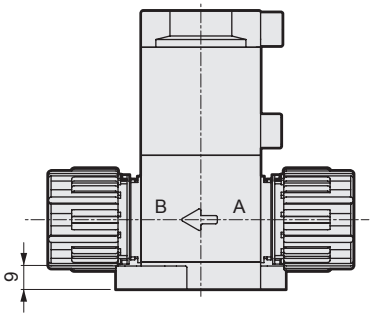
B* D* Cable direction: Opposite side to operating port

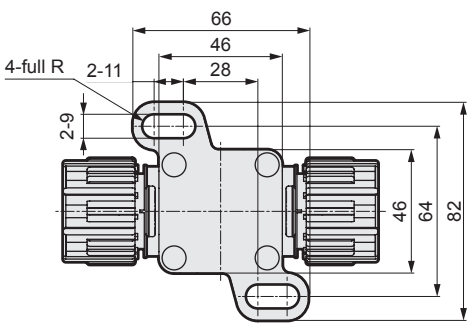
A* C* Cable direction: Operating port side



● F Flange mounting

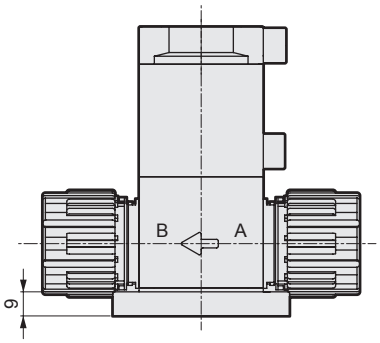
• AMD4*3R-*-***F

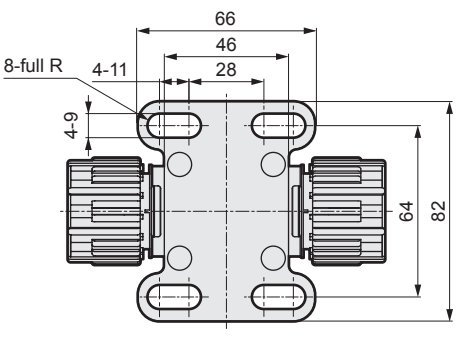




● H 4-point flange mounting

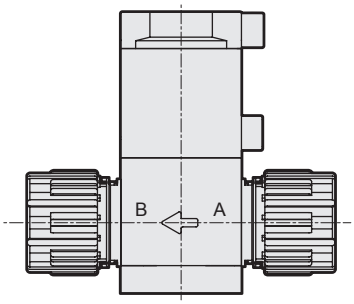
• AMD4*3R-*-***H

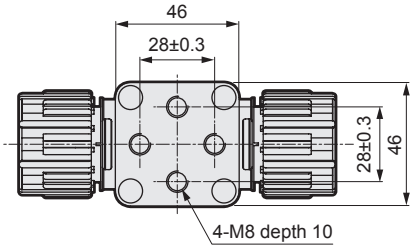


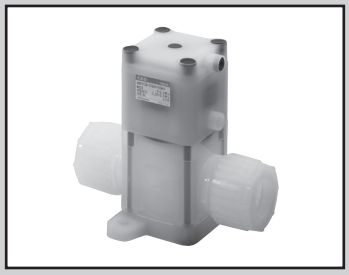


● X Bottom mounting

• AMD4*3R-*-***X







Air operated valve for chemical liquids

AMD5*3R Series

RoHS CAD

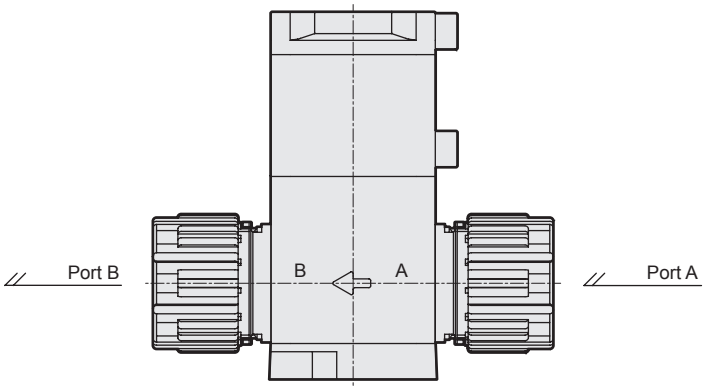
Export controlled items

Specifications

Descriptions		AMD5*3R	
Body option		**N (normal body)**	**B (body with bypass)**
Working fluid		Chemical liquids, pure water, air, N_2 gas (*1)	
Fluid temperature	°C	5 to 120 (*3, *4)	5 to 90
Proof pressure	MPa	1.0	
Working pressure (A→B)	MPa	0 to 0.5	Refer to figure below for “Working pressure”
Working pressure (B→A)	MPa	0 to 0.5	Refer to figure below for “Working pressure”
Valve seat leakage	cm^3/min	0 (water pressure)	
Back pressure	MPa	0 to 0.5	Refer to figure below for “Working pressure”
Ambient temperature	°C	0 to 60 (0 to 50 when sensor attached)	
Frequency		20 times/min. or less	
Mounting orientation		Unrestricted	
Connection		O.D. ø25 tube connection (fitting integrated) O.D. 1” tube connection (fitting integrated)	
Orifice size		ø20	
Cv	(*5)	8	
Bypass orifice size		-	ø6
Operating section	Operating pressure MPa	NC/NO: 0.35 to 0.5 Double acting: 0.3 to 0.4	
	Operating port	Rc1/8 (operation ports used NC: port Y NO: port X Double acting: ports X, Y)	
Sensor		Refer to pages 20 and 21.	

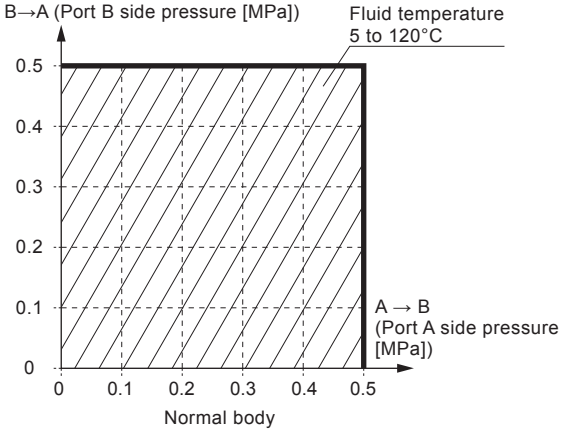
*1: Check the compatibility of product structural materials, working fluids and atmosphere. (Refer to the compatibility check list on Intro Page 15.)
Body with bypass cannot be used for hydrofluoric acid or chemical liquids containing hydrofluoric acid.
*2: Refer to page 122 for flow characteristics.
*3: For hydrofluoric acid or chemical liquids containing hydrofluoric acid, use within the range of 5 to 80°C.
*4: 5 to 100°C when the connector is F-LOCK 60 Series fitting.
*5: Cv when the temperature is 23°C.

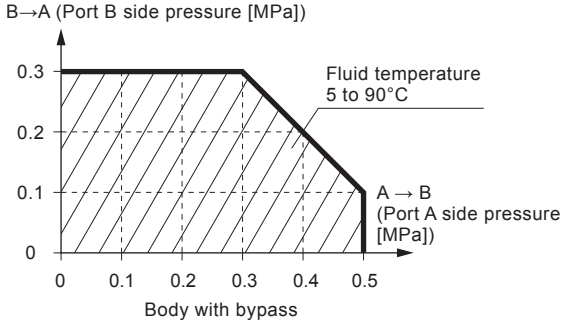
Structure and parts list



Part name	Material
Actuator	PVDF and others
Diaphragm	PTFE
Body	PFA, PTFE
Mounting plate	PVDF

Working pressure





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

How to order

AMD5 (1) 3R - (25BUP) - (00) (N) (4) (F)

- 1: Model No.
- 25BUP: Ⓑ Connection
- 00: Ⓒ Actuator option
- N: Ⓓ Body option
- 4: Ⓔ Operating port direction
- F: Ⓕ Mounting method

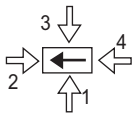
Ⓐ Actuation

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

Code	Content	Orifice size	Ⓑ Connection (*1) 25UP Super 300 Pillar fitting P Series integrated ø25 x ø22 tube connection	25BUP Super 300 Pillar fitting P Series integrated 1" x 7/8" tube connection	25UR F-LOCK 60 Series fitting integrated ø25 x ø22 tube connection	25BUR F-LOCK 60 Series fitting integrated 1" x 7/8" tube connection
			ø20			
Ⓒ Actuator option						
00	ON/OFF only (with indicator)		●	●	●	●
10	With flow rate adjustment		●	●	●	●
With sensor	Transistor	Cable direction (*2)	Cable length				
A1	NPN	Operating port side	1 m	●	●	●	●
A3			3 m	●	●	●	●
B1		Opposite side to operating port	1 m	●	●	●	●
B3			3 m	●	●	●	●
C1	PNP	Operating port side	1 m	●	●	●	●
D1		Opposite side to operating port	1 m	●	●	●	●

Ⓓ Body option		Body material	
N	Normal body	PFA	PTFE
B	Body with bypass	PTFE	PTFE

Ⓔ Operating port direction (*2)



With valve viewed from above, ← indicates fluid flow direction and ⇦ operating port direction.

4	●	●	●	●
1	●	●	●	●
2	●	●	●	●
3	●	●	●	●

Ⓕ Mounting method (*2)

F	Flange mounting	●	●	●	●
H	4-point flange mounting	●	●	●	●
X	Bottom mounting	●	●	●	●

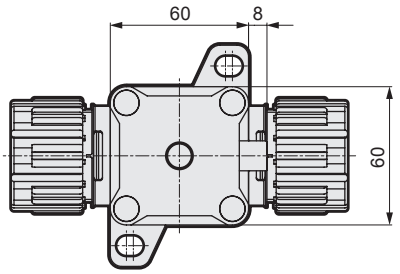
Precautions for model No. selection

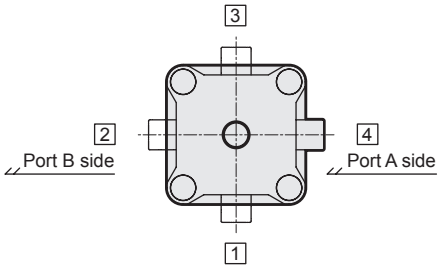
*1: Custom order product if F-LOCK60 Series fitting and body material are PTFE.
Contact CKD for other connection methods.
*2: Refer to dimensions for operating port direction, sensor cable direction, and mounting plate.

Dimensions

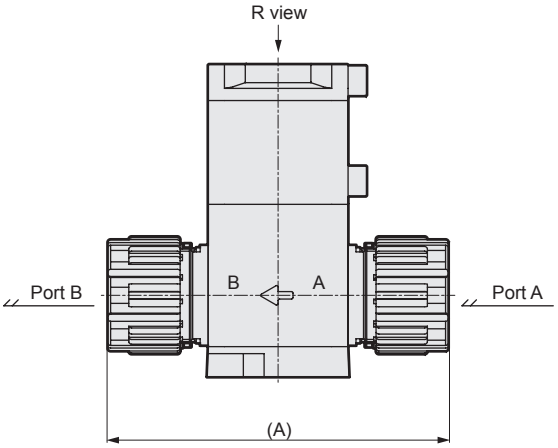
● 00 ON/OFF only (with indicator) + N normal body

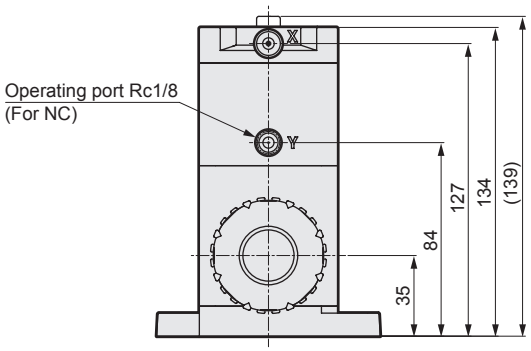
• AMD5*3R- *1 -00N**





Operating port direction (R view)

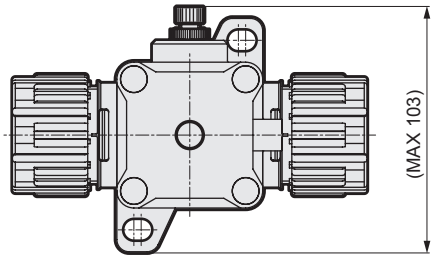


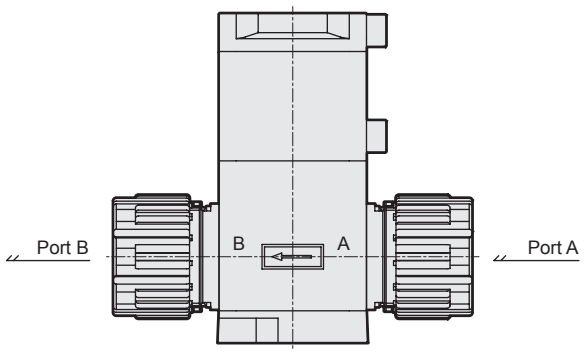


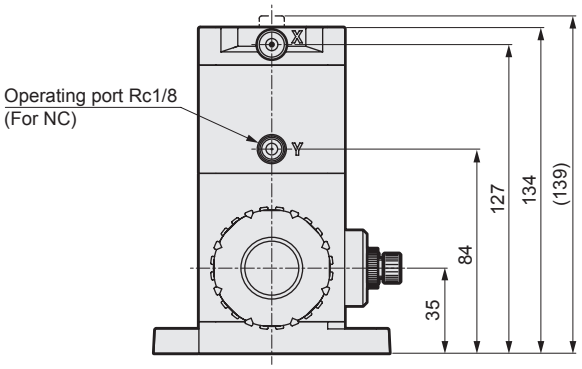
*1 (Connection)	A
25UP	146
25BUP	146
25UR	159
25BUR	162

● 00 ON/OFF only (with indicator) + B body with bypass

• AMD5*3R-*-00B**



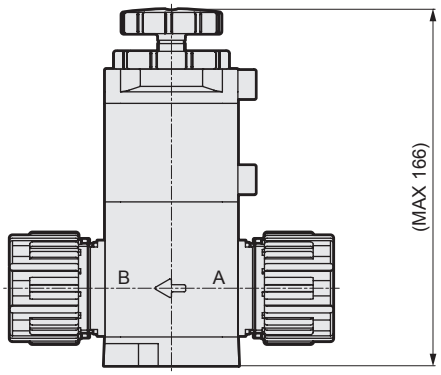




Dimensions

● 10 With flow rate adjustment

• AMD5*3R-*-10***

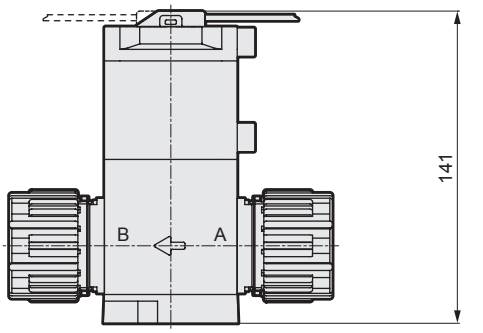


● A* With sensor
B*
C*
D*

• AMD5*3R-*-$^{A}_{B}{}^{C}_{D}$****

B*
D* Cable direction: Opposite side to operating port

A*
C* Cable direction: Operating port side



● F Flange mounting

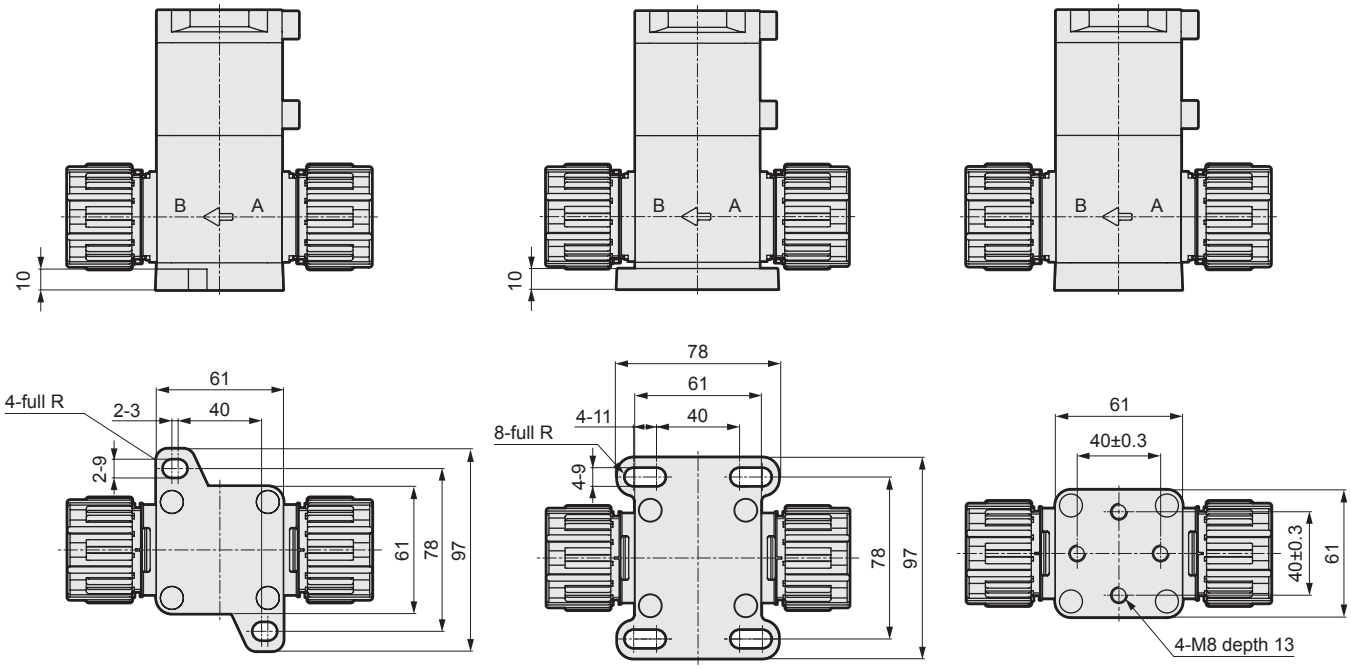
• AMD5*3R-*-***F

● H 4-point flange mounting

• AMD5*3R-*-***H

● X Bottom mounting

• AMD5*3R-*-***X

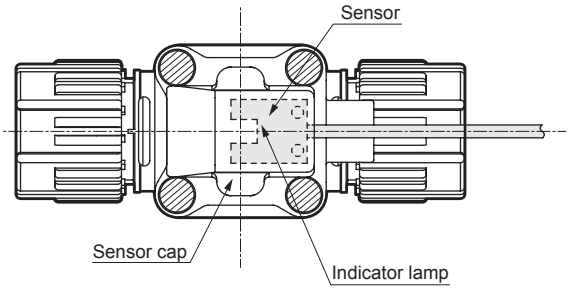


[Sensor specifications]

Actuator option code	A1, B1	A3, B3	C1, D1
Sensor	Micro photo sensor PM-25 Series (Panasonic Devices SUNX Co., Ltd.)		
Switch output	NPN transistor/open collector • Max. inrush current 50 mA • Applied voltage 30 VDC or less (between output and 0 V) • Residual voltage: 2V or less		PNP transistor/open collector • Max. outflow current 50 mA • Applied voltage 30 VDC or less (between output and +V) • Residual voltage: 2V or less
Indicator lamp	Orange LED		
Power supply voltage	5 to 24 VDC ±10% ripple P-P 10% or less		
Current consumption	15 mA or less		
Operating ambient temperature	0 to 50°C (no condensation or freezing)		
Operating ambient humidity	5% to 85% RH, when stored: 5% to 95% RH		
Operating ambient illumination	Fluorescent light: light-receiving surface luminance 1000 Lx or less		
Withstand voltage	1000 VAC for 1 minute applied to all charged sections/between cases		
Insulation resistance	20 MΩ and over with 250 VDC megger all charged sections/between cases		
Material	Case: PBT, display: polycarbonate		
Cable type	0.09 mm^2 4-conductor cabtyre cable (*3, *4)		
Cable length (*12)	1 m	3 m	1 m

*1: Since the output is not equipped with a short circuit protection circuit, perform connections carefully.
Do not directly connect power or capacity loads. Incorrect wiring could result in damage.
*2: Be sure to insulate unused output lines.
*3: It cannot be used in movable parts.
*4: Cable extension is possible, but extending the cable will cause voltage drop. Ensure that the supply voltage of the supplied sensor cable end is within the specified rating.
*5: Never use this product in an explosive gas atmosphere. The sensor does not have an explosive-proof structure.
Never use in an explosive gas atmosphere as explosions or fires could result.
*6: The sensor does not have a dust-proof or drip-proof structure.
It cannot be used in high steam and dusty environments or in direct contact with water, chemicals, etc. or in an atmosphere such as corrosive gas.
*7: No special ambient light countermeasures have been taken. Take care that light does not contact the sensor light-receiving unit.
*8: Avoid using in a transient state (50 ms) after power is turned ON.
*9: Contact CKD if the sensor needs to be replaced.
*10: Do not apply tensile strength to the cable. Failure to observe this could result in disconnection, damage, or malfunction.
*11: Do not remove the sensor or sensor cap.
*12: Contact CKD for cables longer than 1 m or 3 m.
*13: Refer to the most recent manufacturer's catalog upon use.

Valve operation and sensor operation



Valve operation			At CLOSE	At OPEN
Sensor	Detector		Light reception	Light shielding
	Indicator lamp		ON	OFF
	Output 1	Lead wire color: Black	Output ON	Output OFF
	Output 2	Lead wire color: White	Output OFF	Output ON