

Diaphragm Valve Type AI (Pneumatic Type)

Features

- Near-Linear flow characteristics
- Maximum working pressure of 1.0MPa excellent open/close durability to withstand more than 500,000 cycles of opening and closing.
- For the air to open type, two spec types (1.0MPa and 0.7 MPa) are available.
- All-plastic design ensures excellent corrosion resistance.



Basic specifications

- Valve Type : Diaphragm Valve Type AI
- Size : 15 mm - 50 mm (1/2 inch – 2 inch)
- Body Material : U-PVC (Conforming to ASTM D1784 Cell Classification 12454A)
C-PVC (Conforming to ASTM D1784 Cell Classification 23567-A)
PP (Conforming to ASTM D4101 Cell Classification PP0110B67272)
PVDF (Conforming to ASTM D3222 Cell Classification Type II)
- Seal Material / Diaphragm : EPDM, PTFE, FKM etc.
- Connection / Flanged : JIS B2220 10K, DIN/EN1092-1 PN10, ANSI B16.5 CLASS150

Body Material	Fluid Temperature ℃ { °F }	Maximum working pressure (Normal temperature) MPa { psi }	Connection method
			Flanged
U-PVC	0 ~ 60 { 30~140 }	1.0 { 150 }	○
C-PVC	0 ~ 90 { 30~195 }	1.0 { 150 }	○
PP	-20 ~ 90 { -5~195 }	1.0 { 150 }	○
PVDF	-20 ~ 120 { -5~250 }	1.0 { 150 }	○

Note: The maximum working pressure is the value including the water hammer pressure. Be careful that the maximum working pressure is not exceeded during use.

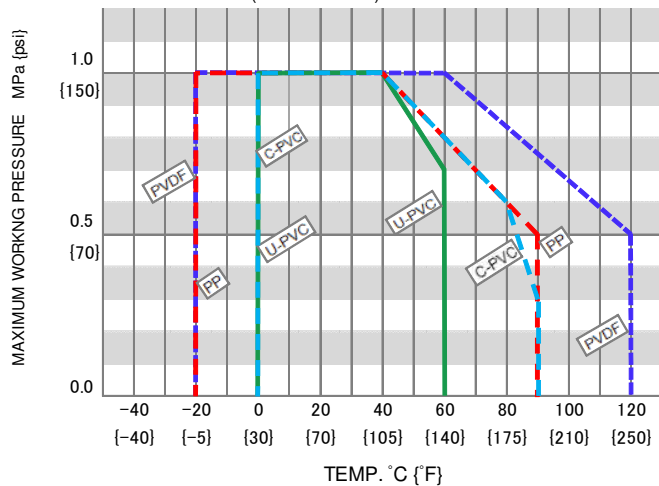
- * Concerning the allowable pressure for each temperature, material and actuator type, see the technical documents at the end of this catalog.
- * The diaphragm may become loose due to temperature changes during long storage, operation stop or while in use. Check the conditions and then retighten the bolts and nut between the bonnet and the body to the "bonnet tightening torque". (Failure to do so may cause fluid leakage.)

Working pressure vs. Temperature

AUTOMATIC PNEUMATIC

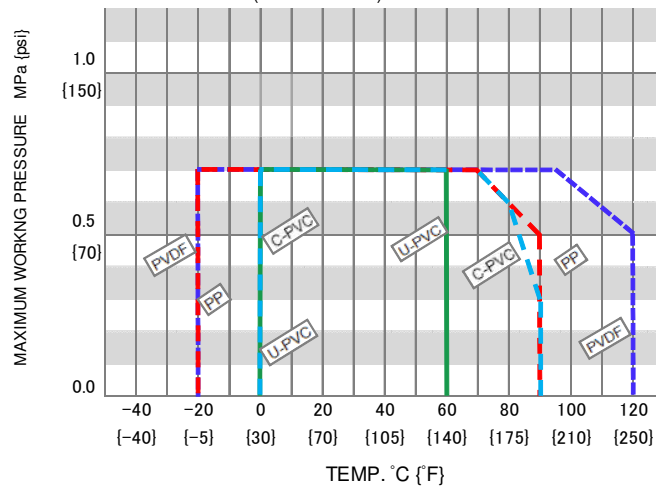
DOUBLE ACTING / AIR TO CLOSE : 15mm - 50mm

AIR TO OPEN (1.0 MPa TYPE) : 15mm - 50mm



AUTOMATIC PNEUMATIC

AIR TO OPEN (0.7 MPa TYPE) : 15mm - 50mm

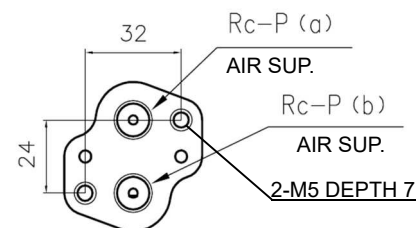


Note : Make sure that the temperature and pressure are within the working range during operation.
(If the tolerance range is exceeded during use, the valve may be damaged.)

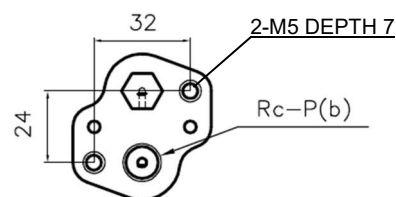
Product dimension

FACE OF AIR SUPPLY

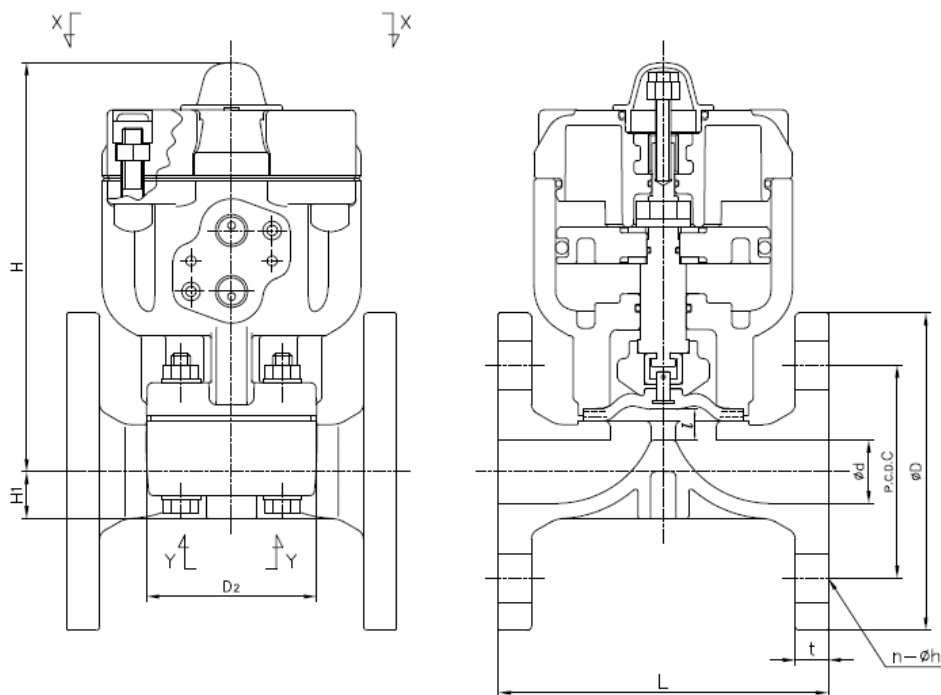
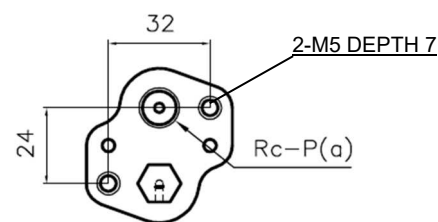
(Double Acting)



(Air to Open)

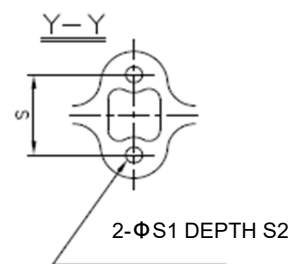
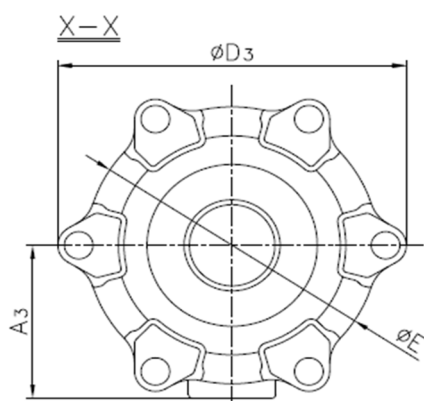
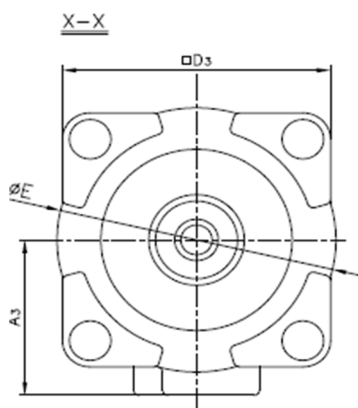


(Air to Close)



SIZE 15 – 32 mm

SIZE 40 , 50 mm



(ENSAT FITTING MOUNTING HOLE)

■ JIS, DIN (Unit: mm)

mm	d	D ₂	D ₃	E	ℓ	H		H ₁	A ₃		S	S ₁	S ₂	P
						DOUBLE ACTING AIR TO OPEN(0.7MPa) AIR TO CLOSE	AIR TO OPEN (1.0MPa)		DOUBLE ACTING	AIR TO OPEN AIR TO CLOSE				
15	16	54X66	91	94	8	145	145	19.5	55	67	25	7	13	1/4
20	20	60X74	91	94	8	153	153	17.5	55	67	25	7	13	1/4
25	25	67X80	100	102	10	161	161	18.5	60	72	25	7	13	1/4
32	32	67X80	100	102	10	165	165	22.5	60	72	25	7	13	1/4
40	40	108X108	184	154	18	238	238	27.5	85	97	45	9	15	1/4
50	52	123X123	184	154	20	254	278	36	85	97	45	9	15	1/4

JIS10K						DIN PN10					
D	C	n	h	L	t	D	C	n	h	L	t
95	70	4	15	110	12	95	65	4	14	130	12
100	75	4	15	120	13	105	75	4	14	150	13
125	90	4	19	130	13	115	85	4	14	160	13
135	100	4	19	142	16	140	100	4	18	180	16
140	105	4	19	180	16	150	110	4	18	200	20
155	120	4	19	210	20	165	125	4	18	230	22

■ ANSI (Unit: inch)

inch	mm	d	D ₂	D ₃	ℓ	E	H		H ₁	A ₃		S	S ₁	S ₂	P
							DOUBLE ACTING AIR TO OPEN(0.7MPa) AIR TO CLOSE	AIR TO OPEN (1.0MPa)		DOUBLE ACTING	AIR TO OPEN AIR TO CLOSE				
1/2	15	0.63	2.13X2.60	3.58	0.31	3.70	5.71	5.71	0.77	2.17	2.64	0.98	0.28	0.51	1/4
3/4	20	0.79	2.36X2.91	3.58	0.31	3.70	6.02	6.02	0.69	2.17	2.64	0.98	0.28	0.51	1/4
1	25	0.98	2.64X3.15	3.94	0.39	4.02	6.34	6.34	0.73	2.36	2.83	0.98	0.28	0.51	1/4
1 1/4	32	1.26	2.64X3.15	3.94	0.39	4.02	6.50	6.50	0.89	2.36	2.83	0.98	0.28	0.51	1/4
1 1/2	40	1.57	4.25X4.25	7.24	0.71	6.06	9.37	9.37	1.08	3.35	3.82	1.77	0.35	0.59	1/4
2	50	2.05	4.84X4.84	7.24	0.79	6.06	10.00	10.94	1.42	3.35	3.82	1.77	0.35	0.59	1/4

ANSI						
D	C	n	h	t	L	
					GRINNELL STANDARD	AV STANDARD
3.5	2.38	4	0.62	0.43	4.25	4.33
3.88	2.75	4	0.62	0.51	5.88	4.72
4.25	3.12	4	0.62	0.59	5.88	5.12
4.62	3.50	4	0.62	0.63	6.38	-
5.00	3.88	4	0.62	0.63	6.94	7.09
6.00	4.75	4	0.75	0.79	7.94	8.27

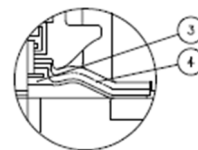
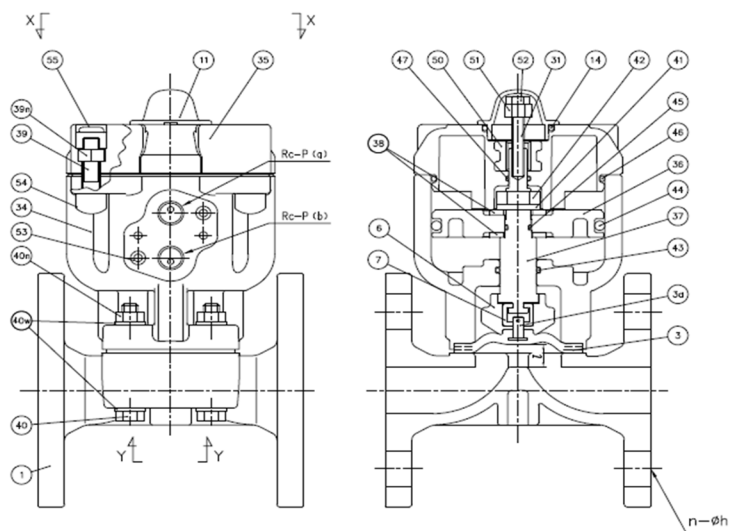
ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE				
	DOUBLE ACTING	AIR TO OPEN (0.7MPa TYPE)	AIR TO OPEN (1.0MPa TYPE)	AIR TO OPEN (1.0MPa TYPE)	AIR TO CLOSE
		DIAPHRAGM COMMON	PTFE DIAPHRAGM	EPDM DIAPHRAGM	
15mm (1/2inch)	AI-1DA	AI-1AO	AI-1AO-P	AI-1AO-E	AI-1AS
20mm (3/4inch)	AI-2DA	AI-2AO	AI-2AO-P	AI-2AO-E	AI-2AS
25mm (1inch)	AI-3DA	AI-3AO	AI-3AO-P	AI-3AO-E	AI-3AS
32mm (1 1/4inch)					
40mm (1 1/2inch)	AI-4DA	AI-4AO	AI-4AO-P	AI-4AO-E	AI-4AS
50mm (2inch)	AI-5DA	AI-5AO	AI-5AO-P	AI-5AO-E	AI-5AS

DATASHEET

Parts list

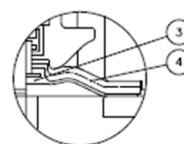
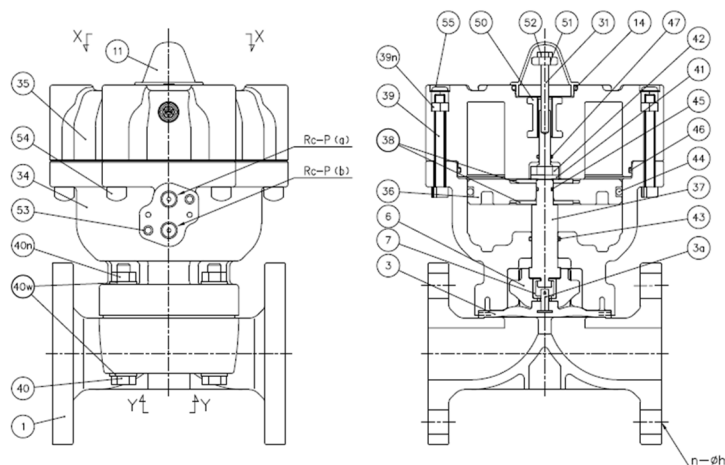
AUTOMATIC [PNEUMATIC] DOUBLE ACTING: SIZE 15 - 32 mm



In case material of diaphragm is PTFE

PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1 BODY	1	PVC, C-PVC, PP, PVDF	35 CYLINDER COVER	1	PPG	43 O-RING (No.43)	1	NBR
3 DIAPHRAGM	1	EPDM, PTFE, Others	36 PISTON	1	PPG	44 O-RING (No.44)	1	NBR
3a INSERTED METAL OF DIAPHRAGM	1	STAINLESS STEEL	37 STEM FOR PNEUMATIC ACTUATOR	1	COPPER ALLOY	45 O-RING (No.45)	1	NBR
4 CUSHION	1	EPDM Used for PTFE Diaphragm	38 WASHER (No.38)	2	STAINLESS STEEL	46 O-RING (No.46)	1	NBR
6 COMPRESSOR	1	PVDF	39 HEXAGON SOCKET HEAD CAP SCREWS	4	STAINLESS STEEL	47 O-RING (No.47)	1	NBR
7 JOINT	1	STAINLESS STEEL	39n NUT (No.39)	4	STAINLESS STEEL	50 INSERTED METAL OF CYLINDER COVER	1	STAINLESS
11 GAUGE COVER	1	PC	40 BOLT (No.40)	4	STAINLESS STEEL	51 STOPPER FOR PNEUMATIC ACTUATOR	1	STAINLESS
14 O-RING (No.14)	1	EPDM	40w WASHER (No.40)	8	STAINLESS STEEL	52 NUT (No.52)	1	STAINLESS
31 INDICATOR ROD	1	STAINLESS STEEL	40n NUT (No.40)	4	STAINLESS STEEL	53 INSERTED METAL OF CYLINDER BODY	2	STAINLESS STEEL
34 CYLINDER BODY	1	PPG	41 SPRING WASHER	1	STAINLESS STEEL	54 CAP FOR HEXAGON SOCKET HEAD CAP SCREW	4	PVC
			42 NUT (No.42)	1	STAINLESS STEEL	55 CAP	4	EPDM Blue

AUTOMATIC [PNEUMATIC] DOUBLE ACTING: SIZE 40,50 mm

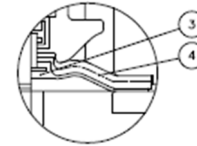
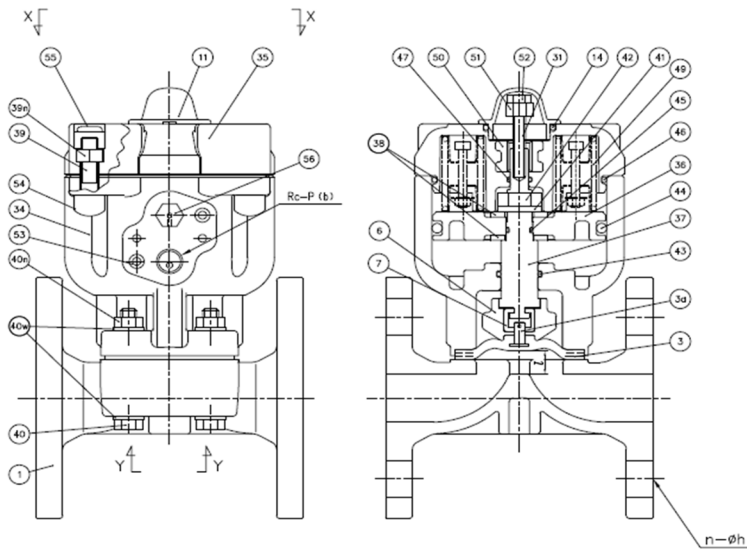


In case material of diaphragm is PTFE

PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1 BODY	1	PVC, C-PVC, PP, PVDF	35 CYLINDER COVER	1	PPG	43 O-RING (No.43)	1	NBR
3 DIAPHRAGM	1	EPDM, PTFE, Others	36 PISTON	1	PPG	44 O-RING (No.44)	1	NBR
3a INSERTED METAL OF DIAPHRAGM	1	STAINLESS STEEL	37 STEM FOR PNEUMATIC ACTUATOR	1	COPPER ALLOY	45 O-RING (No.45)	1	NBR
4 CUSHION	1	EPDM Used for PTFE Diaphragm	38 WASHER (No.38)	2	STAINLESS STEEL	46 O-RING (No.46)	1	NBR
6 COMPRESSOR	1	PVDF	39 BOLT (No.39)	6	STAINLESS STEEL	47 O-RING (No.47)	1	NBR
7 JOINT	1	STAINLESS STEEL	39n NUT (No.39)	6	STAINLESS STEEL	50 INSERTED METAL OF CYLINDER COVER	1	STAINLESS STEEL(SUS304)
11 GAUGE COVER	1	PC	40 BOLT (No.40)	4	STAINLESS STEEL	51 STOPPER FOR PNEUMATIC ACTUATOR	1	STAINLESS STEEL(SUS304)
14 O-RING (No.14)	1	EPDM	40w WASHER (No.40)	8	STAINLESS STEEL	52 NUT (No.52)	1	STAINLESS STEEL(SUS304)
31 INDICATOR ROD	1	STAINLESS STEEL	40n NUT (No.40)	4	STAINLESS STEEL	53 INSERTED METAL OF CYLINDER BODY	2	STAINLESS STEEL(SUS304)
34 CYLINDER BODY	1	PPG	41 SPRING WASHER	1	STAINLESS STEEL	54 CAP FOR HEXAGON SOCKET HEAD CAP SCREWS	6	PVC
			42 NUT (No.42)	1	STAINLESS STEEL	55 CAP	6	EPDM Blue

DATASHEET

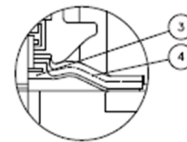
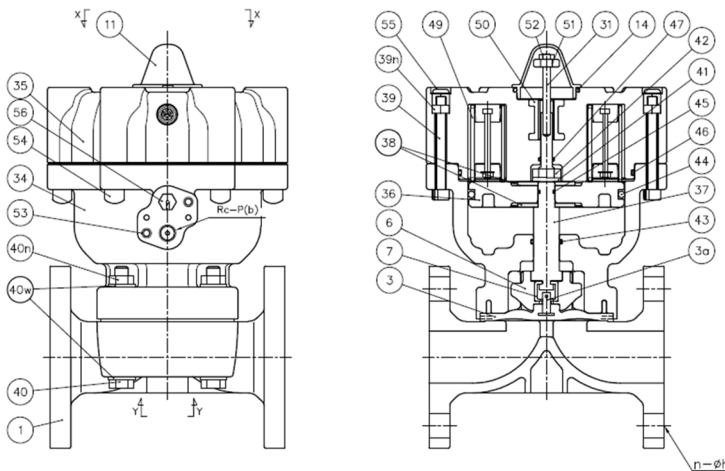
AUTOMATIC [PNEUMATIC] AIR TO OPEN: SIZE 15 - 32 mm



In case material of diaphragm is PTFE

PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1 BODY	1	PVC, C-PVC, PP, PVDF	36 PISTON	1	PPG	45 O-RING (No.45)	1	NBR
3 DIAPHRAGM	1	EPDM, PTFE, Others	37 STEM FOR PNEUMATIC ACTUATOR	1	COPPER ALLOY	46 O-RING (No.46)	1	NBR
3a INSERTED METAL OF DIAPHRAGM	1	STAINLESS STEEL	38 WASHER (No.38)	2	STAINLESS STEEL	47 O-RING (No.47)	1	NBR
4 CUSHION	1	EPDM	39 HEXAGON SOCKET HEAD CAP SCREWS	4	STAINLESS STEEL	49 SPRING UNIT	-	SWOSC-V etc
		Used for PTFE Diaphragm	39n NUT (No.39)	4	STAINLESS STEEL	50 INSERTED METAL OF CYLINDER COVER	1	STAINLESS STEEL
6 COMPRESSOR	1	PVDF	40 BOLT (No.40)	4	STAINLESS STEEL	51 STOPPER FOR PNEUMATIC ACTUATOR	1	STAINLESS STEEL
7 JOINT	1	STAINLESS STEEL	40w WASHER (No.40)	8	STAINLESS STEEL	52 NUT (No.52)	1	STAINLESS STEEL
11 GAUGE COVER	1	PC	40n NUT (No.40)	4	STAINLESS STEEL	53 INSERTED METAL OF CYLINDER BODY	2	STAINLESS STEEL
14 O-RING (No.14)	1	EPDM	41 SPRING WASHER	1	STAINLESS STEEL	54 CAP FOR HEXAGON SOCKET HEAD CAP SCREW	4	PVC
31 INDICATOR ROD	1	STAINLESS STEEL	42 NUT (No.42)	1	STAINLESS STEEL	55 CAP	4	EPDM
34 CYLINDER BODY	1	PPG	43 O-RING (No.43)	1	NBR			PN0.7:Red PN1.0:Blue
35 CYLINDER COVER	1	PPG	44 O-RING (No.44)	1	NBR	56 NIPPLE	1	COPPER ALLOY

AUTOMATIC [PNEUMATIC] AIR TO OPEN: SIZE 40,50 mm

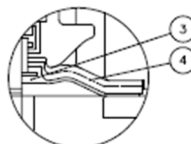
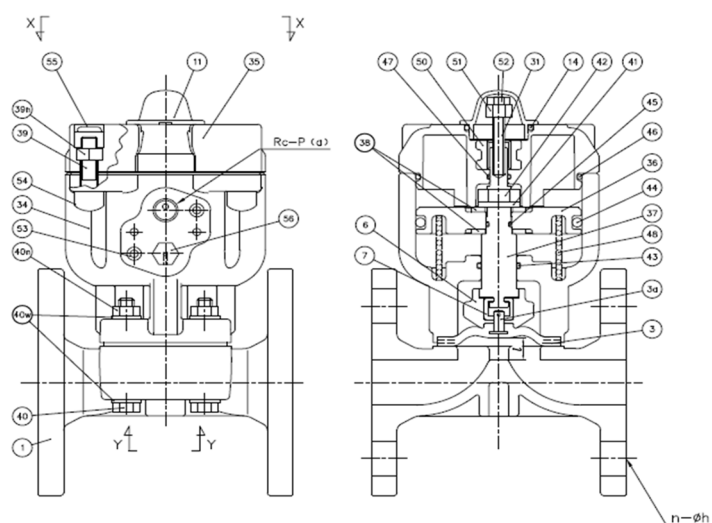


In case material of diaphragm is PTFE

PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1 BODY	1	PVC, C-PVC, PP, PVDF	37 STEM FOR PNEUMATIC ACTUATOR	1	COPPER ALLOY	47 O-RING (No.47)	1	NBR
3 DIAPHRAGM	1	EPDM, PTFE, Others	38 WASHER (No.38)	2	STAINLESS STEEL	49 SPRING UNIT	-	SWOSC-V etc
3a INSERTED METAL OF DIAPHRAGM	1	STAINLESS STEEL	39 BOLT (No.39)	6	STAINLESS STEEL			2"(PN1.0):SWOSC-B etc.
4 CUSHION	1	EPDM	39n NUT (No.39)	6	STAINLESS STEEL	50 INSERTED METAL OF CYLINDER COVER	1	STAINLESS STEEL
		Used for PTFE Diaphragm	40 BOLT (No.40)	4	STAINLESS STEEL	51 STOPPER FOR PNEUMATIC ACTUATOR	1	STAINLESS STEEL
6 COMPRESSOR	1	PVDF	40w WASHER (No.40)	8	STAINLESS STEEL	52 NUT (No.52)	1	STAINLESS STEEL
7 JOINT	1	STAINLESS STEEL	40n NUT (No.40)	4	STAINLESS STEEL	53 INSERTED METAL OF CYLINDER BODY	2	STAINLESS STEEL
11 GAUGE COVER	1	PC	41 SPRING WASHER	1	STAINLESS STEEL	54 CAP FOR HEXAGON SOCKET HEAD CAP SCREWS	6	PVC
14 O-RING (No.14)	1	EPDM	42 NUT (No.42)	1	STAINLESS STEEL	55 CAP	6	EPDM
31 INDICATOR ROD	1	STAINLESS STEEL	43 O-RING (No.43)	1	NBR			PN0.7:Red PN1.0:Blue
34 CYLINDER BODY	1	PPG	44 O-RING (No.44)	1	NBR	56 NIPPLE	1	COPPER ALLOY
35 CYLINDER COVER	1	PPG	45 O-RING (No.45)	1	NBR			
36 PISTON	1	PPG	46 O-RING (No.46)	1	NBR			

DATASHEET

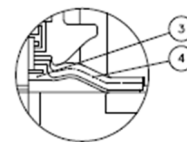
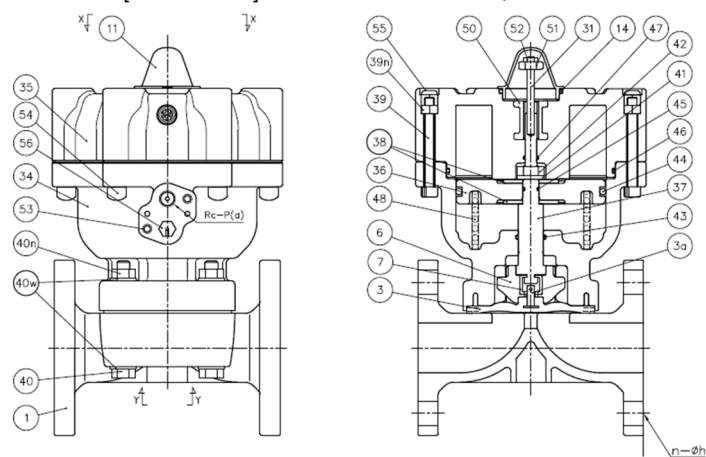
AUTOMATIC [PNEUMATIC] AIR TO CLOSE: SIZE 15 - 32 mm



In case material of diaphragm is PTFE

PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1 BODY	1	PVC, C-PVC, PP, PVDF	36 PISTON	1	PPG	45 O-RING (No.45)	1	NBR
3 DIAPHRAGM	1	EPDM, PTFE, Others	37 STEM FOR PNEUMATIC ACTUATOR	1	COPPER ALLOY	46 O-RING (No.46)	1	NBR
3a INSERTED METAL OF DIAPHRAGM	1	STAINLESS STEEL	38 WASHER (No.38)	2	STAINLESS STEEL	47 O-RING (No.47)	1	NBR
4 CUSHION	1	EPDM	39 HEXAGON SOCKET HEAD CAP SCREWS	4	STAINLESS STEEL	48 SPRING	1	SWOSC-B
		Used for PTFE Diaphragm	39n NUT (No.39)	4	STAINLESS STEEL	50 INSERTED METAL OF CYLINDER COVER	1	STAINLESS STEEL
6 COMPRESSOR	1	PVDF	40 BOLT (No.40)	4	STAINLESS STEEL	51 STOPPER FOR PNEUMATIC ACTUATOR	1	STAINLESS STEEL
7 JOINT	1	STAINLESS STEEL	40w WASHER (No.40)	8	STAINLESS STEEL	52 NUT (No.52)	1	STAINLESS STEEL
11 GAUGE COVER	1	PC	40n NUT (No.40)	4	STAINLESS STEEL	53 INSERTED METAL OF CYLINDER BODY	2	STAINLESS STEEL
14 O-RING (No.14)	1	EPDM	41 SPRING WASHER	1	STAINLESS STEEL	54 CAP FOR HEXAGON SOCKET HEAD CAP SCREW	4	PVC
31 INDICATOR ROD	1	STAINLESS STEEL	42 NUT (No.42)	1	STAINLESS STEEL	55 CAP	4	EPDM Blue
34 CYLINDER BODY	1	PPG	43 O-RING (No.43)	1	NBR	56 NIPPLE	1	COPPER ALLOY
35 CYLINDER COVER	1	PPG	44 O-RING (No.44)	1	NBR			

AUTOMATIC [PNEUMATIC] AIR TO CLOSE: SIZE 40,50 mm



In case material of diaphragm is PTFE

PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1 BODY	1	PVC, C-PVC, PP, PVDF	36 PISTON	1	PPG	45 O-RING (No.45)	1	NBR
3 DIAPHRAGM	1	EPDM, PTFE, Others	37 STEM FOR PNEUMATIC ACTUATOR	1	COPPER ALLOY	46 O-RING (No.46)	1	NBR
3a INSERTED METAL OF DIAPHRAGM	1	STAINLESS STEEL	38 WASHER (No.38)	2	STAINLESS STEEL	47 O-RING (No.47)	1	NBR
4 CUSHION	1	EPDM	39 BOLT (No.39)	6	STAINLESS STEEL	48 SPRING	1	SWOSC-B
		Used for PTFE Diaphragm	39n NUT (No.39)	6	STAINLESS STEEL	50 INSERTED METAL OF CYLINDER COVER	1	STAINLESS STEEL
6 COMPRESSOR	1	PVDF	40 BOLT (No.40)	4	STAINLESS STEEL	51 STOPPER FOR PNEUMATIC ACTUATOR	1	STAINLESS STEEL
7 JOINT	1	STAINLESS STEEL	40w WASHER (No.40)	8	STAINLESS STEEL	52 NUT (No.52)	1	STAINLESS STEEL
11 GAUGE COVER	1	PC	40n NUT (No.40)	4	STAINLESS STEEL	53 INSERTED METAL OF CYLINDER BODY	2	STAINLESS STEEL
14 O-RING (No.14)	1	EPDM	41 SPRING WASHER	1	STAINLESS STEEL	54 CAP FOR HEXAGON SOCKET HEAD CAP SCREW	6	PVC
31 INDICATOR ROD	1	STAINLESS STEEL	42 NUT (No.42)	1	STAINLESS STEEL	55 CAP	6	EPDM Blue
34 CYLINDER BODY	1	PPG	43 O-RING (No.43)	1	NBR	56 NIPPLE	1	COPPER ALLOY
35 CYLINDER COVER	1	PPG	44 O-RING (No.44)	1	NBR			

Diaphragms except EPDM and PTFE are available in FKM, VIFLON®C (FKM-C), VIFLON®F (FKM-F), CPE, CSM, NBR and IIR when required.
The shape and appearance of assembly differ a little with nominal size compared to this drawing.

Compatible Actuator

Has sufficient durability to withstand 500,000 cycles of opening/closing.
Can be used in limited piping space.
All-plastic body ensures excellent corrosion resistance.



BASIC SPECIFICATIONS

DOUBLE ACTING	ACTUATOR TYPE					UNIT
	AV-1DA	AV-2DA	AV-3DA	AV-4DA	AV-5DA	
OPERATING PRESSURE	0.4 - 0.6					MPa
AIR CONSUMPTION	0.89		1.29	4.35	4.80	NL ^{*1)} /OPEN & CLOSE (at 0.4MPa)
	1.07		1.55	5.22	5.76	NL ^{*1)} /OPEN & CLOSE (at 0.5MPa)
	1.25		1.80	6.09	6.72	NL ^{*1)} /OPEN & CLOSE (at 0.6MPa)
AIR SUPPLY BORE	Rc1/4					

AIR TO OPEN (0.7MPa SPEC.)	ACTUATOR TYPE					UNIT
	AV-1AO	AV-2AO	AV-3AO	AV-4AO	AV-5AO	
OPERATING PRESSURE	0.4 - 0.6					MPa
AIR CONSUMPTION	0.35		0.49	1.73	1.98	NL ^{*1)} /OPEN & CLOSE (at 0.4MPa)
	0.42		0.59	2.08	2.37	NL ^{*1)} /OPEN & CLOSE (at 0.5MPa)
	0.49		0.69	2.52	2.77	NL ^{*1)} /OPEN & CLOSE (at 0.6MPa)
AIR SUPPLY BORE	Rc1/4					

AIR TO OPEN (1.0MPa SPEC.)	ACTUATOR TYPE					UNIT
	AV-1AO-P/E ^{*2)}	AV-2AO-P/E ^{*2)}	AV-3AO-P/E ^{*2)}	AV-4AO-P/E ^{*2)}	AV-5AO-P/E ^{*2)}	
OPERATING PRESSURE	0.5 - 0.6					MPa
AIR CONSUMPTION	0.42		0.59	2.08	2.37	NL ^{*1)} /OPEN & CLOSE (at 0.5MPa)
	0.49		0.69	2.43	2.76	NL ^{*1)} /OPEN & CLOSE (at 0.6MPa)
AIR SUPPLY BORE	Rc1/4					

AIR TO CLOSE	ACTUATOR TYPE					UNIT
	AV-1AS	AV-2AS	AV-3AS	AV-4AS	AV-5AS	
OPERATING PRESSURE	0.4 - 0.6					MPa
AIR CONSUMPTION	0.54		0.79	2.63	2.82	NL ^{*1)} /OPEN & CLOSE (at 0.4MPa)
	0.65		0.95	3.15	3.38	NL ^{*1)} /OPEN & CLOSE (at 0.5MPa)
	0.76		1.11	3.68	3.95	NL ^{*1)} /OPEN & CLOSE (at 0.6MPa)
AIR SUPPLY BORE	Rc1/4					

*1) NL = Normal Liters

*2) P : PTFE Diaphragm E : EPDM Diaphragm

OPTION COMBINATION

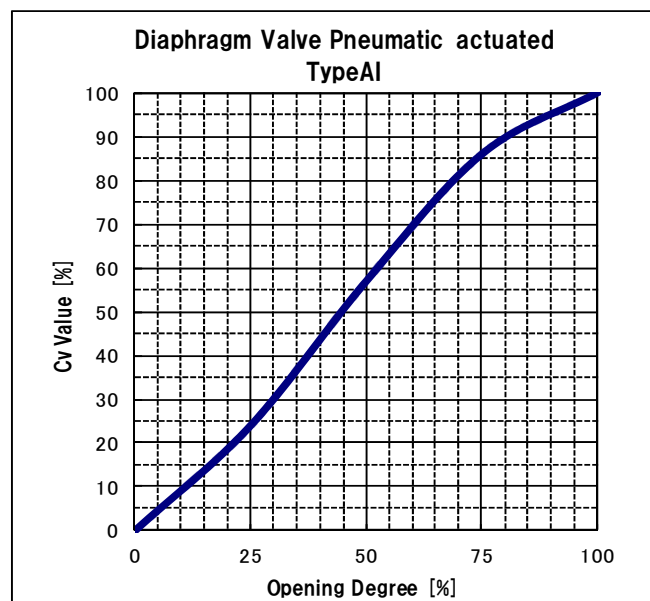
COMBINATION NO.	1	2	3	4	5	6	7	8	9
SOLENOID VALVE	○	—	—	○	○	—	○	—	—
FILTER REGULATOR	—	—	—	○	—	—	○	—	○
SPEED CONTROLLER ^{*1}	◎	○	—	◎	◎	○	◎	—	—
LIMIT SWITCH ^{*2}	—	—	○	—	○	○	○	—	—
POSITIONER (E/P,P/P)	—	—	—	—	—	—	—	○	○

*1 ◎ indicated solenoid valve-dedicated type.

*2 When using the limit switch at 1 to 100mA or 5 to 30V, contact our sales office in your area.

OPTION LIST	MANUFACTURER	BASIC SPECIFICATIONS
SOLENOID VALVE NAMUR	KONAN	▪ WATER PROOF, EXPLOSION PROOF ▪ POWER SOURCE AC100V, AC110V, AC200V, AC220V, DC24V
FILTER REGULATOR	KONAN	
SPEED CONTROLLER	KONAN	* Since a solenoid valve has a built-in exhaust valve, when a solenoid valve is mounted, no speed controller is necessary.
BYPASS VALVE (SPEED CONTROLLER)	KONAN	
LIMIT SWITCH BOX	Rotech	▪ WATER PROOF
LIMIT SWITCH	AZBIL (formerly YAMATAKE)	▪ WATER PROOF, EXPLOSION PROOF ▪ OPEN: 1pc, CLOSE: 1pc, OPEN/CLOSE: 2pcs
POSITIONER	YTC	▪ E/P: INPUT SIGNAL CURRENT DC 4-20 mA ▪ P/P: INPUT SIGNAL AIR PRESSURE 0.02 - 0.1 MPa
MANUAL OVERRIDE	ASAHI YUKIZAI	
FULL OPENING ADJUSTMENT	ASAHI YUKIZAI	

Cv value for each opening degree



FULL-OPEN Cv VALUE

mm	15	20	25	32	40	50
inch	1/2	3/4	1	1 1/4	1 1/2	2
FULL-OPEN Cv VALUE	4.8	7.2	10	11	26	48

DATASHEET

Product weight

TYPE 14 [AUTOMATIC PNEUMATIC TYPE AI]

Unit : kg

mm	inch	DOUBLE ACTING				AIR TO OPEN (0.7MPa TYPE)				AIR TO OPEN (1.0MPa TYPE)				AIR TO CLOSE			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
15	1/2	1.0	1.1	0.9	1.1	1.2	1.3	1.0	1.3	1.3	1.3	1.1	1.4	1.1	1.2	1.0	1.2
20	3/4	1.3	1.3	1.1	1.4	1.4	1.5	1.3	1.6	1.5	1.6	1.3	1.6	1.3	1.4	1.2	1.5
25	1	1.5	1.7	1.3	1.7	1.8	1.9	1.6	2.0	1.8	1.9	1.6	2.0	1.6	1.7	1.4	1.8
32	1 1/4	1.8	1.9	1.5	2.0	2.0	2.2	1.8	2.3	2.1	2.2	1.8	2.3	1.9	2.0	1.6	2.1
40	1 1/2	4.0	4.2	3.6	4.3	4.9	5.1	4.5	5.2	5.0	5.2	4.6	5.3	4.4	4.6	4.0	4.7
50	2	4.8	5.1	4.1	5.2	5.7	6.0	5.1	6.2	6.7	7.0	6.0	7.2	5.2	5.5	4.6	5.7

Product model code list

ACTUATION	TYPE	ACTUATOR TYPE	ACTION / POWER SOURCE	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE
A	DA	I	*	*	*	F	*	***
A AUTOMATIC VALVE	DA TYPE 14	I TYPE AI	F DOUBLE ACTING (1.0MPa TYPE) G AIR TO OPEN (0.7MPa TYPE) H AIR TO OPEN (1.0MPa TYPE) S AIR TO CLOSE (1.0MPa TYPE)	U U-PVC C C-PVC P PP F PVDF	E EPDM T PTFE	F FLANGED	1 JIS10K D DIN A ANSI	015 15mm 1 050 50mm

Installation, Operation and Maintenance Manual

For details of Installation, Operation and Maintenance, please contact our nearest distribution agent or sales office.