

DIAPHRAGM VALVE TYPE 15

- NEAR-LINEAR FLOW CHARACTERISTICS
- REQUIRES LESS HANDLE OPERATION FORCE THANKS TO IMPROVED MATERIAL AND SHAPE.
- THE GAUGE COVER ALSO SERVES AS AN INDICATOR, ALLOWING EASY CHECK OF OPENING DEGREE.

BASIC SPECIFICATIONS

VALVE TYPE ————— **DIAPHRAGM VALVE TYPE 15**

SIZE ————— **125 mm, 150 mm (5 inch, 6 inch)**

BODY MATERIAL ————— **U-PVC PP PVDF**

SEAL MATERIAL / DIAPHRAGM ————— **EPDM PTFE FKM etc.**

CONNECTION / FLANGED ————— **JIS10K, DIN PN10, ANSI CLASS150**

	FLUID TEMPERATURE	MAXIMUM WORKING PRESSURE (NORMAL TEMPERATURE) MPa(kgf/cm ²)				CONNECTION METHOD
		DIAPHRAGM: RUBBER		DIAPHRAGM: PTFE		
		125mm	150mm	125mm	150mm	FLANGED
U-PVC	0°C ~ 60°C	0.8 {8.2}	0.8 {8.2}	0.7 {7.1}	0.5 {5.1}	○
PP	-20°C ~ 90°C	0.8 {8.2}	0.8 {8.2}	0.7 {7.1}	0.5 {5.1}	○
PVDF	-40°C ~ 120°C	0.8 {8.2}	0.8 {8.2}	0.7 {7.1}	0.5 {5.1}	○

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.

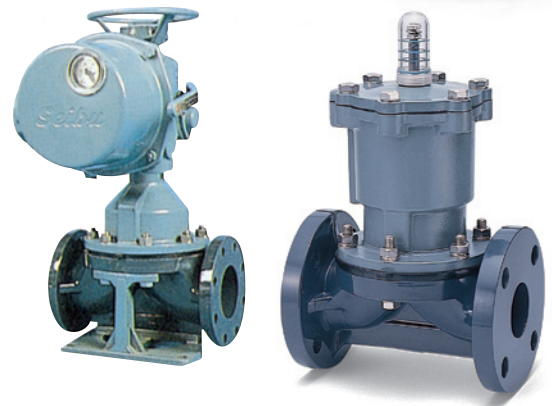
* Concerning the allowable pressure for each temperature, material and actuator type, see the technical documents at the end of this catalog.

* 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 nuts between the bonnet and the body to the "bonnet tightening torque". (Failure to do so may cause fluid leakage.)

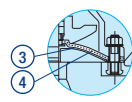
MANUAL



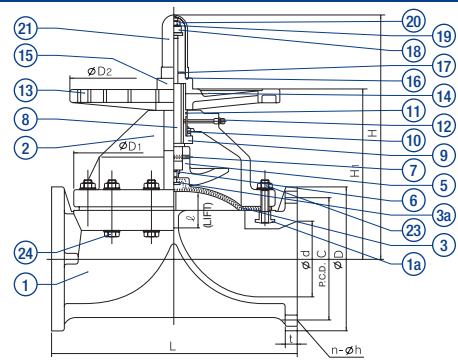
AUTOMATIC



PARTS LIST **MANUAL**



WHEN DIAPHRAGM MATERIAL IS PTFE



PART NO. / NAME	QTY	MATERIAL	PART NO. / NAME	QTY	MATERIAL	PART NO. / NAME	QTY	MATERIAL
① BODY	1	BODY ——— BONNET U-PVC ——— U-PVC PP ——— PP PVDF ——— PPG ⁽¹⁾ PVDF ——— PVDF	⑦ COMPRESSOR PIN	1	SUS304	⑰ VALVE SEAT	1	SUS304
② BONNET	1		⑧ STEM	1	C3604	⑱ STOPPER	1	SS400 (Unichrome plating)
③ DIAPHRAGM	1	EPDM, PTFE, etc.	⑨ SLEEVE (A)	1	C3604	⑲ SPRING WASHER	1	SUS304
③a EMBEDDED DIAPHRAGM FITTING	1	SUS304	⑩ THRUST BEARING (A)	1	SUJ2	⑳ SET NUT	1	SUS304
④ CUSHION ⁽²⁾	1	EPDM, etc.	⑪ O-RING (A)	1	NBR	㉑ GAUGE COVER	1	PC
⑤ COMPRESSOR	1	PVDF	⑫ GREASE NIPPLE	1	C3604	㉒ BOLT/NUT	4	SUS304
⑥ COMPRESSOR NUT	1	C3604	⑬ HANDLE	1	PP	㉓ BOLT/NUT	—	SUS304
			⑭ NAMEPLATE	1	U-PVC	㉔ BOLT/NUT	—	SUS304
			⑮ CAP	1	PP	㉕ STUD NUT	4	C3604 ⁽³⁾ , SUS304 ⁽⁴⁾
			⑯ GASKET (A)	1	EPDM			

NOTE (1) Bonnet PPG 15 – 100 mm: black. 125 – 250 mm: ivory. (2) is used when the diaphragm material is PTFE. (3) is used when the body material is U-PVC or PP. (4) is used when the body material is PVDF.

HANDLE ROTATION [FULL OPEN (ROTATION/LIFT) FULL CLOSE] MANUAL			
SIZE	ROTATION	SIZE	ROTATION
125mm (5inch)	10.0	150mm (6inch)	11.0

COMPATIBLE ACTUATOR **AUTOMATIC**

PNEUMATIC	TYPE AV	For detailed specifications, see P.118	ELECTRIC	TYPE H	For detailed specifications, see P.125
			ELECTRIC	TYPE S	For detailed specifications, see P.131

PRODUCT MODEL
CODE LIST
MANUAL

ACTUATION	TYPE	OPERATING SYSTEM	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE
V	15	MH	*	*	F	*	***
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
V MANUAL VALVE	15 TYPE 15	MH ROUND HANDLE	U U-PVC P PP F PVDF G PVDF+PPG	E EPDM T PTFE	F FLANGED	1 10K 5 5K D DIN A ANSI	125 125mm 150 150mm

PRODUCT MODEL
CODE LIST
AUTOMATIC

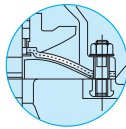
ACTUATION	TYPE	ACTUATOR TYPE	ACTION / POWER SOURCE	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE
A	15	*	*	*	*	F	*	***
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
A AUTOMATIC VALVE	15 TYPE 15	PNEUMATIC V TYPE AV ELECTRIC H TYPE H S TYPE S	PNEUMATIC F DOUBLE ACTING G AIR TO OPEN S AIR TO CLOSE ELECTRIC 1 Single-Phase 100V 2 Single-Phase 200V 3 Three-Phase AC200V 4 Three-Phase AC400V	U U-PVC P PP F PVDF	E EPDM T PTFE	F FLANGED	1 JIS10K 5 JIS5K D DIN A ANSI	125 125mm 150 150mm

MANUAL

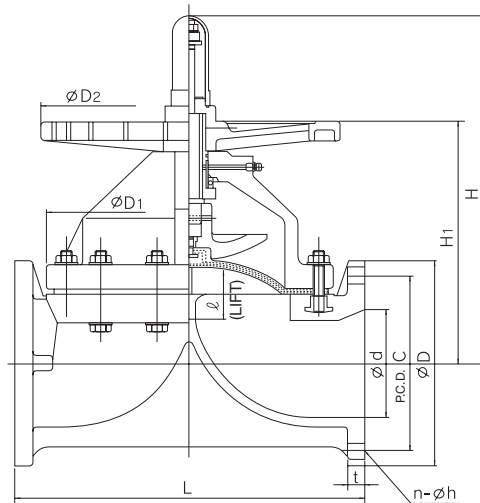
DIAPHRAGM VALVE TYPE 15

TYPE—V15MH

CONNECTION / FLANGED—JIS, DIN, ANSI



WHEN DIAPHRAGM
MATERIAL IS PTFE



■ JIS, DIN (Unit: mm)

mm	d	D ₁	D ₂	ℓ	H	H ₁	JIS						DIN PN10											
							JIS5K			JIS10K			L		t		DIN PN10			t				
							D	C	n	h	D	C	n	h	L	U-PVC	PP PVDF	D	C	n	h	L	U-PVC	PP PVDF
125	125	320	300	60	420	308	235	200	8	19	250	210	8	23	410	22	24	250	210	8	18	400	22	23
150	148	385	410	70	476	334	265	230	8	19	280	240	8	23	480	24	27	285	240	8	22	480	24	27

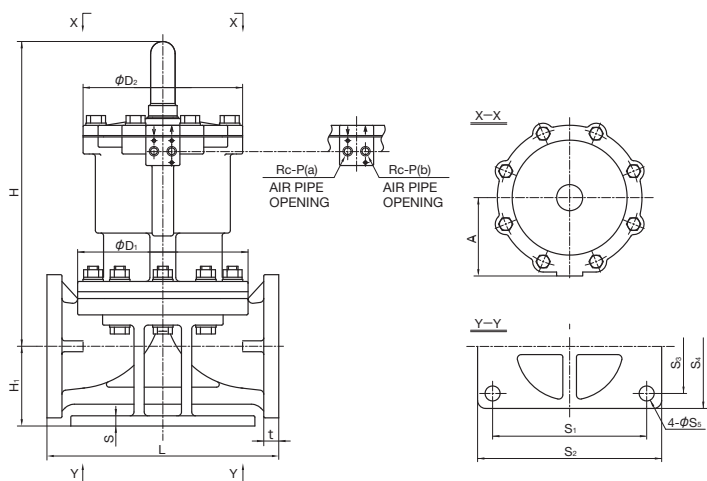
■ ANSI (Unit: inch)

inch	mm	d	D ₁	D ₂	ℓ	H	H ₁	ANSI							
								ANSI CLASS150					t		
								D	C	n	h	L	U-PVC	PP PVDF	
5	125	4.92	12.60	11.81	2.36	16.54	12.13	10.00	8.50	8	0.88	16.14	0.87	0.94	
6	150	5.83	15.16	16.14	2.76	18.74	13.15	11.00	9.50	8	0.88	18.90	0.94	1.06	

AUTOMATIC PNEUMATIC TYPE AV
DOUBLE ACTING
 AIR TO OPEN
 AIR TO CLOSE

DIAPHRAGM VALVE TYPE 15

TYPE—A15V
 CONNECTION / FLANGED—JIS, DIN, ANSI



ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE
125mm (5inch)	AV-4DA
150mm (6inch)	AV-5DA

For detailed specifications, see P.118

■ JIS, DIN (Unit: mm)

mm	D ₁	D ₂	A	H	H ₁	S	S ₁	S ₂	S ₃	S ₄	S ₅	P	JIS5K, JIS10K			DIN PN10		
													L	U-PVC	PP PVDF	L	U-PVC	PP PVDF
125	320	305	150	508	134	15	310	350	280	320	23	1/4	410	22	24	400	22	23
150	385	385	195	566	145	16	360	400	310	350	23	1/4	480	24	27	480	24	27

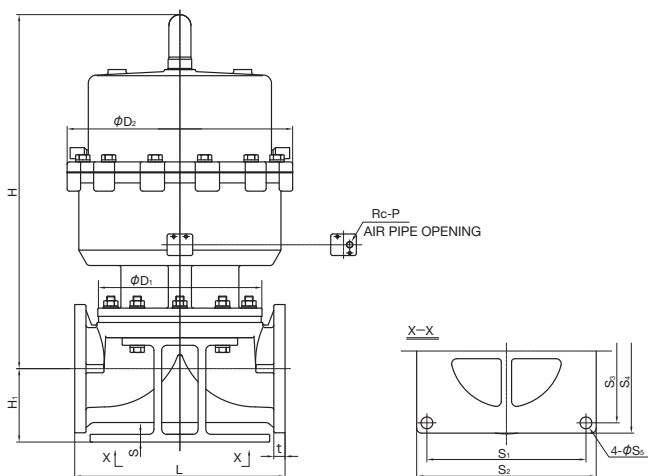
■ ANSI (Unit: inch)

inch	mm	D ₁	D ₂	A	H	H ₁	S	S ₁	S ₂	S ₃	S ₄	S ₅	P	ANSI CLASS150		
														L	U-PVC	PP PVDF
5	125	12.60	12.01	5.91	20.00	5.28	0.59	12.20	13.78	11.02	12.60	0.91	1/4	16.14	0.87	0.94
6	150	15.16	15.16	7.68	22.28	5.71	0.63	14.17	15.75	12.20	13.78	0.91	1/4	18.90	0.94	1.06

AUTOMATIC PNEUMATIC TYPE AV
DOUBLE ACTING
 AIR TO OPEN
 AIR TO CLOSE

DIAPHRAGM VALVE TYPE 15

TYPE—A15V
 CONNECTION / FLANGED—JIS, DIN, ANSI



ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE
125mm (5inch)	AV-4A0
150mm (6inch)	AV-5A0

For detailed specifications, see P.118

■ JIS, DIN (Unit: mm)

mm	D ₁	D ₂	H	H ₁	H ₂	S	S ₁	S ₂	S ₃	S ₄	S ₅	P	JIS5K, JIS10K			DIN PN10		
													L	U-PVC	PP PVDF	L	U-PVC	PP PVDF
125	320	455	690	143	15	310	350	280	320	23	1/4	410	22	24	400	22	23	
150	385	520	790	148	16	360	400	310	350	23	1/4	480	24	27	480	24	27	

■ ANSI (Unit: inch)

inch	mm	D ₁	D ₂	H	H ₁	H ₂	S	S ₁	S ₂	S ₃	S ₄	S ₅	P	ANSI CLASS150		
														L	U-PVC	PP PVDF
5	125	12.60	17.91	20.00	5.28	0.59	12.20	13.78	11.02	12.60	0.91	1/4	16.14	0.87	0.94	
6	150	15.16	20.47	22.28	5.71	0.63	14.17	15.75	12.20	13.78	0.91	1/4	18.90	0.94	1.06	

AUTOMATIC

PNEUMATIC

TYPE AV

DOUBLE ACTING

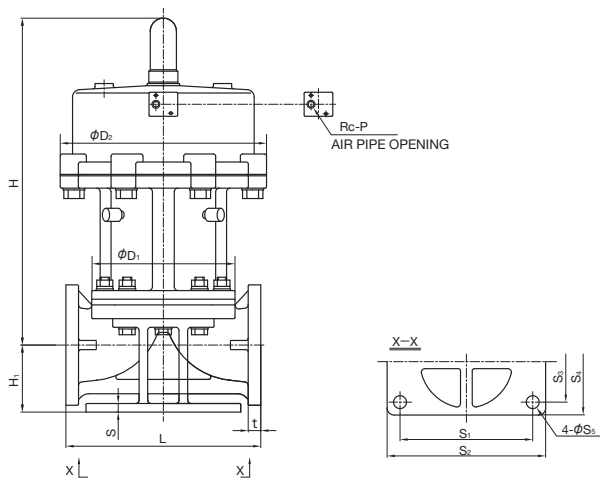
AIR TO OPEN

AIR TO CLOSE

DIAPHRAGM VALVE TYPE 15

TYPE—A15V

CONNECTION / FLANGED—JIS, DIN, ANSI



ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE
125mm (5inch)	AV-4AS
150mm (6inch)	AV-5AS

For detailed specifications, see **P.118**

■ JIS, DIN (Unit: mm)

mm	D ₁	D ₂	H	H ₁	S	S ₁	S ₂	S ₃	S ₄	S ₅	P	JIS5K, JIS10K			DIN PN10				
												L	t		L	t			
125	320	455	653	143	15	310	350	280	320	23	1/4	410	U-PVC	PP PVDF	24	400	U-PVC	PP PVDF	23
150	385	520	722	148	16	360	400	310	350	23	1/4	480	24	27	480	24	27		

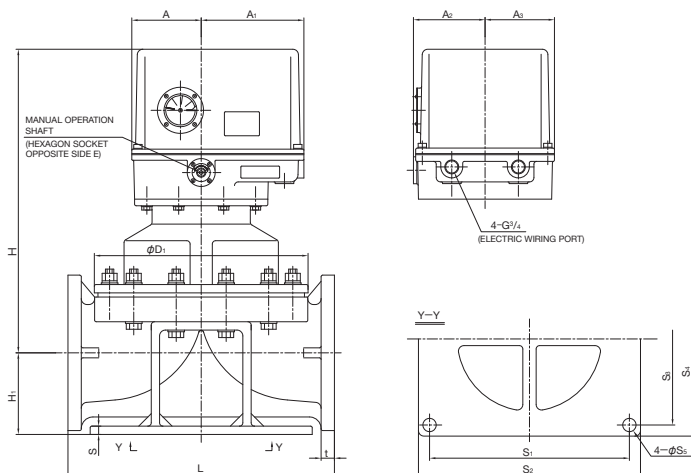
■ ANSI (Unit: inch)

inch	mm	D ₁	D ₂	H	H ₁	S	S ₁	S ₂	S ₃	S ₄	S ₅	P	ANSI CLASS150				
													L	t			
5	125	12.60	17.91	25.71	5.63	0.59	12.20	13.78	11.02	12.60	0.91	1/4	16.14	U-PVC	PP PVDF	0.87	0.94
6	150	15.16	20.47	28.43	5.83	0.63	14.17	15.75	12.20	13.78	0.91	1/4	18.90	0.94	1.06		

AUTOMATIC **ELECTRIC** **TYPE H** Single-Phase 100V
Single-Phase 200V

DIAPHRAGM VALVE TYPE 15

TYPE—A15H
CONNECTION / FLANGED—JIS, DIN, ANSI



ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE
125mm (5inch)	ED-30H
150mm (6inch)	

For detailed specifications, see **P.125**

■ JIS, DIN (Unit: mm)

mm	D ₁	H	H ₁	A	A ₁	A ₂	A ₃	S	S ₁	S ₂	S ₃	S ₄	S ₅	E	JIS5K, JIS10K			DIN PN10				
															L	t		L	t			
125	320	510	134	125	185	129	125	15	310	350	280	320	23	6	410	U-PVC	PP	PVDF	400	U-PVC	PP	PVDF
150	385	550	145	125	185	129	125	16	360	400	310	350	23	6	480	22	24	27	480	22	23	27

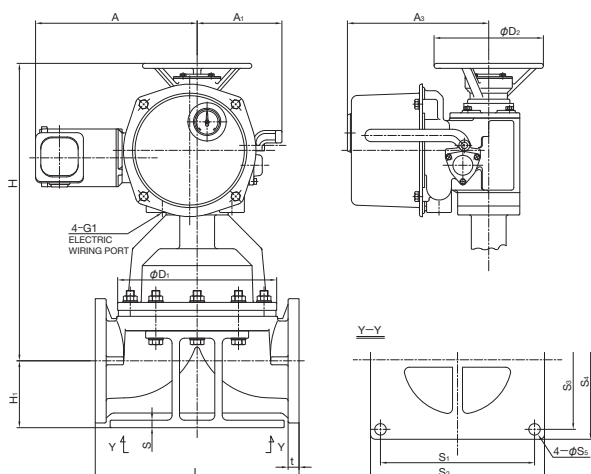
■ ANSI (Unit: inch)

inch	mm	D ₁	H	H ₁	A	A ₁	A ₂	A ₃	S	S ₁	S ₂	S ₃	S ₄	S ₅	E	ANSI CLASS150					
																L	t				
5	125	12.60	20.08	5.28	4.92	7.28	5.08	4.92	0.59	12.20	13.78	11.02	12.60	0.91	0.24	16.14	U-PVC	PP	PVDF	0.87	0.94
6	150	15.16	21.65	5.71	4.92	7.28	5.08	4.92	0.63	14.17	15.75	12.20	13.78	0.91	0.24	18.90	0.94	1.06			

AUTOMATIC **ELECTRIC** **TYPE S** Three-Phase AC200V
Three-Phase AC400V

DIAPHRAGM VALVE TYPE 15

TYPE—A15S
CONNECTION / FLANGED—JIS, DIN, ANSI



ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE
125mm (5inch)	LTRM-01

For detailed specifications, see **P.131**

■ JIS, DIN (Unit: mm)

mm	D ₁	D ₂	H	H ₁	A	A ₁	A ₃	S	S ₁	S ₂	S ₃	S ₄	S ₅	E	JIS5K, JIS10K			DIN PN10				
															L	t		L	t			
125	320	220	590	134	325	171	284	15	310	350	280	320	23	6	410	U-PVC	PP	PVDF	400	U-PVC	PP	PVDF

■ ANSI (Unit: inch)

inch	mm	D ₁	D ₂	H	H ₁	A	A ₁	A ₃	S	S ₁	S ₂	S ₃	S ₄	S ₅	E	ANSI CLASS150					
																L	t				
5	125	12.60	8.66	23.23	5.28	12.80	6.73	11.18	0.59	12.20	13.78	11.02	12.60	0.91	0.24	16.14	U-PVC	PP	PVDF	0.87	0.94

AUTOMATIC

ELECTRIC

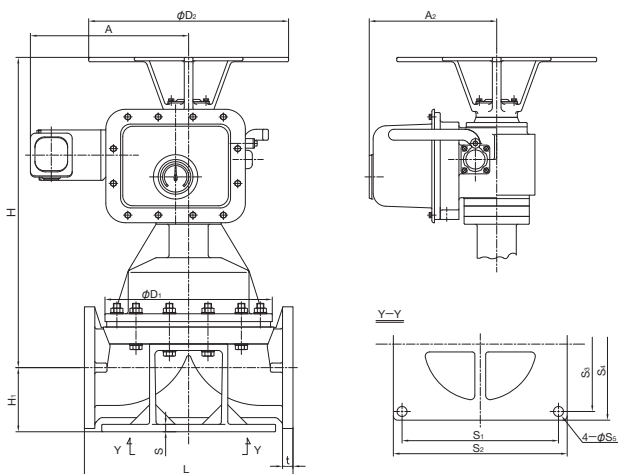
TYPE S

Three-Phase
AC200V
+
Three-Phase
AC400V

DIAPHRAGM VALVE TYPE 15

TYPE—A15S

CONNECTION / FLANGED—JIS, DIN, ANSI



ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE
150mm (6inch)	LTMD-01 (AUTOMATIC RETURN) MECHANISM
	LTKD-01 (MANUAL RETURN) MECHANISM

For detailed specifications, see **P.131**

■ JIS, DIN (Unit: mm)

mm	D1	D2	H	H1	A	A2	S	S1	S2	S3	S4	S5	JIS5K, JIS10K			DIN PN10		
													L	t	PP PVDF	L	t	PP PVDF
150	385	460	714	145	357	293	16	360	400	310	350	23	480	24	27	480	24	27

■ ANSI (Unit: inch)

inch	mm	D1	D2	H	H1	A	A2	S	S1	S2	S3	S4	S5	ANSI CLASS150		
														L	t	PP PVDF
6	150	15.16	18.11	28.11	5.71	14.06	11.54	0.63	14.17	15.75	12.20	13.78	0.91	18.90	0.94	1.06