

DIAPHRAGM VALVE TYPE 14 15mm - 100mm (1/2inch - 4inch)

FEATURES

- 15mm(1/2inch) – 50mm(2inch)
- 65mm(2 1/2inch) – 100mm(4inch)



Excellent Sealing Property

The DIAPHRAGM VALVE TYPE 14 uses a high quality rubber material, exhibiting lower compressive strain, for its diaphragm and cushion, resulting in optimum sealing performance.

Tight Seal at Low Torque

Using dynamic analysis by CAE, DIAPHRAGM VALVE TYPE 14 is designed so that pressure is distributed evenly. This design allows the hand wheel torque be reduced and maintain shut off at low torque.

Easier Maintenance

A bayonet mechanism, provided between the diaphragm and compressor, allows the diaphragm to be replaced easily.

Bottom Stand for Easy Support

Having a new bottom stand with an insert hole, DIAPHRAGM VALVE TYPE 14 helps support the piping. The valve is also provided with a flange stand to increase installation safety.

Built-in Travel Stop

DIAPHRAGM VALVE TYPE 14 contains a revolutionary travel stop mechanism protecting the diaphragm.

Visual Indicator

A color indicator clearly shows whether the valve is fully-opened, half-opened, or fully-closed. Because the indicator enters the handle, going out of view when the valve is fully-closed, the operator would know at glance of valve position valve is fully-opened, half-opened.

MATERIAL AND WORKING TEMPERATURE

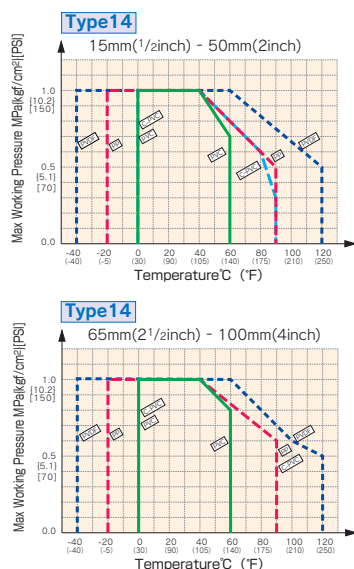
Body Material	Nominal Size mm(inch)	Working Temperature °C (°F)	Max. Working Pressure at 20°C (70°F) MPa{kgf/cm²} [PSI]	End Connectors
			15mm - 100mm (1/2inch - 4inch)	
PVC	15 - 100 (1/2 - 4)	0 - 60 (30 - 140)	1.0 {10.2} [150]	Flanged End
C-PVC	15 - 100 (1/2 - 4)	0 - 90 (30 - 195)	1.0 {10.2} [150]	Flanged End
PP	15 - 100 (1/2 - 4)	-20 - 90 (-5 - 195)	1.0 {10.2} [150]	Flanged End
PVDF	15 - 100 (1/2 - 4)	-40 - 120 (-40 - 250)	1.0 {10.2} [150]	Flanged End

Material Examples



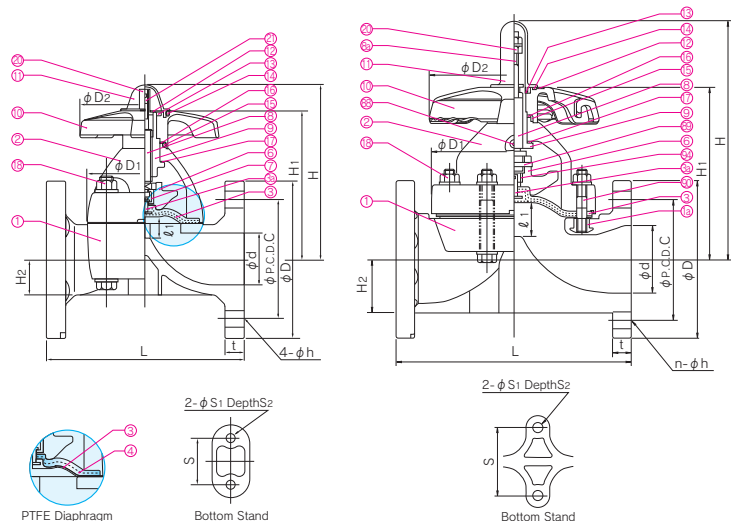
※ PPG Bonnet is also available.

WORKING PRESSURE VS. TEMPERATURE



DIMENSION

- 15mm(1/2inch) - 50mm(2inch)
- 65mm(2 1/2inch) - 100mm(4inch)



PARTS & MATERIALS

No.	DESCRIPTION	Pcs.	MATERIAL	No.	DESCRIPTION	Pcs.	MATERIAL
①	BODY	1	BODY/BONNET, PVC/PVC,C-PVC/PP,PP,PVDF/PPG,PVDF/PVDF	⑬	RETAINING RING-C TYPE	1	STAINLESS STEEL304
②	BONNET	1		⑭	O-RING(A)	1	EPDM
③	DIAPHRAGM	1	EPDM,IIR,NBR,CSM,CPE,FKM VIFLON C(FKM-C), VIFLON F(FKM-F), PTFE	⑮	O-RING(B)	1	EPDM
				⑯	THRUST RING(A)	1	UHMWPE
③a	INSERTED METAL OF DIAPHRAGM	1	STAINLESS STEEL304	⑰	THRUST RING(B)	1	UHMWPE
④	CUSHION	1	EPDM ¹⁾	⑱	BOLT·NUT	4	STAINLESS STEEL304
⑤	PVDF GAS BARRIER(OPTION)	1	PVDF	⑳	STOPPER	1	COPPER ALLOY ²⁾ , STAINLESS STEEL ³⁾ 304
⑥	COMPRESSOR	1	PVDF	㉑	SCREW ²⁾	1	SCM435
⑦	JOINT ²⁾	1	STAINLESS STEEL304	㉒	GREASE NIPPLE ³⁾	1	COPPER ALLOY(C3604)
⑧	STEM	1	COPPER ALLOY	㉓	COMPRESSOR PIN ³⁾	1	STAINLESS STEEL304
⑧a	INDICATOR ROD2)	1	STAINLESS STEEL304	㉔	STUD BOLT·NUT ³⁾	4	STAINLESS STEEL304
⑨	SLEEVE	1	COPPER ALLOY(C3604)	㉕	METAL OF COMPRESSOR	1	STAINLESS STEEL304
⑩	HAND WHEEL	1	PP	⑩a	INSERTED NUT ³⁾	4	COPPER ALLOY(C3604) STAINLESS STEEL304
⑪	GAUGE COVER	1	POLYCARBONATE				
⑫	NAME PLATE	1	PVC				

Note. 1) Used for PTFE diaphragm

2) Used for 15mm(1/2inch)-50mm(2inch)

3) Used for size 65mm(2 1/2inch)-100mm(4inch)

DIMENSIONS TABLE

Nominal Size		d	JIS 10K				D ₁	D ₂	ℓ ₁ (LIFT)	L	t		H	H ₁	H ₂	S	S ₁	S ₂
mm	inch		D	C	n	h					PVC C-PVC	PP PVDF						
15	1/2	16	95	70	4	15	54×66	100	10	110	12	12	104	86	19.5	25	7	13
20	3/4	20	100	75	4	15	54×66	100	10	120	13	13	106	88	17.5	25	7	13
25	1	25	125	90	4	19	67×80	100	12	130	13	13	111	93	18.5	25	7	13
32	1 1/4	32	135	100	4	19	67×80	100	12	142	16	16	116	97	22.5	25	7	13
40	1 1/2	40	140	105	4	19	108×108	156	21	180	16	16	177	144	27.5	45	9	15
50	2	52	155	120	4	19	123×123	156	25	210	20	20	191	158	36	45	9	15
65	2 1/2	67	175	140	4	19	175	220	34	250	22	23	266	188	61	85	11	20
80	3	78	185	150	8	19	201	220	42	280	22	23	280	202	63	100	15	28
100	4	100	210	175	8	19	241	257	50	340	22	24	329	241	78	120	15	28

Nominal Size		d	DIN 2501 PN10				D ₁	D ₂	ℓ ₁ (LIFT)	L	t		H	H ₁	H ₂	S	S ₁	S ₂
mm	inch		D	C	n	h					PVC C-PVC	PP PVDF						
15	1/2	16	95	65	4	14	54×66	100	10	130	12	12	104	86	19.5	25	7	13
20	3/4	20	105	75	4	14	54×66	100	10	150	13	13	106	88	17.5	25	7	13
25	1	25	115	85	4	14	67×80	100	12	160	13	13	111	93	18.5	25	7	13
32	1 1/4	32	140	100	4	18	67×80	100	12	180	16	16	116	97	22.5	25	7	13
40	1 1/2	40	150	110	4	18	108×108	156	21	200	20	20	177	144	27.5	45	9	15
50	2	52	165	125	4	18	123×123	156	25	230	22	22	191	158	36	45	9	15
65	2 1/2	67	185	145	4	18	175	220	34	290	22	22	266	188	61	85	11	20
80	3	78	200	160	8	18	201	220	42	310	24	24	280	202	63	100	15	28
100	4	100	220	180	8	18	241	257	50	350	24	26	329	241	78	120	15	28

Nominal Size		d	ANSI CLASS 150				D ₁	D ₂	ℓ ₁ (LIFT)	L		t		H	H ₁	H ₂	S	S ₁	S ₂
inch	mm		D	C	n	h				G-STANDARD	A-STANDARD	PVC C-PVC	PP PVDF						
1/2	15	0.63	3.50	2.38	4	0.62	2.13×2.60	3.94	0.39	4.25	4.33	0.43	0.43	4.09	3.39	0.77	0.98	0.28	0.51
3/4	20	0.79	3.88	2.75	4	0.62	2.13×2.60	3.94	0.39	5.88	4.72	0.51	0.51	4.17	3.46	0.69	0.98	0.28	0.51
1	25	0.98	4.25	3.12	4	0.62	2.64×3.15	3.94	0.47	5.88	5.12	0.59	0.59	4.37	3.66	0.73	0.98	0.28	0.51
1 1/4	32	1.26	4.62	3.50	4	0.62	2.64×3.15	3.94	0.47	6.38	—	0.63	0.63	4.57	3.82	0.89	0.98	0.28	0.51
1 1/2	40	1.57	5.00	3.88	4	0.62	4.25×4.25	6.14	0.83	6.94	7.09	0.63	0.63	6.97	5.67	1.08	1.77	0.35	0.59
2	50	2.05	6.00	4.75	4	0.75	4.84×4.84	6.14	0.98	7.94	8.27	0.79	0.79	7.52	6.22	1.42	1.77	0.35	0.59
2 1/2	65	2.64	7.00	5.50	4	0.75	6.89	8.66	1.34	—	9.84	0.87	0.91	10.47	7.40	2.40	3.35	0.43	0.79
3	80	3.07	7.50	6.00	4	0.75	7.91	8.66	1.65	10.37	11.02	0.87	0.91	11.02	7.95	2.48	3.94	0.59	1.10
4	100	3.94	9.00	7.50	8	0.75	9.49	10.12	1.97	12.93	13.39	0.87	0.94	12.95	9.49	3.07	4.72	0.59	1.10