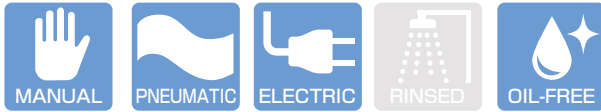


JIS ANSI/ASME/ASTM DIN/ISO



Operating Temperature(°C)

	Flange Type	Union Type
PVC	0 ~ 60	0 ~ 50
HT-CPVC	0 ~ 90	0 ~ 90
PP	0 ~ 90	
PVDF	0 ~ 120	0 ~ 100



Flange Type

True Union Type
(Thread Type·TS Socket Type and Butt Spigot Type)

DIAPHRAGM VALVE

Feature

- Excellent sealing performance with optimized diaphragm design even by low handle operating torque.
- Improved diaphragm in compression set steadily prevents leakage.
- Available customized version for the applications in high temperature.
- Visual indicator at the handle top for open-close position and prevention of over tightening.
- Drip-proof and dust-proof mechanism for prevention of entering water and dust in bonnet.
- Flat at the bottom of flange and insert nuts for prevention of tumbling and for better workability in plumbing.

⚠ Important Notes

- Fluid containing slurry, solid, sediment, or crystallized fluid might disable sealing.

Recommended Torque for Fastening Diaphragm

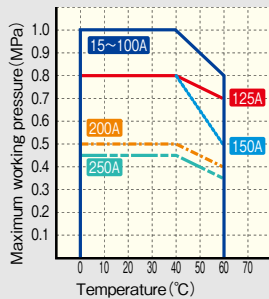
•Please periodically check tightening torque of the bolts for assembling diaphragm as the bolts might be loosen by temperature variation or compression set of diaphragm. Please re-tighten the bolt up to recommended torque shown in the table below in case the bolts loosen, but be careful not to over-tighten.

	Unit:N·m(kgf·cm)									
Size(A)	15~32	40	50	65	80	100	125	150	200	250
Recommended Torque	8 {80}	20 {200}	25 {250}	30 {300}	35 {350}	50 {500}	60 {600}	70 {700}	80 {800}	100 {1000}

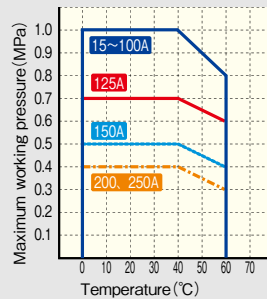
Maximum Working Pressure - Temperature Rating

Body material : PVC

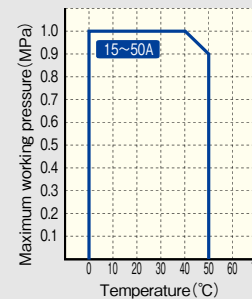
Diaphragm : EPDM • FKM
Connection : Flanged



Diaphragm : PTFE
Connection : Flanged

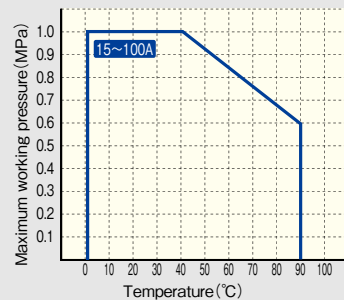


Diaphragm : EPDM • FKM • PTFE
Connection : TS Socket • Threaded

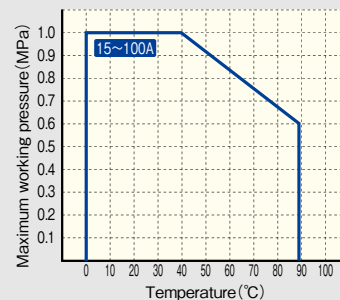


Body material : HT • CPVC

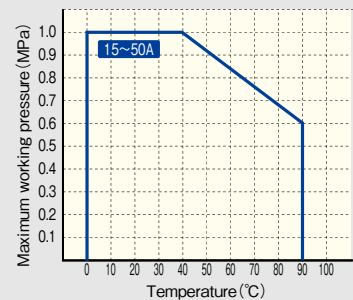
Diaphragm : EPDM • FKM
Connection : Flanged



Diaphragm : PTFE
Connection : Flanged

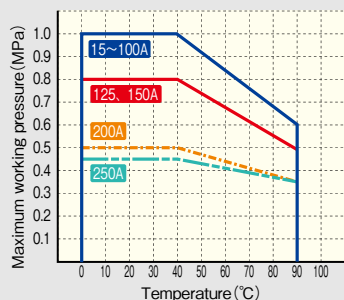


Diaphragm : EPDM • FKM • PTFE
Connection : TS Socket

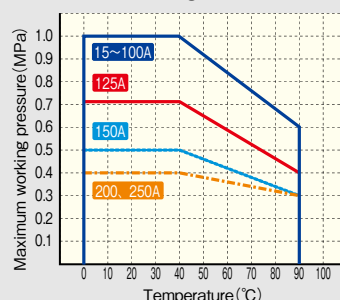


Body material : PP

Diaphragm : EPDM • FKM
Connection : Flanged

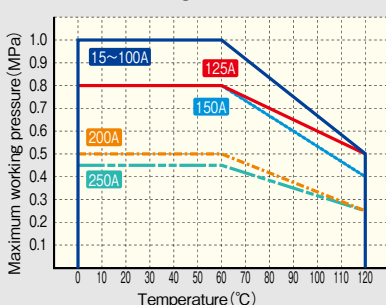


Diaphragm : PTFE
Connection : Flanged

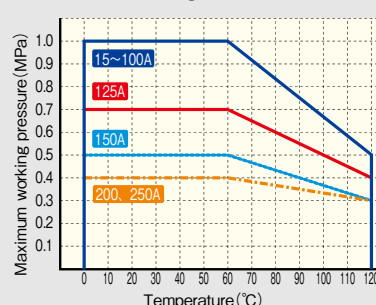


Body material : PVDF

Diaphragm : EPDM • FKM
Connection : Flanged



Diaphragm : PTFE
Connection : Flanged



Diaphragm : EPDM • FKM • PTFE
Connection : Butt Spigot • Threaded

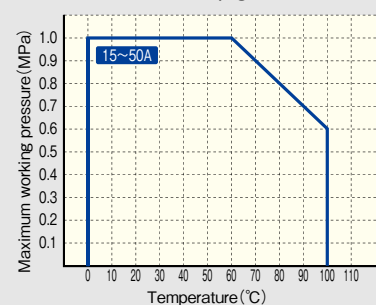
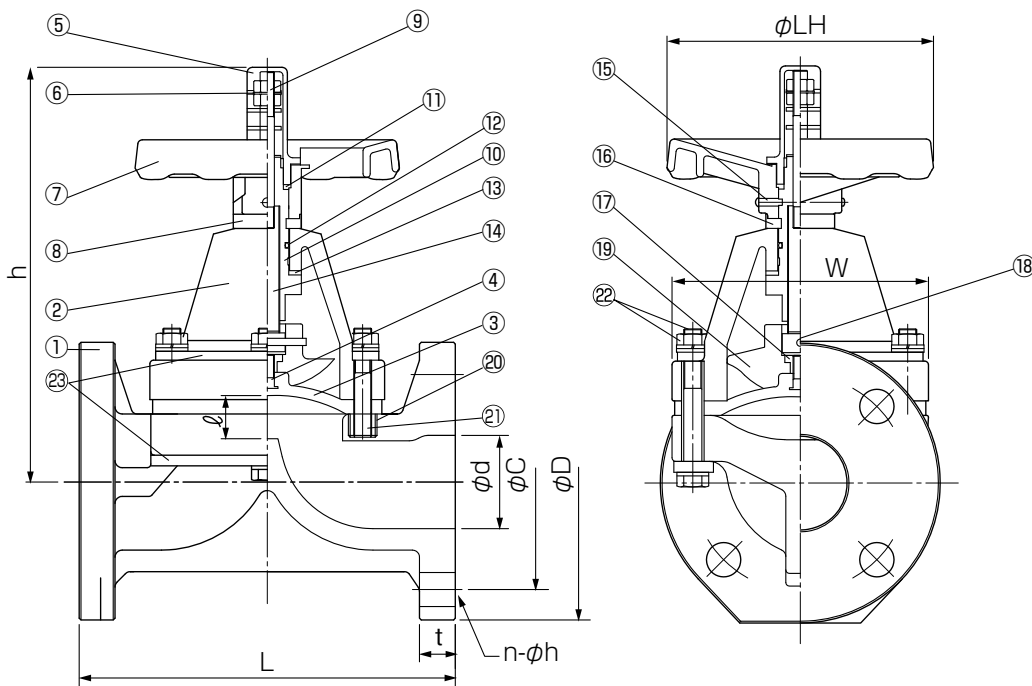


Figure (Flange Type)



Parts List

No.	Part Name	Q'TY	Material/Color	No.	Part Name	Q'TY	Material/Color
1	Body	1	Body/Bonnet ●PVC/PVC ●HT/HT(JIS:Brown) ●CPVC/CPVC (ANSI·DIN:Gray)	11	Stem Packing	1	NBR
2	Bonnet	1	●PP/PP ●PVDF/GFPP ●PVDF/PVDF *3	12	O-Ring	1	NBR
3	Diaphragm	1	●EPDM ●FKM ●PTFE+EPDM ●PTFE+PVDF+EPDM	13	Thrust Washer	1	(15~80A)PTFE
4	Diaphragm Stud Bolt	1	SUS304 *1	14	Thrust Bearing	1	(100~250A)SUJ
5	Indicator Cover	1	PC	15	Stem Spindle	1	C3604
6	Indicator	1	SUS304	16	Retaining Screw	2	SUS304(32~250A)
7	Handle	1	ABS	17	Retaining Ring	1	(~100A)PP,(125~150A)PVC
8	Collar	1	PE	18	Connecting Nut	1	C3604 *1
9	Indicator Stud Bolt	1	SUS304	19	Pin	1	SUS304 *1
10	Stem Sleeve	1	C3604	20	Compressor	1	(15~150A)GF-PP,(200,250A)FC200
				21	Insert Nut	-	C3604(PVDF 15-100A:SUS304)
				22	Stud Bolt	-	SUS304
				23	Hexagonal Bolt, Nut	-	SUS304
					Reinforcing Plate *2	1	(15~50, 200, 250A) SUS304 (65~150A) SS400 Epoxy Resin Coated

*1 Titanium Palladium is available on request.

*2 Applied to PP, HT, CPVC, and PVDF

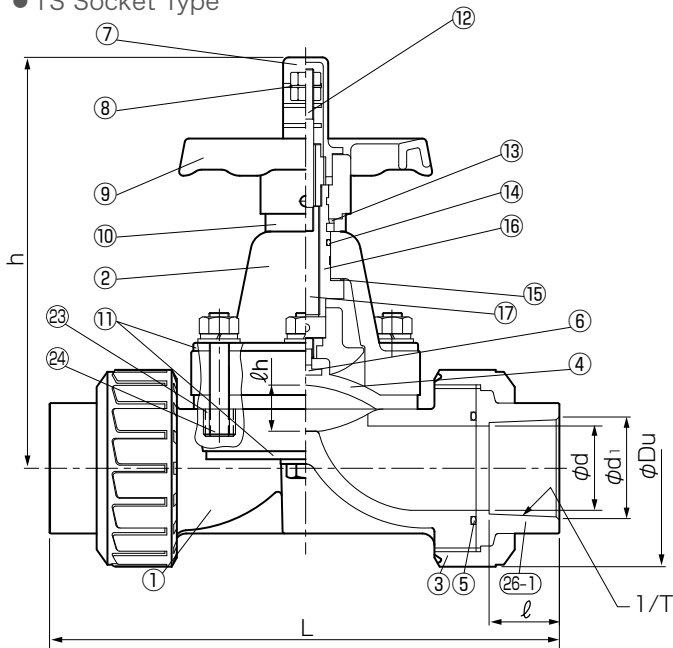
*3 15~150A Only

Size

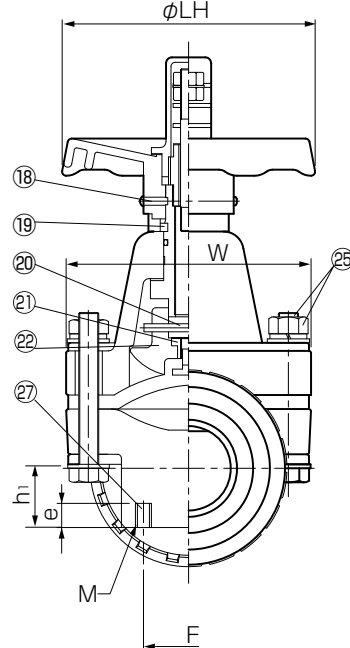
Size		φd	L	h	φLH	W	ℓ	FLANGE												Weight(kg/unit)			
A	B							JIS10K				ANSI				DIN				PVC	HT (CPVC)	PP	PVDF
								φD	φC	n-φh	t	φD	φC	n-φh	t	φD	φC	n-φh	t				
15	1/2	16	110	122	80	76	10	95	70	4-15	14	90	60.5	4-16	11	95	65	4-14	14	0.9	1.1	0.8	1.1
20	3/4	20	120	134	80	82	12	100	75	4-15	14	100	70	4-16	13	105	75	4-14	14	1.0	1.3	1.0	1.3
25	1	25	130	145	80	90	15	125	90	4-19	14	110	79.5	4-16	14	115	85	4-14	14	1.4	1.7	1.3	1.7
32	1 1/4	32	142	145	80	90	15	135	100	4-19	16	117	89	4-16	15.7	140	100	4-18	15	1.7	1.8	1.6	2.1
40	1 1/2	41	180	205	125	122	20	140	105	4-19	16	127	98.5	4-16	17	150	110	4-18	16	2.6	3.3	2.5	3.4
50	2	52	210	233	148	142	27	155	120	4-19	20	155	120.5	4-20	19	165	125	4-18	18	3.6	4.5	3.4	4.8
65	2 1/2	67	250	291	210	170	36	175	140	4-19	22	175	139.5	4-20	22	185	145	4-18	18	6.2	7.7	5.9	8.4
80	3	80	280	322	210	202	37	185	150	8-19	22	190	152.5	4-20	22	200	160	8-18	20	8.2	9.6	7.9	11.2
100	4	100	340	392	260	255	61	210	175	8-19	24	230	190.5	8-20	24	220	180	8-18	20	13.8	18.3	15.4	21.1
125	5	125	410	435	350	320	61	250	210	8-23	24	254	216	8-23	24	250	210	8-18	22	21.8	—	20.0	26.0
150	6	150	480	490	350	375	70	280	240	8-23	24	280	241.5	8-23	25	285	240	8-22	22	26.3	—	25.5	36.0
200	8	198	570	632	410	416	96	330	290	12-23	29	343	298.5	8-23	28	340	295	8-22	29	51.0	—	44.0	61.0
250	10	248	680	780	555	540	132	400	355	12-25	31	406	362	12-25	31	395	350	12-22	26	93.0	—	77.0	108.0

Figure (TS Socket Type · Thread Type · Butt Type)

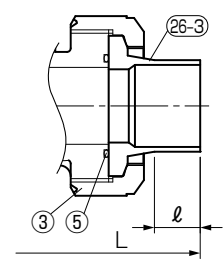
● TS Socket Type



● Thread Type



● Butt Type



Parts List

No.	Part Name	QTY	Material/Color	No.	Part Name	QTY	Material/Color
1	Body	1	Body / Bonnet ● PVC / PVC ● HT / HT (JIS : Brown) ● CPVC / CPVC (ANSI·DIN : Gray)	13	Stem Packing	1	NBR
2	Bonnet	1		14	O-Ring	1	NBR
3	Union Nut	2	● PVDF / GFPP ● PVDF / PVDF	15	Thrust Washer	1	PTFE
4	Diaphragm	1	● EPDM ● FKM ● PTFE+EPDM ● PTFE+PVDF+EPDM	16	Stem Sleeve	1	C3604
5	O-Ring	2	● EPDM ● FKM	17	Stem Spindle	1	C3604
6	Diaphragm Stud Bolt	1	SUS304	18	Retaining Screw	2	SUS304 (32 ~ 50A)
7	Indicator Cover	1	PC	19	Retaining Ring	1	PP
8	Indicator	1	SUS304	20	Pin	1	SUS304 *1
9	Handle	1	ABS	21	Connecting Nut	1	C3604 *1
10	Collar	1	PE	22	Compressor	1	GF-PP
11	Reinforcing Plate*2	1	SUS304	23	Insert Nut	-	C3604
12	Indicator Stud Bolt	1	SUS304	24	Stud Bolt	-	SUS304
				25	Hexagonal Bolt, Nut	-	SUS304
				26-1	TS Socket	2	● PVC ● HT ● CPVC
				26-2	Threaded socket	2	● PVC ● PVDF
				26-3	Butt Spigot Type	2	● PP ● PVDF ● PE
				26-4	Socket welding	2	PP
				27	Fixing Insert Nut	2	C3604

*1 Titanium Palladium is available on request. *2 Applied to PP, HT, CPVC, and PVDF

Size

Size		φ d	h	h1	φ LH	W	φ Du	ℓ h	Fixing Insert Nut		Weight(kg/unit)				
A	B								X	Mxe	PVC		HT,CPVC	PVDF	
											Socket	Thread	Socket	Thread	Spigot
15	1/2	15	123	15	80	76	49	10	25	M6x12	0.7	0.7	0.8	0.9	0.9
20	3/4	20	134	18	80	82	59	12	25	M6x12	0.8	0.8	1.0	1.0	1.0
25	1	25	146	23	80	90	67	15	25	M6x12	1.1	1.1	1.2	1.4	1.4
32	1 1/4	31	146	23	80	90	81	15	25	M6x12	1.2	1.2	1.3	1.6	1.5
40	1 1/2	40	209	32	125	122	98	20	45	M8x12	2.7	2.7	3.4	3.7	3.7
50	2	50	234	37	148	148	120	27	45	M8x12	3.6	3.6	4.3	5.0	5.0

Size		TS Socket											
A	B	JIS				ASTM				DIN			
		L	φd1	1/T	ℓ	L	φd1	1/T	ℓ	L	φd1	1/T	ℓ
15	1/2	144	22.3	1/37	22	137	21.54	1/72	22.22	126	20.3	1/65	16
20	3/4	172	26.3	1/42	25	158	26.87	1/85	25.4	146	25.3	1/80	19
25	1	187	32.3	1/43	29	177	33.65	1/75	28.58	165	32.3	1/95	22
32	1 1/4	210	38.4	1/37	32	190	42.42	1/84	31.75	179	40.3	1/115	26
40	1 1/2	262	48.5	1/38	35	258	48.56	1/78	34.93	247	50.3	1/140	31
50	2	298	60.6	1/34	38	283	60.63	1/83	38.1	284	63.3	1/175	38

Size		Thread						Butt Spigot				Socket welding	
A	B	JIS(Rc)		ANSI(NPT)		DIN(Rp)		DIN		DIN		DIN	
		PVC	PVDF	PVC,PVDF	PVC,PVDF	PVC,PVDF	PVC,PVDF	PP,PVDF	PE	PP	PE	PP	PP
15	1/2	133	18	134	20	133	18	176	30	246	65	137	12
20	3/4	157	18	157	22	157	18	189	24	259	65	153	13
25	1	173	23	180	25	173	23	203	24	283	70	171	14.5
32	1 1/4	188	23	191	25	188	23	210	25	301	75	183	18
40	1 1/2	248	25	254	28	248	25	272	24	376	80	245	16
50	2	280	30	290	30	280	30	306	28	419	90	278	20