

# DIAPHRAGM VALVE-3 LAYERS TYPE

(with PVDF gas barrier diaphragm & high corrosion resistant metal)

## DE300 PVDF 3 LAYERS DIAPHRAGM VALVE



## DE Series

**DE300**  
Size: DN15~DN250

Suitable to the protect diaphragm from the gas permeation  
in the corrosion resistance and electrolytic chlorine gas.

### MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP, CPVC, PPG, PVDF	10	Name Plate	1	PVC
2	Bonnet	1	PPG, PVDF	11	Grease Nipple	1	SUS304 PTFE COATED
3	Compressor	1	15A-25A PVDF 40A-250A FC20 PTFE COATED	12	Stud Bolt & Nut	4 ..... 15A-25A 6 ..... 40A-50A 8 ..... 65A-125A 12 ..... 150A 16 ..... 200A 20 ..... 250A	SUS304 PTFE COATED
4	Hand Wheel	1	ABS	13	Inserted Nut		BSBM PTFE COATED
5	Sleeve	1	15A-50A BSBM PTFE COATED 65A-250A FC25 PTFE COATED	14	Bolt Nut & Washer		SUS304 PTFE COATED
6	Stem	1	15A-50A BSBM PTFE COATED 65A-250A SS41 PTFE COATED	15	thrust Bearing	1	Standardized 80A-250A USED ONLY
7	Diaphragm	1	EPDM, HYPALON TEFLON PVDF 3 lays	16	Stopper	1	SS-41 BSBM SUS304 PTFE COATED
7-1	Upper Board	1	SUS304 PTFE COATED	17	Set Nut	1	SS41 BSBM SUS304 PTFE COATED
7-2	Down Board	2	SUS304 PTFE COATED	18	Gauge Cover	1	PC PTFE COATED
8	Cap	1	15A-25A BSBH PTFE COATED 40A-250A PVC	19	Sheet Ring	1	EPDM
9	Compressor Pin	1	SUS-304 PTFE COATED	20	Washer	1	SUS304 PTFE COATED

\* The standard bonnet material on PVDF valve is PPG. Price will be requested if use PVDF bonnet.

The standard material to bonnet : PPG.

Optional PVDF bonnet material for PVDF diaphragm valve.

®VITON & TEFLON are trademarks of E.I. Du Pont

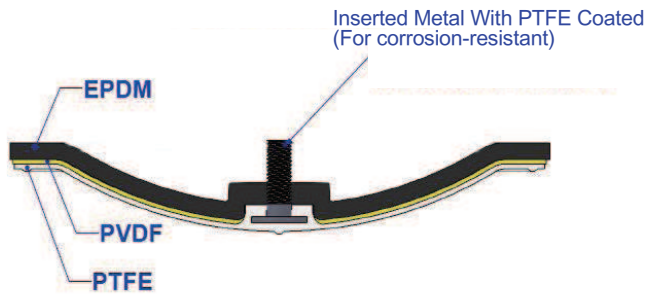
### DIMENSIONS TABLE

Nom. Size m/m(inch)	JIS											PRESS Test for Assembly (at 20°C)											
	D1	D2	D3	e	n No. of holes	D4	D5	Lift ℓ	L	T	H	I	Test Pressure Unit: kgf/cm <sup>2</sup>										
													Rubber Diaphragm					Teflon Diaphragm					
													UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF	
15(1/2")	16	70	91.5	15	4	58x51	94	13	110	15	101	140	10	10	10	10	10	10	10	10	10	10	10
20(3/4")	20	75	97	15	4	70x60	94	13	120	17	106	152	10	10	10	10	10	10	10	10	10	10	10
25(1")	25	90	125	19	4	79x65	94	14	130	17	113	158	10	10	10	10	10	10	10	10	10	10	10
40(1-1/2")	41	105	135	19	4	123	147	24	180	19	133	193	10	10	10	10	10	10	10	10	10	10	10
50(2")	52	120	151	19	4	148	147	28	210	19	145	210	10	10	10	10	10	10	10	10	10	10	10
65(2-1/2")	68	140	185	19	4	183	202	32	250	24	197	276	10	10	10	10	10	10	10	7	7	10	10
80(3")	78	150	183.5	19	8	201	202	34	280	23	218	293	10	10	10	10	10	10	10	7	7	10	10
100(4")	100	175	210	19	8	250	241	54	340	24	261	370	10	10	10	10	10	10	10	7	7	10	10
125(5")	125	210	250	23	8	321	274	72	410	26	308	412	10	7	7	10	10	7	7	7	7	7	7
150(6")	148	240	282	23	8	382	395	72	480	33	334	471	10	7	7	10	10	7	7	7	7	7	7

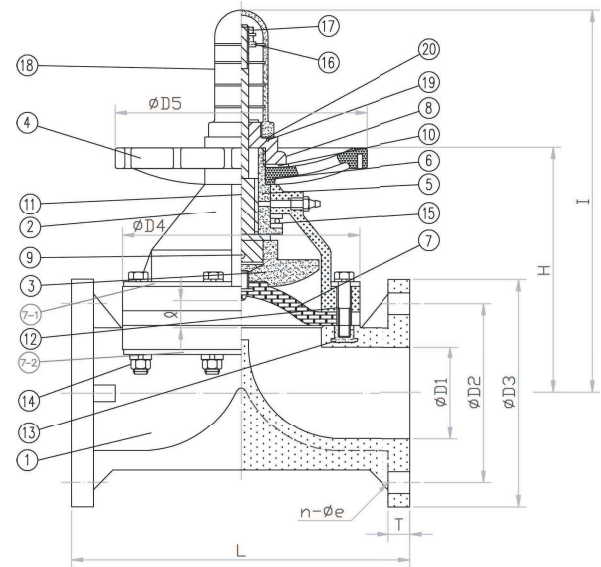


Part No.7

PVDF 3 lays Diaphragm



for corrosive/chlorine transport lines to prevent the permeation of gas barriers from the chemicals



### DIMENSIONS TABLE

ANSI													PRESS Test for Assembly ( at 20°C)									
Nom. Size m/m(inch)	D1	D2	D3	e	n No. of holes	D4	D5	Lift <i>ℓ</i>	L	T	H	I	Test Pressure Unit: psi									
													Rubber Diaphragm					Teflon Diaphragm				
													UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF
													15(1/2")	0.63	2.38	3.50	0.63	4	2.28x2	3.70	0.51	4.25
20(3/4")	0.79	2.76	3.86	0.63	4	2.76x2.36	3.70	0.51	5.90	0.63	4.17	5.98	150	150	150	150	150	150	150	150	150	150
25(1")	0.98	3.13	4.25	0.63	4	3.11x2.56	3.70	0.55	5.90	0.63	4.45	6.22	150	150	150	150	150	150	150	150	150	150
40(1-1/2")	1.61	3.88	5.00	0.63	4	4.84	5.79	0.94	6.95	0.67	5.24	7.60	150	150	150	150	150	150	150	150	150	150
50(2")	2.05	4.74	5.98	0.75	4	5.83	5.79	1.10	7.95	0.67	5.71	8.27	150	150	150	150	150	150	150	150	150	150
65(2-1/2")	2.68	5.49	7.01	0.75	4	7.20	7.95	1.26	9.85	0.87	7.76	10.87	150	150	150	150	150	150	105	105	150	150
80(3")	3.07	6.00	7.52	0.75	4	7.91	7.95	1.34	10.40	0.75	8.50	11.54	150	150	150	150	150	150	105	105	150	150
100(4")	3.94	7.50	9.17	0.75	8	9.84	9.49	2.13	12.95	0.91	10.28	14.57	150	150	150	150	150	150	105	105	150	150
125(5")	4.92	8.50	10.00	0.87	8	12.64	10.79	2.83	16.14	0.94	12.13	16.22	150	105	105	150	150	105	105	105	105	150
150(6")	5.83	9.51	10.98	0.87	8	15.04	15.55	2.83	18.90	1.18	13.15	18.54	150	105	105	150	150	105	105	105	105	150

DIN													PRESS Test for Assembly ( at 20°C)									
Nom. Size m/m(inch)	D1	D2	D3	e	n No. of holes	D4	D5	Lift <i>ℓ</i>	L	T	H	I	Test Pressure Unit: (bar)									
													Rubber Diaphragm					Teflon Diaphragm				
													UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF
													15(1/2")	16	65	95	14	4	58x51	94	13	130
20(3/4")	20	75	105	14	4	70x60	94	13	150	23	106	152	10	10	10	10	10	10	10	10	10	10
25(1")	25	85	125	14	4	79x65	94	14	160	23	113	158	10	10	10	10	10	10	10	10	10	10
40(1-1/2")	41	110	150	18	4	123	147	24	200	23	133	193	10	10	10	10	10	10	10	10	10	10
50(2")	52	125	165	18	4	148	147	28	230	21	145	210	10	10	10	10	10	10	10	10	10	10
65(2-1/2")	68	145	185	18	4	183	202	32	290	22	197	276	10	10	10	10	10	10	7	7	10	10
80(3")	78	160	200	18	8	201	202	34	310	22	218	293	10	10	10	10	10	10	7	7	10	10
100(4")	100	180	210	18	8	250	241	54	350	25	261	370	10	10	10	10	10	10	7	7	7	10
125(5")	125	210	250	18	8	321	274	72	400	24	308	412	10	7	7	10	10	7	7	7	7	7
150(6")	148	240	285	23	8	382	395	72	480	30	334	471	10	7	7	10	10	7	7	7	7	7

※ The dimension table is calculated based on PVC material.  
The flanged length tolerance is according to EN558-1:1995.