

Diaphragm Valve / Flanged type DF 300



DF300
Size: DN15-DN250

Materials of Construction

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

Note: 1. SUS 304Stainless Steel AISI304 2. SS 41Rolled steel for General Structure 3. BSBMFree Cutting Brass Bar
4. FC 20.....Gray Cast Iron 5. SUP.....Steel for Spring ASTM A-230-68

3 / 5 / 6 / 12 / 14 SUS-304, SUS.316, PVD (BONNET), PPG, PVDF

The standard material to bonnet : PPG
Optional PVDF bonnet material for PVDF diaphragm valve
Optional materials on request for part no. 4. 5. 6. 12. 14.: SUS 304 or SUS 316

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Dimensions Table

Nom. size m/m-inch	JIS											Unit:mm										PRESS Test for Assembly (at 20°C)									
	D1	D2	D3	e	n No. of holes	D4	D5	Lift	L	T	H	I	Test Pressure Unit: kgf/cm ²																		
													UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF									
15-1/2"	16	70	95	15	4	59x53	94	13	110	15	101	140	10	10	10	10	10	10	7	7	10	7									
20-3/4"	20	75	100	15	4	74x63	94	13	120	16	106	152	10	10	10	10	10	10	7	7	10	7									
25-1"	25	90	125	19	4	80x66	94	14	130	16	113	158	10	10	10	10	10	10	7	7	10	7									
40-1-1/2"	41	105	140	19	4	126	147	24	180	17	133	193	10	10	10	10	10	7	7	7	7	7									
50-2"	52	120	155	19	4	148	147	28	210	17	145	210	10	10	10	10	10	7	7	7	7	7									
65-2-1/2"	68	140	175	19	4	190	202	32	250	22	197	276	10	10	10	10	10	7	7	7	7	7									
80-3"	78	150	185	19	8	215	202	34	280	22	218	293	10	10	10	10	10	6	5	6	6	6									
100-4"	100	175	210	19	8	255	241	54	340	22	261	370	10	10	10	10	10	6	5	6	6	6									
125-5"	125	210	250	23	8	320	274	72	410	24	308	412	7	7	7	7	7	5	4	4	5	5									
150-6"	148	240	280	23	8	385	395	72	480	30	334	471	7	7	7	7	7	5	4	4	5	5									
200-8"	198	290	330	23	12	430	395	96	570	30	419	625	4	4	4	4	4	3	3	3	3	3									
250-10"	248	355	400	25	12	540	555	132	680	32	510	750	4	3	4	4	4	3	3	3	3	3									

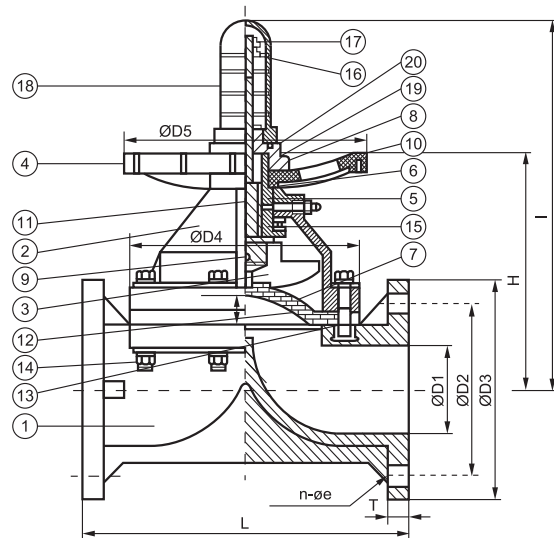
CV Value

CV [GMP/(1 lbf/in ²) ^{1/2}]	
Full Open: 100%	
	CV
1/2"	3.27
3/4"	5.29
1"	8.87
1-1/2"	31.09
2"	43.15
2-1/2"	90.68
3"	116.79
4"	186.78
6"	345.26

Bolts Torque Value

Size	Kg.m	N.m
1/2"	90	8.83
3/4"	110	10.79
1"	110	10.79
1-1/2"	150	14.72
2"	220	21.58
2-1/2"	220	21.58
3"	280	27.47
4"	280	27.47
6"	280	27.47

1 Kg.m = 0.0981N.m



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Nom. size m/m-inch	ANSI												PRESS Test for Assembly (at 20°C)									
	D1	D2	D3	e	n No. of holes	D4	D5	Lift	L	T	H	I	Unit:inch									
													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	2.32x2.09	3.70	0.51	4.25	3.98	5.51	140	150	150	150	150	150	105	105	150	105	
20-3/4"	0.79	2.76	3.86	0.63	4	2.80x2.48	3.70	0.51	5.90	0.63	4.17	5.98	150	150	150	150	150	105	105	150	105	
25-1"	0.98	3.13	4.25	0.63	4	31.5x2.60	3.70	0.55	5.90	0.63	4.45	6.22	150	150	150	150	150	105	105	150	105	
40-1-1/2"	1.61	3.88	5.00	0.63	4	4.96	5.79	0.94	6.95	0.67	5.24	7.60	150	150	150	150	150	105	105	105	105	
50-2"	2.05	4.74	5.98	0.75	4	5.83	5.70	1.10	7.95	0.67	5.71	8.27	150	150	150	150	150	105	105	105	105	
65-2-1/2"	2.68	5.49	7.01	0.75	4	7.48	7.95	1.25	9.85	0.87	7.76	10.87	150	150	150	150	150	105	105	105	105	
80-3"	3.07	6.00	7.52	0.75	4	8.46	7.95	1.34	10.40	0.75	8.50	11.54	150	150	150	150	150	90	75	90	90	
100-4"	3.94	7.50	9.02	0.75	8	10.04	9.49	2.13	12.95	0.91	10.26	14.57	150	150	150	150	150	90	75	90	90	
125-5"	4.92	8.50	10.00	0.87	8	12.60	10.79	2.83	16.14	0.94	12.13	16.22	105	105	105	105	105	75	60	60	75	75
150-6"	5.83	9.51	10.98	0.87	8	15.16	15.55	2.83	18.90	1.18	13.15	18.54	105	105	105	105	105	75	60	60	75	75
200-8"	7.80	11.75	13.50	0.87	8	16.93	15.55	3.78	22.44	1.26	16.40	24.61	60	60	60	60	60	45	45	45	45	45
250-10"	9.76	14.25	15.98	0.98	12	21.26	21.85	5.20	26.77	1.26	20.08	29.53	60	45	60	60	60	45	45	45	45	45

Nom. size m/m-inch	DIN												PRESS Test for Assembly (at 20°C)									
	D1	D2	D3	e	n No. of holes	D4	D5	Lift	L	T	H	I	Unit:mm									
													Test Pressure Unit: psi									
													Rubber Diaphragm					Teflon Diaphragm				
UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF													
15-1/2"	16	65	95	14	4	59x53	94	13	130	23	101	140	10	10	10	10	10	10	7	7	10	7
20-3/4"	20	75	105	14	4	74x63	94	13	150	23	106	152	10	10	10	10	10	10	7	7	10	7
25-1"	25	85	115	14	4	80x66	94	14	160	23	113	158	10	10	10	10	10	10	7	7	10	7
40-1-1/2"	41	110	150	18	4	126	147	24	200	23	133	193	10	10	10	10	10	7	7	7	7	7
50-2"	52	125	165	18	4	148	147	28	230	21	145	210	10	10	10	10	10	7	7	7	7	7
65-2-1/2"	68	145	185	18	4	190	202	32	290	22	197	276	10	10	10	10	10	7	7	7	7	7
80-3"	78	160	200	18	8	215	202	34	310	22	218	293	10	10	10	10	10	6	5	6	6	6
100-4"	100	180	220	18	8	255	241	54	350	25	261	370	10	10	10	10	10	6	5	6	6	6
125-5"	125	210	250	18	8	320	274	72	400	24	308	412	7	7	7	7	7	5	4	4	5	5
150-6"	148	240	285	23	8	385	395	72	480	30	334	471	7	7	7	7	7	5	4	4	5	5
200-8"	198	295	340	23	8	430	395	96	600	32	419	625	4	4	4	4	4	3	3	3	3	3
250-10"	248	350	395	23	12	540	555	132	680	32	510	750	4	3	4	4	4	3	3	3	3	3

Standard dimensions based on PVC material