



## Lined Diaphragm Valve

**Material Specification**

Nominal Diameter		DN15-DN250, 1/2"-10"		
Nominal Pressure		1.0MPa 1.6MPa 150LB		
No.	Name	Material Lists		
1	Lock Screw	A193 B8	A193 B8	A193 B8M
2	Screw	A193 B8	A193 B8	A193 B8M
3	Handwheel	WCB CF8		
4	Sleeve	SS304		
5	Bonnet	WCB	CF8	CF8M
6	Stem Nut	Brass		
7	Stem	2Cr13	A182 304	A182 316
8	Adjustable Pad	SS304		
9	Disc	WCB	CF8	CF8M
10	Rubber Diaphragm	EPDM		
11	Diaphragm	PFA FEP GXPO		
12	Body	WCB+ Lining Material	CF8+ Lining Material	CF8M+ Lining Material
13	Nut	A194 2H	A194 8	A194 8M
14	Flat Washer	45#	A182 304	A182 316
15	Outer Hexagonal Screw	A193 B7	A193 B8	A193 B8M

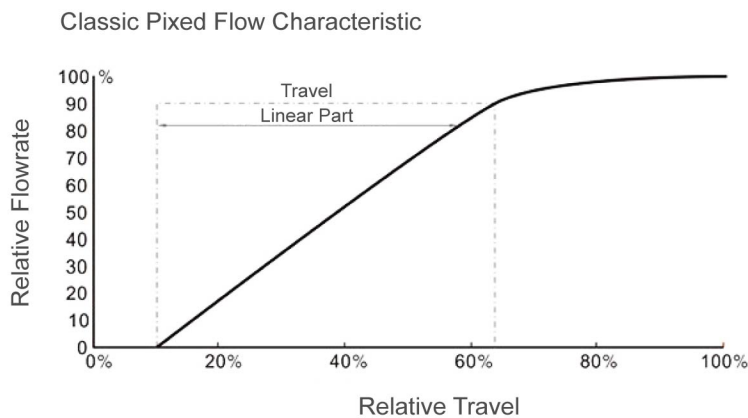


### Technical Specification

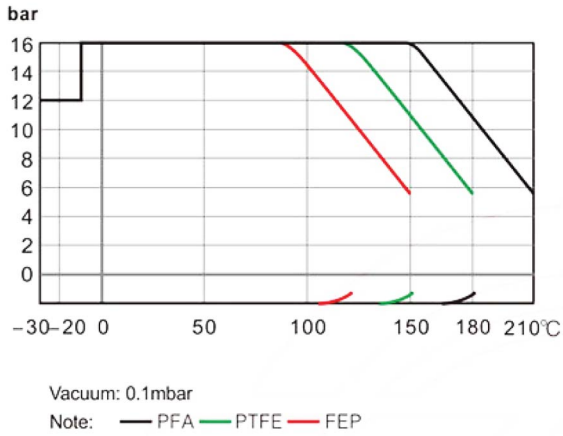
Design & Manufacture Standard		MSS-SP-88		
Face to Face		EN 558-1		
Flange Standard		ASME B16.5, JIS B2220		
Inspection and Test Standard		API 598		
Nominal Diameter		1/2" ~ 10"		
Nominal Pressure		1.0 MPa	1.6 MPa	150 LB
Test Pressure	Shell Test	1.5 MPa	1.5 MPa	1.5 MPa
	High Pressure Sealing	1.1 MPa	1.1 MPa	1.1 MPa
	Low Pressure Sealing	0.6 MPa	0.6 MPa	0.6 MPa
Temperature Range		PFA: -29°C~200°C PTFE: -29°C~180°C FEP: -29°C~150°C GXPO: -10°C~80°C		
Applicable Medium		STRONG CORROSIVE MEDIUM I.E. HYDROCHLORIC ACID, NITRIC ACID, HYDROFLUORIC ACID, LIQUID CHLORINE, SULFURIC ACID AND AQUA REGIA ETC.		

Note: Test standard refers general vatve standard, high pressure should be customized for processing.

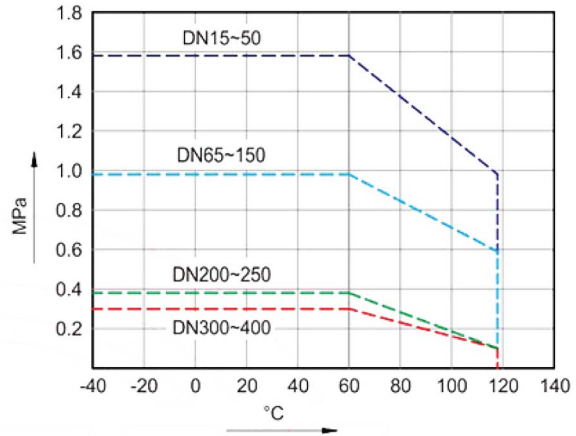
### Flow Characteristic



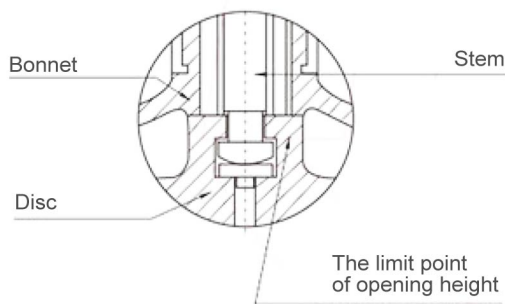
## Pressure-Temperature Curve



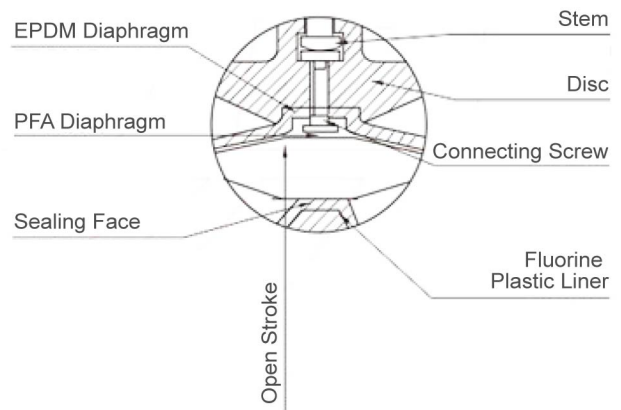
## Pressure-Temperature Curve



## Structure Features



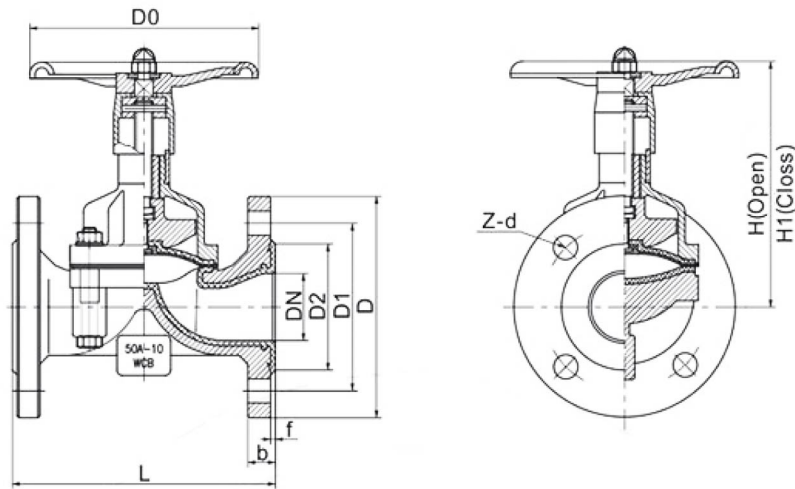
1. Limit Principle



2. Sealing Principle

### Note

- Not exceed a predetermined temperature range.
- The media does not allow hard particles to prevent crushing the sealing surface, affect the sealing performance.
- Diaphragm rise and fall times not too much, to avoid damage to the diaphragm, affect the sealing performance.
- Low flow.



YFM-G41PFA / F4 / F46 / GXPO-6 / 10 / 16

**PN6**

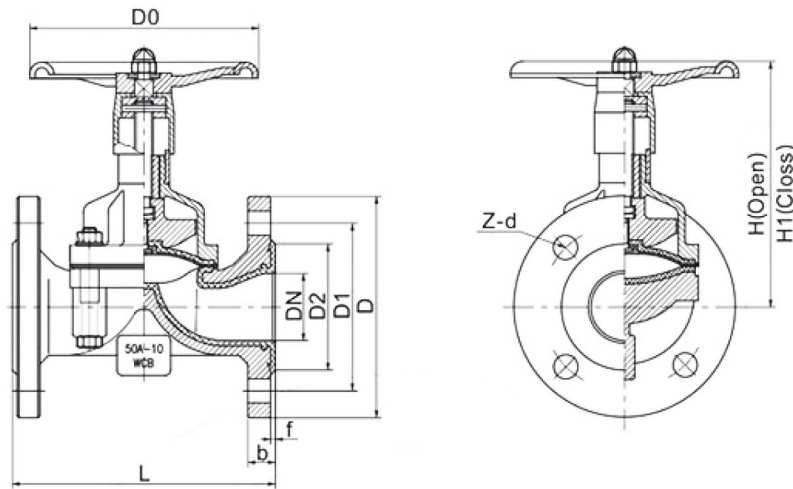
mm

DN	L	D	D1	D2	Z-d	f	b	H	H1	D0	Wt(Kg)
15	125	80	55	40	4-12	2	12	126	116	120	2.8
20	135	90	65	50	4-12	2	14	126	116	120	3
25	145	100	75	60	4-12	2	14	140	127	140	4.5
32	160	120	90	70	4-14	3	16	149	132	140	6.5
40	180	130	100	80	4-14	3	16	175	155	160	8
50	210	140	110	90	4-14	3	16	188	162	180	10
65	250	160	130	110	4-14	3	16	230	196	220	16
80	300	190	150	125	4-18	3	18	262	220	250	21
100	350	210	170	145	4-18	3	18	325	272	280	30
125	400	240	200	175	8-18	3	20	397	332	320	52
150	460	265	225	200	8-18	3	20	450	372	360	70
200	570	320	280	255	8-18	3	22	600	496	400	112
250	680	375	335	310	12-18	4	24	700	570	450	220

**PN10**

DN	L	D	D1	D2	Z-d	f	b	H	H1	D0	Wt(Kg)
15	125	95	65	45	4-14	2	14	126	116	120	3
20	135	105	75	55	4-14	2	14	126	116	120	3.4
25	145	115	85	65	4-14	2	14	140	127	140	5.5
32	160	140	100	78	4-18	3	16	149	132	140	7
40	180	150	110	85	4-18	3	16	175	155	160	9
50	210	165	125	100	4-18	3	16	188	162	180	12.5
65	250	185	145	120	4-18	3	18	230	196	220	20
80	300	200	160	135	4-18	3	20	262	220	250	26
100	350	220	180	155	8-18	3	20	325	272	280	36
125	400	250	210	185	8-18	3	22	397	332	320	60
150	460	285	240	210	8-22	3	24	450	372	360	80
200	570	340	295	265	8-22	3	26	600	496	400	125
250	680	395	350	320	12-22	4	28	700	570	450	240

Note: For more size, please consult our engineer.



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**PN16**

mm

DN	L	D	D1	D2	Z-d	f	b	H	H1	D0	Wt(Kg)
15	125	95	65	45	4-14	2	12	126	116	120	2.8
20	135	105	75	55	4-14	2	14	126	116	120	3
25	145	115	85	65	4-14	2	14	140	127	140	4.5
32	160	140	100	78	4-18	3	16	149	132	140	6.5
40	180	150	110	85	4-18	3	16	175	155	160	8
50	210	165	125	100	4-18	3	16	188	162	180	10
65	250	185	145	120	4-18	3	16	230	196	220	16
80	300	200	160	135	4-18	3	18	262	220	250	21
100	350	220	180	155	8-18	3	18	325	272	280	30
125	400	250	210	185	8-18	3	20	397	332	320	52
150	460	285	240	210	8-22	3	20	450	372	360	70
200	570	340	295	265	12-22	3	22	600	496	400	112
250	680	405	355	320	12-26	4	24	700	570	450	220

**ASME B16.5 Class150**

in	L	D	D1	D2	Z-d	f	b	H	H1	D0	Wt(Kg)
1/2"	110	90	60.5	35	4-16	2	12	126	116	120	3
3/4"	117	100	70.0	43	4-16	2	12	126	116	120	3.4
1"	127	110	79.5	51	4-16	2	14	140	127	140	5.5
1 1/4"	140	115	89.0	64	4-16	3	16	149	132	140	7
1 1/2"	165	125	98.5	73	4-19	3	17.5	175	155	160	9
2"	178	152	120.5	92	4-19	3	19	188	162	180	12.5
2 1/2"	190	180	139.5	105	4-19	3	22	230	196	220	20
3"	203	190	152.5	127	4-19	3	24	262	220	250	26
4"	229	230	190.5	157	8-18	3	24	325	272	280	36
5"	254	255	216.0	186	8-18	3	24	397	332	320	60
6"	267	280	241.5	216	8-23	3	25.5	450	372	360	80
8"	292	345	298.5	270	8-23	3	28.5	600	496	400	125
10"	330	405	362.0	324	12-23	4	30	700	570	450	240

Note: For more size. please consult our engineer.



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