

ISOLATION VALVES

Diaphragm Valves - aqueduct



Overview

Hydroseal all-plastic diaphragm valves are engineered to provide superior handling of difficult media such as corrosive fluids, abrasives and slurries. They can also be used for high purity and sanitary applications.

Manual or automated

Available in manual or actuated (pneumatic or electric) models, the valves can be used for on/off and throttling service, and are self-draining on one side so that little to no dead volume remains in the valve. Standard material choices for the valve's body include PVC, CPVC, PVDF and PPL. Each is available with EPDM, Viton or PTFE diaphragms, allowing service in a wide range of applications.

Advanced Design

The valve controls flow by varying the space between a stationary weir and a moveable flexible diaphragm. By compressing the diaphragm against the weir, all flow is shut off. The only wetted components are the lower half of the valve body and the diaphragm. The diaphragm's stroke adjustment feature allows precise "tweaking" of diaphragm movement for very precise flow control. A large, sure-grip hand wheel makes it easy to open or close the valve, and a beacon-type indicator provides highly visible position indication at the top of the valve's rising stem.

Connection Options

Options include ANSI/DIN/JIS flanges and true union socket end connections.

Features

- Rated at 150 PSI
- Position indicator
- Sure grip hand wheel
- Choice of EPDM, Viton, PTFE diaphragms
- Easily automated
- Choice of union or flanged connections for easy maintenance

Options

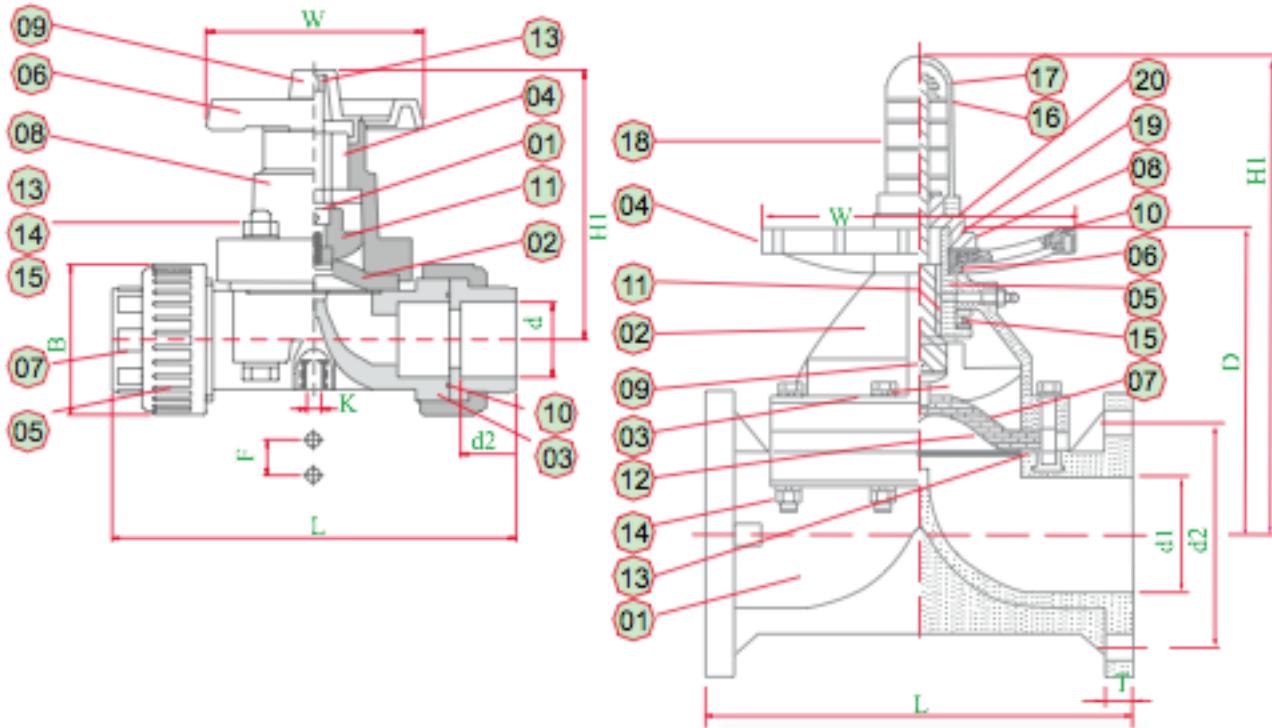
- Electric, Pneumatic Actuation to 4"
- PVDF vapor barrier

Technical Information

SIZE: 1" ~ 2"

JOINT END: THREADED (PT,NPT,BSPF)
SOCKET (ASTM,DIN,JIS)

WORKING PRESSURE: 150 PSI



CONSTRUCTION			
NO	PARTS	PCS	MATERIALS
1	SHAFT	1	BRASS
2	DIAPHRAGM	1	EPDM, TEFLON
3	BODY	1	PVC, PPL, CPVC, PVDF
4	SLEEVE	1	BRASS
5	UNION NUT	2	PVC, PPL, CPVC, PVDF
6	HANDLE	1	ABS
7	END CONNECTOR	2	PVC, PPL, CPVC, PVDF
8	BONNET	1	PVC, PPL, CPVC, PVDF
9	GAUGE COVER	1	PVC
10	O - RING	2	EPDM, VITON
11	COMPRESSOR	1	15-A, 25-A, PVDF
12	INDICATOR	1	PE
13	BOLT	4	SUS304
14	NUT	4	SUS304
15	WASHER	4	SUS304
16	Stopper	1	SS-41, SUS-304
17	Nut	1	SS-41, SUS-304
18	Gauge Cover	1	PC
19	Sheet Ring	1	EPDM
20	Washer	1	SUS 304

SIZE: 2 1/2" ~ 12"

JOINT END: FLANGED

WORKING PRESSURE: 150 PSI

PART	NOMINAL SIZE	SOCKET, THREAD TYPE		ASTM	DIN	JIS	ASTM	DIN	JIS	UNIT OF MEASURE: MM			
		DN	D	d1	d1	d1	d2	d2	d2	L	W	F	H1
60100	1/2"	DN 15	54	21.54	20.30	22.30	22.23	16,00	22,20	166	81	25	104
60101	3/4"	DN 20	54	26.87	25.30	26.30	25.40	18,50	25,40	166	81	25	104
60102	1"	DN 25	63	33.66	32.30	32.33	28.58	22,00	28,60	183	91	25	116
60103	1 1/4"	DN 32	89	42.42	40.30	38.43	31.75	26,00	31,80	238	117	45	142
60104	1 1/2"	DN 40	89	48.56	50.30	48.46	34.85	31,00	34,90	238	117	45	142
60105	2"	DN 50	101	60.63	63.30	60.56	38.10	37,50	38,10	273	150	45	176

PART	NOMINAL SIZE	SOCKET		ASTM	DIN	JIS	ASTM	DIN	JIS	UNIT OF MEASURE: MM			
		DN	D	d1	d1	d1	d2	d2	d2	L	W	T	H1
60106	2 1/2"	DN 65	197	68,07	68,07	68,07	139,45	145,00	145,00	290	202	22	276
60107	3"	DN 90	218	77,98	77,98	77,98	152,40	160,00	160,00	310	202	22	293
60108	4"	DN 100	261	100,07	100,07	100,07	190,50	180,00	180,00	350	241	25	370
60109	6"	DN 150	334	148,08	148,08	148,08	241,55	240,00	240,00	480	395	30	471
60110	8"	DN 200	419	198,12	198,12	198,12	298,45	295,00	295,00	600	430	32	625
60111	10"	DN 250	510	248,41	248,41	248,41	285,75	350,00	350,00	680	540	32	750

SELECTION CHART

SIZE	MATERIAL	END CONN.	SEALS	PRESSURE RATING
1/2" ~ 2"	PVC, PPL CPVC, PVD	Socket Or Threaded	Viton or EPDM	150 PSI @ 70F Non-Shock
2 1/2" - 4"	PVC, PPL CPVC, PVD	Flanged		

CV FACTORS

SIZE	FACTOR	SIZE	FACTOR
1/2"	3,27	2 1/2"	90.68
3/4"	5,29	3"	116,79
1"	8,87	4"	186,78
1 1/4"	25,9	6"	345,26
1 1/2"	31,09	8"	-
2"	43,15	10"	-

Pressure Loss Calculation Formula

$$\Delta P = \left[\frac{Q}{Cv} \right]^2$$

ΔP = Pressure Drop
Q = Flow in GPM
Cv = Flow Coefficient

OPERATING TEMPERATURE/PRESSURE

