

Progressive PUMP ACCESSORIES



TRIPLE-DUTY VALVE PVTD / PVDH



SUCTION DIFFUSER PVSD / PVSDH

MODEL

PVTD, PVTDH

2"~18"



The Progressive Triple-Duty Valve combine pump discharge valve functioning as a shut-off, check valve and calibrated flow balancer. Available in sizes 2" through 18" with cast iron or ductile iron body.

OPERATION

The Progressive Triple-Duty Valve operates automatically and silently. Line pressure of approximately 1/5PSI will open the disc. The spring closes the disc as the line flow approaches zero in order to prevent flow reversal and water hammer. The flow through the valve can be adjusted from tight shut-off to full flow by the rising stem.

FEATURES

The internally guided disc has a soft seat to insure that there is no leakage. The rising stem design incorporates a graduated position indicator to assure accurate disc positioning for throttling service. All mating threaded parts are made of dissimilar, non-galling metals (Bronze/Stainless steel trim) . Field servicing can be done without special tools and don't need to remove valve from line. An NPT drain plug at inlet and outlet is provided as well as gauge taps or metering connections.

MULTI-FUNCTION BENEFITS

- Flow regulator valve
- Positive shut-off
- Non-slam check valve
- Convenient gauge connections

SPECIFICATION

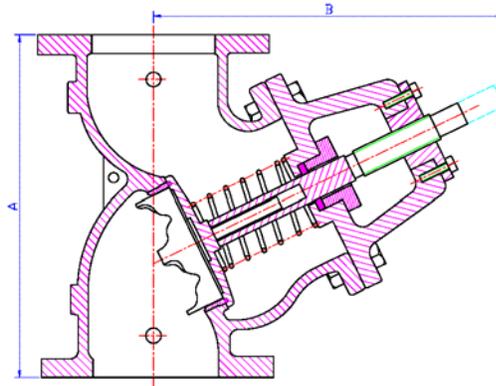
Model	<u>PVTD</u>	<u>PVTDH</u>
Flange Class	125 #ANSI	150 #ANSI
Working Pressure	175 PSI	250 PSI
Working Temperature	32°F~175°F	32°F~175°F

MATERIALS

Model	<u>PVTD</u>	<u>PVTDH</u>
Body and Yoke	Cast Iron A126-B	Ductile Iron A536
Disc	Cast Iron A126-B	Ductile Iron A536
Stem	Stainless Steel	Stainless Steel
Gland	Cast Iron A126-B	Ductile Iron A536
Spring	Stainless Steel	Stainless Steel

Other materials available on application.

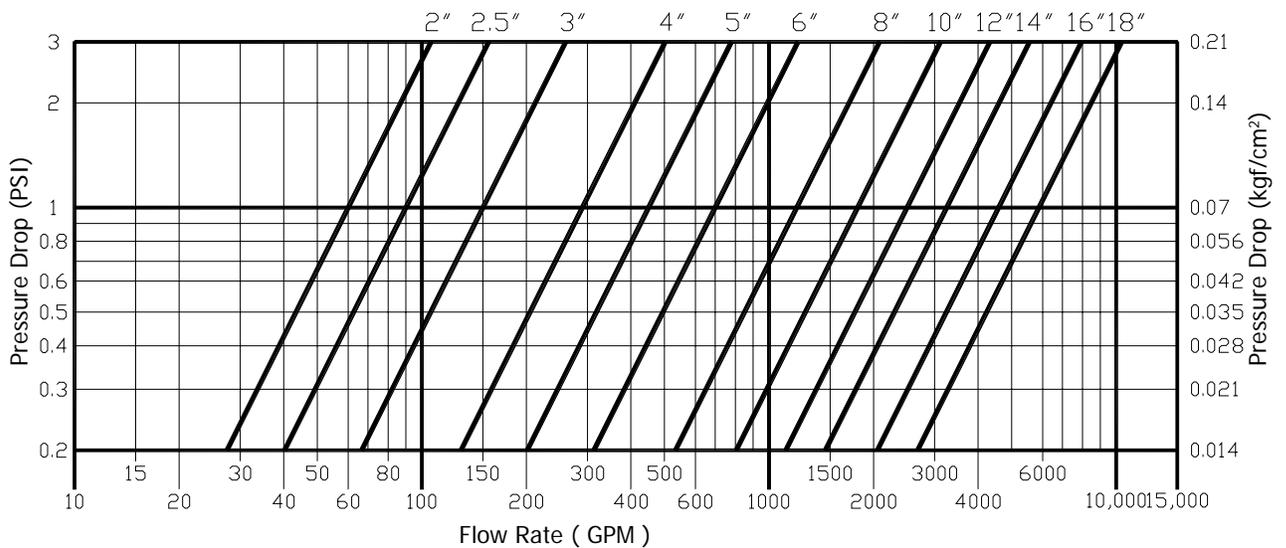
DIMENSIONS and WEIGHT



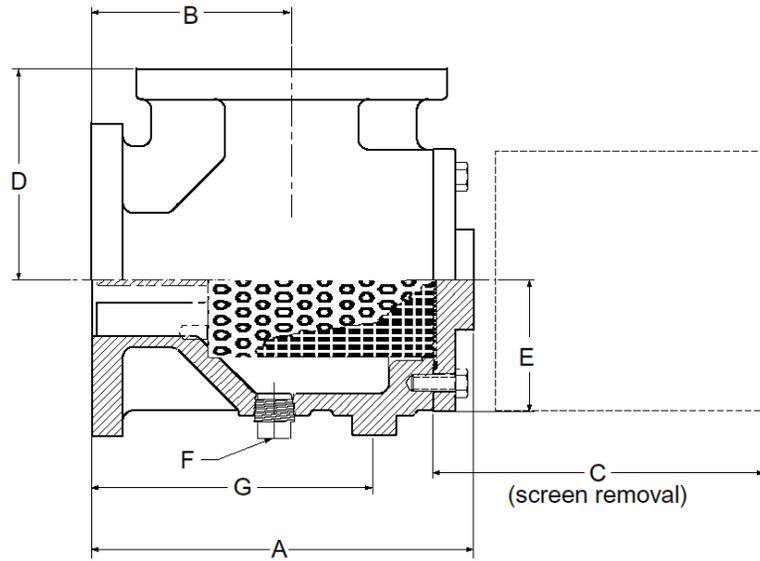
Size	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18
	mm	50	65	80	100	125	150	200	250	300	350	400	450
A	in	8-7/16	9-1/64	9-13/16	12-9/16	14-3/16	16-3/8	20-1/16	24-7/32	29-1/8	29-7/8	37-2/5	40-3/16
	mm	215	230	250	320	360	415	510	615	740	760	950	1020
B	in	6-5/16	6-5/16	8-17/64	10-5/8	12-7/32	14-3/16	18-3/32	20-7/16	23-5/8	27-9/16	38-15/16	38-9/16
	mm	160	160	210	270	310	360	460	520	600	700	990	980
Weight	lb	26.5	33	53	95	136.5	188	330	484	815	847	970	1147
	kg	12	15	24	43	62	85	150	220	370	385	440	520

Other sizes are available on special request. Contact factory for further information.

PRESSURE DROP OF TRIPLE-DUTY VALVE



DIMENSIONS and WEIGHT



Code	Size	Inlet	Outlet	STRAINER		DIMENSIONS IN INCHES							Weight Lbs.
				Free Open Area	Dia. of Open	A	B	C	D	E	F	G	
A	2x2	2	2	32.6	1/8	8 5/8	4 1/2	6	4 1/2	3	5/16	6 1/4	31
B	2.5x2	2 1/2	2	32.6	1/8	8 5/8	4 1/2	6	4 1/2	3	5/16	6 1/4	33
C	3x2	3	2	32.6	1/8	8 5/8	4 1/2	6	4 1/2	3	5/16	6 1/4	33
D	2.5x2.5	2 1/2	2 1/2	32.6	1/8	8 5/8	4 1/2	6	4 1/2	3	5/16	6 1/4	33
E	3x2.5	3	2 1/2	32.6	1/8	8 5/8	4 1/2	6	4 1/2	3	5/16	6 1/4	35
F	3x3	3	3	50.2	1/8	10 1/4	5 3/8	7 1/16	4 3/4	3 5/8	5/8	7 1/4	55
G	4x3	4	3	50.2	1/8	10 1/4	5 3/8	7 1/16	4 3/4	3 5/8	5/8	7 1/4	60
H	4x4	4	4	77.5	1/8	13	7 1/4	8 1/2	5 3/4	4 1/8	5/8	9 1/16	82
I	5x4	5	4	77.5	1/8	13	7 1/4	8 1/2	5 3/4	4 1/8	5/8	9 1/16	84
J	6x4	6	4	77.5	1/8	13	7 1/4	8 1/2	5 3/4	4 1/8	5/8	9 1/16	88
K	5x5	5	5	124	1/8	16 1/8	9 1/16	10 7/8	7 1/16	4 3/4	1	11 3/4	126
L	6x5	6	5	124	1/8	16 1/8	9 1/16	10 7/8	7 1/16	4 3/4	1	11 3/4	128
M	6x6	6	6	150.4	1/8	15 3/4	8 1/4	11	8 1/16	5 1/2	1	10 7/8	161
N	8x6	8	6	150.4	1/8	15 3/4	8 1/4	11	8 1/16	5 1/2	1	10 7/8	165
O	8x8	8	8	242	1/8	19 3/4	11	14 5/8	9 1/2	6 3/4	1	14 5/8	264
P	10x8	10	8	1242	1/8	19 3/4	11	14 5/8	9 1/2	6 3/4	1	14 5/8	275
Q	10x10	10	10	387.5	5/32	24 1/4	12 3/4	18 3/8	11	7 1/2	1	16 3/4	344
R	12x10	12	10	387.5	5/32	24 1/4	12 3/4	18 3/8	11	7 1/2	1	16 3/4	375
S	12x12	12	12	502.2	5/32	26 3/8	15	19 1/8	12	9 1/2	1	19 1/8	583
T	14x12	14	12	502.2	5/32	26 3/8	15	19 1/8	12	9 1/2	1	19 1/8	638
U	14x14	14	14	689.8	5/32	31 1/8	15	22	14	11	1	21 5/8	705
V	16x14	16	14	698.8	5/32	31 1/8	15	22	14	11	1	21 5/8	770
W	16x16	16	16	821.5	5/32	31 1/8	17 3/4	24 3/8	15 3/4	12 3/4	1	21 5/8	836
AC	18x16	18	16	821.5	5/32	31 1/8	17 3/4	24 3/8	15 3/4	12 3/4	1	21 5/8	880
X	18x18	18	18	1116	5/32	33 1/2	20 1/2	24 3/8	17	13 3/4	1	22 1/8	990

NOTES : 1. All dimensions in inches, open area inches².
 2. Strainers are 62% open area.
 3. Other sizes are available on special request.
 4. Contact factory for further information.

MODEL

PVSD, PVSDH

2"×2"~18"×18"



The Progressive Suction Diffuser is design to reduce space and installation costs by replacing a long radius elbow, strainer and extended entry pipe on the suction side of the pump. Flow stabilizing vanes reduce turbulence and resulting stress and vibration.

FEATURES

Progressive Suction Diffuser does more than just remove foreign particles. Since it replaces the elbow, strainer and entry pipe on the suction side of the pump, installation costs are reduced. These units are available with equal size flanges or a reduced outlet flange enabling it to replace the reducing base elbow. The larger open area ratio and the blow-off mean minimum servicing with easy draining and flushing. Quick opening bolted cover minimize down time. Sealing between body and cover is accomplished through an O-ring rather than the conventional flat gasket, eliminating gasket replacement following each service. Straightening vane on the diffuser's outlet side reduce turbulence so that stress and erosion on the pump parts are minimized. They also eliminate the straight pipe normally required for this purpose, saving space, time and money. A separate start-up screen is not needed. Each Suction Diffuser comes equipped with a removable, fine mesh sleeve. After the start up period, simply throw it away, the perforated screen will do the rest. The usual pipe saddle is not needed to mount the Progressive Suction Diffuser because special pads are provided which fit the I.D. of standard pipe. This relieves the stress on hangers and inlet piping. There are provisions for gauge taps on both the inlet and outlet sides of these diffusers. Drilling and tapping should be specified when ordering.

MULTI-FUNCTION BENEFITS

- Save costs and space by replacing 90° elbow, strainer and flow stabilizing piping.

SPECIFICATION

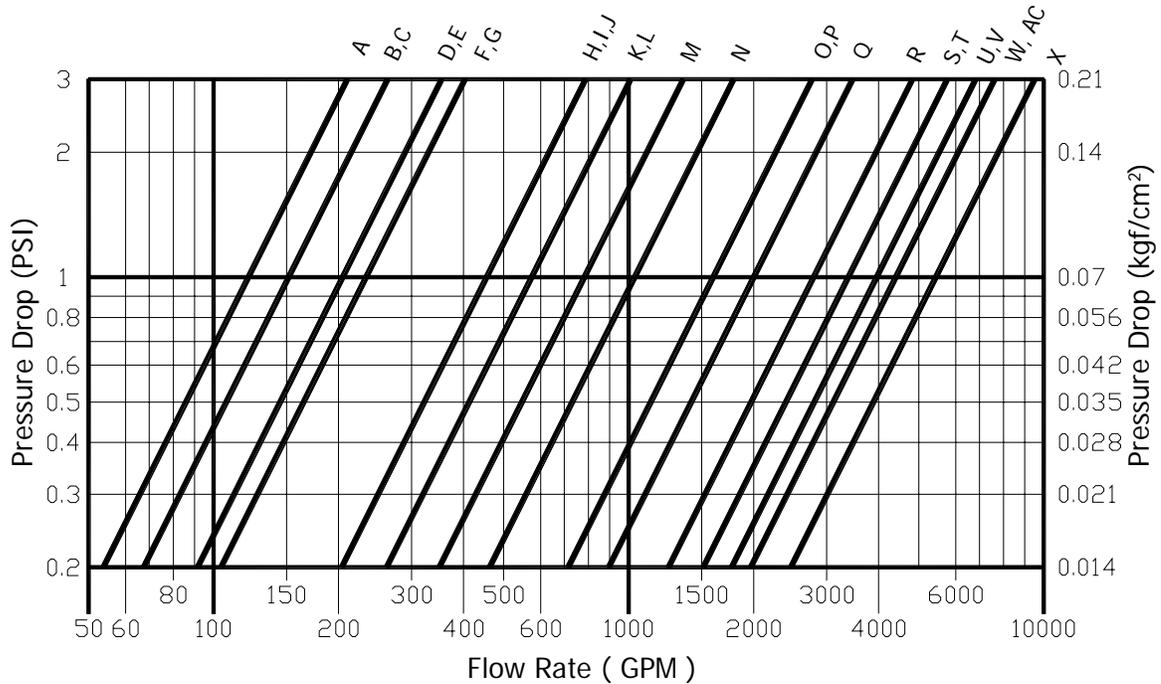
Model	<u>PVSD</u>	<u>PVSDH</u>
Flange Class	125 #ANSI	150 #ANSI
Working Pressure	175 PSI	250 PSI
Working Temperature	32°F~175°F	32°F~175°F

MATERIALS

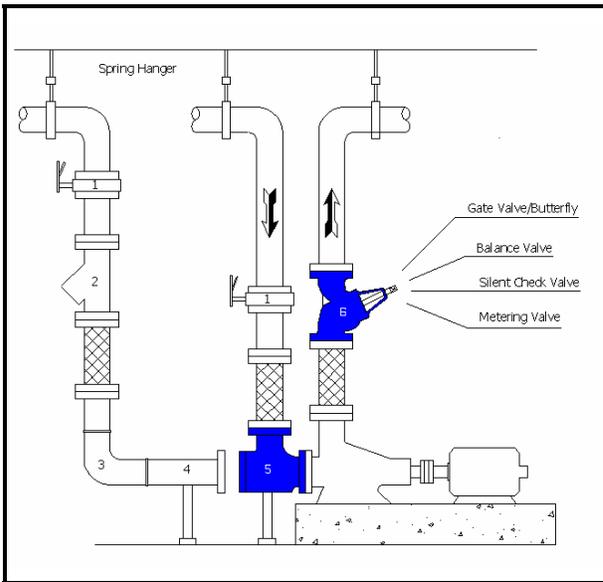
Model	<u>PVSD</u>	<u>PVSDH</u>
Body and Cover	Cast Iron A126-B	Ductile Iron A536
Nuts	Wrought Steel	Wrought Steel
Screen	Stainless Steel	Stainless Steel
Sleeve	20 Mesh, Stainless Steel	20 Mesh, Stainless Steel
O-Ring	Buna-n	Buna-n

Other materials available on application.

PRESSURE DROP of SUCTION DIFFUSER



SUCTION DIFFUSER combined more than one features in one valve, including elbow, strainer and suction stabilizer, this will save your installation space. And help you to eliminates :

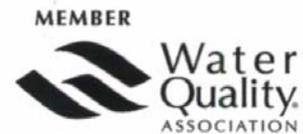


- Long entrance pipe
- Pipe saddle
- At least two welds
- Reducing elbow
- Two flanges
- Conventional strainer
- Gaskets and bolting

- | | |
|--------------------|----------------------------|
| 1. Butterfly Valve | 4. Suction Stabilized pipe |
| 2. Y Strainer | 5. Suction Diffuser |
| 3. Elbow | 6. Triple-Duty Valve |



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