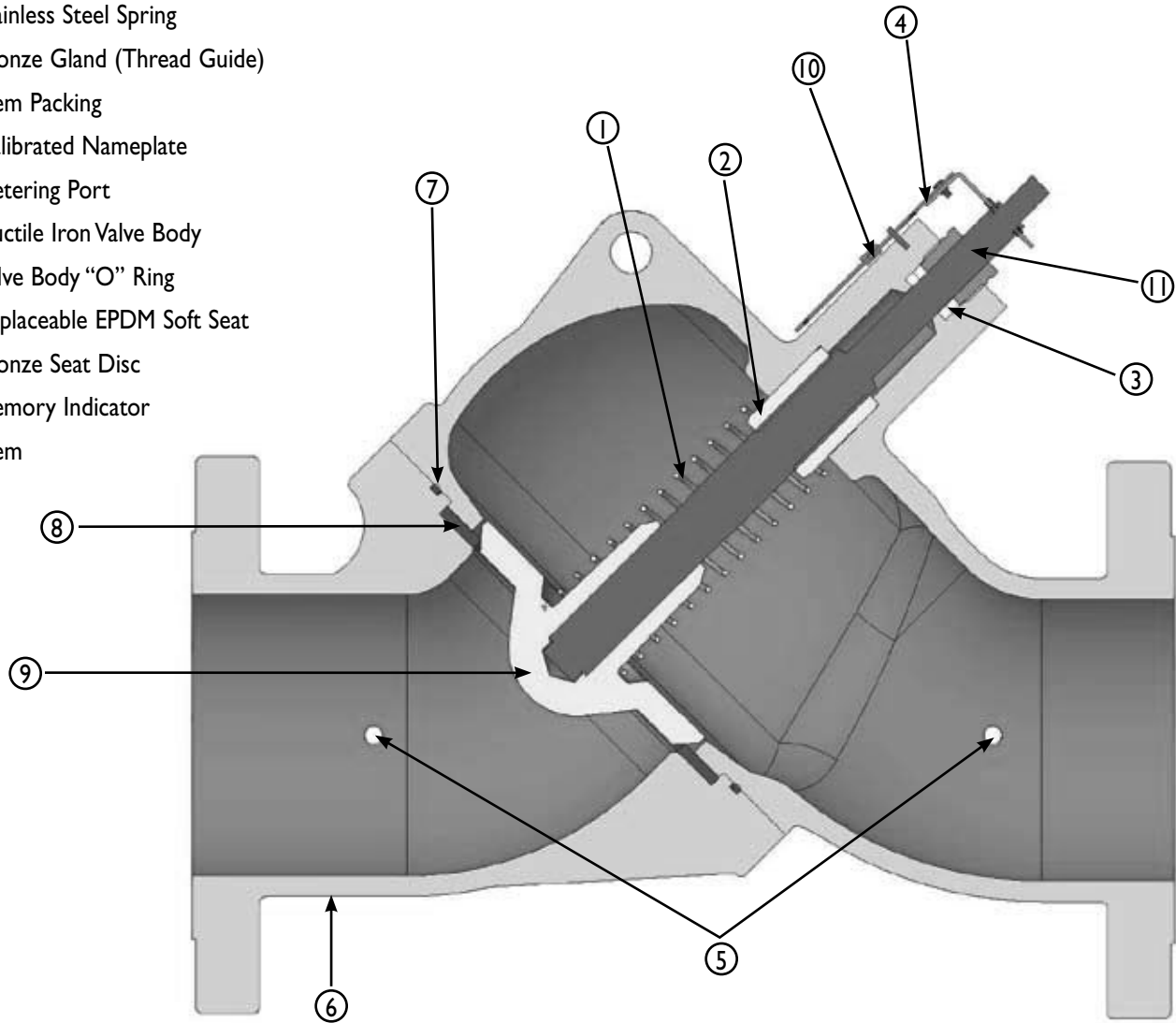


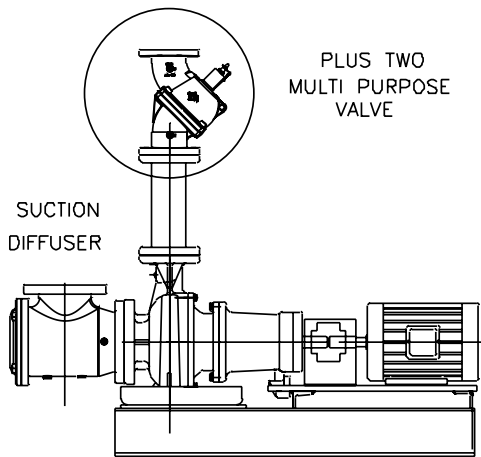
## **Plus Two Multi-Purpose Valve**



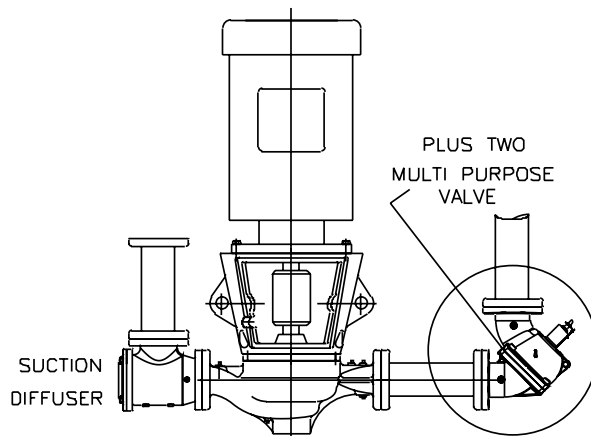
- ① Stainless Steel Spring
- ② Bronze Gland (Thread Guide)
- ③ Stem Packing
- ④ Calibrated Nameplate
- ⑤ Metering Port
- ⑥ Ductile Iron Valve Body
- ⑦ Valve Body "O" Ring
- ⑧ Replaceable EPDM Soft Seat
- ⑨ Bronze Seat Disc
- ⑩ Memory Indicator
- ⑪ Stem



### Typical Installation



BASE MOUNTED SINGLE SUCTION PUMP



VERTICAL IN-LINE PUMP

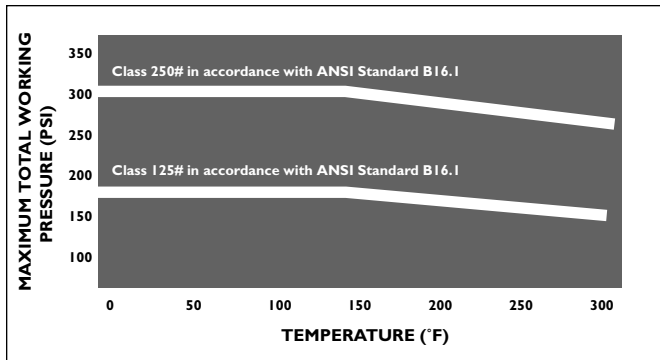
## Design

The new Taco “Plus Two” Multi-Purpose Valve combines all the valve functions that are normally required on the discharge side of a centrifugal pump in a hydronic heating or cooling system into one body. It is a Shut-Off Valve, a Non-Slam Check Valve, a Balancing Valve, and a Flow Metering Valve, and now it is field convertible from a straight pattern to a 90 degree right angle pattern. In addition the new “Plus Two” Multi-Purpose Valves have low pressure drops, equal to or better than any valve on the market today, and the stem seal packing can be replaced under full system pressure.

With sizes ranging from 1-1/2” through 14” the new “Plus Two” Multi-Purpose valves are made of Ductile Iron with stainless steel and bronze fitted construction to provide years of trouble free service. Each valve is available in \*150# psi working pressure with flanged or grooved end connections or \*250# psi working pressure with flanged or grooved end connections (1-1/2”, 2” and 2-1/2” units are threaded connections).

\*Consult Pressure/Temperature Ratings Chart

## Pressure-Temperature Ratings



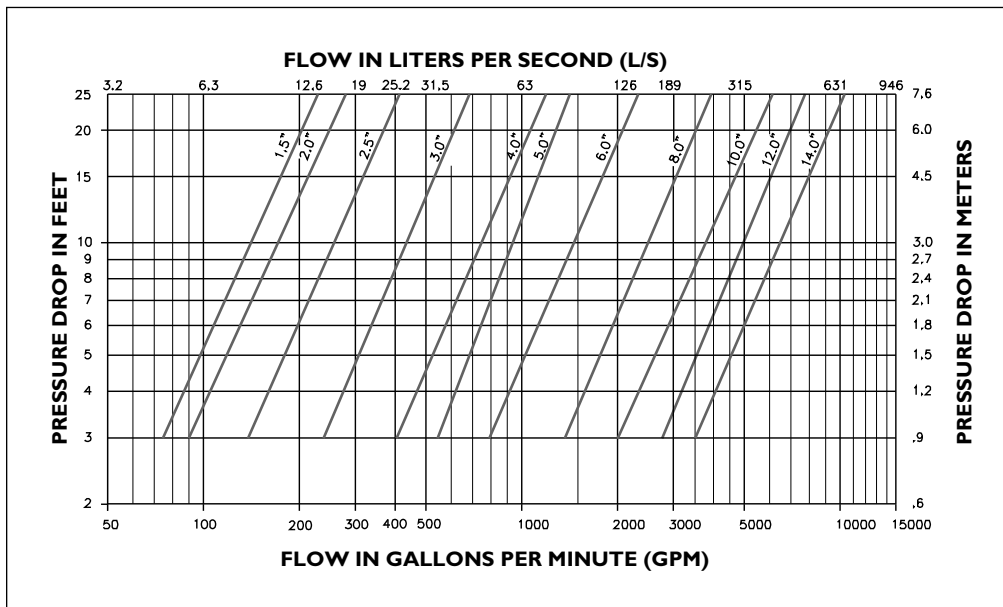
## Features

- Horizontal or Vertical Installation
- Field Convertible to a Right Angle Valve
- Stem Seal Packing Replaceable Under Pressure
- Bronze Fitted Construction
- Five (5) Valves in One:
  - Shut Off Valve
  - Flow Control Valve (Globe Style)
  - Non Slam Check Valve
  - Flow Metering Valve
  - Straight Pattern Valve can be Converted to a Right Angle Pattern Valve
- Memory Indicator, Pointer & Scale
- Schrader Valve Metering Connections
- “O” Ring Sealed Valve Body
- Replaceable “Soft Seat”
- Low Pressure Drop (Equal to or Better than any Comparable Valve on the Market Today)
- Available in 125 psi Working Pressure (Flanged or Grooved End Connections) and 250 psi Working Pressure (Flanged or Grooved End Connections)

## Materials of Construction

Body: Ductile Iron  
 Seat Disc: Bronze  
 Spring: Stainless Steel (302)  
 Gland: Bronze  
 Stem Packing: Asbestos Free Teflon Impregnated Aramid Fiber  
 Seat: EPDM  
 Body “O” Ring: EPDM  
 Stem: Bronze/Stainless Steel (416)

## Pressure Loss Curve (Curves represent valve fully open)



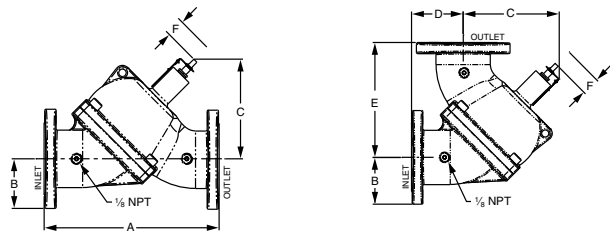
# Dimensional Data

## Plus Two Multi-Purpose Valve (Threaded or Flanged Connection)

Model Number	Size	Connection	A	B (Class 125*)	B (Class 250*)	C	D	E	F	C <sub>v</sub>	Weight (125#)	Weight (250#)
MPV 015-4	1½ (38.1) NPT	Threaded	8.00 (203)	1.44 (037)	1.44 (037)	4.70 (119)	2.39 (061)	5.64 (143)	1.3 (33.0)	69	12 (5.5)	12 (5.5)
MPV 020-4	2 (50.8) NPT	Threaded	8.00 (203)	1.44 (037)	1.44 (037)	4.70 (119)	2.39 (061)	5.64 (143)	1.3 (33.0)	77	12 (5.5)	12 (5.5)
MPV 025-4	2½ (63.5) NPT	Threaded	10.63 (270)	1.93 (049)	1.93 (049)	4.97 (126)	3.50 (089)	7.30 (185)	1.6 (40.6)	122	32 (15)	32 (15)
MPV 030-4*	3 (76.2)	Flanged	11.75 (298)	3.75 (095)	4.13 (105)	6.15 (156)	3.90 (099)	7.85 (199)	1.8 (45.7)	209	38 (17)	46 (21)
MPV 040-4*	4 (101.6)	Flanged	13.75 (349)	4.50 (114)	4.50 (114)	8.51 (216)	4.18 (106)	9.63 (245)	2.1 (53.3)	357	67 (30)	84 (38)
MPV 050-4*	5 (127.0)	Flanged	17.63 (448)	5.00 (127)	5.50 (140)	11.26 (286)	5.25 (133)	12.28 (312)	2.4 (61.0)	459	105 (48)	126 (57)
MPV 060-4*	6 (152.4)	Flanged	20.35 (517)	5.50 (140)	6.25 (159)	11.28 (287)	6.07 (154)	14.23 (361)	2.7 (68.6)	701	134 (61)	176 (80)
MPV 080-4*	8 (203.2)	Flanged	25.88 (657)	6.75 (171)	7.50 (191)	13.58 (345)	6.75 (171)	19.13 (486)	3.9 (99.1)	1200	293 (133)	341 (155)
MPV 100-4*	10 (254.0)	Flanged	30.00 (762)	8.00 (203)	8.75 (222)	15.82 (402)	8.81 (224)	21.20 (538)	4.4 (111.8)	1826	466 (212)	536 (243)
MPV 120-4*	12 (304.8)	Flanged	36.70 (932)	9.50 (241)	10.25 (260)	17.54 (446)	9.98 (253)	26.64 (677)	4.9 (124.5)	2430	724 (329)	811 (368)
MPV 140-4*	14 (355.6)	Flanged	41.56 (1056)	10.50 (267)	11.50 (292)	22.80 (579)	12.09 (307)	29.47 (749)	5.4 (137.2)	3147	1105 (502)	1182 (537)

NOTE: Dimensions are in inches. Metric dimensions are in millimeters and are in parentheses ( ). Weights are in lb (kg). 'F' is the distance required to replace packing under pressure. 'A,C,D,E,F' applies to Class 250\* flanged units also.

\* Append 'A' for Class 250\* working pressure flanged units (e.g. Model Number MPV 030-4A).



## Plus Two Multi-Purpose Valve (Grooved Connection)

Model Number	Size	Connection	A	B	C	D	E	F	C <sub>v</sub>	Weight
MPVG 015-4	1½ (38.1) NPT	Grooved	8.00 (203)	1.35 (034)	4.70 (119)	2.39 (061)	5.64 (143)	1.3 (33.0)	69	10 (4.5)
MPVG 020-4	2 (50.8) NPT	Grooved	8.00 (203)	1.35 (034)	4.70 (119)	2.39 (061)	5.64 (143)	1.3 (33.0)	77	10 (4.5)
MPVG 025-4	2½ (63.5) NPT	Grooved	10.63 (270)	1.55 (039)	4.97 (126)	3.50 (089)	7.30 (185)	1.6 (40.6)	122	16 (7)
MPVG 030-4*	3 (76.2)	Grooved	11.75 (298)	1.85 (047)	6.15 (156)	3.90 (099)	7.85 (199)	1.8 (45.7)	209	22 (10)
MPVG 040-4*	4 (101.6)	Grooved	13.75 (349)	2.32 (059)	8.51 (216)	4.18 (106)	9.63 (245)	2.1 (53.3)	357	43 (20)
MPVG 050-4*	5 (127.0)	Grooved	17.63 (448)	2.90 (074)	11.26 (286)	5.25 (133)	12.28 (312)	2.4 (61.0)	459	78 (35)
MPVG 060-4*	6 (152.4)	Grooved	20.35 (517)	3.41 (087)	11.28 (287)	6.07 (154)	14.23 (361)	2.7 (68.6)	701	106 (48)
MPVG 080-4*	8 (203.2)	Grooved	25.88 (657)	4.50 (114)	13.58 (345)	6.75 (171)	19.13 (486)	3.9 (99.1)	1200	240 (109)
MPVG 100-4*	10 (254.0)	Grooved	30.00 (762)	5.50 (140)	15.82 (402)	8.81 (224)	21.20 (538)	4.4 (111.8)	1826	395 (179)
MPVG 120-4*	12 (304.8)	Grooved	36.70 (932)	6.50 (165)	17.54 (446)	9.98 (253)	26.64 (677)	4.9 (124.5)	2430	609 (276)
MPVG 140-4*	14 (355.6)	Grooved	41.56 (1056)	7.24 (184)	22.80 (579)	12.09 (307)	29.47 (749)	5.4 (137.2)	3147	952 (432)

NOTE: Dimensions are in inches. Metric dimensions are in millimeters and are in parentheses ( ). Weights are in lb (kg). 'F' is the distance required to replace packing under pressure.

