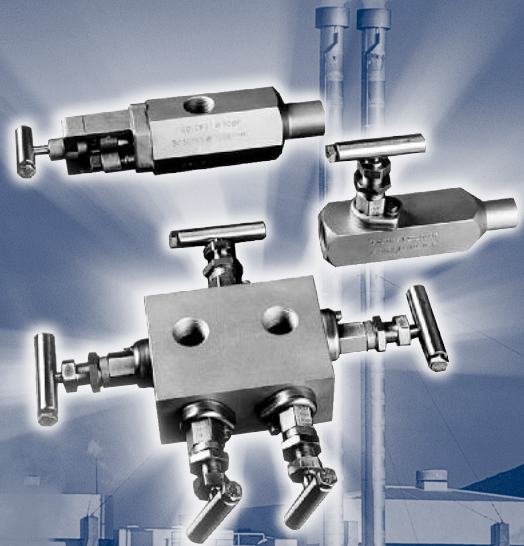


# POWER & STEAM PLANT VALVES AND MANIFOLDS

A S M E B 3 1 . 1 2 5 0 0 # C L A S S

ISO 9001:2008 Certified Quality System

**Needle Valves**  
**Multi-Port Valves**  
**Blowdown Valves**  
**Root & Angle Valves**  
**Two-Valve Block  
& Bleed Manifolds**  
**Three-Valve Manifolds**  
**Five-Valve Manifolds**  
**Gauge Pressure  
Blowdown Manifolds**



**Low-Torque™ Grafoil® Stem Seals**

**Carbide Ball Seats**

**Hard “Roddable” Seat Styles**

**Carbon Steel and  
316 SS Standard Materials**

**Standard 316 SS meets  
NACE MR0175/ISO 15156-36**

**Specialty Alloys Available**



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model no. index

# Warranty, Sales Policy & Manufacturing Standards

## PGI Division

Parker Hannifin Corporation's PGI Division, founded as General Screw Products Company in 1941, began as a contract manufacturer for the oil and gas industry. PGI has since evolved into a leading designer, manufacturer and distributor of innovative and diverse products for the energy and process industries. Based in Houston, Texas, the PGI Division currently has over 180,000 square feet of manufacturing capability and over 400 employees. As the markets we service expand, PGI's quality products are demanded and specified worldwide. For companies that demand the best, PGI delivers "Excellence through Innovation."

## Product Warranty

PGI warrants its products to be free from defects in material and/or workmanship for a period of one (1) year from date of shipment. This guarantee is valid only if such products have been used in normal applications consistent with our recommendations. Our liability is limited to repair or replacement and no responsibility is assumed for consequential damage or expense. Any controversy arising out of the sale of PGI products shall be determined in accordance with laws of the State of Texas, United States of America (USA).

PGI reserves the right to change materials, specifications or designs without notice. PGI will not be obligated to install or furnish such changes on products previously sold.

## Sales Policy

Our products are sold through authorized manufacturer representatives or direct from our factory sales office. All orders are subject to acceptance by PGI, headquarters located in Houston, Texas (USA). Prices are subject to change without notice and any errors in published prices are subject to correction. No materials may be returned for credit without written authorization from our Houston office. In issuing credit for returned material, we reserve the right to deduct a reconditioning and handling charge. Special items, not conforming to our standard line, will not be accepted for credit.

## Special Orders

PGI has been a custom manufacturer of valve components since 1941. PGI invites inquiries for special variations on our line of valves and will work with you to solve your specific application problems.

## Power Coating Specifications

PGI's Carbon Steel products are Alkaline cleaned, then coated with Zinc Phosphate solution before a rust preventative solution is applied.

## Manufacturing Standards & Compliances

PGI products are manufactured, conform and are certified to the following agencies and associations:

- ISO 9001:2008 Certified Quality System
- Canadian Registration Number (CRN)
- CE - Pressure Equipment Directive Conformity
- National Association of Corrosion Engineers (NACE MR0175/ISO 15156-3)
- ASME/ANSI B1.20.1 General Pipe Threads
- ASME/ANSI B16.11 Fittings/Socket Weld, etc.
- ASME/ANSI B31.3 Process Piping
- MSS SP-25 Standard Valve Markings
- MSS SP-82 Valve Pressure Testing Methods
- MSS SP-99 Instrument Valves
- MSS SP-105 Instrument Valves for Code Applications

## Notes

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 Tefzel® are registered trademarks of the E.I. duPont de Nemours and Company.  
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 Rosemount® is a registered trademark of Rosemount®, Inc.  
 Parker® is a registered trademark of Parker Hannifin Corporation.



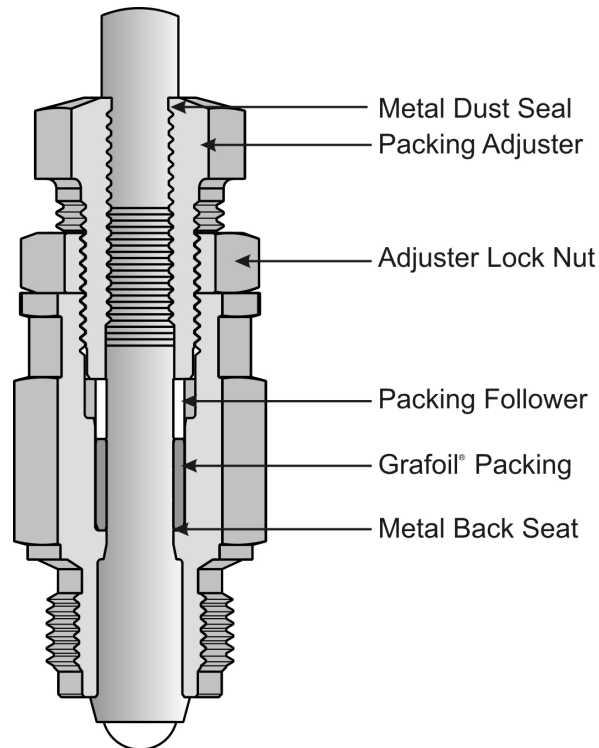
# Low-Torque™ Grafoil® Bonnet and Packing Design

.187" .375" ORIFICE

CODE "G"

## Torque Reduced by 50%

**GRAFOIL® STEM SEAL TORQUE REDUCED BY 50%**



PGI answered customer requests for a lower stem handle turning torque by introducing our new Low-Torque™ Grafoil bonnet and packing design. It is the nature of Grafoil packing that it is easily abraded away by the rotation of the valve stem. This abrading requires periodic packing compression adjustment to stop stem seal leaks. We developed a proprietary assembly technique to lower stem torque by 50% which increases ease of operation, and therefore reduces stem abrasion and stem damage from over-torquing. The Low-Torque™ Grafoil packed stem seal reduces packing adjustments and the associated maintenance costs, while extending the service life of the Grafoil packing.

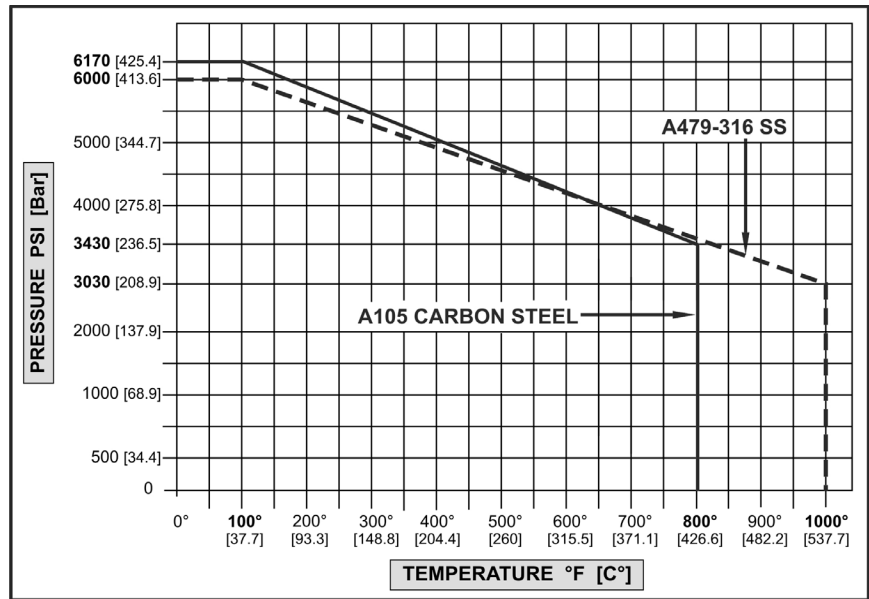
# Pressure and Temperature Charts

**.187" .375" ORIFICE**

## ASME B16.34 Pressure & Temperature Ratings and Chart

All Valves and Manifolds in this brochure are rated as follows:

<b>Carbon Steel ASTM A105</b>	6,170 PSI @ 100°F [425.4 Bar @ 37.7° C] 3,430 PSI @ 800°F [236.5 Bar @ 426.6° C]
<b>Stainless Steel ASTM A479-316</b>	6,000 PSI @ 100°F [413.6 Bar @ 37.7° C] 3,030 PSI @ 1,000°F [200.9 Bar @ 537.7° C]



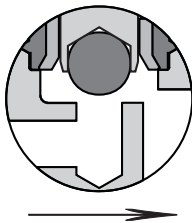
## Material Codes

Body Materials	
<b>S</b>	ASTM A479 316 Stainless Steel
<b>H</b>	Hastelloy® C-276
<b>M</b>	Monel® 405/500
<b>P</b>	ASTM A105 Carbon Steel

Stem Seal Material	
<b>G</b>	Grafoil™ Low-Torque® Packed

Hard Seat Materials	
<b>C</b>	Carbide Ball
<b>R</b>	Ceramic Ball
<b>6</b>	316 SS Ball
<b>N</b>	Monel® Ball
<b>H</b>	Hastelloy® C Ball
<b>S</b>	Stellite Ball
<b>6</b>	316 Cone

## Seats ~ Features and Benefits



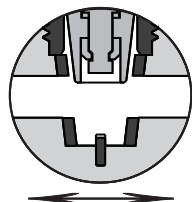
### HARD BALL SEAT ~ .187" .375" Orifice

#### Features

- PGI Standard Carbide *Ball* Seat

#### Benefits

- Non-rotating ball eliminates seat galling and ball creasing
- Leak free, bubble tight seating
- Available in a variety of materials



### 316 SS CONE SEAT ~ .375" Orifice

#### Features

- PGI 316 SS *Cone* Seat

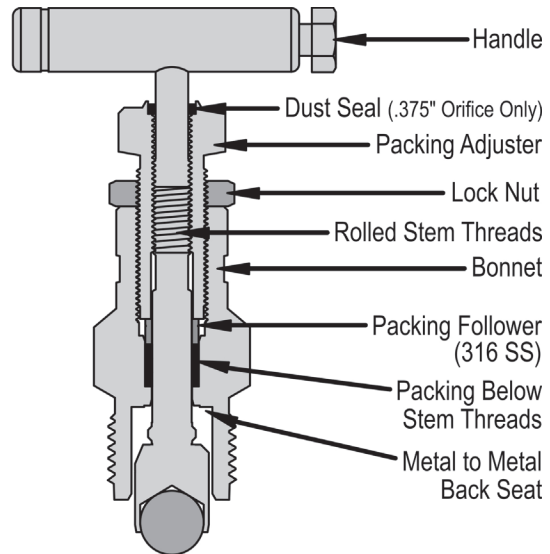
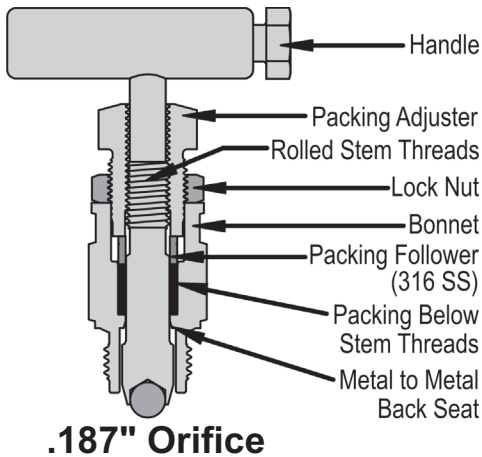
#### Benefits

- Non-rotating stem tip
- Roddable straight-through design
- Bi-directional flow

# Adjustable Packed Bonnet and Packing

**.187" .375" ORIFICE**

## Packed Valves ~ Code "G" Grafoil

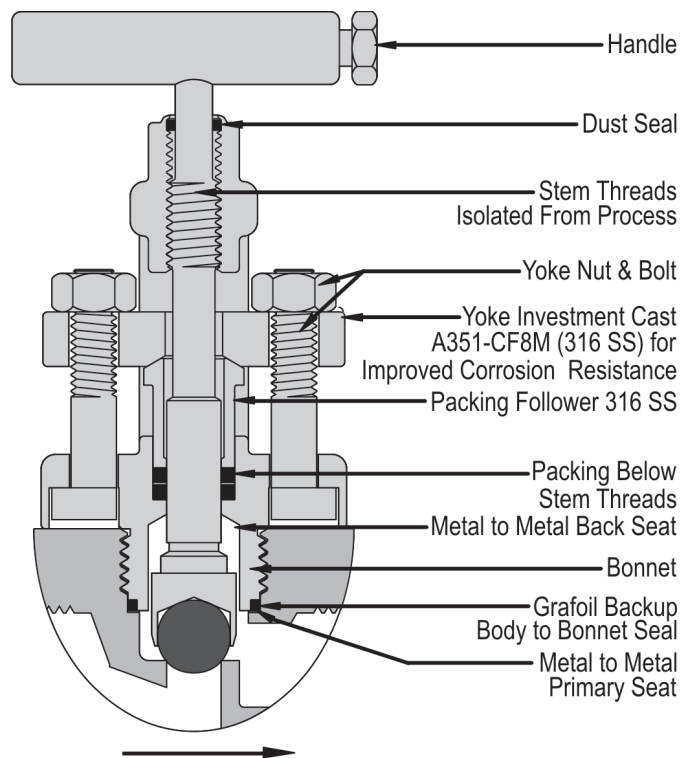


**.375" Orifice**

# OS & Y Bonnet ~ Bonnet and Packing

**.187" .375" ORIFICE**

## OS & Y Grafoil Packed Bonnet Code "Y"

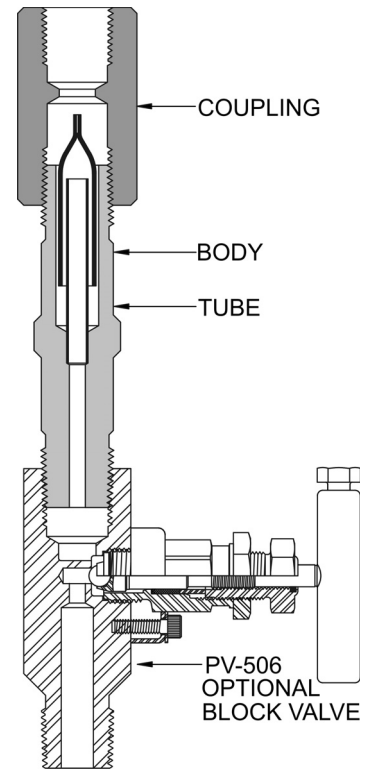
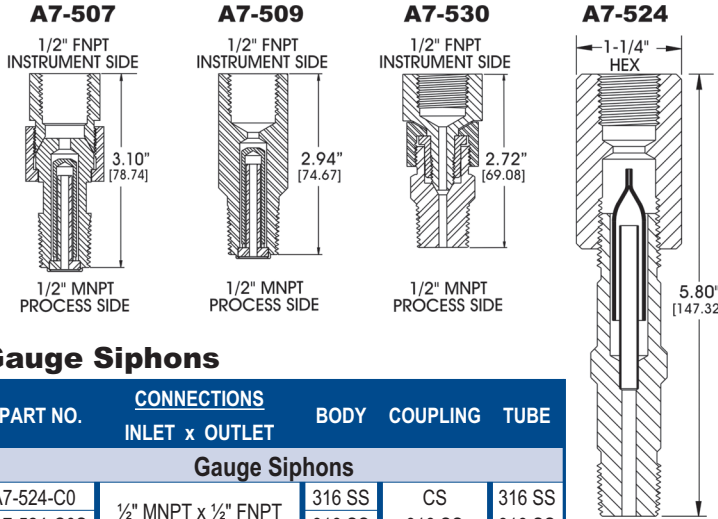


**CODES "Y" and "G"**

# Gauge Siphons

The PGI Gauge Siphon replaces the old style "Pigtail" siphon. The siphon provides a thermal barrier, protecting your instruments from harmful vapors. The siphon can be used as either a freeze or steam protector when used with the proper fill fluids.

When very high heat is present, the siphon, used in conjunction with the PGI V-506 Grafoil Packed Hand Valve, reduces temperatures seen at the instrument by lengthening the condensate leg.



## Gauge Siphons

PART NO.	CONNECTIONS		BODY	COUPLING	TUBE
	INLET	OUTLET			
<b>Gauge Siphons</b>					
A7-524-C0	1/2" MNPT	1/2" FNPT	316 SS	CS	316 SS
A7-524-C0S	1/2" MNPT	1/2" FNPT	316 SS	316 SS	316 SS
A7-522-C0	3/4" MNPT	1/2" FNPT	316 SS	CS	316 SS
A7-522-C0S	3/4" MNPT	1/2" FNPT	316 SS	316 SS	316 SS
A7-508-C0	3/4" MNPT	3/4" FNPT	316 SS	CS	316 SS
<b>Gauge Siphons with Excess Flow Check</b>					
A7-509-C0	1/2" MNPT	1/2" FNPT	316 SS		
<b>Gauge Siphons with Excess Flow Check and Swivels</b>					
A7-507-C0	1/2" MNPT	1/2" FNPT	316 SS		
<b>Gauge Swivel</b>					
A7-530-C0	1/2" MNPT	1/2" FNPT	316 SS		

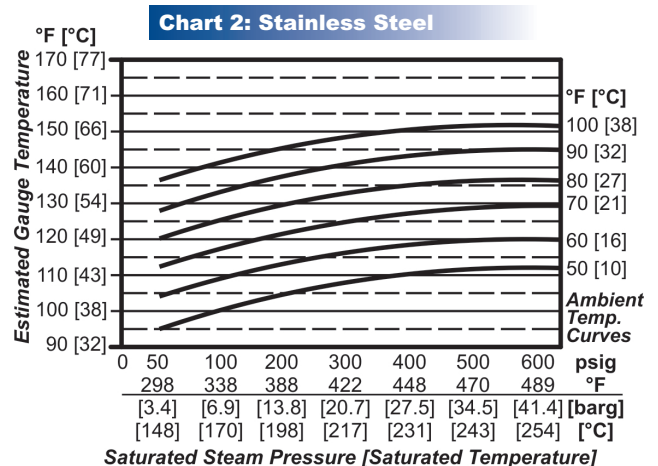
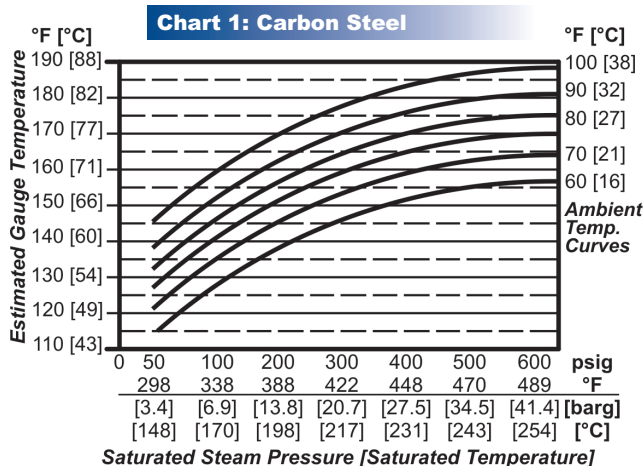
## Hand Block Valve

PART NO.	CONNECTIONS		BODY & BONNET	PACKING	SEAT
	INLET	OUTLET			
PV-506CCG	1/2" MNPT	1/2" FNPT	ASTM A105 CF	Grafoil®	Carbide Ball
PV-506SCG	1/2" MNPT	1/2" FNPT	ASTM A479-316 SS		

## ESTIMATED GAUGE TEMPERATURES

By knowing the material of construction, saturated steam conditions, and ambient temperature, the chart below can estimate the gauge temperature for the A7-522/524-C0 & C0S. For example, if using an A7-524-C0 in an application of 500 psig, 470° F saturated steam, and 90° F ambient temperature, Chart 1 (Carbon Steel) can be utilized by following the 90° F ambient temperature curve to 500 psig. An estimated gauge temperature of 180° F is shown.

The same method will be applied for an A7-524-C0S on Chart 2 (Stainless Steel.) The estimated gauge temperature will be 144° F.

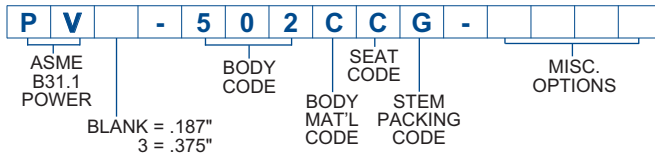




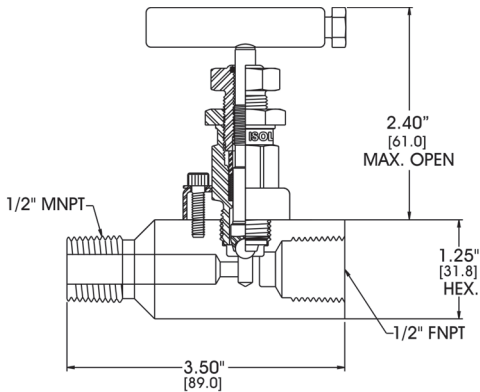
# Hand Valves

**.187" .375" ORIFICE**

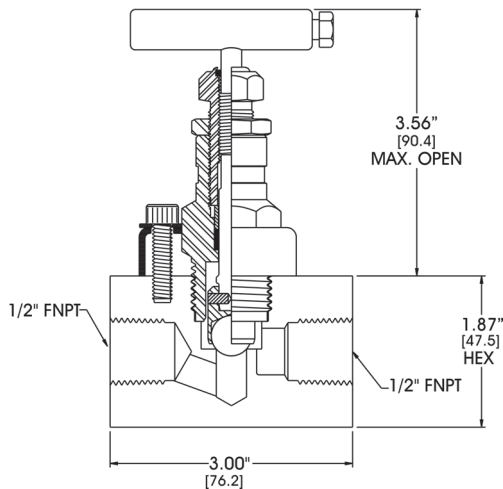
**ASME B31.1 2500# CLASS**



## PV-506



## PV3-508



### Notes

- 100% hydrostatically pressure tested 1.5 times the design pressure per B16.34 requirements
- Roddable .375" orifice 316 SS cone seat available - Consult Factory
- OS&Y bonnet style available
- PGI Carbon Steel products are Alkaline cleaned and coated with Zinc Phosphate solution; rust preventative solution applied

## ORDERING INFORMATION

PART NO.	CONNECTIONS		BODY	SEAT & PACKING
	INLET	OUTLET		
<b>.187" Orifice</b>				
PV-502CCG	1/4" FNPT	x 1/4" FNPT	A105 Carbon Steel	Carbide Ball Seat  Low-Torque™ Grafoil® Packed
PV-502SCG			316 SS	
PV-506CCG	1/2" MNPT	x 1/2" FNPT	A105 Carbon Steel	
PV-506SCG			316 SS	
PV-508CCG	1/2" FNPT	x 1/2" FNPT	A105 Carbon Steel	
PV-508SCG			316 SS	
PV-528SCG	3/4" MNPT	x 1/2" FNPT	316 SS	
PV-540SCG	3/4" FNPT	x 3/4" FNPT	316 SS	
PV-588SCG	3/8" FNPT	x 3/8" FNPT	316 SS	

<b>.375" Orifice</b>				
PV3-508CCG	1/2" FNPT	x 1/2" FNPT	A105 Carbon Steel	Carbide Ball Seat  Grafoil® Packed
PV3-508SCG			316 SS	
PV3-540CCG	3/4" FNPT	x 3/4" FNPT	A105 Carbon Steel	
PV3-540SCG			316 SS	

Carbon Steel Rated to 6,170 PSI @ 100°F -- 3,430 PSI @ 800°F

316 SS Rated to 6,000 PSI @ 100°F -- 3,030 PSI @ 1000°F

See Pressure & Temperature Chart on Page 4.

OPTION CODE	DESCRIPTION
<b>Seat Material Options</b>	
6	316 SS Ball Seat
R	Ceramic Ball Seat
S	Stellite Ball Seat
<b>Miscellaneous Options</b>	
AM7	Male Pipe Socket Weld - Male Inlet Only
AS7	Welded Tube Stub 6" Length Standard (Process Port)
ST	Throttling Stem Tip (316 SS Standard)
W1	316 SS Tag (20 Characters)
WK	Paper Tag
Y	OS & Y Bonnet

## Materials of Construction

PART DESCRIPTION	CARBON STEEL	316 SS
Body	ASTM A105 CF	ASTM A479-316
Bonnet	ASTM A105 CF	ASTM A479-316
Stem	ASTM A479-316	ASTM A479-316
Yoke (OS&Y Bonnet)	ASTM A351-CF3M	ASTM A351-CF3M
Packing Follower	ASTM A479-316	ASTM A479-316
Bolt	ASTM A574	ASTM F837 GR1-CW
Handle Assembly	ASTM A108	ASTM A582 18-8
Lockplate	Stainless Steel 18-8	Stainless Steel 18-8
Stem Lock Pin	ASTM A479-316	ASTM A479-316

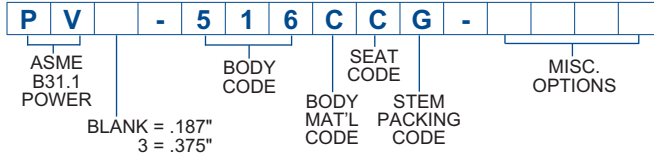
## Max Cv Ratings

ORIFICE SIZE	MAX Cv RATINGS
.187"	.53
.375"	2.40
<b>Approximate Valve Weight:</b>	1.30 lbs. [0.58 kg] each [PV-502/506/508/528/588] 2.00 lbs. [0.91 kg] each [PV-540] 3.00 lbs. [1.36 kg] each [PV3-508/540]

# Multi-Port Valves

**.187" .375" ORIFICE**

**ASME B31.1 2500# CLASS**



## ORDERING INFORMATION

PART NO.	CONNECTIONS		BODY	SEAT & PACKING
	INLET	OUTLET		
<b>.187" Orifice</b>				
PV-516CCG	½" MNPT x (3) ½" FNPT	Standard Length	A105 Carbon Steel	Carbide Ball Seat
PV-516SCG	½" MNPT x (3) ½" FNPT	Standard Length	316 SS	
PV-518CCG	¾" MNPT x (3) ½" FNPT	Standard Length	A105 Carbon Steel	
PV-518SCG	¾" MNPT x (3) ½" FNPT	Standard Length	316 SS	
PV-520CCG	½" MNPT x (3) ½" FNPT	Extended Length	A105 Carbon Steel	Low-Torque™ Grafoil® Packed
PV-520SCG	½" MNPT x (3) ½" FNPT	Extended Length	316 SS	
PV-532CCG	¾" MNPT x (3) ½" FNPT	Extended Length	A105 Carbon Steel	
PV-532SCG	¾" MNPT x (3) ½" FNPT	Extended Length	316 SS	
<b>.375" Orifice</b>				
PV3-516CCG	½" MNPT x (3) ½" FNPT	Standard Length	A105 Carbon Steel	Carbide Ball Seat
PV3-516SCG	½" MNPT x (3) ½" FNPT	Standard Length	316 SS	
Carbon Steel Rated to 6,170 PSI @ 100°F -- 3,430 PSI @ 800°F 316 SS Rated to 6,000 PSI @ 100°F -- 3,030 PSI @ 1000°F <b>See Pressure &amp; Temperature Chart on Page 4.</b>				
OPTION CODE	DESCRIPTION			
<b>Seat Material Options</b>				
6	316 SS Ball Seat			
R	Ceramic Ball Seat			
S	Stellite Ball Seat			
<b>Miscellaneous Options</b>				
AM7	Male Pipe Socket Weld - Male Inlet Only			
ST	Throttling Stem Tip (316 SS Standard)			
W1	316 SS Tag (20 Characters)			
WK	Paper Tag			
Y	OS & Y Bonnet			

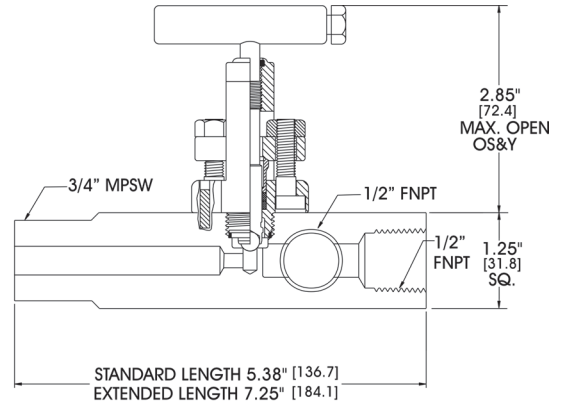
## Materials of Construction

PART DESCRIPTION	CARBON STEEL	316 SS
Body	ASTM A105 CF	ASTM A479-316
Bonnet	ASTM A105 CF	ASTM A351-CF3M
Stem	ASTM A479-316	ASTM A479-316
Yoke (OS&Y Bonnet)	ASTM A351-CF3M	ASTM A351-CF3M
Packing Follower	ASTM A479-316	ASTM A479-316
Bolt	ASTM A574	ASTM F837 GR1-CW
Handle Assembly	ASTM A108	ASTM A581 18-8
Lockplate	Stainless Steel 18-8	Stainless Steel 18-8
Stem Lock Pin	ASTM A479-316	ASTM A479-316

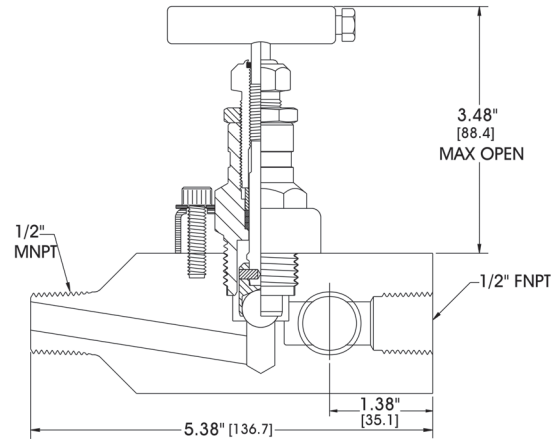
## Max Cv Ratings

ORIFICE SIZE	MAX Cv RATINGS
.187"	.53
.375"	2.40
<b>Approximate Valve Weight:</b>	2.30 lbs. [1.04 kg] each [PV-516/518] 3.60 lbs. [1.63 kg] each [PV-520/532] 5.20 lbs. [2.36 kg] each [PV3-516]

### PV-518



### PV3-516



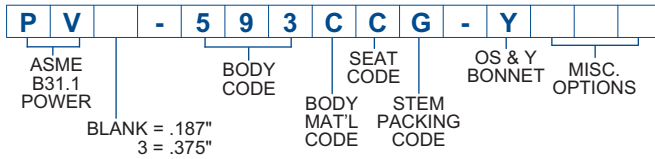
## Notes

- 100% hydrostatically pressure tested 1.5 times the design pressure per B16.34 requirements
- Roddable .375" orifice 316 SS cone seat available - Consult Factory
- OS&Y bonnet style available
- PGI Carbon Steel products are Alkaline cleaned and coated with Zinc Phosphate solution; rust preventative solution applied

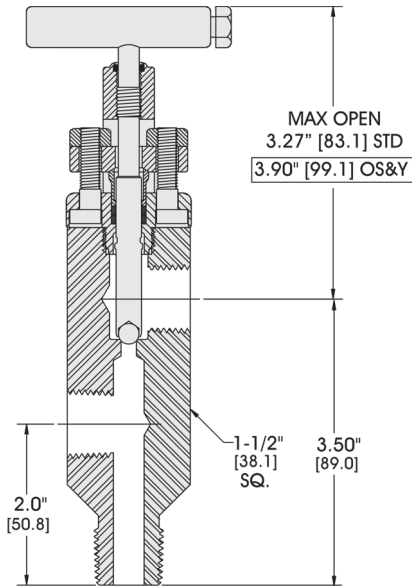
# Blowdown Valves

**.187" .375" ORIFICE**

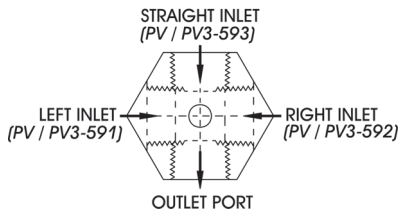
**ASME B31.1 2500# CLASS**



## PV-593



INLET ORIENTATION  
(viewed from top of valve)



### Notes

- 100% hydrostatically pressure tested 1.5 times the design pressure per B16.34 requirements
- Pipe socket weld inlet and outlets available
- Stellite seat inserts available
- Additional inlet ports available
- PGI Carbon Steel products are Alkaline cleaned and coated with Zinc Phosphate solution; rust preventative solution applied
- Standard packed bonnet available

## ORDERING INFORMATION

PART NO.	CONNECTIONS		BODY	SEAT & PACKING	
	INLET ORIENTATION	OUTLET			
<b>.187" Orifice</b>					
PV-591CCG-Y	½" MNPT Left	½" FNPT	A105 Carbon Steel	Carbide Ball Seat	
PV-591SCG-Y			316 SS		
PV-592CCG-Y	½" MNPT Right	½" FNPT	A105 Carbon Steel		Low-Torque™ Grafoil® Packed
PV-592SCG-Y			316 SS		
PV-593CCG-Y	½" MNPT Straight	½" FNPT	A105 Carbon Steel		
PV-593SCG-Y			316 SS		
<b>.375" Orifice</b>					
PV3-591CCG-Y	½" MNPT Left	½" FNPT	A105 Carbon Steel	Carbide Ball Seat	
PV3-591SCG-Y			316 SS		
PV3-592SCG-Y	½" MNPT Right	½" FNPT	A105 Carbon Steel		Grafoil® Packed
PV3-592CCG-Y			316 SS		
PV3-593CCG-Y	½" MNPT Straight	½" FNPT	A105 Carbon Steel		
PV3-593SCG-Y			316 SS		
Carbon Steel Rated to 6,170 PSI @ 100°F -- 3,430 PSI @ 800°F 316 SS Rated to 6,000 PSI @ 100°F -- 3,030 PSI @ 1000°F					
See Pressure & Temperature Chart on Page 4.					
OPTION CODE		DESCRIPTION			
<b>Seat Material Options</b>					
6	316 SS Ball Seat				
R	Ceramic Ball Seat				
S	Stellite Ball Seat				
<b>Miscellaneous Options</b>					
AM7	Male Pipe Socket Weld - Male Inlet Only				
W1	316 SS Tag				
WK	Paper Tag				

## Materials of Construction

PART DESCRIPTION	CARBON STEEL	316 SS
Body	ASTM A105 CF	ASTM A479-316
Bonnet	ASTM A105 CF	ASTM A351-CF3M
Stem	ASTM A479-316	ASTM A479-316
Yoke (OS&Y Bonnet)	ASTM A351-CF3M	ASTM A351-CF3M
Packing Follower	ASTM A479-316	ASTM A479-316
Bolt	ASTM A574	ASTM F837 GR1-CW
Handle Assembly	ASTM A108	ASTM A581 18-8
Stem Lock Pin	ASTM A479-316	ASTM A479-316

## Max Cv Ratings

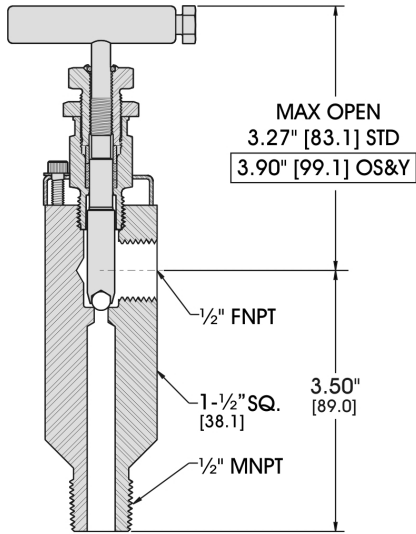
ORIFICE SIZE	MAX Cv RATINGS
.187"	.53
.375"	3.00
<b>Approximate Valve Weight:</b>	3.10 lbs. [1.40 kg] each [PV-591/592/593] 4.80 lbs. [2.18 kg] each [PV3-591/592/593]

# Root & Angle Valves

**.187" .375" ORIFICE**

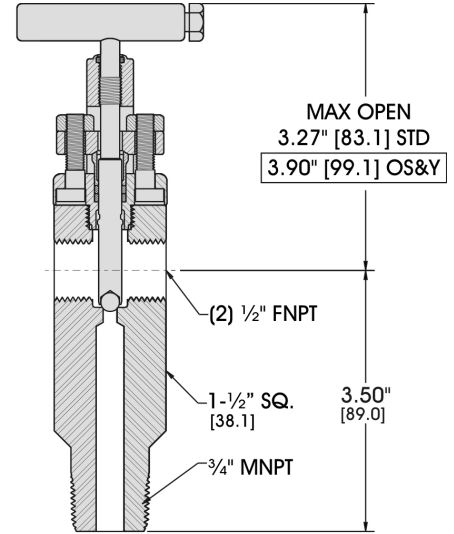
**ASME B31.1 2500# CLASS**

**Single Outlet: PV-579SCG**



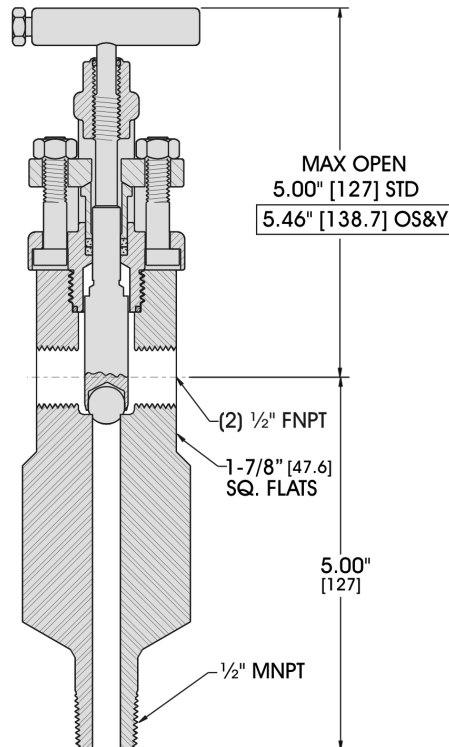
**Standard Packed Bonnet  
.187" Orifice**

**Double Outlet: PV-582SCG-Y**



**OS&Y Bonnet  
.187" Orifice**

**Double Outlet: PV3-580SCG-Y**



**OS&Y Bonnet  
.375" Orifice**

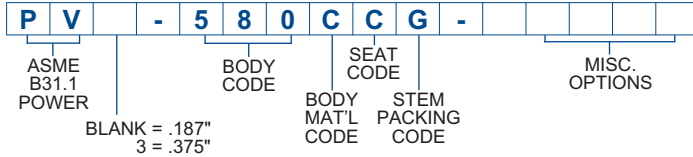


# Root & Angle Valves

**.187" .375" ORIFICE**

**ASME B31.1 2500# CLASS**

**ROOT & ANGLE VALVES**



## ORDERING INFORMATION

PART NO.	CONNECTIONS		BODY BONNET	SEAT & PACKING
	INLET	OUTLET		
<b>.187" Orifice</b>				
PV-579CCG	½" MNPT	(1) ½" FNPT Single Outlet	A105 Carbon Steel 316 SS	Carbide Ball Seat
PV-581CCG	¾" MNPT	(1) ½" FNPT Single Outlet	A105 Carbon Steel 316 SS	
PV-580CCG	½" MNPT	(2) ½" FNPT Double Outlet	A105 Carbon Steel 316 SS	Low-Torque™ Grafoil® Packed
PV-582CCG	¾" MNPT	(2) ½" FNPT Double Outlet	A105 Carbon Steel 316 SS	
<b>.375" Orifice</b>				
PV3-579CCG	½" MNPT	(1) ½" FNPT Single Outlet	A105 Carbon Steel 316 SS	Carbide Ball Seat
PV3-581CCG	¾" MNPT	(1) ½" FNPT Single Outlet	A105 Carbon Steel 316 SS	
PV3-580CCG	½" MNPT	(2) ½" FNPT Double Outlet	A105 Carbon Steel 316 SS	Grafoil® Packed
PV3-582CCG	¾" MNPT	(2) ½" FNPT Double Outlet	316 SS	
PV3-583CCG	1" MNPT	(1) ½" FNPT Single Outlet	316 SS	
Carbon Steel Rated to 6,170 PSI @ 100°F -- 3,430 PSI @ 800°F 316 SS Rated to 6,000 PSI @ 100°F -- 3,030 PSI @ 1000°F <b>See Pressure &amp; Temperature Chart on Page 4.</b>				
OPTION CODE	DESCRIPTION			
<b>Seat Material Options</b>				
6	316 SS Ball Seat			
R	Ceramic Ball Seat			
S	Stellite Ball Seat			
<b>Miscellaneous Options</b>				
AM7	Male Pipe Socket Weld - Male Inlet Only			
ST	Throttling Stem Tip (316 SS Standard)			
W1	316 SS Tag (20 Characters)			
WK	Paper Tag			
Y	OS & Y Bonnet			

## Notes

- 100% hydrostatically pressure tested 1.5 times the design pressure per B16.34 requirements
- PGI Carbon Steel products are Alkaline cleaned and coated with Zinc Phosphate solution; rust preventative solution applied
- OS & Y Bonnet Available on all Models
- Socket Weld Inlet and Outlets Available
- Double Block Valves Available - Consult Factory
- Stellite Seat Inserts Available
- Extended Length Available

## Materials of Construction

PART DESCRIPTION	CARBON STEEL	316 SS
Body	ASTM A105 CF	ASTM A479-316
Bonnet	ASTM A105 CF	ASTM A351-CF3M
Stem	ASTM A479-316	ASTM A479-316
Yoke (OS&Y Bonnet)	ASTM A351-CF3M	ASTM A351-CF3M
Packing Follower	ASTM A479-316	ASTM A479-316
Bolt	ASTM A574	ASTM F837 GR1-CW
Handle Assembly	ASTM A108	ASTM A581 18-8
Lockplate	Stainless Steel 18-8	Stainless Steel 18-8
Stem Lock Pin	ASTM A479-316	ASTM A479-316

## Max Cv Ratings

ORIFICE SIZE	MAX Cv RATINGS
.187"	.53
.375"	3.00
<b>Approximate Valve Weight:</b>	3.10 lbs. [1.41 kg] each [.187" Orifice] 4.80 lbs. [2.18 kg] each [.375" Orifice]

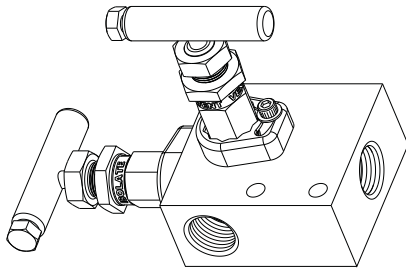
# Two-Valve Block & Bleed Manifolds

**.187" ORIFICE**

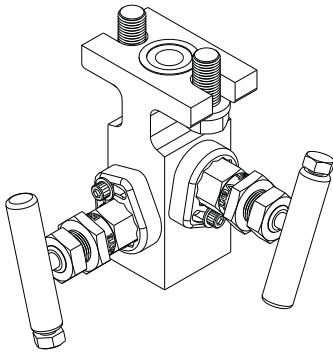
**ASME B31.1 2500# CLASS**

## Description

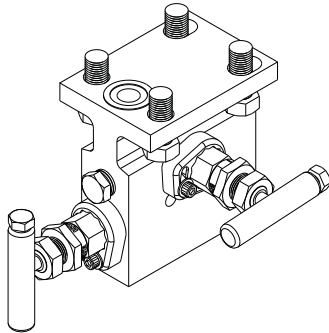
**1/2" FNPT x 1/2" FNPT**



**1/2" FNPT x Flange**

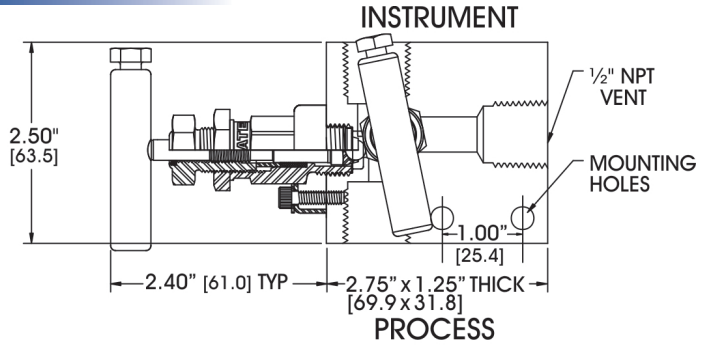


**1/2" FNPT x Flange**

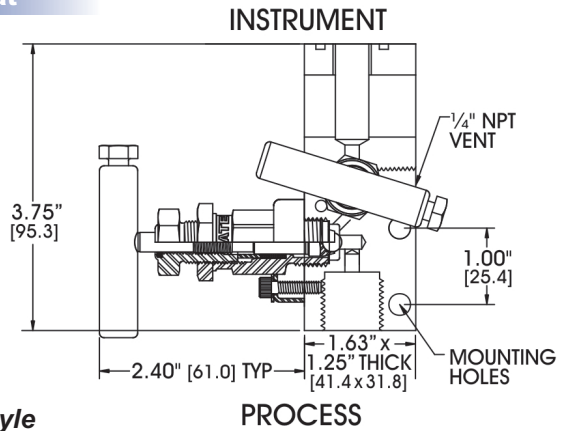


## Body Style

**PM-518 Hard Seat**

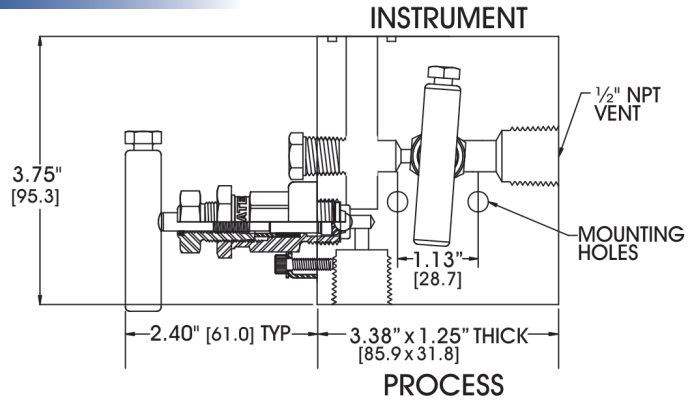


**PM-616 Hard Seat**



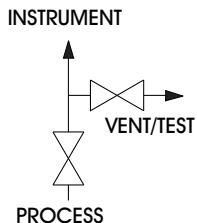
## Standard Body Style

**PM-618 Hard Seat**



## Max Cv Ratings

ORIFICE SIZE	MAX Cv RATING
.187"	.53
Approximate Manifold Weight:	4.3 lbs. [1.95 kg] each [PM-518]
	2.0 lbs. [0.91 kg] each [PM-616]
	5.0 lbs. [2.27 kg] each [PM-618]



## Materials of Construction

PART DESCRIPTION	CARBON STEEL	316 SS
Body	ASTM A105 CF	ASTM A479-316
Bonnet	ASTM A105 CF	ASTM A479-316
Stem	ASTM A479-316	ASTM A479-316
Packing Follower	ASTM A479-316	ASTM A479-316
Handle Assembly	ASTM A108	ASTM A581 18-8
Lockplate	Stainless Steel 18-8	Stainless Steel 18-8
Plugs	ASTM F593 (18-8)	ASTM F593 (18-8)
Mounting Bolts	ASTM A449-TYPE 1	ASTM A449-TYPE 1

# Two-Valve Block & Bleed Manifolds

**.187" ORIFICE**

**ASME B31.1 2500# CLASS**

**TWO-VALVE BLOCK & BLEED MANIFOLDS**

## ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM PACKING CODE	OPTION CODES
<b>Hard Seat</b>				
P M - 5 1 8			G -	
P M - 6 1 6			G -	
P M - 6 1 8			G -	

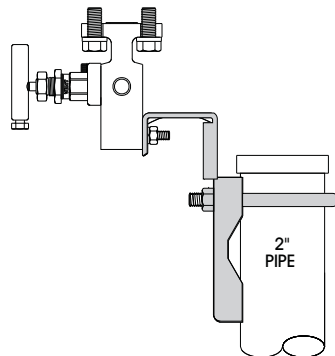
BODY MATERIAL CODE	
ASTM A105 Carbon Steel	<b>C</b>
ASTM A479-316 SS	<b>S</b>

HARD SEAT CODE	
[Std.] Carbide Ball	<b>C</b>
Ceramic Ball	<b>R</b>
316 SS Ball	<b>6</b>
Stellite® Ball	<b>S</b>

STEM PACKING CODE	
Low-Torque™	<b>G</b>
Grafoil® Packed	

### Versa-Mount Bracket Option

See Pages 26-28 for further details.



OPTION CODE	OPTION DESCRIPTION
AP7	Female Pipe Socket Weld (Process Port)
AS7	Welded Tube Stub 6" Length Standard (Process Port)
AT7	Female Tube Socket Weld (Process Port)
AU7	1/2" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports)
ME	Slotted Instrument Flange Using Bolts over 3"
P9	Hex Head Pipe Plug in Vent/Test Port
VC	CS Versa-Mount Bracket
VS	316 SS Versa-Mount Bracket
VCH	CS Heavy-Duty Versa-Mount Bracket
VSH	316 SS Heavy-Duty Versa-Mount Bracket
WA	CS 2-1/4" Bolts for Rosemount® 3051C, 3095, or
WAW9	316 SS 2024 with Coplanar™ (Flange Manifolds Only)
WK	Paper Tag
W1	316 SS Tag (20 Characters)
W9	316 SS Standard Length Flange Bolts (CS Standard)
Y	OS & Y Bonnets (All Locations)

## Pressure & Temperature

BODY MATERIAL	HARD SEAT
	Grafoil
Carbon Steel	6,170 PSI @ 100°F
	3,430 PSI @ 800°F
316 SS	6,000 PSI @ 100°F
	3,030 PSI @ 1,000°F

See Pressure & Temperature Chart on Page 4.

## Notes

- Code material of construction designed to meet the requirements of ASME B31.1
- 100% hydrostatically pressure tested 1.5 times the design pressure per B16.34 requirements
- Pipe Socket Weld Inlet Available
- PGI Carbon Steel products are Alkaline cleaned and coated with Zinc Phosphate solution; rust preventative solution applied

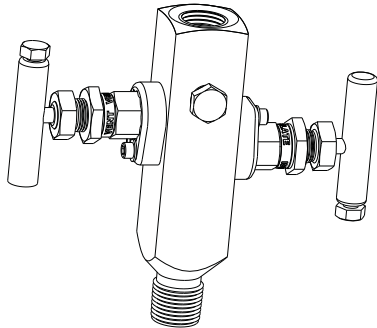
# Two-Valve Block & Bleed Manifolds

**.187" ORIFICE**

**ASME B31.1 2500# CLASS**

## Description

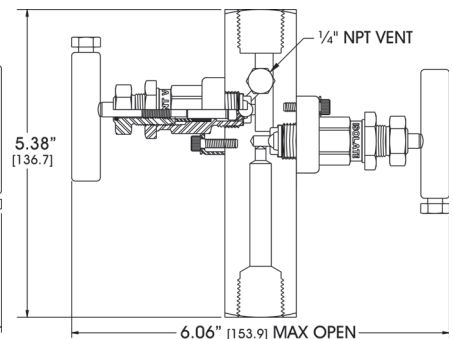
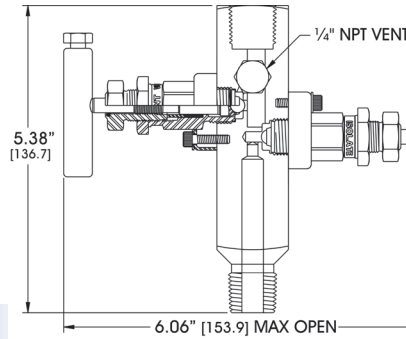
**1/2" MNPT x 1/2" FNPT**



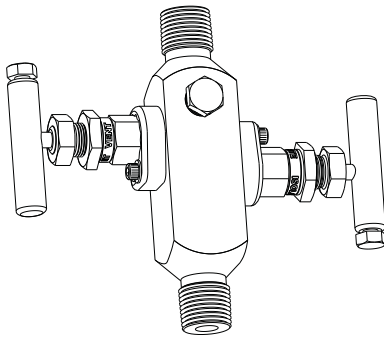
## Body Style

**PV-570 Hard Seat**

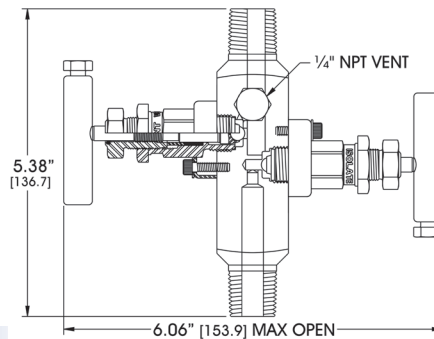
**PV-626 Hard Seat**



**1/2" MNPT x 1/2" MNPT**

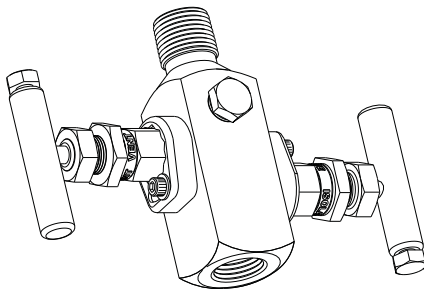


**PV-612 Hard Seat**

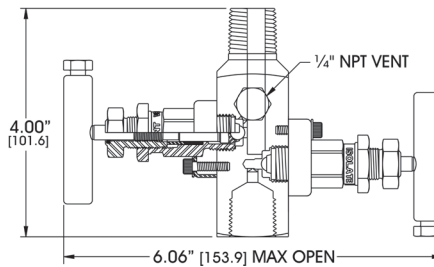


*All drawings shown with P9 Pipe Plug Option.*

**1/2" MNPT x 1/2" FNPT**



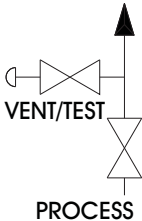
**PV-614 Hard Seat**



## Max Cv Ratings

ORIFICE SIZE	MAX Cv RATINGS
.187"	.53
<b>Approximate Manifold Weight:</b>	2.2 lbs. [1.00 kg] each [PV-570/626] 2.5 lbs. [1.13 kg] each [PV-612/614]

INSTRUMENT



## Materials of Construction

PART DESCRIPTION	CARBON STEEL	316 SS
Body	ASTM A105 CF	ASTM A479-316
Bonnet	ASTM A105 CF	ASTM A479-316
Stem	ASTM A479-316	ASTM A479-316
Packing Follower	ASTM A479-316	ASTM A479-316
Handle Assembly	ASTM A108	ASTM A581 18-8
Lockplate	Stainless Steel 18-8	Stainless Steel 18-8
Plugs	ASTM F593 (18-8)	ASTM F593 (18-8)
Mounting Bolts	ASTM A449-TYPE 1	ASTM A449-TYPE 1



# Two-Valve Block & Bleed Manifolds

**.187" ORIFICE**

**ASME B31.1 2500# CLASS**

**TWO-VALVE BLOCK & BLEED MANIFOLDS**

## ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM PACKING CODE	OPTION CODES
<b>Hard Seat</b>				
PV-570			G -	
PV-612			G -	
PV-614			G -	
PV-626			G -	

BODY MATERIAL CODE	
ASTM A105 Carbon Steel	<b>C</b>
ASTM A479-316 SS	<b>S</b>

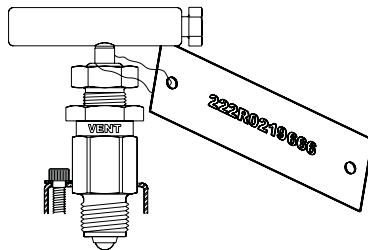
HARD SEAT CODE	
[Std.] Carbide Ball	<b>C</b>
Ceramic Ball	<b>R</b>
316 SS Ball	<b>6</b>
Stellite® Ball	<b>S</b>

STEM PACKING CODE	
Low-Torque™ Grafoil® Packed	<b>G</b>

OPTION CODE	OPTION DESCRIPTION
AM7	1/2" Male Pipe Socket Weld (Process Port)
P9	Hex Head Pipe Plug in Vent/Test Port
WK	Paper Tag
W1	316 SS Tag (20 Characters)
Y	OS & Y Bonnet (All Locations)

### Stainless Steel Tag Option

See Pages 26-28 for further details.



## Pressure & Temperature

BODY MATERIAL	HARD SEAT Grafoil
Carbon Steel	6,170 PSI @ 100°F
	3,430 PSI @ 800°F
316 SS	6,000 PSI @ 100°F
	3,030 PSI @ 1,000°F

See Pressure & Temperature Chart on Page 4.

## Notes

- 100% hydrostatically pressure tested 1.5 times the design pressure per B16.34 requirements
- Pipe Socket Weld Inlet Available
- PGI Carbon Steel products are Alkaline cleaned and coated with Zinc Phosphate solution; rust preventative solution applied

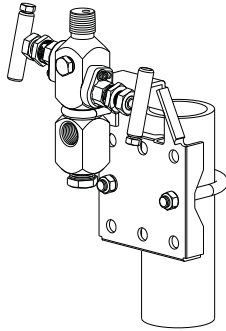
# Two-Valve Versa-Mount Block & Bleed Manifolds

**.187" ORIFICE**

**ASME B31.1 2500# CLASS**

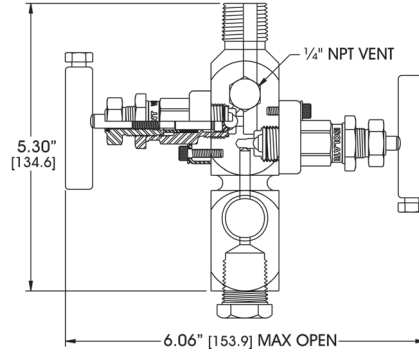
## Description

**(2) 1/2" FNPT x 1/2" MNPT**

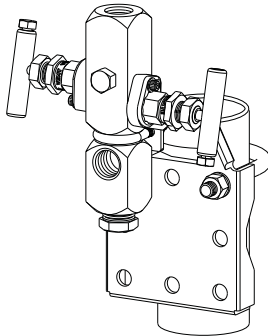


### Body Style

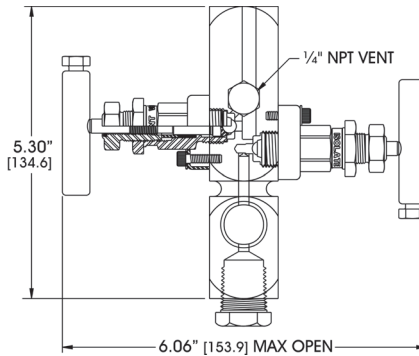
#### PV-620 Hard Seat



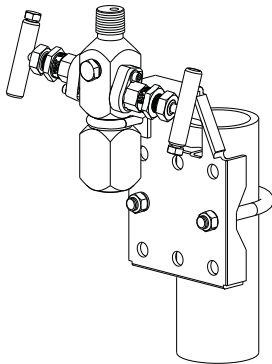
**(2) 1/2" FNPT x 1/2" FNPT**



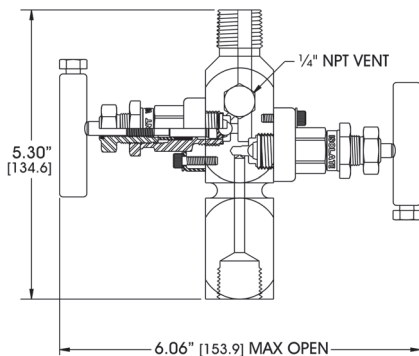
#### PV-622 Hard Seat



**1/2" FNPT x 1/2" MNPT**



#### PV-624 Hard Seat



*All drawings shown with P9 Pipe Plug Option.*

## Max Cv Ratings

ORIFICE SIZE	MAX Cv RATINGS
.187"	.53
Approximate Manifold Weight:	4.0 lbs. [1.81 kg] each [PV-620/622/624]

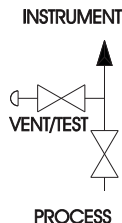
## Materials of Construction

PART DESCRIPTION	CARBON STEEL	316 SS
Body	ASTM A105 CF	ASTM A479-316
Bonnet	ASTM A105 CF	ASTM A479-316
Stem	ASTM A479-316	ASTM A479-316
Packing Follower	ASTM A479-316	ASTM A479-316
Handle Assembly	ASTM A108	ASTM A581 18-8
Lockplate	Stainless Steel 18-8	Stainless Steel 18-8
Plugs	ASTM F593 (18-8)	ASTM F593 (18-8)
Mounting Bolts	ASTM A449-TYPE 1	ASTM A449-TYPE 1

### V-620 & V-622



### V-624



# Two-Valve Versa-Mount Block & Bleed Manifolds

**.187" ORIFICE**

**ASME B31.1 2500# CLASS**

**TWO-VALVE VERSA-MOUNT MANIFOLDS**

## ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM PACKING CODE	OPTION CODES				
<b>Hard Seat</b>								
P V - 6 2 0			G -					
P V - 6 2 2			G -					
P V - 6 2 4			G -					

BODY MATERIAL CODE	
ASTM A105 Carbon Steel	<b>C</b>
ASTM A479-316 SS	<b>S</b>

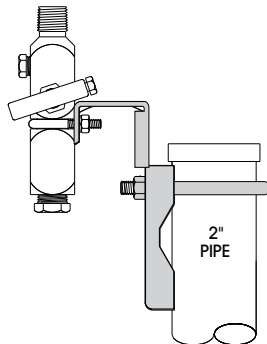
HARD SEAT CODE	
[Std.] Carbide Ball	<b>C</b>
Ceramic Ball	<b>R</b>
316 SS Ball	<b>6</b>
Stellite® Ball	<b>S</b>

STEM PACKING CODE	
Low-Torque™	<b>G</b>
Grafoil® Packed	

### Versa-Mount Bracket Option

Shown with P9 Pipe Plug Option

See Pages 26-28 for further details.



OPTION CODE	OPTION DESCRIPTION
AU7	1/2" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports)
P9	Hex Head Pipe Plug in Vent/Test Port
VC	CS Versa-Mount Bracket
VS	316 SS Versa-Mount Bracket
VCH	CS Heavy-Duty Versa-Mount Bracket
VSH	316 SS Heavy-Duty Versa-Mount Bracket
WK	Paper Tag
W1	316 SS Tag (20 Characters)

## Pressure & Temperature

BODY MATERIAL	HARD SEAT
	Grafoil
Carbon Steel	6,170 PSI @ 100°F
	3,430 PSI @ 800°F
316 SS	6,000 PSI @ 100°F
	3,030 PSI @ 1,000°F

See Pressure & Temperature Chart on Page 4.

## Notes

- 100% hydrostatically pressure tested 1.5 times the design pressure per B16.34 requirements
- Pipe Socket Weld Inlet Available
- PGI Carbon Steel products are Alkaline cleaned and coated with Zinc Phosphate solution; rust preventative solution applied

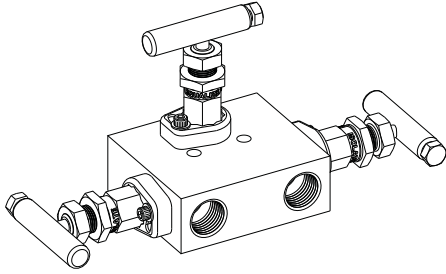
# Three-Valve Manifolds

**.187" ORIFICE**

**ASME B31.1 2500# CLASS**

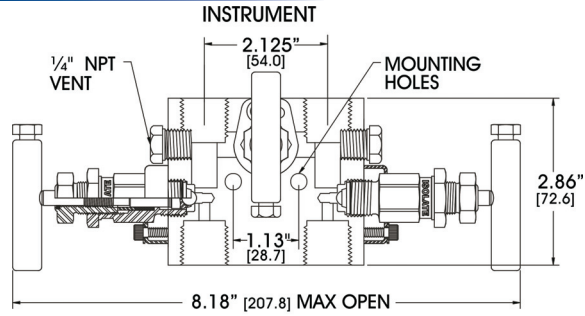
## Description

**1/2" FNPT x 1/2" FNPT**



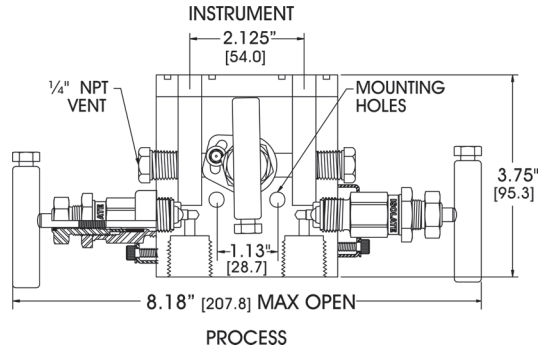
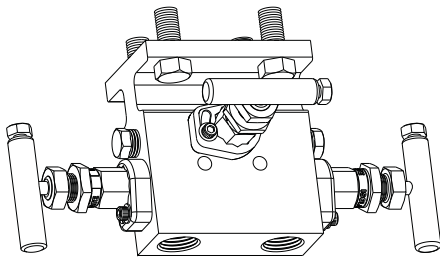
## Body Style

**PM-500 Hard Seat**



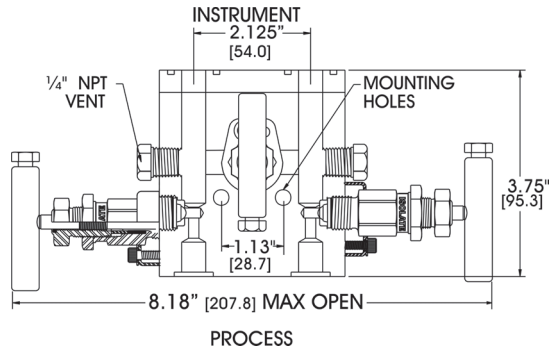
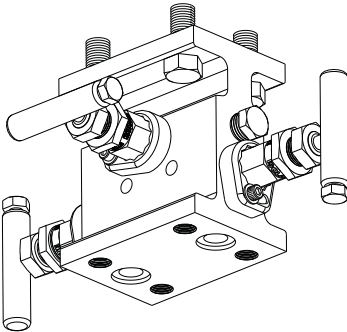
**1/2" FNPT x Flange**

**PM-650 Hard Seat**



**Flange x Flange**

**PM-750 Hard Seat**

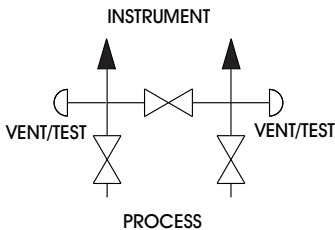


## Max Cv Ratings

ORIFICE SIZE	MAX Cv RATINGS
.187"	.53
Approximate Manifold Weight:	3.7 lbs. [1.68 kg] each [PM-500]
	7.9 lbs. [3.58 kg] each [PM-650]
	5.0 lbs. [2.27 kg] each [PM-750]

## Materials of Construction

PART DESCRIPTION	CARBON STEEL	316 SS
Body	ASTM A105 CF	ASTM A479-316
Bonnet	ASTM A105 CF	ASTM A479-316
Stem	ASTM A479-316	ASTM A479-316
Packing Follower	ASTM A479-316	ASTM A479-316
Handle Assembly	ASTM A108	ASTM A581 18-8
Lockplate	Stainless Steel 18-8	Stainless Steel 18-8
Plugs	ASTM F593 (18-8)	ASTM F593 (18-8)
Mounting Bolts	ASTM A449-TYPE 1	ASTM A449-TYPE 1



# Three-Valve Manifolds

**.187" ORIFICE**

**ASME B31.1 2500# CLASS**

**THREE-VALVE MANIFOLDS**

## ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM PACKING CODE	OPTION CODES			
<b>Hard Seat</b>							
PM - 500			G	-			
PM - 650			G	-			
PM - 750			G	-			

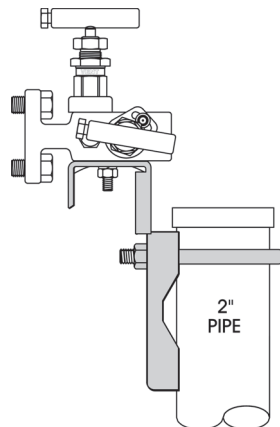
BODY MATERIAL CODE	
ASTM A105 Carbon Steel	<b>C</b>
ASTM A479-316 SS	<b>S</b>

HARD SEAT CODE	
[Std.] Carbide Ball	<b>C</b>
Ceramic Ball	<b>R</b>
316 SS Ball	<b>6</b>
Stellite® Ball	<b>S</b>

STEM PACKING CODE	
Low-Torque™	<b>G</b>
Grafoil® Packed	

### Versa-Mount Bracket Option

See Pages 26-28 for further details.



OPTION CODE	OPTION DESCRIPTION
AU7	½" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports)
ME	Slotted Instrument Flange Using Bolts over 3"
M7	Required Slotting for Rosemount® 1151 Transmitters Series 6 & Above (Flange Manifolds Only)
VA	Bracket Spacer for Flange to Flange Manifolds
VC	CS Versa-Mount Bracket
VS	316 SS Versa-Mount Bracket
VCH	CS Heavy-Duty Versa-Mount Bracket
VSH	316 SS Heavy-Duty Versa-Mount Bracket
WA	CS 2-¼" Bolts for Rosemount® 3051C, 3095, or
WAW9	316 SS 2024 with Coplanar™ (Flange Manifolds Only)
WK	Paper Tag
W1	316 SS Tag (20 Characters)
W9	316 SS Standard Length Flange Bolts (CS Standard)
X3	(2) ¼" Test Ports on Instrument Flange (Flange Manifolds Only)

## Pressure & Temperature

BODY MATERIAL	HARD SEAT
	Grafoil
Carbon Steel	6,170 PSI @ 100°F
	3,430 PSI @ 800°F
316 SS	6,000 PSI @ 100°F
	3,030 PSI @ 1,000°F

See Pressure & Temperature Chart on Page 4.

## Notes

- 100% hydrostatically pressure tested 1.5 times the design pressure per B16.34 requirements
- Pipe Socket Weld Inlet Available
- PGI Carbon Steel products are Alkaline cleaned and coated with Zinc Phosphate solution; rust preventative solution applied



# Three-Valve Blowdown Manifold

**.187" ORIFICE**

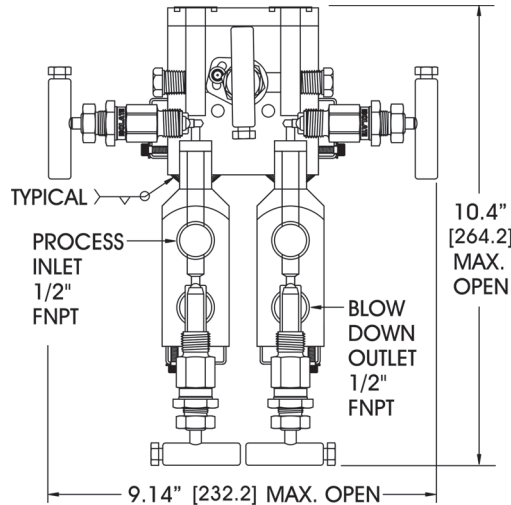
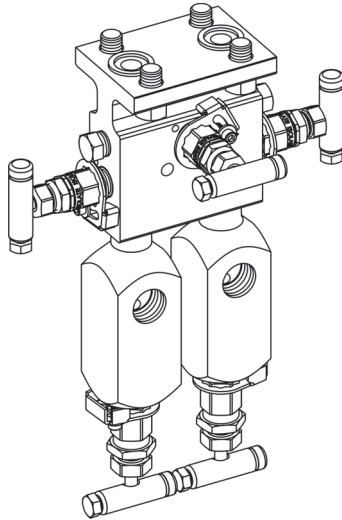
**ASME B31.1 2500# CLASS**

## Description

**1/2" FNPT x Flange**

## Body Style

**AK-135 Angle Style ~ Hard Seat**



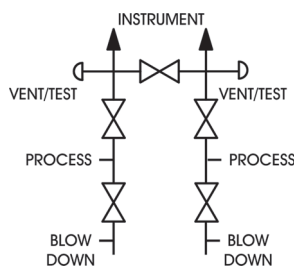
The PGI AK-135 Blow Down Manifold provides the block and equalizing functions of a standard 3-Valve Manifold and incorporates two additional block valves that are used as the blow down valves. This convenient design allows the user to blow down the process away from the directly flange mounted differential pressure transmitter. Installation time is reduced along with the additional nipples, tees and shut-off valves required in conventional blow down applications.

## Max Cv Ratings

ORIFICE SIZE	MAX Cv RATINGS
.187"	.53
Approximate Manifold Weight: 8 lbs. [3.62 kg] each [AK-135]	

## Materials of Construction

PART DESCRIPTION	CARBON STEEL	316 SS
Body	ASTM A105 CF	ASTM A479-316
Bonnet	ASTM A105 CF	ASTM A479-316
Stem	ASTM A479-316	ASTM A479-316
Packing Follower	ASTM A479-316	ASTM A479-316
Handle Assembly	ASTM A108	ASTM A581 18-8
Lockplate	Stainless Steel 18-8	Stainless Steel 18-8
Plugs	ASTM A105 CF	ASTM F593 (18-8)
Mounting Bolts	ASTM A449-TYPE 1	ASTM A449-TYPE 1



# Three-Valve Blowdown Manifold

**.187" ORIFICE**

**ASME B31.1 2500# CLASS**

**THREE-VALVE BLOW DOWN MANIFOLD**

## ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM PACKING CODE	OPTION CODES
<b>Straight Style - Hard Seat</b>				
A K - 1 3 5		S	G	-

BODY MATERIAL CODE	
ASTM A105 Carbon Steel	C
ASTM A479-316 SS	S

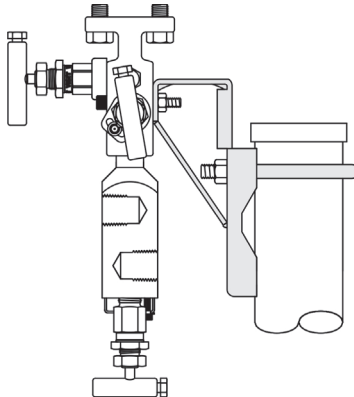
HARD SEAT CODE	
[Std.] Stellite® Ball	S
Carbide Ball	C
Ceramic Ball	R
316 SS Ball	6

STEM PACKING CODE	
Low-Torque™	G
Grafoil® Packed	

### Versa-Mount Bracket Option

Shown with AK-135

See Pages 26-28 for further details.



OPTION CODE	OPTION DESCRIPTION
AS7	Welded Tube Stub 6" Length Standard (Process Port)
M7	Required Slotting for Rosemount® 1151 Transmitters Series 6 & Above (Flange Manifolds Only)
VA	Bracket Spacer for Flange to Flange Manifolds
VCH	CS Heavy-Duty Versa-Mount Bracket
VSH	316 SS Heavy-Duty Versa-Mount Bracket
WK	Paper Tag
W1	316 SS Tag (20 Characters)
W9	316 SS Standard Length Flange Bolts (CS Standard)

## Pressure & Temperature

BODY MATERIAL	HARD SEAT
	Grafoil
Carbon Steel	6,170 PSI @ 100°F
	3,430 PSI @ 800°F
316 SS	6,000 PSI @ 100°F
	3,030 PSI @ 1,000°F

See Pressure & Temperature Chart on Page 4.

## Notes

- 100% hydrostatically pressure tested 1.5 times the design pressure per B16.34 requirements
- Pipe Socket Weld Inlet Available
- PGI Carbon Steel products are Alkaline cleaned and coated with Zinc Phosphate solution; rust preventative solution applied

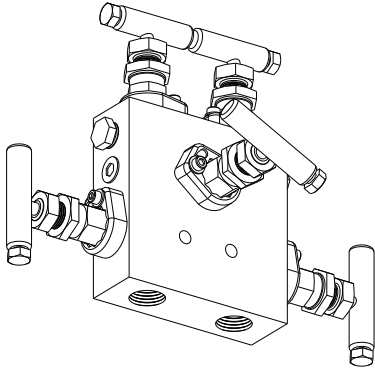
# Five-Valve Manifolds

**.187" ORIFICE**

**ASME B31.1 2500# CLASS**

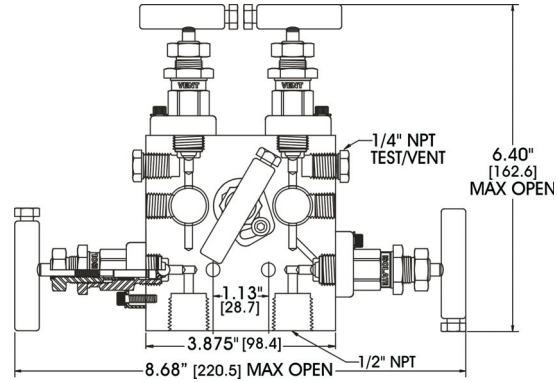
## Description

**1/2" FNPT x 1/2" FNPT**

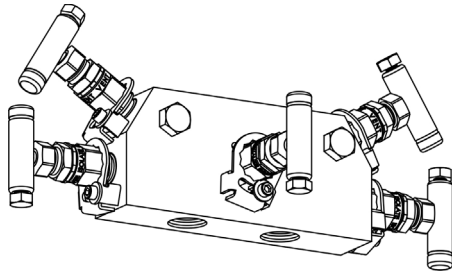


## Body Style

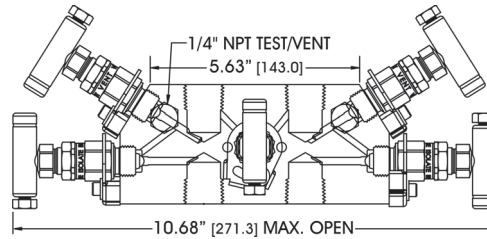
**PM-534 Angle Style ~ Hard Seat**



**1/2" FNPT x 1/2" FNPT**



**PM-850 Straight Style ~ Hard Seat**

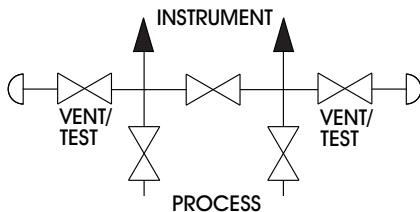


## Max Cv Ratings

ORIFICE SIZE	MAX Cv RATINGS
.187"	.53
<b>Approximate Manifold Weight:</b>	7.0 lbs. [3.18 kg] each [PM-534] 5.5 lbs. [2.49 kg] each [PM-850]

## Materials of Construction

PART DESCRIPTION	CARBON STEEL	316 SS
Body	ASTM A105 CF	ASTM A479-316
Bonnet	ASTM A105 CF	ASTM A479-316
Stem	ASTM A479-316	ASTM A479-316
Packing Follower	ASTM A479-316	ASTM A479-316
Handle Assembly	ASTM A108	ASTM A581 18-8
Lockplate	Stainless Steel 18-8	Stainless Steel 18-8
Plugs	ASTM A105 CF	ASTM F593 (18-8)
Mounting Bolts	ASTM A449-TYPE 1	ASTM A449-TYPE 1



# Five-Valve Manifolds

**.187" ORIFICE**

**ASME B31.1 2500# CLASS**

**FIVE-VALVE MANIFOLDS**

## ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM PACKING CODE	OPTION CODES
<b>Straight Style - Hard Seat</b>				
PM - 534			G -	
PM - 850			G -	

BODY MATERIAL CODE	
ASTM A105 Carbon Steel	C
ASTM A479-316 SS	S

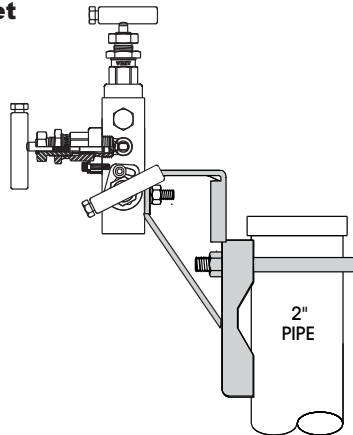
HARD SEAT CODE	
[Std.] Carbide Ball	C
Ceramic Ball	R
316 SS Ball	6
Stellite® Ball	S

STEM PACKING CODE	
Low-Torque™	G
Grafoil® Packed	

### Versa-Mount Bracket Option

Shown with PM-534

See Pages 26-28 for further details.



OPTION CODE	OPTION DESCRIPTION
AS7	Welded Tube Stub 6" Length Standard (Process Port)
M7	Required Slotting for Rosemount® 1151 Transmitters Series 6 & Above (Flange Manifolds Only)
VCH	CS Heavy-Duty Versa-Mount Bracket
VSH	316 SS Heavy-Duty Versa-Mount Bracket
WK	Paper Tag
W1	316 SS Tag (20 Characters)
W9	316 SS Standard Length Flange Bolts (CS Standard)

## Pressure & Temperature

BODY MATERIAL	HARD SEAT
	Grafoil
Carbon Steel	6,170 PSI @ 100°F
	3,430 PSI @ 800°F
316 SS	6,000 PSI @ 100°F
	3,030 PSI @ 1,000°F

See Pressure & Temperature Chart on Page 4.

## Notes

- 100% hydrostatically pressure tested 1.5 times the design pressure per B16.34 requirements
- Pipe Socket Weld Inlet Available
- PGI Carbon Steel products are Alkaline cleaned and coated with Zinc Phosphate solution; rust preventative solution applied

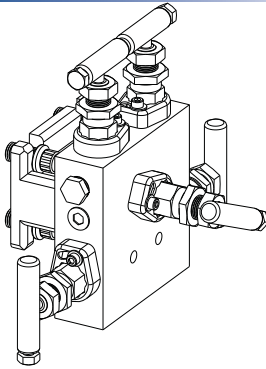
# Five-Valve Manifolds

**.187" ORIFICE**

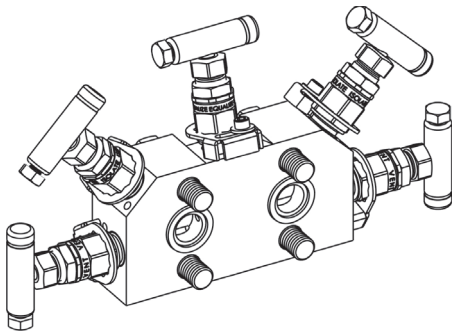
**ASME B31.1 2500# CLASS**

## Description

**1/2" FNPT x Flange**

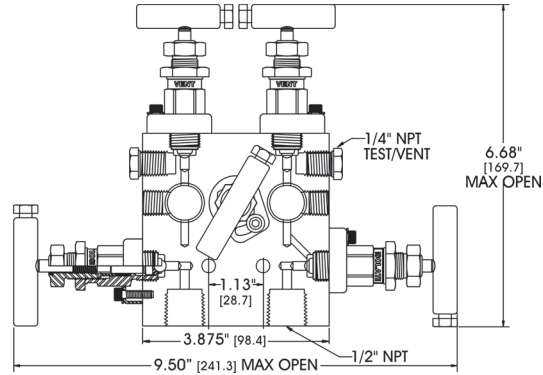


**1/2" FNPT x Flange**

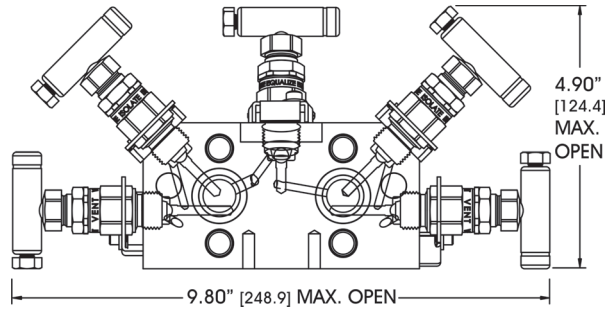


## Body Style

**PM-634 Angle Style ~ Hard Seat**



**PM-818 Straight Style ~ Hard Seat**

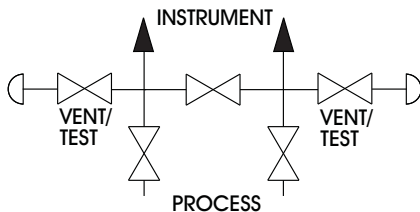


## Max Cv Ratings

ORIFICE SIZE	MAX Cv RATINGS
.187"	.53
Approximate Manifold Weight:	8.0 lbs. [3.63 kg] each [PM-634]
	6.1 lbs. [2.77 kg] each [PM-818]

## Materials of Construction

PART DESCRIPTION	CARBON STEEL	316 SS
Body	ASTM A105 CF	ASTM A479-316
Bonnet	ASTM A105 CF	ASTM A479-316
Stem	ASTM A479-316	ASTM A479-316
Packing Follower	ASTM A479-316	ASTM A479-316
Handle Assembly	ASTM A108	ASTM A581 18-8
Lockplate	Stainless Steel 18-8	Stainless Steel 18-8
Plugs	ASTM F593 (18-8)	ASTM F593 (18-8)
Mounting Bolts	ASTM A449-TYPE 1	ASTM A449-TYPE 1





# Five-Valve Manifolds

**.187" ORIFICE**

**ASME B31.1 2500# CLASS**

**FIVE-VALVE MANIFOLDS**

## ORDERING INFORMATION

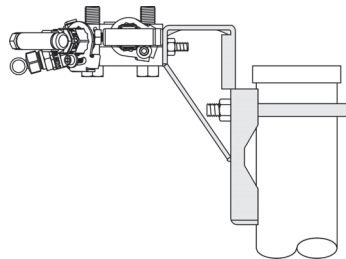
BODY STYLE	BODY CODE	SEAT CODE	STEM PACKING CODE	OPTION CODES
<b>Angle Style - Hard Seat</b>				
PM - 634			G -	
PM - 818			G -	

BODY MATERIAL CODE	
ASTM A105 Carbon Steel	C
ASTM A479-316 SS	S

HARD SEAT CODE	
[Std.] Carbide Ball	C
Ceramic Ball	R
316 SS Ball	6
Stellite® Ball	S

STEM PACKING CODE
Low-Torque™
Grafoil® Packed

### Versa-Mount Bracket Option



Shown with PM-818

See Pages 26-28 for further details.

OPTION CODE	OPTION DESCRIPTION
AS7	Welded Tube Stub 6" Length Standard (Process Port)
M7	Required Slotting for Rosemount® 1151 Transmitters Series 6 & Above (Flange Manifolds Only)
P9	Hex Head Pipe Plug in Vent/Test Port
VA	Bracket Spacer for Flange to Flange Manifolds
VCH	CS Heavy-Duty Versa-Mount Bracket
VSH	316 SS Heavy-Duty Versa-Mount Bracket
WJ	3-1/4" CS Bolts for Rosemount® 3051C, 3051S Transmitter with Coplanar™ Flange (PM-818 Only)
WJW9	3-1/4" CS Bolts for Rosemount® 3051C, 3051S Transmitter with Coplanar™ Flange (PM-818 Only)
WK	Paper Tag
W1	316 SS Tag (20 Characters)
W5A	2-1/4" SS Bolts for Rosemount® 3051C, 3051S Transmitter with Coplanar™ Flange (PM-634 Only)
W9	316 SS Standard Length Flange Bolts (CS Standard)

## Pressure & Temperature

BODY MATERIAL	HARD SEAT
	Grafoil
Carbon Steel	6,170 PSI @ 100°F
	3,430 PSI @ 800°F
316 SS	6,000 PSI @ 100°F
	3,030 PSI @ 1,000°F

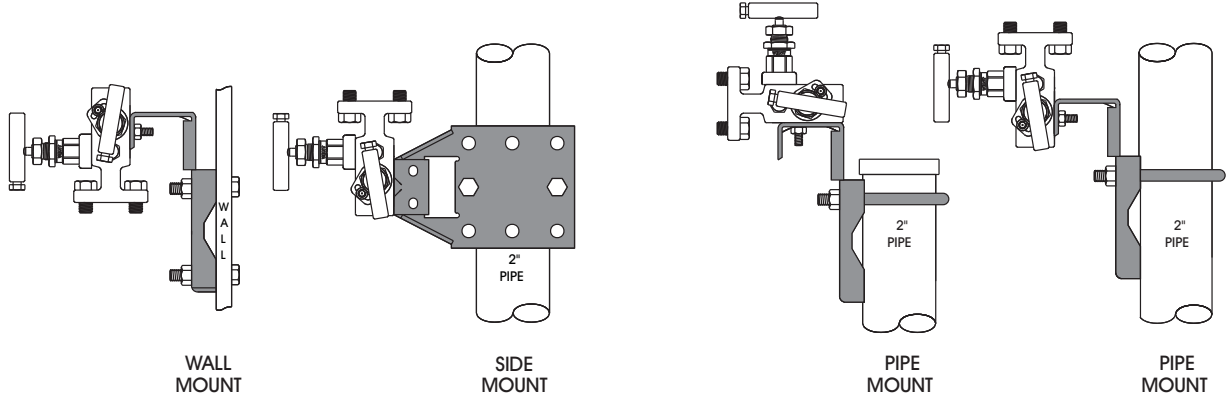
See Pressure & Temperature Chart on Page 4.

## Notes

- 100% hydrostatically pressure tested 1.5 times the design pressure per B16.34 requirements
- Pipe Socket Weld Inlet Available
- PGI Carbon Steel products are Alkaline cleaned and coated with Zinc Phosphate solution; rust preventative solution applied

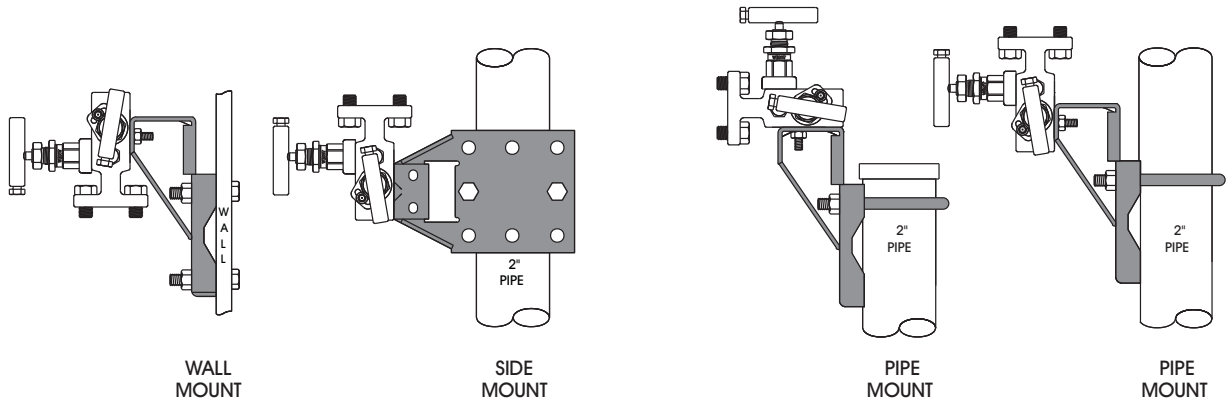
# Accessories & Options

## AK-002-\_\_ : Versa-Mount Manifold Brackets



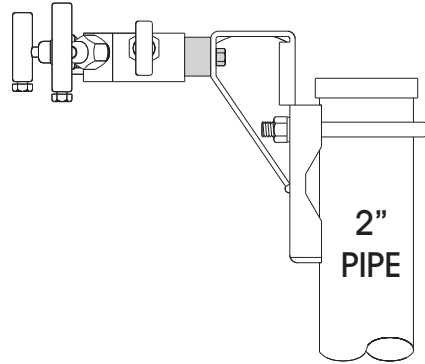
PART NUMBER	DESCRIPTION	MATERIAL
<b>Manifold Mounting Brackets &amp; Accessories</b>		
AK-002-10	Versa-Mount Manifold Mounting Bracket [VC Option Code]	Carbon Steel
AK-002-C0	Versa-Mount Manifold Mounting Bracket [VS Option Code]	316 SS

## AK-002-\_\_-HD: Heavy-Duty Versa-Mount Manifold Brackets



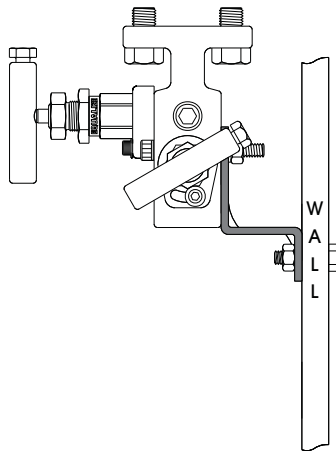
PART NUMBER	DESCRIPTION	MATERIAL
<b>Manifold Mounting Brackets &amp; Accessories</b>		
AK-002-10-HD	Heavy Duty Versa-Mount Manifold Mounting Bracket [VCH Option Code]	Carbon Steel
AK-002-C0-HD	Heavy Duty Versa-Mount Manifold Mounting Bracket [VSH Option Code]	316 SS
AK-002-10-HDWL	Heavy Duty Versa-Mount Manifold Mounting Bracket with 2 U-Bolts [VCHWL Option Code]	Carbon Steel
AK-002-C0-HDWL	Heavy Duty Versa-Mount Manifold Mounting Bracket with 2 U-Bolts [VSHWL Option Code]	316 SS

## AK-085-C0: Coplanar™ Mounting Adapter Plate



PART NUMBER	DESCRIPTION	MATERIAL
<b>Manifold Mounting Brackets &amp; Accessories</b>		
AK-085-C0	Coplanar™ Mounting Adapter Plate	316 SS

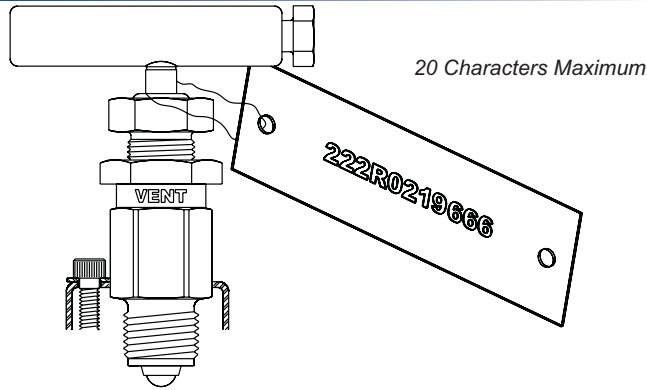
## AK-096-\_: Panel Mount Bracket



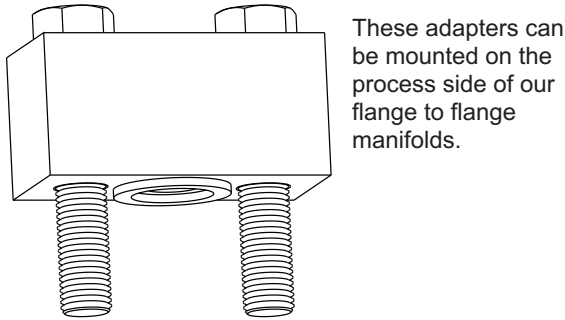
PART NUMBER	DESCRIPTION	MATERIAL
<b>Manifold Mounting Brackets &amp; Accessories</b>		
AK-096-10	Panel Mount Bracket	Carbon Steel
AK-096-C0		316 SS

# Accessories & Spare Parts

## 316 Stainless Steel Tag ~ Option Code W1



## AK-010- : Flange Adapters 1/2" FNPT x Seal Face Flange



PART NUMBER	DESCRIPTION	MATERIAL
<b>Flange Adapters</b>		
AK-010-10	Flange Adapter ~ Includes (2) 1/2" NPT	Carbon Steel
AK-010-C0	Flange Adapters, (4) Bolts, (2) Teflon® Seals	316 SS
OPTION CODE	OPTION DESCRIPTION	
MJ	Grafoil Flange Seals	

### ADDITIONAL OPTIONS

PART NUMBER	DESCRIPTION	MATERIAL
<b>Flange Seals</b>		
P5-018-R1	Grafoil Flange Seal (Standard)	Grafoil
SP5-018-R1	Grafoil Flange Seals - Pair (Standard)	Grafoil
P5-018-R0	Teflon® Seal (Derates Manifold to 600# ASME Rating)	Teflon

PART NUMBER	DESCRIPTION	STEM	SEAL	SEAT
<b>Service Bonnet Assemblies</b>				
Regular Assembly ~ .187" Orifice	SAV166CCG-HH	A105 CS	Grafoil®	Carbide Ball
	SAV166SCG-HH	316 SS		
Regular Assembly ~ .375" Orifice	SAV301CCG-HH	A105 CS		
	SAV301SCG-HH	316 SS		
Assemblies include handle.				

# Additional PGI Product Offerings

## PGI Instrument Valves

Hand, Gauge, Bleed, Root and Multi-port designs. Carbon Steel, 316 SS to NACE MR0175/ISO 15156-3 and exotic materials available. Offered with our patented Teflon® Pressure-Core® Stem Seal with an unmatched 5 year warranty.

## PGI Instrument Manifolds

A complete line of Block & Bleed, Meter, Two, Three and Five Valve styles available in Carbon Steel and 316 SS to NACE MR-01-75/ISO 15156-3. Specialty alloys available. Offered with the patented Teflon® Pressure-Core® Stem Seal with an unmatched 5 year warranty.

## Lone Star Valves & Manifolds

PGI also offers a complete line of instrument valve and manifold products with the traditional 1 year warranty. This value line of products is available in adjustable packed bonnet designs and FKM O-Ring seal bonnets for customers requiring a quality products at a value price. The Lone Star line offers a complete array of seat material options. A wide variety of ball seat materials, metal to metal seats and soft seats are available in a variety of materials to fit your application. Lone Star is also available in NACE MR-01-75/ISO 15156-3 for your critical services.

## Direct-Mount® Systems

PGI, as the industry leader of close coupled manifolding, offers systems to meet today's strict measurement requirements that reduce or eliminate gauge line errors (GLE). Offered with our patented Teflon® Pressure-Core® Stem Seal with an unmatched 5 year warranty.

## Engineered Products Division

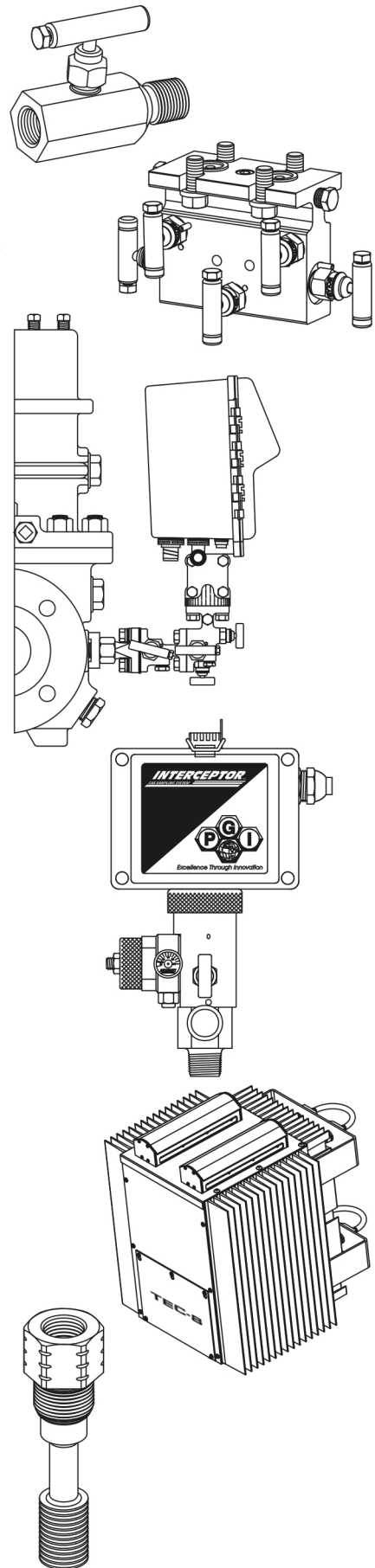
PGI offers a complete line of Gas and Liquid Composite Samplers. The Interceptor™ and Nova™ samplers are FM and CSA Approved, Intrinsically safe for Class I, Division 1, Group C and D hazardous locations, when used with an approved PGI furnished power supply. Our NOVA system samples refined liquids, dense phase CO<sub>2</sub> and wet, dry or dirty gas. Engineered Products division also offers sample cylinders, sample probes and cylinder valves. Our Hot-Shot™ Heated Enclosure System is designed to be used with natural gas samplers and will heat the sampling system to temperatures above the hydrocarbon dew point of the gas, assisting in the compliance of the new API Standard 14.1.

## ZEUS® Power Systems

We offer efficient and reliable alternatives to solar panel systems used to power electronic instruments on gas pipelines. PGI's ThermoElectric Chargers (TEC™) and Differential Pressure Chargers (DB1™) both produce 12 or 24-volts of power to keep batteries fully charged. TEC is fueled by natural gas or propane, while the DB1 is powered using the differential pressure developed across a pressure regulator. Both TEC and DB1 continually monitor the battery's temperature and charge level, and charge the battery accordingly. TEC and DB1 can be used on transmitters, flow computers, AFR (Air Fuel Ratio) and communication systems on gas pipelines. The compact units excel in cold, snowy or rainy conditions, and are low-emission environmentally friendly.

## ThermoSync® Temperature Measurement System

PGI's ThermoSync™ thermowell and optional RTD probe provide the most accurate pipeline gas temperature measurement system available. The unique patented design optimizes thermo-coupling at the RTD tip while minimizing pipe wall induced errors. Reducing pipe temperature effects on flow calculations provides greater accuracy and minimizes unaccountable errors. The ThermoSync Temperature system measures the true flowing gas temperature by including a finned thermowell with a RTD that has PVC insulation, thus reducing the transfer of outside temperature effects to the RTD.





### **INSTRUMENTATION PRODUCTS**

Instrument Valves & Manifolds  
Power and Steam Plant Valves & Manifolds  
Purge Adapters for the Process Industry

### **SPECIALIZED SYSTEMS**

Gas & Liquid Sampling Systems  
Natural Gas Sampling System Heated Enclosures  
Sample Cylinders and Accessories

### **MEASUREMENT ACCURACY PRODUCTS**

ThermoSync® Thermowells & Temperature Probes  
Direct-Mount® Systems  
Square Root Error (SRE) & Gauge Line Error (GLE) Indicators

### **ZEUS® POWER SYSTEMS**

TEC™ ThermoElectric Battery Chargers  
DB1™ Differential Pressure Battery Chargers

### **ADDITIONAL PGI DIVISION PRODUCTS & SERVICES**

Valve Fittings & Wellhead Components  
Propane and Anhydrous Ammonia Valves  
Contract Machining



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