

Warranty, Sales Policy & Manufacturing Standards

PGI International

PGI International, founded as General Screw Products Company in 1941, began as a contract manufacturer for the oil and gas industry. PGI International 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, PGI International currently has over 180,000 square feet of manufacturing capability and over 400 employees. As the markets we service expand, PGI International's quality products are demanded and specified worldwide. For companies that demand the best, PGI delivers "Excellence through Innovation."

Product Warranty

PGI International 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 International products shall be determined in accordance with laws of the State of Texas, United States of America (USA).

PGI International reserves the right to change materials, specifications or designs without notice. PGI International 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 International, 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 International 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 International'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

Monel[®] is a registered trademark of International Nickel Company.
 Hastelloy[®] is a registered trademark of Haynes International Inc.
 Delrin[®], Viton[®], Teflon[®] and Tefzel[®] are registered trademarks of the E.I. duPont de Nemours and Company.
 Grafoil[®] is a registered trademark of Union Carbide Corporation.
 Coplanar[™] is a trademark of Rosemount[®], Inc.
 Rosemount[®] is a registered trademark of Rosemount[®], Inc.
 Parker[®] is a registered trademark of Parker Hannifin Corporation.

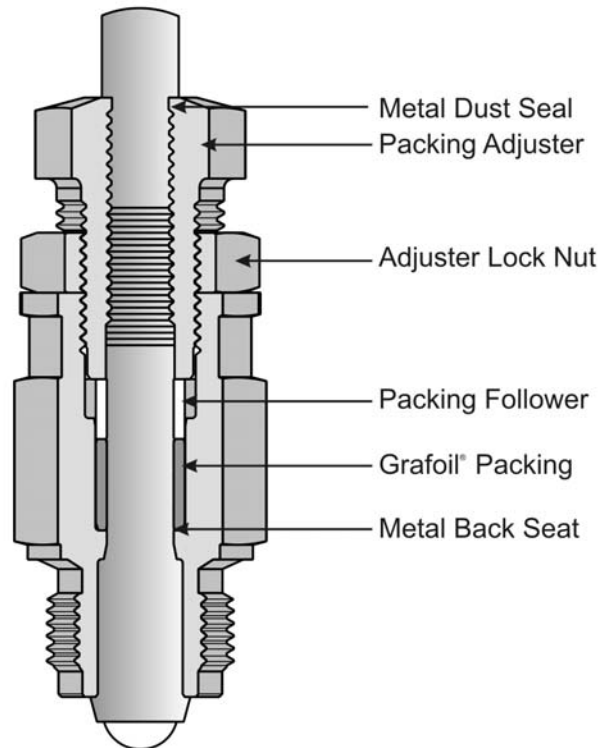
Low-Torque™ Grafoil® Bonnet and Packing Design

.187" .375" ORIFICE

CODE "G"

Torque Reduced by 50%

GRAFOIL® STEM SEAL TORQUE REDUCED BY 50%



PGI International 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.

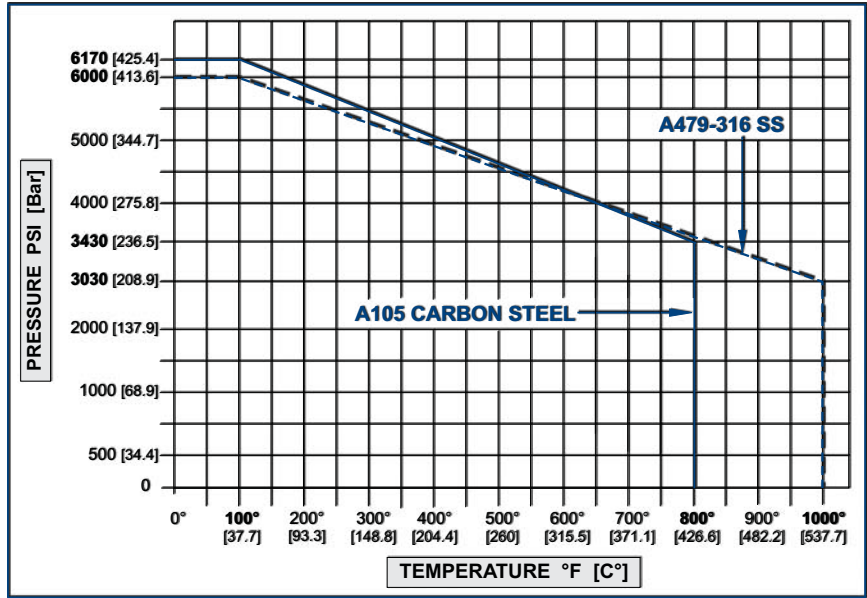
Pressure and Temperature Charts

.187" .375" ORIFICE

ASME B16.34 Pressure & Temperature Ratings and Chart

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

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



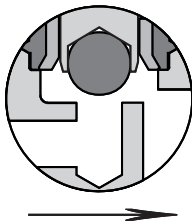
Material Codes

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

Stem Seal Material	
G	Grafoil™ Low-Torque® Packed

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

Seats ~ Features and Benefits



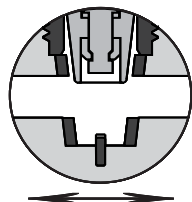
HARD BALL SEAT ~ .187" .375" Orifice

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

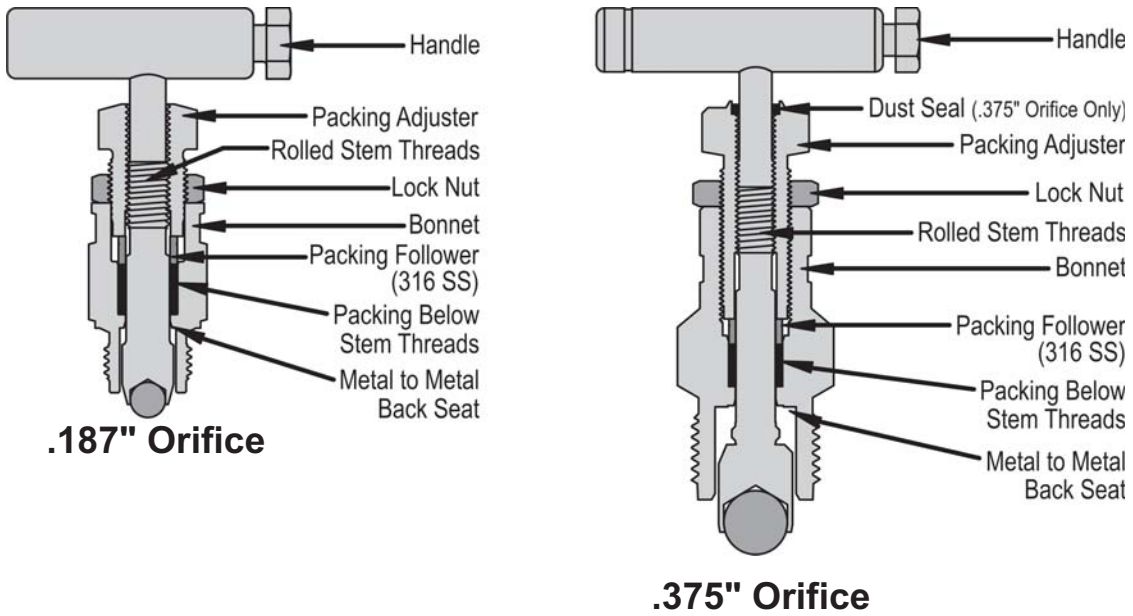
Benefits

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

Adjustable Packed Bonnet and Packing

.187" .375" ORIFICE

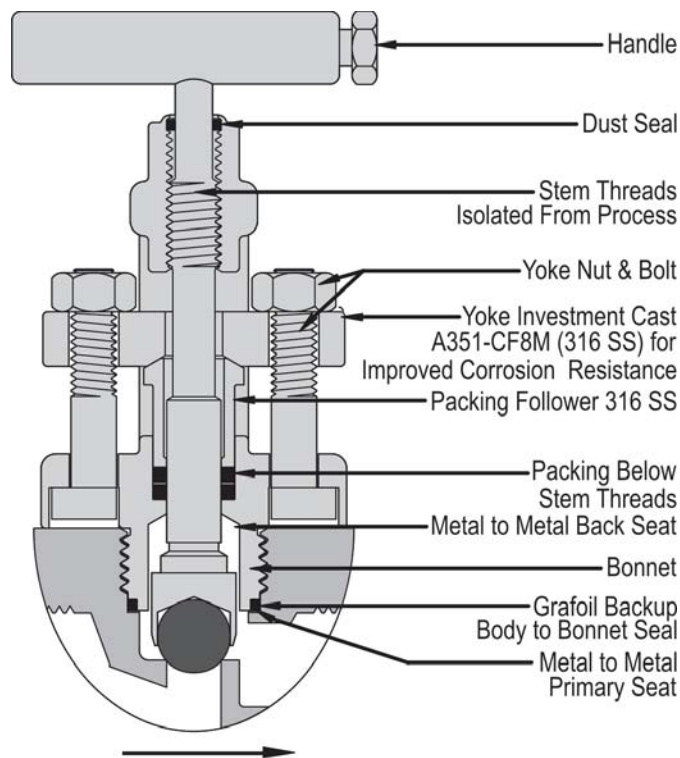
Packed Valves ~ Code "G" Grafoil



OS & Y Bonnet ~ Bonnet and Packing

.187" .375" ORIFICE

OS & Y Grafoil Packed Bonnet Code "Y"



CODES "Y" and "G"