

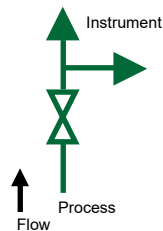
## GAUGE VALVE



Block and Bleed Valves are designed for users to isolate pressure to their instrument, bleed off excess process, and remove an instrument without disturbing or shutting down their system. Single block and bleed valves are a compact and economical solution for safe operation of pressure equipment.

## FEATURES / BENEFITS

- Complies with MSS SP-99 and MSS SP-132 Standards Where Applicable
- Rolled Stem Threads for Strength, Durability and Ease of Use
- Bleed Plug Standard
- 316SS Body Option Complies with NACE MR0175
- Leak Tested Before Shipping
- Available Factory-Installed on Reotemp Instruments



## SPECIFICATIONS

<b>Body Material</b>	316SS, Carbon Steel, Monel, Hastelloy C276, Duplex 2205, Super Duplex 2507
<b>Max Pressure Pressure Rating Available</b>	10,000 psi
<b>Min/Max Temperature Ratings Available</b>	-67°F to 1,000°F
<b>Seats Available</b>	Hard, POM, PEEK, PCTFE, ETFE
<b>Connections Available</b>	1/4"NPT, 1/2"NPT, 3/4"MNPT

## GAUGE VALVE

**HOW TO ORDER:** Choose options to build a part number. For example: **G12HTX22S-HT**

<b>G12</b>	<b>H</b>	<b>T</b>	<b>X</b>	<b>22</b>	<b>S</b>	<b>-HT</b>
MODEL	SEAT	STEM SEAL	SEAT/TIP	CONNECTIONS	BODY MATERIAL	OPTIONS
<b>G12</b> = Single Block & Bleed Process Valve	<b>H</b> = Hard Seat (Integral) <b>S</b> = Soft Seat	<b>T</b> = PTFE Packing <b>V</b> = High Pressure FKM O'Ring <sup>1</sup> <b>G</b> = Graphite Packing <sup>1</sup> <b>H</b> = High Pressure PTFE Packing <sup>2</sup> <b>J</b> = High Pressure Graphite Packing <sup>2</sup> <b>F</b> = FKM O-Ring	<b>X</b> = Hard Seat (Integral) - Standard <b>S</b> = Hard Seat with Stellite Valve Tip <b>P</b> = POM - Standard Soft Seat <sup>3</sup> <b>K</b> = PEEK Soft Seat <b>F</b> = ETFE Soft Seat <b>C</b> = PCTFE Soft Seat <sup>4</sup> <b>R</b> = Hard Seat with POM Tip <b>M</b> = Hard Seat with PCTFE Tip	<b>22</b> = 1/2" MNPT Inlet x 1/2" FNPT Outlet <b>2F</b> = 1/2" FNPT Inlet x 1/2" FNPT Outlet <b>2M</b> = 1/2" MNPT Inlet x 1/2" MNPT Outlet <b>24</b> = 1/2" MNPT Inlet x 1/4" FNPT Outlet <b>2R</b> = 1/2" FNPT Inlet x 1/2" MNPT Outlet <b>44</b> = 1/4" MNPT Inlet x 1/4" FNPT Outlet <b>4F</b> = 1/4" FNPT Inlet x 1/4" FNPT Outlet <b>32</b> = 3/4" MNPT Inlet x 1/2" FNPT Outlet	<b>S</b> = 316SS <b>M</b> = Monel 400 <b>H</b> = Hastelloy C-276 <b>C</b> = Carbon Steel <b>2</b> = Duplex <b>7</b> = Super Duplex	<b>OX</b> = Cleaned for Oxygen Service <sup>5</sup> <b>M3</b> = 2" SS Pipe Mounting Kit <b>HT</b> = Internal Hydrostatic Test <b>PM</b> = Positive Material Test <b>MR</b> = MTR for Body <b>4P</b> = 1/4" NPT Bleed Port <b>PP</b> = Power Piping According to ASME B31.1 <sup>6</sup> <b>LT</b> = Very Low Process Temperature (-67°F) <sup>7</sup> <b>MT</b> = Medium Low Process Temperature (-40°F) <sup>7</sup> <b>T1</b> = Non-Rotating Stem Tip <b>TS</b> = Stainless Steel Tag
		<sup>1</sup> Available in hard seat only.				
		<sup>2</sup> Increases max pressure to 10,000 psi for PTFE and to 7,200 psi for Graphite. Available in hard seat only.	<sup>3</sup> POM is comparable to Delrin.			
			<sup>4</sup> PCTFE is equivalent to Kel-F.			

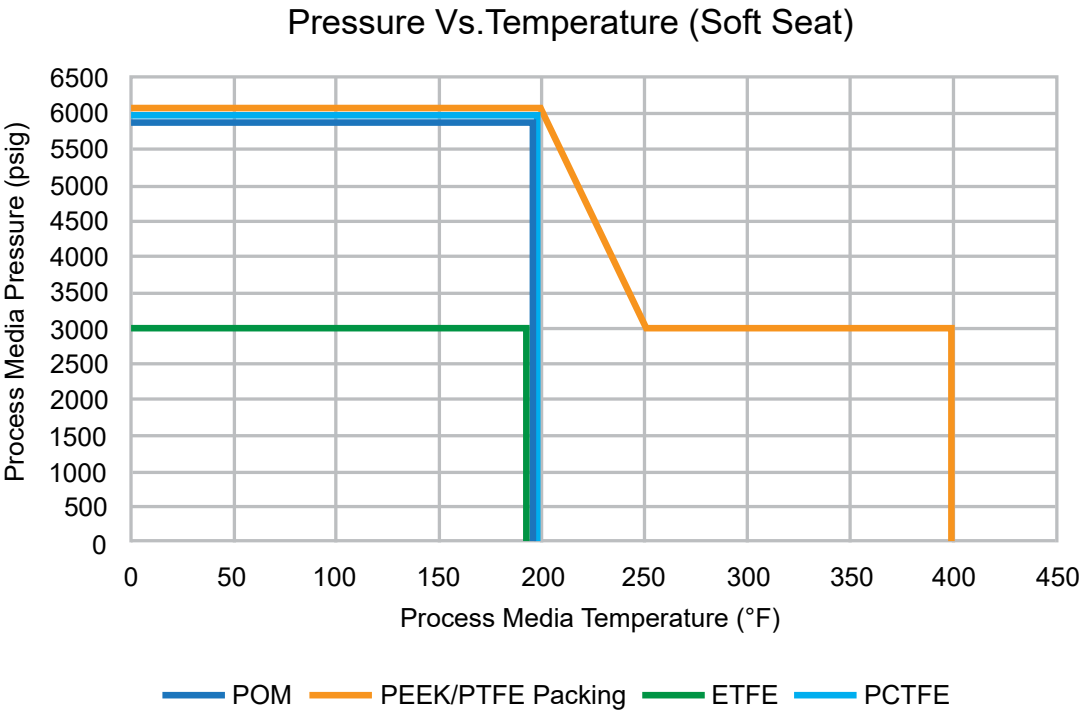
**Note:** Not all combinations in the above table are possible. Conversely, if a combination is desired but not seen, ask your Reotemp Sales Representative. Additional configurations and options are available upon request.

<sup>5</sup>Max Temperature is 392°F at 1,305 psi. Max Pressure is 6,000 psi at 140°F

<sup>6</sup>Graphite packing with S body only.

<sup>7</sup>-MT is not available with carbon steel, FKM, or PEEK. LT requires a hard seat or PCTFE soft seat, PTFE stem seal, and S body.

VALVE SOFT SEAT CHART



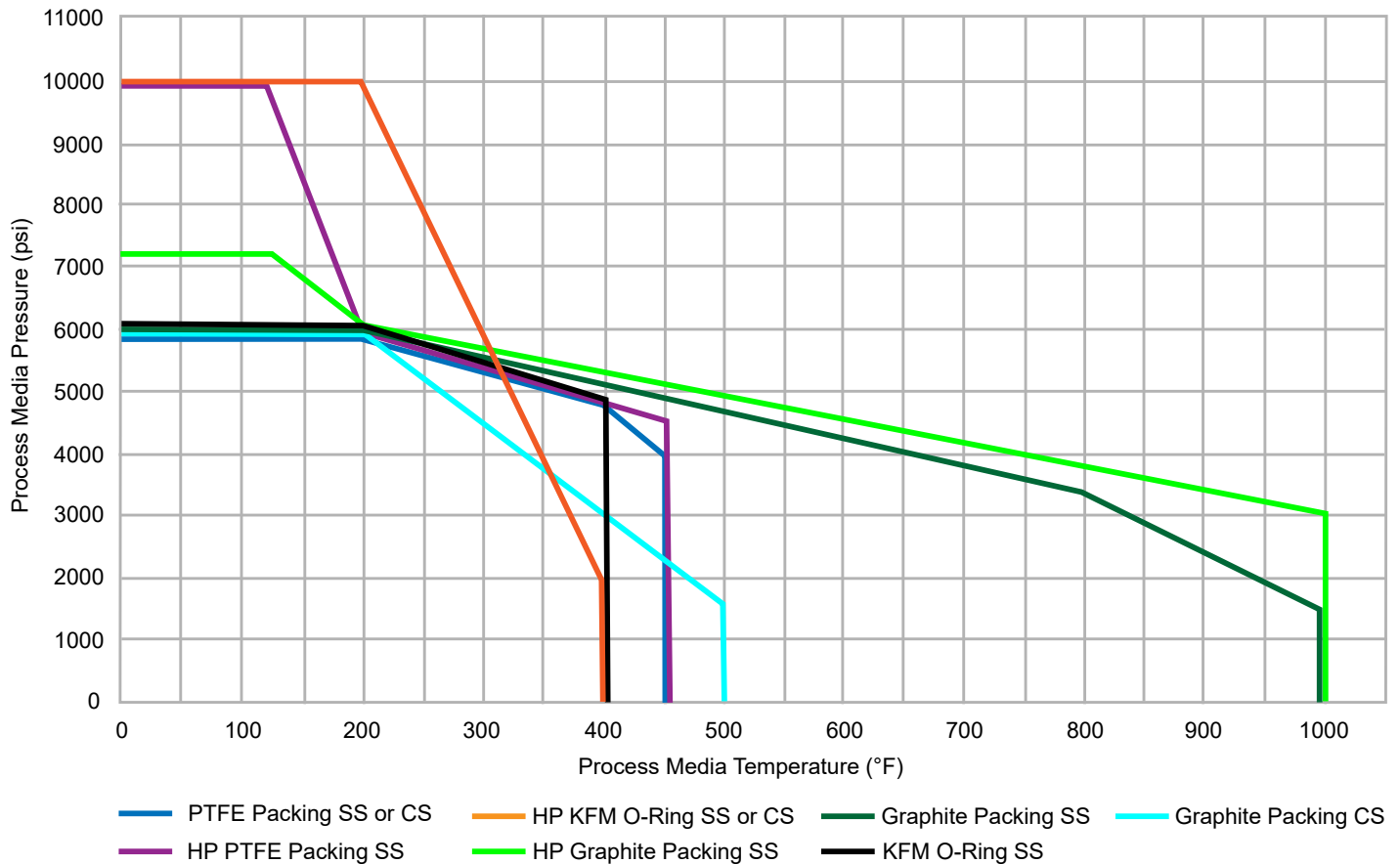
Soft Seat Ratings	
POM	6,000psi at 200°F
PEEK w/ PTFE Packing	6,000psi at 200°F 3,000psi at 400°F
ETFE	3,000psi at 200°F
PCTFE	6,000psi at 200°F

Minimum Temperature Soft Seat Ratings	
Soft Seat Value with No Options	0°F
-MT Option Code	-40°F
-LT Option Code	-67°F

**Note:** EN 61518 guidelines for direct mount manifolds state that the max temperature on a flange mounted to a transmitter should not exceed 248°F to protect the transmitter from excess heat.

## VALVE HARD SEAT CHART

Pressure Vs. Temperature (Hard Seat)



### Hard Seat Ratings

PTFE Packing SS or CS Body	6,000psi at 200°F 4,000psi at 450°F
High Pressure FKM O-Ring SS or CS Body	10,000psi at 200°F 2,000psi at 392°F
Graphite Packing and SS Body	6,000psi at 200°F 1,500psi at 1,000°F
Graphite Packing and CS Body	6,000psi at 200°F 1,500psi at 500°F
High Pressure PTFE Packing and SS Body	10,000psi at 120°F 4,500psi at 450°F
High Pressure Graphite Packing and SS Body	7,200psi at 120°F 3,000psi at 1,000°F
FKM O-Ring and SS Body	6,000psi at 200°F 4,500psi at 392°F

### Minimum Temperature Ratings

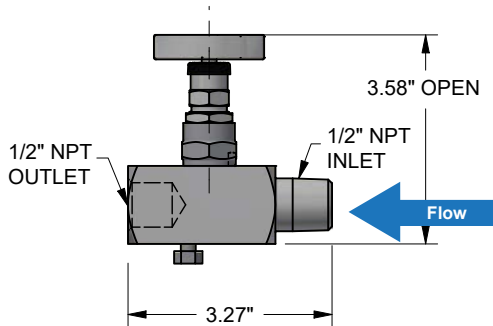
No Additional Options	0°F
-MT Option Code	-40°F
-LT Option Code	-67°F

### Soft Tip Max Temperature

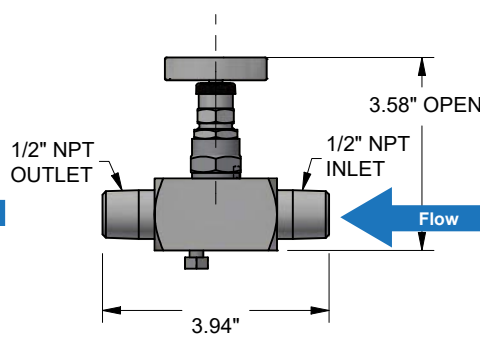
POM	212°F
PCTFE	302°F

**Note:** EN 61518 guidelines for direct mount manifolds state that the max temperature on a flange mounted to a transmitter should not exceed 248°F to protect the transmitter from excess heat.

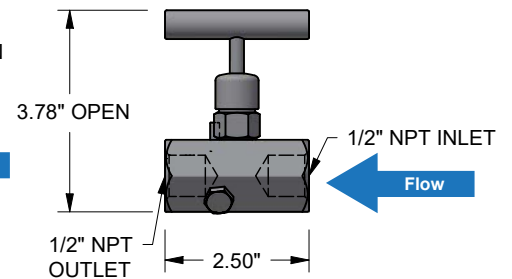
## GAUGE VALVE



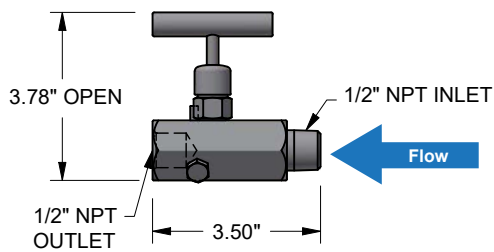
G12HTX22S



G12HTX2MS



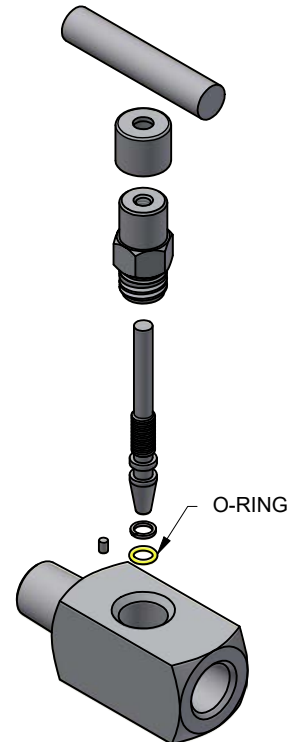
G12HVX2FS



G12HVX22S



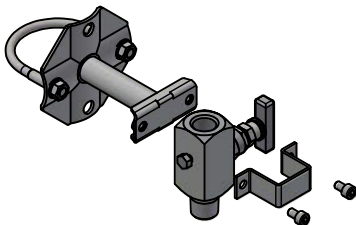
Packed Bonnet Seal Example



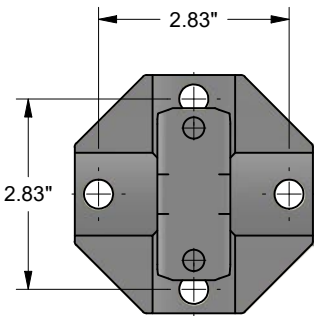
O-Ring Example

**Note:** Dimensions are given as examples for reference. Contact your Reotemp sales representative for more exact and detailed drawings.

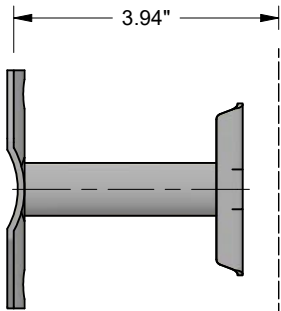
GAUGE VALVE



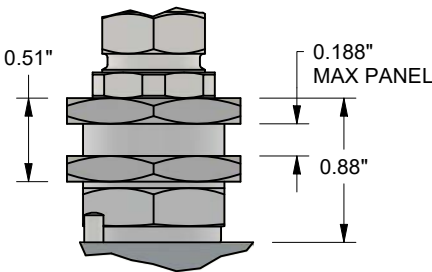
-M3 (2" SS Pipe Mounting Bracket Option)



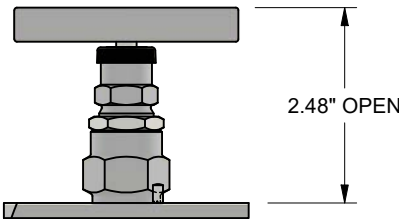
Mounting Bracket Hole Pattern



Mounting Bracket Side View



-M4 (Panel Mounting Option)



H and J (High Pressure Packing)

VALVES