



Instrument Needle Valves

**SOFT SEAT
.187" ORIFICE**

SOFT SEAT: .187" Orifice



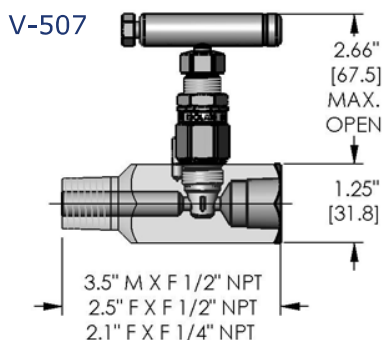
Features

- PGI Soft Cone Seat

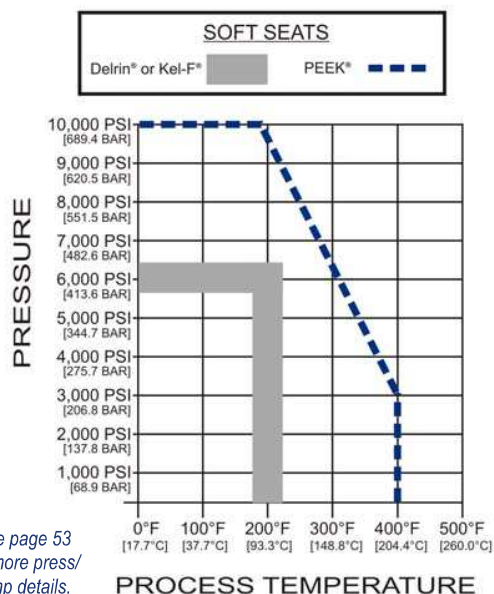
Benefits

- Roddable straight-through design
- Leak free, bubble tight seating
- Easily replaced
- Available in a variety of materials
- Bi-directional flow

Dimensions, inches [mm]



Pressure vs. Temperature



Part Number Selection

Base Model

Bi-Directional Flow		
V-	501	1/4" MNPT x 1/4" FNPT
V-	503	1/4" FNPT x 1/4" FNPT
V-	507	1/2" MNPT x 1/2" FNPT
V-	509	1/2" FNPT x 1/2" FNPT
V-	529	3/4" MNPT x 1/2" FNPT
V-	531	1/2" MNPT x 1/4" FNPT

Body Material Code

C	ASTM A108
S	ASTM A479-316 SS
P	ASTM A696*

Seat Material Code

D	Delrin® (Standard)
K	Kel-F®
P	Peek®

Stem Packing/Seal Code

P	PTFE (Below threads)
V	Viton® O-Ring

V- - - - - Options [pages 49-50]

Materials of Construction

Part	Carbon Steel	A696 Carbon Steel*	316 Stainless Steel
Body / Bonnet	ASTM A108	ASTM A696 Gr.C	ASTM A479-316
Packing "P" / "V"	PTFE/Viton® O-Ring	PTFE/Viton® O-Ring	PTFE/Viton® O-Ring
Stem	ASTM A479-316	ASTM A479-316	ASTM A479-316
Packing Adjuster	ASTM A696 Gr.C	ASTM A696 Gr.C	ASTM A479-316
Packing Follower	ASTM A479-316	ASTM A479-316	ASTM A479-316
Jam Nut (TFE Packed Only)	ASTM A696 Gr.C	ASTM A696 Gr.C	ASTM A582-303
Handle Assembly	ASTM A108	ASTM A108	300 Series SS

Max Cv Ratings

.187" Orifice	Straight Body Style
	.83

Approx. Valve Weight:

1.30 lbs. [.58 kg] ea.

* Barstock equivalent of ASTM A105

Notes

- PGI Carbon Steel products are Alkaline Zinc plated for corrosion prevention
- PGI 316 SS products meet the requirements of NACE MR0175/ISO 15156-3
- 100% Pressure Tested
- Carbon Steel Weld End Connection Bodies are ASTM A696 Gr.C



Instrument Needle Valves

**HARD SEAT
.187" ORIFICE**

HARD BALL SEAT: .187" Orifice



Features

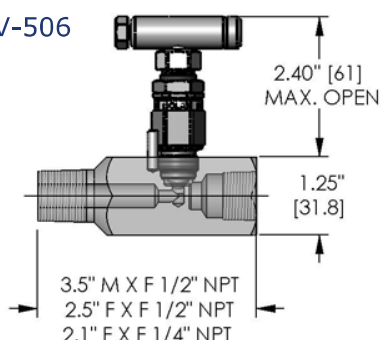
- PGI Standard 316 SS Ball Seat

Benefits

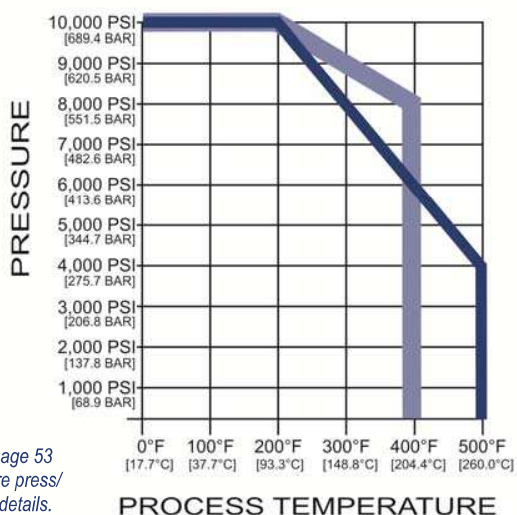
- Non-rotating ball eliminates seat galling and ball creasing
- Leak free, bubble tight seating
- Available in a variety of materials

Dimensions, inches [mm]

V-506



Pressure vs. Temperature



Part Number Selection

Base Model

Inlet x Outlet		
V-	500	1/4" MNPT x 1/4" FNPT
V-	502	1/4" FNPT x 1/4" FNPT
V-	506	1/2" MNPT x 1/2" FNPT
V-	508	1/2" FNPT x 1/2" FNPT
V-	528	3/4" MNPT x 1/2" FNPT
V-	530	1/2" MNPT x 1/4" FNPT
V-	540	3/4" FNPT x 3/4" FNPT

Body Material Code

C	ASTM A108
S	ASTM A479-316 SS
P	ASTM A696*

Seat Material Code

6	316 SS Ball (Standard)
C	Carbide Ball
N	Monel®

Stem Packing/Seal Code

P	PTFE (Below threads)
V	Viton® O-Ring

V- [] [] [] [] - Options [pages 49-50]

Materials of Construction

Part	Carbon Steel	A696 Carbon Steel*	316 Stainless Steel
Body / Bonnet	ASTM A108	ASTM A696 Gr.C	ASTM A479-316
Packing "P" / "V"	PTFE/Viton® O-Ring	PTFE/Viton® O-Ring	PTFE/Viton® O-Ring
Stem	ASTM A479-316	ASTM A479-316	ASTM A479-316
Packing Adjuster	ASTM A696 Gr.C	ASTM A696 Gr.C	ASTM A479-316
Packing Follower	ASTM A479-316	ASTM A479-316	ASTM A479-316
Jam Nut (TFE Packed Only)	ASTM A696 Gr.C	ASTM A696 Gr.C	ASTM A582-303
Handle Assembly	ASTM A108	ASTM A108	300 Series SS

Max Cv Ratings

.187" Orifice	Straight Body Style
	.53

Approx. Valve Weight:
1.30 lbs. [.58 kg] ea.

* Barstock equivalent of ASTM A105

Notes

- PGI Carbon Steel products are Alkaline Zinc plated for corrosion prevention
- PGI 316 SS products meet the requirements of NACE MR0175/ISO 15156-3
- 100% Pressure Tested
- Carbon Steel Weld End Connection Bodies are ASTM A696 Gr.C



Instrument Needle Valves

**SOFT SEAT
.375" ORIFICE**

SOFT SEAT: .375" Orifice



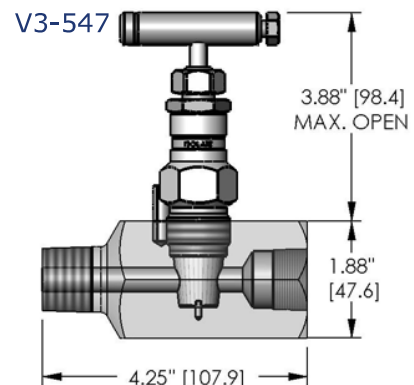
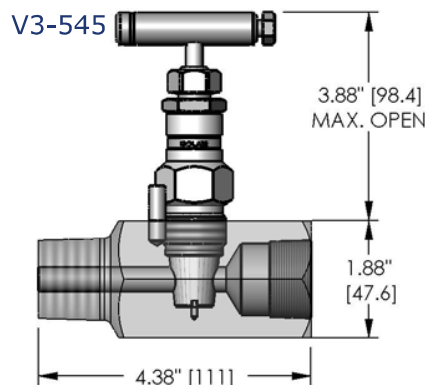
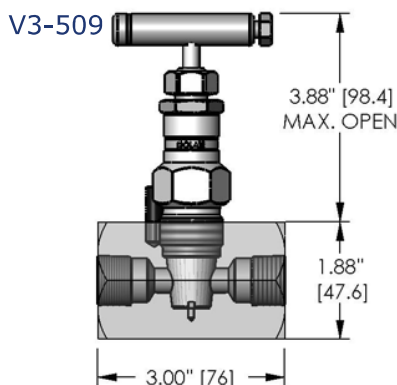
Features

- PGI Soft Cone Seat

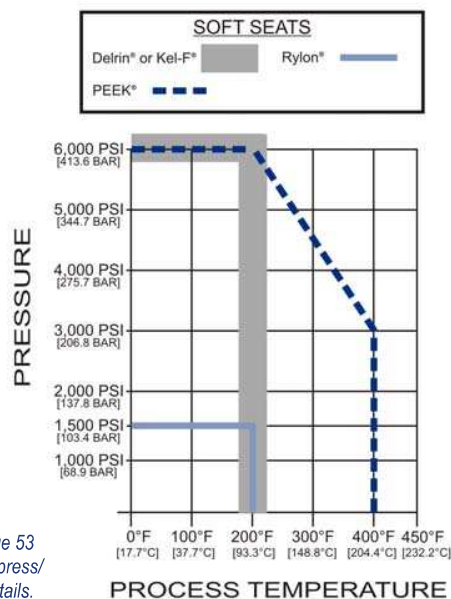
Benefits

- Roddable straight-through design
- Leak free, bubble tight seating
- Easily replaced
- Available in a variety of materials
- Bi-directional flow

Dimensions, inches [mm]



Pressure vs. Temperature



Part Number Selection

Base Model

V3-	507	1/2" MNPT x 1/2" FNPT
V3-	509	1/2" FNPT x 1/2" FNPT
V3-	529	3/4" MNPT x 1/2" FNPT
V3-	537	1" MNPT x 1/2" FNPT
V3-	541	3/4" FNPT x 3/4" FNPT
V3-	543	1" FNPT x 1" FNPT
V3-	545	1" MNPT x 1" FNPT
V3-	547	3/4" MNPT x 3/4" FNPT

Body Material Code

C	ASTM A108
S	ASTM A479-316 SS

Seat Material Code

D	Delrin® (Standard)
K	Kel-F®
P	Peek®

Stem Packing/Seal Code

P	PTFE (Below threads)
V	Viton® O-Ring

V3- - Options [pages 49-50]

Materials of Construction

Part	Carbon Steel	A696 Carbon Steel*	316 Stainless Steel
Body / Bonnet	ASTM A108	ASTM A696 Gr.C	ASTM A479-316
Packing "P" / "V"	PTFE/Viton® O-Ring	PTFE/Viton® O-Ring	PTFE/Viton® O-Ring
Stem	ASTM A479-316	ASTM A479-316	ASTM A479-316
Packing Adjuster	ASTM A696 Gr.C	ASTM A696 Gr.C	ASTM A479-316
Packing Follower	ASTM A479-316	ASTM A479-316	ASTM A479-316
Jam Nut (TFE Packed Only)	ASTM A696 Gr.C	ASTM A696 Gr.C	ASTM A582-303
Handle Assembly	ASTM A108	ASTM A108	300 Series SS

Max Cv Ratings

.375" Orifice	Straight Body Style
	3.00

Approx. Valve Weight:
3.00 lbs. [1.36 kg] ea.

* Barstock equivalent of ASTM A105

Notes

- PGI Carbon Steel products are Alkaline Zinc plated for corrosion prevention
- PGI 316 SS products meet the requirements of NACE MR0175/ISO 15156-3
- 100% Pressure Tested
- Carbon Steel Weld End Connection Bodies are ASTM A696 Gr.C



Instrument Needle Valves

**HARD SEAT
.375" ORIFICE**

HARD BALL SEAT: .375" Orifice



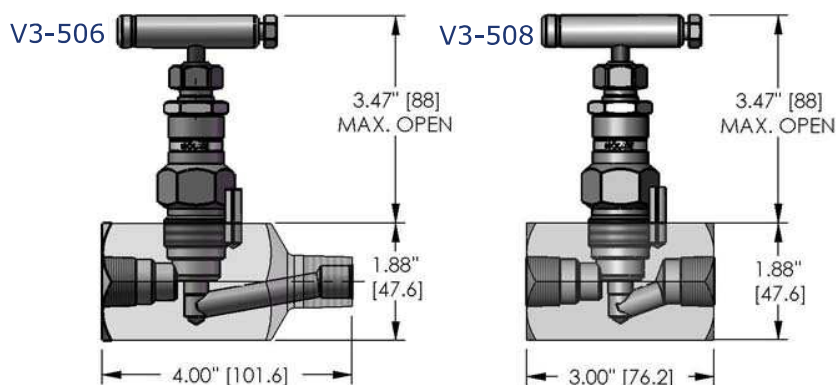
Features

- PGI Standard 316 SS Ball Seat

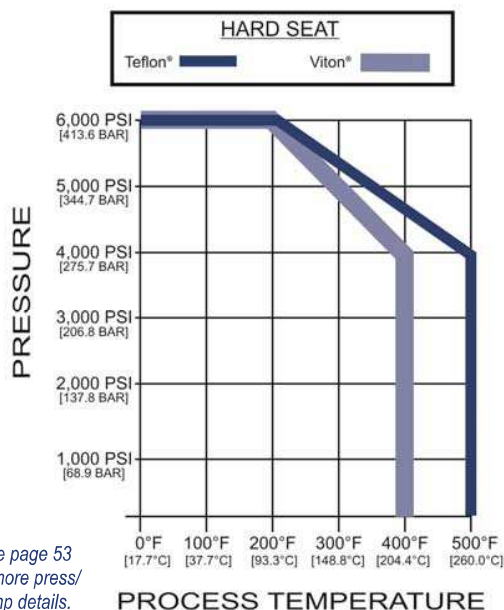
Benefits

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

Dimensions, inches [mm]



Pressure vs. Temperature



Part Number Selection

Base Model

Inlet x Outlet		
V3-	506	1/2" MNPT x 1/2" FNPT
V3-	508	1/2" FNPT x 1/2" FNPT
V3-	540	3/4" FNPT x 3/4" FNPT
V3-	542	1" FNPT x 1" FNPT
V3-	544	1" MNPT x 1" FNPT

Body Material Code

C	ASTM A108
S	ASTM A479-316 SS
P	ASTM A696*

Seat Material Code

6	316 SS Ball (Standard)
C	Carbide Ball
N	Monel®

Stem Packing/Seal Code

P	PTFE (Below threads)
V	Viton® O-Ring

V3- - Options [pages 49-50]

Materials of Construction

Part	Carbon Steel	A696 Carbon Steel*	316 Stainless Steel
Body / Bonnet	ASTM A108	ASTM A696 Gr.C	ASTM A479-316
Packing "P" / "V"	PTFE/Viton® O-Ring	PTFE/Viton® O-Ring	PTFE/Viton® O-Ring
Stem	ASTM A479-316	ASTM A479-316	ASTM A479-316
Packing Adjuster	ASTM A696 Gr.C	ASTM A696 Gr.C	ASTM A479-316
Packing Follower	ASTM A479-316	ASTM A479-316	ASTM A479-316
Jam Nut (TFE Packed Only)	ASTM A696 Gr.C	ASTM A696 Gr.C	ASTM A582-303
Handle Assembly	ASTM A108	ASTM A108	300 Series SS

Max Cv Ratings

.375" Orifice	Straight Body Style
	2.40

Approx. Valve Weight:
3.00 lbs. [1.36 kg] ea.

* Barstock equivalent of ASTM A105

Notes

- PGI Carbon Steel products are Alkaline Zinc plated for corrosion prevention
- PGI 316 SS products meet the requirements of NACE MR0175/ISO 15156-3
- 100% Pressure Tested
- Carbon Steel Weld End Connection Bodies are ASTM A696 Gr.C