

GAS MINI VALVE

1/8" Bore Soft Seat Gas Mini Valve

The soft seat mini valve is designed specifically for the natural gas industry. It features a double Viton™ O-ring with a back-up Teflon™ seal below the threads, a full backseating capability, a blowout proof stem and a unique seat design for service up to 6,000 psi. The valve is also available with a 1,800 psi rupture disc.



Standard Features

Hydrotested at 150% of rated pressure (shell test). Nitrogen gas tested to 2000 psi.

Seat tightness (zero leakage) verified to 110% of rated pressure. Nitrogen gas tested to 2000 psi.

Packing below stem threads

Metal body-to-bonnet seals are in compression, not tension

Bonnet lock pin

Stem threads are rolled, not cut

Unique mini soft seat design

Pressure component materials sourced from the US, Canada or Europe

Benefits

Complies with ASME B31.1 & B31.3 shell testing procedures as standard. Ensures structural integrity of valve.

Complies with ASME B31.1 & B31.3 seat testing procedures as standard. Ensures zero leakage at seats for proper calibration.

Prevents corrosion of critical stem threads

Mitigates risk of stress cracking

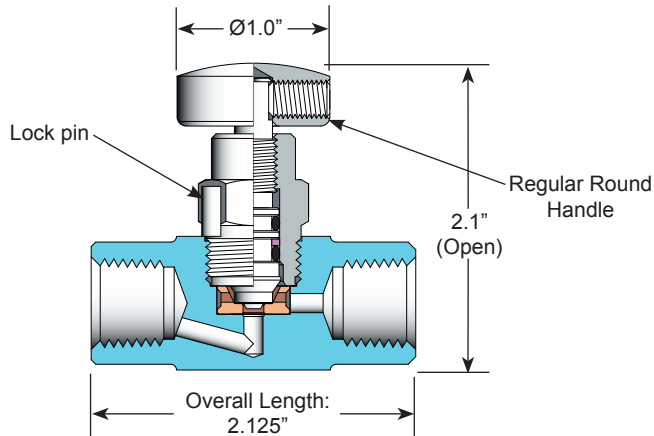
Provides for a tamper proof bonnet

Higher quality stem for longer service life

Allows pressure up to 6000 psi

Reliable material traceability, MTR's provided with every order on pressure containing components.

O-Ring Bonnet Assembly

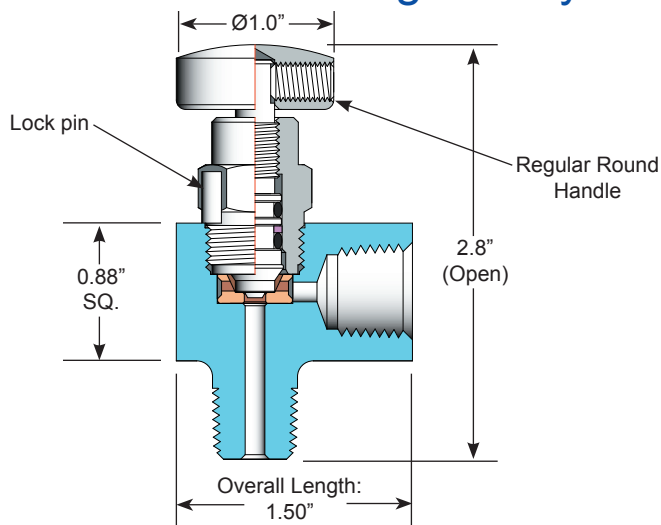


Specifications:

Type: **P2N6G**, Gas Valve, Globe Pattern
 Rating: Up to 6000 psi @ 100°F (41370 kPa @ 38°C)
 Stem: Flat tip
 Packing: Vition™ or Aflas™ O-ring
 Seat: Delrin™, Optional Peek™ and Kel-F™
 Handle: Removable
 Bore Size: 1/8"
 Inlet Connections: 1/8" to 1/4" NPT
 Outlet Connections: 1/8" to 1/4" NPT
 Bonnet Lock: Pin
 Body Stock: .875" Sq.
 Weight: 0.35 - 0.40 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available.

Angle Body Assembly

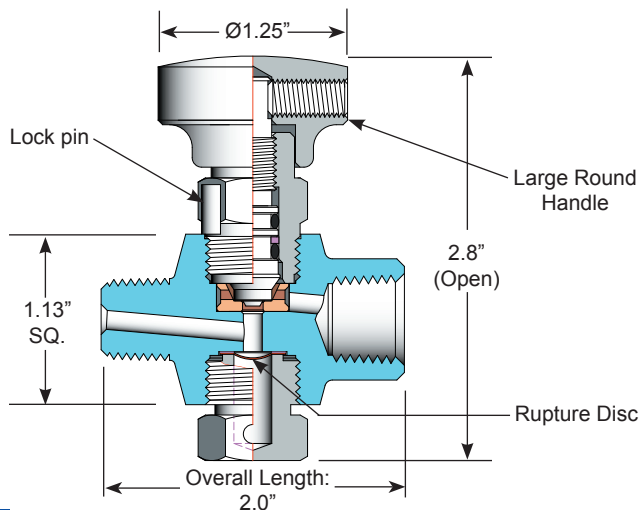


Specifications:

Type: **P2NA6G**, Gas Valve, Globe Pattern
 Rating: Up to 6000 psi @ 100°F (41370 kPa @ 38°C)
 Stem: Flat tip
 Packing: Vition™ or Aflas™ O-ring
 Seat: Delrin™, Optional Peek™ and Kel-F™
 Handle: Removable
 Bore Size: 1/8"
 Inlet Connections: 1/8" to 1/4" NPT
 Outlet Connections: 1/8" to 1/4" NPT
 Bonnet Lock: Pin
 Body Stock: 1.5" x 1.5" x 0.875"
 Weight: 0.4 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available.

Rupture Disc Valve Assembly



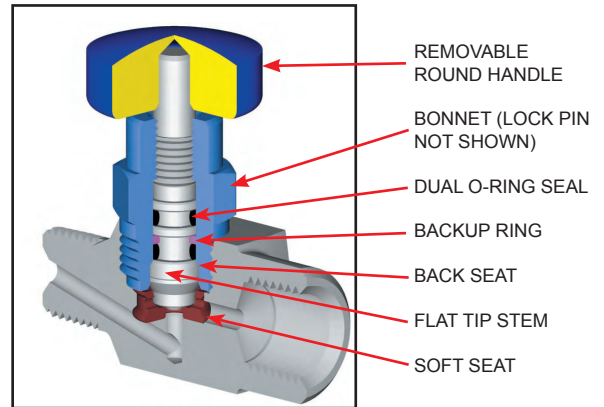
Specifications:

Type: **P2N6G-RPD**, Rupture Valve, Globe Pattern
 Rating: Up to 1800 psi @ 100°F (12410 kPa @ 38°C)
 Stem: Flat tip
 Packing: Vition™ or Aflas™ O-ring
 Seat: Delrin™, Optional Peek™ and Kel-F™
 Handle: Removable
 Bore Size: 1/8"
 Inlet Connections: 1/8" to 1/4" NPT
 Outlet Connections: 1/8" to 1/4" NPT
 Bonnet Lock: Pin
 Body Stock: 2.0" x 1.125" x 1.125"
 Weight: 0.5 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available.

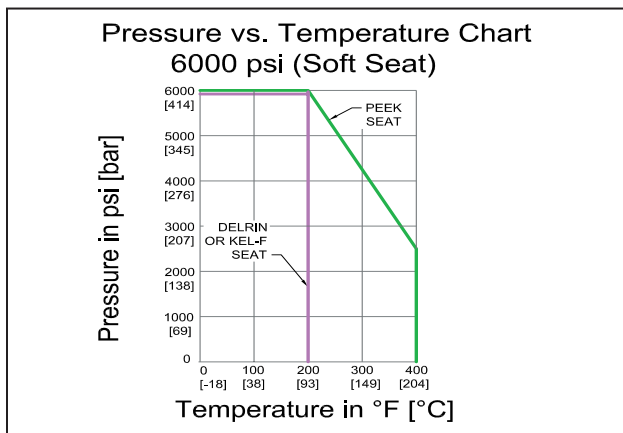
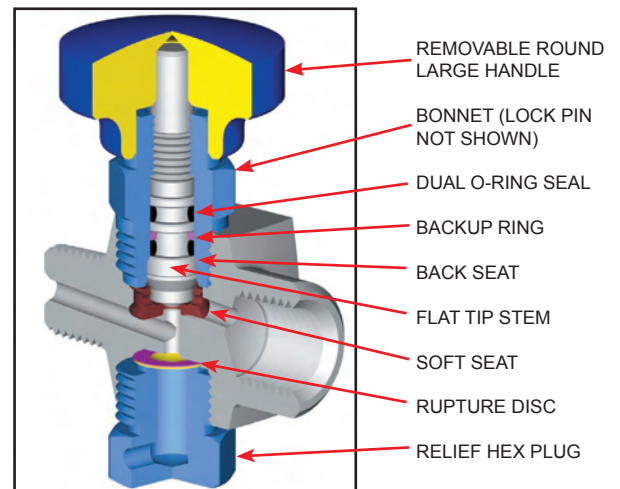
O-Ring Bonnet Assembly

Standard Materials					
Valve	Body	Bonnet	Stem	Handle	Packing
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	Anodized Aluminum	Dual Viton™ O-ring with Teflon™ backup ring
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS		
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS		

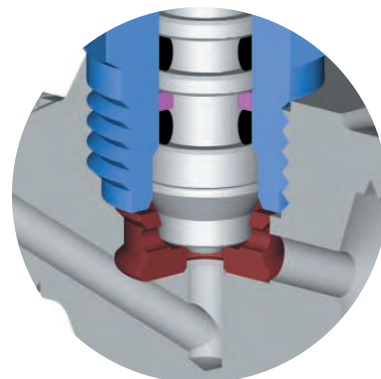


Rupture Disc Valve Assembly

Standard Materials					
Valve	Body	Bonnet	Stem	Disc	Packing
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	Incoloy™	Dual Viton™ O-ring with Teflon™ backup ring
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS		
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS		



Stem and Seat Configuration



Mini Soft Seat Unique Flat Tip Design Rated Up to 6000 psi

Note: Packing material ratings based on manufacturer's specifications. Approximations only. Phoenix does not represent these values as finite. They are provided only as representative values.

P2N6G™ and P2NA6G™ Gas Valve Model Numbering System

Phoenix	Orifice Size	Type	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Material	Packing	Seat	Stem Tip	Option Codes	Description
P	2=1/8"	N6G	2=1/8"	F=FNPT	2=1/8"	F=FNPT	SS=ASTM A182 316/316L	A=Aflas™	D=Delrin™	Flat Tip Standard (leave blank)	CC	Chlorine Clean
		NA6G (Angle Body)	4=1/4"	M=MNPT	4=1/4"	M=MNPT	SC=ASTM A105 CS*	V=Viton™ (FKM)	P=Peek™		OC	Oxygen Clean
							CS=ASTM A108 CS*		K=Kel-F™		SN	SilcoNert™ Coating
							C5=ASTM A350 LF2				SGI	Sour Gas ISO NACE Latest Rev.
							N4=Monel™ 400				RL (R)(B)	Round Large Handle Aluminum (Red)(Blue)
							N6=Inconel™ 625				RC	Round Handle CS
							N8=Inconel™ 825				RS	Round Handle SS
							N2=Hastelloy™ C276				TH	Tee Handle
EXAMPLE: P2N6G4M4FCSVD = 1/8" Orifice, Gas Valve, 1/4" MNPT Inlet, 1/4" FNPT Outlet, A108 CS Body, FKM Packing, Delrin™ Seat, Flat Tip Stem												
P	2	N6G	4	M	4	F	CS	V	D		N4	Monel™ 400 Stem
*For code applications, A108 CS is unacceptable, A105 CS must be selected for CS valves.												
											N5	Monel™ 500 Stem
											N6	Inconel™ 625 Stem
											N8	Inconel™ 825 Stem
											N2	Hastelloy™ C276 Stem
											RPD	Rupture Disc Incoloy™
											TG	SS Tag

Use with Confidence, Phoenix Precision Products Meet the Following Specifications:

- ✓ ASME B31.1 Power Piping
- ✓ ASME B31.3 Process Piping
- ✓ ASME B16.34 Valves - Flanged, Thread, and Welding End
- ✓ API 598 Valve Inspection and Testing
- ✓ MSS SP-25 Standard Marking Systems for Valves, Fittings and Flange Unions
- ✓ MSS SP-99 Instrument Valves
- ✓ MSS SP-105 Instrument Valves for Code Applications
- ✓ NACE MR0175/ISO15156 for all 316SS valves and A105CS body/316SS bonnet (SC-Material Code) when in service with less than 50 PPM of chlorides

Seal and Seat Material Temperature Rating

Code	Description	MIN. TEMP	MAX. TEMP
A	Aflas™	15°F (-10°C)	400°F (204°C)
V	Viton™	-20°F (-29°C)	400°F (204°C)
D	Delrin™	-40°F (-40°C)	200°F (93°C)
P	Peek™	-40°F (-40°C)	400°F (204°C)
K	Kel-F™	-100°F (-73°C)	200°F (93°C)

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