

™ P2N6G™ AND P2NA6G™ GAS VALVE

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.



Benefits

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

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



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

Packing below stem threads



Prevents corrosion of critical stem threads

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



Mitigates risk of stress cracking

Bonnet lock pin



Provides for a tamper proof bonnet

Stem threads are rolled, not cut



Higher quality stem for longer service life

Unique mini soft seat design



Allows pressure up to 6000 psi

Pressure component materials sourced from the US, Canada or Europe



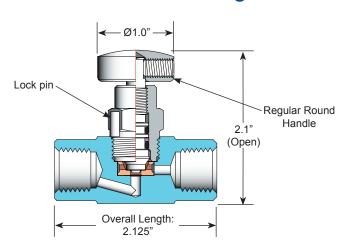
Reliable material traceability, MTR's provided with every order on pressure containing components.





P2N6G™ and P2NA6G™ Gas Valve Technical Specifications

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"

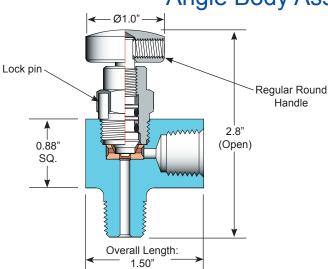
Inlet Connections: 1/8" to 1/4" NPT Outlet Connections: 1/8" to 1/4"NPT

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

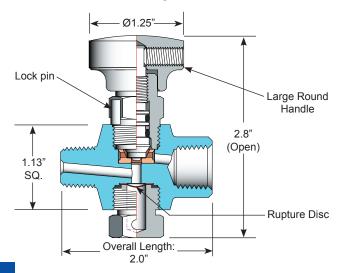
Body Stock: 1.5" x 1.5" x 0.875"

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*

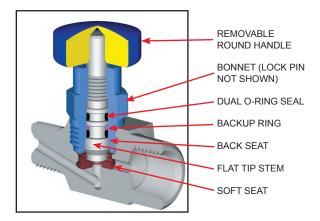
*Other specifications or services may be available.



P2N6G™ and P2NA6G™ Gas Valve Bonnet. Stem and Seat Characteristics

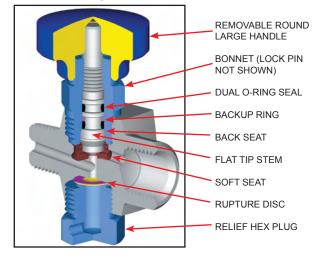
O-Ring Bonnet Assembly

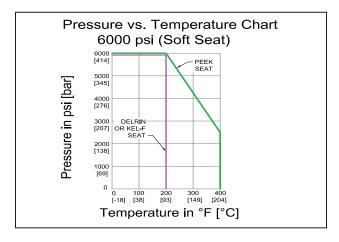
Standar	Standard Materials									
Valve	Body	Bonnet	Stem	Handle	Packing					
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS Anodized Aluminum ASTM A182 316SS	Anodized Aluminum	Dual Viton™ O-ring with Teflon™					
SC	ASTM A105CS	ASTM A182 316SS								
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS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



Rupture Disc Valve Assembly

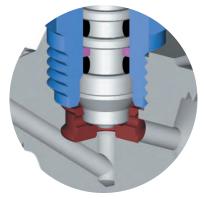
Standard Materials							
Valve	Body	Bonnet	Stem	Disc	Packing		
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	Incoloy™	Viton™		
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS		O-ring with Teflon™		
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS		backup ring		





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.

Stem and Seat Configuration



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



P2N6G[™] and P2NA6G[™] Gas Valve Model Numbering System

Phoenix	Orifice Size	Туре	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Material	Packing	Seat	Stem Tip
Р	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)
		NA6G (Angle Body)	4=1/4"	M=MNPT	4=1/4"	M=MNPT	SC=ASTM A105 CS*	V=Viton™ (FKM)	P=Peek™	
							CS=ASTM A108 CS*		K=Kel-F™	
							C5=ASTM A350 LF2			
							N4=Monel™ 400			
							N6=InconeI™ 625			
							N8=InconeI™ 825			
							N2=Hastelloy™ C276			
EXAMPL	E: P2N6	G4M4FC		" Orifice, Gas \at, Flat Tip Ste		" MNPT Inlet, 1	/4" FNPT Outlet, A	108 CS Body	, FKM Packing	g, Delrin™
P	2	N6G	4	М	4	F	cs	V	D	

Option Codes	Description		
СС	Chlorine Clean		
ОС	Oxygen Clean		
SN	SilcoNert™ Coating		
SGI	Sour Gas ISO NACE Latest Rev.		
RL (R)(B)	Round Large Handle Aluminum (Red)(Blue)		
RC	Round Handle CS		
RS	Round Handle SS		
TH	Tee Handle		
N4	Monel [™] 400 Stem		
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
Α	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)
Р	Peek™	-40°F (-40°C)	400°F (204°C)
K	Kel-F™	-100°F (-73°C)	200°F (93°C)

For further information please contact:



Phoenix Precision Ltd. 2620 21st Street N.E. Calgary, Alberta T2E 7L3 Phone:(403) 291-3154 Fax: (403) 291-3292

email: phoenix@phoenixprecision.ca www.phoenixprecisionvalves.com

Distributor / Representative:

Haldatec

Phone: +61-3-9872-5822 Fax: +61-3-9872-5129 E-mail: sales@haldatec.com.au Web Site: www.haldatec.com.au

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