

Anderson Greenwood Instrumentation Primary Isolation Valves

A chemical injection and instrumentation primary isolation Root valve with a 3/8" (9.5 mm) bore for pressures to 6000 psig (414 barg)

General Application

The H70W is an ideal solution for the simple installation of chemical injection lines and instruments directly to a wellhead in conventional oil and gas production, reducing leak points, assembly time and installation footprint.

TECHNICAL DATA

Materials

CS, 316 SS

Seats:

Metal or soft

Connections
Inlet:

1/2" to 3/4" NPT

Outlet:

1/2" NPT

Orifice sizes:

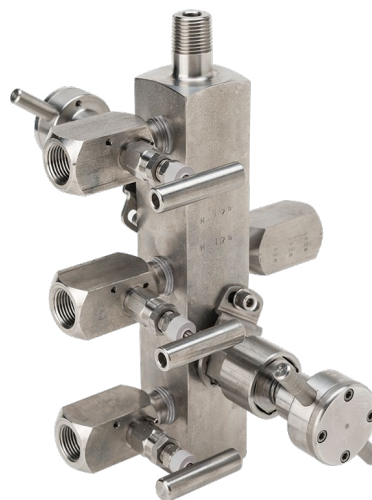
3/8" (9.5 mm)

Pressure (max):

6000 psig (414 barg)

Temperature (min/max):

-313°F to 1000°F
(-192°C to 538°C)



Features

- Compact modular design.
- Simple installation directly to the outlet of a wellhead gate valve provides significant reduction in field installation costs.
- 'Plug and play' design eliminates multiple piping elbows, tees, tubing connectors and valves in one factory tested assembly.
- Simple field operation.
- DBB functions when used in conjunction with an API wellhead valve.
- Up to two chemical injection ports with isolation valves.
- Separate 3/8" bore block valve for isolation, testing and/or removal of instruments.
- Instrument bleed valve installed at factory and extra 1/2" NPT hex-plug included.
- Horizontal or vertical applications can be handled by the same valve.

H70W SERIES

Anderson Greenwood Instrumentation Primary Isolation Valves

Specifications

Standard Features

- Single-piece 3/8" primary bore body design
- ANSI Class 2500#
- Bar-stock construction
- Full factory tested assembly
- Horizontal or vertical mounting of instrument
- Comes with additional 1/2" hex-plug
- Compliant to NACE MR0175

Design Codes and Standards

All H70WH Series assemblies are designed to comply with the following code requirements:

- ASME B16.34 Main body/block valves material wall thickness
- ASME VIII, DIV 1 Design procedures and materials
- ASME B1.20.1 National pipe threads
- MSS-SP-99 Injection/bleed valves design/testing

Standard Materials of Construction Options:

Body	Stainless steel (A479-316) or carbon steel (ASTM A105) * Other materials are available, please consult if required.
Trim	SS 316 (available for all body materials)
Seats	3/8" rodable bore block valves = PEEK, Delrin®, 316 SS 3/16" injection/bleed valves = integral seats (body)
Packing	Standard = adjustable PTFE optional = adjustable Graphite

Optional Versions

- BS-6755: fire-tested (Graphite packing/metal seats)
- Large 1/4" bore injection valves available

Testing

- MSS-SP-99 standard functional air test of assembly to 3000 psig.
- MSS-SP-61 optional hydro-test of assembly. Please consult if required.
- EN10204 3.1 body material test reports available.

Valve Technical Specifications

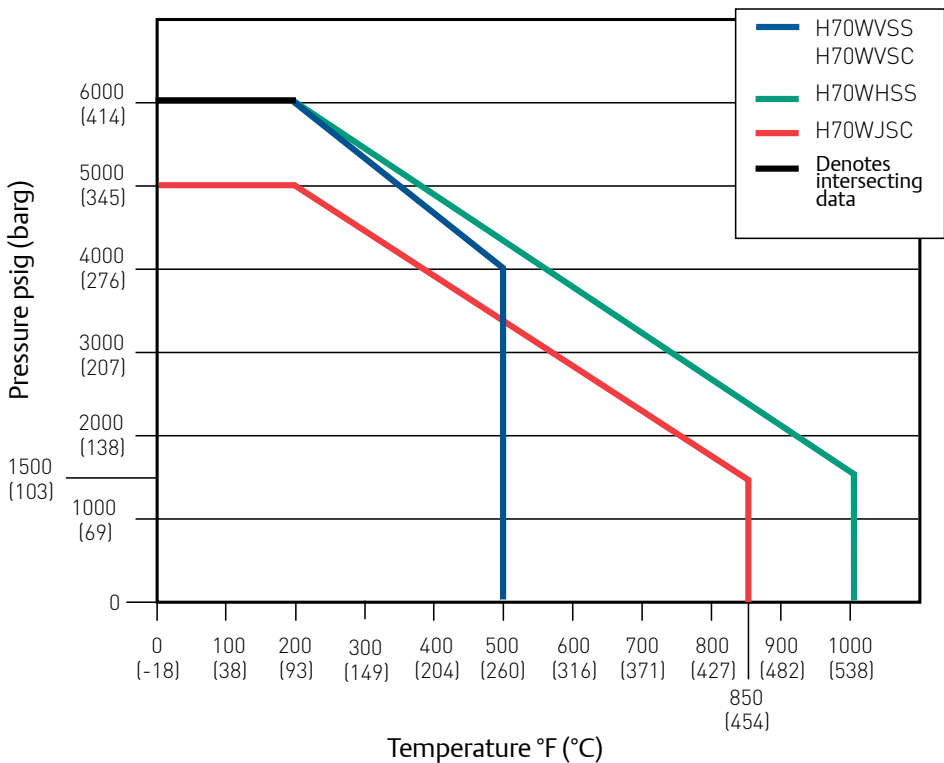
All H70WH Series feature our time tested high performance P Series and H7/H1 Bonnet designs for reliable performance and bubble-tight isolation.

- Anti-blow out stem design
- P Bonnet lock plates and packing adjustment lock collars
- Metal to metal bonnet to body seals
- Adjustable packing
- Pressure rating up to 6000 psig (680 barg)
- Temperature range -313°F to +1000°F (-192°C to +538°C) for 316SS metal seats and body

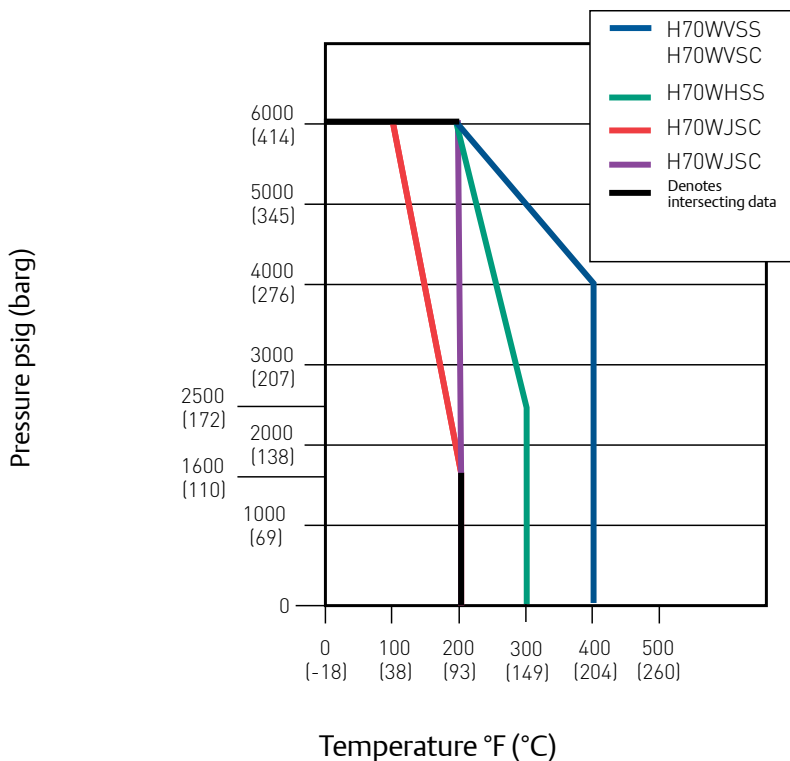
Anderson Greenwood Instrumentation Primary Isolation Valves

Pressure vs. Temperature

Metal seat (1)



Soft seat



1. Minimum Temperature -70°F (-57°C), PEEK and Delrin® -40°F (-40°C)
 For 316SS Bodies and P series Bonnets and Metal Seats Minimum Temperature is -313°F (-192°C) @ 2500psi (172 bar)

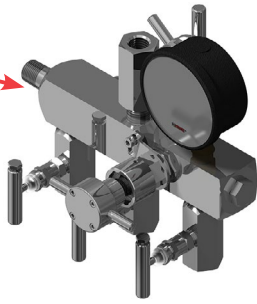
H70W SERIES

Anderson Greenwood Instrumentation Primary Isolation Valves

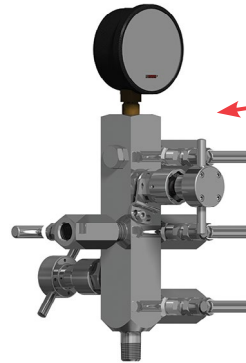
Typical Wellhead Installation - Field Installs



Field assembly
14 pieces reduced to 1



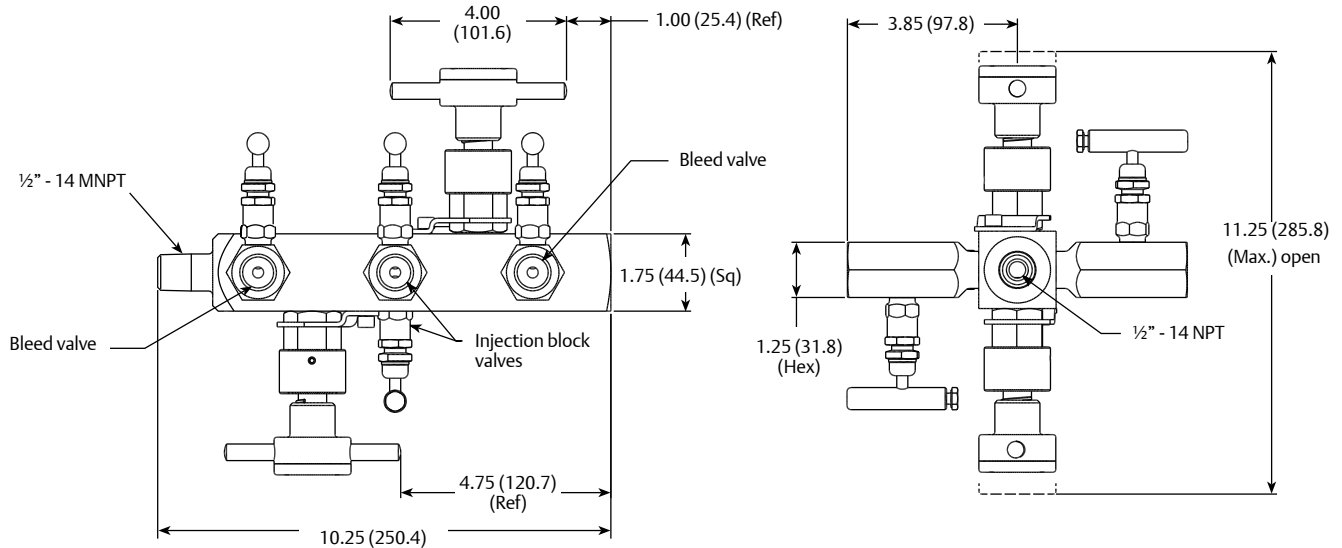
Back side, showing primary
"P" Series block valve



Horizontal install - Qty 2 chemical injection lines

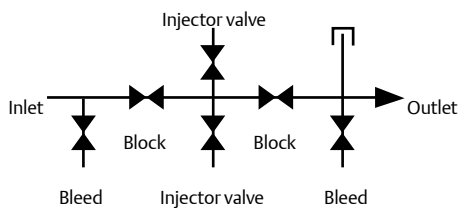
Vertical install - Qty 1 chemical injection line
Fully assembled and tested in Harlingen, Texas - USA

Standard dimensions, inches (mm)



Approximate valve weight: 18 lbs. (8.16 Kg)

Flow schematic



Anderson Greenwood Instrumentation Primary Isolation Valves

Selection Guide

H70W		V	E	S	44	
BASIC SERIES		ADJUSTABLE	SEAT MATERIAL - 3/8" BORE P SERIES BLOCK VALVES AND H1 SERIES (OPTION)		BODY MATERIAL ^[1]	CONNECTIONS (INLET/OUTLET)
Series configuration						
H70W	H70 series chemical injection primary isolation root valve	V PTFE	E PEEK	S 316 SS	44	½" MNPT x ½" FNPT
		H Graphite	D Delrin®	C A105 C.S.	46	¾" MNPT x ½" FNPT
			S 316 SS (required for fire-test cert)			

H72		-HD	
CHEMICAL LINE BLOCK VALVES (2)/BLEED VALVES (2)		OPTIONS	
H71	H7 ^[2] series qty 1 chemical injection	HD	Hydro-test as per MSS-SP-61
H72	H7 ^[2] series qty 2 chemical injection	LB	1/4" Large bore chemical injection block valves
H11	H1 series qty 1 chemical injection	LT	Low Temperature for 316SS 3/8" orifice and P series bonnet with metal seat and H7 block Valves -313°F (-192°C) @ 2500psi (172bar)
H12	H1 series qty 2 chemical injection		

NOTES

1. Please consult for other materials if required
2. Standard offering