

# PRECISION Instrument Manifolds

## Isoaltion/Needle/Hand Valve P1/A & P1/B Series

PRECISION'S line of Needle/Hand valves are ideal for isolation and instrument applications that require a bleed for trapped pressure. The P1/A offers isolation only. The P1/B, or Bleeding Gauge Valve, offers bleed of pressure to atmosphere. For offshore applications, PRECISION products feature all metal components of 316SS.

### Applications

Simple isolation applications and isolate/bleed applications for instruments or offline situations. Note: The bleed plug bleeds to atmosphere at the valve, do not use with toxic or hazardous materials that might harm staff or environment..

### Features & Benefits

#### ◆ Each valve is fully tested prior to shipment.

Each Precision valve is tested with nitrogen prior to shipment to maximum working pressure prior to shipment, twice, once after assembly, and again after the valve(s) have been fully opened and closed. All potential leak paths are tested, and each valve/manifold must be bubble tight to pass our stringent quality controls.

#### ◆ Non-Rotating ½ round tip ensures bubble tight shutoff

Tip is articulated at the seat, not the shaft/seal area, ensuring bubble tight shutoff for years of trouble free service. Articulating at the tip keeps the stem packing from being damaged by torque caused by misalignment of seat and tip.

#### ◆ Stem is back seated for safety.

Valve stem has a shoulder to prevent accidental removal of stem from valve/bonnet.

#### ◆ Solid, fully machined bonnet lock pin.

Bonnet lock pin is solid, fully machined with no sharp edges that could injure staff, prevents accidental removal of bonnet from body.

#### ◆ Dowel Pin to hold Handle in Place.

Handle is held in place by bull nosed dowel pin that protrudes into valve shaft to hold handle in place. Handles don't fall off in shipping or in high vibration service.

#### ◆ Full Traceability.

Every valve is permanently marked with a batch number that allows all element traceability.

#### ◆ Wide variety of Materials.

Available in a wide variety of materials of construction, including carbon steel (K), 316 Stainless Steel (H), 316L Stainless Steel to Nace (L). Our stainless steel valves are ALL stainless steel, including handles, valve shafts, and other non wetted parts. *Ideal for use in offshore or other corrosive environments!*



Isolation Gauge Valve, GV



Bleeding Gauge Valve, BGV

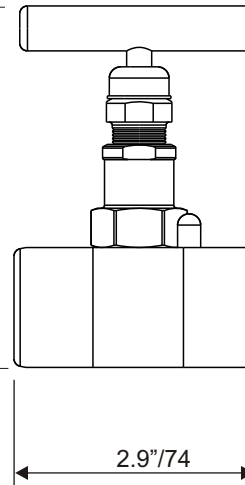
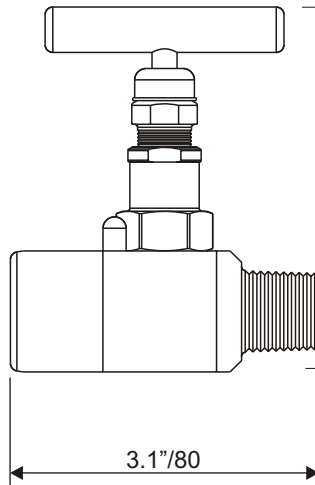
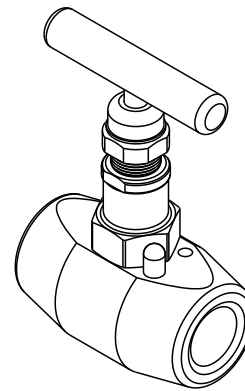
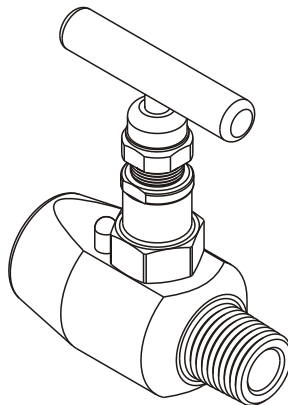
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NEEDLE  
&  
HAND  
VALVES

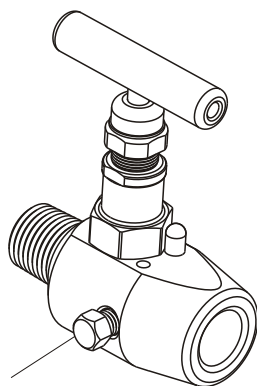
## Isolation/Needle/Hand Valve Dimensions

Male inlet/Female outlet

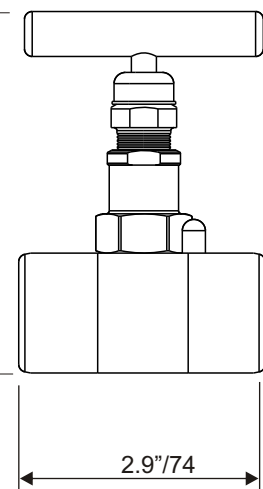
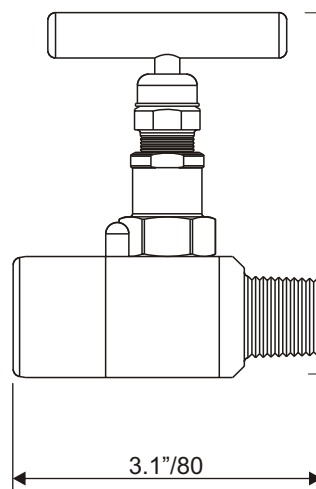
Female inlet/Female outlet



PRECISION Bleeding Gauge Valve - Allows isolation and bleed to atmosphere



M8 Ball nose bleed screw



# PRECISION Instrument Manifolds

## Needle/Hand Valve Selection Chart

**P 1 / M 4 W 4 T A X X E H** - Options

### P for PRECISION

Manifold Type  
1 = Isolation Valve

### Code Break

Process / Inlet Connection type  
M = Male  
W = Female

### Process Connection Size

2 = 1/4" NPT    S = Socket Weld  
4 = 1/2" NPT    B = Butt Weld  
6 = 3/4" NPT    (Weld end valves MUST be L grade and have Graphite  
8 = 1" NPT       seals, see table 2)

Instrument / Outlet Connection type

M = Male  
W = Female

### Instrument / Outlet Connection Size

2 = 1/4" NPT    S = Socket Weld  
4 = 1/2" NPT    B = Butt Weld  
6 = 3/4" NPT    (Weld end valves MUST be L grade and have Graphite  
8 = 1" NPT       seals, see table 2)

Seals

T = TFE  
G = Graphite

### Bleed / Vent Requirements

A = No bleed, Gauge Valve (GV)  
B = 1 Bleed screw in body, downstream,  
Bleeding Gauge Valve (BGV)

Bleed Size

X = No Bleed  
0 = M8 Bleed screw  
2 = 1/4" FNPT Bleed port instead of M8 screw  
(Note: 1/4" bleed may be long lead)

### Handle Options

X = T Bar  
K = Knurled SS knob  
(Note: Knurled knob may be long lead)

Pressure Rating

Blank = 6,000 Psig  
E = 10,000 Psig

### Materials of Construction

H = 316SS  
L = 316L SS for NACE  
J = Monel 400  
Z = Inconel 718  
K = Carbon Steel  
C = H-C 276

### Options

R = Bottom Mounting (M8 X 14)  
O = Mounting to Order  
OX = Oxygen Clean  
P = Panel Mounting  
Inlet Extensions  
-50 = 50mm  
-66 = 66mm

### Table 2

B - Butt Weld  
S - Socket Weld  
1 - Sched 5S  
2 - Sched 10S  
3 - Sched 40S  
5 - Sched 80S  
7 - Sched 160  
9 - Sched XXS



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