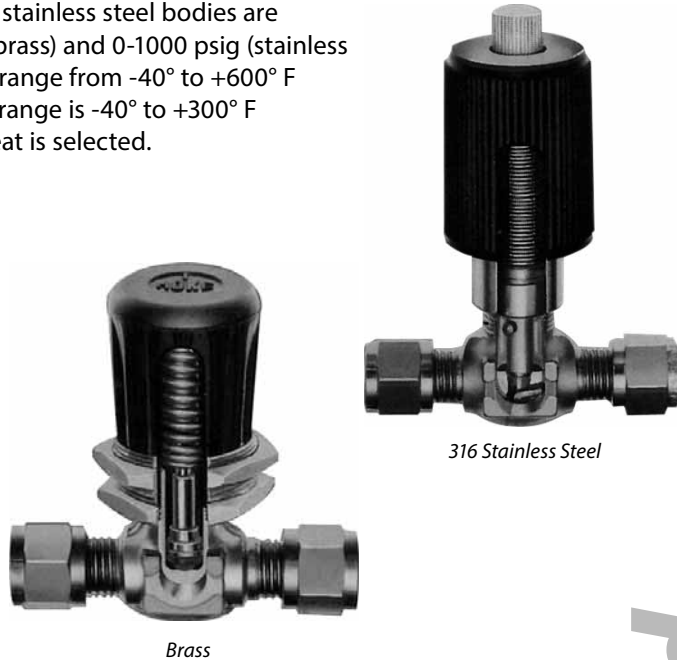


4100 Series

316 Stainless Steel or Brass Bellows Sealed Valves
(.060"/1.5 mm or .170"/4.3 mm orifices)

Introduction

With its compact size suitable for confined spaces, the 4100 Series design includes an internal volume of only 0.08 cubic inches. Brass and 316 stainless steel bodies are available. Operating pressures range from 0 - 600 psig (brass) and 0-1000 psig (stainless steel). 316 stainless steel operating temperature ratings range from -40° to +600° F (-40° to +316° C), while the brass operating temperature range is -40° to +300° F (-40° to +149° C) depending on whether a hard or soft seat is selected.



Typical Applications

Stainless steel valves

- Critical gas analysis
- High temperature liquid metals
- Handling reactive and toxic fluids
- Vacuum system bake-out

Brass valves

- Sampling systems
- Gas analysis equipment
- Laboratory service
- Instrumentation

Features & Benefits

- Low internal volume for gas analysis
- Panel mounting is available (specify kit 4100K1)

Stainless steel valves

- Choice of blunt or regulating stem points
- Seal welded bellows to body

Brass valves

- Phosphor bronze bellows silver-soldered to body and stem isolates fluid from atmosphere
- Choice of vee stem with small orifice for metering, blunt point, or PCTFE stem
- Special High Tolerance NPT Thread

Technical Data

| | 316 STAINLESS STEEL | BRASS |
|-----------------------------------|--|--|
| MAXIMUM OPERATING PRESSURE | Vacuum to 1000 psig (70 kg/cm ²) | Vacuum to 600 psig @ 70° F (45 kg/cm ² @ 21° C) |
| TEMPERATURE RANGE | -40° F to +600° F (-40° C to +316° C) | Hard seat: -40° F to +300° F (-40° C to +149° C) Soft seat: -40° F to +250° F (-40° C to +121° C) |
| ORIFICE SIZE | Vee stem: 0.059 (1.5 mm) Blunt stem: 0.170 (4.3 mm) | Vee stem: 0.060 (1.5 mm) Blunt stem: 0.170 (4.3 mm) PCTFE stem: 0.170 (4.3 mm) |
| Cv FACTOR | 0.35 (maximum) | 0.35 (maximum) |
| INTERNAL VOLUME | 0.08 cubic inches | 0.08 cubic inches |

HOKE®

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Phone (864) 574-7966 Fax (864) 587-5608
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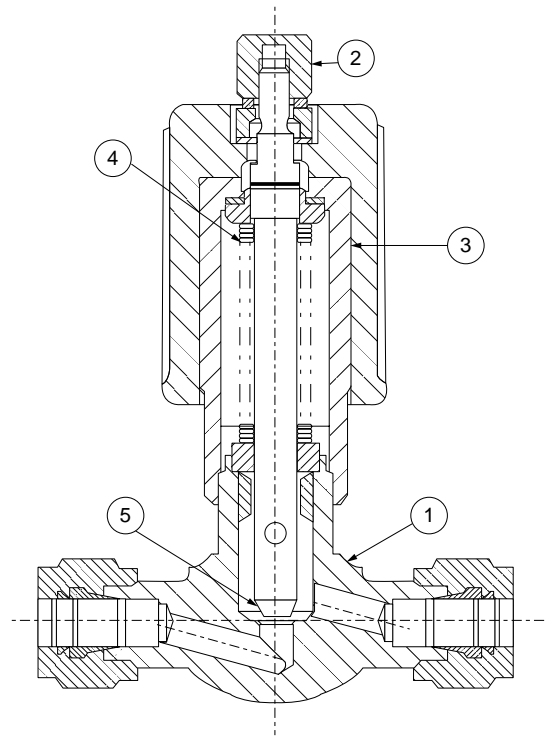
packless valves

4100 Series

Materials of Construction

316 Stainless Steel

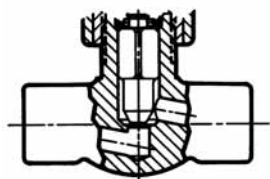
| | DESCRIPTION | MATERIAL |
|---|--------------------|----------------------|
| 1 | Body | 316 stainless steel |
| 2 | Cap nut | Brass, nickel-plated |
| 3 | Handle | Brass, nickel-plated |
| 4 | Bellows | 316 stainless steel |
| 5 | Stem point | 316 stainless steel |
| 6 | Panel mounting kit | Brass, nickel-plated |



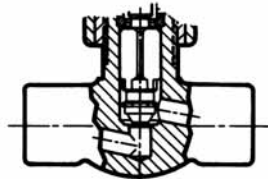
Materials of Construction

Brass

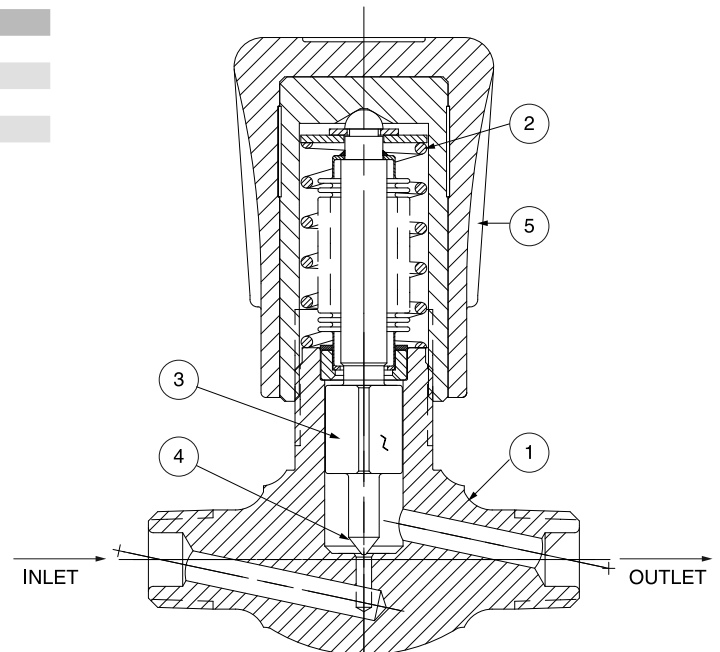
| | DESCRIPTION | MATERIAL |
|---|-------------|---|
| 1 | Body | Forged brass |
| 2 | Bellows | Phosphor bronze silver-soldered to body |
| 3 | Stem | 316 stainless steel |
| 4 | Stem tip | PCTFE |
| 5 | Handle | Nylon with brass insert |



Blunt Stem
4111M4B



PCTFE Stem
4151M4B



Vee Stem
4171M4B

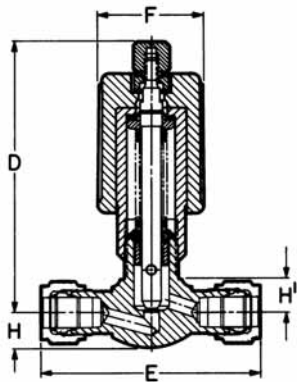
4100 Series

Dimensions

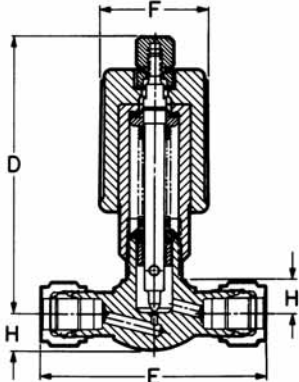
Stainless Steel

| CONNECTIONS | | D | E | F | H | H1 | PANEL MOUNTING | |
|--------------------------|------|----|-----|----|--------|--------|----------------|----------------|
| | | | | | | | HOLE SIZE | MAX. THICKNESS |
| ¼" NPT Male | inch | 3 | 1 ¾ | 1 | 2 5/16 | 1 1/16 | 1 1/16 | ¼ |
| | mm | 76 | 44 | 25 | 10 | 9 | 26 | 6 |
| ¼" O.D. Tube GYROLOK® | inch | 3 | 2 ¾ | 1 | 2 5/16 | 1 1/16 | 1 1/16 | ¼ |
| | mm | 76 | 60 | 25 | 10 | 9 | 26 | 6 |
| 6 mm GYROLOK® | inch | 3 | 2 ¾ | 1 | 2 5/16 | 1 1/16 | 1 1/16 | ¼ |
| | mm | 76 | 60 | 25 | 10 | 9 | 26 | 6 |

Dimensions for reference only, subject to change.



Blunt Stem
4112G4Y



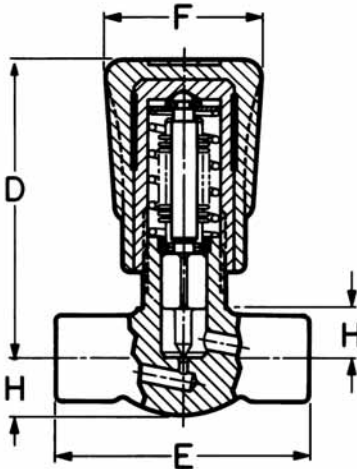
Vee Stem
4172G4Y

Dimensions

Brass

| CONNECTIONS | | D | E | F | H | H1 | PANEL MOUNTING | |
|--------------------------|------|-------|-----|--------|--------|-----|----------------|----------------|
| | | | | | | | HOLE SIZE | MAX. THICKNESS |
| ⅜" NPT Male | inch | 2 5/8 | 1 ¾ | 1 1/16 | 2 3/16 | 3/8 | 1 1/16 | ¼ |
| | mm | 67 | 44 | 27 | 9 | 10 | 26 | 6 |
| ¼" NPT Male | inch | 2 5/8 | 1 ¾ | 1 1/16 | 2 3/16 | 3/8 | 1 1/16 | ¼ |
| | mm | 67 | 44 | 27 | 9 | 10 | 26 | 6 |
| ¼" O.D. Tube GYROLOK® | inch | 2 5/8 | 1 ¾ | 1 1/16 | 2 3/16 | 3/8 | 1 1/16 | ¼ |
| | mm | 67 | 60 | 27 | 9 | 10 | 26 | 6 |

Dimensions for reference only, subject to change.



Vee Stem
4171M4B

4100 Series

How to Order

Stainless Steel: Order valve by part number shown in chart.

| CONNECTIONS | ORDER BY PART NUMBER | | CV FACTOR | ORIFICE |
|-----------------------|----------------------|------------|-----------|---------|
| | BLUNT STEM | VEE STEM | | |
| ¼" NPT Male | 4112M4Y | — | 0.35 | 0.17 |
| ¼" O.D. Tube GYROLOK® | — | 4172G4Y | 0.059 | 0.06 |
| ¼" O.D. Tube GYROLOK® | 4112G4Y | — | 0.35 | 0.17 |
| 6 mm GYROLOK® | 4112G6Y/MM | — | 0.35 | 0.17 |
| 6 mm GYROLOK® | — | 4172G6Y/MM | 0.059 | 0.06 |
| Panel Mounting Kit | 4100K1 | 4100K1 | — | — |

Brass: Order valve by part number shown in chart.

| CONNECTIONS | ORDER BY PART NUMBER | | | CV FACTOR | ORIFICE |
|-----------------------------|----------------------|----------|------------|-----------|---------|
| | BLUNT STEM | VEE STEM | PCTFE STEM | | |
| ½" NPT Male | 4111M2B | — | 4151M2B | 0.35 | 0.17 |
| ½" NPT Male | — | 4171M2B | — | 0.059 | 0.06 |
| ½" NPT Male x ½" NPT Female | 4111L2B | — | — | 0.35 | 0.17 |
| ¼" NPT Male | 4111M4B | — | 4151M4B | 0.35 | 0.17 |
| ¼" NPT Male | — | 4171M4B | — | 0.059 | 0.06 |
| ¼" O.D. Tube GYROLOK® | — | — | 4151G4B | 0.35 | 0.17 |

Panel Mounting

To order Panel Mounting Kit, specify part number 4100K1.

FOR YOUR SAFETY

IT IS SOLELY THE RESPONSIBILITY OF THE SYSTEM DESIGNER AND USER TO SELECT PRODUCTS SUITABLE FOR THEIR SPECIFIC APPLICATION REQUIREMENTS AND TO ENSURE PROPER INSTALLATION, OPERATION AND MAINTENANCE OF THESE PRODUCTS. MATERIAL COMPATIBILITY, PRODUCT RATINGS AND APPLICATION DETAILS SHOULD BE CONSIDERED IN THE SELECTION. IMPROPER SELECTION OR USE OF PRODUCTS DESCRIBED HEREIN CAN CAUSE PERSONAL INJURY OR PROPERTY DAMAGE.