



1700 Series

Forged Body, Integral Bonnet Needle Valves

These affordable valves are suited for a wide variety of process control applications. Non-rotating stainless steel or replaceable PCTFE stem tips reduce galling. Dyna-Pak® packing below the stem threads prevents fugitive emissions.



Typical Applications

- Cylinder valves
- Panel board instrumentation
- Pressure gauge valves
- Sampling systems
- Research laboratories
- Oxygen service
- Corrosive or high pressure service

Technical Data

| | |
|------------------------------------|--|
| BODY* | 316 stainless steel, Monel® |
| MAXIMUM OPERATING PRESSURE | 6000 psig @ 70° F (414 Bar @ 21° C) |
| OPERATING TEMPERATURE RANGE | <i>Metal stem tip</i> -65° to +450° F (-54° to +232° C) <i>PCTFE stem tip</i> -20° to +250° F (-29° to +121° C) |
| ORIFICE | 0.187" (4.8mm) |
| Cv FACTOR | 0.31 |

* Consult factory for other materials

Features & Benefits

Safety

- Lock nut secures packing nut to prohibit accidental removal

Long cycle life

- Packing below stem threads prevents fluid from contacting the stem threads
- Non-rotating hardened 17-4PH stainless steel, Monel® or replaceable PCTFE stem tip is combined with a hardened 450 stainless steel - or Monel® thread gland to reduce galling

Helps eliminate fugitive emissions

- Dyna-Pak® packing provides a leak-tight seal with low operating torque

Reliability

- All valves are tested for bubble-tight leakage at both seat and packing

Installation variety

- Broad selection of male NPT, female NPT, and HOKE **GYROLOK**® fractional or metric tube fitting connections

Panel mounting

- Panel mounting is standard on all models
- Special High Tolerance NPT Thread

needle valves

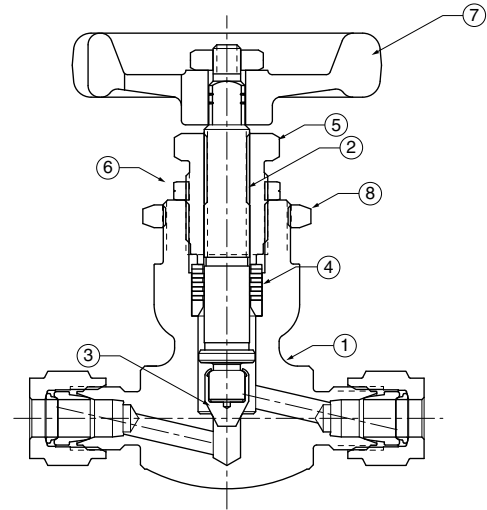
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1700 Series

Materials of Construction

| DESCRIPTION | 316 STAINLESS STEEL | MONEL® |
|----------------------|--------------------------------|---------------------|
| 1 Body | 316 stainless steel | Monel® |
| 2 Stem | 316 stainless steel | Monel® |
| <i>Stem tip</i> | | |
| 3 Soft | PCTFE | PCTFE |
| 3 Hard | 17-4PH stainless steel | Monel® |
| 4 Stem packing | TFE/316 stainless steel wafers | TFE/Monel® wafers |
| 5 Thread gland | 450 stainless steel | Monel® |
| 6 Lock nut | 316 stainless steel | 316 stainless steel |
| <i>Handle</i> | | |
| 7 1711 Series | Aluminum | Aluminum |
| 7 1751 Series | ABS | ABS |
| 8 Panel mounting nut | Nickel-plated brass | Nickel-plated brass |



Dimensions

1700 Series: Globe Pattern

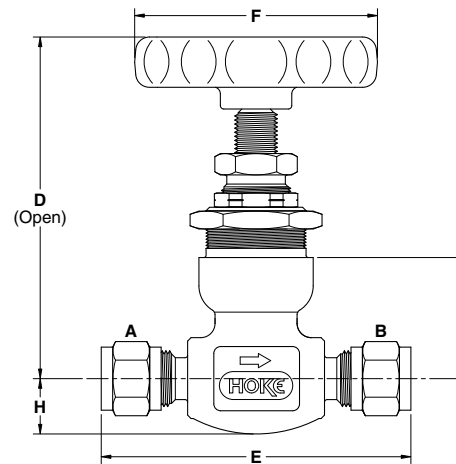
| INLET A | OUTLET B | | D | E | F | H | H' |
|---------------|---------------|------|----|----|----|----|----|
| ¼" GYROLOK® | ¼" GYROLOK® | inch | 3 | 2½ | 2½ | ½ | 1½ |
| | | mm | 76 | 52 | 54 | 13 | 27 |
| ¼" male NPT | ¼" male NPT | inch | 3 | 2¾ | 2½ | ½ | 1½ |
| | | mm | 76 | 56 | 54 | 13 | 27 |
| ¼" male NPT | ¼" female NPT | inch | 3 | 2½ | 2½ | ½ | 1½ |
| | | mm | 76 | 54 | 54 | 13 | 27 |
| ¼" female NPT | ¼" female NPT | inch | 3 | 2½ | 2½ | ½ | 1½ |
| | | mm | 76 | 52 | 54 | 13 | 27 |
| ⅜" GYROLOK® | ⅜" GYROLOK® | inch | 3 | 2½ | 2½ | ½ | 1½ |
| | | mm | 76 | 54 | 54 | 13 | 27 |
| 8mm GYROLOK® | 8mm GYROLOK® | inch | 3 | 2½ | 2½ | ½ | 1½ |
| | | mm | 76 | 68 | 54 | 13 | 27 |

Dimensions for reference only, subject to change.

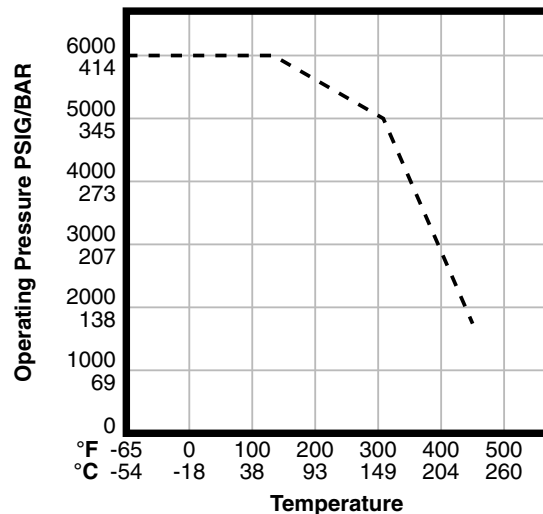
Panel mounting dimensions

Panel hole = 5/16" (22.6 mm) diameter

Panel thickness = 1/4" (6.4 mm) maximum

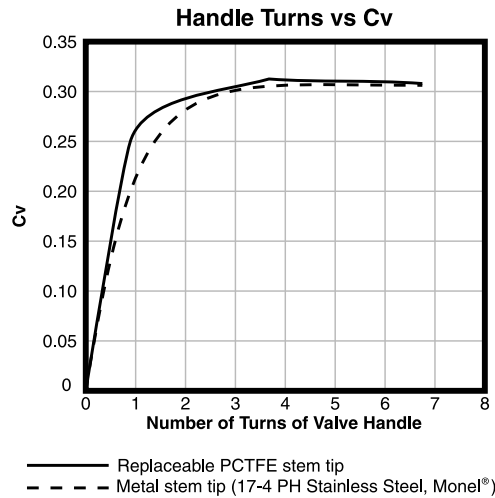


Pressure vs. Temperature Curve



1700 Series

Flow Curves



How to Order: Standard Valves



1711L4Y: Globe pattern

1700 Series: Globe Pattern

Metal stem tip for service to +450° F (+232° C)

0.187" (4.7mm) orifice/0.31 Cv

| END CONNECTIONS | | ORDER BY PART NUMBER | |
|-----------------|---------------|----------------------|---------|
| INLET | OUTLET | 316 STAINLESS STEEL | MONEL® |
| ¼" GYROLOK® | ¼" GYROLOK® | 1711G4Y | — |
| ¼" male NPT | ¼" male NPT | 1711M4Y | 1711M4M |
| ¼" male NPT | ¼" female NPT | 1711L4Y | — |
| ¼" female NPT | ¼" female NPT | 1711F4Y | 1711F4M |
| ⅜" GYROLOK® | ⅜" GYROLOK® | 1711G6Y | — |
| 8mm GYROLOK® | 8mm GYROLOK® | 1711G8YMM | — |

NOTE: For applications requiring TPED/PED certification, add a CE suffix to part number. Example: 1711 G4Y-CE.



1751G4Y: Globe pattern

1700 Series: Globe Pattern

PCTFE stem tip for service to +250° F (+121° C)

0.187" (4.7mm) orifice/0.31 Cv

| END CONNECTIONS | | ORDER BY PART NUMBER | |
|-----------------|---------------|----------------------|---------|
| INLET | OUTLET | 316 STAINLESS STEEL | MONEL® |
| ¼" GYROLOK® | ¼" GYROLOK® | 1751G4Y | — |
| ¼" male NPT | ¼" male NPT | 1751M4Y | 1751M4M |
| ¼" male NPT | ¼" female NPT | 1751L4Y | — |
| ¼" female NPT | ¼" female NPT | 1751F4Y | 1751F4M |
| ⅜" GYROLOK® | ⅜" GYROLOK® | 1751G6Y | — |
| 8mm GYROLOK® | 8mm GYROLOK® | 1751G8YMM | — |

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.

Ordering Options

Spare Parts

Spare parts and repair kits are available for all needle valves. Please contact your distributor for specific information.

Cleaning and Testing

When ordering, please specify if oxygen cleaning or helium leak testing is required.

Additional Sizes

Additional sizes and options are available on special request. Please consult your local HOKE distributor.