Century Valve

- Bore Sizes: 1/8" [3.2 mm]
  3/16" [4.8 mm]
  5/16" [8 mm]
  3/8"[9.5 mm]
  7/16" [11 mm]
  5/8" [16 mm]
- Straight through (roddable) and globe-pattern models.
- Needle (rising plug) and ball stem end models.
- Standard pressures to 6000 psig [414 barg], optional pressures to 10000 psig [689 barg] available.
- Various standard end-connections from 1/4" to 1" - threaded, socketweld and buttweld.
- Temperatures to 1200°F [650°C].
- Optional API 607 Edition 4/BS6755 Part 2 upgrades available.

tyco / Flow Control

Total Flow Control Solutions™

CM1 - Soft seated, straight-through, 3/16" [5 mm] bore, 6000 psig [414 barg] hand valve

The CM1 (6000 psig [414 barg]) barstock construction, straight-through, hand valve is designed for a safe, in-line repairable, long service life. The CM1 is a soft seated valve, ensuring repetitive bubble-tight sealing in both standard and dirty process conditions and is available in a wide variety of inlet & outlet configurations and materials. Specific CM1 models meet the requirements of NACE MR0175-2002. The CM1 is standardly equipped with a Delrin® seat and is available with either Teflon® or GRAFOIL® packing or an O-ring seal. To simplify installation requirements the CM1 series can be factory configured with a wide variety of various manufacturers tube fittings.

Features

- Utilizes needle stem ends, which provide repetitive bubble-tight shutoff in a variety of process conditions.
- All valves are available with a panel mount system option - consult factory.
- Either the Teflon® or GRAFOIL® packing is easily adjustable in field.
- All valves are hydrostatically tested to rated pressure prior to factory shipment. Full material traceability is standard on each CM1. All valves are shipped standard with full material documentation for wetted components.
- All packing is below the threads, which ensures the process does not contaminate the valve's actuation threads. This feature ensures smooth valve operation and long service life.
- All CM1's feature safety back seating ensuring the prevention of both accidental stem blowout and removal under pressure.
- Soft seats are in-line replaceable/repairable ensuring the CM1 provides economical, long service life. Standard seat material is Delrin®. Readily available seat options include PEEK.
- Standard dust covers ensure long service life by preventing the elements (rain, snow, dirt, etc.) access to the bonnet assembly.

CM1 Ordering Code: CM1 — 1 — M44T — CN — 16 — T — SC

Materials of Construction

1: SS - 316/316L (meets NACE MR0175-2002)
2: CS/SS - A105 CS Body w/SS Trim (meets NACE MR0175-2002)
3: CS - A108 CS
(Other construction materials available - consult factory)

Inlet/Outlet Connections

Standard threaded connections:

M22T: 1/4" MNPT x 1/4" FNPT
F22T: 1/4" FNPT x 1/4" FNPT
M44T: 1/2" MNPT x 1/2" FNPT
F44T: 1/2" FNPT x 1/2" FNPT
M64T: 3/4" MNPT x 1/2" FNPT
M66T: 3/4" MNPT x 3/4" FNPT
F66T: 3/4" FNPT x 3/4" FNPT

Optional socketweld or buttweld connections available - consult factory.

Bonnet Assembly

A: O-ring, Needle tipped stem end
CN: Adjustable packing, Needle tipped stem end

Seat

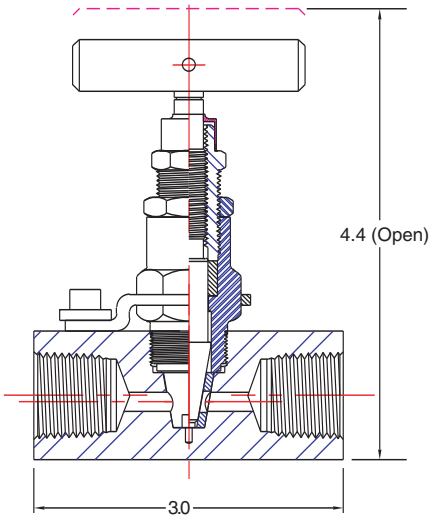
16: Delrin®
15: PEEK

Packing

A: Aflas® O-ring
V: Viton® O-ring
T: Teflon®, Adjustable packing
G: GRAFOIL®, Adjustable packing

Special Construction Options

SC-L: Bonnet lock upgrade (in accordance with ANSI B31.1)
SG1: Sour Gas (Valve to meet NACE MR0175-2002)
SG2: Sour Gas (Valve to meet NACE MR0175-2003)
SC-O: Gaseous Oxygen Cleaned
SC: For other special requirements - consult factory



CM1B - Hard or soft seat, straight-through (roddable), 3/8" [9.5 mm] bore, 6000 psig [414 barg] hand valve • Wth optional API FIRESAFE 607 rating

The CM1B (6000 psig [414 barg] barstock construction valve features a straight-through (roddable) 3/8" [9.5 mm] bore. This bi-directional valve has a high flow capability. The CM1B is ideally suited for severe process conditions (eg. high-temperature steam) or in applications where valve plugging is a concern. Furthermore, the CM1B is available with an optional API FIRESAFE 607/BS6755 Part 2, rating, making it the valve of choice for hazardous services. The CM1B features replaceable soft or metal seats, which can be easily removed and replaced, eliminating the need for valve removal should the seat become damaged by process conditions

The CM1B is available in a wide variety of inlet & outlet configurations and materials. Specific CM1B models meet the requirements of NACE MR0175-2002. The CM1B is available with either Teflon® or GRAFOIL® packing. To simplify installation requirements the CM1B series can be factory configured with a variety of various manufacturers tube fittings.

Features

- Large bore (3/8" [9.5 mm]), high-pressure, high-temperature, severe service isolation valve. This valve is ideally suited for the varying requirements of the power industry.
- API 607 FIRESAFE Addition 4, BS6755 Part 2 upgrade available.
- Needle (plug type) stem end provides bubble-tight shutoff and ensures long valve life. Replaceable/repairable seat ensure long, safe and economical installed valve life.
- Upgraded large handle ensures ease of operation while actuating valve.
- All valves are hydrostatically tested to rated pressures prior to factory shipment. Full material traceability is standard on each CM1B. All valves are shipped standard with complete material documentation for wetted components.
- Either the Teflon® or GRAFOIL® packing is easily adjustable in field.
- All packing is below the threads (rotating version), which ensures the process does not contaminate the valve's actuation threads. This feature ensures smooth valve operation and long service life.
- All CM1B's in the severe service series feature upgraded bonnet lock plate with 'P' bonnets assembly to ensure accidental removal under pressure does not occur.
- Temperatures up to 1200°F with 316SS with 0.04% minimum carbon content.

CM1B Ordering Code: CM1B 1 F88T P 1 G SC

Materials of Construction

1: SS - 316/316L (meets NACE MR0175-2002)
2: CS/SS - A105 CS Body w/SS Trim (meets NACE MR0175-2002)
(Other construction materials available - consult factory.)

Inlet/Outlet Connections

Standard threaded connections:

M44T:	1/2" MNPT	x 1/2" FNPT
F44T:	1/2" FNPT	x 1/2" FNPT
M64T:	3/4" MNPT	x 1/2" FNPT
M66T:	3/4" MNPT	x 3/4" FNPT
F66T:	3/4" FNPT	x 3/4" FNPT
M88T:	1" MNPT	x 1" FNPT
F88T:	1" FNPT	x 1" FNPT

Standard socketweld connections:

MS44S:	1/2" MSW	x 1/2" FSW
FS44S:	1/2" FSW	x 1/2" FSW
MS64S:	3/4" MSW	x 1/2" FSW
MS66S:	3/4" MSW	x 3/4" FSW
FS66S:	3/4" FSW	x 3/4" FSW
MS88S:	1" MSW	x 1" FSW
FS88S:	1" FSW	x 1" FSW

Optional buttweld connections available - consult factory.

Bonnet Assembly

H: Adjustable packing, Needle tipped stem end (plug), rotating
P: Adjustable packing, Needle tipped stem end (plug), non-rotating stem – meets API 607/BS6755 Part 2 requirements

Seat

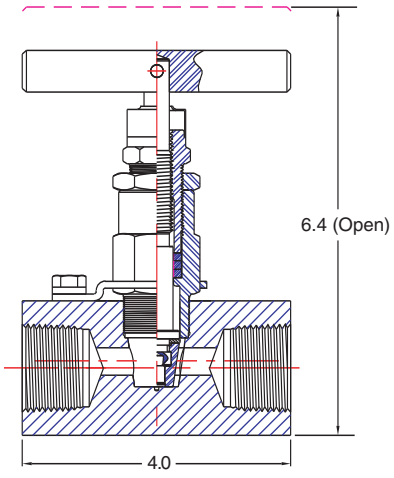
1: 316SS (Requires 'P' Bonnet option)
15: PEEK
16: Delrin®

Packing

T: Teflon®, Adjustable packing
G: GRAFOIL®, Adjustable packing

Special Construction Options

SC-L: Bonnet lock upgrade (in accordance with ANSI B31.1)
SG1: Sour Gas (Valve to meet NACE MR0175-2002)
SG2: Sour Gas (Valve to meet NACE MR0175-2003)
SC-O: Gaseous Oxygen Cleaned
SC: For other special requirements - consult factory
SC-H: 316SS with 0.04% minimum Carbon



CM1C - Straight-through (roddable), hard or soft seat, 5/8" [16 mm] bore, 6000 psig [414 barg] hand valve. Note: 3500 psi [238 barg] max. soft seated models.

The CM1C (6000 psig [414 barg]) barstock construction valve is a severe service, high-pressure/temperature, straight through (roddable) bi-directional flow unit. The CM1C is also ideally suited for process conditions where potential plugging is a concern. The CM1C features replaceable soft or metal seats, which can be easily removed and replaced, eliminating the need for valve removal should the seat become damaged by process conditions

The CM1C is available in a wide variety of inlet & outlet configurations and materials. Specific CM1C models meet the requirements of NACE MR0175-2002. The CM1C is available with either Teflon® or GRAFOIL® packing. To simplify installation requirements the CM1C series can be factory configured with a wide variety of various manufacturers' tube fittings.

Features

- Needle stem end (plug type) provides bubble-tight shutoff and ensures long valve life. Replaceable/repairable seats ensure long, safe and economical installed valve life.
- Upgraded large handle ensures ease of operation while actuating valve.
- All valves are hydrostatically tested to rated pressure prior to factory shipment. Full material traceability is standard on each CM1C. All valves are shipped standard with complete material documentation for wetted components.
- Either the Teflon® or GRAFOIL® packing is easily adjustable in field.
- All packing is below the threads, which ensures the process does not contaminate the valve's actuation threads. This feature ensures smooth valve operation and long service life.
- All CM1C's feature safety back seating ensuring the prevention of both accidental stem blowout and removal under pressure.
- All CM1C's in the severe service series feature an upgraded bonnet lock plate with 'P' bonnet assembly to ensure accidental removal under pressure does not occur.
- Standard dust covers ensure long service life by preventing the elements (rain, snow, dirt, etc.) access to the bonnet assembly.

CM1C Ordering Code

CM1C | 1 | M88T | P | 1 | G | SC

Materials of Construction

1: SS - 316/316L (meets NACE MR0175-2002)
2: CS/SS - A105 CS Body w/SS Trim (meets NACE MR0175-2002)
(Other construction materials available - consult factory)

Inlet/Outlet Connections

Standard threaded connections:

F44T: 1/2" FNPT x 1/2" FNPT
M64T: 3/4" MNPT x 1/2" FNPT
M66T: 3/4" MNPT x 3/4" FNPT
F66T: 3/4" FNPT x 3/4" FNPT
M88T: 1" MNPT x 1" FNPT
F88T: 1" FNPT x 1" FNPT

Standard socket weld connections:

FS44S: 1/2" FSW x 1/2" FSW
MS64S: 3/4" MSW x 1/2" FSW
MS66S: 3/4" MSW x 3/4" FSW
FS66S: 3/4" FSW x 3/4" FSW
MS88S: 1" MSW x 1" FSW
FS88S: 1" FSW x 1" FSW

Optional buttweld connections available - consult factory.

Bonnet Assembly

GN: Adjustable packing, Needle tipped stem end (plug) rotating
P: Adjustable packing, Needle tipped stem end (plug) non-rotating stem

Seat

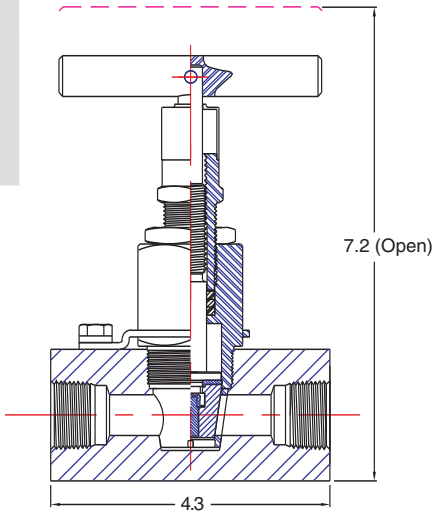
1: 316SS (Requires 'P' Bonnet option)
15: PEEK
16: Delrin®

Packing

T: Teflon®, Adjustable packing
G: GRAFOIL®, Adjustable packing

Special Construction Options

SC-L: Bonnet lock upgrade (in accordance with ANSI B31.1)
SG1: Sour Gas (Valve to meet NACE MR0175-2002)
SG2: Sour Gas (Valve to meet NACE MR0175-2003)
SC-O: Gaseous Oxygen Cleaned
SC: For other special requirements - consult factory



CM2 - Globe pattern, 3/16" [5 mm] bore, 6000 psig [414 barg] hand valve

The CM2 (6000 psig [414 barg] barstock construction needle valve is designed for multiple applications wherever throttling or bubble-tight shutoff is required. The CM2 is available in a wide variety of inlet & outlet configurations and materials. Specific CM2 models meet the requirements of NACE MR-01-75, latest revision. The CM2 is available in both hard and soft seat configurations, and is available with Teflon® or GRAFOIL® packing or an O-ring seal. To simplify installation requirements the CM2 series can be factory configured with various manufacturers tube fittings.

Features

- Available with either ball or needle stem ends, providing bubble-tight shutoff and ensuring long valve life. The non-rotating ball tip eliminates seat galling.
- All valves are available with a panel mount system option - consult factory.
- All valves are hydrostatically tested to rated pressure prior to factory shipment.
- Full material traceability is standard on each CM2. All valves are shipped standard with full material documentation for wetted components.
- Either the Teflon® or GRAFOIL® packing is easily adjustable in field.
- All packing is below the threads which ensures the valve's actuation threads are not contaminated by the process. This feature ensures smooth valve operation and long service life.
- All CM2's feature safety back seating ensuring the prevention of both accidental stem blowout and removal under pressure.
- Standard dust covers ensure long service life by preventing the elements (rain, snow, dirt, etc.) access to the bonnet assembly.

CM2 Ordering Code: **CM2** **1** **M44T** **D** **G** **SC**

Materials

1: SS - 316/316L (meets NACE MR0175-2002)
2: CS/SS - A105 CS Body w/ SS Trim (meets NACE MR0175-2002)
3: CS - A108 CS
(Other construction materials available - consult factory)

Inlet/Outlet Connections

Standard threaded connections:

M22T: 1/4" MNPT x 1/4" FNPT
F22T: 1/4" FNPT x 1/4" FNPT
M44T: 1/2" MNPT x 1/2" FNPT
F44T: 1/2" FNPT x 1/2" FNPT
M64T: 3/4" MNPT x 1/2" FNPT
Optional socketweld or buttweld connections available - consult factory.

Bonnet Assembly

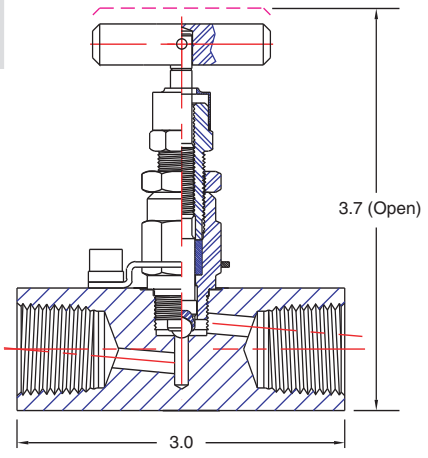
B: O-ring, Needle tipped stem end
D: Adjustable packing, Rotating ball tipped stem end
DN: Adjustable packing, Needle tipped stem end

Packing

A: Aflas® O-ring
V: Viton® O-ring
T: Teflon®, Adjustable packing
G: GRAFOIL®, Adjustable packing

Special Construction Options

SC-L: Bonnet lock upgrade (in accordance with ANSI B31.1)
SG1: Sour Gas (Valve to meet NACE MR0175-2002)
SG2: Sour Gas (Valve to meet NACE MR0175-2003)
SC-O: Gaseous Oxygen Cleaned
SC: For other special requirements - consult factory



CM2M - Soft or Hard seat, Globe pattern, 1/8" [3.2 mm bore], 6000 psig [414 barg] hand valve

The CM2M (6000 psig [414 barg]) barstock construction, globe pattern, mini valve is designed for a safe, in-line repairable, long service life. The CM2M is a soft or hard seated valve, ensuring repetitive bubble-tight sealing in both standard and dirty process conditions and is available in all inlet & outlet configurations and materials. Specific CM2M models meet the requirements of NACE MR0175-2002. The CM2M is standardly equipped with a Delrin® seat and is available with an O-ring seal. To simplify installation requirements the CM2M series can be factory configured with a wide variety of various manufacturers tube fittings.

Features

- Utilizes needle stem ends, which provide repetitive bubble-tight shutoff.
- All valves are hydrostatically tested to rated pressure prior to factory shipment.
- Full material traceability is standard on each CM2M. All valves are shipped standard with full material documentation for wetted components.
- All O-rings are below the threads, which ensures the process does not contaminate the valve's actuation threads. This feature ensures smooth valve operation and long service life.
- All CM2M valves feature safety back seating ensuring the prevention of both accidental stem blowout and removal under pressure.
- Soft seats are in-line replaceable/repairable ensuring the CM2M provides economical, long service life. Standard soft seat material is Delrin®. Readily available seat options include PEEK.

CM2M Ordering Code: CM2M 1 M22T NN 16 V SC

Materials of Construction

1: SS - 316/316L (meets NACE MR0175-2002)
3: CS - A108 CS
(Other construction materials available - consult factory)

Inlet/Outlet Connections

Standard threaded connections:
M22T: 1/4" MNPT x 1/4" FNPT
F22T: 1/4" FNPT x 1/4" FNPT
M22M: 1/4" MNPT x 1/4" MNPT

Bonnet Assembly

NN: O-ring, Needle tipped stem end.

Seat

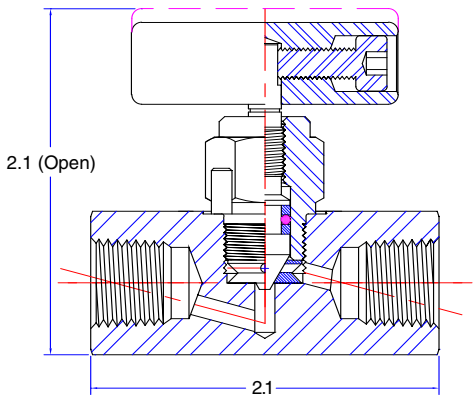
16: Delrin®
15: PEEK
Note: Leave blank for hard seat

Packing

V: Viton® O-ring

Special Construction Options

SG1: Sour Gas (Valve to meet NACE MR0175-2002)
SG2: Sour Gas (Valve to meet NACE MR0175-2003)
SC-O: Gaseous Oxygen Cleaned
SC: For other special requirements - consult factory
RH: Round Handle



CM25 - Globe pattern, 3/16" [5 mm] bore, 10000 psig [689 barg] hand valve

The CM25 (10,000 psig [689 barg]) barstock construction needle valve is designed for multiple applications wherever throttling or bubble-tight shutoff is required. The CM25 is available in a wide variety of inlet & outlet configurations and materials. Specific CM25 models meet the requirements of NACE MR0175-2002. The CM25 is available with Teflon® or GRAFOIL® packing or an O-ring seal. To simplify installation requirements the CM25 series can be factory configured with various manufacturers tube fittings.

Features

- Available with either ball or needle stem ends, providing bubble-tight shutoff and ensuring long valve life. The non-rotating ball tip eliminates seat galling.
- All valves are hydrostatically tested to rated pressure prior to factory shipment.
- Full material traceability is standard on each CM25. All valves are shipped standard with full material documentation for wetted components.
- Either the Teflon® or GRAFOIL® packing is easily adjustable in field.
- All packing is below the threads which ensures the valve's actuation threads are not contaminated by the process. This feature ensures smooth valve operation and long service life.
- All CM25's feature safety back seating ensuring the prevention of both accidental stem blowout and removal under pressure.
- Standard dust covers ensure long service life by preventing the elements (rain, snow, dirt, etc.) access to the bonnet assembly.

CM25 Ordering Code: **CM25 1 M44T C G SC**

Materials

1: SS - 316/316L (meets NACE MR0175-2002)
2: CS/SS - A105 CS Body w/SS Trim (meets NACE MR0175-2002)
3: CS - A108 CS
(Other construction materials available - consult factory)

Inlet/Outlet Connections

Standard threaded connections:

M22T: 1/4" MNPT x 1/4" FNPT
F22T: 1/4" FNPT x 1/4" FNPT
M44T: 1/2" MNPT x 1/2" FNPT
F44T: 1/2" FNPT x 1/2" FNPT
M64T: 3/4" MNPT x 1/2" FNPT
M66T: 3/4" MNPT x 3/4" FNPT
F66T: 3/4" FNPT x 3/4" FNPT

Optional socketweld or buttweld connections available - consult factory.

Bonnet Assembly

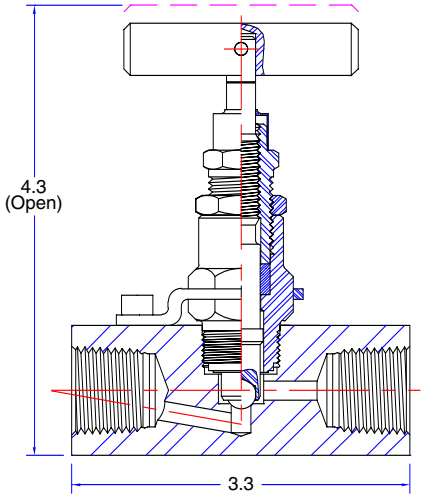
A: O-ring, Needle tipped stem end
C: Adjustable packing, Rotating ball tipped stem end
CN: Adjustable packing, Needle tipped stem end
F: Adjustable packing, Rotating ball tipped stem end (required for 1/4" inlets only)
FN: Adjustable packing, Needle tipped stem end (required for 1/4" inlets only)

Packing

A: Aflas® O-ring
V: Viton® O-ring
T: Teflon®, Adjustable packing
G: GRAFOIL®, Adjustable packing

Special Construction Options

SC-L: Bonnet lock upgrade (in accordance with ANSI B31.1)
SG1: Sour Gas (Valve to meet NACE MR0175-2002)
SG2: Sour Gas (Valve to meet NACE MR0175-2003)
SC-O: Gaseous Oxygen Cleaned
SC: For other special requirements - consult factory



CM25A - Globe pattern, 3/16" [5 mm] bore, 10000 psig [689 barg] hand valve

The CM25A (10,000 psig [689 barg]) barstock construction needle valve is designed for multiple applications wherever throttling or bubble-tight shutoff is required. The CM25A is available in a wide variety of inlet & outlet configurations and materials. Specific CM25A models meet the requirements of NACE MR0175-2002. The CM25A is available with Teflon® or GRAFOIL® packing or an O-ring seal. To simplify installation requirements the CM25A series can be factory configured with various manufacturers tube fittings.

Features

- Available with either ball or needle stem ends, providing bubble-tight shutoff and ensuring long valve life. The non-rotating ball tip eliminates seat galling.
- All valves are available with a panel mount system option - consult factory.
- All valves are hydrostatically tested to rated pressure prior to factory shipment.
- Full material traceability is standard on each CM25A. All valves are shipped standard with full material documentation for wetted components.
- Either the Teflon® or GRAFOIL® packing is easily adjustable in field.
- All packing is below the threads which ensures the valve's actuation threads are not contaminated by the process. This feature ensures smooth valve operation and long service life.
- All CM25A's feature safety back seating ensuring the prevention of both accidental stem blowout and removal under pressure.
- Standard dust covers ensure long service life by preventing the elements (rain, snow, dirt, etc.) access to the bonnet assembly.

CM25A Ordering Code: **CM25A** **1** **M44T** **C** **G** **SC**

Materials

1: SS - 316/316L (meets NACE MR0175-2002)
2: CS/SS - A105 CS Body w/SS Trim (meets NACE MR0175-2002)
3: CS - A108 CS
(Other construction materials available - consult factory)

Inlet/Outlet Connections

Standard threaded connections:

M22T: 1/4" MNPT x 1/4" FNPT
F22T: 1/4" FNPT x 1/4" FNPT
M44T: 1/2" MNPT x 1/2" FNPT
F44T: 1/2" FNPT x 1/2" FNPT
M64T: 3/4" MNPT x 1/2" FNPT

Bonnet Assembly

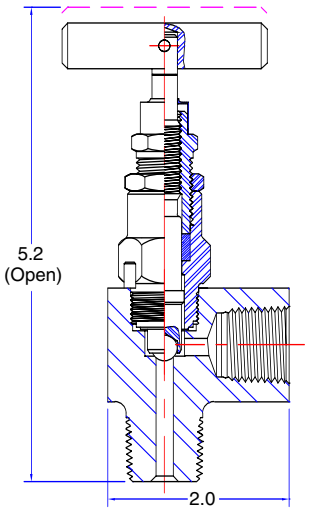
A: O-ring, Needle tipped stem end
C: Adjustable packing, Rotating ball tipped stem end
CN: Adjustable packing, Needle tipped stem end
F: Adjustable packing, Rotating ball tipped stem end (required for 1/4" inlets only)
FN: Adjustable packing, Needle tipped stem end (required for 1/4" inlets only)

Packing

A: Aflas® O-ring
V: Viton® O-ring
T: Teflon®, Adjustable packing
G: GRAFOIL®, Adjustable packing

Special Construction Options

SC-L: Bonnet lock upgrade (in accordance with ANSI B31.1)
SG1: Sour Gas (Valve to meet NACE MR0175-2002)
SG2: Sour Gas (Valve to meet NACE MR0175-2003)
SC-O: Gaseous Oxygen Cleaned
SC: For other special requirements - consult factory



CM25H - Globe Pattern, 5/16" [8 mm] bore, 6000 psig [414 barg] hand valve

The CM25H (6000 psig [414 barg]) barstock valve features a large, globe pattern 5/16" [8 mm] bore, allowing free passage of viscous processes. Optional needle or ball stem ends provide repetitive, bubble-tight shutoff. The CM25H is available in a wide variety of inlet & outlet configurations and materials. Specific CM25H models meet the requirements of NACE MR0175-2002. The CM25H is available with Teflon® or GRAFOIL® packing or an O-ring seal. To simplify installation requirements the CM25H series can be factory configured with a wide variety of various manufacturers tube fittings.

Features

- Available with either ball or needle stem ends, providing bubble-tight shutoff and ensuring long valve life. The non-rotating ball stem end eliminates seat galling.
- Overly large handle ensures ease of operation while actuating valve.
- All valves are hydrostatically tested to rated pressures prior to factory shipment. Full material traceability is standard on each CM25H. All valves are shipped standard with complete material documentation for wetted components.
- Either the Teflon® or GRAFOIL® packing is easily adjustable in field.
- All packing is below the threads, which ensures the process does not contaminate the valve's actuation threads. This feature ensures smooth valve operation and long service life.
- All CM25H's feature safety back seating ensuring the prevention of both accidental stem blowout and removal under pressure.
- Standard dust covers ensure long service life by preventing the elements (rain, snow, dirt, etc.) access to the bonnet assembly.

CM25H Ordering Code: **CM25H** **1** **M44T** **GN** **G** **SC**

Materials of Construction

1: SS - 316/316L (meets NACE MR0175-2002)
2: CS/SS - A105 CS Body w/SS Trim (meets NACE MR0175-2002)
3: CS - A108 CS
(Other construction materials available - consult factory)

Inlet/Outlet Connections

Standard threaded connections:
M88T: 1" MNPT x 1" FNPT
F88T: 1" FNPT x 1" FNPT

Standard socket weld connections:
MS88S: 1" MSW x 1" FSW
FS88S: 1" FSW x 1" FSW

Optional buttweld connections available - consult factory.

Bonnet Assembly

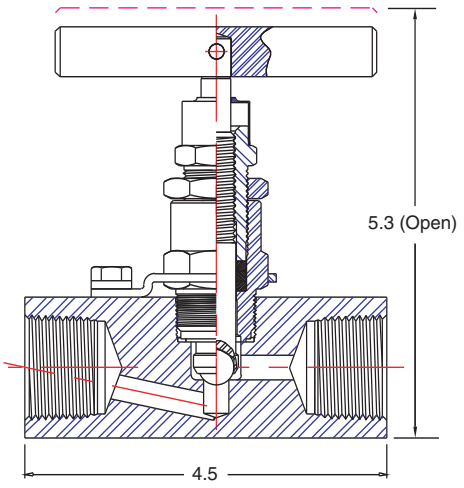
G: Adjustable packing, rotating ball tipped stem end
GN: Adjustable packing, Needle tipped stem end, (plug) rotating

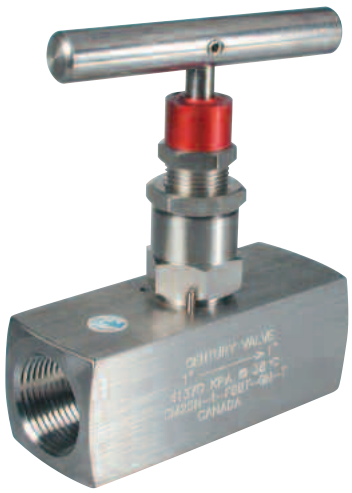
Packing

T: Teflon®, Adjustable packing
G: GRAFOIL®, Adjustable packing

Special Construction Options

SC-L: Bonnet lock upgrade (in accordance with ANSI B31.1)
SG1: Sour Gas (Valve to meet NACE MR0175-2002)
SG2: Sour Gas (Valve to meet NACE MR0175-2003)
SC-O: Gaseous Oxygen Cleaned
SC: For other special requirements - consult factory





CM25D - Globe Pattern 7/16" [11 mm] bore, 10000 psig [689 barg] hand valve

The CM25D (10000 psig [689 barg]) barstock construction globe pattern hand valve is ideally suited for severe service, high-temperature applications. The globe pattern construction of this unit ensures reliable bubble-tight shutoff and allows for throttling of the most severe of services. The standard packing for the CM25D is GRAFOIL® for high-temperature compatibility, however, Teflon® is readily available.

The CM25D is available in a wide variety of inlet & outlet configurations and materials. To simplify installation requirements the CM25D series can be factory configured with a wide variety of various manufacturers tube fittings.

Features

- Rotating ball stem tip provides reliable bubble-tight shutoff of large (7/16" [11mm]) globe pattern bore.
- Overly large handle ensures ease of operation while actuating valve.
- All valves are hydrostatically tested to rated pressures prior to factory shipment. Full material traceability is standard on each CM25D. All valves are shipped standard with complete material documentation for wetted components.
- Either the Teflon® or GRAFOIL® packing is easily adjustable in field.
- All packing is below the threads, which ensures the process does not contaminate the valve's actuation threads. This feature ensures smooth valve operation and long service life.
- All CM25D's feature safety back seating ensuring the prevention of both accidental stem blowout and removal under pressure.
- All CM25D's in the severe service series feature an upgraded bonnet lock plate to prevent accidental removal of bonnet assembly under pressure.
- Temperatures up to 1200°F with 316SS with 0.04% minimum carbon content.

CM25D Ordering Code: **CM25D 1 M88T PID G SC**

Materials of Construction

1: SS - 316/316L (meets NACE MR0175-2002)
2: CS/SS - A105 CS Body w/SS Trim (meets NACE MR0175-2002)
(Other construction materials available - consult factory)

Inlet/Outlet Connections

Standard threaded connections:

F44T: 1/2" FNPT x 1/2" FNPT
F66T: 3/4" FNPT x 3/4" FNPT
M66T: 3/4" MNPT x 3/4" FNPT
F88T: 1" FNPT x 1" FNPT
M88T: 1" MNPT x 1" MNPT

Standard socketweld connections:

FS44S: 1/2" FSW x 1/2" FSW
MS66S: 3/4" MSW x 3/4" FSW
MS64S: 3/4" MSW x 1/2" FSW
FS66S: 1" FSW x 1" FSW
MS88S: 1" MSW x 1" FSW

Optional buttweld connections available - consult factory.

Bonnet Assembly

PID: Adjustable packing, Rotating ball tipped stem end

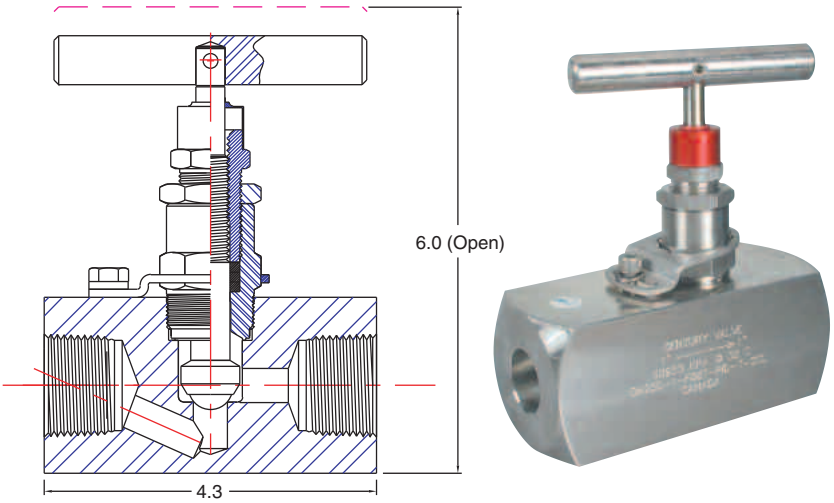
Packing

T: Teflon®, Adjustable packing
G: GRAFOIL®, Adjustable packing

Special Options

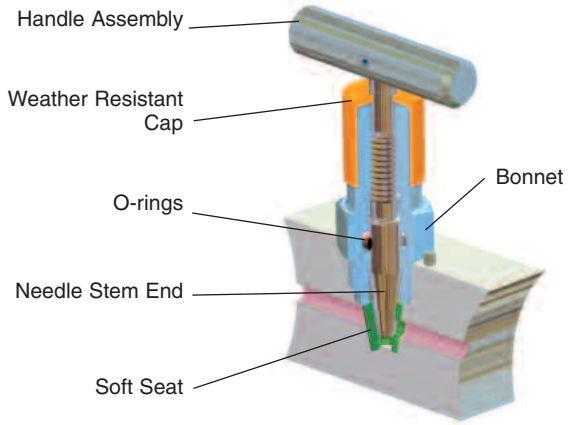
SG1: Sour Gas (Valve to meet NACE MR0175-2002)
SG2: Sour Gas (Valve to meet NACE MR0175-2003)
SC-O: Gaseous Oxygen Cleaned
SC: For other special requirements - consult factory
SC-H: 316SS with 0.04% minimum Carbon

Note: All seats on CM25D Series are integral – no nomenclature designation required.

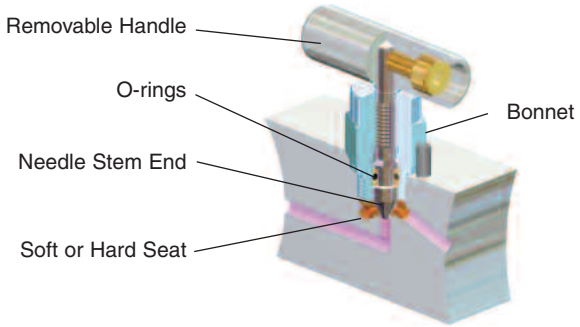


Bonnet Assembles

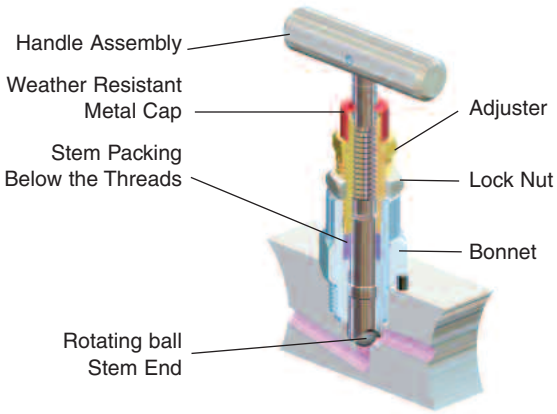
O-ring, Needle tipped stem end



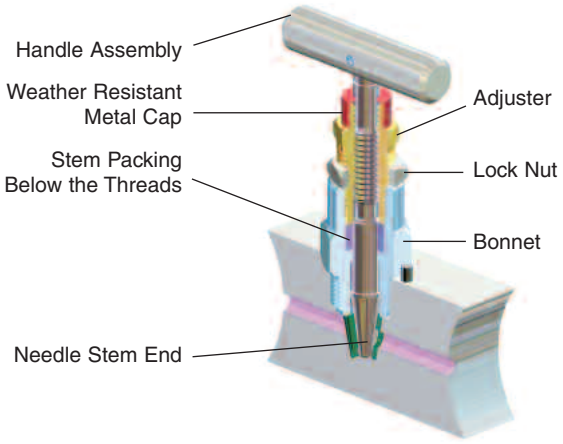
O-ring Needle tipped stem end



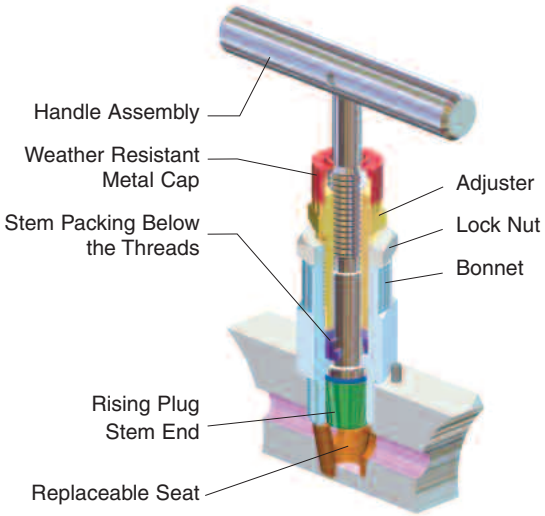
Adjustable packing, Rotating ball tipped stem end



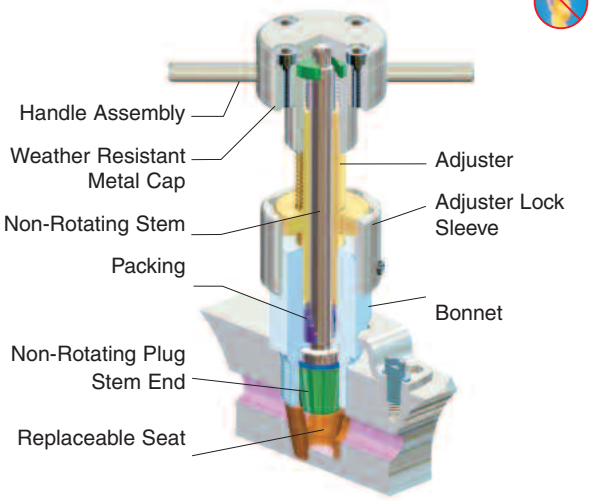
Adjustable packing, Needle tipped stem end



Adjustable packing, Needle tipped stem end, (plug) rotating

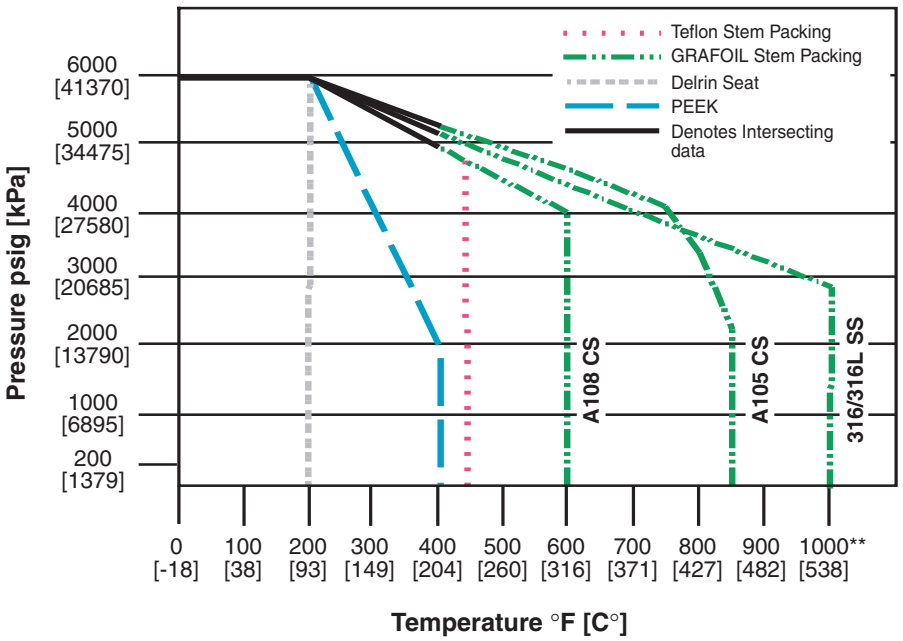


Adjustable packing, Needle tipped stem end (plug) non-rotating stem - meets API 607 / BS6755 Part 2 requirements



Pressure/Temperature Chart

Standard 6000 psi Valve, 316/316L SS, A108CS, A105 CS*



* In accordance with ASME 16.34, ASME B31.1 ASME B31.1

** For applications above 1000°F, please consult factory.

Temperature Ratings

Body Materials

	Minimum °F [°C]	Maximum °F [°C]
316/316L SS*	-425°F [-253°C]	1000°F [538°C]
A105 CS	-20°F [-29°C]	850°F [454°C]
A108 CS	-20°F [-29°C]	600°F [315°C]

Note: 316SS with 0.04% minimum carbon option, for temp up to 1200°F.

Stem Seal Materials

	Maximum °F [°C]
Viton®	400°F [204°C]
Aflas®	400°F [204°C]
Teflon®	450°F [232°C]
GRAFOIL®	1000°F [538°C]

Note: GRAFOIL® suitable for services in excess of 1000°F in a non-oxidizing environment.

Seat Materials

	Maximum °F [°C]
316/316L	1000°F [538°C]
Delrin®	200°F [93°C]
Peek	400°F [204°C]

Notes

1 Teflon® and Delrin® are registered trademarks of the E.I. duPont de Nemours Company.

2. GRAFOIL® is a registered trademark of UCAR Carbon.

3. Viton® is a registered trademark of DuPont Dow Elastomers.

Tyco Valves & Controls

www.tycoflowcontrol.com

www.centuryvalve.com