



ANDERSON GREENWOOD INSTRUMENTATION PRODUCTS

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.
- All valves are available with panel mount system option - consult factory.
- 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 on all wetted parts is standard on each HM1C. All valves are shipped standard with complete material construction documentation on all wetted parts.
- 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 HM1C's feature safety back seating, ensuring the prevention of both accidental stem blowout and removal under pressure.
- All HM1C's in the severe service series feature an upgraded bonnet lock plate 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.
- Body to bonnet pressure seals below bonnet threads prevent process from corroding bonnet retention threads which are loaded in compression for additional strength.
- Backseat design provides secondary stem seating and prevents stem blowout.
- Adjustable gland follower allows easy access to adjust the packing gland.
- Stem threads are located above the stem packing and are completely isolated from the process.
- Stem packing with Grafoil® or Teflon® for bubble-tight sealing.
- Firesafe to API 607 Addition 4, BS6755 Part 2.

**Straight-through (roddable), hard or soft seat,
5/8" [16 mm] bore, 6000 psig [414 barg]**



Technical Data

Standard Material Traceability

Standard material traceability to
EN10204-3.1.B, 50049-3.1.b.

Valve Packings

Teflon®

Maximum pressure - 10,000 psig [689 barg]

Maximum temperature - 500°F [260°C]

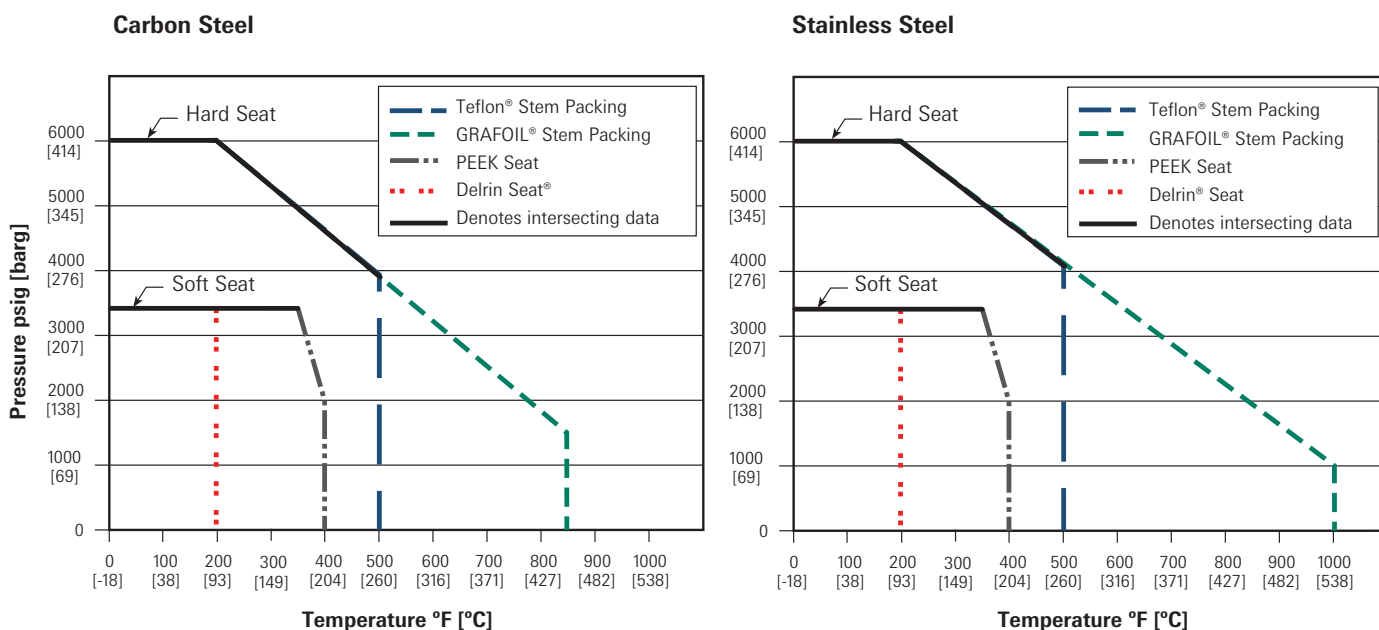
GRAFOIL®

Maximum pressure - 6,000 psig [414 barg]

Maximum temperature - 1000°F [538°C]

* 3500 psig [238 barg] maximum soft seated models.

Pressure vs Temperature



Ordering Code

HM1C S 8 GN S H SCL SC

Materials of Construction

- S – SS - 316/316L (meets NACE MR0175 latest revision with needle stem end)
- C – CS - carbon steel (A108CS)
- (Other construction materials available - consult factory)

Inlet/Outlet Connections

Standard threaded connections

- 46: 3/4" MNPT x 1/2" FNPT
- 6: 3/4" MNPT x 3/4" FNPT
- 66: 3/4" FNPT x 3/4" FNPT
- 8: 1" MNPT x 1" FNPT
- 88: 1" FNPT x 1" FNPT

Standard socketweld (pipe)'

- 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

Socketweld (tube)'

- FP64P: 3/4" FPSW x 1/2" FPSW
- FP88P: 1" FPSW x 1" FPSW

Stem End

- GN – Needle stem end (plug) rotating

Seat

- S – 316SS
- D – Delrin®
- K – PEEK

Packing

- V – Teflon®
- H – GRAFOIL®

Bonnet Lock Plate

- SCL – Bonnet lock plate upgrade (in accordance with ANSI B31.1)

Special Construction Options

- RH – Round handle - (available in red, black and silver)
- LB – Lockable bonnet - consult factory
- O – Gaseous Oxygen Cleaned
- SC – Special requirements - consult factory
- TF – Installed Tube Fittings

Note

1. Removal of soft seat required before weld.

Product Overview

The HM1C (6000 psig [414 barg]) barstock construction valve is a severe service, high-pressure/temperature, straight through (roddable) bi-directional flow unit. The HM1C features a C_v rating of 9.8 which allows for high flow capacities. The HM1C is also ideally suited for process conditions where potential plugging is a concern. The HM1C 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 HM1C is available in a wide variety of inlet and outlet configurations and materials. Specific HM1C models meet the requirements of NACE MR0175 latest revision. The HM1C is available with either Teflon® or Grafoil® packing. To simplify installation requirements, the HM1C series can be factory configured with a wide variety of various manufacturers' tube fittings.

Materials

Standard	SS Valve	CS Valve	SG Valve
Body	316 SS/316LSS	A108 CS	316 SS/316LSS
Bonnet	316 SS	A108 CS	316 SS
Stem	316 SS	303 SS	316 SS
Non-Wetted Parts	Austenitic SS	A108 CS	Austenitic SS

Special

For severe service, isolation valves are available in the following exotic materials:

- Monel® Alloy 400
- Duplex S31803
- Hastelloy®00 C276

Notes

1. Teflon® and Delrin® are registered trademarks of the E.I. duPont de Nemours Company.
2. Monel® is a registered trademark of International Nickel Company.
3. Hastelloy® is a registered trademark of Haynes International.
4. GRAFOIL® is a registered trademark of UCAR Carbon.
5. Delrin® Seat 200°F [93°C] Max.
6. PEEK® Seat 400°F [204°C] Max.

