

Hex Valve offers a bellows stem seal option for use on Hex instrument valves in the control and monitoring of corrosive chemicals, hazardous materials or any application where leakage and containment are primary considerations.

The bellows stem seal option can be specified on a wide range of Hex instrument valves, gauge valves, bleed valves, three and five valve manifolds and static pressure manifolds. The bellows is hydroformed and laser-welded to the stem assembly for greater stability and longer life.

The bellows can be provided in either 316L or Monel, and the option also provides secondary sealing for greater protection than can be achieved with a single seal design. Hex Valve exercised care in maintaining compact bonnet dimensions to reduce the risk of accidental breakage or damage to the bellows and also to reduce the amount of space that would be required to install the products.



#### **Features and Benefits**

- Non-Rotating Tip (NRT) Stem: Provides tight, repeatable shutoff without the galling or cross-scoring that occurs on ball type stems. The NRT conical stem tip stops rotating when it contacts the seat, so further torque turns the stem, but not the tip, preventing damage to the tip.
- Optional Seal Welding: Fillet welds covering all joined external components can be specified as an option.
- Back-Up Sealing: Secondary sealing for greater protection against leakage than provided by single seal designs. Available with o-ring or packed seal on hard seated models.
- Bellows Option Available on a Wide Selection
  of Models: The bellows stem seal option can be
  provided on Hex instrument valves, primary gauge or
  block valves, bleed valves, three valve manifolds and
  static pressure manifolds.



# **Ordering Information**

The Hex Bellows Stem Seal option provides a bellows produced in 316L Stainless Steel or Monel.

The bellows option is available on these Hex Valve models:

Primary Block (Root Valves)

- HG461
- HG465

Instrument Valves

- HG48
- HN49
- HB50
- HB59

### **How to Order**

Hex Bellows Stem Seal valves are easy to order. From the bellows option shown below, add the appropriate digits to the end of your specific valve model number.

- Multi-ply bellows: add "RD"
- Multi-ply, seal-welded assembly: add "RE" (Note: seal-welded assemblies are available only on hard seated models.)

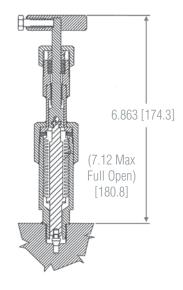
## **Pressure and Temperature Ratings**

The Ratings shown are for 316L SST bellows only, and assumes 15,000 to 30,000 cycle life. Individual valve ratings should be considered in final evaluation, and can be found on the Hex Pressure/Temperature Charts available from our factory and representatives.

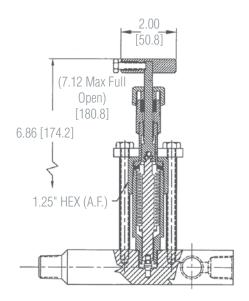
Temperature, °F [°C]	Pressure, PSIG [BAR]
-20 to 100 [-29 to 38]	1500 [103]
200 [93]	1410 [97]
300 [149]	1320 [91]
400 [204]	1245 [86]
500* [260]	1170 [81]
600* [316]	1110 [77]
650* [343]	1075** [74]
700* [371]	1050 [72]
800* [427]	990 [68]
900* [482]	930 [64]
1000* [538]	900 [62]

<sup>\*</sup> Requires high temperature secondary seal.

### **Dimensions**



Bellows Seat Bonnet



HG46 Bellows Seal Bonnet (Packed Secondary Seal)

<sup>\*\*</sup> Carbon Steel temperature limit.