



## Diaphragm Seals

# HD Series Hazardous Duty Diaphragm Seal Elements

### DESCRIPTION

Mansfield & Green HD Series seal elements feature an innovative redundant diaphragm construction that provides ultimate protection for hazardous gas or liquid applications. The seal's unique design provides the operator with immediate indication of a failure condition while maintaining process integrity until maintenance can be initiated.

Built-in over pressure protection is provided up to 2000 psig (138 bar). The design permits free movement of the diaphragm with accurate response to pressure changes. It also protects the seal element from distortion due to improper handling during maintenance routines.

HD Series diaphragm seals are continuous duty elements with an all-welded construction free of gaskets or mechanical connections that can be problematic in hazardous applications. HD Series diaphragm seals can be specified with .25" or .5" NPT instrument connections and can be threaded or flange mounted. Flange models comply with ANSI B16.5. HD Series diaphragm seals can be mounted to most transmitters, transducers, pressure switches, pressure gauges, process controllers, or other forms of pressure sensing device.



### FEATURES

- Ideal for hazardous gas or liquid applications
  - Redundant diaphragms
  - Localized failure indication
  - Built-in over pressure protection
  - Designed for corrosive applications
- Easy installation and maintenance
  - Continuous duty
  - All-welded construction
  - No gaskets
  - .25" and .5" NPT instrument connections
  - Flanged attached models
  - ANSI B16.5 compliant
  - Compatible with most transmitters, transducers, pressure switches, pressure gauges, etc.

### Threaded Seal Elements

The HBW seal element is used for pressure applications only and has a maximum pressure rating of 2000 psig at 100°F (138 bar at 38°C)

### Flanged Seal Elements

The HCW seal element is used for pressure applications only and features a standard raised face type flange. It can be supplied for standard ANSI Class ratings of 150, 300, and 600. Metric sizes are available upon request.

Type HD Series diaphragm seals have a volumetric displacement of .07 cubic inches.

NOTE: Hazardous duty diaphragm seals MUST be mounted vertically for sightglass to operate correctly

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