TESCOM

DH Series

Regulators - Pressure Reducing

DDHXX1910X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure
500 psig / 34.5 bar

Outlet Pressure Ranges
0-20, 0-50, 0-100, 0-150, 0-250 psig
0-1.4, 0-3.4, 0-6.9, 0-10.3, 0-17.2 bar

Design Proof Pressure
150% of rated inlet

Leakage
Bubble-tight

Ambient Operating Temperature
-4°F to 165°F / -20°C to 74°C

Flow Capacity
C_V = 5.0

MEDIA CONTACT MATERIALS

Body, Bonnet, Back-cap
316 Stainless Steel or Brass

Diaphragm
Ethylene Propylene (E.P.) or Nylon Reinforced, Gylon® (PTFE)

Seat
Main Valve: Buna-N, E.P., Chemraz®, Viton®
Vent: CTFE, Vespel®

O-Rings
Buna-N, E.P., Chemraz®, Viton®

Remaining Parts
300 Series Stainless Steel, Nitronic 60

OTHER

Cleaning
CGA 4.1 and ASTM G93

Weight
Stainless Steel: 15 lbs / 6.8 kg
Brass: 16 lbs / 7.3 kg

Vespel® and Viton® are registered trademarks of E.I. du Pont de Nemours and Company.
Gylon® is a registered trademark of Garlock, Inc.
Chemraz® is a registered trademark of Greentweed.

DOME LOADED

SPRING LOADED

TESCOM DH-Series single-stage regulator provides a compact size with high flow capability from 5-200 SCFM / 142-5663 SLPM. The large diaphragm and balanced main valve design provide low droop (larger usable flow range) than competitive designs. Available in spring or dome loaded configurations.

Applications

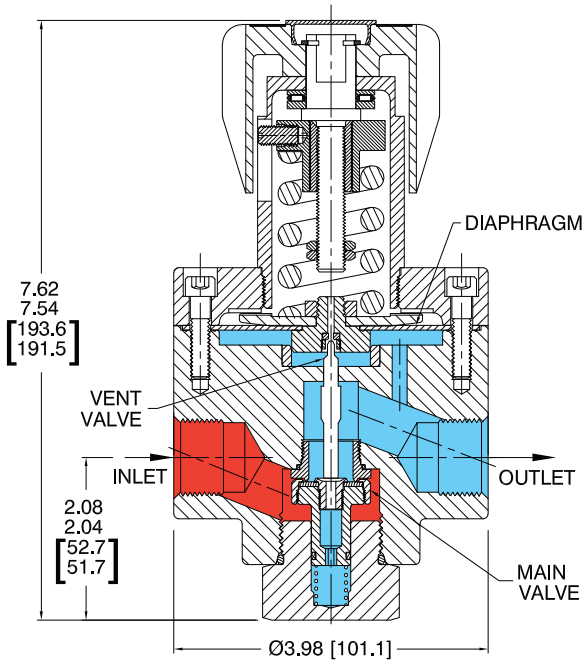
- Purging, blanketing, high flow inerting, heat treating, and shielding gases
- Performs well at very low pressure differentials such as dewar-supplied processes
- Multi-drop breathing air stations

Features and Benefits

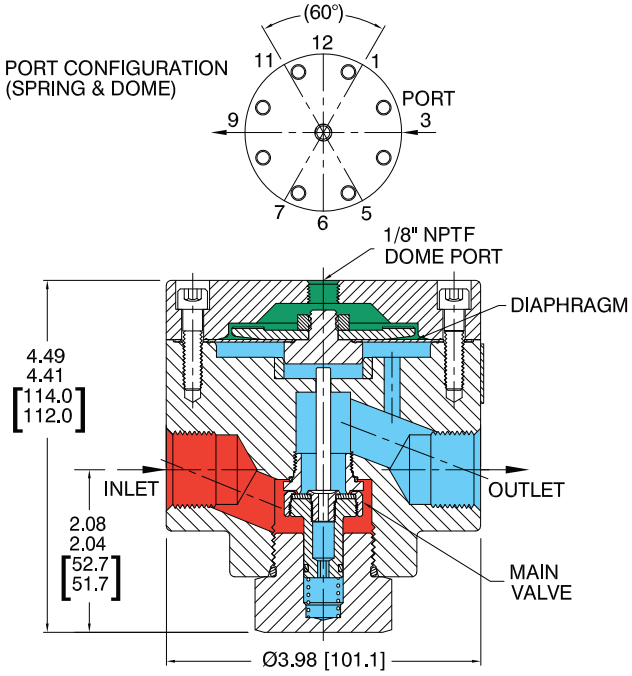
- Available in 316 Stainless Steel or Brass
- Accurately regulates pressure up to 250 psig / 17.2 bar for spring load, 300 psig / 20.7 bar for dome load and 500 psig / 34.5 bar for air load (optional)
- Five outlet pressure ranges
- Choice of spring load or dome load (air load is optional)
- Low droop
- Panel mounting is available

DH Series Regulator Drawings

SPRING LOAD (VENTING)



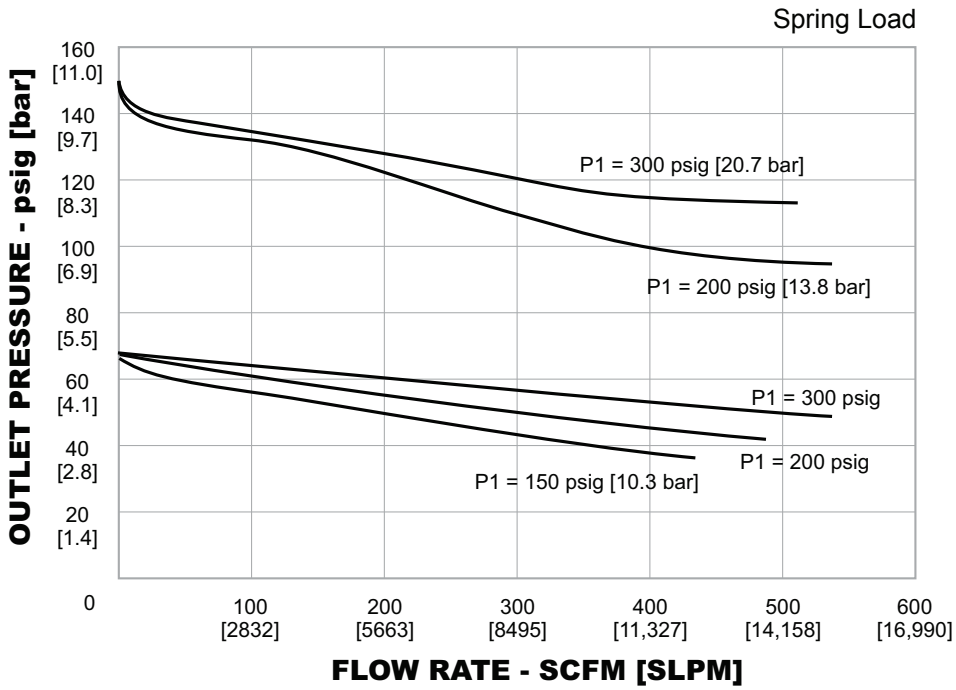
DOME LOAD (NON-VENTING SHOWN, VENTING AVAILABLE)

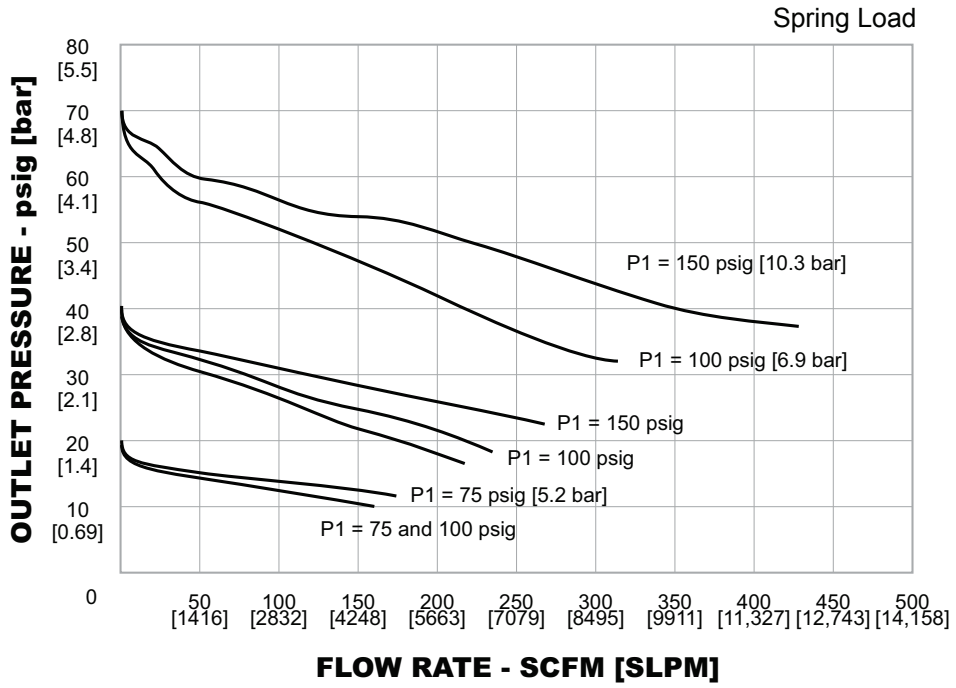


All dimensions are reference & nominal
Metric [millimeter] equivalents are in brackets

DH Series Regulator Flow Charts

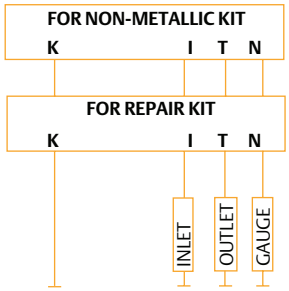
For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on www.tescom.com.





DH Series Regulator Part Number Selector

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.



Example for selecting a part number:

DH	H	1	0	B	E	V	9	A	4	4	9

BASIC SERIES	LOAD TYPE	BODY, BONNET, BACK-CAP MATERIAL	OUTLET PRESSURE	O-RING AND VALVE SEAT MATERIAL	DIAPHRAGM MATERIAL	VENT SEAT MATERIAL	OPTIONAL ITEMS	PORTING CONFIGURATION	INLET, OUTLET, GAUGE PORTS
DH	**H –** Spring Loaded, Handknob **W –** Spring Loaded, Wrench **D –** Dome Loaded *(available with Gylon® diaphragm only)*	**1 –** Brass **6 –** 316 Stainless Steel	**0 –** 0-20 psig 0-1.4 bar **1 –** 0-50 psig 0-3.4 bar **2 –** 0-100 psig 0-6.9 bar **3 –** 0-150 psig 0-10.3 bar **5 –** 0-250 psig 0-17.2 bar **D –** 0-300 psig 0-20.7 bar *(Dome Load only)*	**B –** Buna-N O-Ring Buna-N 90 Seat **E –** E.P. O-Ring E.P. 80 Seat **M –** Chemraz® O-Ring, Chemraz® 75 Seat **V –** Viton®	**E –** E.P. or Nylon Reinforced **G –** Gylon®	**C –** CTFE **V –** Vespel® **P –** Peek **N –** Non-Venting	**C –** CCL **9 –** None	**A –** No gauge ports **B –** 2 gauge ports at 60° **D –** 1 outlet gauge at 90° **L –** 2 gauge ports at 90° ** Crossholes for 1/2" ports limits C_V to 3.5*	**H –** 1/2" NPTF* C_V = 3.5 **3 –** 3/4" NPTF **4 –** 1" NPTF **9 –** None