

DH-16 Series

Regulators - Pressure Reducing

DDH161952X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure

300 psig / 20.7 bar

Outlet Pressure Ranges

0-20, 0-50, 0-100, 0-150, 0-250, or 0-300 (dome loaded only) psig
0-1.4, 0-3.4, 0-6.9, 0-10.3, 0-17.2, or 0-20.7 bar

Design Proof Pressure

150% of rated pressure

Leakage

Bubble-tight

Operating Temperature

-20°F to 165°F / -29°C to 74°C

Flow Capacity

$C_v = 5.0$

MEDIA CONTACT MATERIALS

Body, Bonnet, Back-cap

316 Stainless Steel

Diaphragm

Ethylene Propylene (E.P.), Gylon®

Seat, Vent

CTFE, Vespel®

Seat, Main Valve

Buna-N 90, E.P. 80, Chemraz 75®, Viton®

O-Rings

Buna-N, E.P., Chemraz®, Viton®

Remaining Parts

300 Series Stainless Steel, Nitronic 60

OTHER

Internal Surface Finish

20 R_a microinch / 0.63 micrometer

Connections - Inlet and Outlets

Welded female or male VCR®, tube stubs, sanitary

Connections - Gauges

NPTF

High Purity Internal Connections (H.P.I.C.)

(internal style of VCR®, compatible with male swivel VCR®)

Cleaning

CGA 4.1 and ASTM G93

Weight

15 lbs / 6.8 kg

VCR® is a registered trademark of Cajon Co.

Gylon® is a registered trademark of Garlock, Inc.

Vespel® and Viton® are registered trademarks of E.I. du Pont de Nemours and Company.

Chemraz® is a registered trademark of Greentweed.



SHOWN WITH SANITARY CONNECTIONS

TESCOM DH-16 low pressure, high flow regulator is designed for applications with flows from 5-200 SCFM / 141-5663 SLPM. Its Gylon® diaphragm ensures gas purity and integrity. Welded sanitary, tubing, or VCR® connections are standard.

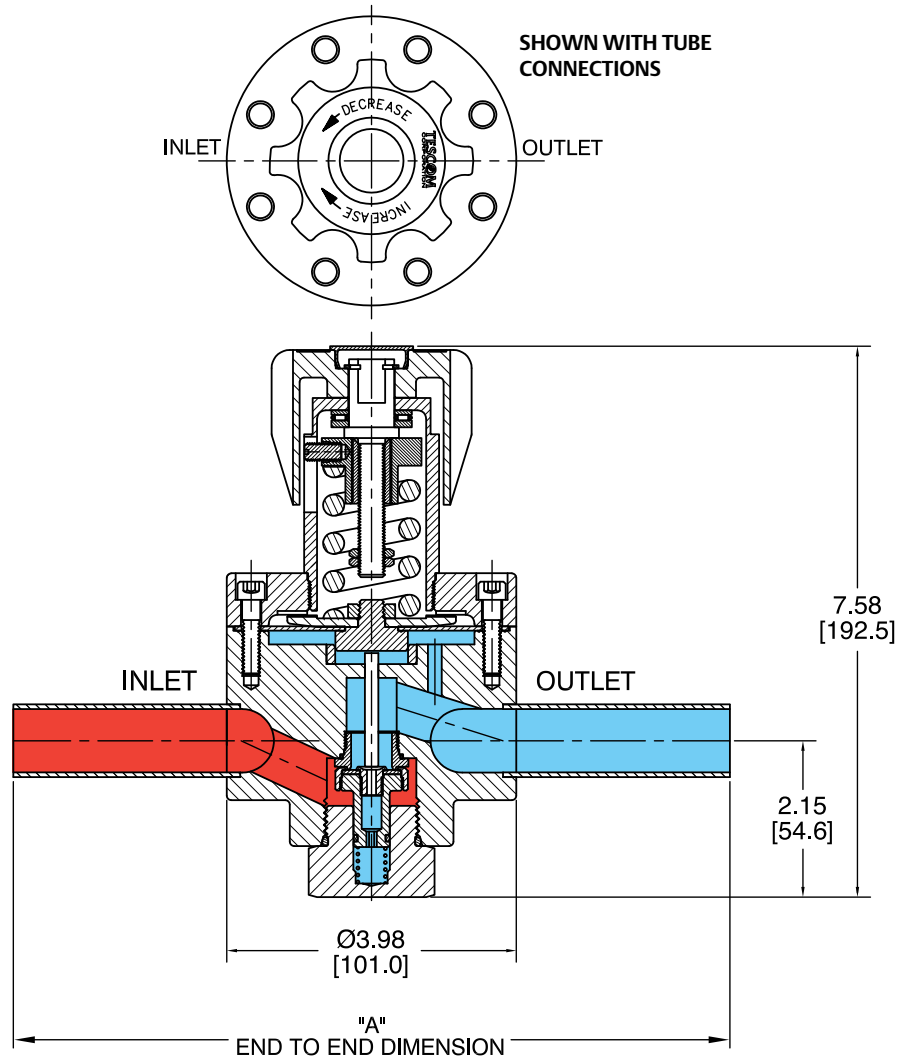
Applications

- Nitrogen purging
- Facility tool and equipment for air or nitrogen

Features and Benefits

- $C_v = 5.0$ flow capacity
- Gylon® diaphragm
- Low droop, high flow
- Five outlet pressure ranges
- Accurately regulates pressures up to 250 psig / 17.2 bar (300 psig / 20.7 bar for dome loaded)

DH-16 Series Regulator Drawing

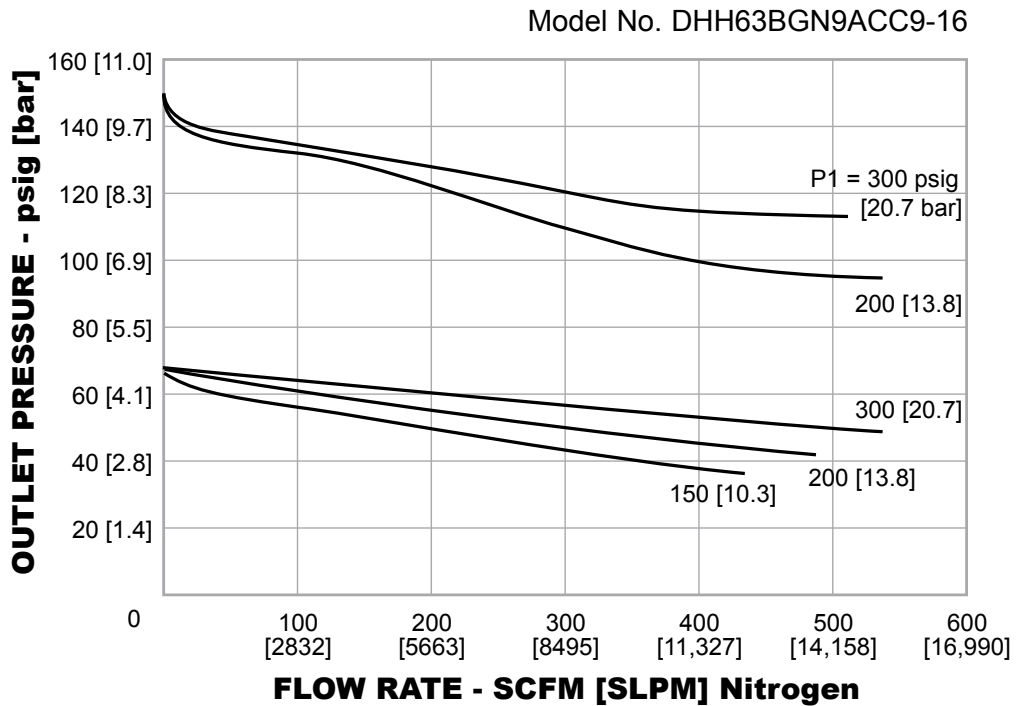
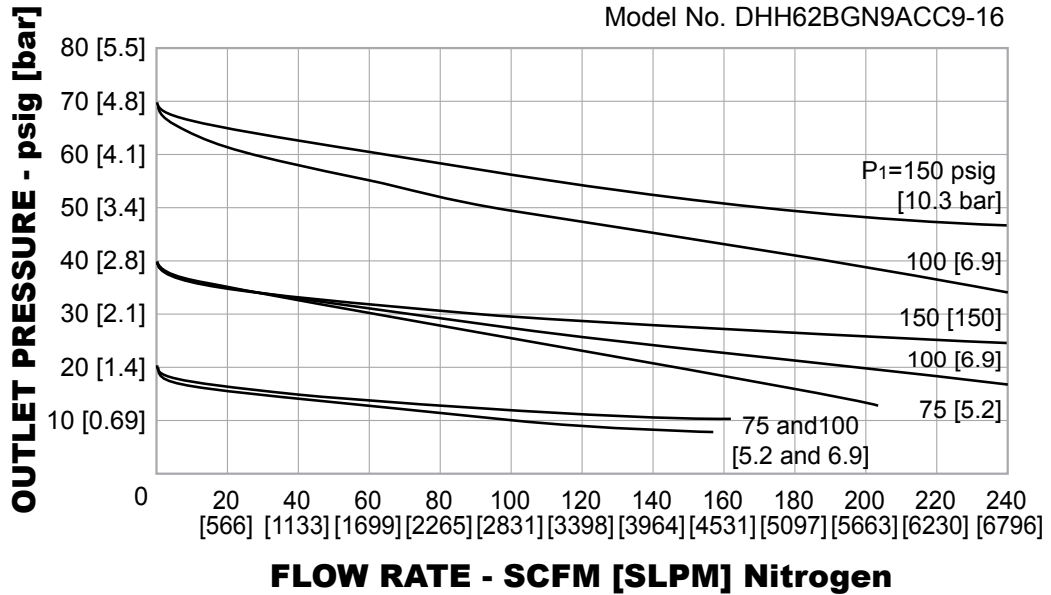


PART NO.	DIMENSION "A"	PART NO.	DIMENSION "A"
DHX6XXXXXXAAX-16	7.25 / 7.13	DHX6XXXXXX66X-16	9.91 / 9.79
DHX6XXXXXXBBX-16	7.25 / 7.13	DHX6XXXXXX77X-16	9.91 / 9.79
DHX6XXXXXXCCX-16	7.25 / 7.13	DHX6XXXXXX88X-16	9.91 / 9.79

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

DH-16 Series Regulator Flow Charts

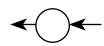


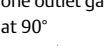
For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on www.tescom.com.



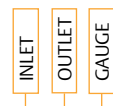
DH-16 Series Regulator Part Number Selector

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

Example for selecting a part number:

BASIC SERIES	LOAD TYPE	BODY, BONNET, AND BACK-CAP MATERIAL	OUTLET PRESSURE	O-RING AND VALVE SEAT MATERIAL	DIAPHRAGM MATERIAL	VENT SEAT MATERIAL	OPTIONAL ITEMS	GAUGE PORT CONFIGURATION	INLET, OUTLET, AND GAUGE PORTS	MOD
DH	D – Dome Load H – Spring Load, (Handknob) W – Spring Load, (Wrench)	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 (valve seat) E – E.P. (O-Ring) E.P. 80 (valve seat) M – Chemraz® (O-Ring) Chemraz 75® (valve seat) V – Viton® (O-Ring) Viton® (valve seat)	E – E.P./Nylon Reinforced G – Gylon®	C – CTFE V – Vespel® P – Peek N – Non-venting	C – CCL P – Panel Mount 9 – None	<p>A – No gauge ports</p>  <p>B – Two gauge ports at 60°</p>  <p>D – One outlet gauge at 90°</p>  <p>E – Left hand inlet one outlet gauge at 90°</p> 	<p>A – 1/2" Sanitary¹</p> <p>B – 3/4" Sanitary²</p> <p>C – 1" Sanitary</p> <p>D – 1 1/2" Sanitary</p> <p>F – 1/4" NPTF (gauge only)</p> <p>M – 1/2" FVCR¹</p> <p>N – 3/4" FVCR²</p> <p>P – 1" FVCR</p> <p>R – 1/2" MVCR¹</p> <p>S – 3/4" MVCR²</p> <p>T – 1" MVCR</p> <p>Y – 1/4" HPIC (gauge only)</p> <p>6 – 1/2" Tube¹</p> <p>7 – 3/4" Tube²</p> <p>8 – 1" Tube</p> <p>W – 1 1/2" Tube</p> <p>9 – None</p>	16

1. 1/2" port limits regulator C_v to 2.0
2. 3/4" port limits regulator C_v to 3.0



WARNING! Do not attempt to select, install, use or maintain this product until you have read and fully understood the TESCOM Safety, Installation and Operation Precautions.