

## 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, PTFE

#### Seat, Vent

PCTFE, Polyimide (Vespel®)

#### Seat, Main Valve

Nitrile, Buna-N 90 Durometer, E.P. 80, Perfluoroelastomer (Chemraz 75), FKM (Viton®-A)

#### O-Rings

Buna-N, Ethylene Propylene, FFKM, Perfluoroelastomer (Chemraz®), FKM (Viton®-A)

#### 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

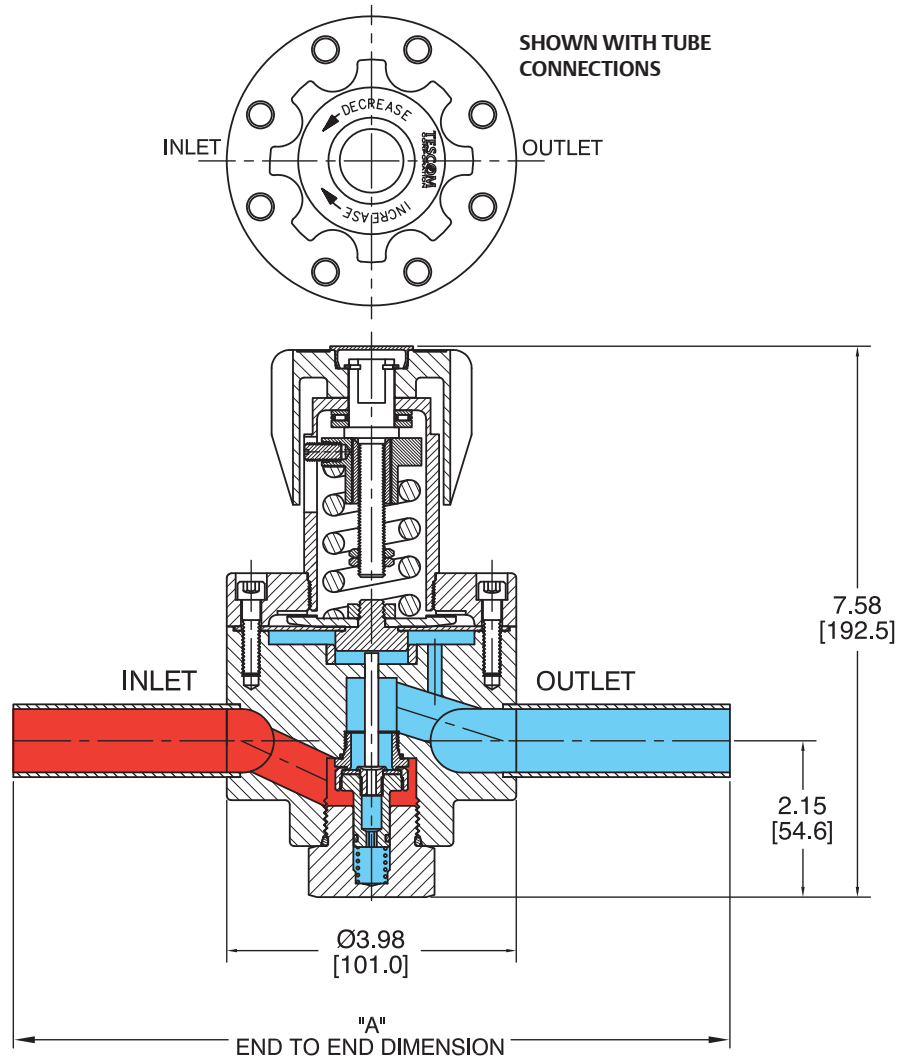
- Nitrogen purging
- Facility tool and equipment for air or nitrogen

### 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

## DH-16 Series Regulator Drawing

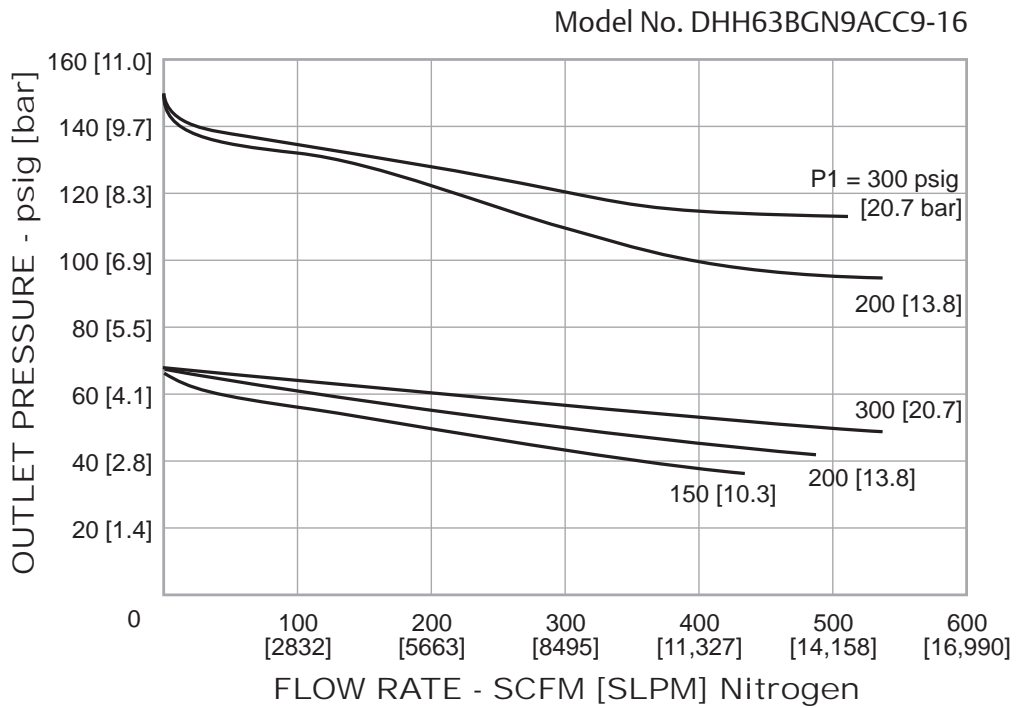
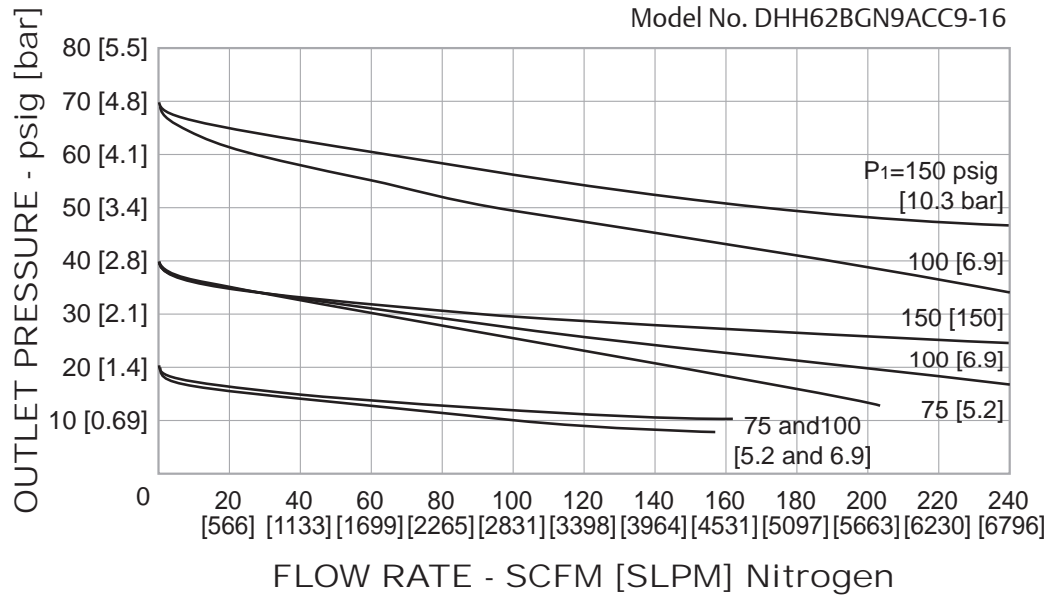


PART NO.	DIMENSION "A"	PART NO.	DIMENSION "A"
DHX6XXXXXXAAX-16	7.25 / 7.13	DHX6XXXXXX66X-16	9.91 / 9.79
DHX6XXXXXXBBX-16	7.25 / 7.13	DHX6XXXXXX77X-16	9.91 / 9.79
DHX6XXXXXXCCX-16	7.25 / 7.13	DHX6XXXXXX88X-16	9.91 / 9.79

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 TESCO catalog or on www.tescom.com.



# DH-16 SERIES

## 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 – Nitrile, Buna-N (O-Ring) Nitrile, Buna-N 90 Durometer (valve seat) E – E.P. (O-Ring) E.P. 80 (valve seat) M – Chemraz®** (O-Ring) Chemraz 75®** (valve seat) V – FKM (Viton®-A) (O-Ring) FKM (Viton®-A) (valve seat)	E – E.P./Nylon Reinforced G – PTFE	C – PCTFE V – Polyimide (VespeI®) 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" Sanitary<sup>1</sup></p> <p>B – 3/4" Sanitary<sup>2</sup></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" FVCR<sup>1</sup></p> <p>N – 3/4" FVCR<sup>2</sup></p> <p>P – 1" FVCR</p> <p>R – 1/2" MVCR<sup>1</sup></p> <p>S – 3/4" MVCR<sup>2</sup></p> <p>T – 1" MVCR</p> <p>Y – 1/4" HPIC (gauge only)</p> <p>6 – 1/2" Tube<sup>1</sup></p> <p>7 – 3/4" Tube<sup>2</sup></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<sub>V</sub> to 2.0  
2. 3/4" port limits regulator C<sub>V</sub> to 3.0

\*\* FFKM, Perfluoroelastomer (Chemraz®)