PH-1800 Series

Regulators - Pressure Reducing

DPH181980X012

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 and 0-300 (Dome load only) psig
0-1.4, 0-3.4, 0-6.9, 0-10.3, 0-17.2 and 0-20.7 (Dome load only) bar

Design Proof Pressure
150% of rated pressure

Leakage
Bubble-tight

Operating Temperature
-20°F to 300°F / -29°C to 149°C

Flow Capacity
C_V = 10.0

MEDIA CONTACT MATERIALS

Body
316L Stainless Steel

Diaphragm
Gylon®

Seat, Main Valve
Ethylene Propylene (E.P.)

O-Rings
Ethylene Propylene (E.P.)

Valve Spring
Elgiloy®

Remaining Parts
316 Stainless Steel

OTHER

Internal Surface Finish
20 R_a, 30 R_a microinch / 0.51, 0.76 micrometer

Connections
Sanitary Fittings
Tube Ends
High Purity Internal Connections (H.P.I.C.) (gauge port only)

Cleaning
CGA 4.1 and ASTM G93
Clean Service Certificate of Conformance available

Weight (approximately)
35 lbs / 15.9 kg

Gylon® is a registered trademark of Garlock, Inc.
Elgiloy® is a registered trademark of Elgiloy Corp.

TESCOM PH-1800 Series is part of our Pharmpure™ product line. This high purity, high-flow single-stage regulator offers a compact, USP Class VI and BPE compliant design suitable for biotech and pharmaceutical applications. This regulator offers gas flows of 5-2000 SCFM /142-56,634 SLPM. Its Gylon® diaphragm ensures gas purity and integrity.

Applications

- Clean steam for sanitization
- Vessel headspace pressurization

Features and Benefits

- Flow capacity C_V = 10.0
- Gylon® diaphragm
- Low droop, high-flow
- Five outlet pressure ranges
- Accurately regulates pressures up to 250 psig / 17.2 bar
- Welded sanitary connections and tube stubs are available
- Soft goods are USP Class VI compliant
- ASME BPE 2009 compliant design

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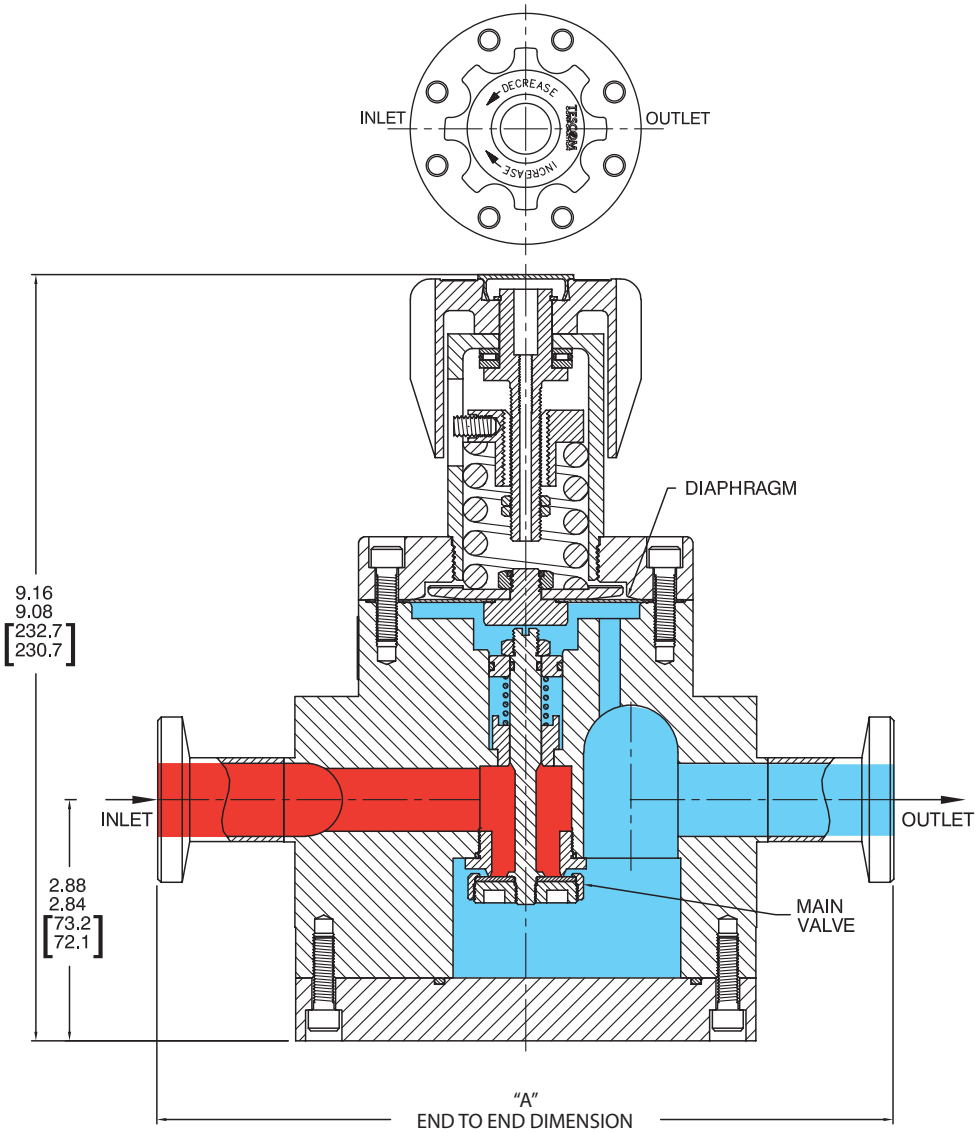
PH-1800 Series Regulator Drawing

SHOWN WITH SANITARY CONNECTIONS



Part No.	Dimension "A"
PH18XXXXXXBBX	8.82/8.70
PH18XXXXXXCCX	8.82/8.70
PH18XXXXXXDDX	8.82/8.70
PH18XXXXXXEEX	8.66/8.54

Part No.	Dimension "A"
PH18XXXXXX77X	11.56/11.44
PH18XXXXXX88X	11.56/11.44
PH18XXXXXXWWX	11.56/11.44

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

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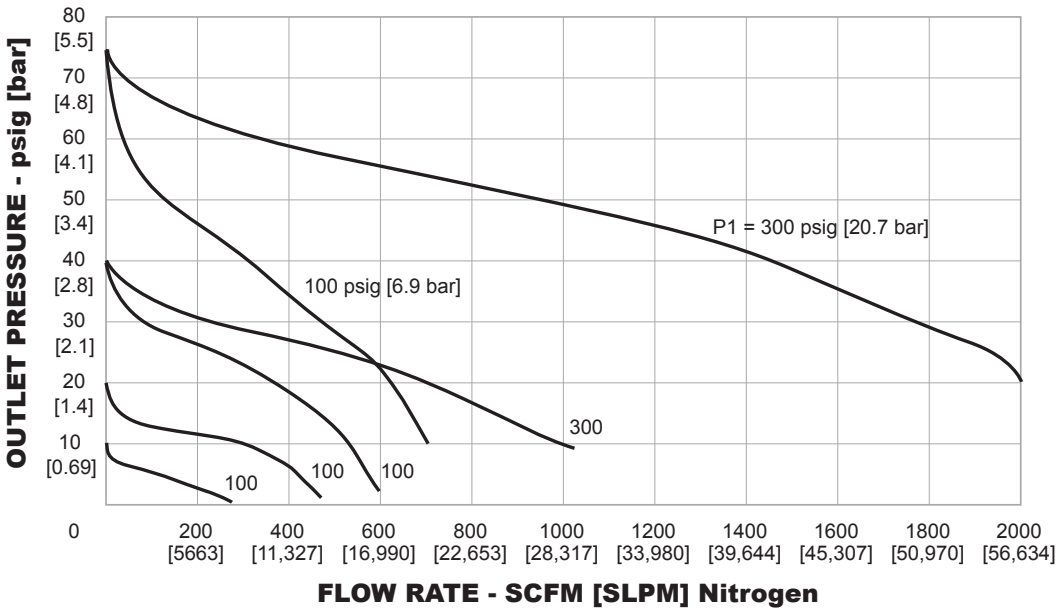
PH-1800 Series Regulator Flow Chart

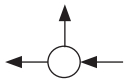
For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on www.tescom.com.



PH-1800 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:

PH-18	H	A	1	G	N	B	A	D D 9 (INLET, OUTLET, GAUGE)
BASIC SERIES	**LOAD TYPE**	**BODY MATERIAL / BODY SURFACE FINISH**	**OUTLET PRESSURE**	**SOFT GOODS**	**VENT SEAT**	**CERTIFICATE OF CONFORMANCE**	**GAUGE PORT CONFIGURATION**	**INLET, OUTLET, AND GAUGE PORTS**
PH-18	**D** – Dome load **H** – Spring load (handknob)	**A** – 316L Stainless Steel / 20 R_a SFV1 **C** – 316L Stainless Steel / 30 R_a SFV3	**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)	**G** – Diaphragm: Gylon® O-Rings: E.P. Seat: E.P. *1. Port size limits regulator to C_V = 6.5*	**N** – Non-venting	**A** – None **B** – Clean Service Certificate	**A** – No gauge ports **D** – One outlet gauge at 90° 	**B** – 3/4" Sanitary[1] **C** – 1" Sanitary **D** – 1-1/2" Sanitary **E** – 2" Sanitary **7** – 3/4" Tube[1] **8** – 1" Tube **W** – 1-1/2" Tube **Y** – 1/4" HPIC **9** – None

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.*

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