PH-1600 Series

Regulators - Pressure Reducing

DPH161979X012

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 psig
0-1.4, 0-3.4, 0-6.9, 0-10.3, 0-17.2 bar

Design Proof Pressure
150% of rated pressure

Leakage
Bubble-tight

Operating Temperature
-20°F to 300°F / -28°C to 148°C

Flow Capacity
1/2" Port Size: C_V = 2.5
3/4" Port Size: C_V = 3.5
1 and 1-1/2" Port Size: C_V = 5.0

MEDIA CONTACT MATERIALS

Body
316L Stainless Steel

Diaphragm
Gylon®

Seat, 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 / 0.63, 0.80 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
16 lbs / 7 kg

VCR® is a registered trademark of Cajon Co.
Gylon® is a registered trademark of Garlock, Inc.
Elgiloy® is a registered trademark of Elgiloy Specialty Metals.

TESCOM PH-1600 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 provides gas flows up to 400 SCFM / 11,320 SLPM. Its Gylon® diaphragm ensures gas purity and integrity.

Applications

- Clean steam for sanitization
- Vessel headspace pressurization

Features and Benefits

- Up to 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
- Welded sanitary connections and tube ends are available
- Soft goods USP Class VI compliant
- BPE 2009 compliant design

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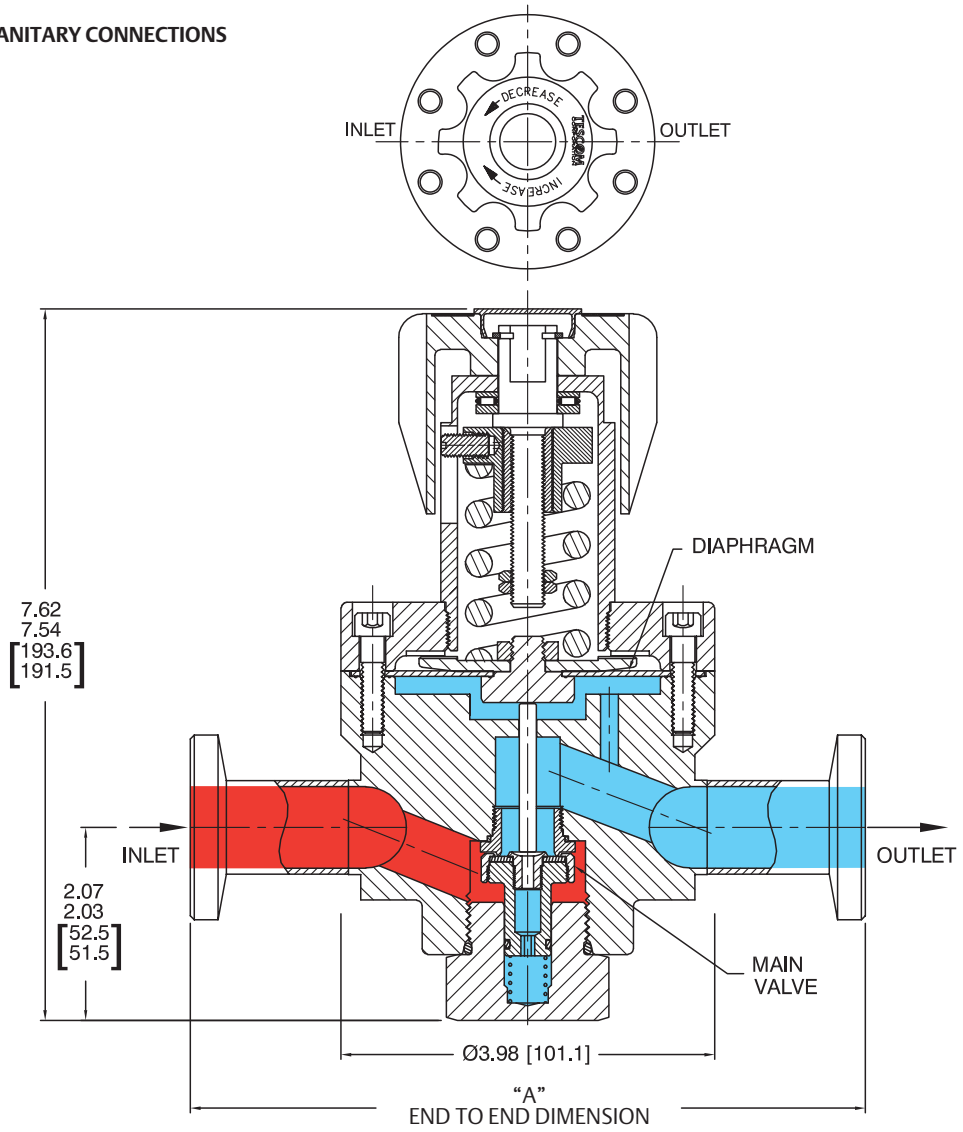
PH-1600 Series Regulator Drawing

SHOWN WITH SANITARY CONNECTIONS



PART NUMBER	DIMENSION "A"	PART NUMBER	DIMENSION "A"
PH16XXXXXXAAX	7.25 / 7.13	PH16XXXXXX66X	9.91 / 9.79
PH16XXXXXXBBX	7.25 / 7.13	PH16XXXXXX77X	9.91 / 9.79
PH16XXXXXXCCX	7.25 / 7.13	PH16XXXXXX88X	9.91 / 9.79
PH16XXXXXXDDX	7.19 / 7.07	PH16XXXXXXWWX	9.91 / 9.79

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

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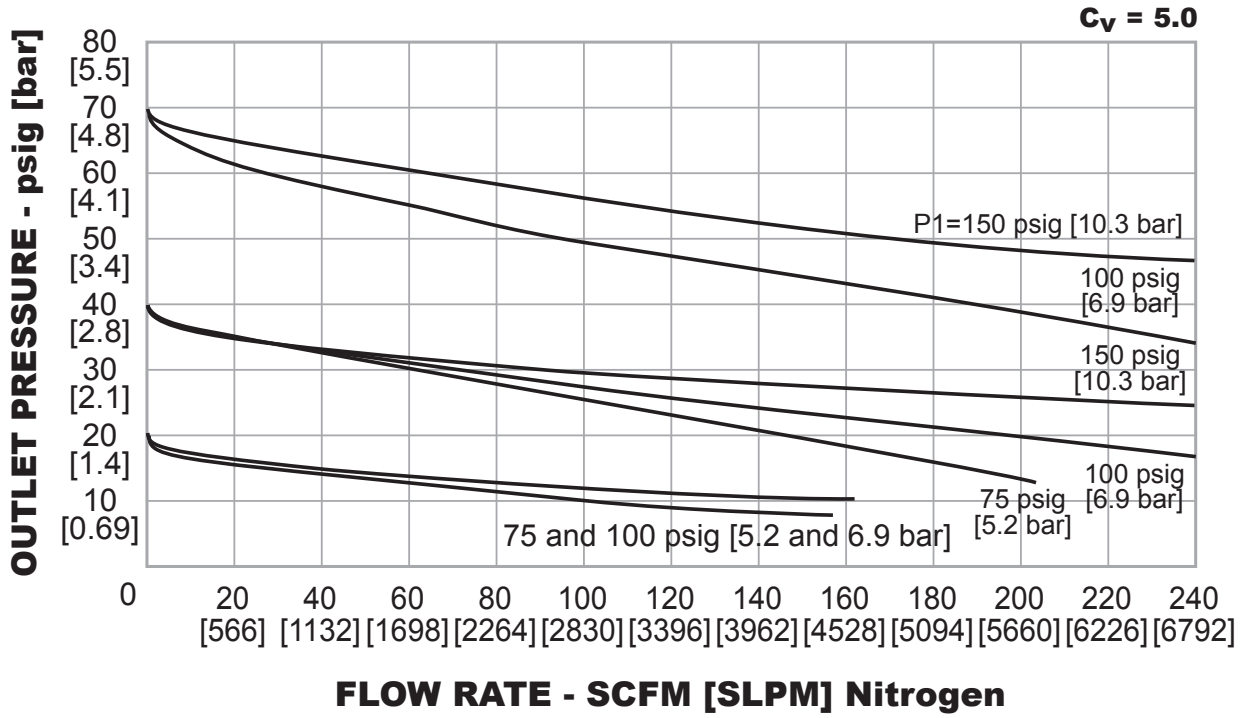
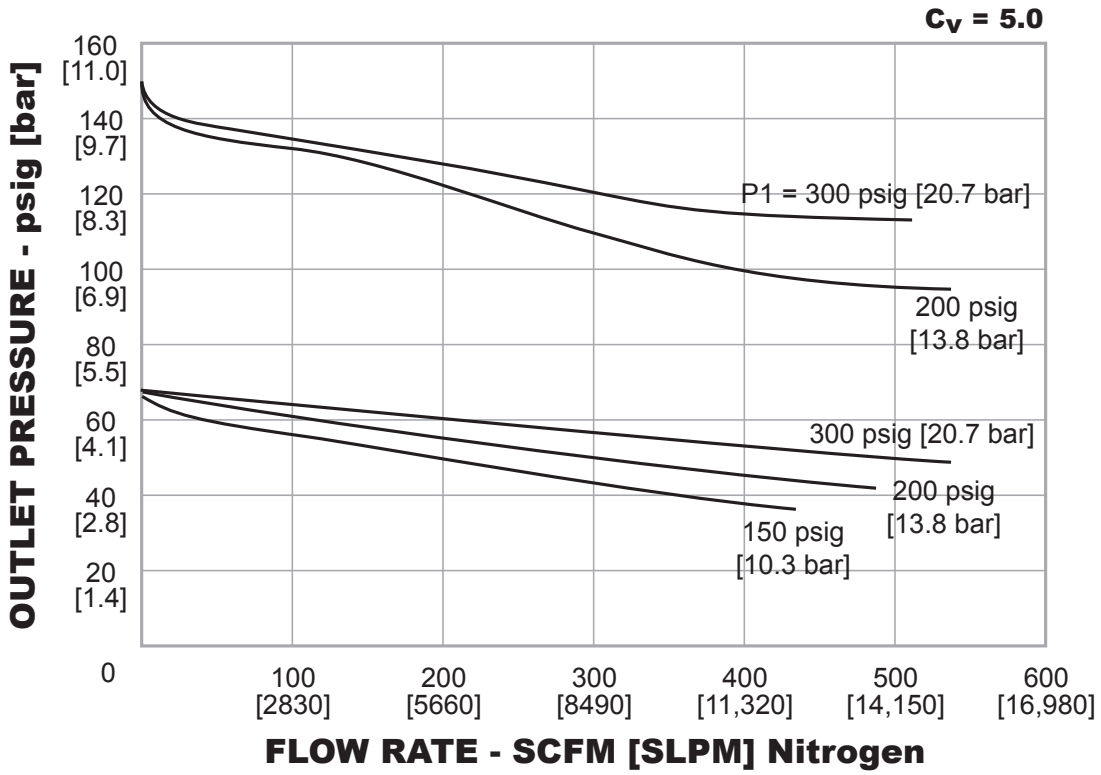
PH-1600 Series Regulator Flow Charts

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.





Note: Flow curves shown with 1" ports. Smaller ports will limit the maximum flow reached. Additional flow curves are available, please consult TESCOM.

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PH-1600 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:

								INLET	OUTLET	GAUGE
PH16	**H**	**A**	**1**	**G**	**N**	**B**	**A**	**D**	**D**	**9**

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
PH16	**D –** Dome load **H –** Spring load, handknob **W –** Spring load, wrench adjust	**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	**G – Diaphragm:** Gylon® **O-rings:** E.P. **Seat:** E.P.	**N –** Non-Venting	**A –** None **B –** Clean Service Certificate	**A –** No gauge ports  **D –** One outlet gauge at 90° 	**A** – 1/2" Sanitary[1] **B** – 3/4" Sanitary[2] **C** – 1" Sanitary **D** – 1-1/2" Sanitary **6** – 1/2" Tube[1] **7** – 3/4" Tube[2] **8** – 1" Tube **W** – 1-1/2" Tube **Y** – 1/4" HPIC **9** – None

1. Port size limits regulator to C_V = 2.5
2. Port size limits regulator to C_V = 3.5

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.*

EMERSON Process Management

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