

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: $C_v = 5.0$



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.

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 Ra, 30 Ra 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.

Applications

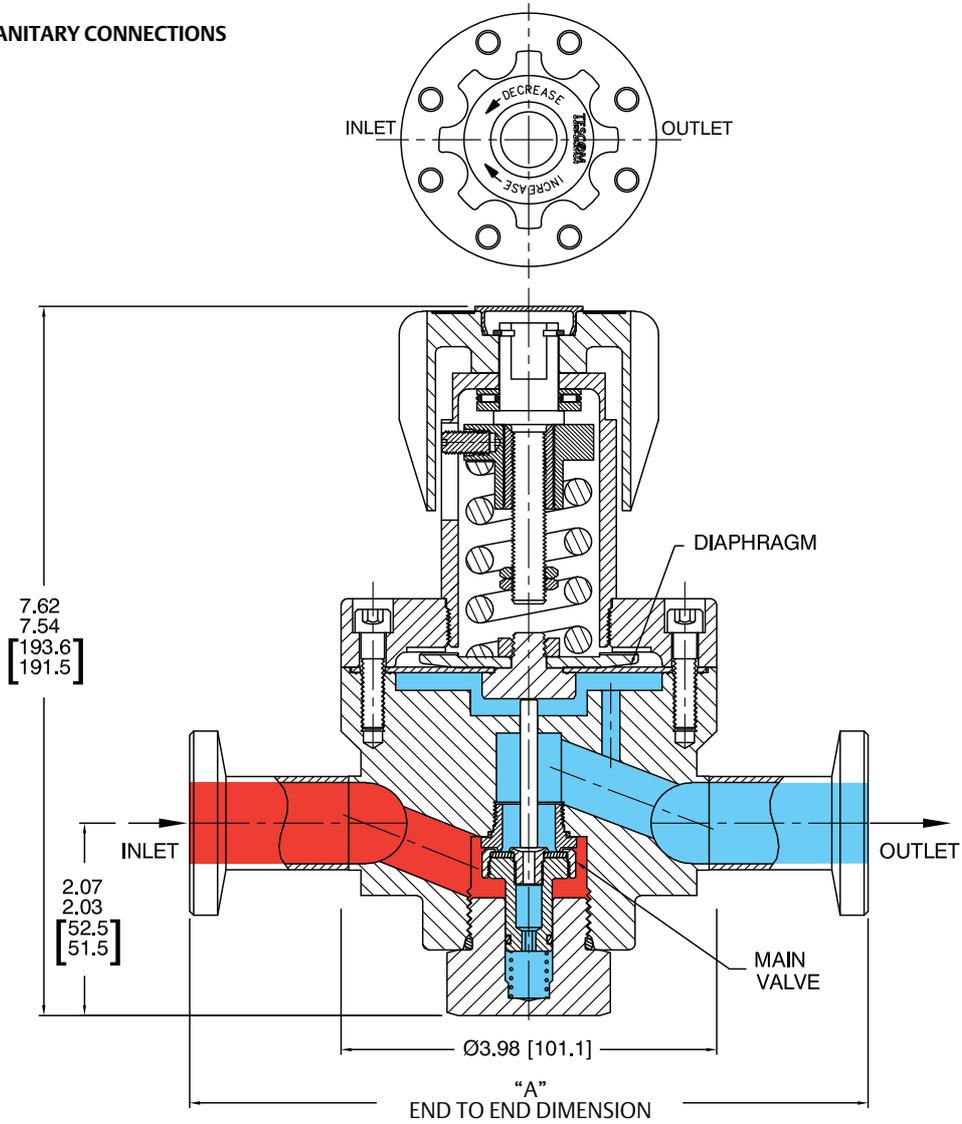
- Clean steam for sanitization
- Vessel headspace pressurization

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

PH-1600 Series Regulator Drawing

SHOWN WITH SANITARY CONNECTIONS

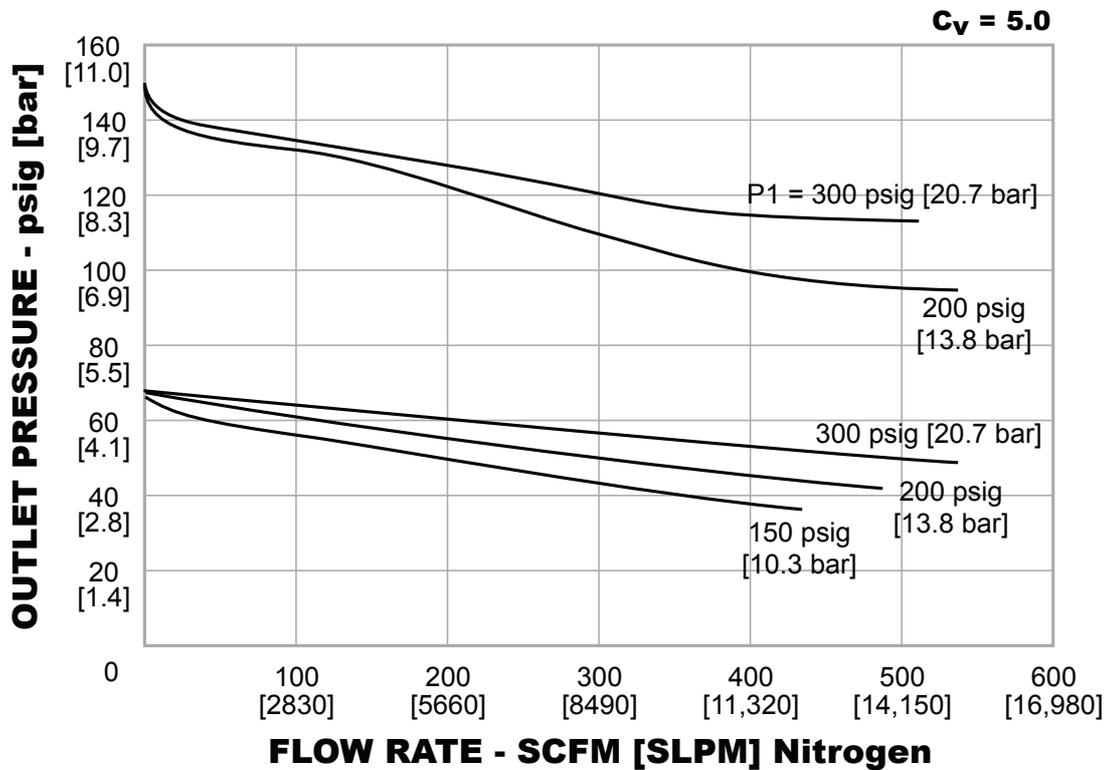
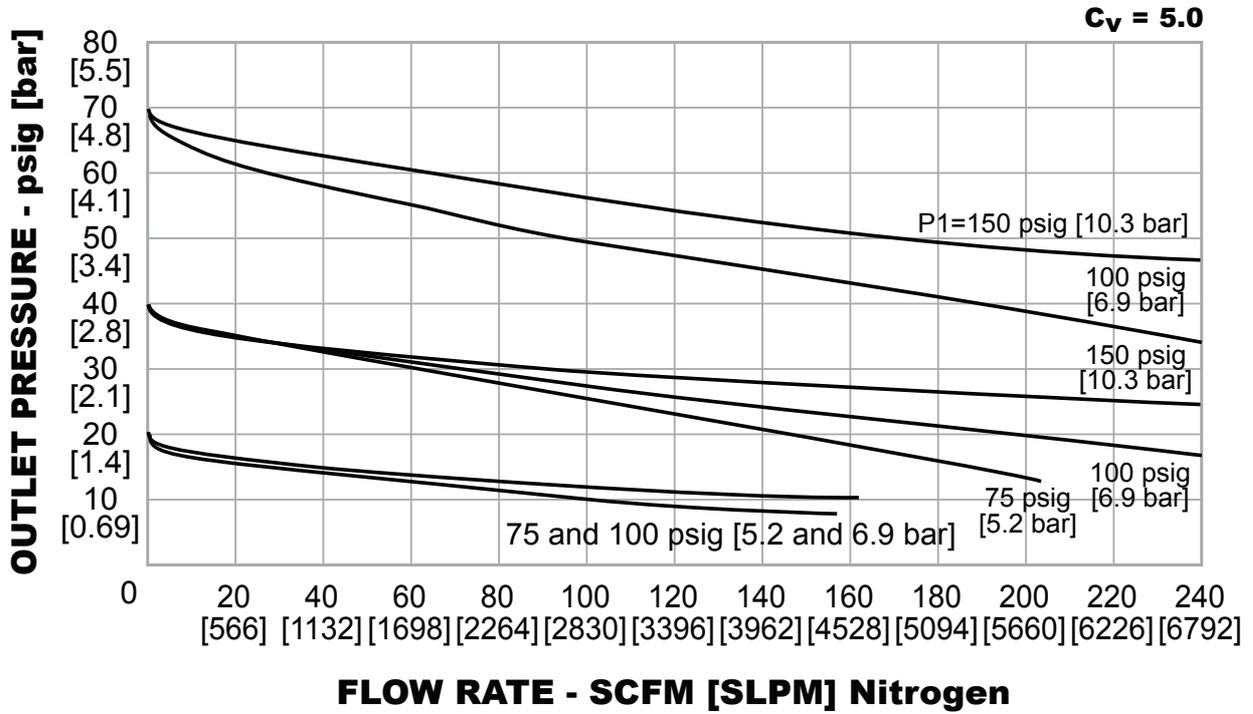


PART NUMBER	DIMENSION "A"	PART NUMBER	DIMENSION "A"
PH16XXXXXXAAX	7.25 / 7.13	PH16XXXXXX66X	9.91 / 9.79
PH16XXXXXXBBX	7.25 / 7.13	PH16XXXXXX77X	9.91 / 9.79
PH16XXXXXXCCX	7.25 / 7.13	PH16XXXXXX88X	9.91 / 9.79
PH16XXXXXXDDX	7.19 / 7.07	PH16XXXXXXWWX	9.91 / 9.79

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

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.

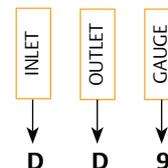


Note: Flow curves shown with 1" ports. Smaller ports will limit the maximum flow reached. Additional flow curves are available, please consult TESCOM.

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:



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	A – 316L Stainless Steel / 20 R _a SFV1	0 – 0-20 psig 0-1.4 bar	G – Diaphragm: Gylon® O-rings: E.P. Seat: E.P.	N – Non-Venting	A – None B – Clean Service Certificate	A – No gauge ports	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
	H – Spring load, handknob	C – 316L Stainless Steel / 30 R _a SFV3	1 – 0-50 psig 0-3.4 bar				D – One outlet gauge at 90°	
	W – Spring load, wrench adjust		2 – 0-100 psig 0-6.9 bar					
			3 – 0-150 psig 0-10.3 bar					
			5 – 0-250 psig 0-17.2 bar					

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