

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

PTFE

Seat, Main Valve

Ethylene Propylene

O-Rings

Ethylene Propylene

Valve Spring

Cobalt Chrome Nickel Alloy (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

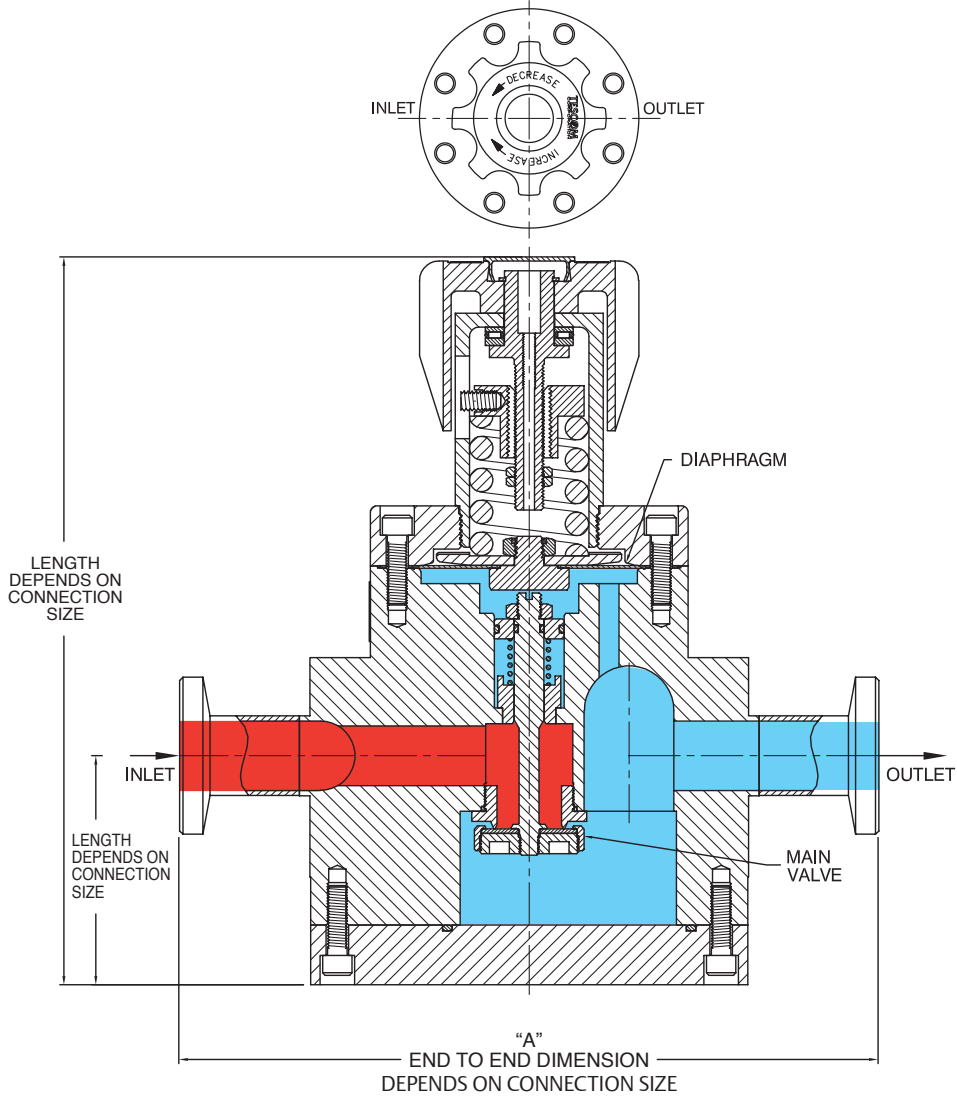
Features and Benefits

- 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

PH-1800 SERIES

PH-1800 Series Regulator Drawing

SHOWN WITH SANITARY CONNECTIONS



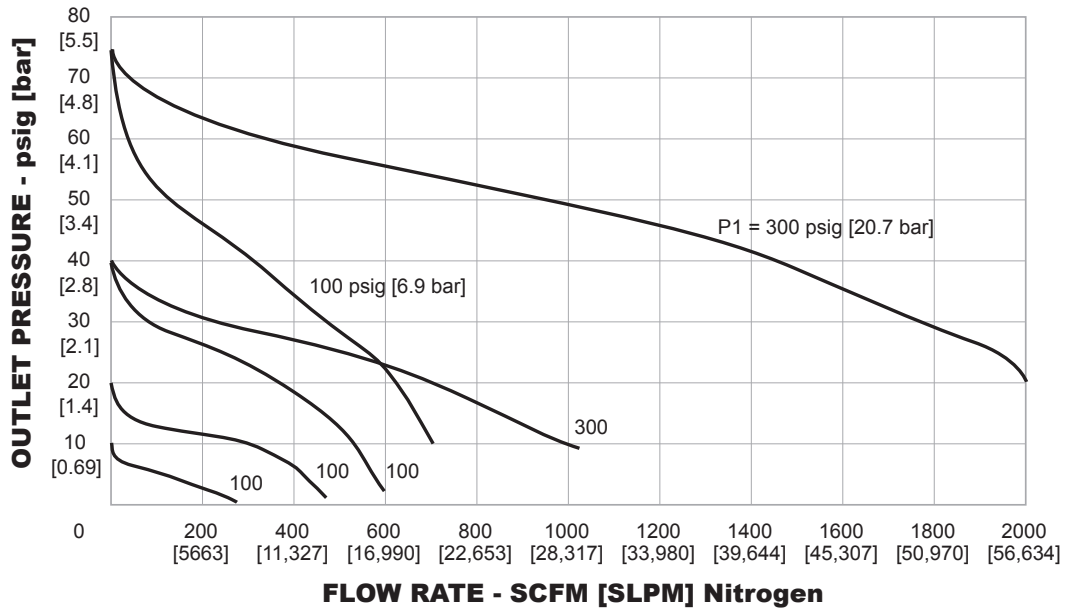
Part No.	Dimension "A"
PH18XXXXXXBBX	8.82/8.70
PH18XXXXXXCCX	8.82/8.70
PH18XXXXXXDDX	8.82/8.70
PH18XXXXXXEEX	8.66/8.54

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

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

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
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	A – 316L Stainless Steel / 20 R _a SFV1	0 – 0-20 psig 0-1.4 bar	G – Diaphragm: PTFE O-Rings: E.P. Seat: E.P.	N – Non-venting	A – None B – Clean Service Certificate	A – No gauge ports	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
	H – Spring load (handknob)	C – 316L Stainless Steel / 30 R _a SFV3	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)					
<div style="border: 1px solid black; padding: 2px; display: inline-block;">1. Port size limits regulator to C_v = 6.5</div>								