PH-2200 Series

Regulators - Pressure Reducing

DPH221972X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure
150 psig / 10.3 bar

Outlet Pressure Ranges
Spring (handknob)
0-10, 0-25, 0-50, and 0-100 psig
0-0.69, 0-1.7, 0-3.4, and 0-6.9 bar
Spring Bias and Dome
0-100 psig / 0-6.9 bar *(See Part Number Selector for more details)*

Design Proof Pressure
150% maximum rated

Leakage
Internal: Bubble-tight
External: designed to meet < 2 x 10^{-8} atm cc/sec He

Operating Temperature (media only)
Teflon® Seat: -40°F to 165°F / -40°C to 74°C
PEEK-OPTIMA® or PEEK-Classix® Seat: -40°F to 400°F / -40°C to 204°C

Flow Capacity
C_V = 0.06, 0.15, and 0.24

MEDIA CONTACT MATERIALS

Body
316L Stainless Steel

Seat
Teflon®, PEEK-OPTIMA®, PEEK-Classix®

Friction Sleeve
Inner: Teflon®
Outer: 316 Stainless Steel

Valve Guide
316 Stainless Steel

Diaphragm
316 Stainless Steel

Seat Retainer
Nitronic 60

Remaining Parts
316 Stainless Steel

OTHER

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)
2.0 lbs / 0.9 kg

TESCOM PH-2200 Series is part of our Pharmpure™ product line. This high purity single-stage regulator offers a compact, USP Class VI and BPE compliant design suitable for specialty, corrosive, and pyrophoric gases of < 5 SCFM / 142 SLPM. Diffusion-resistant metal diaphragm seal ensures gas purity and integrity.

Applications

- Sparge gases
- Clean steam for sanitization
- Transfer panels
- Low flow specialty gas

Features and Benefits

- 316L Stainless Steel barstock regulator body design
- FDA/USP compliant designs are available
- Clean Service Certification of Compliance is available: Includes actual material certification, weld records, and bill of materials
- 15 or 32 R_a microinch / 0.38 or 0.81 micrometer body surface finish is standard
- Precise pressure control
- Gauge port is available
- ASME BPE 2009 compliant design

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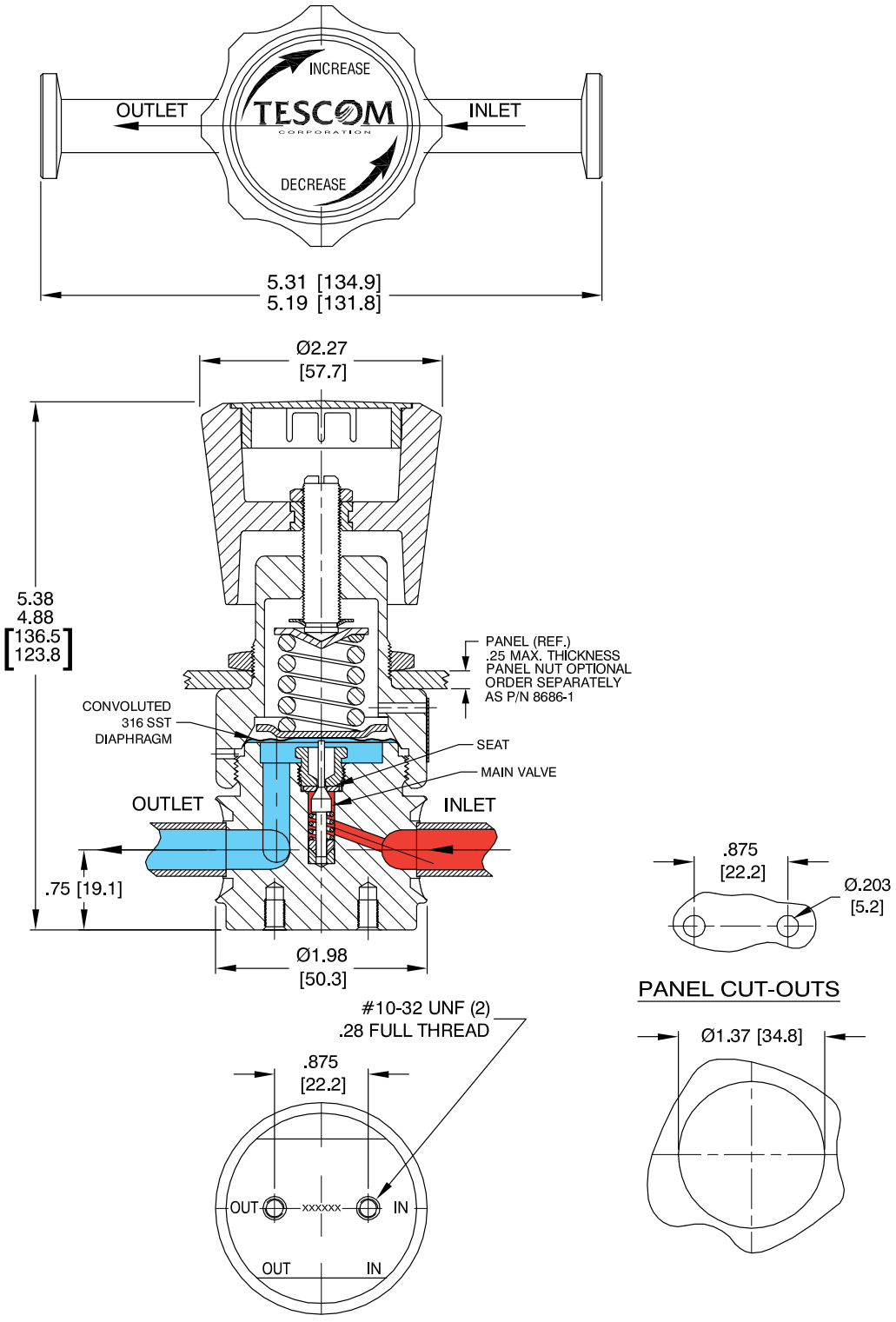
PH-2200 Series Regulator Drawing



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

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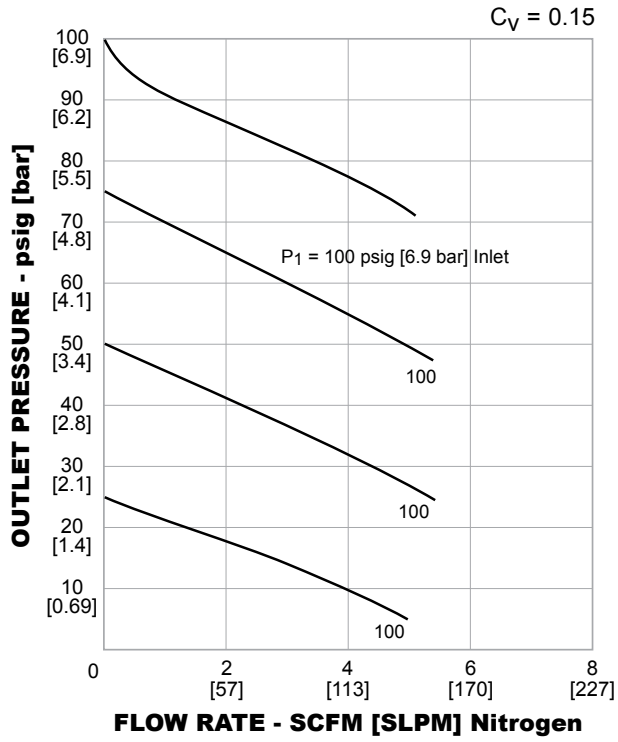
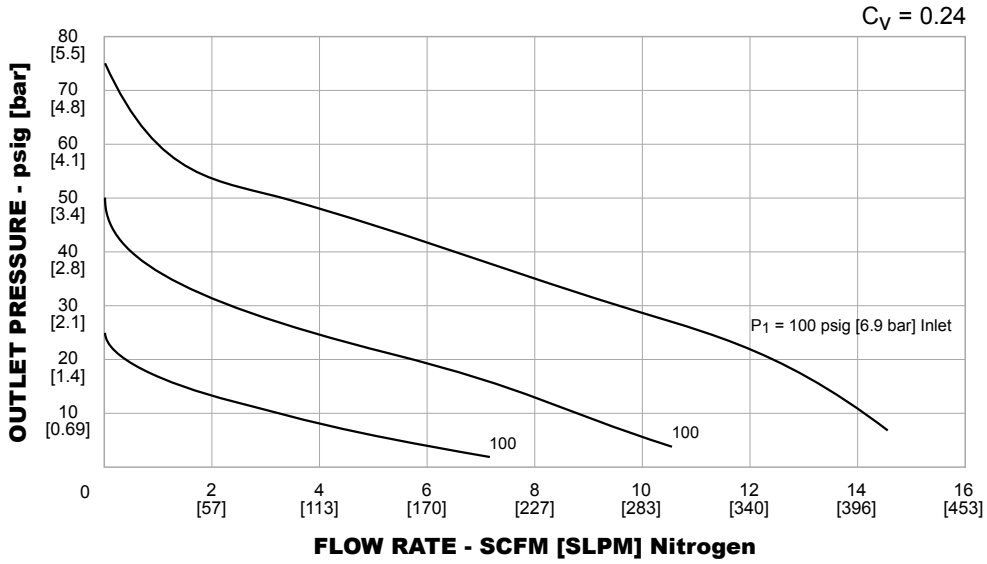
PH-2200 Series Regulator Flow Charts

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.

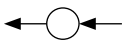
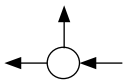




PH-2200 Series Regulator Part Number Selector

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

Example for selecting a part number:

PH-22	A				2		8	8	1	0	B
BASIC SERIES	**BODY MATERIAL**	**BODY SURFACE FINISH**	**SEAT MATERIAL**	**VALVE SPRING**	**LOAD TYPE**	**OUTLET PRESSURE**	**INLET AND OUTLET PORT TYPE**	**INLET AND OUTLET PORT SIZE WALL THICKNESS**	**FLOW CAPACITY**	**GAUGE PORT OPTIONS**	**CERTIFICATE OF CONFORMANCE**
PH-22	**A** – 316L Stainless Steel	15 R_a	Teflon®	316 Stainless Steel	**0** – Spring	0-10 psig 0-0.69 bar	**8** – Sanitary	**6** – 3/8" (Tube Only) 0.375" OD x 0.035" wall	**1** – C_V = 0.06	**0** – No gauge ports	**A** – None
	B – 316L Stainless Steel	15 R_a	Arlon® (PEEK)	Elgiloy®	**1** – Spring	0-25 psig 0-1.7 bar	**9** – Tube	**8** – 1/2" 0.500" OD x 0.065" wall	**2** – C_V = 0.15		**B** – Clean Service Certification
	C – 316L Stainless Steel	32 R_a	Teflon®	316 Stainless Steel	**2** – Spring	0-50 psig 0-3.4 bar			**4** – C_V = 0.24	**2** – One 1/4" HPIC outlet gauge port at 90°	
	D – 316L Stainless Steel	32 R_a	Arlon® (PEEK)	Elgiloy®	**3** – Spring	0-100 psig 0-6.9 bar					
					4 – Spring Bias 0-50 psig / 0-3.4 bar Spring Bias Pressure	0-100 psig 0-6.9 bar					
					5 – Spring Bias 0-100 psig / 0-6.9 bar Spring Bias Pressure	0-100 psig 0-6.9 bar					
					6 – Dome	0-100 psig 0-6.9 bar					

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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