Regulators - Pressure Reducing

D22541988X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS *Pressure rating per criteria of ANSI/ASME B31.3*

Maximum Inlet Pressure 600 psig / 41.4 bar Outlet Pressure Ranges

30, 60, 100, 150 psig 2.1, 4.1, 6.9, 10.3 bar **Design Proof Pressure**

150% maximum rated

Inboard Leak Rate < 2 x 10⁻⁸ atm cc/sec He Operating Temperature PCTFE Seat

-40°F to 140°F / -40°C to 60°C Teflon[®] PFA Seat -40°F to 160°F / -40°C to 71°C Flow Capacity

 $C_{V} = 1.0$

MEDIA CONTACT MATERIALS

Body 316L Stainless Steel with Electropolish Diaphragm Nickel Alloy (Hastelloy®) Valve Seat PCTFE or PTFE PFA Seat Retainer Nitronic 60 Stainless Steel Stem, Seal, and Remaining Parts 316 Stainless Steel

OTHER

Internal Surface Finish 25 R_a microinch / 0.63 micrometer Connections Welded female or male VCR® Tube stubs Compression fittings High Purity Internal Connections (H.P.I.C.) (gauge port only) Cleaning DI water electronic grade cleaned

Weight (without gauges) 3.5 lbs / 1.6 kg

Teflon® is a registered trademark of E.I. du Pont de Nemours and Company. VCR® is a registered trademark of Cajon Co. Hastelloy® is a registered trademark of Haynes International, Inc.

TESCOM 22-5400 Series high purity, high flow BA Grade pressure reducing regulator offers a $C_V = 1.0$ and a 316 Stainless Steel Electropolished body of 25 R_a. Inlet pressure is 600 psig / 41.4 bar with outlet pressures up to 150 psig / 10.3 bar.

Applications

- High flow purging
- Regulating corrosive and specialty gases
- Bulk gas delivery

Features and Benefits

- Compact, hand-loaded and pressure reducing
- Low internal volume
- Metal-to-metal diaphragm to body seal for high leak integrity
- 1.3 C_V is available consult TESCOM

NOTE:

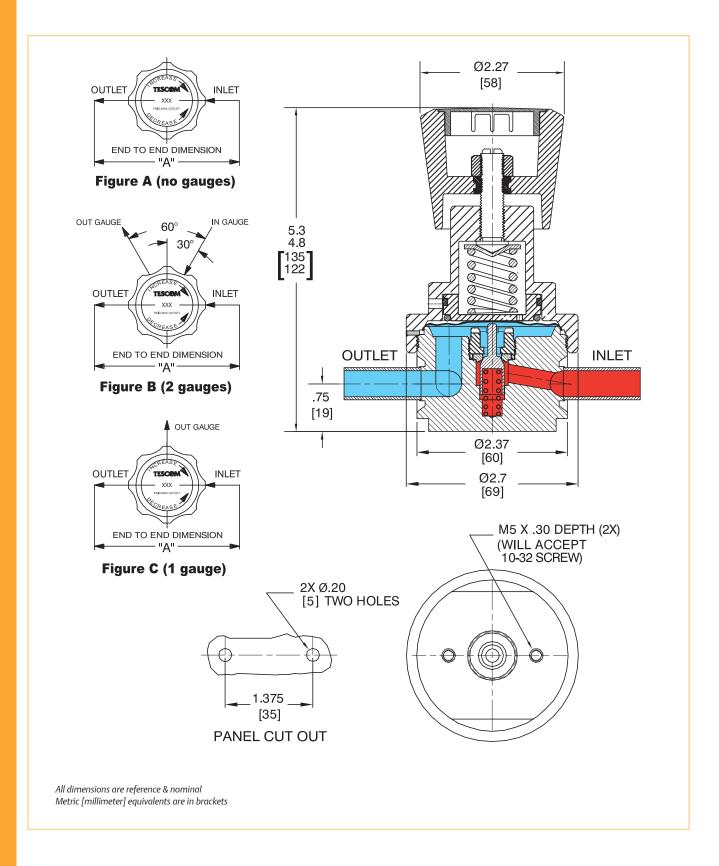
When choosing a regulator and control pressure, decaying inlet characteristic must be considered when the supply pressure is expected to change. The decaying inlet characteristic of a pressure reducing regulator is commonly known as the increase in control pressure due to the decrease in supply pressure. It is important to make sure this effect does not cause the control pressure to exceed the pressure rating of the unit's outlet or that of the downstream system.

For more information on decaying inlet, please refer to the Technical Information section of the product catalog and/or contact the TESCOM customer support further assistance.



TESCOM

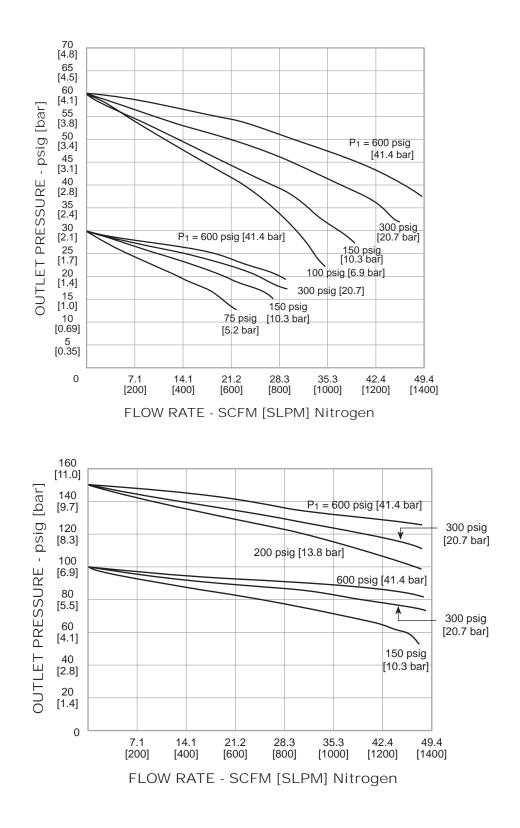
22-5400 Series Regulator Drawing





22-5400 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.





22-5400 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:

22-54	4		2	К	RW		1	1	
BASIC SERIES	BODY MATERIAL	FINISH	OUTLET PRESSURE	SEAT MATERIAL	INLET AND OUTLET PORT TYPE AND SIZE	'A' ± .06"	MAXIMUM INLET PRESSURE	GAUGE PORT OPTION	NUMBER OF GAUGE PORTS (FIGURE)
22-54	4 – 316 Stainless Steel Electropolish	25 R _a	 0 - 30 psig 2.1 bar 1 - 60 psig 4.1 bar 2 - 100 psig 6.9 bar 3 - 150 psig 10.3 bar 	K – PCTFE T – PTFE PFA	 T6 - 3/8" O.D. Tube T8 - 1/2" O.D. Tube RU - 1/2" Male Swivel RW - 1/2" Female Swivel C6 - 3/8" Compression Fitting 	3.70 3.70 5.59 5.59 6.42	1 – 600 psig 41.4 bar	0 – None 1 – 1/4 [*] H.P.I.C. 2 – 1/4 [*] H.P.I.C.	0 (A) 1 (C) 2 (B)
					C8 – 1/2" Compression Fitting	6.00			

