

## 22-5400 Series

### 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

$< 2 \times 10^{-8}$  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

$C_v = 1.0$

##### Decaying Inlet Characteristic

2.7 per 100 psig / 0.19 per 6.9 bar

#### MEDIA CONTACT MATERIALS

##### Body

316L Stainless Steel with Electropolish

##### Diaphragm

Hastelloy®

##### Valve Seat

PCTFE or Teflon® 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.

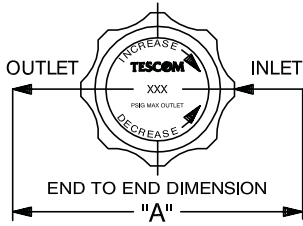
### Applications

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

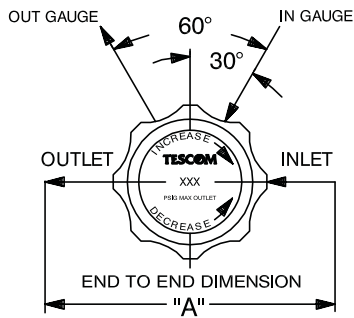
### Features and Benefits

- 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

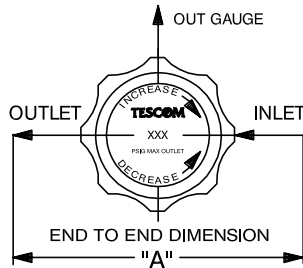
22-5400 Series Regulator Drawing



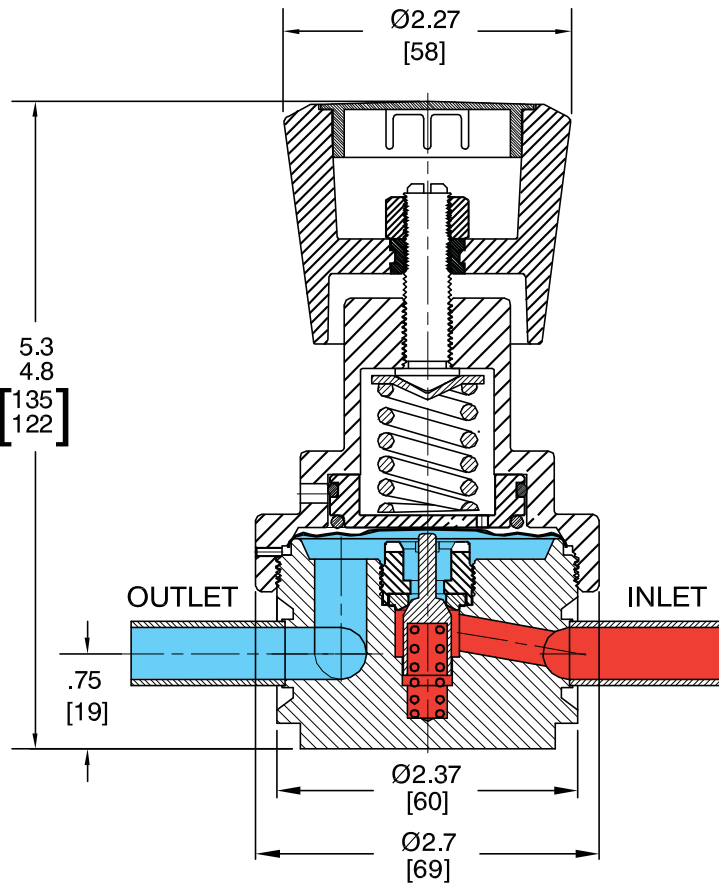
**Figure A (no gauges)**



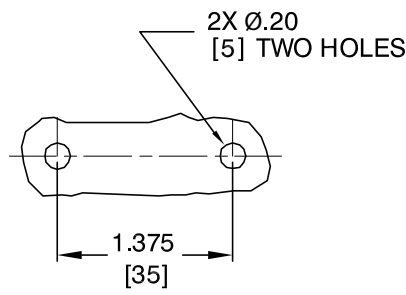
**Figure B (2 gauges)**



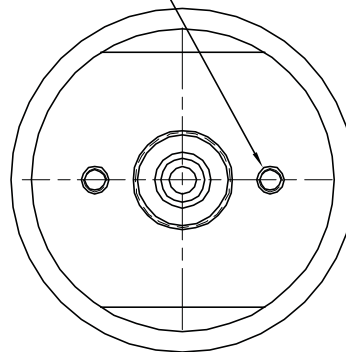
**Figure C (1 gauge)**



M5 X .30 DEPTH (2X)  
(WILL ACCEPT  
10-32 SCREW)



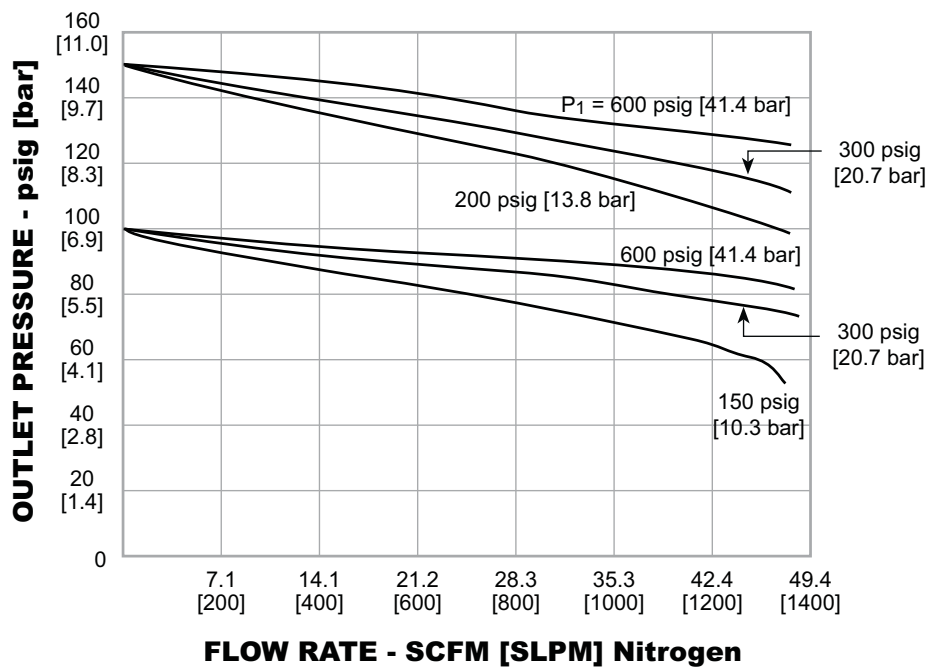
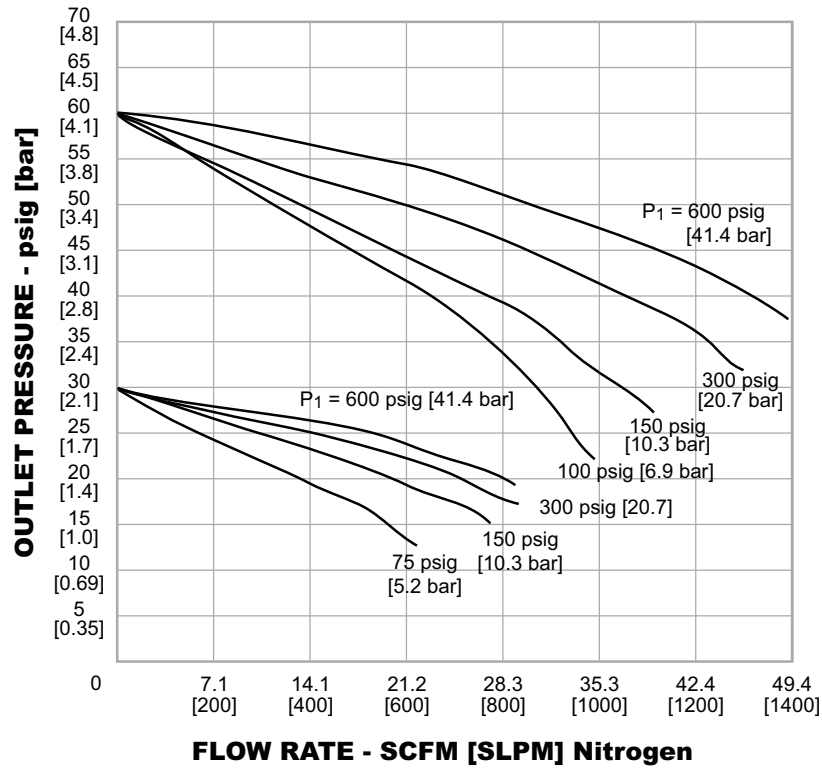
PANEL CUT OUT



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

## 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](http://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	K	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	6 – 316 Stainless Steel Electropolish	25 R <sub>a</sub>	0 – 30 psig 2.1 bar	K – PCTFE  T – Teflon® PFA	T6 – 3/8" O.D. Tube	3.70	1 – 600 psig 41.4 bar	0 – None	0 (A)
			1 – 60 psig 4.1 bar		T8 – 1/2" O.D. Tube	3.70		1 – 1/4" H.P.I.C.	1 (C)
			2 – 100 psig 6.9 bar		RU – 1/2" Male Swivel	5.59		2 – 1/4" H.P.I.C.	2 (B)
			3 – 150 psig 10.3 bar		RW – 1/2" Female Swivel	5.59			
					C6 – 3/8" Compression Fitting	6.42			
					C8 – 1/2" Compression Fitting	6.00			