

# 22-2200 Series

## Regulators - Pressure Reducing

D22221914X012

### Specifications

For other materials or modifications, please consult TESCOM.

#### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

**Maximum Inlet Pressure**

250 psig / 17.2 bar

**Outlet Pressure Ranges**

30, 60, 100, and 150 psig  
2.1, 4.1, 6.9, and 10.3 bar

**Design Proof Pressure**

150% maximum rated

**Design Burst Pressure**

400% maximum rated

**Inboard Leak Rate**

$2 \times 10^{-8}$  atm cc / sec PER ASTM E449

**Operating Temperature**

-40°F to 140°F / -40°C to 60°C

**Flow Capacity**

$C_v = 0.24$

#### MEDIA CONTACT MATERIALS

**Body**

316L Stainless Steel

**Diaphragm**

316 Stainless Steel

**Seat**

PCTFE or Teflon®

**Trim**

316 Stainless Steel

**Valve**

316 Stainless Steel

#### OTHER

**Internal Body Surface Finish**

25  $R_a$  microinch / 0.63 micrometer

**Connections**

Welded female, male VCR®

Tube stubs or compression type

High Purity Internal Connections (H.P.I.C.)

(Internal style of VCR®, compatible with male swivel VCR®)

**Internal Body Surface Finish**

25  $R_a$  microinch / 0.63 micrometer

**Cleaning**

DI water electronic grade cleaned

**Weight (without gauges)**

2.0 lbs / 1 kg

Teflon® is a registered trademark of E.I. du Pont de Nemours and Company

VCR® is a registered trademark of Cajon Co.



TESCOM 22-2200 Series high purity BA Grade pressure reducing regulator provides 316 Stainless Steel construction with 25  $R_a$  surface finish and is electronic grade cleaned. Inlet pressure is 250 psig / 17.2 bar with outlet pressures up to 150 psig / 10.3 bar.

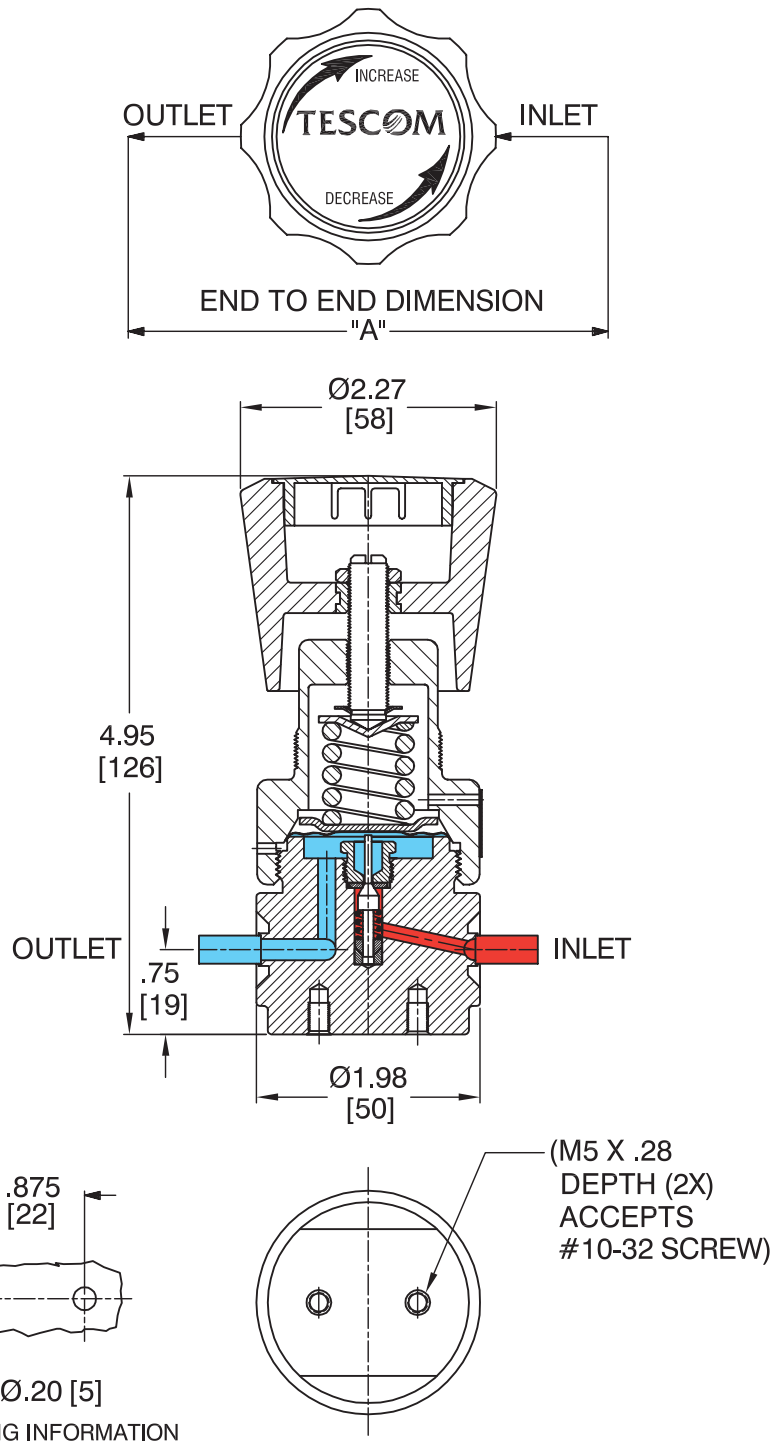
### Applications

- Regulating corrosive and specialty gases
- Gas and liquid chromatography
- Sampling systems
- Research labs
- Instrumentation

### Features and Benefits

- Metal-to-metal diaphragm to seal for high leak integrity
- 3.5 SCFM / 100 SLPM flow capacity
- Welded VCR®, tube stubs and compression fittings are available
- Enhanced cleanliness and reduced leak rates - a substantial improvement over the conventional NPTF product

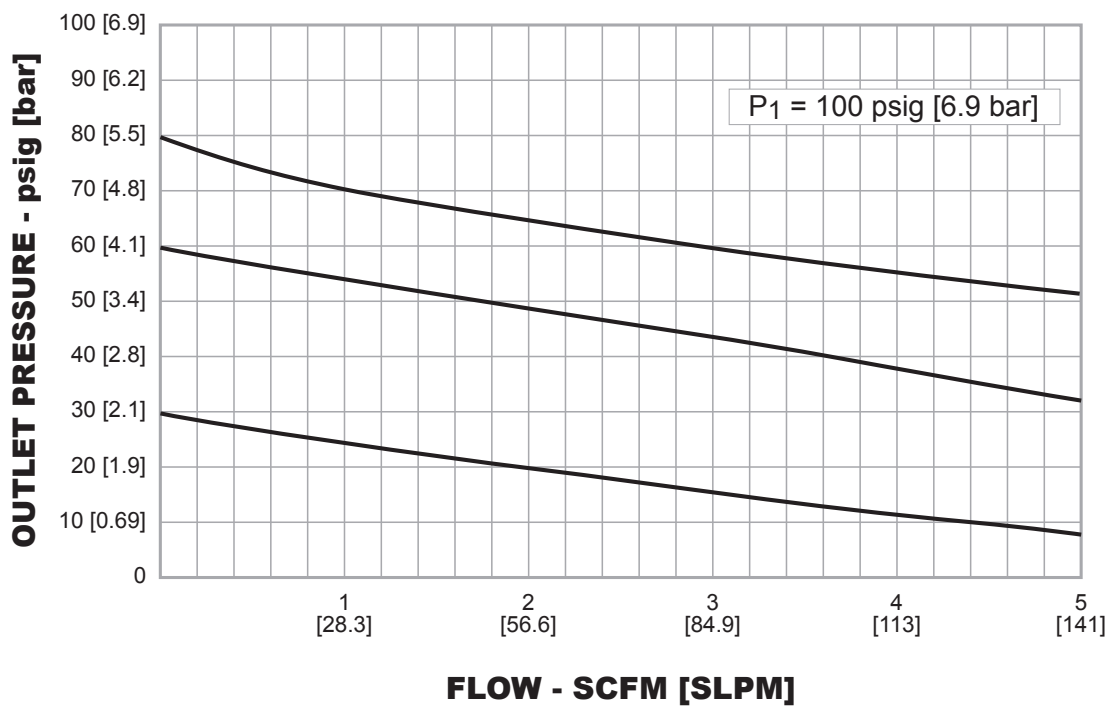
22-2200 Series Regulator Drawing



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

## 22-2200 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](http://www.tescom.com).



## 22-2200 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:

22-22	4	3	K	RM		2	0
BASIC SERIES	BODY MATERIAL AND FINISH	OUTLET PRESSURE	SEAT MATERIAL	INLET AND OUTLET PORT SIZE AND TYPE	'A' ± 0.06"	INLET PRESSURE TRIM MATERIAL FLOW CAPACITY	PORTING CONFIGURATION GAUGE PORT TYPE
22-22	4 - 316L Stainless Steel 25 R <sub>a</sub>	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 - Teflon®	A4 - 1/4" H.P.I.C T4 - 1/4" O.D. Tube T6 - 3/8" O.D. Tube T8 - 1/2" O.D. Tube RM - 1/4" Male Swivel RT - 1/4" Female Swivel RK - 1/2" Male Swivel RL - 1/2" Female Swivel RU - IN Port: 1/4" Male Swivel OUT Port: 1/4" Female Swivel RV - IN Port: 1/4" Female Swivel OUT Port: 1/4" Male Swivel C4 - 1/4" Compression C6 - 3/8" Compression	1.09" 3.50" 3.50" 3.50" 3.70" 3.70" 4.75" 4.75" 3.70" 3.70" 4.97" 5.99"	2 - 250 psig 17.2 bar 316 Stainless Steel C <sub>v</sub> = 0.24	 0 - No gauge ports  2 - 1/4" H.P.I.C. - A B - 1/4" NPTF S - 1/4" MVCR, Fixed 7 - 1/4" FVCR



**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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