TESCOM

04 Series
Regulators - Pressure Reducing

Specifications

For other materials or modifications, please consult TESCOM.

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

Maximum Inlet Pressure
3500 psig / 241 bar

Outlet Pressure Ranges
0-30, 0-60, 0-100 psig
0-2.1, 0-4.1, 0-6.9 bar

Design Proof Pressure
150% of maximum rated

Leakage
Internal: Bubble-tight
External: $< 1 \times 10^{-6}$ atm cc/sec He

Operating Temperature[1]
-40°F to 165°F / -40°C to 74°C

Flow Capacity
$C_V = 0.06$

Maximum Operating Torque
30 in-lbs / 3.4 N•m

Decaying Inlet Characteristic
1.0 Change: 100 psig / 6.9 bar

MEDIA CONTACT MATERIALS

Body
316 Stainless Steel, Brass or Aluminum

Diaphragm
Elgiloy®

Seat
CTFE[1], Teflon® or Vespel®

Friction Sleeve (inner)
Teflon®

Remaining Parts
316 Stainless Steel or Brass (on Brass models)

OTHER

Cleaning
CGA 4.1 and ASTM G93

Connections
1/8" or 1/4" NPTF

Internal Volume
3.03 cc

Weight (without gauges)
Stainless or Brass Models: 1 lb / 0.5 kg
Aluminum Models: 0.5 lb / 0.2 kg

Teflon® and Vespel® are registered trademarks of E.I du Pont de Nemours and Company.
Elgiloy® is a registered trademark of Elgiloy Corp.

1. CTFE option: maximum temperature of 140°F / 60°C

TESCOM 04 Series space saving and lightweight miniature regulator offers minimal internal volume and is easy to purge resulting in less retention.
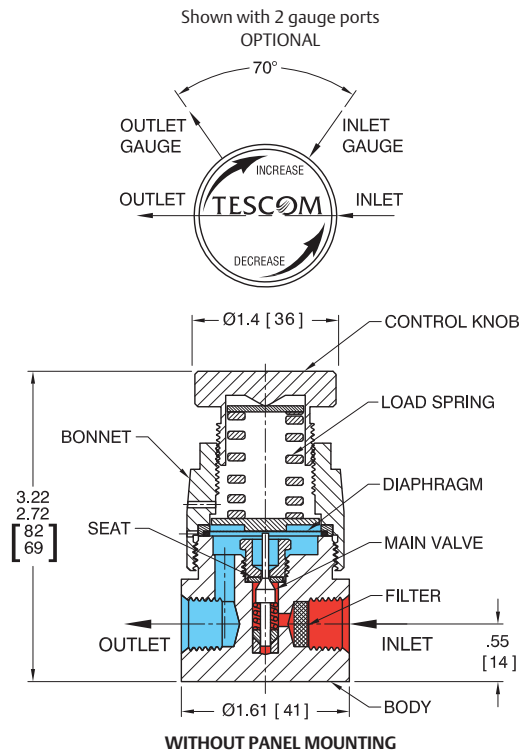
Applications

- Analyzers
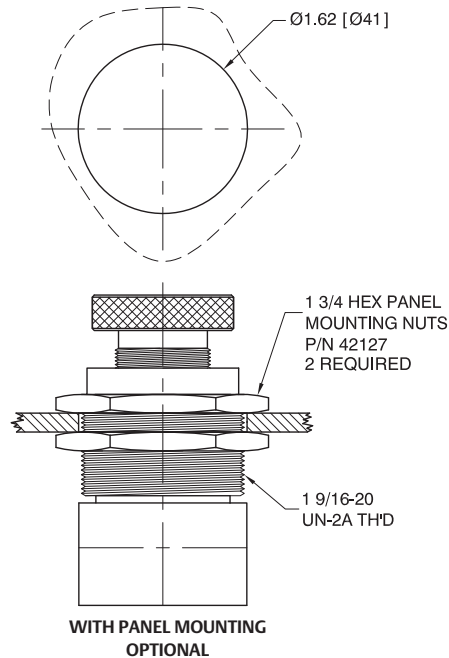- Lecture bottles
- Sampling systems

Features and Benefits

- Compact size (3" / 76 mm high) and constructed with lightweight materials
- Available in 316 Stainless Steel, Brass, or Aluminum body construction
- Elgiloy® diaphragm provides accurate and stable pressure control
- Minimal internal volume allows for rapid purging and carry-over
- Corrosion resistant
- Various porting configurations are available

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04 Series Regulator Drawing

Shown with 2 gauge ports
OPTIONAL

70°

OUTLET
GAUGE

INLET
GAUGE

INCREASE

OUTLET   TESCOM   INLET

DECREASE

Ø1.4 [36]   CONTROL KNOB

LOAD SPRING

BONNET

DIAPHRAGM

3.22
2.72
[82]
[69]

SEAT   MAIN VALVE

FILTER

OUTLET   INLET   .55
[14]

Ø1.61 [41]   BODY

WITHOUT PANEL MOUNTING

Required mounting hole for panel mounting

Ø1.62 [Ø41]

1 3/4 HEX PANEL
MOUNTING NUTS
P/N 42127
2 REQUIRED

1 9/16-20
UN-2A TH'D

**WITH PANEL MOUNTING
OPTIONAL**

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

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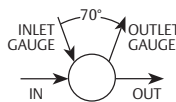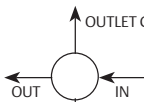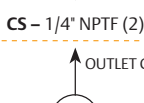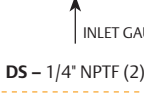## 04 Series Regulator Flow Charts
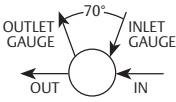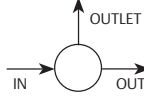
For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on www.tescom.com.

FLOW RATE - SCFM [SLPM] Nitrogen

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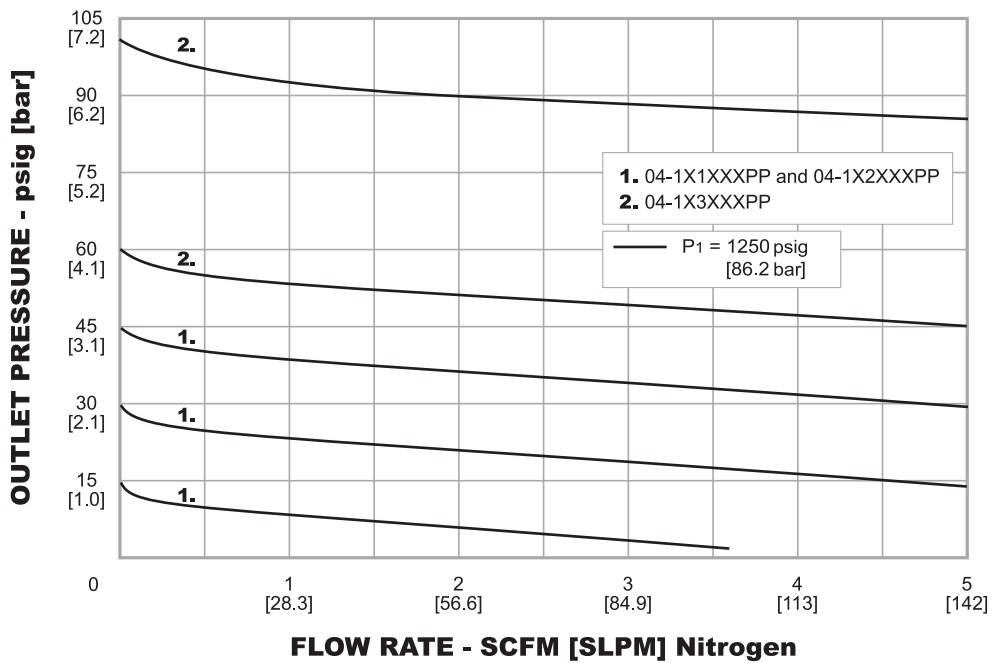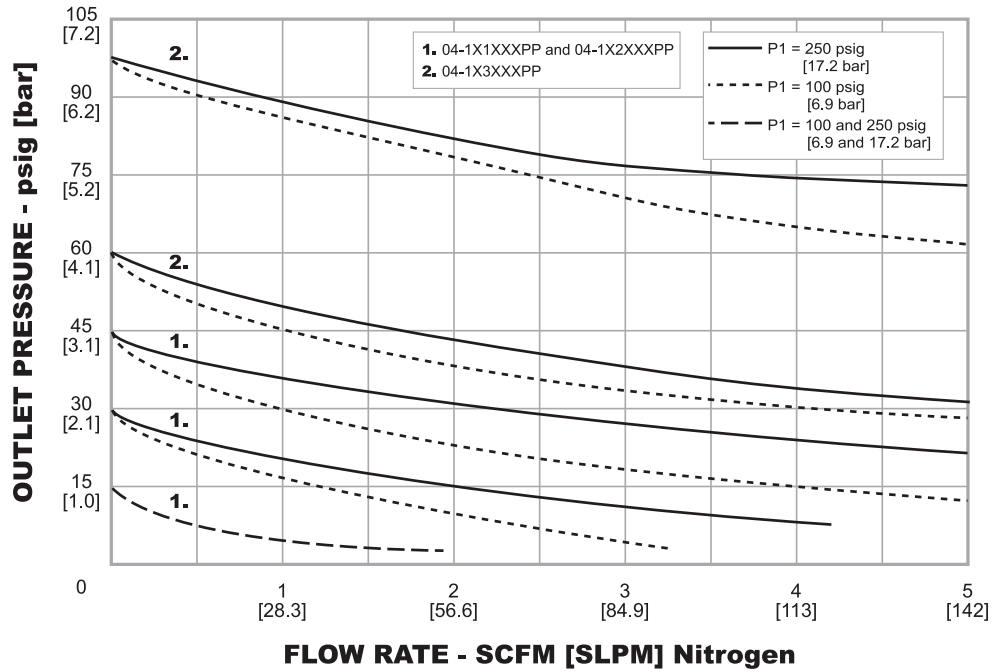
04 Series Regulator Part Number Selector

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

Example for selecting a part number:

04-1	A		3	E	AA	PP	Z
BASIC SERIES	INLET PRESSURE TRIM MATERIAL	BODY AND SEAT MATERIAL	OUTLET PRESSURE	ADJUSTMENT	GAUGE PORT OPTIONS SIZE, TYPE AND (NUMBER OF PORTS)	INLET AND OUTLET PORTS SIZE AND TYPE	OPTIONS
04-1	**A –** 3500 psig 241 bar 316 Stainless Steel	316/316L Stainless Steel Teflon®	**1 –** 0-30 psig 0-2.1 bar **2 –** 0-60 psig 0-4.1 bar **3 –** 0-100 psig 0-6.9 bar	**Without Panel Mounting** **A –** Black knob **With Panel Mounting** **E –** Black knob	**AA –** No Gauge Ports (0)	**PP –** 1/8" NPTF **NN –** 1/4" NPTF	**Z –** None
	B – 3500 psig 241 bar 316 Stainless Steel/Brass	Brass Teflon®			**AF –** 1/4" NPTF (1) **AG –** 1/8" NPTF (1)		
	C – 3500 psig 241 bar 316 Stainless Steel/Brass	Aluminum Teflon®			**AT –** 1/8" NPTF (2)		
	D – 3500 psig 241 bar 316 Stainless Steel	316/316L Stainless Steel CTFE			**BF –** 1/4" NPTF (1) **BG –** 1/8" NPTF (1)		
	E – 3500 psig 241 bar 316 Stainless Steel/Brass	Brass CTFE			**BT –** 1/8" NPTF (2)		
	F – 3500 psig 241 bar 316 Stainless Steel/Brass	Aluminum CTFE			**CS –** 1/4" NPTF (2)		
	G – 3500 psig 241 bar 316 Stainless Steel	316/316L Stainless Steel Vespel®			**DS –** 1/4" NPTF (2)		
	H – 3500 psig 241 bar 316 Stainless Steel/Brass	Brass Vespel®			**GF –** 1/4" NPTF (2)		
	J – 3500 psig 241 bar 316 Stainless Steel/Brass	Aluminum Vespel®					

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