

TESCOM™ Pressure Reducing Regulators

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure

6000 psig / 414 bar

Outlet Pressure Ranges

Spring Loaded: 10-200, 10-400 psig / 0.7 - 14, 0.7 -28 bar

Air/Dome Loaded: 0-600 psig / 0-41 bar

Design Proof Pressure

150% maximum pressure

Leakage

Bubble-tight

Operating Temperature

Media: Limit determined by most restrictive element (see table below).

Ambient: See note below table.

Flow Capacity

$C_v = 0.3$

Maximum Operating Torque

25 in-lbs / 2.8 N•m



TESCOM 44-1500 Series high flow/low pressure regulator controls outlet pressures up to 600 psig / 41 bar. Large area piston provides accurate pressure control and cycle life superior to diaphragm sensed regulators when applied to heavy duty cycling.

MEDIA CONTACT MATERIALS

Body

316 Stainless Steel or Brass

40 Micron Filter

Bronze

Main Valve Seat

Polyimide (Vespel® SP21), PEEK

Vent Valve Seat

Polyimide (Vespel® SP21), PEEK

O-Ring

Nitrile, Buna-N, FKM (Viton®-A), FFKM, Perfluoroelastomer (Kalrez®), E.P.

Back-up Rings

PTFE

Remaining Parts

300 Series Stainless Steel, Brass, Nickel Alloy (Monel®)

OTHER

Cleaning

CGA 4.1 and ASTM G93

Weight

4.75 lbs / 2.2 kg

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O-RING SEAL	MEDIA TEMPERATURE
ETHYLENE PROPYLENE	-30 °F TO +200 °F / -34 °C TO +93 °C
BUNA-N	-30 °F TO +165 °F / -34 °C TO +74 °C
FKM	-15 °F TO +200 °F / -26 °C TO +93 °C
FFKM	+20 °F TO +200 °F / -6 °C TO +93 °C
SEAT	MEDIA TEMPERATURE
VESPEL	-30 °F TO +200 °F / -34 °C TO +93 °C
PEEK	-30 °F TO +200 °F / -34 °C TO +93 °C

Note: Maximum ambient temperature rating is 165 °F (74 °C) for regulators with plastic hand knobs or air actuators. Minimum ambient temperature is determined by soft goods minimum media temperature.

Applications

- Hydraulic and pneumatic testing

Features and Benefits

- For gaseous and liquid media
- “Segregated and Captured” vent design is standard and well suited for hydraulic and pneumatic media.
- Balanced valve design ensures stable downstream pressure
- Low droop
- Large sensor for accurate pressure control
- Dome and air loaded versions can be automated with the TESCOM ER5000 Electropneumatic Controller

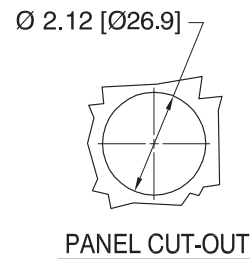
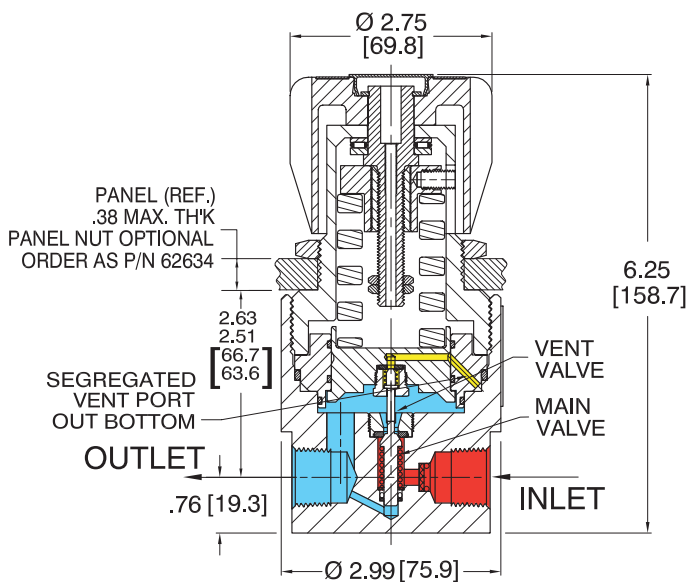
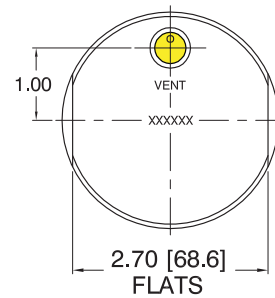
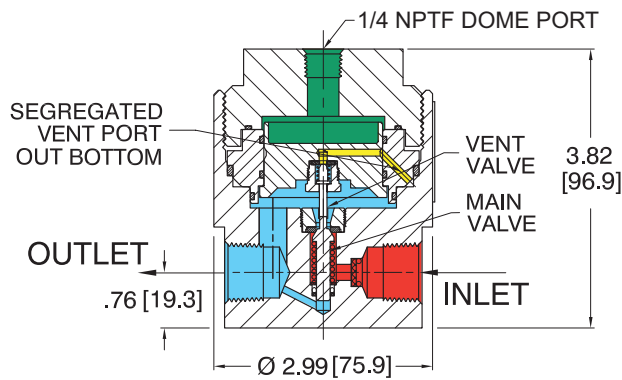
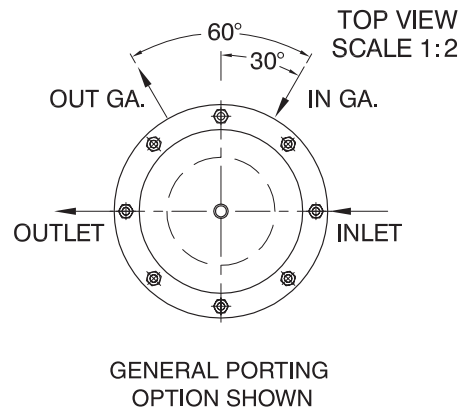
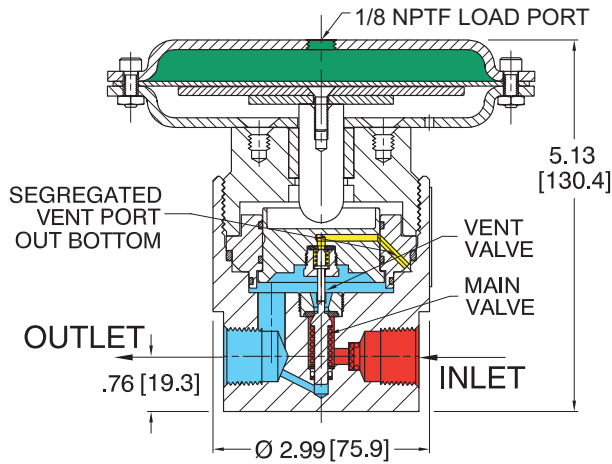
NOTE:

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.

44-1500 SERIES

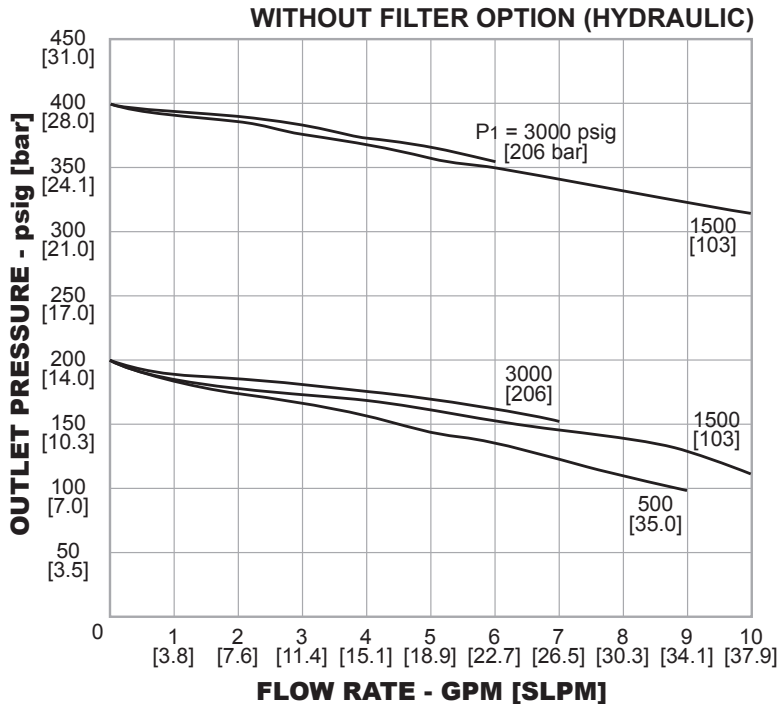
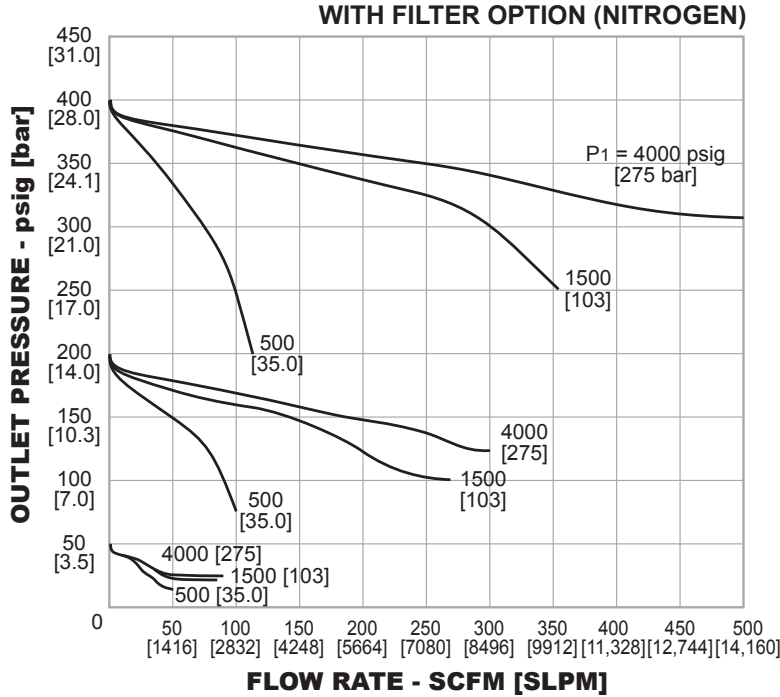
44-1500 Series Regulator Drawings



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

44-1500 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.



44-1500 SERIES

44-1500 Series Regulator Part Number Selector



Learn more about common options.

For modifications, repair kits and accessories, contact factory.

Example for selecting a part number:

BASIC SERIES	BODY MATERIAL	MATERIALS CONTACTING LINE MEDIA	OUTLET PRESSURE	SOFT GOODS MATERIAL		INLET AND OUTLET PORT TYPE	VENT PORT	INLET AND OUTLET PORT SIZE	LOADING TYPE	FILTER OPTION	MAIN VALVE AND VENT SEAT MATERIAL	GAUGE PORT OPTIONS 1/4" NPTF
				O-RING	BACK-UP O-RING							
44-15	1 – Brass 6 – 316 Stainless Steel	Brass, Nickel Alloy (Monel®), 300 Series Stainless Steel Nickel Alloy (Monel®), 300 Series Stainless Steel	Spring load only 2 – 10-200 psig 0.7-14 bar 4 – 10-400 psig 0.7-28 bar Air and Dome load only 6 – 10-600 psig 0.7-41 bar	D – Nitrile, Buna-N T – FKM (Viton®-A) V – FFKM, Perfluoroelastomer (Kalrez®) Z – E.P.	PTFE PTFE PTFE PTFE	1 – SAE 2 – NPTF 3 – MS33649	1/4" 1/4" 1/4"	6 – 3/8" 8 – 1/2"	A – Air loaded D – Dome loaded S – Spring loaded	2 – WITH Filter* 3 – NO Filter	7 – Vespel® SP21 8 – PEEK	0 - None 1 - One Gauge Port at 90° 2 - Two Gauge Ports at 60° 3 - Two Gauge Ports at 60° (left hand inlet) 5 - Outlet Port at 90° (left hand inlet) 6 - Two Gauge Ports at 90°

*Filter not recommended for liquid service.