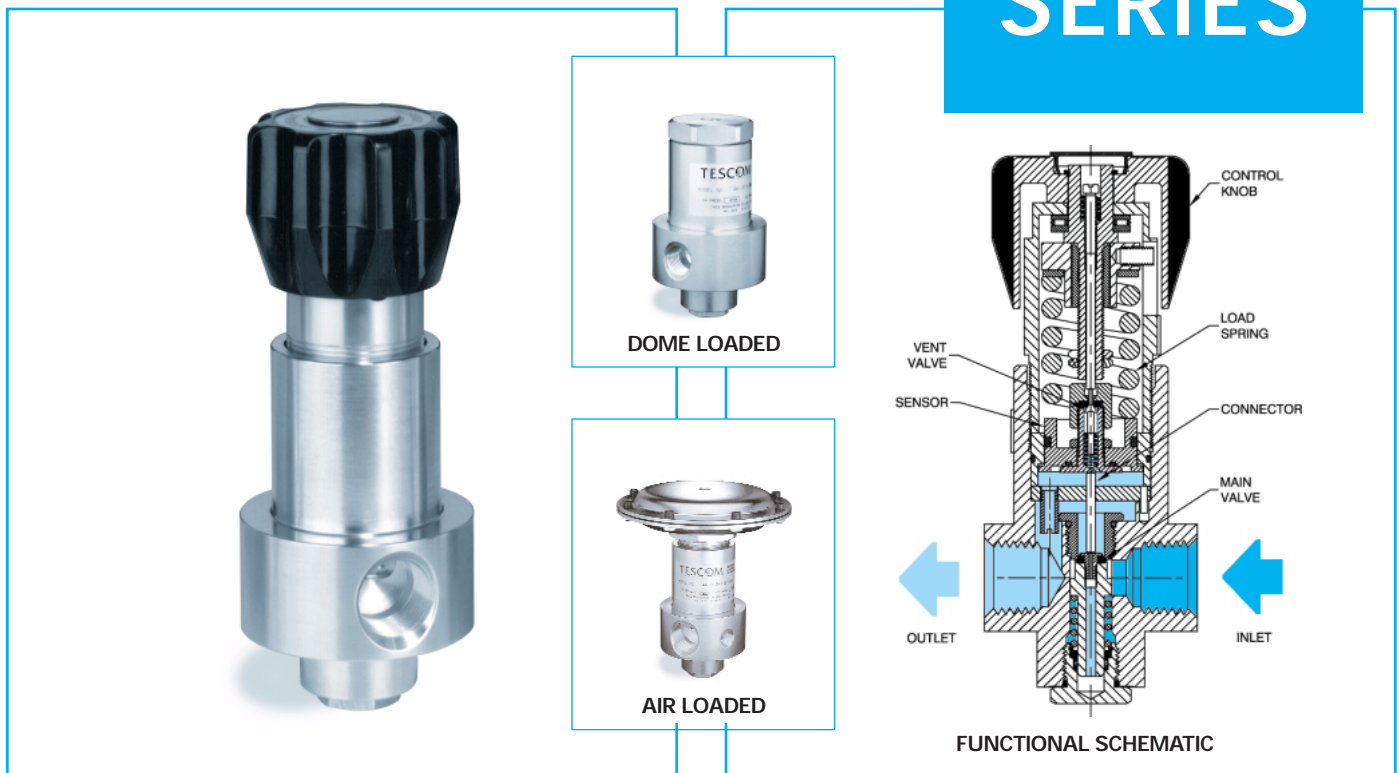


HIGH FLOW / HIGH PRESSURE

PRESSURE REDUCING REGULATOR

44-1300 SERIES



LARGE FLOW • EXCELLENT SENSITIVITY • HIGH PRESSURE

The 44-1300 Series Regulator is designed to safely reduce inlet pressures of up to 4500 PSIG (310.3 bar)* and accurately deliver high gas flows throughout the 10-1500 PSIG (.69-103.4 bar) outlet pressure range. Designed for control of high and low pressure gases, this self-venting unit can also be furnished as a non-venting regulator for hydraulic applications. A special baffle below the piston provides stable operation and eliminates regulator hunting by preventing sudden and direct pressure surges upon the sensor. The balanced stem design and soft seated main valve provide bubble-tight service.

- Extremely reliable
- Large piston sensor gives excellent sensitivity
- Balanced stem design assures constant downstream pressure
- Soft seated main valve
- Large handknob provides fast low-torque pressure settings
- Self-venting
- Adaptable to Tescom ratio actuators and ER 2000 & ER 3000 Electropneumatic PID Controllers
- Available with optional gauge ports
- Optional configuration for saltwater atmosphere
- Dome load available

*4500 PSIG (310. bar) maximum inlet – Stainless Steel version
3750 PSIG (258.6 bar) maximum inlet – Brass version

TYPICAL APPLICATIONS

- Hyperbaric Chambers
- Air Compressors
- Pressurized Ballast Tanks
- High Pressure Testing
- Purging and Charging
- Life Support Applications
- Manifold Systems
- Tube Trailers
- Gas Transfer Stations

TESCOM

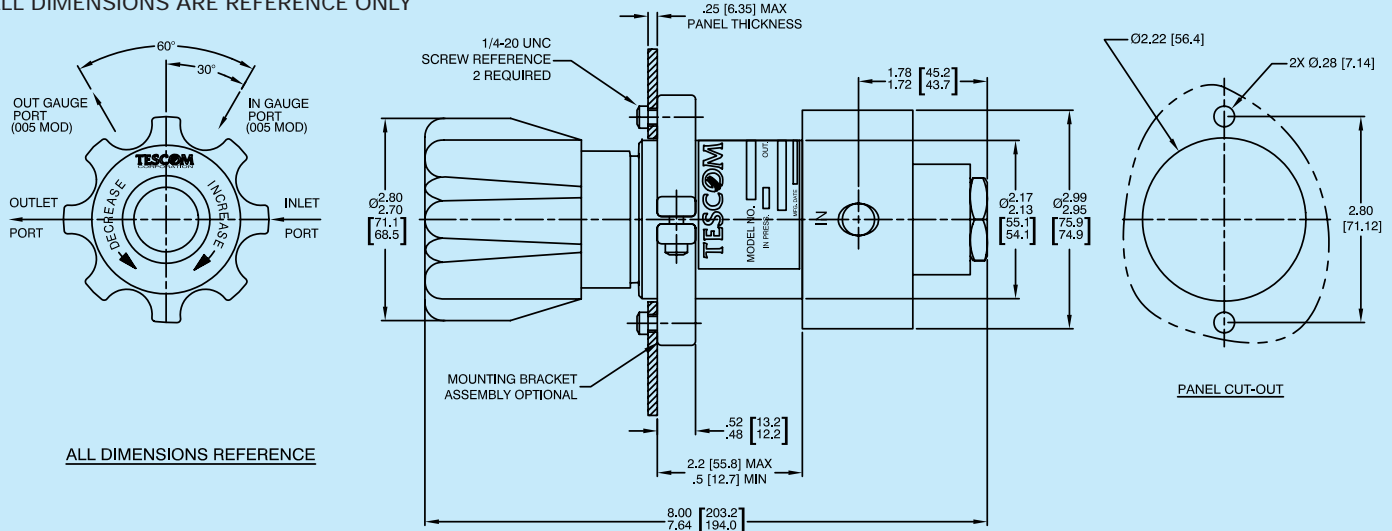
C O R P O R A T I O N
INDUSTRIAL CONTROLS DIVISION
12616 Industrial Boulevard
Elk River, Minnesota 55330-2491
1-800-447-1250 (612) 241-3238
Fax: (612) 241-3224

e-mail: icd@tescom.com
www.tescom.com

INSTALLATION DIMENSIONS

METRIC EQUIVALENTS ARE IN PARENTHESES
ALL DIMENSIONS ARE REFERENCE ONLY

44-1300 SERIES



ALL DIMENSIONS REFERENCE

SPECIFICATIONS

FLUID MEDIA – All gases and liquids compatible with materials of construction. For other media, consult factory. **

PRESSURE RATING – Per criteria of ANSI/ASME B31.3.

Maximum rated inlet pressure (Brass) 3750 PSIG (258.6 bar)
Maximum rated inlet pressure (Stainless) 4,500 PSIG (310.3 bar)
Outlet pressure ranges 10-300, 15-600, 20-1000, 50-1500 PSIG
(.69-20.7, 1.0-41.3, 1.4-69, 3.4-103.4 bar)

Design proof pressure 150% maximum operating
Materials:

Body Brass or 300 Series SST
Seat, main valve PCTFE
(except 300 PSIG outlet – Teflon®)
Seat, vent valve 600 & 300 PSIG outlet – Teflon®
1000 & 1500 PSIG outlet – PCTFE
Seals Viton-A®
Back-up rings Teflon®
Gaskets PCTFE
Trim 300 Series, 17-4 Stainless, Teflon and Brass

Flow capacity See below
Ambient operating & fluid media temperature¹ -15°F to +165°F
(-25°C to +75°C)

Leakage Bubble tight
Weight (w/o gauges) 6 1/4 lbs. (2.83 kg)
Ports 1/2" NPT inlet and outlet
3/4" NPT inlet and outlet

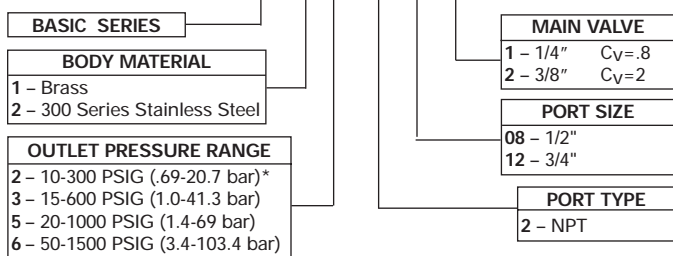
Maximum operating torque 40 lb. in. (4.5 Nm)

¹ For extended temperatures from -65°F to +400°F, consult factory.

****NOTE:** Tescom may make suggestions for a material to use with a specific media. These suggestions will be based on technical compatibility resources both through associations and manufacturers. Tescom does not guarantee the material to be compatible with the specific media – this is the responsibility of the user. Users must test under their own operating conditions to determine the suitability of any material in a particular application.

ORDERING INFORMATION

EXAMPLE: **44-1313-2081**



NOTE: * 10-300 PSIG available with Cv = 2 only.

OXYGEN SERVICE: System designers must verify the compatibility of materials used in this product before installation and operation. Specification of materials for oxygen service is the USER'S RESPONSIBILITY. Cleaning for oxygen service per the "intermediate" level requirements of ASTM-G93 and CGA 4.1 is supplied by Tescom.

STANDARD MODIFICATIONS

- 44-13XX-XXXX-002 . . . Non-Venting.
- 44-13XX-XXXX-005 . . . 1/4" NPT inlet and outlet gauge ports.
- 44-13XX-XXXX-053 . . . Coated load spring and plastic bearings for saltwater atmosphere.
- 44-132X-XXXX-056 . . . 2500 PSIG outlet pressure, 6000 PSIG inlet pressure, stainless steel body.
- 44-131X-XXXX-056 . . . 2500 PSIG outlet pressure, 5000 PSIG inlet pressure, brass body.
- 44-13XX-XXXX-125 . . . Dome loaded with 2:1 or 4:1 ratios, consult factory.
- 44-13XX-XXXXA002 . . . Air actuated with ratios available up to 19:1, consult factory.

ACCESSORIES (additional cost)

- Soft Goods Kits 44-13XX-XXX1 P/N 389-1873
44-13XX-XXX2 P/N 389-1874
44-13X2-XXX2 P/N 389-2726
 - Standard Repair Kits 44-13XX-XXX1 P/N 389-1875
44-13XX-XXX2 P/N 389-1876
44-13X2-XXX2 P/N 389-2727
 - Soft Goods (002 model) 44-13XX-2XX1-002 P/N 389-1459
44-13XX-2XX2-002 P/N 389-1896
 - Panel mounting bracket assembly P/N 1129
- Consult factory for Repair Kits on regulator modifications.

FLOW CHART (metric units are in parenthesis)

REGULATOR DISCHARGE CHARACTERISTICS CURVES

