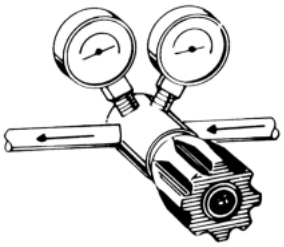
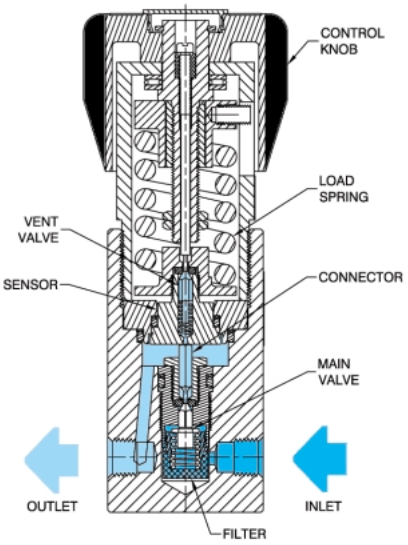
HIGH PRESSURE

PRESSURE REDUCING REGULATOR

44-1100 SERIES



IN-LINE



FUNCTIONAL SCHEMATIC

HIGH PRESSURE • EXCELLENT SENSITIVITY • SELF-VENTING

The **44-1100 Series** high pressure regulators are designed to safely reduce inlet pressures up to 10,000 PSIG (690 bar) and accurately provide six secondary outlet pressure ranges. The pressure ranges are obtainable with one regulator by installing one of a combination of three load springs and three sensors. These are available in kit form and can be installed while the regulator is in the system. This self-venting regulator allows the operator to reduce pressure setting in a closed system by venting the downstream pressure through the regulator. A non-venting version is also available.

- **Removable valve assembly module permits easy repair**
- **Excellent sensitivity through a wide range of pressure settings**
- **Extra safety and reliability of spring loaded piston sensor**
- **Available in brass or stainless steel**
- **Unbalanced stem assures positive shut-off**
- **Large handknob provides fast low-torque pressure settings**
- **Available with or without gauges and CGA**

TYPICAL APPLICATIONS

Calibration Kits

Airline Charging Carts

Chemical Plants

Manufacturing Processes

Research and Development Laboratories

TESCOM CORPORATION

INDUSTRIAL CONTROLS DIVISION
12616 Industrial Boulevard
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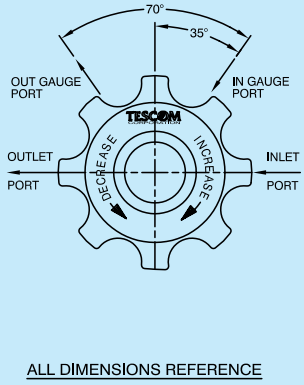
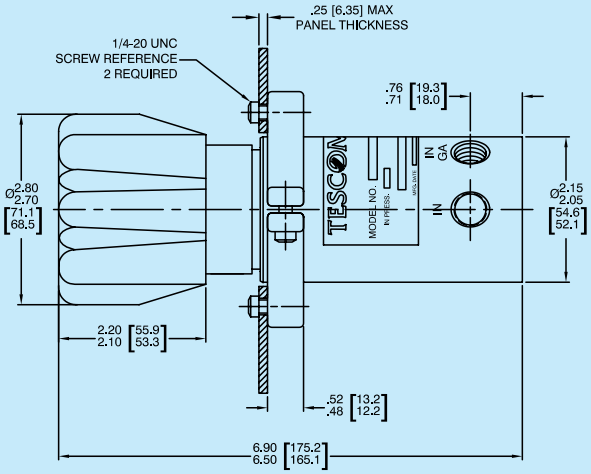
INSTALLATION DIMENSIONS

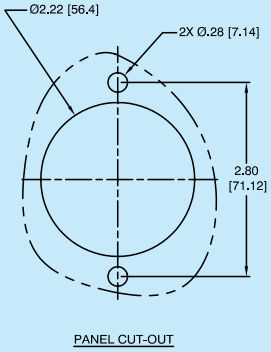
44-1100 SERIES

METRIC EQUIVALENTS ARE IN PARENTHESES



ALL DIMENSIONS REFERENCE





PANEL CUT-OUT

ALL DIMENSIONS ARE REFERENCE

SPECIFICATIONS

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

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

Maximum rated inlet pressure (SST) . . . . . 10,000 PSIG (690 bar)
Maximum rated inlet pressure (Brass) . . . . . 6,000 PSIG (415 bar)
Outlet pressure ranges . . . . . 0-500, 0-800, 10-1500, 15-2500 25-4000, 50-6000 PSIG (0-35, 0-55, .69-105, 1.03-175, 1.72-280 and 3.45-415 bar)
Proof pressure . . . . . 150% maximum operating
Materials
- Body . . . . . Brass or 303 SST
- Brass models: 20 Micron (nominal) Filter . . . . . Bronze
- Main Valve Seat . . . . . Vespel®
- Vent Valve Seat . . . . . PCTFE
- Seals . . . . . Buna-N
- Back-up Rings . . . . . Teflon®
- Remaining Parts . . . . . 300 SST

Flow Capacity . . . . . C_V=.06
Leakage . . . . . Bubble tight
Ambient operating and fluid temperatures . . . . . -65°F to +165°F (-40°C to +75°C)
Weight (w/o gauges) . . . . . 4 3/4 lbs. (2.15 kg.)
Ports . . . . . 1/4" NPT inlet, outlet and gauge ports
Maximum operating torque . . . . . 40 lb.-in (46 kg•cm)

****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.

NOTE: Regulators vent to zero PSIG (zero bar) in all pressure ratings.

ORDERING INFORMATION

EXAMPLE: **4 4 - 1 1 1 1 - 2 4**

BASIC SERIES

BODY MATERIAL
1 – Brass
2 – Stainless Steel

OUTLET PRESSURE RANGE
1 – 0-500 PSIG (0-35 bar)
2 – 0-800 PSIG (0-55 bar)
3 – 10-1500 PSIG (1.03-105 bar)
4 – 15-2500 PSIG (1.03-175 bar)
5 – 25-4000 PSIG (1.72-280 bar)
6 – 50-6000 PSIG (3.45-415 bar)

PORT SIZE
4 – 1/4"

PORT TYPE
2 – NPT

STANDARD CLEANING: Regulators are cleaned in accordance with the "intermediate" level of ASTM-G93 and CGA 4.1. The "intermediate" level assures removal of visible particles and combustible residues.

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.

ACCESSORIES (additional cost)

GAUGES: Consult Gauges Section
CYLINDER CONNECTIONS: Order by CGA connection number. The most popular are CGA 350 (Hydrogen), CGA 540 (Oxygen) CGA 580 (Nitrogen) and CGA 590 (Air).

Soft good kits (standard models) . . . . . P/N 389-1275
Standard repair kits (soft & metallic) . . . . . P/N 389-1449
Multiple range kits (see catalog page) . . . . . P/N 38-144X-XXX-XX
Panel mounting bracket assembly . . . . . P/N 1129
Main valve service tool . . . . . P/N 6557-3

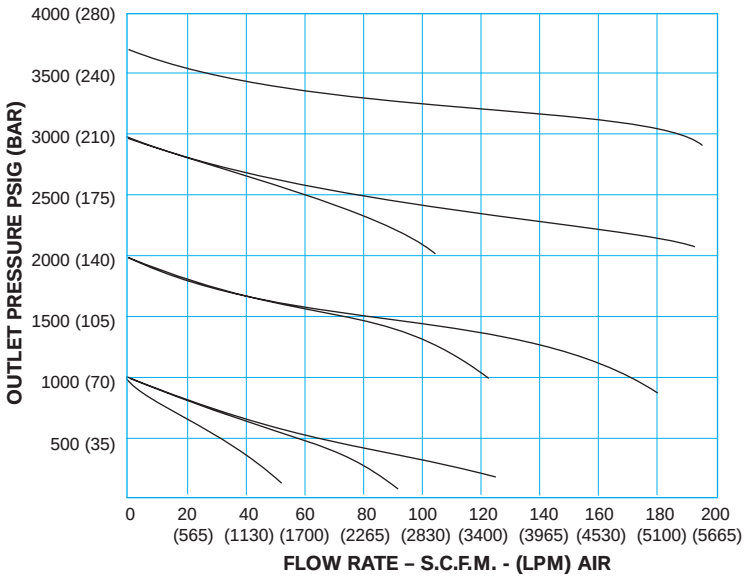
CONSULT FACTORY FOR KITS ON MODIFICATIONS

STANDARD MODIFICATIONS

Add suffix **"001"** to part number for **Viton-A® O-Rings** and **Non-Venting**.
Add suffix **"002"** to part number for **non-venting** modification of the standard model with **filter removed.**
Add suffix **"009"** to part number for **Viton-A® O-Rings** and **Teflon® Back-up Rings.**

FLOW CHART

REGULATOR DISCHARGE CHARACTERISTICS CURVES



Viton-