

26-1000 Series

Regulators - Pressure Reducing

D26100538X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure

Stainless Steel: 10,000 psig / 690 bar

Brass: 6000 psig / 415 bar

Maximum Outlet Pressure

5-500, 5-800, 10-1500, 15-2500, 25-4000, 50-6000, 200-10,000 psig
0.3-35, 0.3-55, 0.7-105, 1-175, 1.7-275, 3.4-415, 14-690 bar

Design Proof Pressure

150% maximum rated

Leakage

Bubble-tight

Operating Temperature

-40°F to 165°F / -40°C to 74°C

Flow Capacity

Standard: $C_v = 0.06$

Optional: $C_v = 0.02, 0.12, 0.30$

MEDIA CONTACT MATERIALS

Body

316 Stainless Steel or Brass

Bonnet

300 Series Stainless Steel

40 Micron Filter

300 Series Stainless Steel or Bronze

Seat

Main Valve: Vespel®

Vent Valve: CTFE

Seals

Buna-N

Back-Up Rings

Teflon®

Trim

300 Series Stainless Steel

OTHER

Cleaning

CGA 4.1 and ASTM G93

Weight (without gauges)

Stainless Steel: 5.5 lbs / 2.5 kg

Brass: 5.7 lbs / 2.6 kg

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TESCOM 26-1000 Series controls pressures up to 10,000 psig / 690 bar. This pressure reducing regulator offers standard venting providing decreased outlet pressure. The 26-1000 Series has an interchangeable spring and sensor for product versatility. The low torque handknob is easy to adjust.

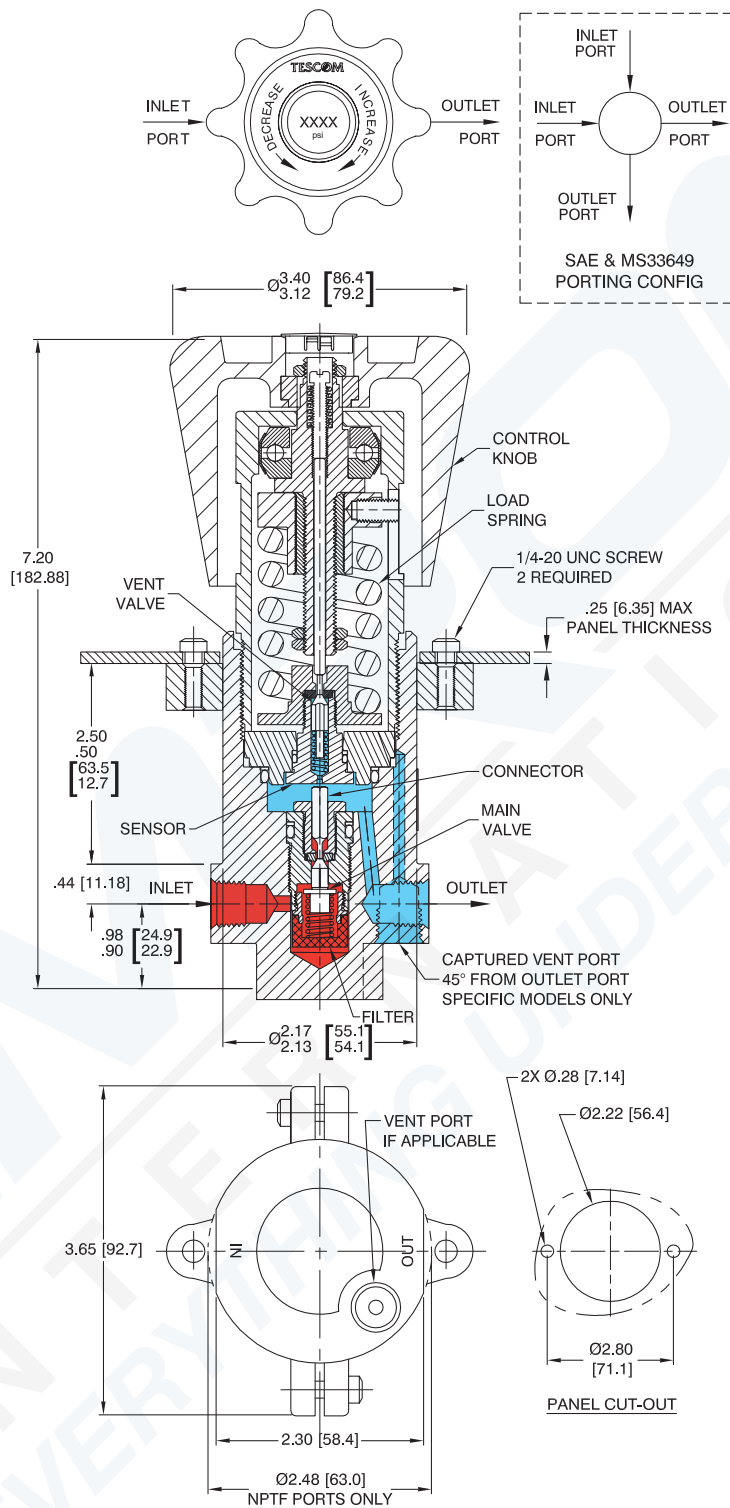
Applications

- Test equipment
- Calibration stands
- Production equipment

Features and Benefits

- Can be easily converted to seven different outlet pressure ranges
- Available with captured venting
- Numerous inlet and outlet porting options
- Available in Brass or Stainless Steel
- Unbalanced stem provides positive shut-off
- Safety and reliability of piston sensor
- Excellent sensitivity through a wide range of pressure settings
- Vents to zero psig / bar in all pressure ranges

26-1000 Series Regulator Drawing

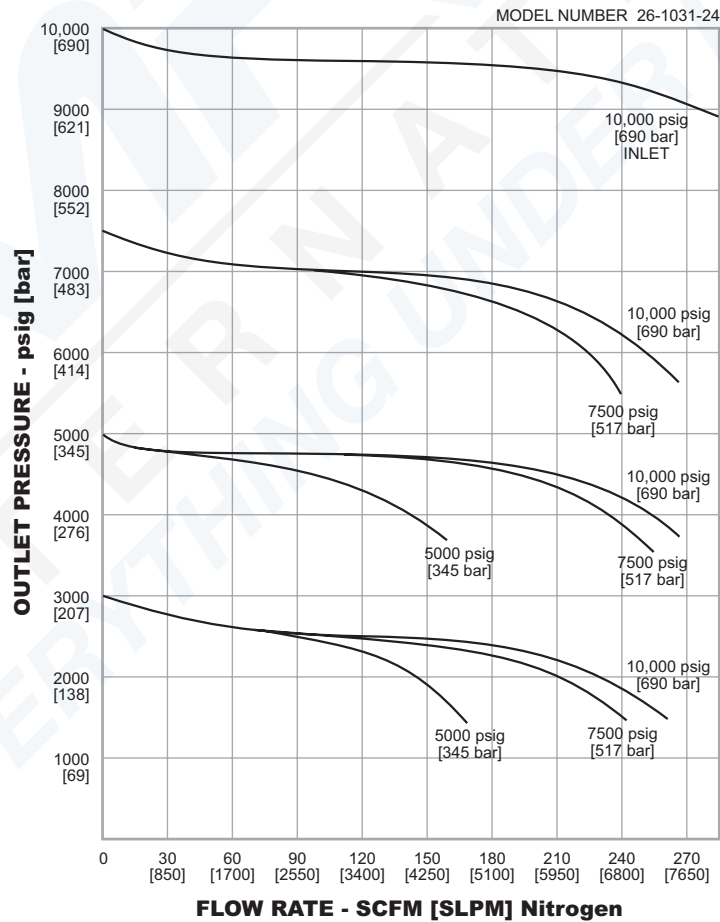
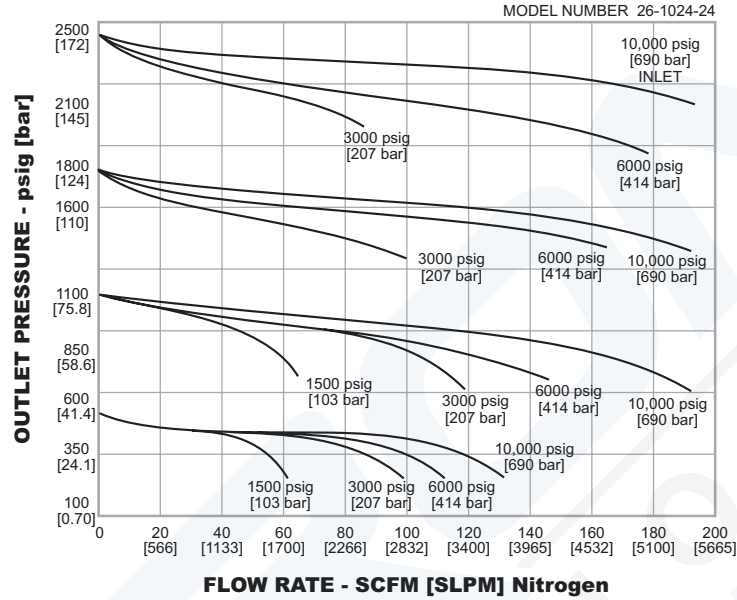


All dimensions are reference & nominal
Metric [millimeter] equivalents are in brackets

CAUTION:
Vent port at base of regulator
must not be plugged or restricted.

26-1000 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.



26-1000 Series Regulator Part Number Selector

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

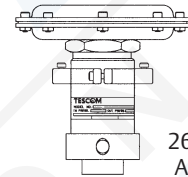
Example for selecting a part number:

| 26-10 | 1 | 4 | - | 3 | 4 | [BLANK] |
|--|--------------------------------------|--|---|--|----------------------------------|--|
| BASIC SERIES | BODY MATERIAL | OUTLET PRESSURE RANGE | | INLET AND OUTLET PORT TYPE | INLET AND OUTLET PORT SIZE | OPTIONS |
| 26-10 | 1 – Brass 6 – 316 Stainless Steel | 1 – 200-10,000 psig 14-690 bar (Stainless Steel Body Only) 2 – 50-6000 psig 3.4-415 bar 3 – 25-4000 psig 1.7-275 bar 4 – 15-2500 psig 1-175 bar 5 – 10-1500 psig 0.7-105 bar 6 – 5-800 psig 0.3-55 bar 7 – 5-500 psig 0.3-35 bar | | 1 – SAE ¹ (SAR ¹ for Europe) 2 – NPTF 3 – MS33649 ¹ 4 – High Pressure 6 – Medium Pressure | 4 – 1/4" 6 – 3/8" (NPTF only) | [BLANK] – None 005 – Viton-A® O-rings 008 – 1/4" NPTF inlet and outlet gauge ports 045 – Non-venting 163 – 1/2" inlet and outlet ports 249 – 15,000 psig / 1034 bar inlet capability (Stainless Steel model only) |
| <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: auto; margin-right: auto;"> 1. Two inlet and outlet ports standard at 90° </div> | | | | | | |

NOTE: All pressure ranges vent to zero psig.

26-1000 Series Regulator Standard Modifications

| MODIFICATION | FEATURE | PART NUMBER | SUFFIX |
|--|-----------------------|---------------|--------------------------|
| Captured Venting | | 002 | |
| <i>The captured bonnet vent port allows the user to: 1) capture fluids, 2) re-use vented media, and 3) provide a secondary sealed barrier.</i> | | | |
| Standard Unit with Viton-A® Soft Goods | | 005 | |
| Captured Venting with Viton-A® Soft Goods | | 007 | |
| 1/4" NPTF Inlet and Outlet Gauge Ports at 60° Angle | | 008 | |
| 15,000 psig / 1034 bar Inlet and Outlet Pressure Capabilities in Stainless Steel | | 039 | |
| <i>For varied outlet capabilities, consult factory.</i> | | | |
| Wrench Adjustment with Locking Device | | 098 | |
| <i>For applications subject to vibration or accidental changes in pressure settings.</i> | | | |
| 1/2" Inlet and Outlet Ports | | 163 | |
| Non-Venting with Viton-A® O-Rings | | 280 | |
| Air Ratio Device, Non-Venting Only | | 045A | |
| <i>With pressure ranges of:</i> | | | |
| Model Number | Max. P2 / psig | Ratio* | Notes |
| 26-10X1-XX-045A | 10,000 / 690 bar | 125-1 | Stainless Steel Only |
| 26-10X2-XX-045A | 6000 / 414 bar | 75-1 | Brass or Stainless Steel |
| 26-10X4-XX-045A | 2500 / 172 bar | 32-1 | Brass or Stainless Steel |
| 26-10X5-XX-045A | 1500 / 103 bar | 19-1 | Brass or Stainless Steel |
| <i>* Ratio is for reference only</i> | | | |
| Seat Material: Teflon®, CTFE, PEEK®, 17-4 PH Stainless Steel | | | <i>consult TESCOM</i> |
| O-Ring Material: Teflon®, Viton-A®, Ethylene Propylene, Urethane, Kalrez® | | | <i>consult TESCOM</i> |
| Vent Options: Captured Bonnet, Non-Venting | | | <i>consult TESCOM</i> |
| Loading Options: | | | |
| Air Ratio**, Dome-Load (1:1), Bias: captured bonnet (negative or positive bias), Wrench Adjust. | | | <i>consult TESCOM</i> |
| <i>** The air ratio model can provide up to 15,000 psig / 1034 bar outlet pressure. For specific ratios, consult factory.</i> | | | |
| Pressures: 20,000 psig / 1379 bar inlet and outlet | | | <i>consult TESCOM</i> |
| Flow Capacity: C _v = 0.12, C _v = 0.02 (not available with metal seat) | | | <i>consult TESCOM</i> |
| Cartridge Mounted | | | <i>consult TESCOM</i> |
| Electronic Controls | | | <i>consult TESCOM</i> |
| <i>Available to automate your system. Can be used with air ratio or dome-loaded models.</i> | | | |



26-1000 with Air Actuator

26-1000 Series Regulator Accessories (optional at extra cost)

| ITEM | PART NUMBER |
|---|--------------------|
| Gauges Consult GAUGES section of catalog | |
| Standard Repair Kit | P/N 38-1000-26 |
| Standard Soft Goods Kits: | |
| Model: 26-10X1 | P/N 389-1016 |
| 26-10X2 and 26-10X3 | P/N 389-1005 |
| 26-10X4 | P/N 389-1017 |
| 26-10X5, 26-10X6, and 26-10X7 | P/N 389-1002 |
| <i>Consult Tescom about kits for modifications.</i> | |
| Multiple Range Kit (see back page) | P/N 38-100X-XXX-XX |
| Main Valve Service Tool | P/N 6557-3 |
| System Automation: To automate your system, an ER5000 Electropneumatic PID Controller can be used with this regulator. | |
| <i>Consult Tescom for additional information and a specific part number.</i> | |

26-1000 Multiple Range Kits

TESCOM's Multiple Range Kits permit the 26-1000 Series to be modified to any one of several different outlet pressure ranges. Modular design of these regulators permit the outlet pressure ranges to be changed while retaining the desirable characteristics of minimum lock-up, maximum sensitivity, precision and accuracy.

This can be done by interchanging a combination of sensors and load springs and can be accomplished while the regulator remains in line and connected to the system.

With the use of the Multiple Range Kits, the 26-1000 Series regulator has the ability to accomplish what would ordinarily require up to seven different regulators.

To change the pressure range, simply remove the control knob which is retained by a locknut, unscrew the bonnet (1 3/4" across the flats for the 26-1000) and remove the spring and sensor. Select the spring and sensor combination which will produce the pressure range required. Reassemble the regulator and resume regulator operation.

- Economy and convenience of a single regulator
- Modular components
- Minimum lock-up with maximum sensitivity
- Convert without removing from panel
- Color coded springs
- No special tools involved

26-1000 Series Kit



| Desired Outlet Pressure Range | 26-1000 SERIES | | | |
|-------------------------------|------------------|------------|--------------|------------|
| | Sensor Assy. No. | Sensor P/N | Spring Color | Spring P/N |
| 200-10,000 psig / 14-690 bar | 1 | 1006-XX | Silver | 1051 |
| 50-6000 psig / 3.4-414 bar | 2 | 1007-XX | Silver | 1051 |
| 25-4000 psig / 1.7-276 bar | 2 | 1007-XX | Gold | 1050 |
| 15-2500 psig / 1.0-172 bar | 3 | 1008-XX | Silver | 1051 |
| 10-1500 psig / 0.7-103 bar | 4 | 1009-XX | Silver | 1051 |
| 0-800 psig / 0-54 bar | 4 | 1009-XX | Gold | 1050 |
| 0-500 psig / 0-35 bar | 4 | 1009-XX | Olive | 1049 |

Since the 26-1000 regulator is provided with one spring and one sensor when shipped, the Multiple Range Kit will contain all other springs and sensors required to accomplish any of the above listed pressures ranges.

Part Number Selector for Multiple Range Kits

Example for selecting a part number:

26-1000 SERIES

| 38-100 | X | - | XXX | X | X |
|--------------|---|-------------------------|-----|---|--|
| BASIC SERIES | SPRING COMBINATION | SENSOR ASSEMBLY NUMBERS | | METALLIC MATERIAL | O-RING MATERIAL |
| 38-100 | 1 – 1049-1050 2 – 1049-1051 3 – 1050-1051 | 1 2 3 4 | | 2 – 300 Series Stainless Steel 6 – 316 Stainless Steel | 0 – Buna-N 2 – Viton-A® 5 – Ethylene Propylene |



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.