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.

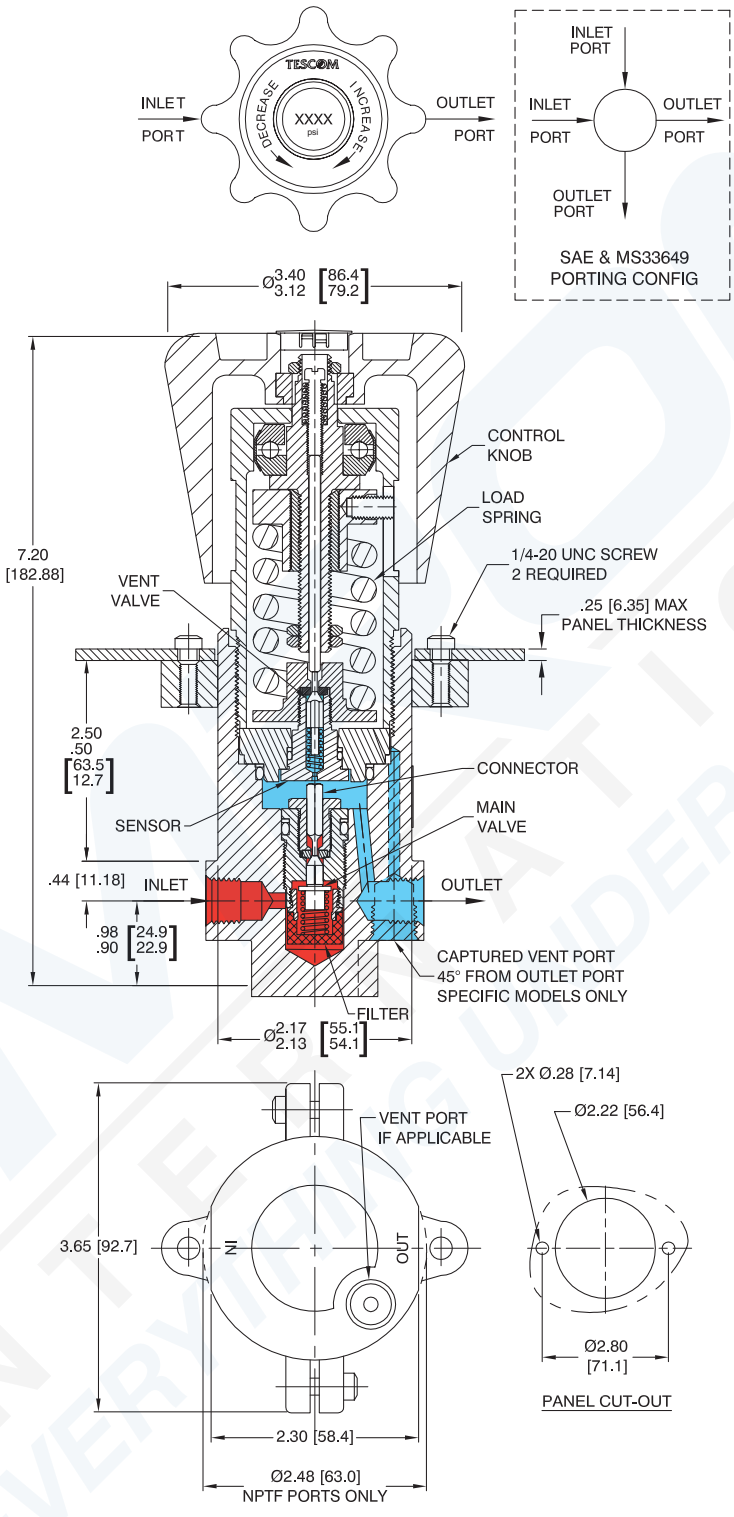
Applications

- 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.

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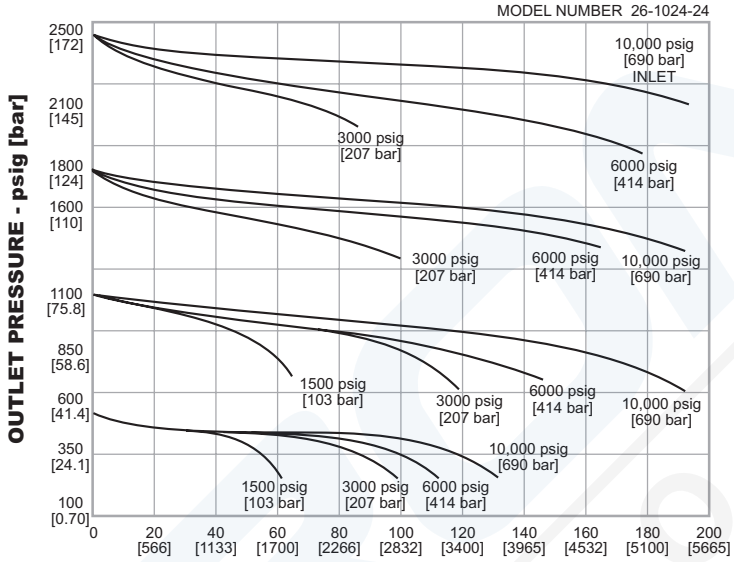
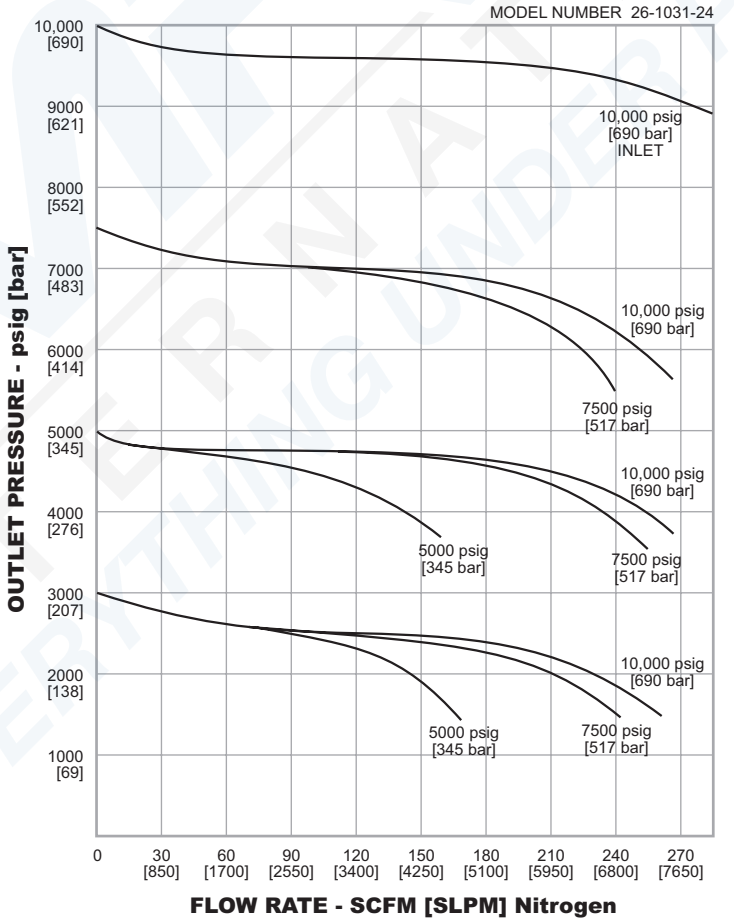
26-1000 Series Regulator Flow Charts

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.





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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 *1. Two inlet and outlet ports standard at 90°*	**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)
NOTE: All pressure ranges vent to zero psig.					

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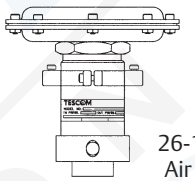
26-1000 Series Regulator Standard Modifications

MODIFICATION	FEATUREPART NUMBER SUFFIX
Captured Venting	002
The captured bonnet vent port allows the user to: 1) capture fluids, 2) re-use vented media, and 3) provide a secondary sealed barrier.	
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
For varied outlet capabilities, consult factory.	
Wrench Adjustment with Locking Device	098
For applications subject to vibration or accidental changes in pressure settings.	
1/2" Inlet and Outlet Ports	163
Non-Venting with Viton-A® O-Rings	280
Air Ratio Device, Non-Venting Only	045A

With pressure ranges of:

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

** Ratio is for reference only*



26-1000 with Air Actuator

Seat Material: Teflon®, CTFE, PEEK®, 17-4 PH Stainless Steel ..... *consult TESCOM*

O-Ring Material: Teflon®, Viton-A®, Ethylene Propylene, Urethane, Kalrez® ..... *consult TESCOM*

Vent Options: Captured Bonnet, Non-Venting ..... *consult TESCOM*

Loading Options:

Air Ratio**, Dome-Load (1:1), Bias: captured bonnet (negative or positive bias), Wrench Adjust. ..... *consult TESCOM*

*** The air ratio model can provide up to 15,000 psig / 1034 bar outlet pressure. For specific ratios, consult factory.*

Pressures: 20,000 psig / 1379 bar inlet and outlet ..... *consult TESCOM*

Flow Capacity: C_V = 0.12, C_V = 0.02 *(not available with metal seat)* ..... *consult TESCOM*

Cartridge Mounted ..... *consult TESCOM*

Electronic Controls ..... *consult TESCOM*

Available to automate your system. Can be used with air ratio or dome-loaded models.

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
Consult Tescom about kits for modifications.	
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.

Consult Tescom for additional information and a specific part number.

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.

26-1000 Series Kit

- **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**

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.*

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