Regulators - Pressure Reducing

D54201597X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure 10,000 psig / 690 bar

Outlet Pressure Ranges 5-500, 5-800, 10-1500, 15-2500, 25-4000, 50-6000, 200-10,000 psig¹

0.35-34.5, 0.35-55.2, 0.69-103, 1.0-172, 1.7-276, 3.4-414, 13.8-690 bar¹

Design Proof Pressure 150% maximum rated

Leakage

2 drops per minute at 150 S.U.S. at 2500 psig / 172 bar

Ambient Operating Temperature² -15°F to 165°F / -26°C to 74°C

Flow Capacity Main Valve: $C_V = 0.06$ Vent Valve: $C_V = 0.08$

MEDIA CONTACT MATERIALS

Body

316 Stainless Steel

Main Valve, Vent Seat

17-4 PH Stainless Steel

O-Rings

FKM (Viton[®]-A), Nitrile, Buna-N, Ethylene Propylene, FFKM, Perfluoroelastomer (Kalrez[®])

Poppets

17-4 PH Stainless Steel

Back-up Ring

PTFE

Remaining Parts 300 Series and 17-4 PH Stainless Steel

OTHER

Cleaning CGA 4.1 and ASTM G93

Weight

5.3 lbs / 2.4 kg

 ${\rm Viton}^{\otimes}$ and ${\rm Kalrez}^{\otimes}$ are registered trademarks of E.I. du Pont de Nemours and Company.

1. Regulator vents to zero psig in all pressure ranges.

2. For extended temperatures from -40°F to 400°F / -40°C to 204°C, consult TESCOM.



TESCOM 54-2000 Series pressure reducing regulator is suitable for 10,000 psig / 690 bar inlet and outlet hydraulic applications. Segregated and captured vent allows for convenient downstream pressure reduction adjustments. Hardened Stainless Steel seat and stem provide excellent wear resistance in harsh applications.

Applications

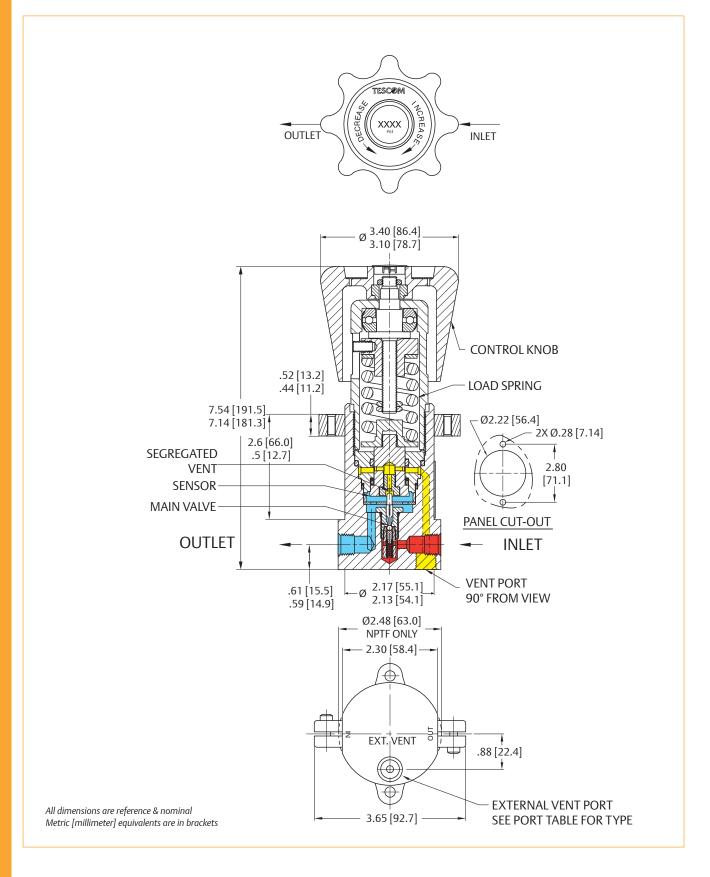
- Wellhead control panels
- Subsea valve actuations
- Hydraulic Power Units (HPU)
- Component testing

Features and Benefits

- Special models available for 15,000 and 20,000 psig / 1034 and 1379 bar
- Segregated vent for easy pressure adjustments in either direction
- Main valve cartridge
- High-impact handknob
- Cartridge style models are available
- NACE compatible designs are available
- Compatible with TESCOM air actuators and ER5000 Electropneumatic Controller
- Piston-sensed design ensures safety and reliability



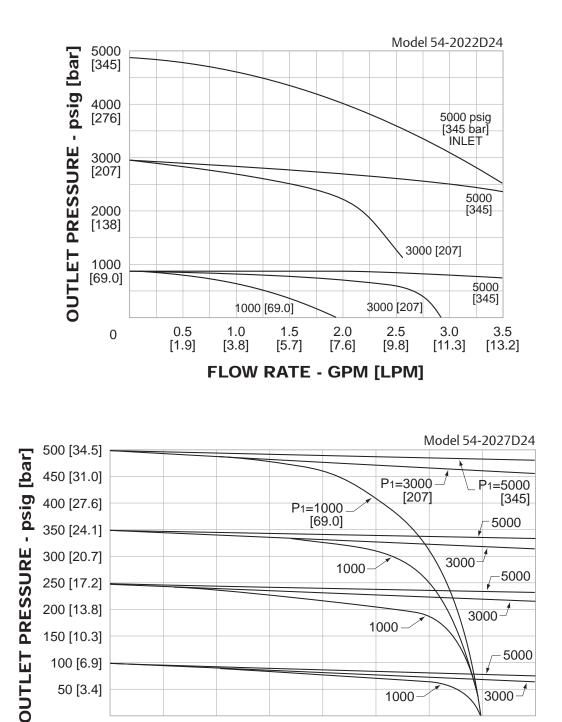
54-2000 Series Regulator Drawing





54-2000 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.





3000-1

2.0

[7.6]

1000

1.5

[5.7]

1.0

[3.8]

FLOW RATE - GPM [LPM]

0.5

[1.9]

0

54-2000 Series Regulator Part Number Selector

i Learn more about common options. For modifications, repair kits and accessories, contact factory.

Example for selecting a part number:

| 54-20 | 6 | 4 | D | | | 2 | | 4 |
|-----------------|--------------------------------|----------------------------|---------------------|------------|--------------|--------------------------|---------------|---------------------|
| BASIC SERIES | BODY AND BONNET MATERIAL | OUTLET PRESSURE RANGES | SOFT GOODS MATERIAL | | | INLET AND OUTLET | EXTERNAL VENT | INLET AND |
| | | | O-RII | | BACK-UP RING | PORT TYPE | PORT (1/4") | OUTLET PORT SIZE |
| 54.30 | c 216 (1 1 1 | 1 200 10 000 | DYNAMIC | STATIC | DTEE | 4 645 | CAE | a 1/41 |
| 54-20 | 6 – 316 Stainless | 1 – 200-10,000 psig | D – Nitrile, | Nitrile, | PTFE | 1 – SAE | SAE | 4 – 1/4" |
| | Steel | 13.8-690 bar | Buna-N | Buna-N | PTFE | 2 – NPTF | NPTF | 6 – 3/8" |
| | | 2 – 50-6000 psig | | | PTFE | 3 – MS33649 | MS33649 | 8 – 1/2" |
| | | 3.4-414 bar | T – FKM | FKM | | 4 – High Pressure | NPTF | |
| | | 3 – 25-4000 psig | (Viton®-A) | (Viton®-A) | | 6 – Medium | NPTF | |
| | | 1.7-276 bar | | | | Pressure | | |
| | | 4 – 15-2500 psig | Z – Ethylene | Ethylene | | | | |
| | | 1.0-172 bar | Propylene | Propylene | | | | |
| | | 5 – 10-1500 psig | | | | | | |
| | | 0.69-103 bar | | | | | | |
| | | | | | | | | |
| | | 6 – 5-800 psig | | | | | | |
| | | 0.35-55.2 bar | | | | | | |
| | | 7 – 5-500 psig | | | | | | |
| | | 0.35-34.5 bar | | | | | | |

