54-2000 Series

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 Stainless Steel

O-Rings

Viton-A®, Buna-N, Ethylene Propylene, Kalrez®

Poppets

17-4 Stainless Steel

Back-up Ring

PTFE

Remaining Parts

300 Series and 17-4 Stainless Steel

OTHER

Cleaning

CGA 4.1 and ASTM G93

Weight

5.3 lbs / 2.4 kg

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

- 1. Regulator vents to zero psiq 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

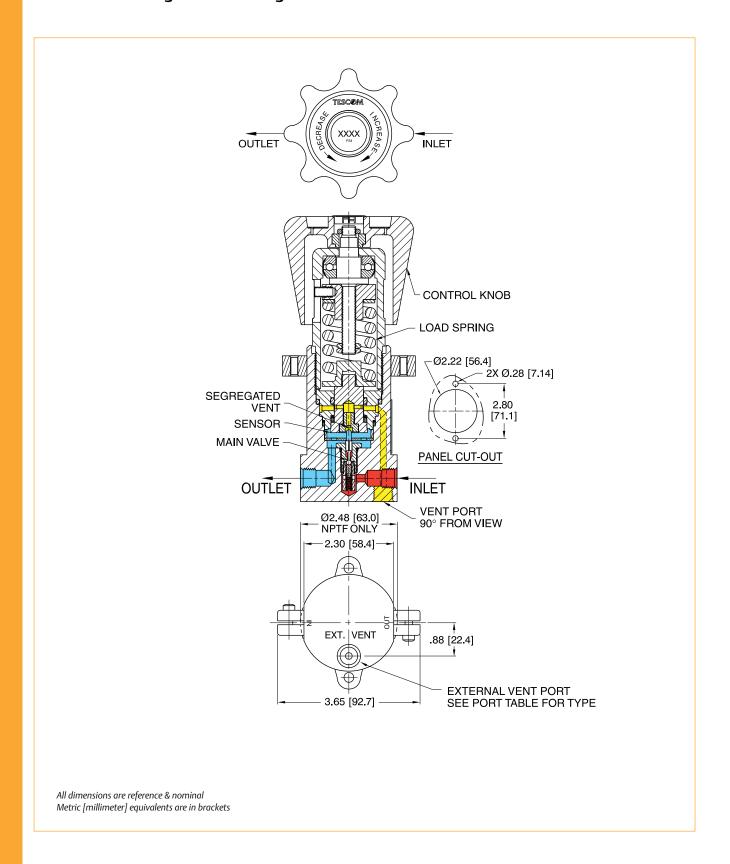
Features and Benefits

- 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 ER3000 Electropneumatic Controller
- Piston-sensed design ensures safety and reliability



TESCOM

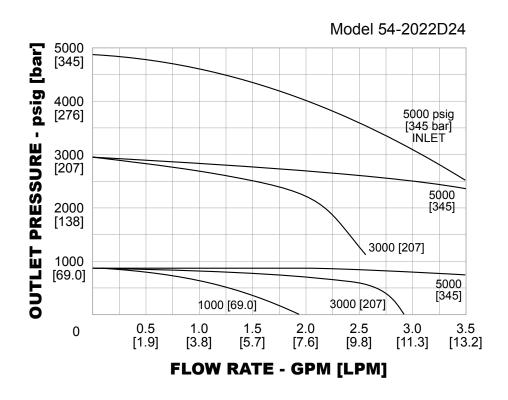
54-2000 Series Regulator Drawing





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.



Model 54-2027D24 500 [34.5] OUTLET PRESSURE - psig [bar] 450 [31.0] P1=3000 P1=5000 [207] [345] 400 [27.6] P1=1000 [69.0] 5000 350 [24.1] 3000 300 [20.7] 1000 **-5000** 250 [17.2] 200 [13.8] 3000 ⁻ 1000 150 [10.3] 5000 100 [6.9] 50 [3.4] 3000-7 1000 0 0.5 1.0 2.0 [1.9] [3.8] [5.7] [7.6] **FLOW RATE - GPM [LPM]**





4

2

Pressure

54-2000 Series Regulator Part Number Selector

4

1.7-276 bar
4 – 15-2500 psig
1.0-172 bar
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

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

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Example for selecting a part number:

6

54-20

BASIC	BODY AND BONNET MATERIAL	OUTLET PRESSURE RANGES	SOFT GOODS MATERIAL			INLET AND OUTLET	EXTERNAL VENT	INLET AND
SERIES			O-RING		BACK-UP RING	PORT TYPE	PORT (1/4")	OUTLET PORT SIZE
	WATERIAL		DYNAMIC	STATIC	BACK-OF KING			I OKI SIZE
54-20	6 – 316 Stainless	1 – 200-10,000 psig	D – Buna-N	Buna-N	PTFE	1 – SAE	SAE	4 – 1/4"
	Steel	13.8-690 bar	T – Viton-A®	Viton-A®	PTFE	2 – NPTF	NPTF	6 – 3/8"
		2 – 50-6000 psig	Z – Ethylene	Ethylene	PTFE	3 – MS33649	MS33649	8 – 1/2"
		3.4-414 bar	Propylene	Propylene		4 – High Pressure	NPTF	,
		3 – 25-4000 psig				6 – Medium	NPTF	

