TESCOM[®]

54-2700 Series

Regulators - Relief / Backpressure

D54271905X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure

Air Loaded: 500 psig / 34.5 bar **Dome Loaded:** 5500 psig / 379 bar **Spring Loaded:** 500 psig / 34.5 bar

Design Proof Pressure

150% of maximum operating

Maximum Air Operator Pressure

100 psig / 6.9 bar

Operating Temperature¹

-40°F to 165°F / -40°C to 74°C

Internal Leakage

Bubble-tight

Flow Capacity (main valve)

 $C_{V} = 5.0$

MEDIA CONTACT MATERIALS

Body

303 and 316 Stainless Steel

Seat

Glass Filled Peek, Vespel® SP1

O-Killigs

Buna-N, Viton®, Ethylene Propylene

Back-up Rings

Teflon®

Remaining Parts

303 Stainless Steel

OTHER

Cleaning

CGA 4.1 and ASTM G93

Weight (approximately)

30 lbs / 13.6 kg

1. Operating temperature range dependent on O-ring material. Teflon®, Viton® and Vespel® are registered trademarks of E.I. du Pont de Nemours and Company.



SPRING LOADED

TESCOM 54-2700 Series high flow backpressure regulator. The soft seat allows for hydraulic or pneumatic service. Optional with air load for use with the TESCOM ER5000 Electropneumatic Controller.

Applications

- Process control
- High flow pump discharge control
- Hydraulic test stands

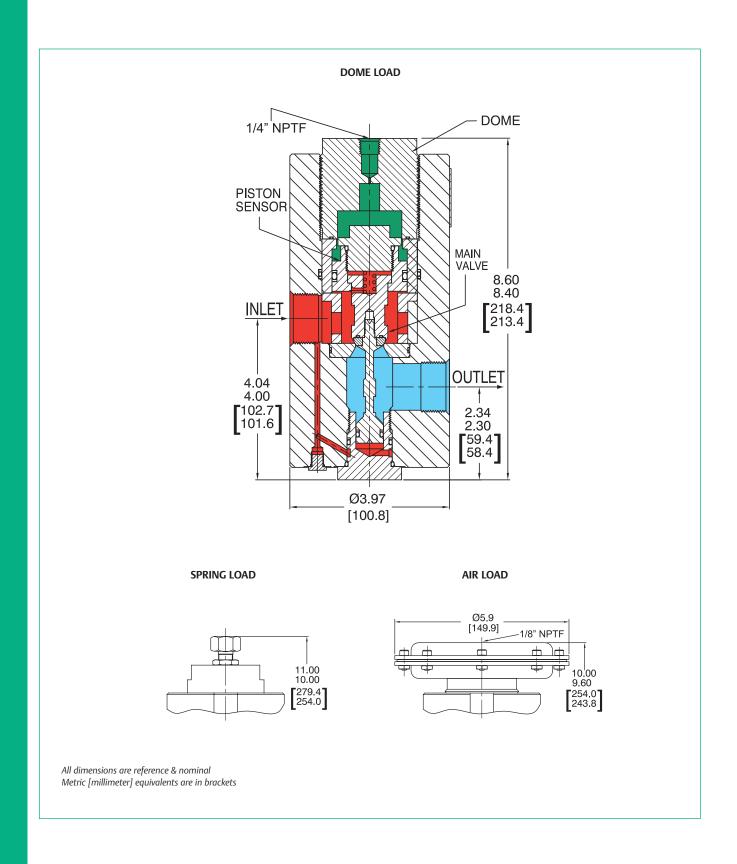
Features and Benefits

- Available in air, dome, and spring loaded versions
- Compatible with TESCOM ER5000 Electropneumatic Controller (air load only)
- High flow: $C_V = 5.0$
- 500 or 5500 psig / 34.5 or 379 bar maximum controlled pressure range



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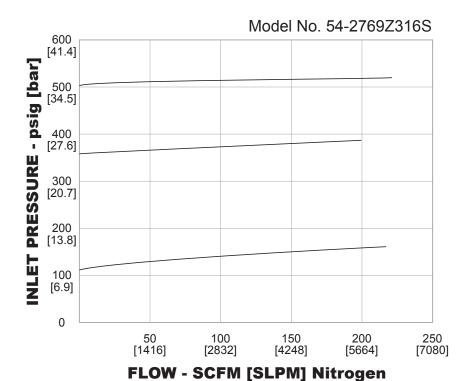
54-2700 Series Regulator Drawing





54-2700 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.



INLET PRESSURE - psig [bar] Model No. 54-27292212D 400 [27.6] 300 [20.7] 200 [13.8] 100 [6.9] 0 1600 [45,312] 400 800 1200 2000 [11,328] [22,656] [56,640] [33,984]







54-2700 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:

54-27	2	9	Z			2	16	Α
BASIC SERIES	BODY MATERIAL	CONTROL PRESSURE	SOFT GOODS MATERIAL			INLET AND OUTLET	PORT	LOADING
			O-RINGS	SEAT	TEMPERATURE	PORT TYPE	SIZE	OPTIONS
54-27	2 – 303 Stainless Steel	9 – 500 psig / 34.5 bar (5500 psig / 379 bar	T – Viton®	Glass Filled Peek	-15°F to 300°F -26°C to 149°C	1 – SAE* 2 – NPTF	16 – 1"	A – Air D – Dome
	6 – 316 Stainless Steel	for dome load only)	Z – Ethylene Propylene	Glass Filled Peek	-40°F to 250°F -40°C to 121°C	3 – MS33649		S – Spring
			D – Buna-N	Glass Filled Peek	-40°F to 165°F -40°C to 74°C	*Body diamete	r is 4.50"	
			V – Viton®	Vespel® SP1	-15°F to 300°F -26°C to 149°C			

