

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)

$C_v = 5.0$



SPRING LOADED

MEDIA CONTACT MATERIALS

Body

303 and 316 Stainless Steel

Seat

Glass Filled Peek, Vespel® SP1

O-Rings

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.

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 ER3000 Electropneumatic Controller.

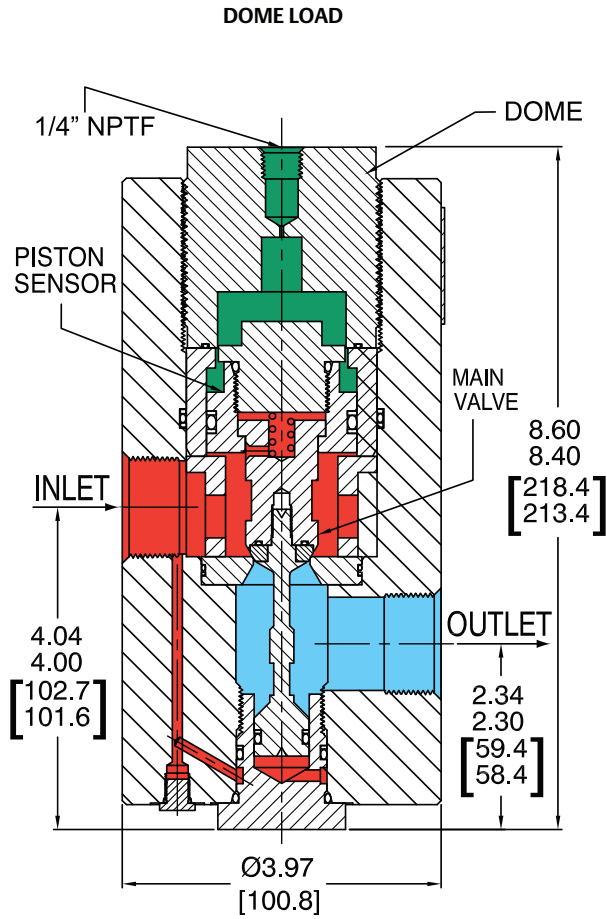
Applications

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

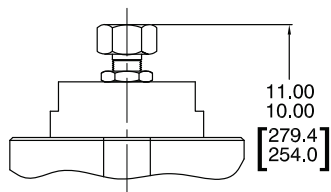
Features and Benefits

- Available in air, dome, and spring loaded versions
- Compatible with TESCOM ER3000 Electropneumatic Controller (air load only)
- High flow: $C_v = 5.0$
- 500 or 5500 psig / 34.5 or 379 bar maximum controlled pressure range

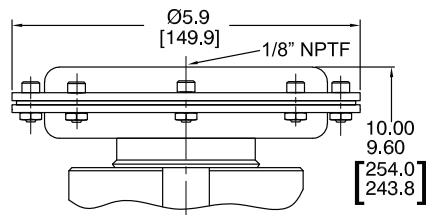
54-2700 Series Regulator Drawing



SPRING LOAD



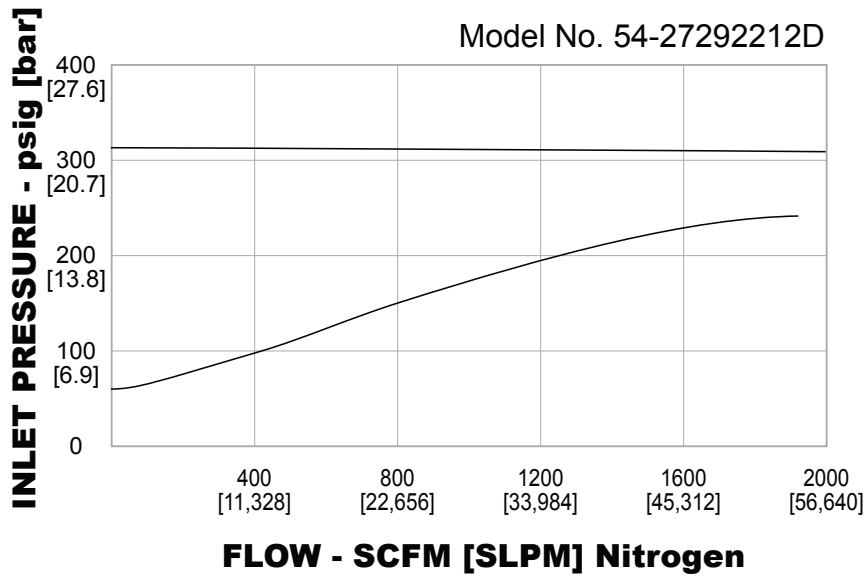
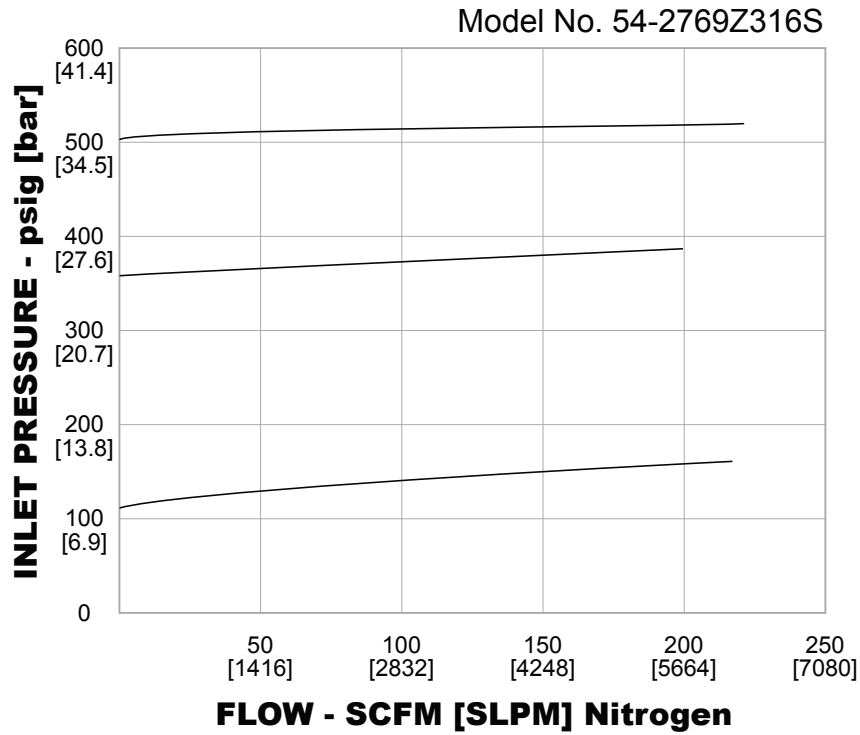
AIR LOAD



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

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.



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 A

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

*Body diameter is 4.50"