54-2) 00 SERIES

D54271905X012

Regulators - Relief / Backpressure

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: 5500 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 Stainless Steel and 316 Stainless Steel **Seat**

Glass Filled Peek, Polyimide (Vespel[®] SP21)

O-Rings

Nitrile, Buna-N, FKM (Viton®-A), Ethylene Propylene

Back-up Rings

PTFE

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 ER5000 Electropneumatic Controller.

Applications

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

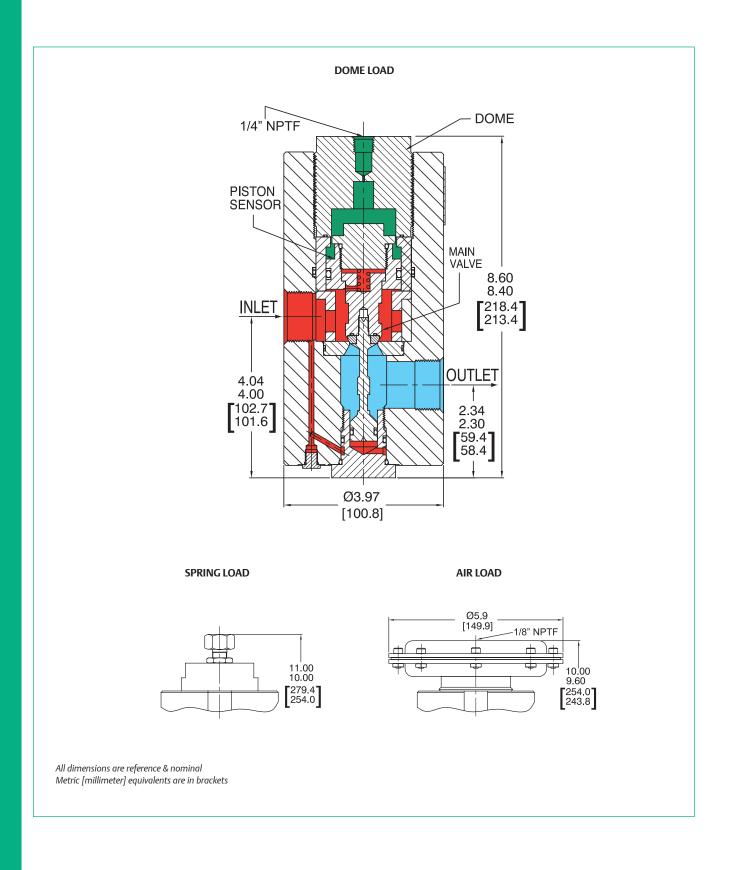
Features and Benefits

- 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



54-2) 00 SERIES

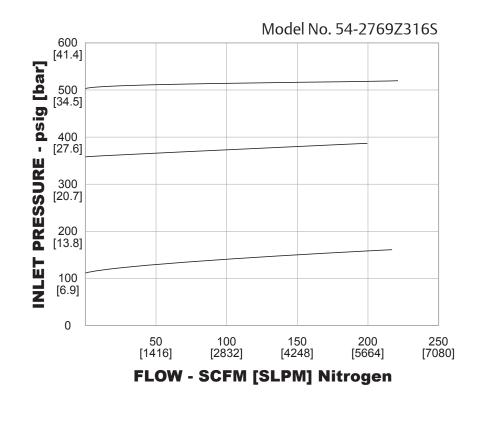
54-2700 Series Regulator Drawing

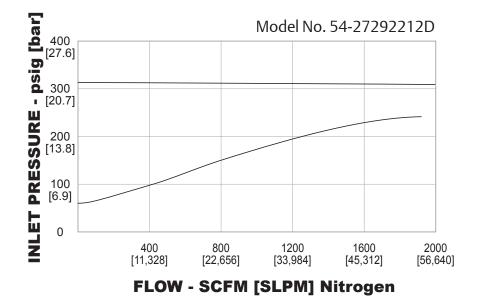




54-2700 Series Regulator Flow Charts

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.







54-2) 00 SERIES

54-2700 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:

54-27	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 6 – 316 Stainless Steel	9 – 500 psig / 34.5 bar (5500 psig / 379 bar for dome load only)	T – FKM (Viton®-A) Z – Ethylene Propylene D – Nitrile, Buna-N V – FKM (Viton®-A)	Glass Filled Peek Glass Filled Peek Glass Filled Peek Polyimide (Vespel® SP21)	-15°F to 300°F -26°C to 149°C -40°F to 250°F -40°C to 121°C -40°F to 165°F -40°C to 74°C -15°F to 300°F -26°C to 149°C	1 – SAE* 2 – NPTF 3 – MS33649 *Body diameter	16 – 1" ∵ <i>is 4.50</i> "	A – Air D – Dome S – Spring

