

# 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 Temperature<sup>1</sup>

-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-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

<sup>1</sup>. 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.

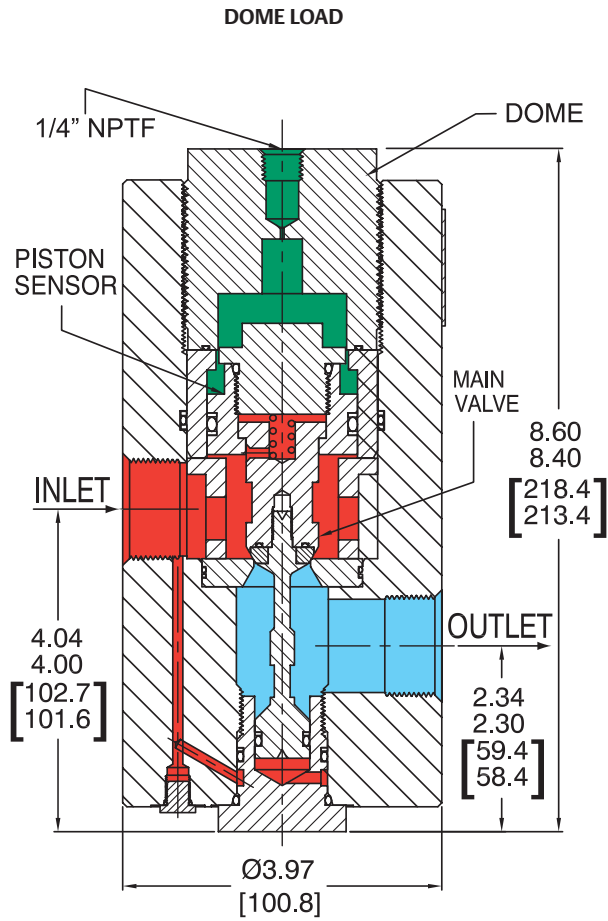
### Applications

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

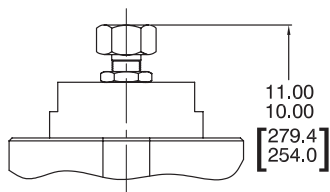
### Features and Benefits

- 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

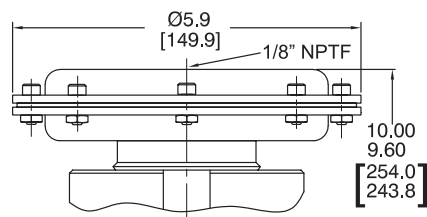
54-2700 Series Regulator Drawing



SPRING LOAD



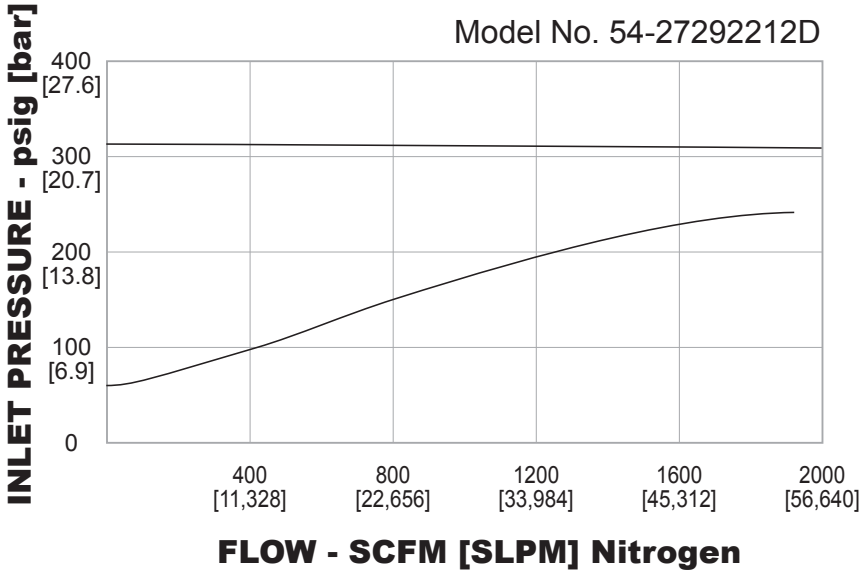
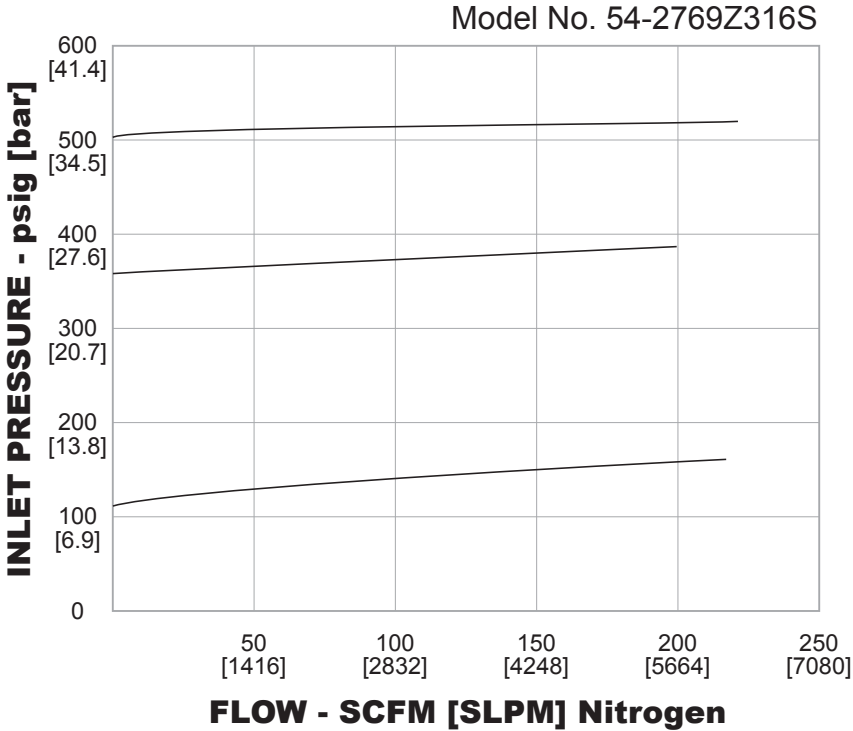
AIR LOAD



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](http://www.tescom.com).



## 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:

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 6 – 316 Stainless Steel	9 – 500 psig / 34.5 bar (5500 psig / 379 bar for dome load only)	T – Viton® Z – Ethylene Propylene D – Buna-N V – Viton®	Glass Filled Peek Glass Filled Peek Glass Filled Peek Vespel® SP1	-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	16 – 1"	A – Air D – Dome S – Spring
						*Body diameter is 4.50"		



**WARNING!** Do not attempt to select, install, use or maintain this product until you have read and fully understood the *TESCOM Safety, Installation and Operation Precautions*.

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