## TESCOM

## 54-2300 Series Regulators - Relief / Backpressure

#### D54231641X012

#### **Specifications**

For other materials or modifications, please consult TESCOM.

#### **OPERATING PARAMETERS**

Pressure rating per criteria of ANSI/ASME B31.3

#### Maximum Inlet Pressure Spring and Dome Loaded: 5000 psig / 345 bar

Air Actuated: 10,000 psig / 690 bar

**Control Pressure Ranges** 1000, 1500, 2500, 3500, 5000 and 10,000 psig 69.0, 103, 172, 241, 345 and 690 bar

**Design Proof Pressure** 150% of maximum rated

Leakage 2 drops/min at 150 S.U.S. at 2500 psig / 172 bar

**Operating Temperature (media)**<sup>1</sup> -40°F to 165°F / -40°C to 74°C

Flow Capacity  $C_V = 1.6$ 

#### MEDIA CONTACT MATERIALS

#### Body

303 or 316 Stainless Steel

Seat, Poppet and Sensor 17-4 PH Stainless Steel

**O-Rings** Buna-N, Viton<sup>®</sup>, Ethylene Propylene or Polyurethane

Back-up Rings PTFE

Bonnet (Spring load only) 303 Stainless Steel

Remaining Parts 300 Stainless Steel

#### OTHER

Cleaning CGA 4.1 and ASTM G93

Weight

Spring and Dome Loaded: 15 lbs / 6.8 kg Air Actuated: 30 lbs / 13.6 kg

1. Operating temperature range dependent on o-ring material.

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



DOME LOADED

SPRING LOADED

TESCOM 54-2300 Series backpressure hydraulic regulator is capable of flows from 5-50 GPM and is available in air load for use with the TESCOM ER3000 Electropneumatic Controller.

### Applications

- Hydraulic test stands
- Process control

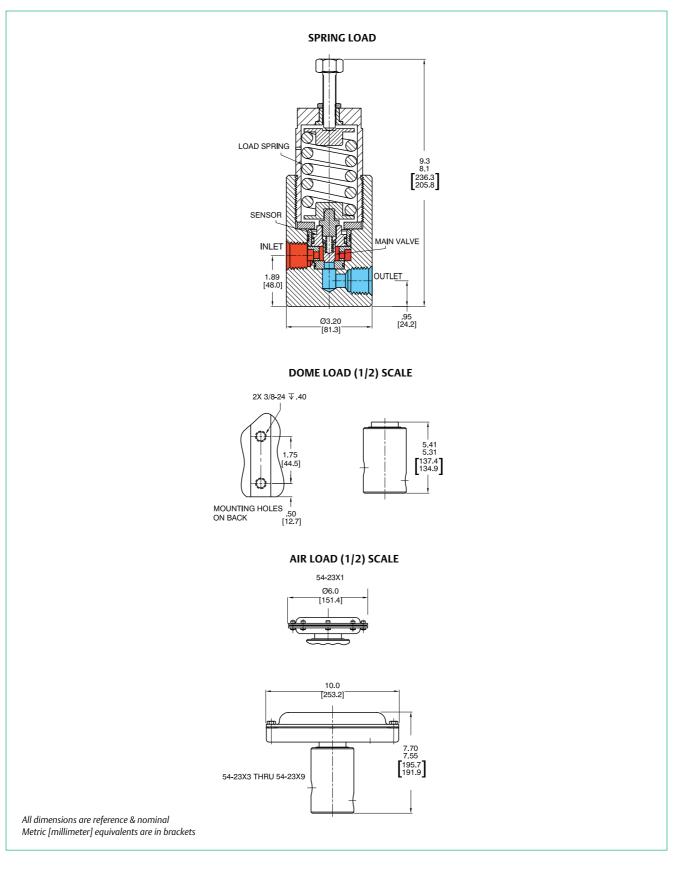
### **Features and Benefits**

- Wear rings available for non-lubricating media
- Control pressure up to 10,000 psig / 690 bar
- Flow Capacity C<sub>V</sub> = 1.6
- Excellent crack-to-reseat ratio
- Hardened metal-to-metal seats for heavy duty service
- Choice of spring, dome and air actuated loading
- Standard side mounting holes



# **TESC**ØM<sup>®</sup>

## 54-2300 Series Regulator Drawing

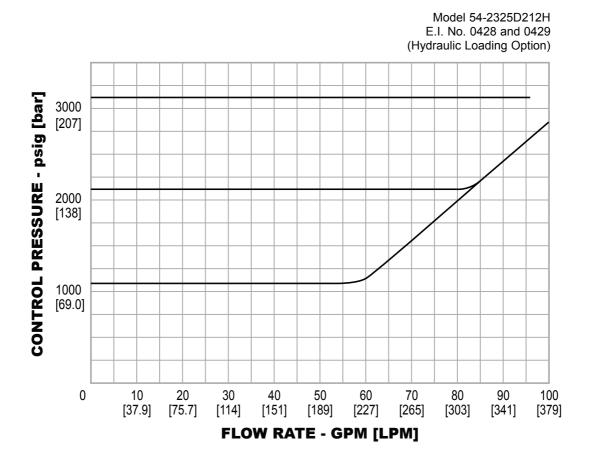




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### 54-2300 Series Regulator Flow Chart

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.





# TESCOM

# 54-2300 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:

54-23	2 BODY MATERIAL	1 CONTROL PRESSURE RANGES	T SOFT GOODS MATERIAL				2	12	S
BASIC SERIES									
			O-RIN DYNAMIC	gs Static	SEAT	TEMPERATURE (MEDIA ONLY)	PORT TYPE	PORT SIZE	loading Method
54-23	<ul> <li>2 - 303 Stainless Steel</li> <li>6 - 316 Stainless Steel</li> </ul>	<ul> <li>0 - 20-1000 psig         <ul> <li>1.4-69.0 bar                 (spring only)</li> <li>1 - 20-1500 psig                 1.4-103 bar                 (spring and air only)</li> </ul> </li> <li>3 - 50-3500 psig                 3.4-241 bar                 (spring only)                 50-2500 psig                 3.4-172 bar                 (air only 30:1*)</li> <li>5 - 200-5000 psig                 13.8-345 bar                 (spring and dome                 1:1 and air 75:1)</li> <li>9 - 250-10,000 psig                 17.2-690 bar                      (air only 125:1*)</li> </ul>	<ul> <li><b>D</b> – Buna-N</li> <li><b>T</b> – Viton<sup>®</sup></li> <li><b>U</b> – Polyurethane</li> <li><b>Z</b> – Ethylene Propylene</li> </ul>	Buna-N Viton® Polyurethane Ethylene Propylene	17-4 Stainless Steel 17-4 Stainless Steel 17-4 Stainless Steel Steel	-40°F to 165°F -40°C to 74°C -15°F to 300°F -26°C to 149°C -15°F to 125°F -26°C to 52°C -40°F to 225°F -40°C to 107°C	<b>1</b> – SAE <b>2</b> – NPTF	<ul> <li>8 - 1/2"</li> <li>12 - 3/4"</li> <li>is for reference</li> </ul>	<b>S</b> – Spring <b>H</b> – Dome <b>A</b> – Air nce only.

