

**Specifications**

For other materials or modifications, please consult TESCOM.

**OPERATING PARAMETERS**

Pressure rating per criteria of ANSI/ASME B31.3

<b>Maximum Inlet Pressure</b>	15,000 psig / 1034 bar
<b>Controlled Pressure Ranges</b>	0-500, 0-800, 10-1500, 15-2500, 25-4000, 50-6000, 200-10,000, 300-15,000 psig 0-34.5, 0-55.2, 0.69-103, 1.0-172, 1.7-276, 3.4-414, 13.8-690, 20.7-1034 bar
<b>Design Proof Pressure</b>	150% maximum rated
<b>Leakage</b>	Maximum 2 drops/minute at 150 SUS at 2500 psig / 172 bar
<b>Ambient Operating Temperature<sup>1</sup></b>	-15°F to 165°F / -26°C to 74°C
<b>Flow Capacity</b>	C <sub>v</sub> = 0.08
<b>Maximum Operating Torque</b>	40 in-lbs / 4.5 N•m

**MEDIA CONTACT MATERIALS**

<b>Body</b>	316 Stainless Steel
<b>Seat and Poppet</b>	17-4 Stainless Steel
<b>O-Ring</b>	See Part Number Selector
<b>Back-up Ring</b>	<b>Inlet Pressure Ranges</b> 2500-10,000 psig / 172-690 bar: Teflon® 15,000 psig / 1034 bar: CTFE
<b>Valve Seal</b>	Vespel®
<b>Sensor Seal</b>	<b>Inlet Pressure Ranges</b> 500-10,000 psig / 34.5-690 bar: CTFE 15,000 psig / 1034 bar: Vespel®
<b>Remaining Parts</b>	300 Series Stainless Steel

**OTHER**

<b>Cleaning</b>	CGA 4.1 and ASTM G93
<b>Weight</b>	5 lbs / 2.3 kg

1. For extended temperatures from -40°F to 400°F / -40°C to 204°C, consult TESCOM.

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AIR LOADED



SPRING LOADED



DOME LOADED

TESCOM 54-2100 Series backpressure regulator is suitable for 15,000 psig / 1034 bar liquid applications. Modifications are also available for 20,000 psig / 1379 bar and 30,000 psig / 2068 bar. Hardened Stainless Steel seat and stem provide excellent wear resistance in harsh applications.

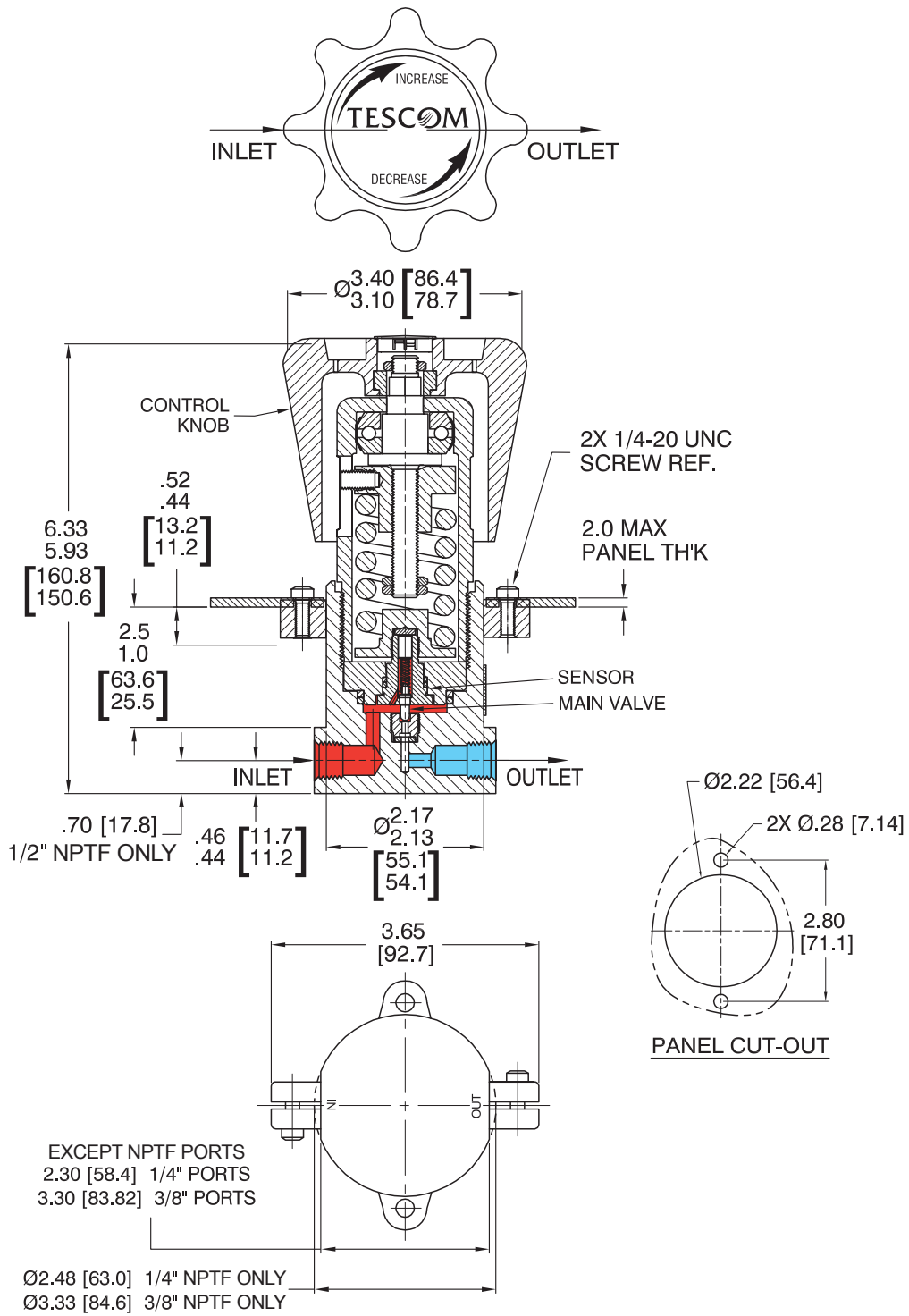
**Applications**

- Pump discharge pressure control
- Chemical injection
- Burst testing

**Features and Benefits**

- Accuracy ± 1% of control pressure range
- Easily adjusted, low torque handknob control, dome and air loaded versions are available
- Hardened Stainless Steel seats
- Safe and reliable piston-style sensor
- Panel mounting is standard
- Compatible with TESCOM's air actuator and ER5000 Electropneumatic Controllers

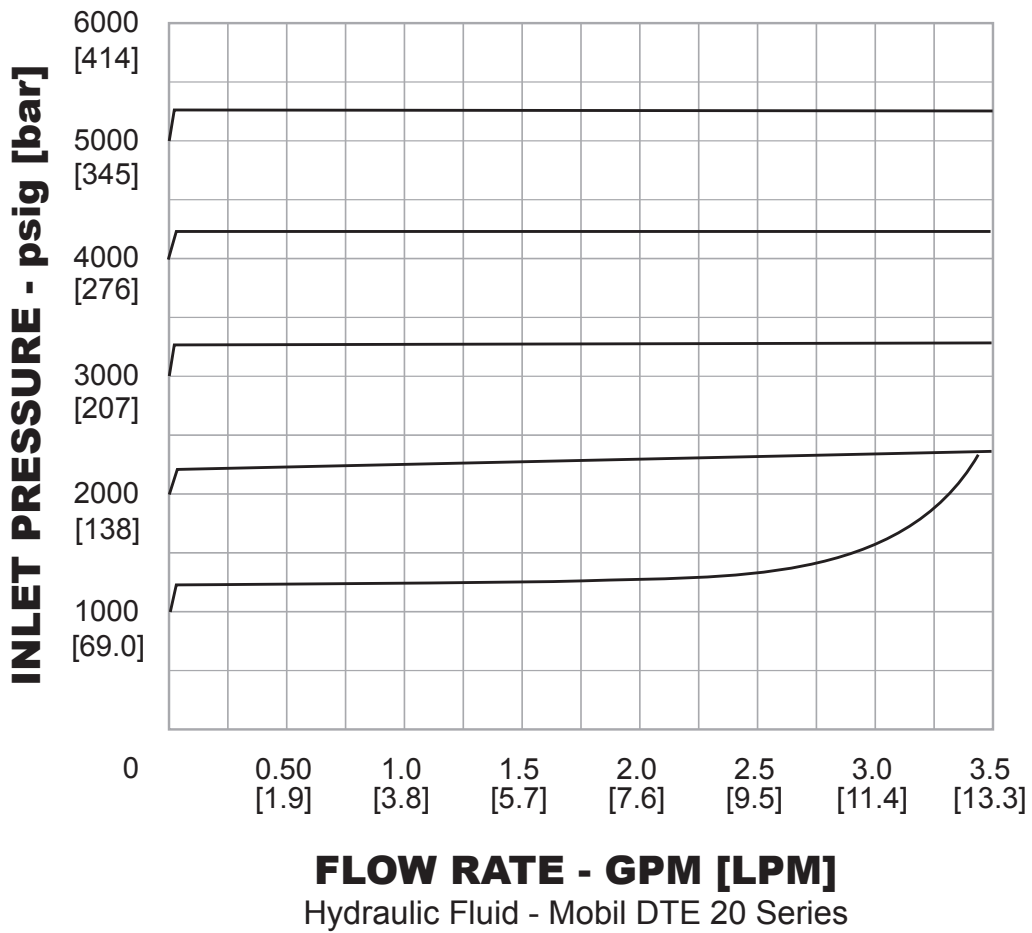
54-2100 Series Regulator Drawing



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

### 54-2100 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](http://www.tescom.com).



## 54-2100 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:

BASIC SERIES	BODY MATERIAL	INLET PRESSURE	SOFT GOODS MATERIAL			INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	LOADING
			DYNAMIC	STATIC	SEAT			
54-21	6 – 316 Stainless Steel	0 – 300-15,000 psig 20.7-1034 bar <sup>1</sup> <i>(Spring only)</i> 1 – 200-10,000 psig 13.8-690 bar <sup>2</sup> 2 – 50-6000 psig 3.4-414 bar <i>(Spring and Air only)</i> 3 – 25-4000 psig 1.7-276 bar <i>(Spring only)</i> 4 – 15-2500 psig 1.0-172 bar <i>(Spring and Air only)</i> 5 – 10-1500 psig 0.69-103 bar <i>(Spring and Air only)</i> 6 – 0-800 psig 0-55.2 bar <i>(Spring only)</i> 7 – 0-500 psig 0-34.5 bar <i>(Spring and Dome only)</i>	<b>D</b> – Buna-N <b>T</b> – Viton® <b>V</b> – Kalrez® <b>Z</b> – Ethylene Propylene	Buna-N Viton® Kalrez® Ethylene Propylene	17-4 Stainless Steel 17-4 Stainless Steel 17-4 Stainless Steel 17-4 Stainless Steel	1 – SAE 2 – NPTF 3 – MS33649 4 – High Pressure/Amico 6 – Medium Pressure/Slimline	4 – 1/4" 6 – 3/8" 8 – 1/2" <i>(NPTF/SAE/MS33649 only)</i> 9 – 9/16" <i>(MP/HP only)</i> 12 – 3/4" <i>(MP only)</i>	– Spring <i>(no letter required)</i> H – Dome A – Air <sup>3</sup>
			For extended temperatures of soft goods material, please consult TESCOM.			1. Available with 1/4" and 3/8" high pressure, 1/4" and 3/8" medium pressure, 1/4" NPTF only 2. Not to be used with 3/8" SAE or 3/8" MS33649 ports 3. 80 psig / 5.5 bar minimum loading pressure needed		