

44-5800 Series

Regulators - Pressure Reducing

D44582012X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure

6000 psig / 414 bar / 41,370 kPa

Maximum Outlet Pressure

0-25, 0-50, 0-100, 0-250, 0-500 psig
0-1.7, 0-3.4, 0-6.9, 0-17.2, 0-34.5 bar
0-172, 0-345, 0-690, 0-1724, 0-3448 kPa

Design Proof Pressure

150% maximum rated

Operating Steam Pressure

650 psig / 44.8 bar

Inlet Proof Pressure

9000 psig / 620 bar

Leakage

Bubble-tight
Diaphragm 2×10^{-8} atm cc/sec He

Operating Temperatures

Maximum Media Temperature: 500°F / 260°C

Maximum Ambient Temperature: 149°F / 65°C

Minimum Ambient Temperature: -4°F / -20°C

Heater Temperature Control: 270° turn

122°F to 572°F / 50°C to 300°C

Heater Temperature Analog Output

4-20 mA / 176°F to 518°F / 80°C to 270°C

Voltage

90-125 VAC / 190-230 VAC, 50/60 Hz

Flow Capacity

$C_v = 0.02$

MEDIA CONTACT MATERIALS

Body

316 Stainless Steel, Monel, or Hastelloy®

Seat

VespeI SP1®

Diaphragm and Spring

Elgiloy®, Hastelloy®

Remaining Parts

316 Stainless Steel, Monel, or Hastelloy®

OTHER

Connections

NPTF

Cleaning

CGA 4.1 and ASTM G93

Weight

Electric: 6.3 lbs / 2.9 kg

Steam: 3.1 lbs / 1.4 kg

VespeI® is a registered trademark of E.I. du Pont de Nemours and Company.

Elgiloy® is a registered trademark of Elgiloy Corp.

Hastelloy® is a registered trademark of Haynes International, Inc.



TESCOM 44-5800 Series offers superior heat transfer technology. With a high tolerance to voltage spikes and high ambient temperatures, this regulator is designed for worldwide applications.

Applications

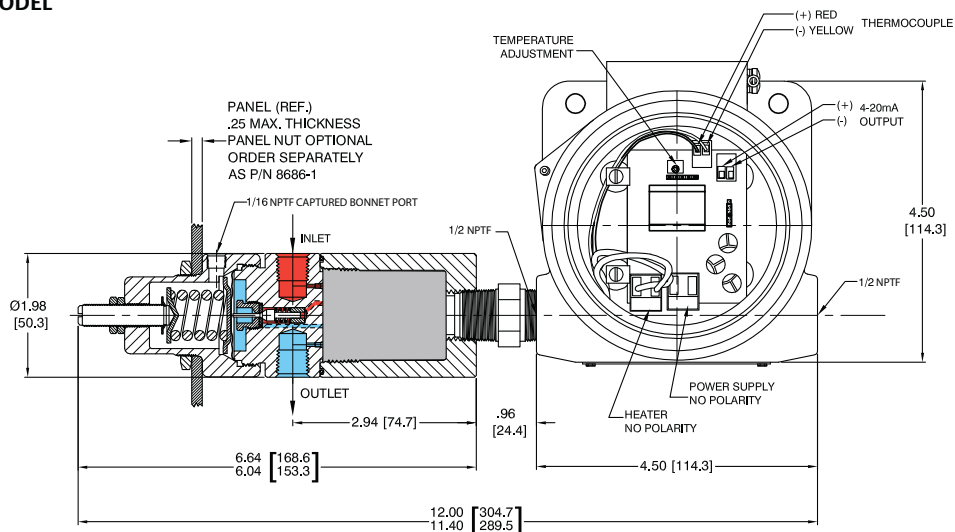
- Liquid petroleum analyzer
- Petrochemical / refinery analyzer
- Sampling systems

Features and Benefits

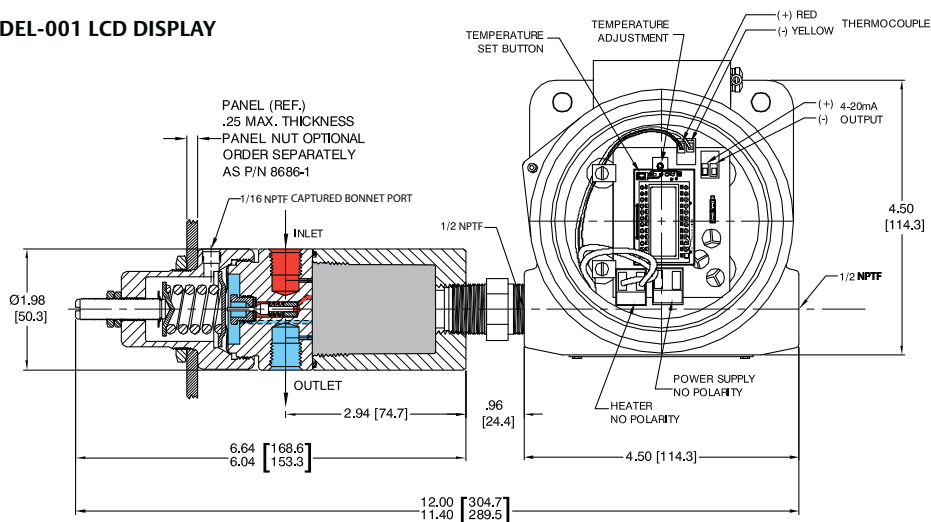
- For worldwide use: Designed for 90-125 VAC / 190-230 VAC, 50/60 Hz
- 4-20 mA analog output for remote temperature monitoring and data acquisition
- Optional LCD temperature display
- Optional heating capacity up to 400 watts for faster response to flow variations
- Optional panel mounting
- Advanced heat transfer technology
- Single turn heater temperature control dial
- CSA, ATEX, and IECEX Certification to T4 Rating
- NACE MR0175/ISO 15156

44-5800 Series Regulator Drawing

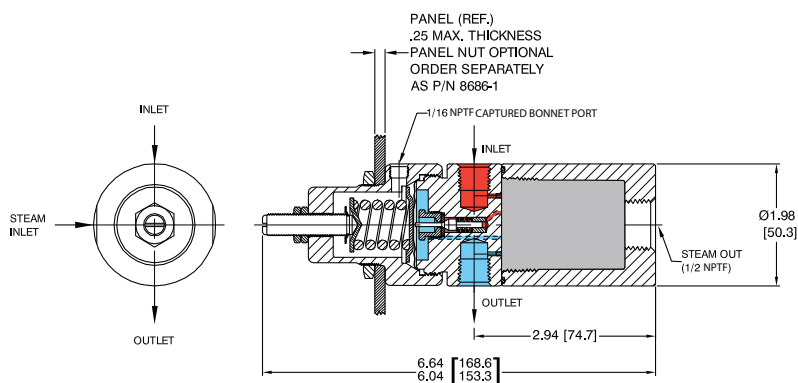
ELECTRIC MODEL



ELECTRIC MODEL-001 LCD DISPLAY



STEAM MODEL

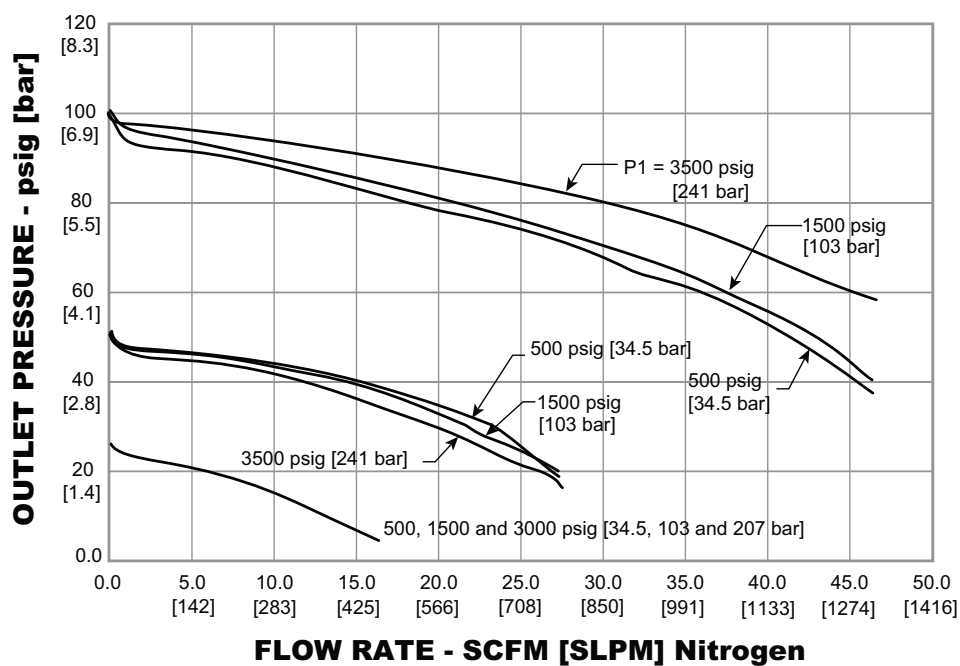
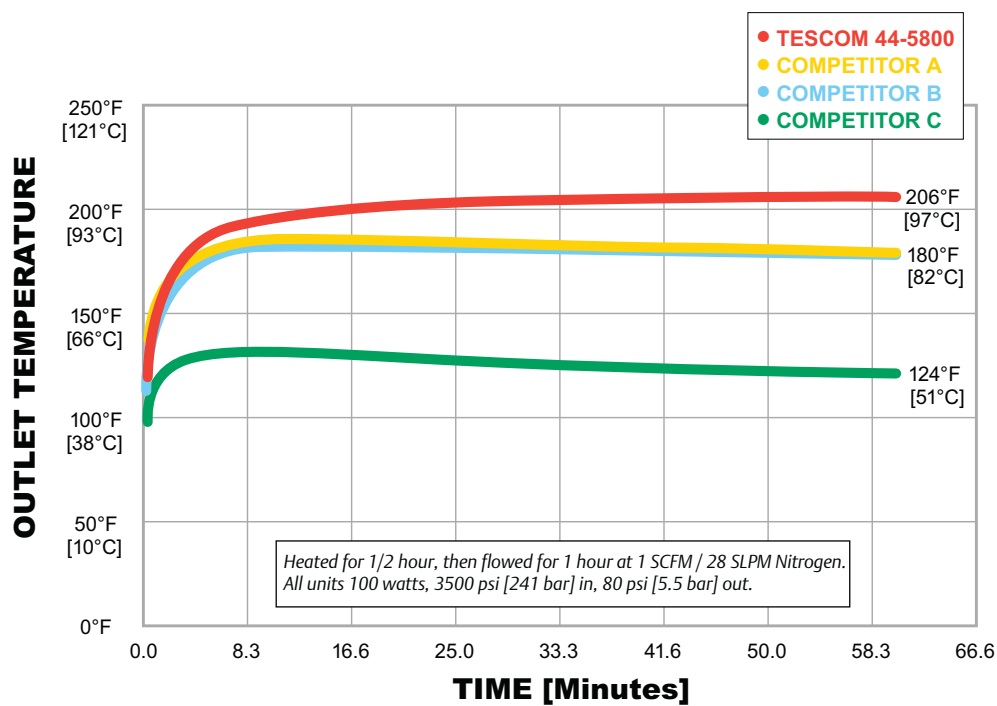


All dimensions are reference & nominal
Metric [millimeter] equivalents are in brackets

Note: Steam in at 90° to process connections (same plane).

44-5800 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.



44-5800 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:

ELECTRIC MODEL

44-58	6				1	D		2	4	1	E
BASIC SERIES	MATERIAL				OUTLET PRESSURE RANGE	HEATER		INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	INLET PRESSURE	VOLTAGE
	BODY	DIAPHRAGM	SPRING	REMAINING PARTS		115 VAC	230 VAC				
44-58	5 – Hastelloy®	Hastelloy®	Elgiloy®	Hastelloy®	0 – 0-25 psig	A – 12.5 WATTS	50 WATTS	2 – NPTF	4 – 1/4"	1 – 6000 psig	E – 115 VAC
	6 – 316	Elgiloy®	Elgiloy®	316	0-1.7 bar	0.10 amps	0.21 amps			414 bar	E1 – 230 VAC
	Stainless Steel			Stainless Steel	0-172 kPa	B – 25 WATTS	100 WATTS			41,370 kPa	
	9 – Monel	Elgiloy®	Elgiloy®	Monel	1 – 0-50 psig	0.21 amps	0.42 amps				
					0-3.4 bar	C – 50 WATTS	200 WATTS				
					0-345 kPa	0.42 amps	0.83 amps				
					2 – 0-100 psig	D – 100 WATTS	400 WATTS				
					0-6.9 bar	0.83 amps	1.67 amps				
					0-690 kPa	E – 200 WATTS					
					3 – 0-250 psig	1.67 amps					
					0-17.2 bar						
					0-1724 kPa						
					4 – 0-500 psig						
					0-34.5 bar						
					0-3448 kPa						

- 001
LCD DISPLAY

STEAM MODEL

44-58	6				1	-	2	4	1	S
BASIC SERIES	MATERIAL				OUTLET PRESSURE RANGE	INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	INLET PRESSURE		
	BODY	DIAPHRAGM	SPRING	REMAINING PARTS						
44-58	5 – Hastelloy®	Hastelloy®	Elgiloy®	Hastelloy®	0 – 0-25 psig 0-1.7 bar 0-172 kPa	2 – NPTF	4 – 1/4"	1 – 6000 psig 414 bar 41,370 kPa		
	6 – 316	Elgiloy®	Elgiloy®	316						
	Stainless Steel			Stainless Steel						
	9 – Monel	Elgiloy®	Elgiloy®	Monel	1 – 0-50 psig 0-3.4 bar 0-345 kPa					
									2 – 0-100 psig 0-6.9 bar 0-690 kPa	
										3 – 0-250 psig 0-17.2 bar 0-1724 kPa
					4 – 0-500 psig 0-34.5 bar 0-3448 kPa					

STEAM