

20-1200 Series

Regulators - Pressure Reducing

D20121935X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure	5000 psig / 345 bar
Maximum Outlet Pressure	450 psig / 31.0 bar
Leakage	Bubble-tight
Operating Temperature	-40°F to 185°F / -40°C to 85°C
Flow Capacity	C _v = 0.50

MEDIA CONTACT MATERIALS

Body	Aluminum 6061-T6 with Electroless Nickel Plating, 316 Stainless Steel
Seat	Vespel®
O-Rings	Buna-N
Main Valve	316 Stainless Steel
Sensor	Aluminum 6061-T6
Spring	302 Stainless Steel
Filter	10 micron, 316 Stainless Steel
Remaining Parts	300 Series Stainless Steel, Teflon®, 18-8 Stainless Steel

OTHER

Cleaning	CGA 4.1 and ASTM G93
Connections	1/4", 3/8", 1/2" NPTF, and SAE
Weight (approximate)	1.4 lbs / 0.6 kg

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TESCOM 20-1200 Series lightweight, aluminum constructed preset regulator offers an integrated 10 micron filter designed for hydrogen service. NGV 3.1 and TUV batch approved for onboard hydrogen fuel cell vehicles. Excellent choice for other OEM applications.

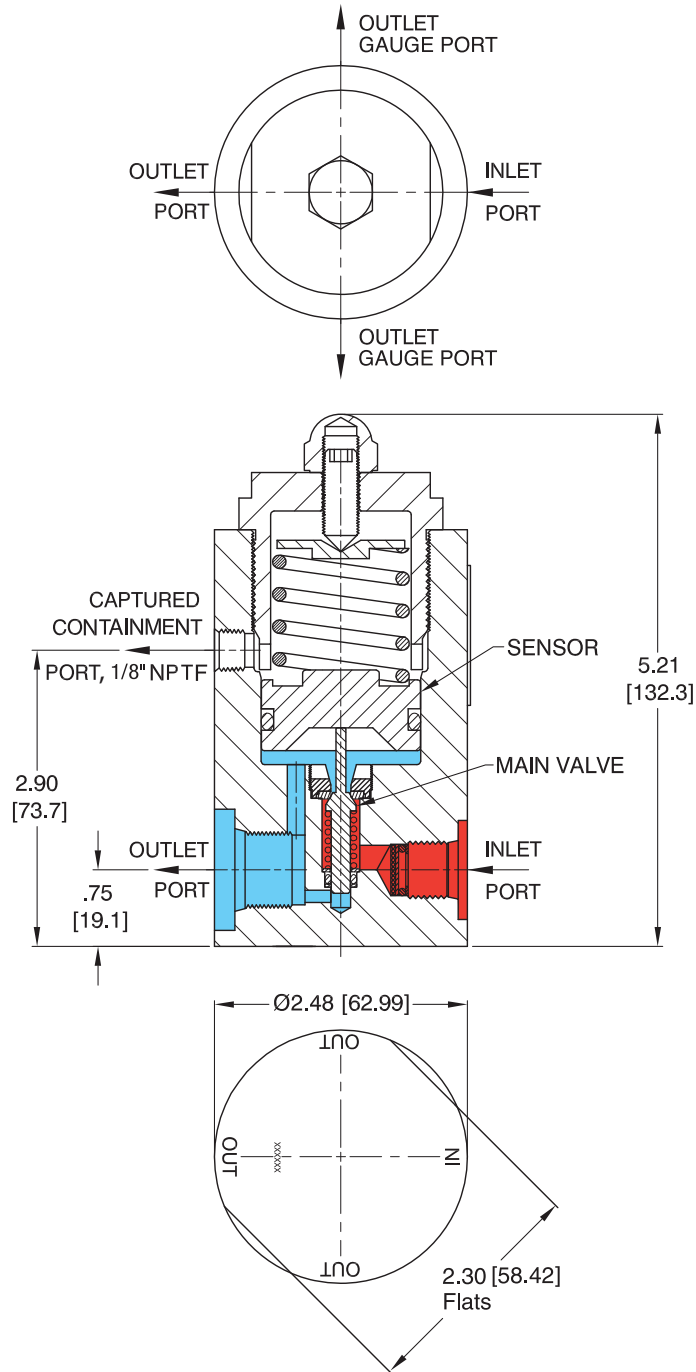
Application

- Hydrogen fuel cell vehicles

Features and Benefits

- Piston-sensed design provides a long service life and enhanced safety
- High flow and minimal flow droop
- Balanced valve design minimizes supply pressure effect
- Lightweight, precision machined aluminum construction
- Used in diverse applications for a broad range of temperatures, flows, and pressures
- Wide variety of preset outlet pressures are available
- 10 micron, 316 Stainless Steel filter

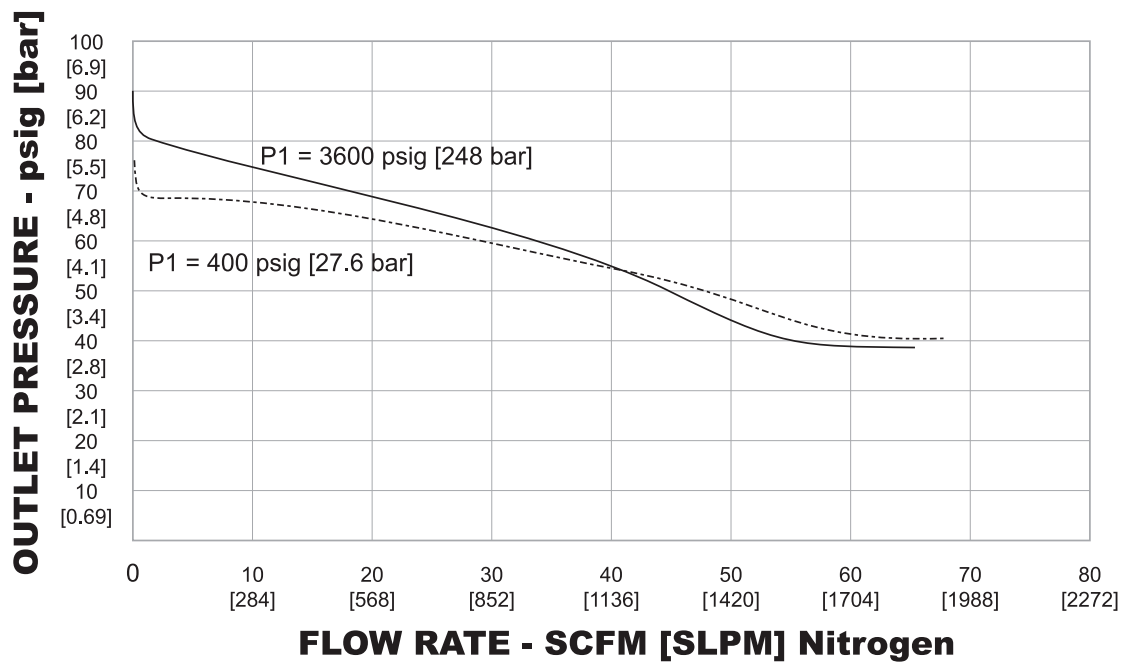
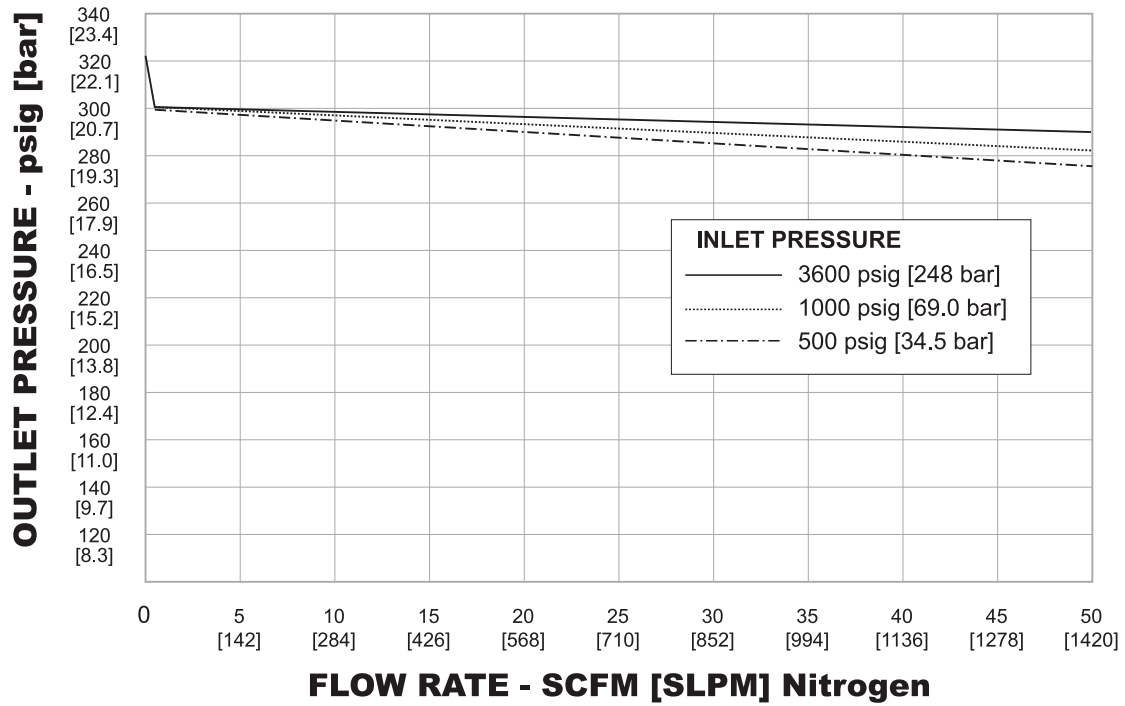
20-1200 Series Regulator Drawing



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

20-1200 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.



20-1200 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:

20-12	3	2	-	1	9	01
BASIC SERIES	BODY MATERIAL	OUTLET PRESSURE RANGES	PORT TYPE	INLET AND OUTLET SIZE	SET PRESSURE	
20-12	3 – Electroless Nickel-Plated 6061-T6 Aluminum 6 – 316 Stainless Steel	1 – 0-75 psig 0-5.2 bar 2 – 90-190 psig 6.2-13.1 bar 3 – 101-320 psig 7.0-22.1 bar 4 – 200-450 psig 13.8-31.0 bar	1 – SAE 2 – NPTF	4 – 1/4" inlet 1/4" outlet 1/4" gauge 7 – 3/8" inlet 3/8" outlet 1/4" gauge 9 – 3/8" inlet 1/2" outlet 3/8" gauge	01 – 150 psig 10.3 bar 02 – 300 psig 20.7 bar 03 – 400 psig 27.6 bar 04 – 175 psig 12.1 bar 05 – 50 psig 3.4 bar 06 – 125 psig 8.6 bar 07 – 170 psig 11.7 bar 08 – 55 psig 3.8 bar 09 – 100 psig 6.9 bar 10 – 70 psig 4.8 bar 11 – 435 psig 30.0 bar 12 – 160 psig 11.0 bar	13 – 90 psig 6.2 bar 14 – 141 psig 9.7 bar* 15 – 40 psig 2.8 bar 16 – 220 psig 15.2 bar 17 – 60 psig 4.1 bar 18 – 290 psig 20.0 bar 19 – 218 psig 15.0 bar 20 – 45 psig 3.1 bar 21 – 200 psig 13.8 bar 22 – 80 psig 5.5 bar 23 – 320 psig 22.1 bar

*Pressure at 2.5 SCFM