

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 (Aluminum body)
10,000 psig / 690 bar (Stainless Steel body)

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.

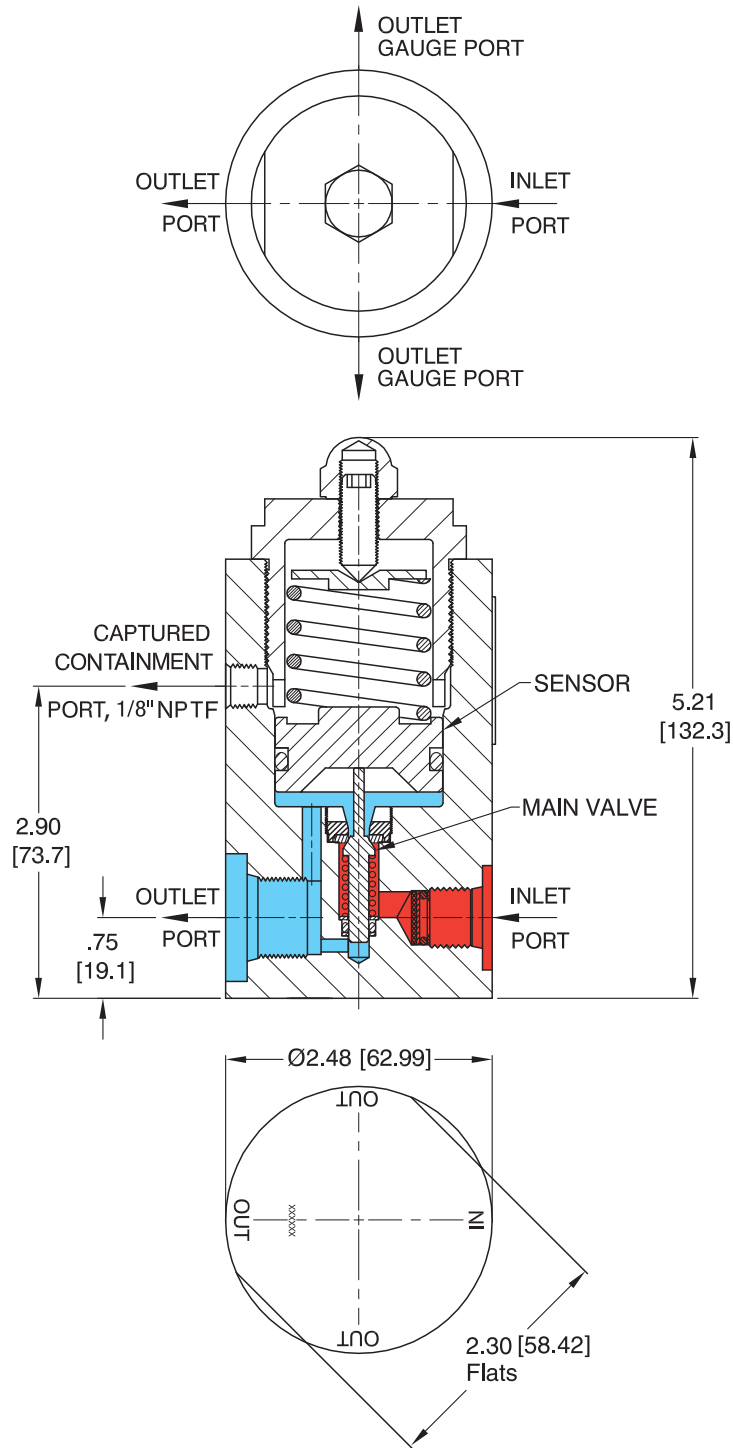
Application

- 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

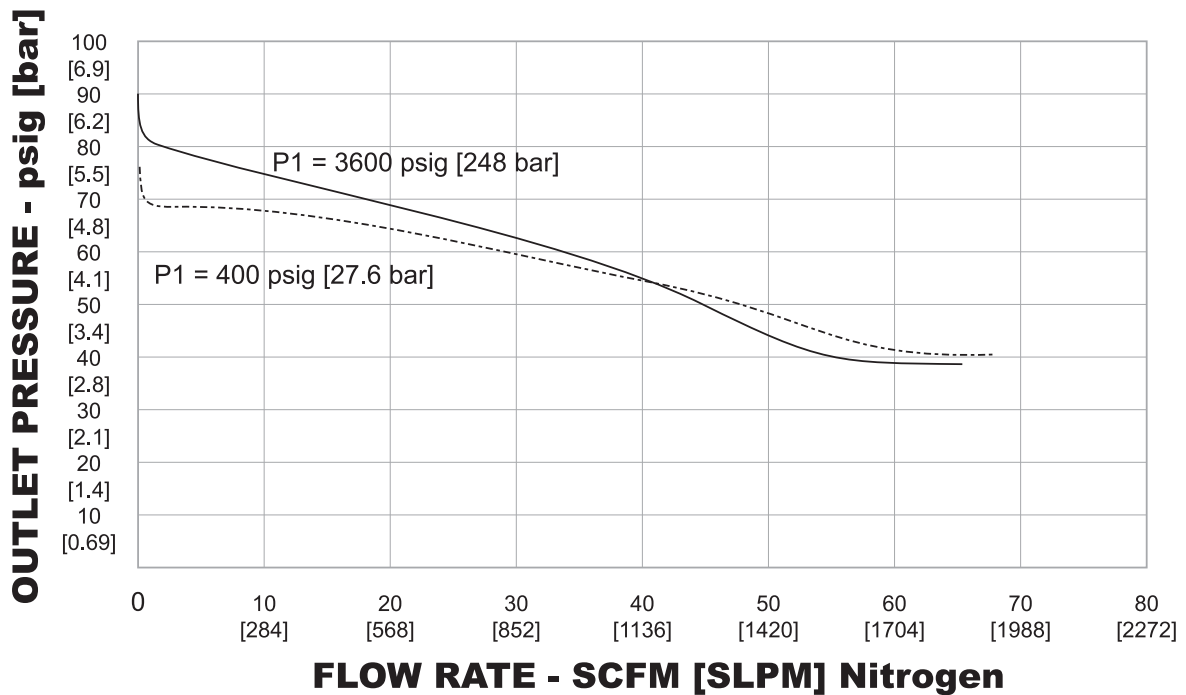
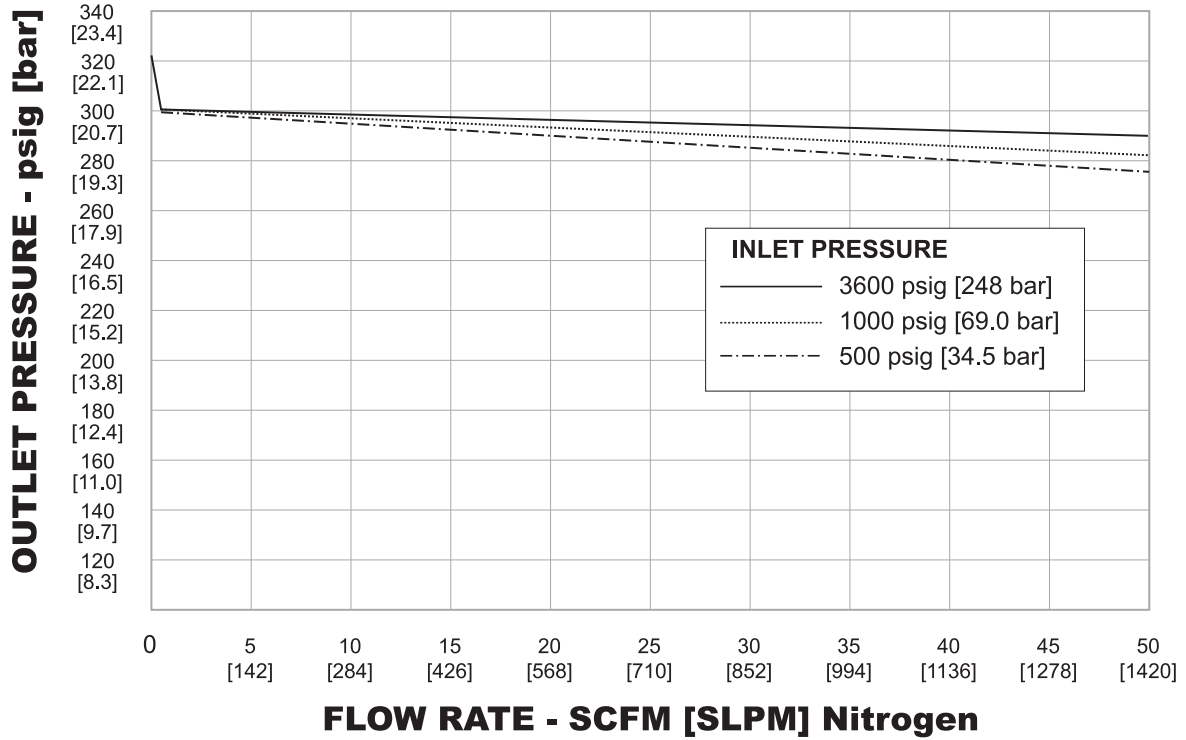
20-1200 Series Regulator Drawing



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	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	13 – 90 psig 6.2 bar
		2 – 90-190 psig 6.2-13.1 bar			02 – 300 psig 20.7 bar	14 – 141 psig 9.7 bar*
		3 – 101-320 psig 7.0-22.1 bar			03 – 400 psig 27.6 bar	15 – 40 psig 2.8 bar
		4 – 200-450 psig 13.8-31.0 bar			04 – 175 psig 12.1 bar	16 – 220 psig 15.2 bar
					05 – 50 psig 3.4 bar	17 – 60 psig 4.1 bar
					06 – 125 psig 8.6 bar	18 – 290 psig 20.0 bar
					07 – 170 psig 11.7 bar	19 – 218 psig 15.0 bar
					08 – 55 psig 3.8 bar	20 – 45 psig 3.1 bar
					09 – 100 psig 6.9 bar	21 – 200 psig 13.8 bar
					10 – 70 psig 4.8 bar	22 – 80 psig 5.5 bar
					11 – 435 psig 30.0 bar	23 – 320 psig 22.1 bar
					12 – 160 psig 11.0 bar	

*Pressure at 2.5 SCFM

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*.