

# 20-1200 Series

## Regulators - Pressure Reducing

### 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.

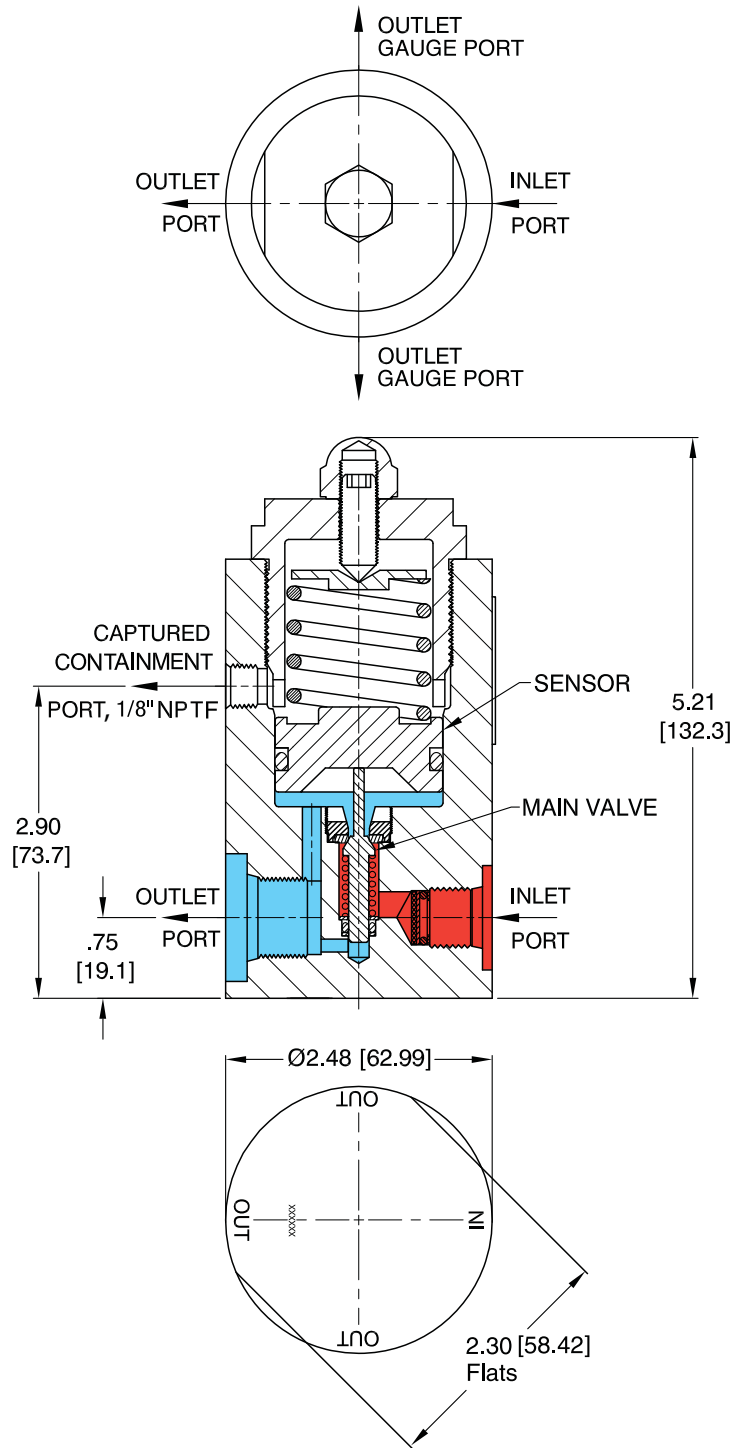
### Application

- 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

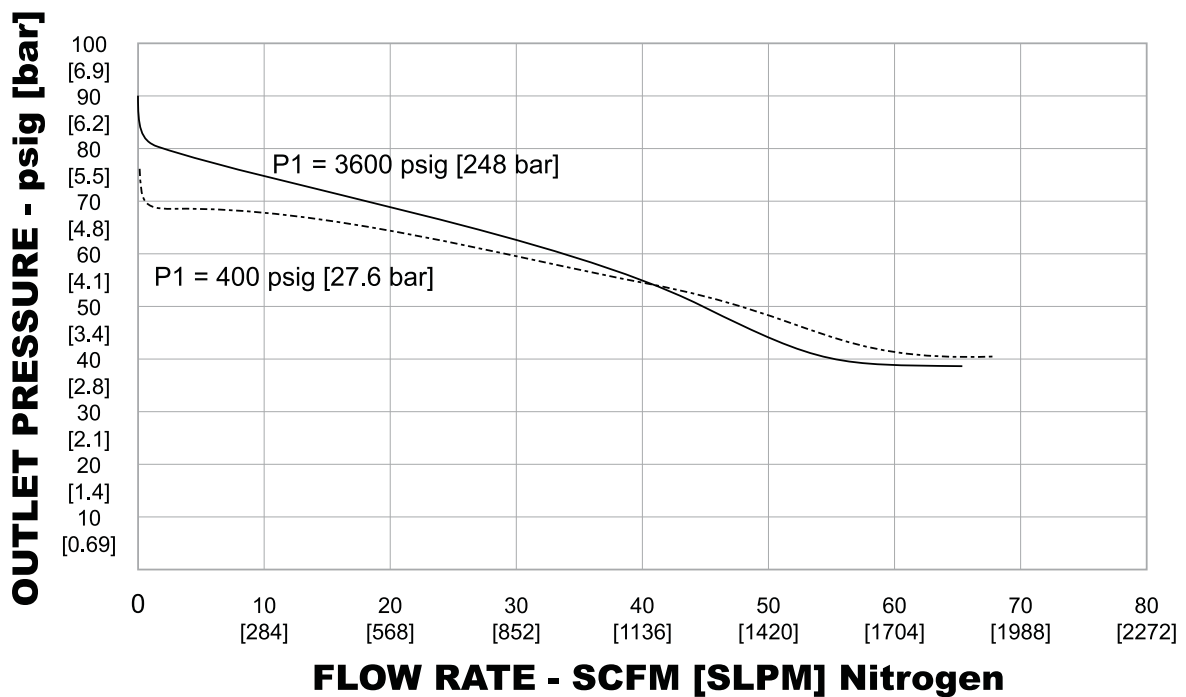
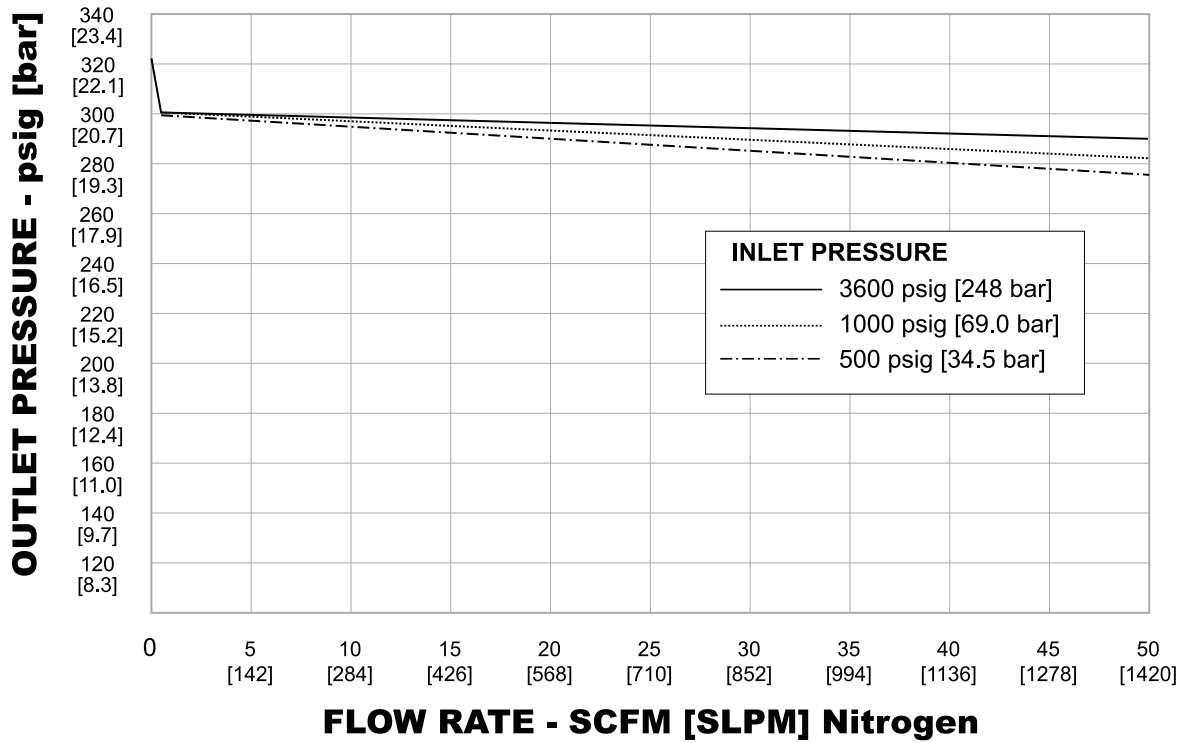
20-1200 Series Regulator Drawing



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

\*Pressure at 2.5 SCFM