

959 Series

Tied Diaphragm Single Stage Regulator

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

Customer Value Proposition:

The 959 Series Regulator is a high pressure, tied diaphragm regulator.

The 959 Series tied diaphragm regulator provides shut off of corrosive or hazardous gases if a leak across the seat occurs. The added unique compression member loading eliminates threads in the wetted area, thus reducing particle entrapment.

For subatmospheric pressure control, a negative pressure 959 regulator (NPR959) is available.



Contact Information:

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Product Features:

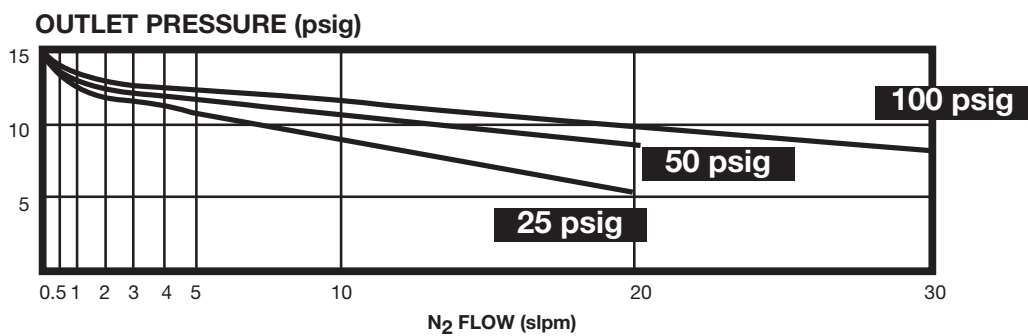
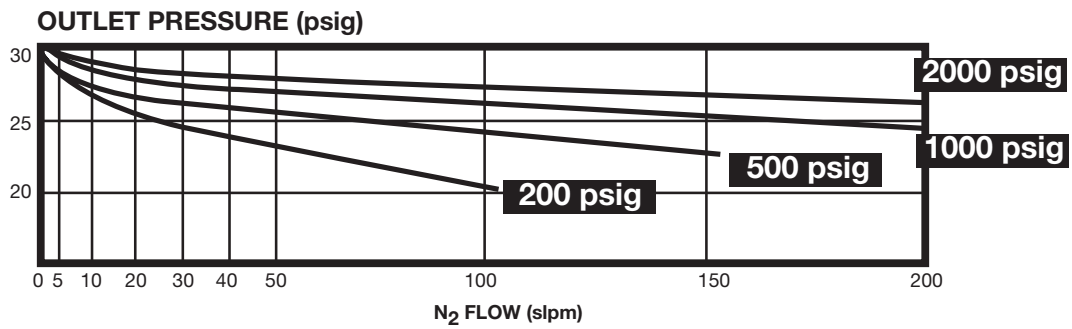
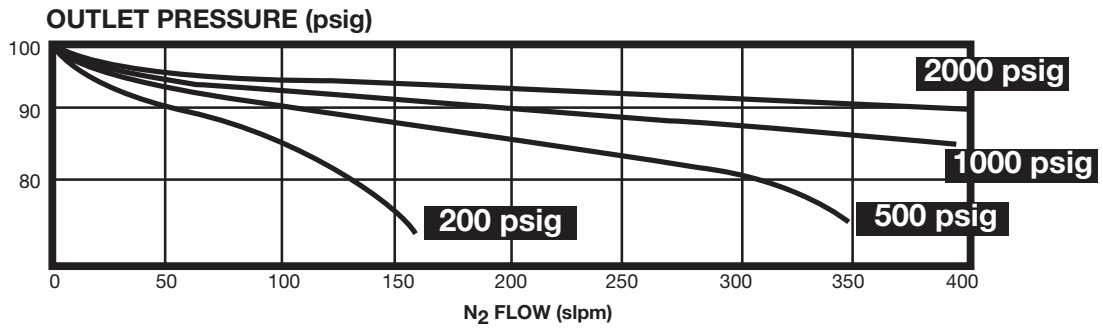
- Tied Diaphragm for added safety.
- Unique patented compression member loads seal to body without requiring a threaded nozzle or additional seals to atmosphere.
- Metal-to-metal diaphragm-to-body seal assures high leak integrity.
- Adjustment range spring may be replaced without breaking diaphragm seal to body and exposing the wetted area to contamination.



ENGINEERING YOUR SUCCESS.

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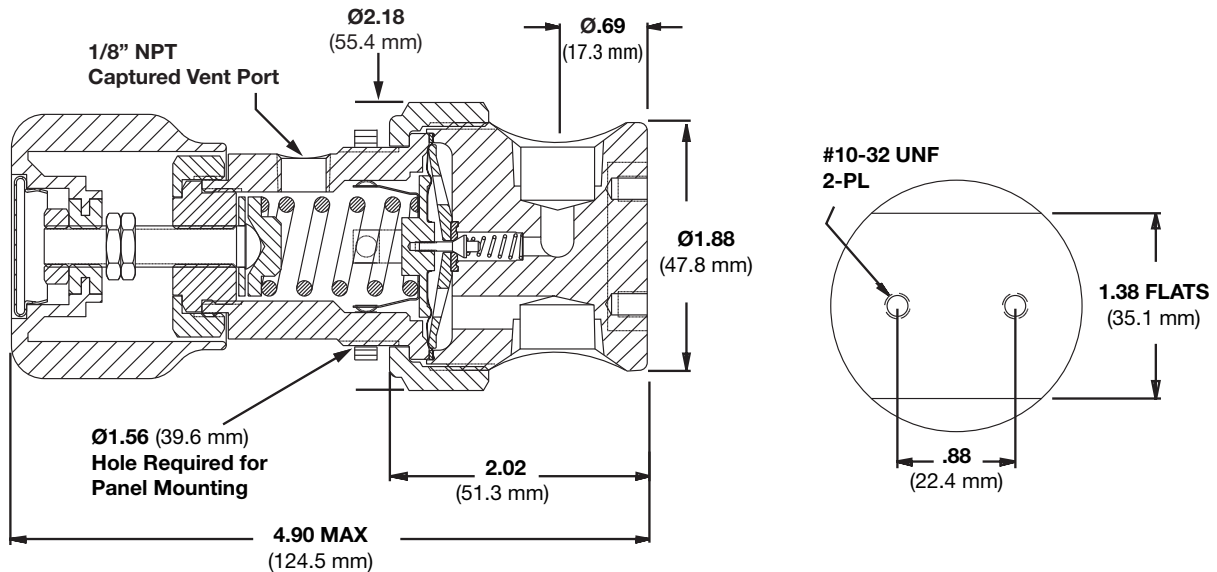
Flow Curves



Safety Guide and Installation and Operating Instructions available at
www.parker.com/veriflo

959 Series

Dimensional Drawing



Ordering Information

Build an 959 Series Regulator by replacing the numbered symbols with an option from the corresponding tables below.

1
 2
 3
 4
 5
 6
 7

Sample: 959 30 S 4P 03 X 4 TH

Finished Order: 95930S4P03X4TH

1 Range
 30 = 1 - 30 psig
 100 = 3 - 100 psig
 150 = 5 - 150 psig

2 Body Material
 S = 316L Stainless Steel
 H = Hastelloy C-22® (Includes Hastelloy C-22® body, diaphragm, compression member, poppet and Inconel® spring.)

3 Porting
 2P = 2 Ports - No X required for gauges, Inlet & outlet ports only
 3P = 3 Ports - One X for gauge port
 4P = 4 Ports - Two X's for gauge ports
 4PB = 4 Ports - One X for gauge port
 5P = 5 Ports - Two X's for gauge ports
 6P = 6 Ports - Two X's for gauge ports
 See Regulator Porting Guide for more information.

4 Outlet Gauge
 03 = 0 - 30 psig
 OL = 0 - 60 psig
 01 = 0 - 100 psig
 2 = 0 - 200 psig
 X = No Gauge
 Additional ranges available upon request

5 Inlet Gauge
 2 = 0 - 200 psig
 6 = 0 - 600 psig
 10 = 0 - 1000 psig
 20 = 0 - 2000 psig
 30 = 0 - 3000 psig
 40 = 0 - 4000 psig
 X = No Gauge
 Additional ranges available upon request

6 Port Style
 4 = 1/4" NPT Female
 Note: All Gauge ports are 1/4" NPT Female

7 Optional Features
 This section can have multiple options

2 = 0.2 C_V
 DO = Dome Loaded
 PM = Panel Mount
 R = Relief Valve (4PB, 5P and 6P Only)
 TH = Hastelloy Trim Available on Stainless Steel body, only. Includes Hastelloy C-22® diaphragm, compression member, poppet and screen with an Inconel® spring.
 VESP = Vespel® Seat (Recommended for N₂O Service)

Vespel® is a registered trademark of DuPont Performance Elastomers L.L.C.
 Hastelloy C-22® is a registered trademark of Haynes International, Inc.
 Inconel® is a registered trademark of Special Metals Corporation

Note: Veriflo reserves the right to plug NPT ports. If a true ported body is required, please contact Customer Service.

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Specifications

| Materials of Construction | |
|----------------------------|---|
| Wetted | |
| Body Options | 316L Stainless Steel (std) Hastelloy C-22® |
| Compression Member Options | 316L Stainless Steel (std) Hastelloy C-22® |
| Diaphragm Options | 316L Stainless Steel (std) Hastelloy C-22® |
| Seat Options | PCTFE or Vespel® |
| Poppet Options | 316L Stainless Steel (std) Hastelloy C-22® |
| Poppet Spring Options | 316 Stainless Steel (std) Inconel® X750 |
| Poppet Screen | Hastelloy C-22® |
| Inlet Screen | 316L Stainless Steel (std) Hastelloy C-22® |
| Non-wetted | |
| Cap | Nickel Plated Brass |
| Nut | 316L Stainless Steel |
| Knob | ABS |

For additional information on materials of construction, functional performance and operating conditions, please see Regulator Technical Bulletin.

| Functional Performance | |
|-----------------------------|---|
| Design | |
| Burst Pressure | 10,500 psig (724 barg) |
| Proof Pressure | 5,250 psig (362 barg) |
| Flow Capacity | |
| Cv Options | C _v 0.04 (std) C _v 0.2 |
| Leak Rate | |
| Internal: | Bubble Tight |
| External: | Bubble Tight |
| Internal Volume | 5.41 cc without fittings |
| Approx. Weight | 2 lbs. (0.9 kg) |
| Operating Conditions | |
| Maximum Inlet | <i>based on C_v Option</i> |
| C _v 0.04 | 3,500 psig (240 barg) |
| C _v 0.2 | 1,250 psig (86 barg) |
| Outlet Options | 1 - 30 psig (2 barg) 3 - 100 psig (7 barg) 5 - 150 psig (10.3 barg) |
| Temperature | -40°F to 150°F (-40°C to 65°C) |

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