

Compact, General-Purpose Dome-Loaded Pressure-Reducing Regulators—RD2 Series

Features

- Piston sensing
- Integral 25 µm filter
- Cartridge poppet assembly for ease of service
- Bottom mounting

Options

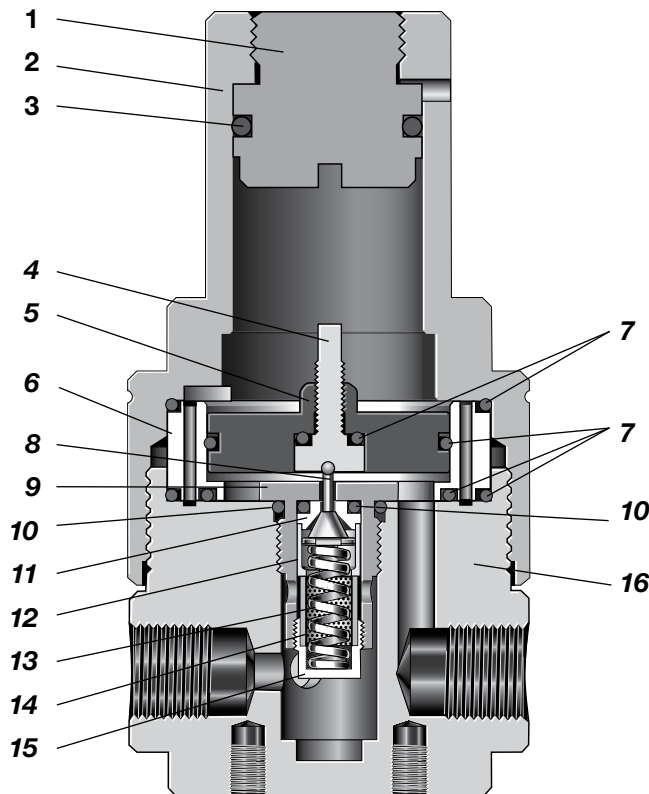
- No filter—for liquid applications
- NACE MR0175/ISO 15156-compliant models (nonventing and no-filter models only)
- Special cleaning to ASTM G93 Level C
- Panel mounting kit sold separately—no disassembly required



Technical Data

Series	Maximum Inlet Pressure psig (bar)	Maximum Outlet Control Pressure psig (bar)	Sensing Type	Temperature Range °F (°C)	Flow Coefficient (C _v)	Seat Diameter in. (mm)	Inlet and Outlet Connections	Gauge / Dome Connection	Weight lb (kg)
RD2	5800 (400)	5800 (400)	Piston	-4 to 176 (-20 to 80) See Pressure-Temperature Ratings , page 32.	0.05	0.087 (2.2)	1/4 in. NPT	Gauge: 1/4 in. NPT Dome: 1/8 in. NPT	3.1 (1.4)

Materials of Construction



Component	Material / Specification
1 Dome plug	316L SS / A479 or EN10088
2 Dome	
3 Dome plug O-ring	FKM, EPDM, nitrile, or FFKM
4 Non-relieving plug	316L SS / A479 or EN10088
5 Piston	
6 Piston plate	
7 Piston O-rings	FKM, EPDM, nitrile, or FFKM
8 Poppet	431 SS / A276 or EN10088
9 Poppet housing	316L SS / A479 or EN10088
10 O-rings	FKM, EPDM, nitrile, or FFKM
11 Seat	PEEK or PCFTE
12 Seat retainer	316L SS / A479 or EN10088
13 Poppet spring	302 SS / A313
14 Filter	316L SS
15 Plug	316L SS / A479 or EN10088
16 Body	

Wetted lubricants: Silicone-based and synthetic hydrocarbon-based

Wetted components listed in italics.

Gauge plugs (not shown): 431 SS / A276.

Flow Data

The graphs illustrate the change or “droop” in outlet pressures as the flow rate increases. For more flow curve information, contact your authorized Swagelok representative.

RD2 Series

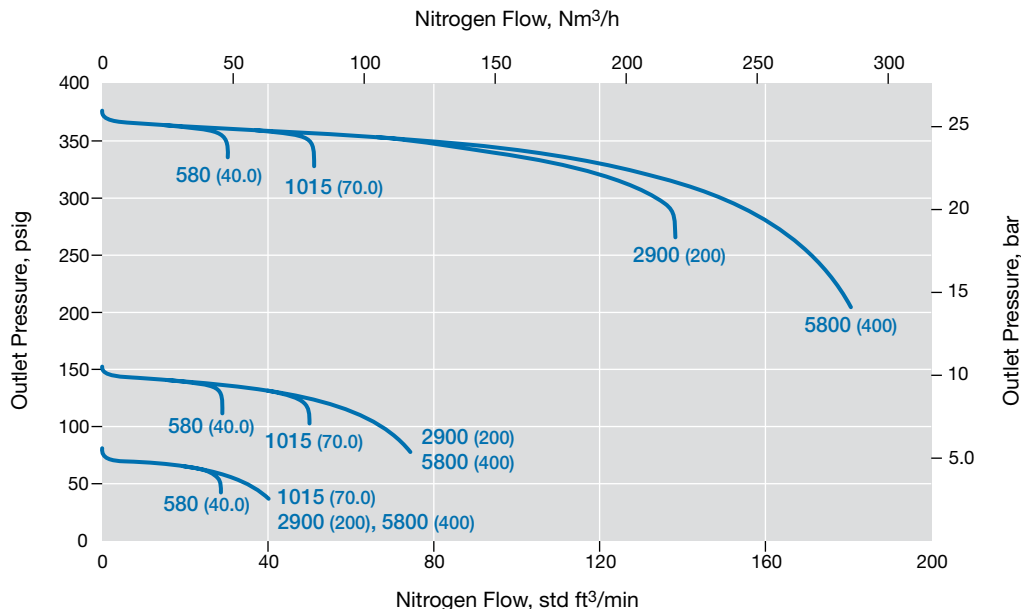
Flow Coefficient: 0.05

Maximum Inlet Pressure: RD2—5800 psig (400 bar)

Outlet Pressure Control Range: 0 to 5800 psig (0 to 400 bar)

Pressure Control Range

— 0 to 5800 psig (0 to 400 bar)



RD2 Series

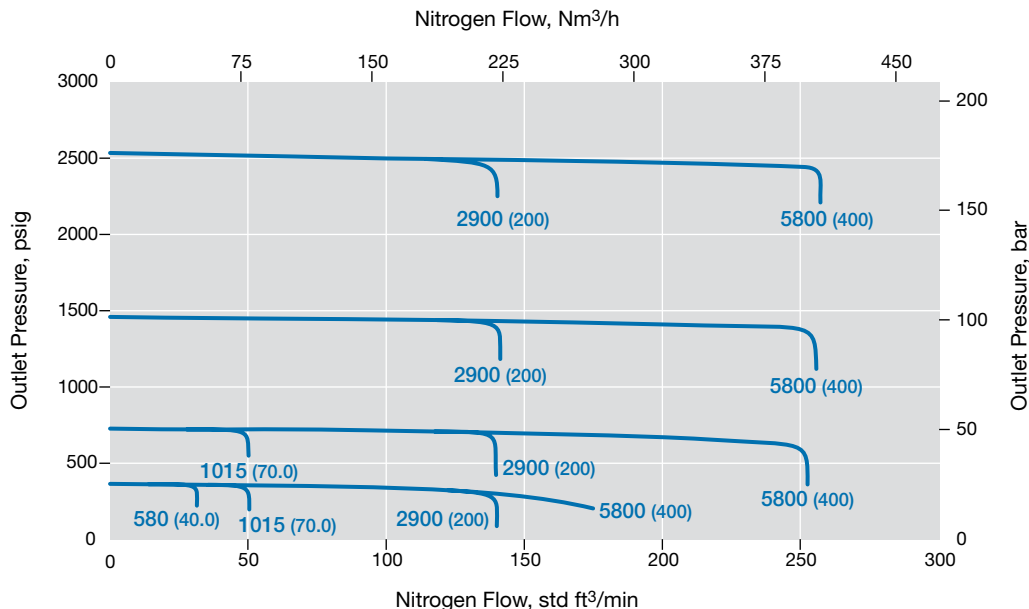
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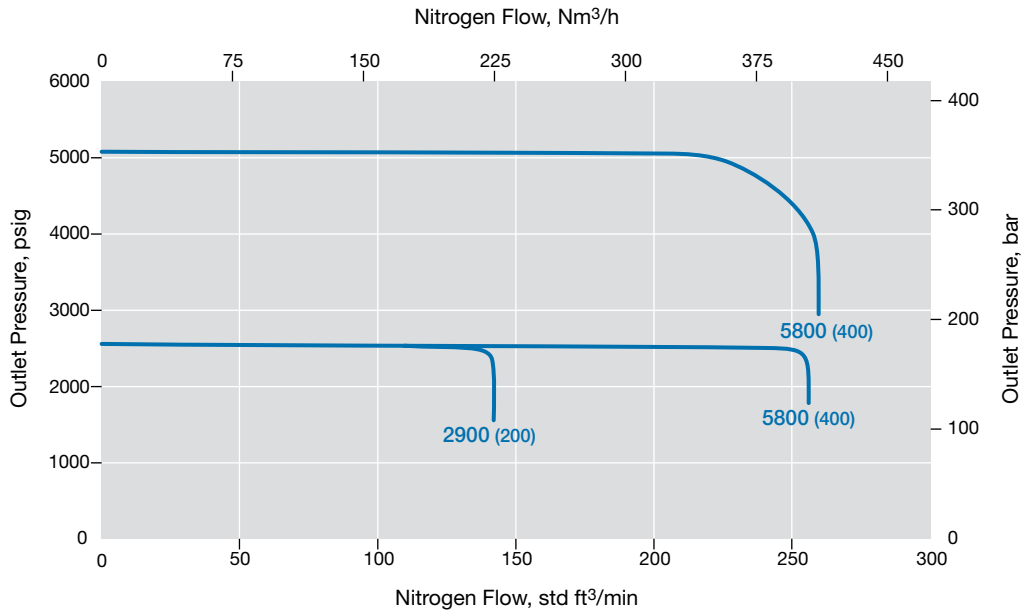
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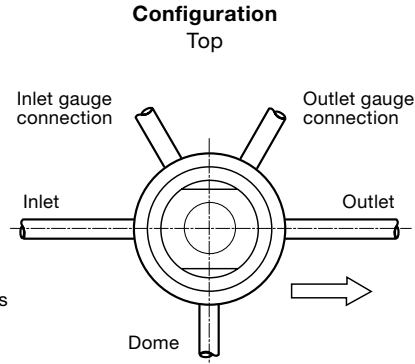
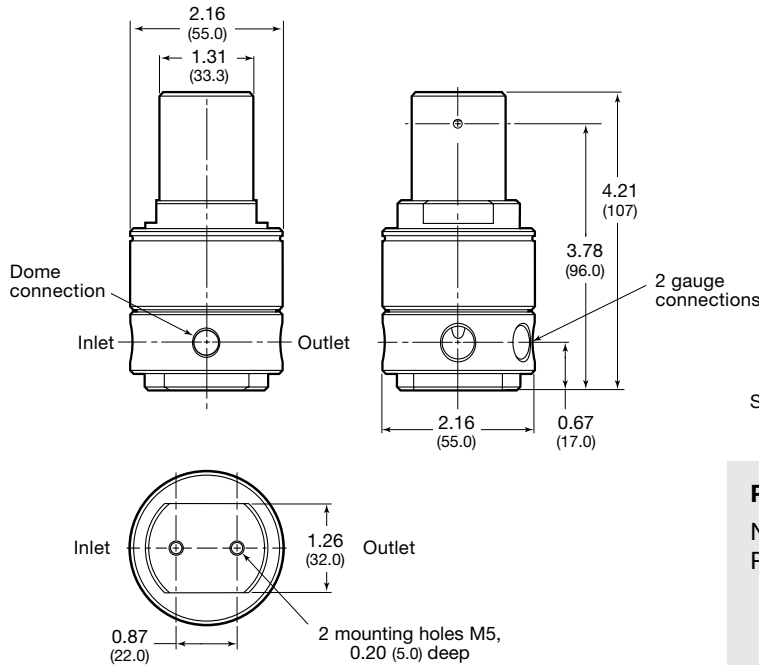
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Dimensions

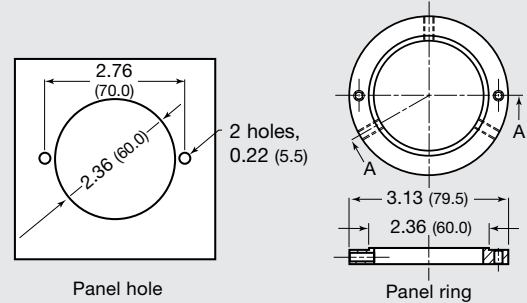
Dimensions, in inches (millimeters), are for reference only and are subject to change.



Shown with tubing for clarity; tubing not included.

Panel Mounting Kit

No disassembly required when using panel mount kit. Panel mounting kit ordering number: **RS2-P-02**



Ordering Information

Build an RD2 series regulator ordering number by combining the designators in the sequence shown below.

1 **2** **3** **4** **5** **6** **7**
RD N2 - 02 - V V K - L

1 Series

RD = 5800 psig (400 bar) maximum inlet pressure

2 Inlet / Outlet

N2 = 1/4 in. female NPT

3 Body Material

02 = 316L SS

4 Seal Material

V = Fluorocarbon FKM
 N = Nitrile
 E = EPDM
 F = FFKM

5 Piston Seal Material

V = Fluorocarbon FKM
 N = Nitrile
 E = EPDM
 F = FFKM

6 Seat Material

K = PCTFE
 P = PEEK

7 Options

L = No filter
 N = NACE MR0175/ISO 15156
 G93 = ASTM G93 Level C-cleaned