AVR3 Series

Steam Heated Pressure Reducing Vaporizing Regulator

Customer Value Proposition:

The AVR3 Series regulator is designed to heat and/or vaporize a gas or liquid sample before entering an analyzer system.

The unique design allows the user to dissassemble the regulator and heat transfer components for complete cleaning and repair of the unit, thus reducing expensive replacement costs and down time.

Contact Information:

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Veriflo Division
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www.parker.com/veriflo

Product Features:

- Ultra low internal volume.
- Cleaned for O_2 service is standard.
- Convoluted Hastelloy C-22® diaphragm for superior strength and corrosion resistance provides outlet pressure stability with changes in flow.
- Integral diaphragm stop provides additional measure of safety.
- Field serviceable heat transfer element.
- Express Service Program is available for standard configurations -See *ESP options in blue italic print.*

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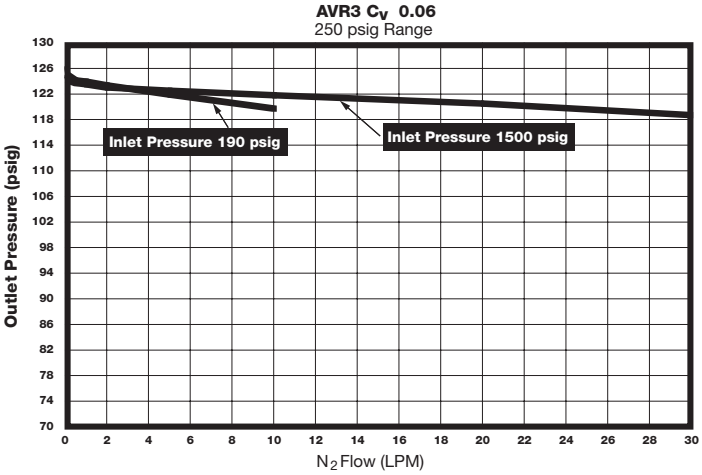
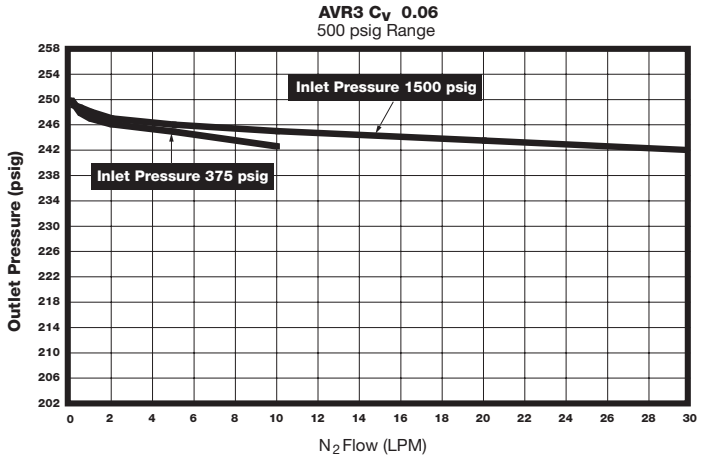
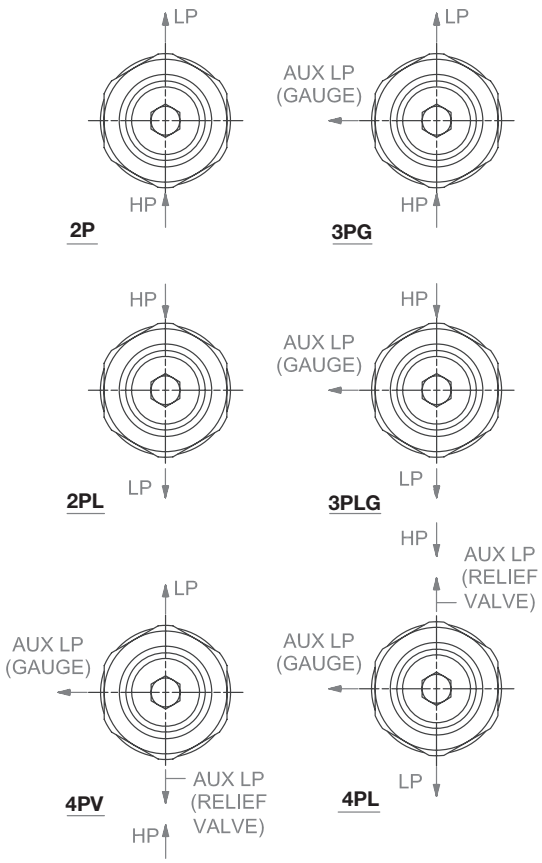
AVR3 Series Regulator

Flow Curves

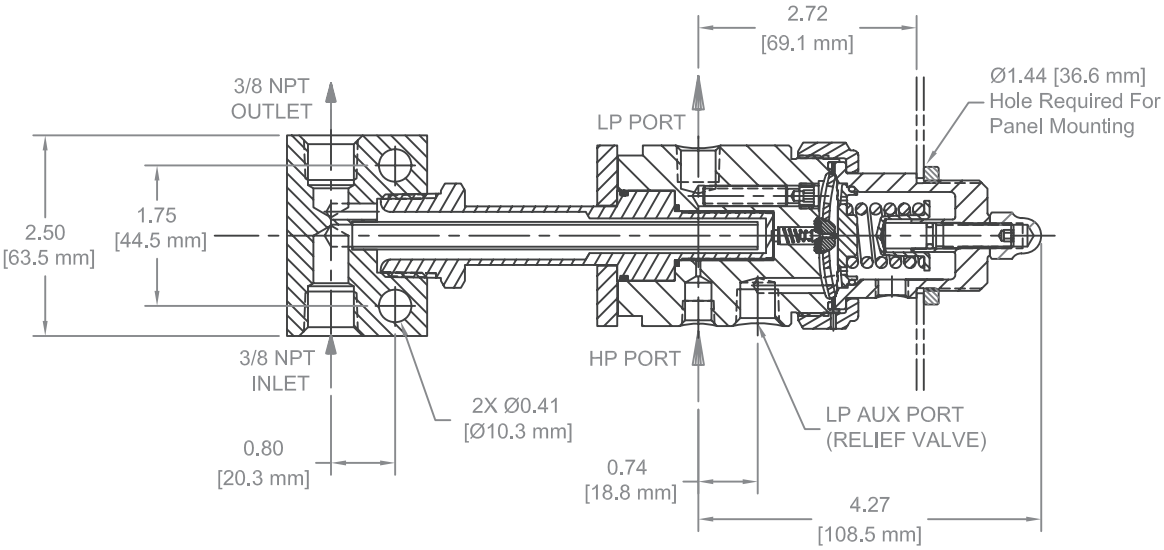




Porting Guide



Dimensional Drawing



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

AVR3 Series Regulator

Ordering Information

Build an AVR3 Series Regulator by replacing the numbered symbols with an option from the corresponding tables below.

Note: Options in *blue/Italic* type are available for the *Express Service Program.*

	①	②	③	④	⑤	⑥
Sample: **AVR3**	**S**	**K**	**1**	**X**	**3PG**	
Finished Order: **AVR3SK1X3PG**						

① Body Material

S = 316L Stainless Steel
H = Hastelloy C-22®
M = Monel®

② Seat Material

K = PCTFE
P = PEEK™
V = Vespel®

③ Pressure Range

0 = 0 - 10 psig (max inlet 250 psig)
1 = 1 - 30 psig
2 = 2 - 60 psig
3 = 3 - 100 psig
4 = 10 - 250 psig
5 = 20 - 500 psig

④ Outlet Gauge

03 = 0 - 30 psig
OL = 0 - 60 psig
01 = 0 - 100 psig
4 = 0 - 400 psig
6 = 0 - 600 psig
X = No Gauge

⑤ Porting Configuration

See Notes below.

blank = 2 Port
3PG = 3 Port - Relief Valve or Gauge Port
4PV = 4 Port - Relief Valve and Gauge Port
2PL = 2 Port - Reverse Entry
3PLG = 3 Port - Reverse Entry Relief Valve or Gauge Port
4PL = 4 Port - Reverse Entry Relief Valve and Gauge Port

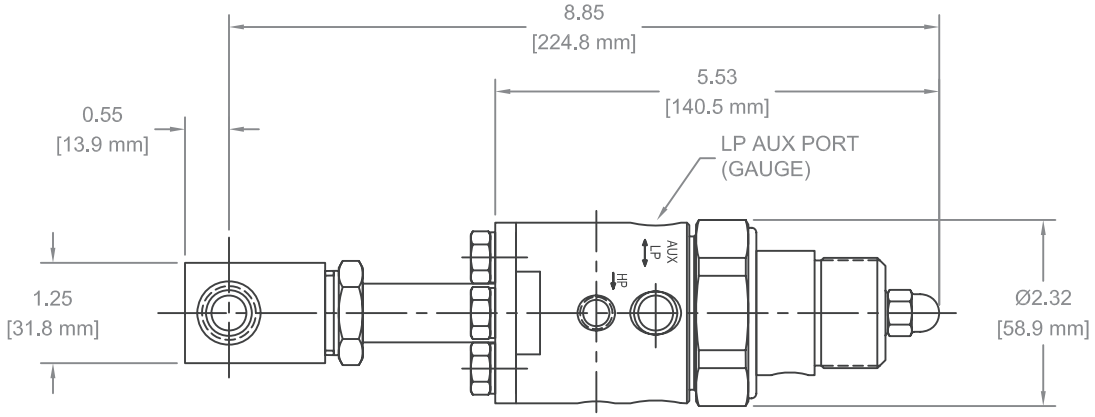
⑥ Optional Features

RV = Relief Valve

Note: Panel Mount Option: Order Panel Nut Ring P/N 41900363 as a separate line item.

Note: Additional options are available. Contact Veriflo for more information

Notes: Veriflo reserves the right to plug NPT ports. If a true ported body is required, please contact Customer Service.
High pressure port standard is 1/8" NPT Female.
1/4" NPT Female on auxillary outlet ports.



AVR3 Series Regulator

Specifications

Materials of Construction	
Wetted	
Body Options	316L Stainless Steel (Std), Monel® Hastelloy C-22®
Compression Member	Inconel® 625
Diaphragm	Hastelloy C-22®
Poppet	Hastelloy C-276®
Poppet Spring	Inconel® X750
Seat Options	PCTFE, PEEK™ or Vespel®
Carrier Options	316L Stainless Steel (std) Hastelloy C-22®
Heater Seal	PEEK™
O-ring Back-up	FKM
Non-wetted	
Cap	303 Stainless Steel
Nut	316L Stainless Steel

Operating Conditions	
Maximum Inlet	3,500 psig (241 barg) or 250 psig (17.2 barg) for 10 psig range
Outlet	0-10 psig (0.7 barg), 1-30 psig (2 barg), 2-60 psig (4 barg), 3-100 psig (7 barg), 10-250 psig (17 barg), 20-500 psig (35 barg)
Temperatures	*based upon seat option*
PCTFE	150°F (66°C)
PEEK™	275°F (135°C)
Vespel®	500°F (260°C)
Maximum Steam Supply	600 psig, 500°F (41 barg, 260°C)

Functional Performance	
Design	
Burst Pressure	10,500 psig (724 barg)
Proof Pressure	5,250 psig (362 barg)
Flow Capacity	C_V 0.06 Nominal
Leak Rate	
Internal:	Bubble Tight
External:	Bubble Tight
Internal Volume	
High Pressure Inlet	0.57 cc
Overall	4.6 cc
Approx. Weight	8 lbs. (2.0 kg)

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

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