

# AVR3 Series

## Steam Heated, Vaporizing Pressure Regulator

Pressure Reducing • Stainless Steel



### 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 disassemble the regulator and heat transfer components for complete cleaning and repair of the unit, thus reducing expensive replacement costs and down time.

### Product Features:

- Ultra low internal volume
- Convuluted Hastelloy® C-22 diaphragm for superior strength and corrosion resistance provides outlet pressure stability with changes in flow
- Field-serviceable heat transfer element
- Integral diaphragm stop provides additional measure of safety

### Specifications:

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

Operating Conditions	
Maximum Inlet	3,500 psig (241 barg) or 250 psig (17.2 barg) for 10 psig range
Outlet Options	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)
<b>Temperature</b>	Based upon seat option
PCTFE	150°F (66°C)
PEEK™	275°F (135°C)
VespeI®	500°F (260°C)
Maximum Steam Supply	600 psig, 500°F (41 barg, 260°C)

Material of Construction	
Wetted	
Body Options	316L Stainless Steel (std) (Consult factory for alloyed body material availability)
Compression Member	Inconel® 625
Diaphragm	Hastelloy® C-22
Poppet	Hastelloy® C-22
Poppet Spring	Inconel® X750
Seat Options	PCTFE (std), PEEK™ or VespeI®
Carrier Options	316L Stainless Steel (std) or Hastelloy® C-22
Heater Seal	PEEK™
O-ring Backup	FKM
Non-Wetted	
Nut	316L Stainless Steel
Cap	303 Stainless Steel

For additional information on materials of construction, functional performance and operating conditions, please contact factory.

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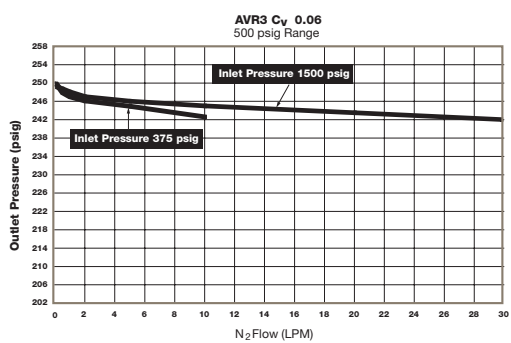
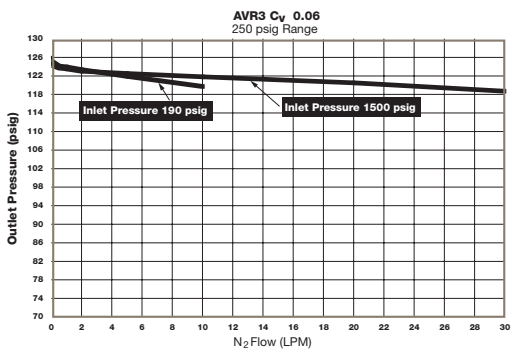


INSTRUMENTATION PRODUCTS DIVISION

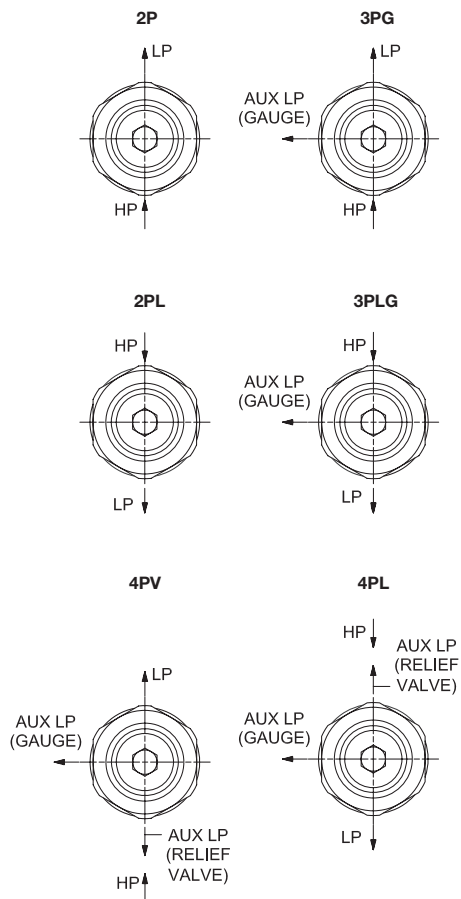
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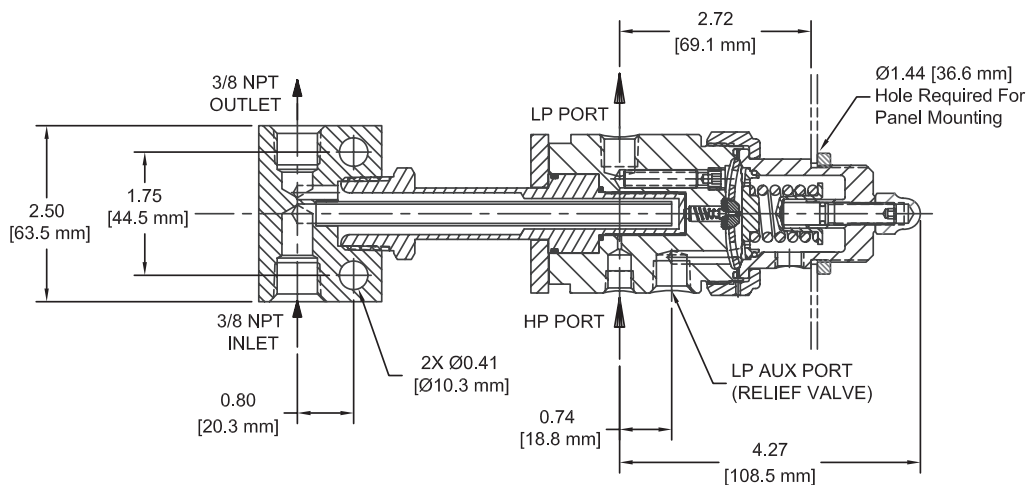
## Flow Curve:



## Porting Configurations:



## Dimensional Drawing: (AVR3S shown)



# AVR3 Series

## Ordering Information:

Building a Part Number: <i>Example: AVR3SK1X3PG</i>						
Example Part Number:	<b>AVR3</b>	<b>S</b>	<b>K</b>	<b>1</b>	<b>X</b>	<b>3PG</b>
Ordering Parameters/Options:	Series	Body Material	Seat Material	Pressure Range	Outlet Gauge	Porting Configuration
Table Reference: (see below)	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>

A - Series	
AVR3	AVR3 Series Pressure Regulator

B - Body Material	
S	316L Stainless Steel

C - Seat Material	
K	PCTFE
P	PEEK™
V	Vespele®

D - Pressure Range	
0	0-10 psig (Maximum inlet 250 psig)
1	1-30 psig
2	2-60 psig
3	3-100 psig
4	10-250 psig
5	20-500 psig

E - 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

F - Porting Configuration	
Blank	2 Port
3PG	3 Port
4PV	4 Port
2PL	2 Port (Reverse Entry)
3PLG	3 Port
4PL	4 Port

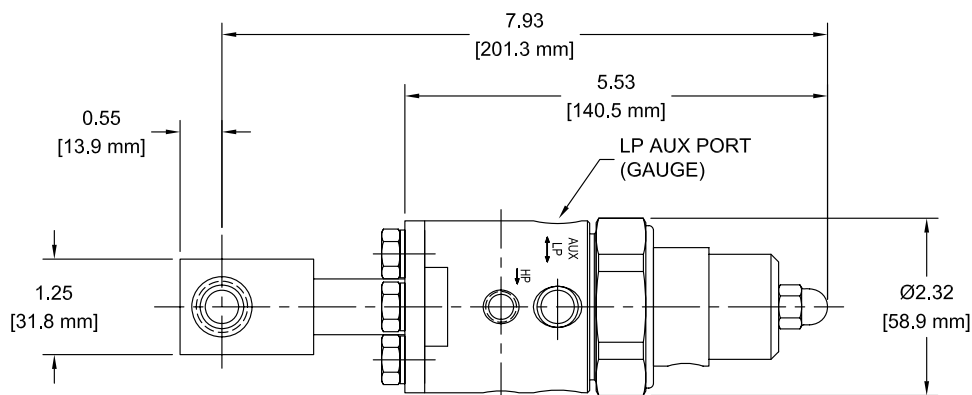
Additional configurations available upon request

**Notes:**

Parker IPD reserves the right to plug NPT ports.  
High pressure port standard is 1/8" NPT Female.  
1/4" NPT Female on auxiliary outlet ports.

Parker Instrumentation Products Division reserves the right to plug NPT ports

### AVR3S



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### WARNING

**FAILURE, IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

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Proposition 65 Warning: This product contains chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

### Offer of Sale

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