

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
- Convolutioned 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	
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
Leak Rate: External	Bubble Tight
Internal Volume	
High Pressure Inlet	0.57 cc
Overall	4.6 cc
Approximate Weight	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)
Temperature	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 (41barg, 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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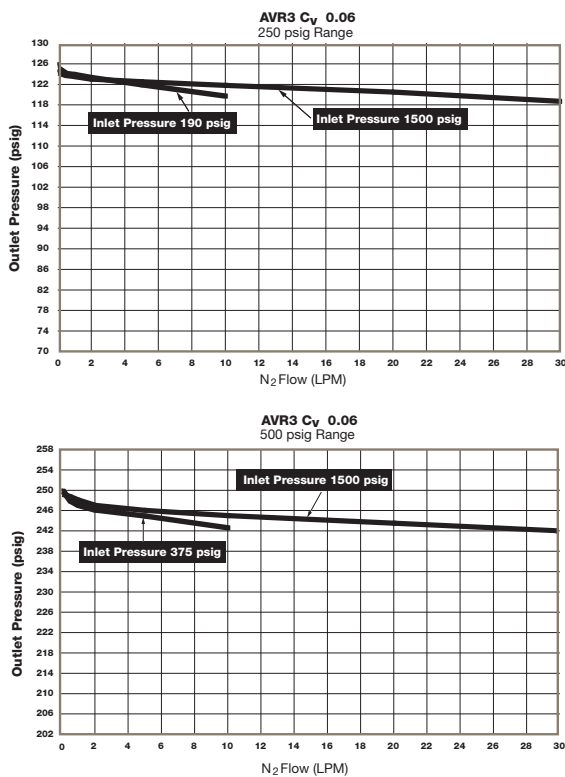


INSTRUMENTATION PRODUCTS DIVISION

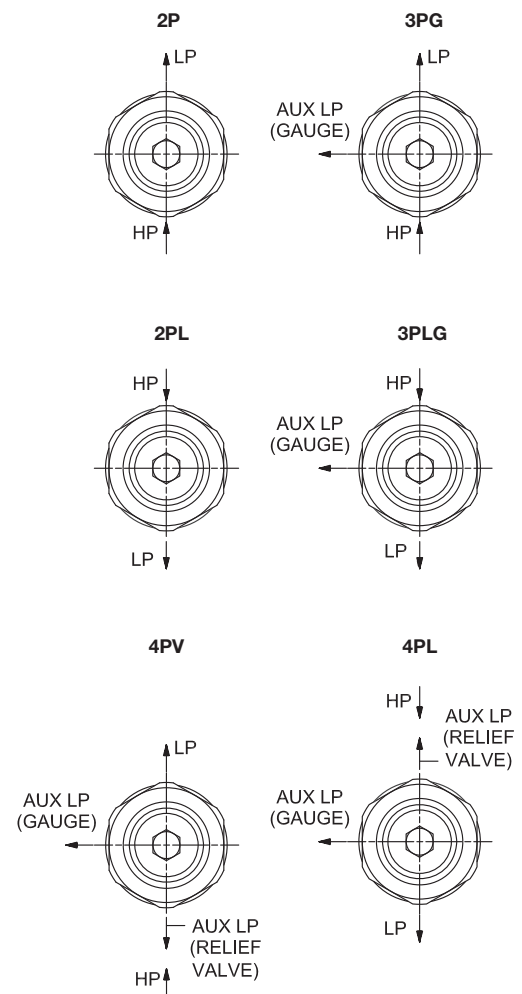
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AVR3 Series

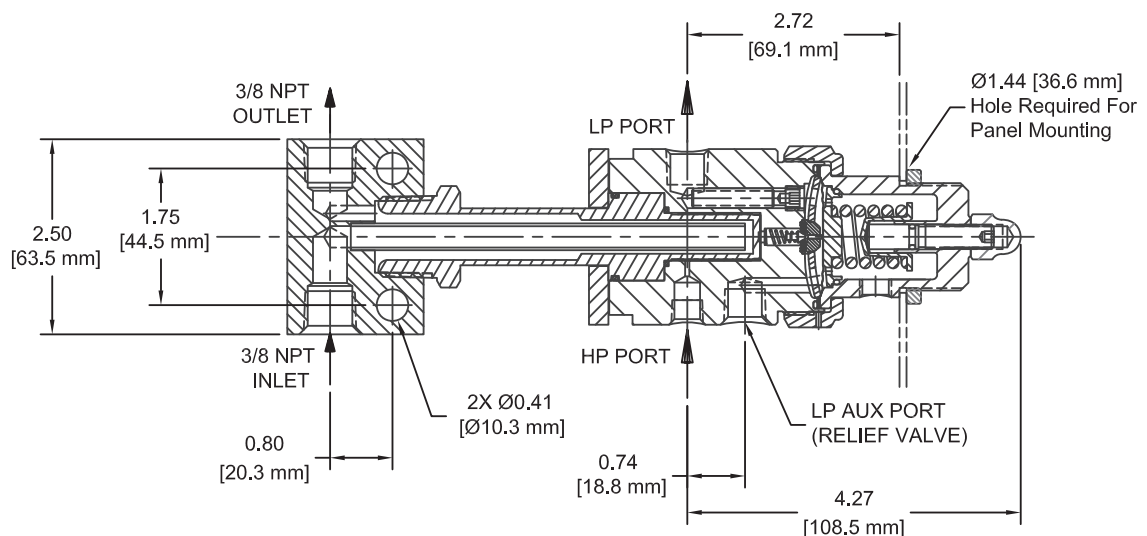
Flow Curve:



Porting Configurations:



Dimensional Drawing: (AVR3S shown)



AVR3 Series

Ordering Information:

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

A - Series	
AVR3	AVR3 Series Pressure Regulator

B - Body Material	
S	316L Stainless Steel

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

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

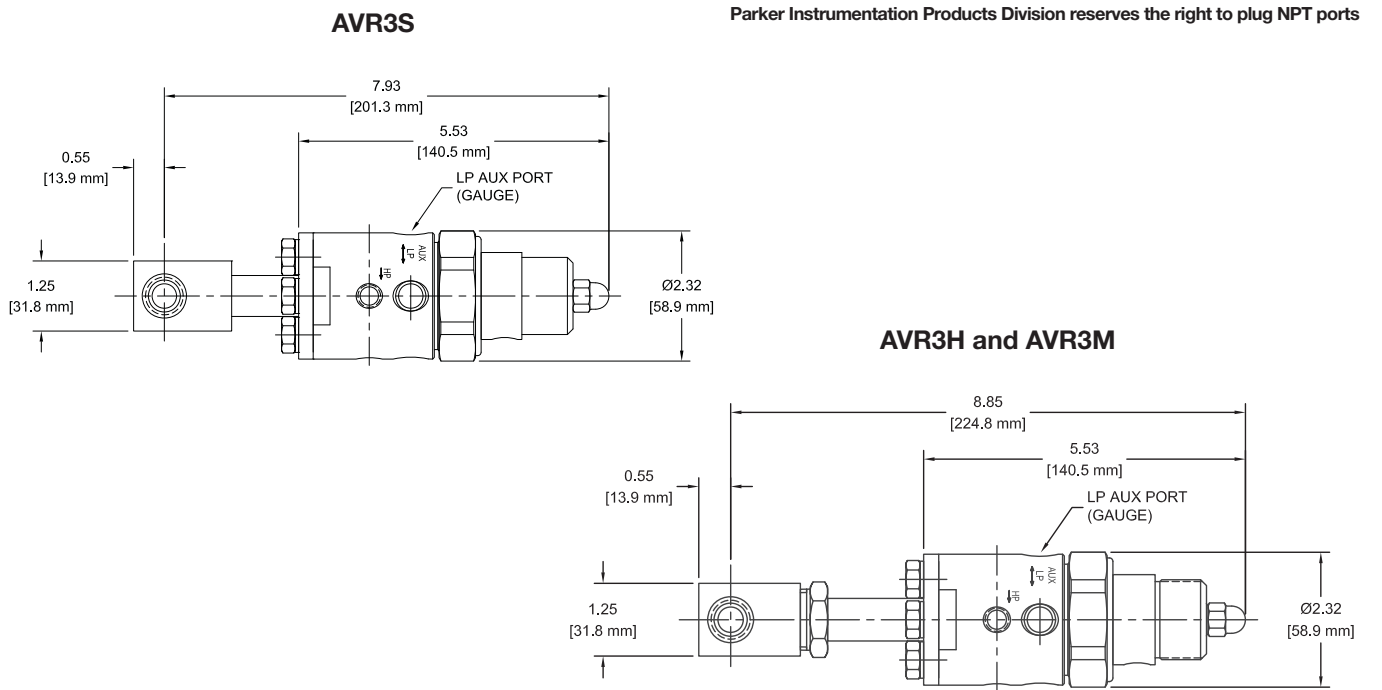
E - Outlet Gauge	
03	0-30 psig
OL	0-60 psig
01	0-100 psig
4	0-400 psig
6	0-600 psig
X	No Gauge

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



Parker Worldwide

AE – UAE, Dubai
Tel: +971 4 8875600
parker.me@parker.com

AR – Argentina, Buenos Aires
Tel: +54 3327 44 4129
falecom@parker.com

AT – Austria, Wiener Neustadt
Tel: +43 (0)2622 23501-0
parker.austria@parker.com

AT – Eastern Europe, Wiener Neustadt
Tel: +43 (0)2622 23501 970
parker.eastern@parker.com

AU – Australia, Dandenong
Tel: +61 (0)3 9768 5555
customer.service.au@parker.com

AZ – Azerbaijan, Baku
Tel: +994 50 2233 458
parker.azerbaijan@parker.com

BE/LX – Belgium, Nivelles
Tel: +32 (0)67 280 900
parker.belgium@parker.com

BR – Brazil, Sao Jose dos Campos
Tel: +55 12 4009 3504
falecom@parker.com

BY – Belarus, Minsk
Tel: +375 17 209 9399
parker.belarus@parker.com

CA – Canada, Grimsby, Ontario
Tel: +1 905-945-2274
ipd_canada@parker.com

CH – Switzerland, Etoy
Tel: +41 (0) 21 821 02 30
parker.switzerland@parker.com

CL – Chile, Santiago
Tel: +56 (0) 2 2303 9640
falecom@parker.com

CN – China, Shanghai
Tel: +86 21 2899 5000
INGtechnical.china@parker.com

CZ – Czech Republic, Klecany
Tel: +420 284 083 111
parker.czechrepublic@parker.com

DE – Germany, Kaarst
Tel: +49 (0)2131 4016 0
parker.germany@parker.com

DK – Denmark, Ballerup
Tel: +45 43 56 04 00
parker.denmark@parker.com

ES – Spain, Madrid
Tel: +34 902 33 00 01
parker.spain@parker.com

FI – Finland, Vantaa
Tel: +358 (0)20 753 2500
parker.finland@parker.com

FR – France, Contamine s/Arve
Tel: +33 (0)4 50 25 80 25
parker.france@parker.com

GR – Greece, Athens
Tel: +30 210 933 6450
parker.greece@parker.com

HU – Hungary, Budapest
Tel: +36 1 220 4155
parker.hungary@parker.com

ID – Indonesia, Tangerang
Tel: +62 (0)21 7588 1906
parker.id@parker.com

IE – Ireland, Dublin
Tel: +353 (0)1 466 6370
parker.ireland@parker.com

IN – India, Mumbai
Tel: +91 22 6513 7081-85

IT – Italy, Corsico (MI)
Tel: +39 02 45 19 21
parker.italy@parker.com

JP – Japan, Tokyo
Tel: +81 3 6408 3900
infophj@parker.com

KR – South Korea, Seoul
Tel: +82 2 559 0400
parker.kr@parker.com

KZ – Kazakhstan, Almaty
Tel: +7 7272 505 800
parker.eastern@parker.com

LV – Latvia, Riga
Tel: +371 6 745 2601
parker.latvia@parker.com

MX – Mexico, Toluca
Tel: +52 722 275 4200
contacto@parker.com

MY – Malaysia, Selangor
Tel: +603 784 90 800
parker.my@parker.com

NL – The Netherlands, Oldenzaal
Tel: +31 (0)541 585 000
parker.nl@parker.com

NO – Norway, Stavanger
Tel: +47 (0)51 826 300
parker.norway@parker.com

NZ – New Zealand, Mt Wellington
Tel: +64 9 574 1744

PL – Poland, Warsaw
Tel: +48 (0)22 573 24 00
parker.poland@parker.com

PT – Portugal, Leca da Palmeira
Tel: +351 22 999 7360
parker.portugal@parker.com

RO – Romania, Bucharest
Tel: +40 21 252 1382
parker.romania@parker.com

RU – Russia, Moscow
Tel: +7 495 645-2156
parker.russia@parker.com

SE – Sweden, Spånga
Tel: +46 (0)8 59 79 50 00
parker.sweden@parker.com

SG – Singapore,
Tel: +65 6887 6300
parker.sg@parker.com

SK – Slovakia, Banská Bystrica
Tel: +421 484 162 252
parker.slovakia@parker.com

SL – Slovenia, Novo Mesto
Tel: +386 7 337 6650
parker.slovenia@parker.com

TH – Thailand, Bangkok
Tel: +66 2 186 7000
phthailand@parker.com

TR – Turkey, Istanbul
Tel: +90 216 4997081
parker.turkey@parker.com

TW – Taiwan, Taipei
Tel: +886 2 2298 8987
enquiry.taiwan@parker.com

UA – Ukraine, Kiev
Tel: +380 44 494 2731
parker.ukraine@parker.com

UK – United Kingdom, Warwick
Tel: +44 (0)1926 317878
parker.uk@parker.com

USA – IPD, Huntsville
Tel: +1 256 881 2040
ipdct@parker.com

USA – Autoclave Engineers, Erie
Tel: +1 814 860 5700
ipdaect@parker.com

VN – Vietnam, Hochi Minh City
Tel: +84 (0)8337 546 51
parker_viet@parker.com

ZA – South Africa, Kempton Park
Tel: +27 (0)11 961 0700
parker.southafrica@parker.com

WARNING

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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.

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Instrumentation Products Division
1005 A Cleaner Way
Huntsville, AL 35805 • USA
Tel: 256 881 2040
Fax: 256 881 5072

ipd.sales@parker.com
www.parker.com/ipdus
Mobile Application: m.parker.com/ipd

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