

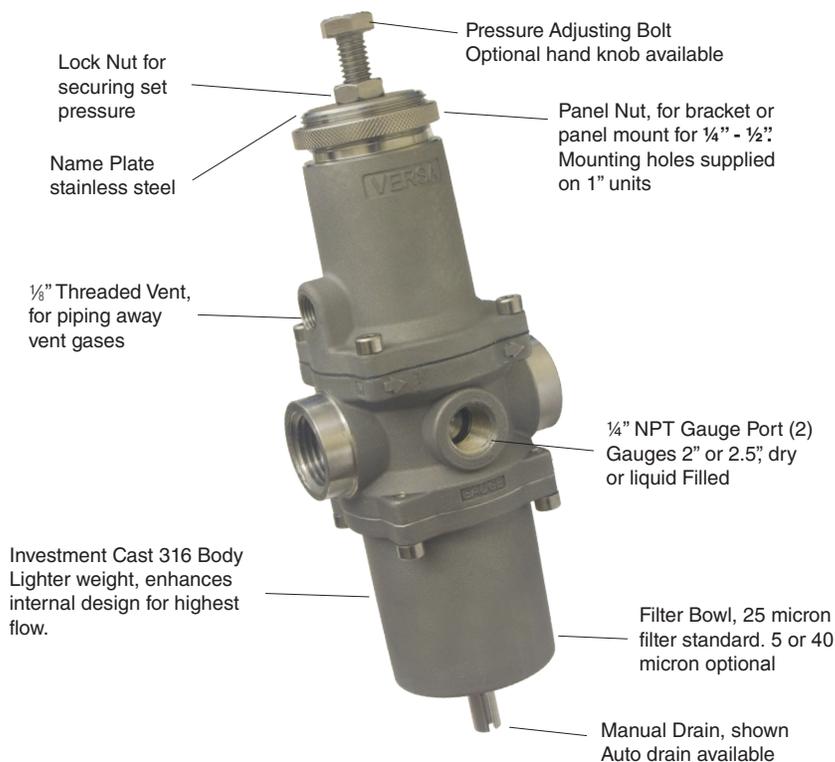


Bulletin AR-316
2016

AR-316 SERIES



AR-316 SERIES Stainless Steel Regulator

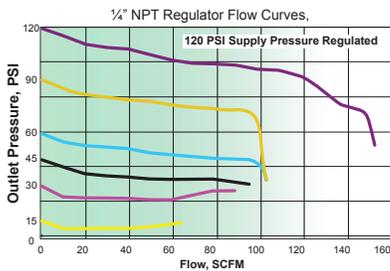


The Versa Type AR-316 series of stainless steel regulators and filter regulators are designed to stand up to the harshest environments while providing highly accurate pressure regulation.

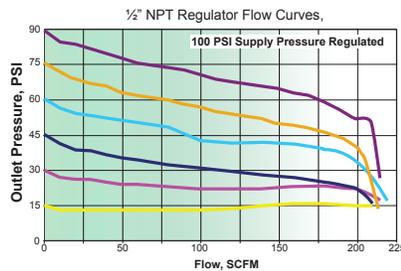
Proven 316L stainless steel housing and filter assemblies along with fluorocarbon diaphragm construction make the AR-316 compatible with sour gas and adaptable to off shore environments.

This quality instrument is economical to buy as well as operate, and provides extremely stable and repeatable control of gas pressure. Over ported internal flow paths helps the unit achieve high flow rates with minimal pressure drop.

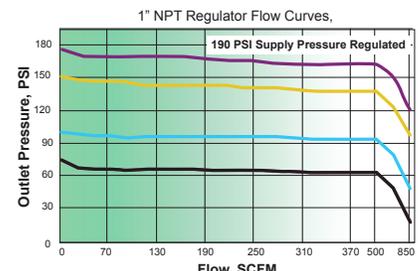
The ARFA stainless steel construction is ideal for sour gas and/or corrosive environments and is NACE Compliant meeting sulfide stress cracking material requirements for NACE Standard MR0175. The ARFB model, only the wetted parts are NACE compliant



1/4" C_v 2.1



1/2" C_v 4.3



1" C_v 11.0

Port Size:

Inlet / Outlet 1/4", 1/2" and 1" NPT
 Gauge Ports (2) 1/4" NPT
 Vent 1/8" NPT
 AutoDrain (optional) 1/4" NPT

Pressure Supply Max:

290 psig (20.0 BAR)*
 Output Ranges:
 3-30 psig (0-2.1 BAR)
 6-60 psig (0-4.1 BAR)
 10-100 psig (0-6.9 BAR)
 15-150 psig (0-10.3 BAR)

*With auto drain 150 psi Max

Exhaust Capacity:

1.0 SCFM (1.7 m3/hr) at down stream pressure of 10 psig (0.7 BAR) above set point

Filter:

25 micron (5 & 40 optional)
 Coalescing filter (optional)

Media:

Pneumatic only

Temperature:

5°F to 180°F (-15°C to 82°C) std
 -60°F to 300°F (-51°C to 149°C) -EP
 -20°F to 200°F (-29°C to 93°C) -44

Materials:

Body, bonnet, filter,	316L Stainless steel
Diaphragm, seals	FKM (fluorocarbon)
Valve spring	Inconel
Adjusting spring	Inconel (ARFA) Stainless Steel (ARFB)
Name plate	316L Stainless steel
Filter	316L Stainless steel (washable)

Repair Kits		
Part Number		Description
1/4" & 1/2"	1"	
AR-RK-1	AR7-RK-1	Regulator Kit, Relieving
AR-RK-2	AR7-RK-2	Regulator Kit, Non-Relieving
AR-FK-05	AR7-FK-05	Filter Kit, 5 micron
AR-FK-5-EP	AR7-FK-5-EP	Filter Kit, 5 micron EP seal
AR-FK-25	AR7-FK-25	Filter Kit, 25 micron
AR-FK-40	AR7-FK-40	Filter Kit, 40 micron
ARD-RK-1	ARD7-RK-1	AutoDrain, Kit, Relieving
ARD-RK-2	ARD7-RK-2	AutoDrain, Kit, Non-Relieving

Suffix	Description
-125B	Adjusting Knob. 1/4" & 1/2" only
-EP	Low Temperature service, Ethylene Propylene
-44	Low Temperature service, low temp Buna
-AB	Mounting kit, bracket and nut. 1/4" & 1/2" only
-APN	Panel mount nut. 1/4" & 1/2" only
-GA	Gauge, 2.5" Diameter*
-GAG	Gauge, 2.5" Diameter, Liquid Filled*
-GB	Gauge, 2.0" Diameter*
-GBG	Gauge, 2.0" Diameter, Liquid Filled*
-RPB	Gauge ports plugged at factory
-RPL	Gauge mounted at factory, inlet on left
-RPR	Gauge mounted at factory, inlet on right

* When gauge is specified it is shipped loose along with a plug. For factory installed gauge see options above.

AR-316 SERIES Ordering Information

Size	Pressure	ARFA*		ARNA		ANFA*
		Filter Regulator, Relieving Type**		Regulator Only, Relieving Type**		Filter Only
		Nace 1***	Nace 2***	Nace 1***	Nace 2***	Nace 1***
1/4"	15-150	ARFA-3111-316-†	ARFB-3111-316-†	ARNA-3011-316-†	ARNB-3011-316-†	ANFA-3100-316-†
	10-100	ARFA-3112-316-†	ARFB-3112-316-†	ARNA-3012-316-†	ARNB-3012-316-†	—
	6-60	ARFA-3113-316-†	—	ARNA-3013-316-†	—	—
	3-30	ARFA-3114-316-†	—	ARNA-3014-316-†	—	—
1/2"	15-150	ARFA-5111-316-†	ARFB-5111-316-†	ARNA-5011-316-†	ARNB-5011-316-†	ANFA-5100-316-†
	10-100	ARFA-5112-316-†	ARFB-5112-316-†	ARNA-5012-316-†	ARNB-5012-316-†	—
	6-60	ARFA-5113-316-†	—	ARNA-5013-316-†	—	—
	3-30	ARFA-5114-316-†	—	ARNA-5014-316-†	—	—
1"	15-150	ARFA-7111-316-†	ARFB-7111-316-†	ARNA-7011-316-†	ARNB-7011-316-†	ANFA-7100-316-†
	10-100	ARFA-7112-316-†	ARFB-7112-316-†	ARNA-7012-316-†	ARNB-7012-316-†	—

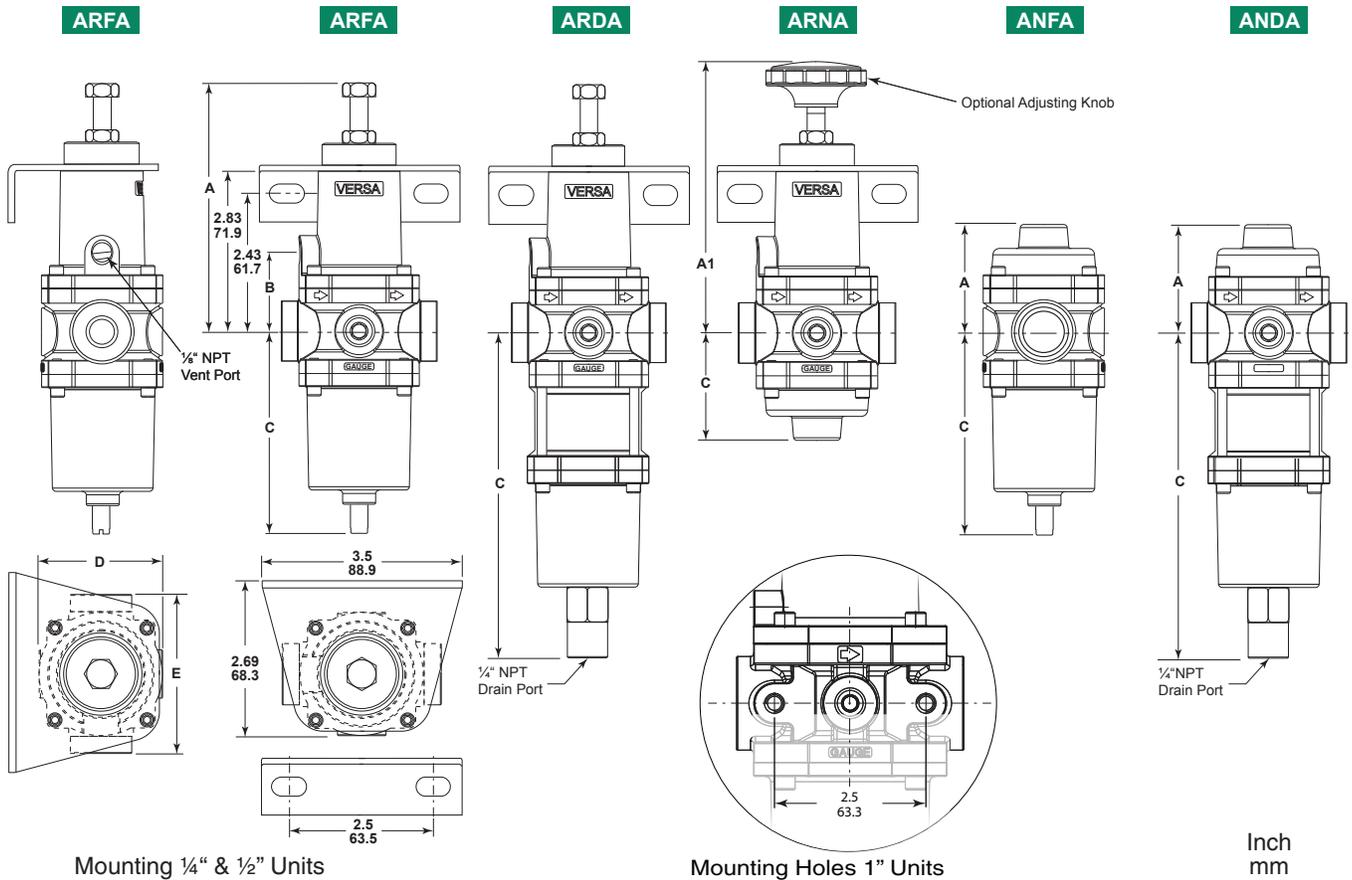
† Suffix option(s) added here as required. See Suffix table on opposite page for options. All models supplied with (2) 1/4" NPT gauge ports. 2 plugs supplied loose. For factory installed plugs add suffix -RPB.

* Filtration: Standard filter is 25 micron. For 5 micron filter change 6th character from 1 to 2. For 40 micron filter change from 1 to 3. For example change ARFA-3111-316 to ARFA-3211-316. Coalescing filter available on 1/4" & 1/2" "Filter Only" units (ANFA's). Change 1 to 4. For example ANFA-3400-316.

** Drain: Standard filter supplied with manual drain. For AutoDrain change 3rd character from F to D. Example change ARFA-3111-316 to ARDA-3111-316. AutoDrain supplied with 1/4" npt drain connection. 150 psi maximum.

*** Regulator Type: Standard regulator is relieving type. For non-relieving type change 7th character from 1 to 2. For example change ARFA-3111-316 to ARFA-3121-316.

*** NACE 1 ARFA/ARNA/ANFA items are fully NACE compliant. NACE 2 ARFB/ARNB units, only wetted parts are NACE compliant, adjusting spring is 316L stainless steel.



Mounting 1/4" & 1/2" Units

Mounting Holes 1" Units

Inch
mm

Dimensions															
Type	Port Size (NPT)	Weight		A		A1		B		C		D		E	
		lbs	kg	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
ARFA	1/4" - 1/2"	2.4	1.1	4.3	109.2	4.89	2.2	1.39	35.3	3.58	90.9	2.13	54.1	2.75	69.9
ARDA	1/4" - 1/2"	3.2	1.5	4.3	109.2	4.89	2.2	1.39	35.3	5.75	140.9	2.13	54.1	2.75	69.9
ARNA	1/4" - 1/2"	2.2	1.0	4.3	109.2	4.89	2.2	1.39	35.3	1.88	47.8	2.13	54.1	2.75	69.9
ANFA	1/4" - 1/2"	2.2	1.0	1.87	45.8	4.89	2.2	-	-	3.58	90.9	2.13	54.1	2.75	69.9
ANDA	1/4" - 1/2"	3.0	1.4	1.87	45.8	4.89	2.2	-	-	5.75	140.9	2.13	54.1	2.75	69.9
ARFA	1"	8.1	3.67	8.99	228.3	-	-	1.75	44.5	5.19	131.8	3.50	88.9	4.13	104.8
ARDA	1"	9.2	4.2	8.99	228.3	-	-	1.75	44.5	7.41	188.7	3.50	88.9	4.13	104.8
ARNA	1"	7.7	3.49	8.99	228.3	-	-	1.75	44.5	5.19	131.8	3.50	88.9	4.13	104.8
ANFA	1"	6.6	3.0	1.7	43.18	-	-	-	-	5.19	131.8	3.50	88.9	4.13	104.8
ANDA	1"	7.7	3.49	1.7	43.18	-	-	-	-	7.41	188.7	3.50	88.9	4.13	104.8

†† **WARNING.** Non-Relieving regulators should have a pressure relief valve installed down stream of regulator on dead ended services. This device will prevent excessive build up of pressure protecting systems and components down stream of regulator.

While due care was exercised in preparing this document, Versa Products Company, Inc. Shall not be liable for any inaccuracies or omissions subject to change without notice.

If no bracket is supplied with the 1/4" or 1/2" regulator can be mounted in a 1.36" (35 mm) diameter hole. Maximum thickness is 0.25" (6 mm). See options for panel nut.

**Versa
has been
supplying the
oil and gas
industry with
pneumatic
and hydraulic
components
for over 50
years. We
have built a
reputation
for quality
that is
unsurpassed
in the market
for high
performance
solenoids,
pneumatic
relays, resets
and pilot
valves**

**WARNINGS REGARDING THE DESIGN APPLICATION,
INSTALLATION AND SERVICE OF VERSA PRODUCTS**

The warnings below must be read and reviewed before designing a system utilizing, installing, servicing, or removing a Versa product. Improper use, installation or servicing of a Versa product could create a hazard to personnel and property.

DESIGN APPLICATION WARNINGS

Versa products are intended for use where compressed air or industrial hydraulic fluids are present. For use with media other than specified or for non-industrial applications or other applications not within published specifications, consult Versa.

Versa products are not inherently dangerous. They are only a component of a larger system. The system in which a Versa product is used must include adequate safeguards to prevent injury or damage in the event of system or product failure, whether this failure be of switches, regulators, cylinders, valves or any other system component. System designers must provide adequate warnings for each system in which a Versa product is utilized. These warnings, including those set forth herein, should be provided by the designer to those who will come in contact with the system.

Where questions exist regarding the applicability of a Versa product to a given use, inquiries should be addressed directly to the manufacturer. Confirmation should be obtained directly from the manufacturer regarding any questioned application prior to proceeding.

INSTALLATION, OPERATION AND SERVICE WARNINGS

Do not install or service any Versa product on a system or machine without first depressurizing the system and turning off any air, fluid, or electricity to the system or machine. All applicable electrical, mechanical, and safety codes, as well as applicable governmental regulations and laws must be complied with when installing or servicing a Versa product.

Versa products should only be installed or serviced by qualified, knowledgeable personnel who understand how these specific products are to be installed and operated. The individual must be familiar with the particular specifications, including specifications for temperature, pressure, lubrication, environment and filtration for the Versa product which is being installed or serviced. Specifications may be obtained upon request directly from Versa. If damages should occur to a Versa product, do not Operate the system containing the Versa product. Consult Versa for technical information.

**LIMITED WARRANTY DISCLAIMER
AND LIMITATION OF REMEDIES**

Versa's Series products are warranted to be free from defective material and workmanship for a period of ten years from the date of manufacture, provided said products are used in accordance with Versa specifications. Versa's liability pursuant to that warranty is limited to the replacement of the Versa product proved to be defective provided the allegedly defective product is returned to Versa or its authorized distributor. Versa provides no other warranties, expressed or implied, except as stated above. There are no implied warranties of merchantability or fitness for a particular purpose. Versa's liability for breach of warranty as herein stated is the only and exclusive remedy and in no event shall Versa be responsible or liable for incidental or consequential damages.

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