

VMAP Modular Air Package

ELECTRONIC
EQUIPMENT

ACOUSTIC

WEIGHING

ANTI-TILTING

VALVES

TEMPERATURE

DETECT
A FIRE®

FLOW/
RATE

DENSITY

INTERFACE

PRESSURE

LEVEL

TF
99



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About Versa



More than 70 Years of Innovation and Expertise

Versa Products Co., Inc. (VERSA) is a global engineering and manufacturing company that specializes in solenoid, pilot, and manual actuated directional control valves and related components. Since 1949, VERSA has built a reputation on our products' quality, responsive customer service, and technical expertise. Our ongoing dedication to innovation and our field-

proven products have positioned us as a driving force in fluid power and valve automation markets. Our continued focus on Real World Reliability has allowed us to develop a comprehensive line of product solutions for each application, even in the most challenging environments.



Best-in-Class Service

VERSA's commitment to continuous improvements in our products and operational capabilities ensures that we exceed our customers' expectations. With our company motto, "Get it Right, Fast!" we take pride in our 99% on-time product delivery performance and competitive lead times. With decades of experience, we have developed an in-depth understanding of the needs of our customer markets, ensuring that we provide you with the right solution for your application. Our distribution partners are an extension of our brand, offering their expertise and support across the globe.



Maximum Performance

At VERSA, our products are engineered to ensure maximum productivity and uptime reliability even in the harshest environments. Our valves are fully ported and 100% tested before leaving the factory. VERSA stands behind its product performance by offering the industry's only 10-year warranty.

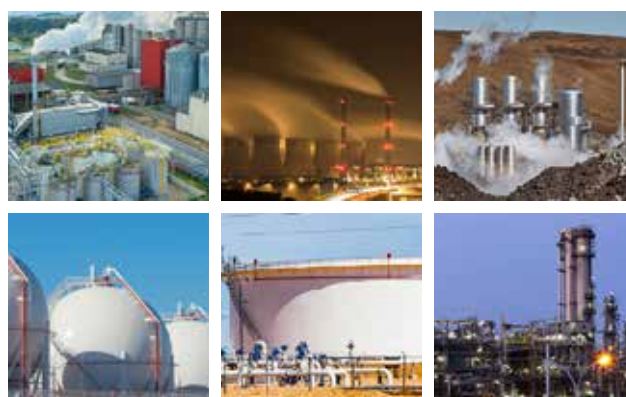


Integrated Product Solutions

VERSA offers a comprehensive product portfolio allowing us the flexibility to provide the solution tailored to meet your application needs.

Key Markets

- Oil & gas - downstream, midstream and upstream
- Renewable energy - bio-fuels, carbon capture, geothermal, hydrogen
- Chemical processing
- Mobile pneumatic
- Power generation
- Aerospace fuel storage and delivery
- Industrial controls



VERSA Modular Air Package (VMAP)

The VERSA Modular Air Package (VMAP) is a compact air management system that provides a full range of pneumatic accessories and functions to meet the needs of most control systems in the actuator control industry. The VMAP offers you the flexibility to create a solution

tailored to your application needs. It simplifies the design process by combining all common circuit components into one integrated assembly.

Features

- 316 Stainless Steel construction.
- Smaller package.
- Less weight.
- Reduce leak points.
- Can be mounted in any orientation.
- Reducing fittings, tubing, and related labor and installation cost.
- Threaded mounting holes are supplied as standard or utilize an optional bracket.
- 100% testing of complete assembly.
- 10-year warranty on the complete circuit.

Component Overview

- 1 Mounting bracket
- 2 Regulator adapter plate
- 3 Filter/Regulator
- 4 Hazardous location operator
- 5 V-316 Series valve assembly
- 6 Dust excluder
- 7 Gauge, glycerin filled
- 8 ID Tag
- 9 Exhaust port speed control



VERSA VMAP design benefits

VMAP simplifies the design process by integrating all common circuit components into one assembly. Whether for a standard shutoff circuit or a complex control system, VMAP meets the requirements of any

control project. It reduces engineering efforts, components, leak points, vendors, costs, weight, and saves time.

Current Technology



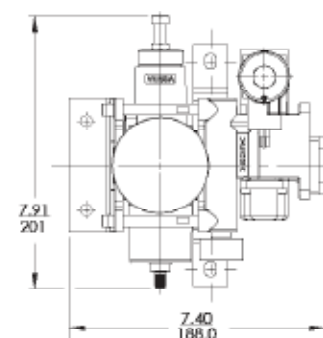
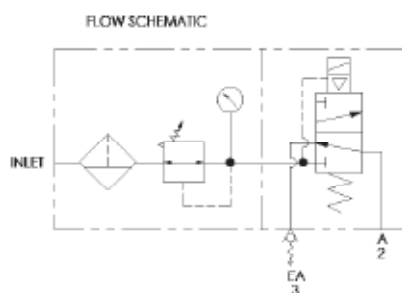
VMAP



VMAP and Panel shown at scale

VERSA VMAP Standard Models

Valve package for single acting actuators



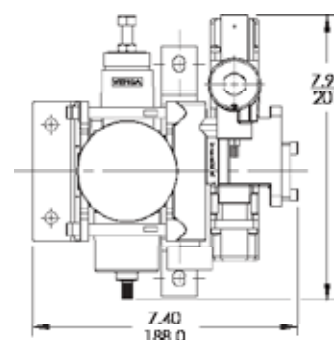
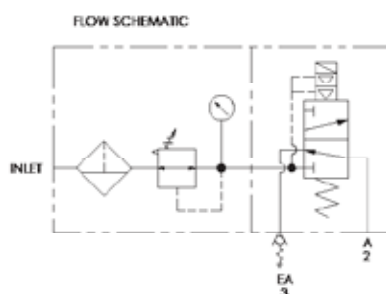
VA3-22-3A11-XV9-000902

Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VSG-3321-316-B649-XV9-D024
Tag		P-2002-16-NV28A

VA5-22-3A11-XV9-000915

Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VSG-3521-316-C468-XV9-D024
Tag		P-2002-16-NV28A

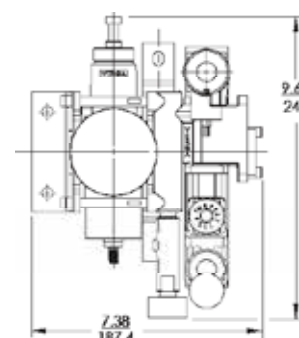
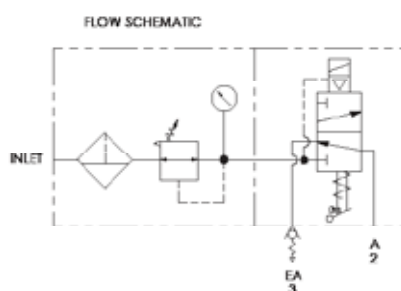
Valve package for single acting actuators with Powershift



VA3-22-3A11-XV9-000903		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VSA-3321-316-PWR-B649-XV9-D024
Tag		P-2002-16-NV28A

VA5-22-3A11-XV9-000916		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VSG-3521-316-C468-XV9-D024
Tag		P-2002-16-NV28A

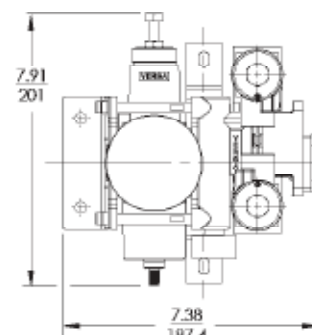
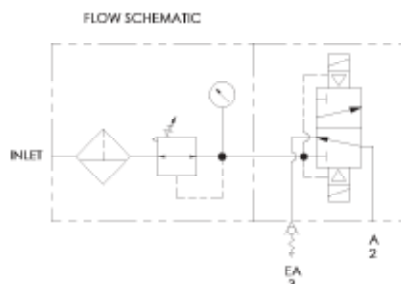
Valve package for single acting actuators with latching manual reset



VA3-22-3A11-XV9-000904		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VAG-3321-316-181D-C647-D024
Tag		P-2002-16-NV28A

VA5-22-3A11-XV9-000917		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VAG-3521-316-181D-C658-D024
Tag		P-2002-16-NV28A

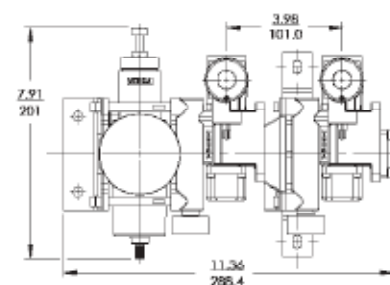
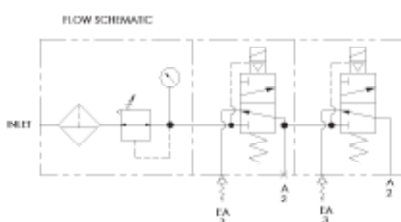
Valve package for single acting actuators, fail last position



VA3-22-3A11-XV9-000905		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VGG-3321-316-B649-XV9-D024
Tag		P-2002-16-NV28A

VA5-22-3A11-XV9-000918		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VGG-3521-316-C649-D024
Tag		P-2002-16-NV28A

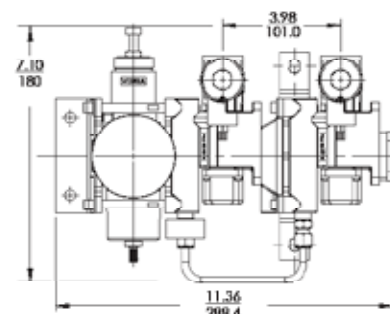
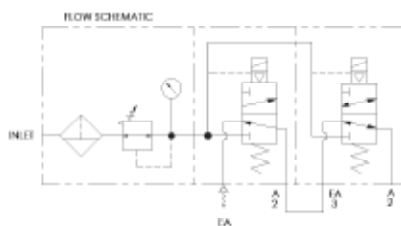
Valve package for single acting actuators in 1002 configuration



VA3-22-3S3A-XV9-000906		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VSG-3321-316-DE3-VAS-XV9-D024 VSG-3321-316-B649-XV9-D024
Tag		P-2002-16-NV28A

VA5-22-3S3A-XV9-000919		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VSG-3521-316-DE5-VAS-XV9-D024 VSG-3521-316-B543-DE5-XV9-D024
Tag		P-2002-16-NV28A

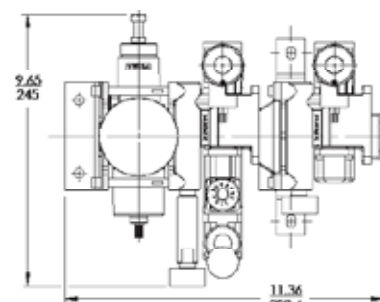
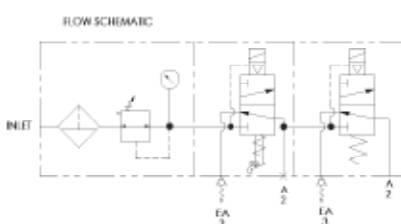
Valve package for single acting actuators in 2002 configuration



VA3-22-3P3A-XV9-000907		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VSG-3321-316-DE3-VAP-XV9-D024 VSG-3321-316-C667-XV9-D024
Tubing	1/4"	VA-88-000688-1
Tag		P-2002-16-NV28A

VA5-22-3P3A-XV9-000920		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VSG-3521-316-DE5-VAP-XV9-D024 VSG-3521-316-B543-XV9-D024
Tubing	1/4"	VA-88-000689-1
Tag		P-2002-16-NV28A

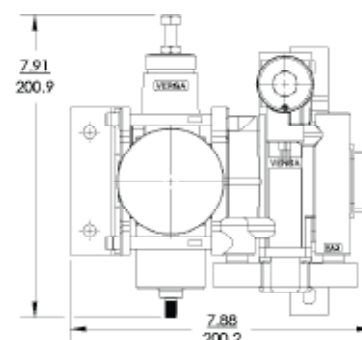
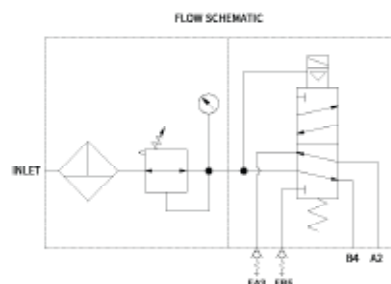
Valve package for single acting actuators in 1002 configuration with one latching manual reset



VA3-22-3S3A-XV9-000908		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VAG-3321-316-C646-VAS-XV9-D024 VSG-3321-316-B649-XV9-D024
Tag		P-2002-16-NV28A

VA5-22-3S3A-XV9-000921		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VAG-3521-316-181D-C650-D024 VSG-3521-316-B543-DE5-XV9-D024
Tag		P-2002-16-NV28A

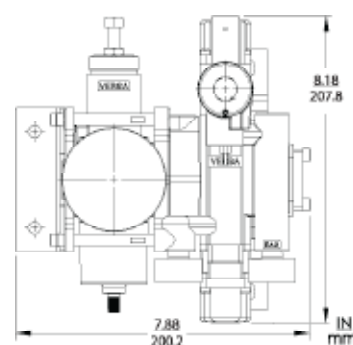
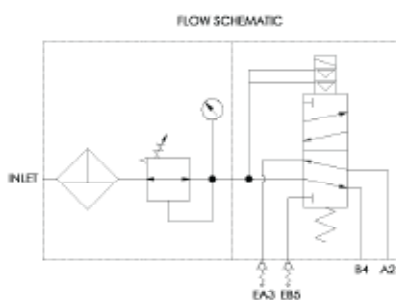
Valve package for double acting actuators



VA3-22-3P3A-XV9-000909		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VSG-4322-316-B649-XV9-D024
Tag		P-2002-16-NV28A

VA5-22-4A11-XV9-000922		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VSG-4522-316-B543-DE5-XV9-D024
Tag		P-2002-16-NV28A

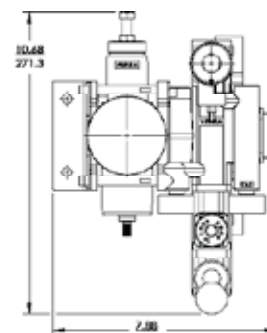
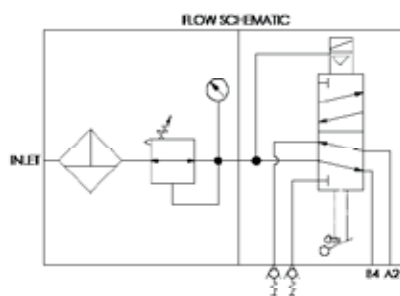
Valve package for double acting actuators with powershift



VA3-22-4A11-XV9-000910		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VSA-4322-316-PWR-B649-XV9-D024
Tag		P-2002-16-NV28A

VA5-22-4A11-XV9-000923		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VSA-4522-316-PWR-C468-XV9-D024
Tag		P-2002-16-NV28A

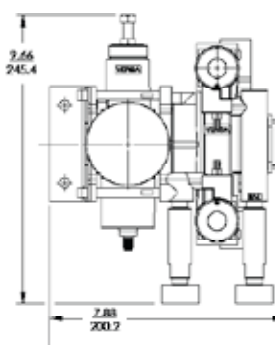
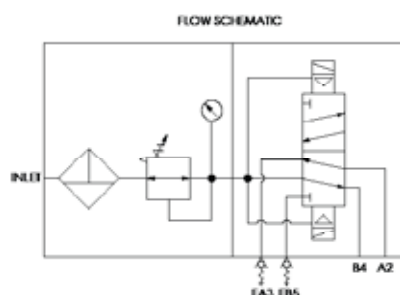
Valve package for double acting actuators with latching manual reset



VA3-22-4A11-XV9-000911		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VAG-4322-316-181D-C662-D024
Tag		P-2002-16-NV28A

VA5-22-4A11-XV9-000924		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VAG-4522-316-181D-C658-D024
Tag		P-2002-16-NV28A

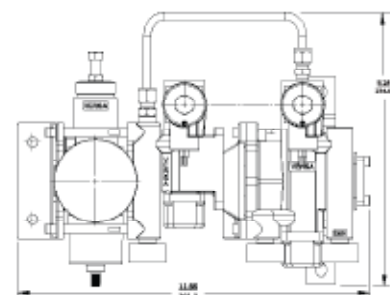
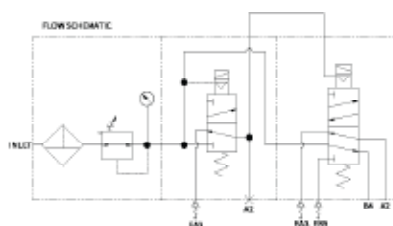
Valve package for double acting actuators, fail last position



VA3-22-4A11-XV9-000912		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VGG-4322-316-C647-D024
Tag		P-2002-16-NV28A

VA5-22-4A11-XV9-000925		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VGG-4522-316-C649-D024
Tag		P-2002-16-NV28A

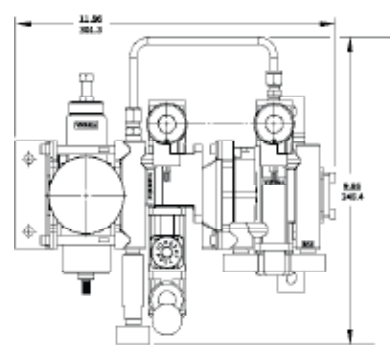
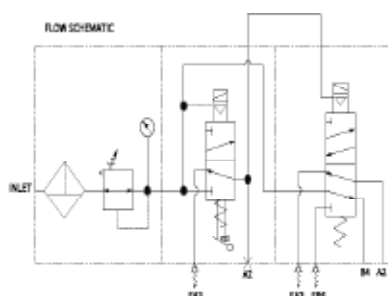
Valve package for double acting actuators in 1002 configuration



VA3-22-3P4A-XV9-000955		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VSG-3321-316-C207-VA1-XV9-D024 VSG-4302-316-B649-XV9-D024
Tubing	1/4"	VA-88-000955-1
Tag		P-2002-16-NV28A

VA5-22-3P4A-XV9-000957		
Description	Port Size	Part Number
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VSG-3521-316-C745-VA1-XV9-D024 VSG-4502-316-B543-DE5-XV9-D024
Tubing	1/4"	VA-88-000957-1
Tag		P-2002-16-NV28A

Valve package for double acting actuators in 1002 configuration with one latching manual reset



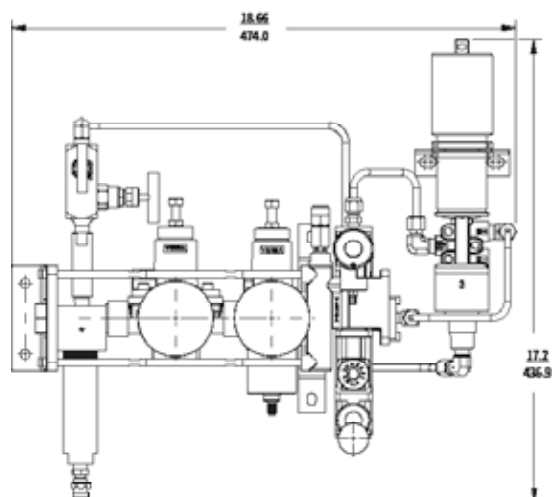
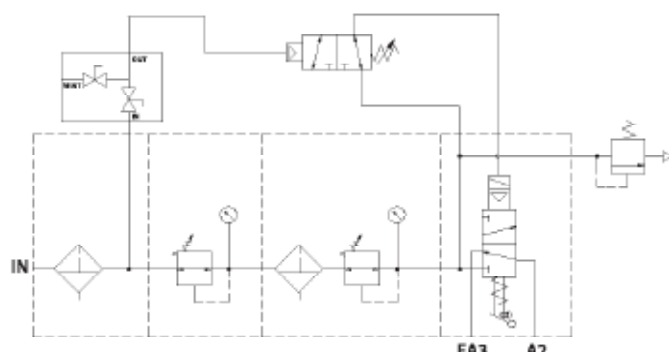
VA3-22-3P4A-XV9-000956		
Descrizione	Dimensione della porta	Numero parte
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/4"	ARFA-3111-316-GAG-VA
Valve assembly	1/4"	VAG-3321-316-181D-C744-D024 VSG-4302-316-B649-XV9-D024
Tubing	1/4"	VA-88-000955-1
Tag		P-2002-16-NV28A

VA5-22-3P4A-XV9-000958		
Descrizione	Dimensione della porta	Numero parte
Adapter		MS02-3-3-316-VA-VBC
Regulator assembly	1/2"	ARFA-5111-316-GAG-VA
Valve assembly	1/2"	VAG-3521-316-181D-C746-D024 VSG-4502-316-B543-DE5-XV9-D024
Tubing	1/4"	VA-88-000957-1
Tag		P-2002-16-NV28A

Valve package for single acting actuator with over pressure protection with a ExPilot operated latching valve



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VA3-24-F1RY-XV9-000933

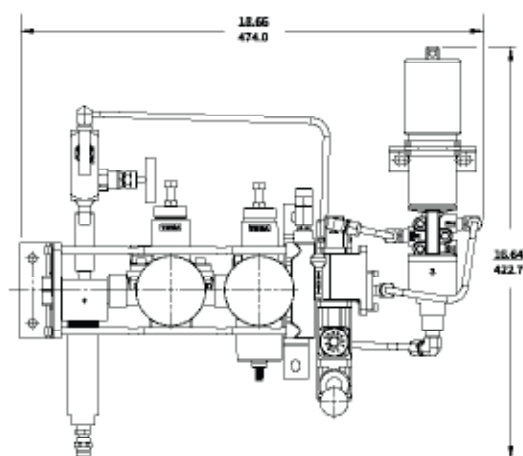
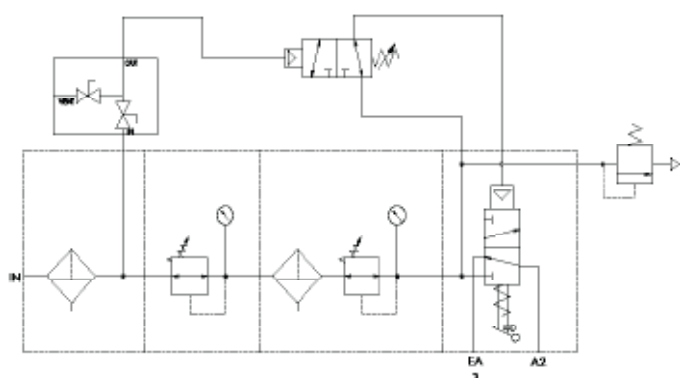
Bill of Materials

Description	Part Number
Adapter	AFH-090-111L-316BS-VA-VBC
Tie Rod	AFH-090-110-316
Filter HP	AFHA-3321-316-BB1-VA
Adapter	V-4302-99D-316
Regulator HP	ARHB-3322-316-GAG-VA
Adapter	V-4302-99D-316
Regulator	ARFA-3111-316-GAG-VA
Valve	VAG-3301-316-181D-C674-VB-D024
Relief Valve	RV-3-316-100
Pressure Sensor	BAA-8302-913-AB
Tag	P-2002-16-NV28A
Tubing	VA-88-000933-1
	VA-88-000747-2
	VA-88-000747-3

Valve package for single acting actuator with over pressure protection with a pilot operated latching valve



FLOW SCHEMATIC



VA3-24-F1RY-1-000970

Bill of Materials

Description	Part Number
Adapter	AFH-090-111L-316BS-VA-VBC
Tie Rod	AFH-090-110-316
Filter HP	AFHA-3321-316-BB1-VA
Adapter	V-4302-99D-316
Regulator HP	ARHB-3322-316-GAG-VA
Adapter	V-4302-99D-316
Regulator	ARFA-3111-316-GAG-VA
Valve	VAP-3301-316-181D-AX-VAX3-VB
Relief Valve	RV-3-316-100
Pressure Sensor	BAA-8302-913-AB
Tag	P-2002-16-NV28A
Tubing	VA-88-000747-1
	VA-88-000747-2
	VA-88-000747-3

Specifications



Filter/Regulator assembly

	ARFA-3111-316-GAG-VA	ARFA-5111-316-GAG-VA
Body	1/4" Body Ported, Stainless Steel - Type 316L, NACE Compliant	1/2", Body Ported, Stainless Steel - Type 316L, NACE Compliant
Flow	2.1 Cv (Cv minus filter element)	4.3 Cv (Cv minus filter element)
Max Pressure	290 psi	
Pressure Range	15-150 psi, (1.03-10.3 bar)	
Function	Relieving Regulator	
Media	Air - Inert Gas Natural Gas	
Filter	25 Micron Stainless Steel(standard)	
Temp Range	5°F to 149°F (15°C to 65°C)	
Seals	FKM	
Weight	3,4 lb (1,54 kg)	



V-316 Series directional control valves

	V-316 Series Directional Control Valves	
Body	1/4", Body Ported, Stainless Steel - Type 316L	1/2", Body Ported, Stainless Steel - Type 316L
Flow	1.8 Cv	4.8 Cv
Pressure Range	VAC-175 psi (VAC-12.1 bar)	
Pilot Range	55-175 psi (3.79-12.1 bar)	
Media	Air - Inert Gas Natural Gas	
Temperature Rating	-4°F to 189°F (-20°C to 87°C)	
Seals	FKM	
Weight	7 lb (3,18 kg)	7,56 lb (3,43 kg)



High pressure filter assembly

	AFHA-3321-316-BB1-VA
Body	1/4" Body Ported, Stainless Steel - Type 316L
Flow	1/4" - 0.69 Cv
Pressure Range	0-1600 psi, 0-110.3 bar
Filter	25 Micron Polyethylene
Media	Air - Inert Gas Natural Gas
Temperature Rating	-4°F to 212°F, -20°C to 100°C
Seals	FKM
Weight	3,88 lb (1,76 kg)



High pressure regulator assembly

High Pressure Regulator Assembly ARHB-3322-316-GAG-VAA	
Body	Body Ported, Stainless Steel - Type 316L, Nace Compliant
Flow	0.14 Cv
Pressure Range	0-1500 psi (0-103.4 bar)
Function	Non-Relieving regulator
Media	Air - Inert Gas Natural Gas
Filter	40 Mesh Stainless Steel
Temp Range	5°F to 149°F (15°C to 65°C)
Seals	FKM
Weight	4,88 lb (2,21 kg)



Pressure relief valve

V-316 Series Directional Control Valves		
	RV-3-316-100	RV-5-316-100
Body	1/4", Body Ported, Stainless Steel - Type 316L	1/2", Body Ported, Stainless Steel - Type 316L
Flow	1.3 Cv	5.5 Cv
Pressure Range	VAC-175 psi (VAC-12.1 bar)	
Pilot Range	55-175 psi (3.79-12.1 bar)	
Media	Aria - Gas inerte Gas naturale	
Temperature Rating	da -6°F a 300°F, da -21°C a 149°C	
Seals	FKM	
Weight	0,16lb (0,07 kg)	0,41lb (0,19 kg)



Pressure sensor

BAA-8302-913-AB	
Body	1/4" Body Ported, Stainless Steel - Type 316L
Flow	1/4" - 1.3 Cv
Pressure Range	200-1500 psi, 13.8-103 bar
Pilot Range	25 Micron Polyethylene
Media	Air - Inert Gas Natural Gas
Temperature Rating	-4°F to 212°F, -20°C to 100°C
Seals	FKM
Weight	3,88 lb (1,76 kg)





VMAP - MODULAR AIR PACKAGE



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