

## C-316 SERIES

### Stainless Steel 3-Way and 4-Way Solenoid Valves

The Versa C-316 Series stainless steel body-ported valve is a high flow, 3 or 5-port, solenoid valve. The sealing design is that of Versa's proven elastomer packed plunger producing bubble-tight performance along with long trouble-free product life. This seal design also yields the highest flow available in the smallest package.

The C-316 Series utilizes stainless steel bodies, actuating caps and internal parts making this series of valves ideal for use in the most aggressive environments. Seals are FKM (fluorocarbon). Solenoid materials are a function of area classification rating. See options for details.

The C-316 Series is available as either a 4-way, for double acting devices or a 3-way, for spring return devices. The 3-way function can be specified as either normally closed or opened. All solenoid actuators are solenoid/pilot type, which allows the use of the smallest solenoids available resulting in low power consumption. This design also assures a positive shifting force which makes certain the valve shifts when energized and reduces the chance of coil burnout. Single solenoid spring return models utilize an air assisted spring return feature assuring a positive return. Double solenoid models are equipped with a detent that maintains the valve in the last shifted position, even in high vibration environments. A complete selection of electrical connections, power requirements and area classifications, makes Versa's C-316 the valve of choice for demanding applications.



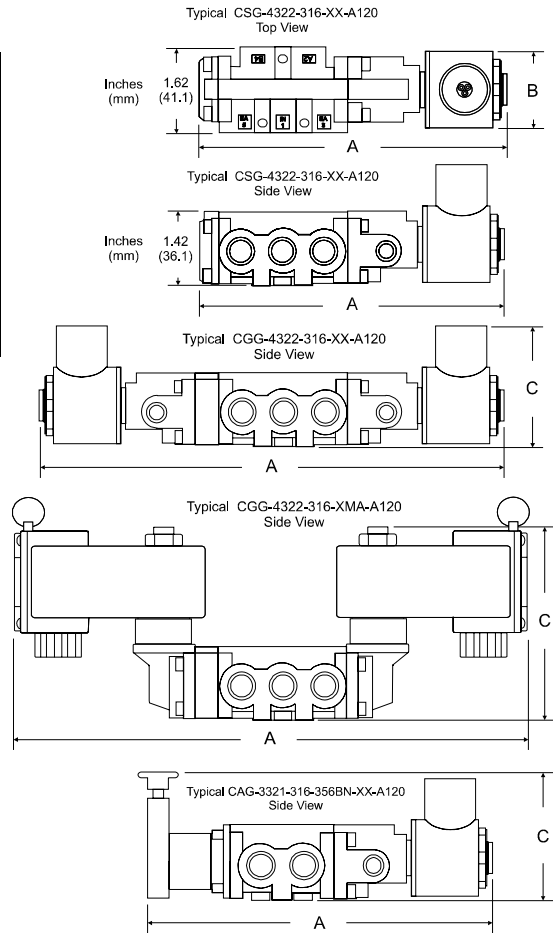
Versa's proven and well-accepted solenoid latch option for single solenoid, spring return, 3-way and 4-way valves, is also available on the C-316 Series. With the loss of solenoid signal, the valve shifts closed and cannot be re-shifted until manually reset. Versa's latching solenoid is the benchmark in valve actuator controls.

<p><b>Flow Rate:</b> Cv = 2.0 (Kv = 29.3)</p> <p><b>Port Size:</b> Inlet, cylinder and exhaust: 1/4" NPT</p> <p><b>Media:</b> Pneumatic only Lubricator not required</p> <p><b>Expilot Solenoid:</b> Consult Factory</p>	<p><b>Pressure:</b> 25 to 150 psi (1.8 to 10.3 bar), Single solenoid, spring return 15 to 150 psi (1.0 to 10.3 bar), Double solenoid, detent For applications above 125 psi (8.6 bar), exhaust flow controls or mufflers are recommended.</p> <p><b>Temperature:</b> -5 to 200° F (-20 to 93° C), Media and ambient (standard) -55 to 200° F (-48 to 93° C), Media and ambient (option -44)</p>	<p><b>Materials:</b> Valve body and internal parts: 316L stainless steel Actuator caps: 316L stainless steel Valve seals: FKM (fluorocarbon) Screws: Stainless steel Solenoid internal parts: 304, 430F and 302 stainless steel Coil/solenoid housing: Per solenoid option selected. See option section.</p>
--	---	--

# C-316 Stainless Steel Ordering Information

Basic Valve Number			
FUNCTION	SINGLE SOLENOID/SPRING RETURN, 2 POSITION	DOUBLE SOLENOID/DETENT, 2 POSITION	LATCHING, SINGLE SOLENOID/SPRING RETURN
4-Way 5/2	CSG-4322-316-†(coil code) 	CGG-4322-316-†(coil code) 	CAG-4322-316-356BN-†(coil code) 
3-Way NC 3/2	CSG-3321-316-†(coil code) 	CGG-3321-316-†(coil code) 	CAG-3321-316-356BN-†(coil code) 
3-Way NO 3/2	CGS-3322-316-†(coil code) 	CGG-3321-316-†(coil code) 	CGA-3322-316-356BN-†(coil code) 

† Add suffix option here as required. See coil code below



Dimensions		SOLENOID OPTIONS								
VALVE TYPE		GENERAL SERVICE			HAZARDOUS SERVICE (-XX, -XN)			HAZARDOUS SERVICE (-XMA, -XIF)		
		A	B	C	A	B	C	A	B	C
3-Way Single Solenoid, Spring Return†	Inches (mm)	5.31 (135.0)	1.04 (26.4)	2.13 (54.2)	5.41 (137.5)	1.44 (36.6)	2.30 (58.5)	6.31 (160.3)	2.56 (65)	4.13 (104.8)
4-Way Single Solenoid, Spring Return†	Inches (mm)	5.81 (147.7)	1.04 (26.4)	2.13 (54.2)	5.91 (150.2)	1.44 (36.6)	2.30 (58.5)	6.81 (173.0)	2.56 (65)	4.13 (104.8)
3-Way Double Solenoid, Detented†	Inches (mm)	8.33 (211.6)	1.04 (26.4)	2.13 (54.2)	8.53 (216.8)	1.44 (36.6)	2.30 (58.5)	10.33 (262.4)	2.56 (65)	4.13 (104.8)
4-Way Double Solenoid, Detented†	Inches (mm)	8.83 (224.3)	1.04 (26.4)	2.13 (54.2)	9.03 (229.5)	1.44 (36.6)	2.30 (58.5)	10.83 (275.0)	2.56 (65)	4.13 (104.8)
3-Way Single Solenoid, Latching*	Inches (mm)	6.41 (162.9)	1.04 (26.4)	2.34 (59.4)	6.51 (165.5)	1.44 (36.6)	2.34 (59.4)	7.41 (188.2)	2.56 (65)	4.13 (104.8)

\* Add 0.5" (12.7 mm) to "A" dimension for 4-Way Latch Valve † For dimensions -XDA, consult factory

Weights (approximate)	GENERAL SERVICE	HAZARDOUS SERVICE (-XX, -XN, -XIS)	HAZARDOUS SERVICE (-XMA, -XIF)
Single Solenoid/Spring Return 3-Way*	1.30 lbs (590 grams)	1.6 lbs (725 grams)	2.5 lbs (1130 grams)
Double Solenoid/Detented 3-Way*	1.9 lbs (860 grams)	2.6 lbs (1180 grams)	4.3 lbs (1950 grams)
Single Solenoid, Latching, 3-Way*	1.6 lbs (725 grams)	1.9 lbs (860 grams)	2.8 lbs (1270 grams)

\* For 4-way add 0.1 lbs (45 grams)

Electrical Options		Suffix Detail	Solenoid Housing Material	Voltages (Coil Codes) All options available in all voltages, except where noted. Consult factory for other voltages.	NOMINAL COIL POWER AC/DC (watts)
<b>GENERAL</b>	<b>General Purpose</b>				
	½" NPT conduit, NEMA 1, 2 & 3* ½" NPT conduit, watertight, NEMA 4 & 4X* Cord grip PG9 mini-DIN type connector, NEMA 4 ½" NPT conduit mini-DIN type connector, NEMA 4	None -PC -HC -HCC	Carbon Steel, Painted Carbon Steel, Chromate coated Engineered polymer Engineered polymer		6.0/7.0 6.0/7.0 6.5/10.5 6.5/10.5
<b>HAZARDOUS LOCALIZATION</b>	<b>Explosion Proof</b>				
	½" NPT conduit, NEMA 7 & 9, UL listed, CSA approved* For Low power, add -LB with -XX For Watertight, add -PC with -XX For Stainless housing, add -ST with -XX	-XX -LB-XX -PC-XX -ST-XX	Carbon Steel, Chromate coated Carbon Steel, Chromate coated Carbon Steel, Chromate coated Stainless Steel		5.6/7.2 1.8/1.8 5.6/7.2 5.6/7.2
	<b>Flameproof (d)</b>				
	M20x1.5 conduit, II 2 G EEx d IIB + H <sub>2</sub> T6 or T4* For Low power, add -LB with -XN For Watertight add -PC with -XN For Stainless housing add -ST with -XN	-XN -LB-XN -PC-XN -ST-XN	Carbon Steel, Chromate coated Carbon Steel, Chromate coated Carbon Steel, Chromate coated Stainless Steel	12VDC (D012) 24VDC (D024) 48VDC (D048) 120V60 (A120) 110V50 (E110) 220V50 (E220) 240V60 (A240)	5.6/7.2 1.8/1.8 5.6/7.2 5.6/7.2
	M20x1.5 conduit, II 2 G EEx d IIC T4 or T5 or T6* ½" NPT conduit, II 2 G EEx d IIC T4 or T5 or T6*	XDAS XDAT	Stainless Steel w/ Junction Box Stainless Steel w/ Junction Box		10.0/4.0 - 10.0 10.0/4.0 - 10.0
	<b>Encapsulated (m), Increased Safety (e)†</b>				
	M20x1.5 conduit, II 2 G EEx me II T5...T6- ½" NPT conduit, II 2 G EEx me II T5...T6-	-XMAA -XMAF	Engineered polymer Engineered polymer		na/4.0 na/4.0
	<b>Intrinsically safe (ia)**</b>				
	Cord grip PG 9, Class I, II & III, Div 1, Group A thru G, FM/CSA Cord grip PG 9, II 2 G EEx ia IIC T6 M20x1.5 conduit, II 2 G EEx ia IIC T4...T6 ½" NPT conduit, II 2 G EEx ia IIC T4...T6	-XISC -XISX6 -XIFA† -XIFF†	Engineered polymer Engineered polymer Engineered polymer Engineered polymer		na/1.6 na/1.6 na/0.8 na/0.8
	<b>MISC</b>	Manual override, un-guarded push and hold (not available with all solenoid options)		-ME	N/A
Solenoid exhaust adapter, 1/8 NPT For pilot solenoid consult factory		-H2	N/A		

**NOTES**  
 \* For high temperature coil add, -HT  
 (included in XMA, XIF)  
 \*\* 24 Volt DC only  
 † Contact factory for other options in this series

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

For warranty information and/or any additional information with regards to installation, operation and service warnings, please consult factory.