

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.

Flow Rate: Cv = 2.0 (Kv = 29.3)

Port Size: Inlet, cylinder and exhaust: 1/4" NPT

Media: Pneumatic only Lubricator not required

Expilot Solenoid: Consult Factory

Pressure:

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.

Temperature:

-5 to 200° F (-20 to 93° C), Media and ambient

Materials:

Valve body and internal parts:

Actuator caps:

Valve seals:

Screws:

Solenoid internal parts:

Coil/solenoid housing

316L stainless steel

316L stainless steel

FKM (fluorocarbon)

Stainless steel

304, 430F and 302 stainless steel

Per solenoid option selected. See option section.

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)

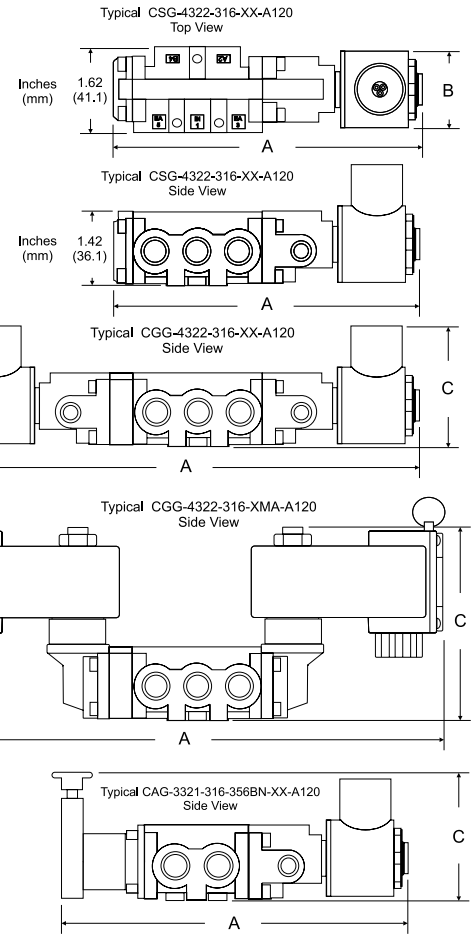
† Add suffix option here as required. See coil code below

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