



Bulletin C316S b
Side Ported

## 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

ressure:

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

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

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

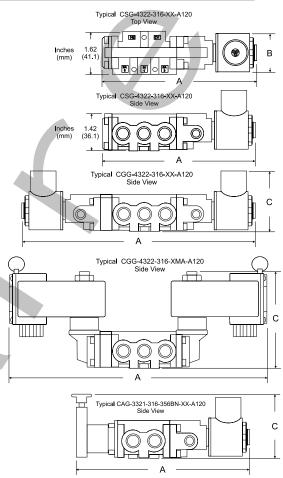
† Add suffix option here as required. See coil code below

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

<sup>\*</sup> Add 0.5" (12.7 mm) to "A" dimension for 4-Way Latch Valve † For dimentions –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)		

<sup>\*</sup> For 4-way add 0.1 lbs (45 grams)



	Electrical Options	Suffix Detail	Solenoid Housing Material		All options available	Coil Codes) e in all voltages, . Consult factory for	POWER AC/DC (watts)
G	General Purpose				_		
E	½" NPT conduit, NEMA 1,2 & 3*	None	Carbon Steel, Painted				6.0/7.0
N	1/2" NPT conduit, watertight, NEMA 4 & 4X*	-PC	Carbon Steel, Chromate coated				6.0/7.0
E R	Cord grip PG9 mini-DIN type connector, NEMA 4	-HC	Engineered polymer				6.5/10.5
A L	½" NPT conduit mini-DIN type connector, NEMA 4	-HCC	Engineered polymer				6.5/10.5
	Explosion Proof						
	1/2" NPT conduit, NEMA 7 & 9, UL listed, CSA approved*	-XX	Carbon Steel, Chromate co.	ated			5.6/7.2
	For Low power, add -LB with -XX	-LB-XX	Carbon Steel, Chromate co.	ated			1.8/1.8
н	For Watertight, add –PC with –XX	-PC-XX	Carbon Steel, Chromate co.	ated			5.6/7.2
Α	For Stainless housing, add -ST with -XX	-ST-XX	Stainless Steel				5.6/7.2
Z A	Flameproof (d)				12VDC (D012)		
R	M20x1.5 conduit, H II 2 G EEx d IIB + H2 T6 or T4*		Carbon Steel, Chromate co	ated	24VDC ( <b>D024</b> ) 48VDC ( <b>D048</b> )		5.6/7.2
D	For Low power, add –LB with –XN	-LB-XN	Carbon Steel, Chromate co.	eel, Chromate coated			1.8/1.8
0	For Watertight add –PC with –XN	-PC-XN	Carbon Steel, Chromate co.	ated	120V60 <b>(A120)</b>	110V50 <b>(E110)</b>	5.6/7.2
U S	For Stainless housing add –ST with –XN	-ST-XN	Stainless Steel		220V50 <b>(E220)</b>	240V60 <b>(A240)</b>	5.6/7.2
3	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
L	1/2" 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
0	Encapsulated (m), Increased Safety (e)†						
C A	M20x1.5 conduit, II 2 G EEx me II T5T6-	-XMAA	Engineered polymer				— na/4.0
T	1/2" NPT conduit, II 2 G EEx me II T5T6	-XMAF	Engineered polymer	NOTE	S		na/4.0
1	Intrinsically safe (ia)**	7	Ziigiiiooiou poiyiioi	* For	high temperature co	oil add, -HT	1107 110
0	Cord grip PG 9, Class I, II & III, Div 1, Group A thru G, FM/CSA	-XISC	Engineered polymer			)	na/1.6
N	Cord grip PG 9, 🔝 II 2 G EEx ia IIC T6	-XISX6	, ,	ngineered polymer ** 24 Volt DC only			na/1.6
	M20x1.5 conduit, II 2 G EEx ia IIC T4T6	-XIFA†	Engineered polymer			ntact factory for other options in this	
	1/2" NPT conduit, II 2 G EEx ia IIC T4T6	-XIFF†	Engineered polymer	series	;		na/0.8 na/0.8
		71	Ziigiiiooiou poiyiioi				
	Manual override, un-quarded push and hold (not available with all	-ME	N/A				
M	solenoid options)					While due care was ex	
s	Solenoid exhaust adapter, 1/8 NPT	-H2	N/A			this document, Versa F	
Č	For expilot solenoid consult factory					Inc. shall not be liable or omissions. Specific	