

C SERIES



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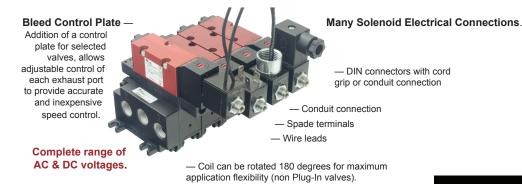


Features

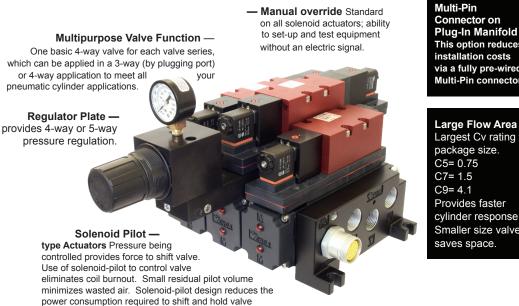
Air-Assisted Spring

Return Air boosts spring

for positive valve return.



C9 NEMA 4 Rated



Connector on Plug-In Manifold This option reduces installation costs via a fully pre-wired Multi-Pin connector.

Largest Cv rating for package size. Provides faster cylinder response. Smaller size valve saves space.

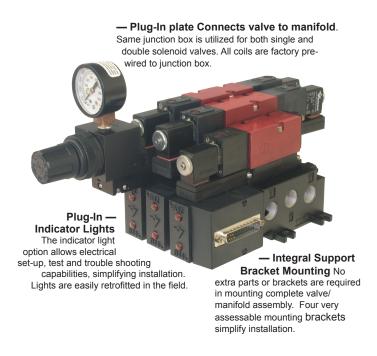
Plug-In Electrical

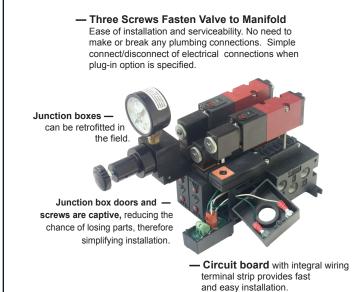


and air line lubricants.

Rated for 20 million bubble tight cycles on lubricated service (10 million

on non-lubricated service). Superior wear resistance characteristics.







Single & Double Solenoids
 In 2 or 3 Position Valves

All Double Solenoid 2 Position
Valves are equipped with detent.
3-Position Valves offer choice of all ports
blocked or cylinder ports open to exhaust
in un-actuated position.

— 1/2" NPT Conduit connection for ease of wiring. One on each side of manifold for mounting and wiring flexibility.

Low Power Solenoid Option (Standard on Plug-In Valves) Inexpensive operating costs due to low power consumption and no need for additional power supplies.

Low power solenoids also operate at reduced heat; reducing the need for cooling or venting when applied in control panels.

"Ground" and Common" connections are pre-wired at factory to common terminal screws and are color coded (green/white), reducing installed cost.

Common Inlet and Exhaust Galleries. C5= 1/4" NPT or G1/4, C7= 3/8" NPT or G3/8 C9= 1/2" NPT

Powder Coated — Aluminum Manifolds & End Plates Provides superior corrosion and

superior corrosion and strength characteristics and enhances appearance. Porting threads with integrity.

> Locating bosses on manifold and end plate interfaces assure proper installation and sealing.

- Modular Manifold Stacking Design

Allows for flexibility; Valve stations can be added or subtracted in the field.

— **Vibration Resistant Fasteners** retain manifold integrity under the toughest of

conditions.

Track Gasket Sealing Custom designed gaskets assure proper installation and a positive seal.



The C Family



Versa's C-Series, C5, C7 & C9, valves are multi-purpose four-way, 5 port 2 position or 5 port 3 position, pilot operated pneumatic valves consisting of two body types, sideported and manifold mounted. Pilot supply can be either Inpilot or Expilot. A low power solenoid controls the pilot signal which provides the positive force for shifting the valve spool.

Double solenoid/pilot 5/2 models feature detented offset positions. Double solenoid/pilot 5/3 models feature a spring return to the unactuated center position with all ports blocked or exhaust ports open in the center position or cylinder ports open to inlet.

A balanced, packed spool is the flow controlling element of each valve. The balanced spool allows the force necessary to shift the valve to remain independent of the pressure of the medium being controlled. The use of elastomer sealing provides bubbletight operation thus enabling positive positioning of 3-position devices, and thrift of operation due to no waste of leaking air.



The C5 is a four-way manifold mounted and body ported, two/three position (5/2 5/3) valves, with 1/8" NPT ports standard and ISO G thread optional. The manifold mounted valves are designed to be mounted on a stacking style manifold and can be manual, pilot or electrically operated with a variety coil options, as well as the Plug-In feature. An optional Pre-Wired sub D connector can support up to 12 valves on a manifold.

The body ported valves are of a universal flow design, solenoid, manual or pilot operated and can be mounted individually or side by side using #6 screws or on a 2 to 10 station rack mounted manifold (for more information on manual and pilot actuated valves see page 9).



The C7 is a four-way manifold mounted and body ported, two/three position (5/2 5/3) valve, with $\frac{1}{4}$ " NPT ports standard and ISO G thread optional. The manifold mounted valves are designed to be mounted on a stacking style manifold and can be manual, pilot or electrically operated with a variety coil options, as well as the Plug-In feature. An optional Pre-Wired sub D connector can support up to 12 valves on a manifold.

The body ported valves are of a universal flow design, solenoid, manual or pilot operated and can be mounted individually or side by side using #8 screws or on a 2 to 10 station rack mounted manifold (for more information on manual and pilot actuated valves see page 9).



The C9 is a four-way manifold mounted and body ported, two/three position (5/2 5/3) valve, with ½" NPT ports. The manifold mounted valves are designed to be mounted on a stacking style manifold and can be electrically operated with a variety coil options, as well as the Plug-In feature. An optional Pre-Wired Amphonal 19 pin connector can support up to 8 valves on a manifold.

The body ported valves are of a universal flow design, solenoid, or pilot operated and can be mounted individually or side by side using ½" screws (for more information on pilot actuated valves see page 9).



Overrides Four types of overrides are available: Standard, Suffix Detail -G, -M and -CML. The standard is a push twist to lock, requires no call out. -G is a guarded momentary contact, -M is an unguarded momentary contact and -CML is a raised grip, push twist to lock.

Two styles are available depending on the solenoid pilot cap used; engineered polymer or aluminum. The engineered polymer (shown extreme left top to bottom) -CML, -M & standard. The aluminum (shown left top to bottom) -CML, -M, -G & standard (see electrical page 15 for applicable coil and override).



Technical

Materials Valves

Valve body, plunger - Anodized Aluminum Actuating caps:

Solenoid (Standard) – Anodized Aluminum Solenoid (Low-Watt) - Synthetic Resin

Spring Cap – Synthetic Resin

Pilot Piston - Synthetic Resin

Valve Seals: Plunger & Body - FKM (fluorocarbon)

Pilot Piston - NBR (nitrile)

Solenoid Parts (wetted) - 304, 430F Stainless Steel

and Brass

Screws - Stainless Steel Plug-In Plate - Synthetic Resin

Temperature

Ambient Range -15°C (5°F) to +50°C (125°F)

Flow

C5: Cv (Kv) average all ports: 0.75 (11)
C7: Cv (Kv) average all ports: 1.5 (22)
C9: Cv (Kv) average all ports: 4.1 (59.5)

Installation

C Series valves have no limitations on mounting orientation.

Filtration & Lubrication

40 to 50 micron filtration, and use of general purpose, non-detergent lubricating oil (ISO, ASTM) Grade 32 in controlled air is recommended.

Materials Manifolds

Manifold, End Plates - Die cast Aluminum,

Regulator Accessory Plate - Black Anodized

Station Blank - Black Oxide Steel

Valve to Manifold - Stainless Steel

Track-gaskets - NBR (nitrile)

Bleed Control Plate, Junction Box - Synthetic Resin

Screws: Manifold to Manifold - Black Oxide Steel

powder coat-epoxy painted

Aluminum

Operating Pressure

Valve Type	Actuation	Pilot Type	Size Series	Operating Pressure Range	Auxiliary Pilot Pressure
	Single solenoid		C5	15-115 psi (1-8 bar)	
	or	Inpilot	C7	25-115 psi (1.7-8 bar)	none required
5/2 &	Single pilot-spring return		C9	30-150 psi (2.1-10.3 bar)	
5/3	Double solenoid		C5	Vacuum-115 psi (Vacuum-8 bar)	15-115 psi (1-8 bar)
	or Double pilot-spring	Expilot	C7	Vacuum-115 psi (Vacuum-8 bar)	25-115 psi (1.7-8 bar)
	centered		C9	Vacuum-150 psi (Vacuum-10.3 bar)	30-150 psi (2.1-10.3 bar)
	Double solenoid- momentary contact		C5	10-115 psi (0.7-8 bar)	
		Inpilot	C7	15-115 psi (1-8 bar)	none required
5/2			C9	20-150 psi (1.4-10.3 bar)	·
5/2	Double solenoid-		C5	Vacuum-115 psi	10-115 psi (0.7-8 bar)
	momentary contact or	Expilot	C7	(Vacuum-8 bar)	15-115 psi (1-8 bar)
	Double pilot- momentary pressure		C9	Vacuum-150 psi (Vacuum-10.3 bar)	20-150 psi (1.4-10.3 bar)
5/2 &	Manual-Lever, Butto		C5	Vacuum-115 psi	not
5/3	or Rotary switch		C7	(Vacuum-8 bar)	applicable



Valve Selector									
С			SG		-	4	5		
		AC	TUATING DEVICES			FUNCTION	VALVE		
VALVE SERIES					TYPE OF	PORT SIZE			
	Act	uation	Description Valve Series			VALVE	SIZE		
	SG	Spring Return, Solenoid	Spring pushes valve spool	C5, C7 & C9		4 Four-Way	2 1/8" NPT 3 1/4" NPT		
	GG	Solenoid - Pilot	2 position valve, dual solenoid	C5, C7 & C9		5 Four-Way	5 ½" NPT		
	xx	Spring Centering, Solenoid	Solenoid-Pilot Spring Centering. For 3 position solenoid operated valves	C5, C7 & C9					
	SP	Spring Return, Pilot	Spring pushes valve spool	C5, C7 & C9					
	PP	Pressure Pilot	2 position dual pilot valve	C5, C7 & C9					
	JJ	Spring Centering, Pressure Pilot	For 3 position pilot operated valves	C5, C7 & C9	, C7 & C9				
С	SI Spring Return, Palm Button		Spring pushes valve spool	ushes valve spool C5, C7					
S	ВІ	Spring Centering, Palm Button	For 3 position manually operated valves						
E	SL	Spring Return, Lever	Spring pushes valve spool						
R I	BL	Spring Centering, Lever	For 3 position manually operated valves	C5, C7					
E S	ZL	Two-Detent, Lever	For 2 position manually operated valves	C5, C7					
3	UL	Three-Detent, Lever	For 3 position manually operated valves	C5, C1					
	ZI	Two-Detent, Palm Button	For 2 position manually operated valves	C5, C7					
	UI	Three-Detent, Palm Button	For 3 position manually operated valves	00, 01					
	ZA	Two-Detent, Rotary Switch*	For 2 position manually operated valves	C5, C7					
	UA	Three-Detent, Rotary Switch*	C5, C7 For 3 position manually operated valves						
	*Rota	ary Switch must have-357	Suffix Detail						

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C5M	-	4	2	0	2	-	6	-	
Manifold Type Valve Size		Valve Type	Cylinder Port Size	Port Type	Cylinder Port Location		Number of Stations		
C5M - 1/8" C7M - 1/4"		4 - 4-Way	2 - 1/8"	0 - NPT 6 - ISO	0 - Rack Mounted: (cylinder		Rack Mounted 2 -10		
C9M - ½"			4 - 3/8"	Threads	ports are in the valve)		Stacking Manifold 2 - 10		
			5 - 1/2"		2 - Stacking: Side		Multi Pin Connector C5 & C7		
					3 - Stacking: Side & Bottom		2 - 12 C9 2 - 8		

Note: ISO ports available on both valves and manifolds. Contact factory for part number.

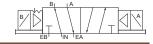
2	2	- 243 - Coil Code
BODY DETAILS	SPOOL DETAILS (flow patterns)	SUFFIX DETAILS
O SIDE PORTED-EXPILOT Body with integral, pipe threaded ports. This type of body is directly connected to pressure lines and is used for mechanical, manual and Expilot* type solenoid or pilot actuated valves. MANIFOLD MOUNTING – EXPILOT Body-ported for manifold mounting. This type of body is screw connected to a manifold that is connected to pressure lines and is used for mechanical, manual and Expilot* type solenoid or pilot actuated valves. SIDE PORTED – INPILOT Body same as "0" above, except it has an auxiliary internal passage to supply Inpilot** type solenoid and pilot actuators. MANIFOLD MOUNTING – INPILOT Body same as "1" above, except it has internal auxiliary passage to supply Inpilot** type solenoid and pilot actuators. *Manifold Mounting – inpilot actuators *Separate pressure line connection needed to supply solenoid-pilot, **Internal auxiliary porting supplies media pressure to solenoid-pilot	2 FOUR-WAY VALVES Two Position Standard flow pattern: inlet alternately open to one cylinder port; opposite cylinder port alternately open to exhaust. FOUR-WAY VALVES Three Position (Offset flows as standard flow patterns, above) Center Position 3 All ports blocked 4 Cylinder ports open to exhaust Inlet(s) open to both cylinder ports	Coil/Coil Housing -027 0.75 Low Watt DC Solenoid Operator -043 Low Watt AC/DC Solenoid Operator -228L ½" conduit -243 Wire leads -C50 ½" conduit, 8 watt, steel housing -CB 48" coil wire lead length -CD 72" coil wire lead length -HC DIN interface, pg grip cord connection -HCC DIN interface, ½" conduit connector -HCCL DIN interface, ½" conduit connector -HCCL DIN interface, ½" conduit connector -HCL DIN interface, pg grip cord connection with light -HC LDIN interface, pg grip cord connection with light -HT High temperature coil, class H -LA Low power, 0.85 watt -LB Low power, 1.8 watt -PC Potted coil, NEMA 4/4X, female hub Hazardous Service Solenoids -XX Hazardous Location Solenoid -XX Hazardous Location Solenoid Manual Overrides -G Override, un-guarded, locking -M Override, un-guarded, locking -M Override, un-guarded, locking -S5G Dow High vacuum -55M Dow Molykote 33 -H2 ½" exhaust adapter -L14 Dust filter on solenoid exhaust -ET High Temp Service with override (C5 & C7) -ETM High Temp Service with override (C5 & C7)

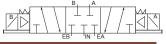
	PMR	-	SSD	-	XS_	D024
	Multi-Pin Connector		Surge Suppression		Isolation Plug	Voltage Code (required for Lights)
None	Non Plug-In manifold		SSD		XS Supply XE Exhaust	D024 - DC 24 Volt A120 - AC 120 Volt
Р	Plug-In manifold		DC coils only		(requires location -	A240 - AC 240 Volt D024 - DC 24 Volt
PL	Plug-In manifold with lights*				which section to be Isolated)	see definition last
PM	Multi-Pin connector left hand side				Example XS3 is the	column above
PML	Multi-Pin connector left hand side with lights*				supply port 3rd in- terface from the left	
PMR	Multi-Pin connector right hand side				looking at cylinder ports	
PMRL	Multi-Pin connector right hand side with lights*				porto	
*Lights re	equire voltage call out, see last column					

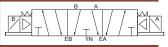
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Solenoid Valves

Manifold Mounted Valves Size & Function

			Operating	Pilot	Stack	king Manifold Mou	unt Valves	
	Actuation	Туре	Pressure Range	Туре	Standard	Low	Watt	
			psi			DC Only Option - 027	AC/DC Option - 043	
		05	15 - 115	Inpilot	CSG-4232-(*)	CSG-4232-027-(*)	CSG-4232-043-(*)	
4-Way	0	C5	Vac - 115	Expilot	CSG-4212-(*)	CSG-4212-027-(*)	CSG-4212-043-(*)	
2-Position	Single solenoid spring return	07	25 - 115	Inpilot	CSG-4332-(*)	CSG-4332-027-(*)	CSG-4332-043-(*)	
5/2	Spring return	C7	Vac - 115	Expilot	CSG-4312-(*)	CSG-4312-027-(*)	CSG-4312-043-(*)	
			30 - 150	Inpilot	CSG-4532-(*)			
		C9	Vac - 150	Expilot	CSG-4512-(*)			
			10 - 115	Inpilot	CGG-4232-(*)	CGG-4232-027-(*)	CGG-4232-043-(*)	
	Double solenoid	C5	Vac - 115	Expilot	CGG-4212-(*)	CGG-4212-027-(*)	CGG-4212-043-(*)	
4-Way		07	15 - 115	Inpilot	CGG-4332-(*)	CGG-4332-027-(*)	CGG-4332-043-(*)	
2-Position 5/2		C7	Vac - 115	Expilot	CGG-4312-(*)	CGG-4312-027-(*)	CGG-4312-043-(*)	
		C9	20 - 150	Inpilot	CGG-4532-(*)			
		69	Vac - 150	Expilot	CGG-4512-(*)			
	Double solenoid spring centered (all ports closed)	C5	15 - 115	Inpilot	CXX-4233-(*)	CXX-4233-027-(*)	CXX-4233-043-(*)	
			Vac - 115	Expilot	CXX-4213-(*)	CXX-4213-027-(*)	CXX-4213-043-(*)	
4-Way 3-Position		C7	25 - 115	Inpilot	CXX-4233-(*)	CXX-4333-027-(*)	CXX-4233-043-(*)	
5/3			Vac - 115	Expilot	CXX-4213-(*)	CXX-4313-027-(*)	CXX-4213-043-(*)	
0.0		C9	30 - 150	Inpilot	CXX-4533-(*)			
		Lea	Vac - 150	Expilot	CXX-4513-(*)			
	Double	C5	15 - 115	Inpilot	CXX-4234-(*)	CXX-4234-027-(*)	CXX-4234-043-(*)	
	solenoid	65	Vac - 115	Expilot	CXX-4214-(*)	CXX-4214-027-(*)	CXX-4214-043-(*)	
4-Way 3-Position	spring centered	C7	25 - 115	Inpilot	CXX-4334-(*)	CXX-4334-027-(*)	CXX-4334-043-(*)	
5-Position 5/3	(cylinder ports		Vac - 115	Expilot	CXX-4314-(*)	CXX-4314-027-(*)	CXX-4314-043-(*)	
0.0	open to	C9	30 - 150	Inpilot	CXX-4534-(*)			
	Exhaust)	Lea	Vac - 150	Expilot	CXX-4514-(*)			
		C5	15 - 115	Inpilot	CXX-4238-(*)	CXX-4238-027-(*)	CXX-4238-043-(*)	
	Double		Vac - 115	Expilot	CXX-4218-(*)	CXX-4218-027-(*)	CXX-4218-043-(*)	
4-Way 3-Position	solenoid	C7	25 - 115	Inpilot	CXX-4338-(*)	CXX-4338-027-(*)	CXX-4338-043-(*)	
5-Position 5/3	spring centered (Inlet open to		Vac - 115	Expilot	CXX-4318-(*)	CXX-4318-027-(*)	CXX-4318-043-(*)	
3.3	cylinder ports)	C9	30 - 150	Inpilot	CXX-4538-(*)			
		Ca	Vac - 150	Expilot	CXX-4518-(*)			

Manifold Cylinder Port Size & Location

						Manifolds Plug-In	Stacking Manifolds Plug-In		
	Cylinde Siz		Cylinder Port Location		Manifold part	Mountable	Manifold part	Mountable Valves	
	1/8" NPT	1⁄4" NPT	Side Only	Side & Bottom	Number	Valves, Typical		Low Watt 027 or 043	
	X		X	CGG-4232-		CSG-4232-(*) CGG-4232-(*)	C5M-4202-(†)-(††)	CSG-4232-027-P-(*) CGG-4232-027-P-(*) CXX-4233-027-P-(*)	
C5		X	X		C5M-4302-(†)	CXX-4233-(*) CXX-4234-(*)	C5M-4302-(†)-(††)	CXX-4234-027-P-(*) CSG-4232-043-P-(*) CGG-4232-043-P-(*) CXX-4233-043-P-(*) CXX-4234-043-P-(*)	
	X			Х	C5M-4203-(†)		C5M-4203-(†)-(††)		
	1⁄4" NPT	3/8" NPT							
	Х		X		C7M-4302-(†)		C7M-4302-(†)-(††)	CSG-4332-027-P-(*) CGG-4332-027-P-(*)	
C7		X	X		C7M-4402-(†)	CSG-4332-(*) CGG-4332-(*) CXX-4333-(*)	C7M-4402-(†)-(††)	CXX-4333-027-P-(*) CXX-4334-027-P-(*) CSG-4332-043-P-(*)	
	X			X	C7M-4303-(†)	CXX-4334-(*)	C7M-4303-(†)-(††)	CXX-4333-043-P-(*) CGG-4332-043-P-(*) CXX-4334-043-P-(*)	
	½" NPT	½" NPT							
C9	х		X		C9M-4502-(†)	CSG-4532-(*) CGG-4532-(*)	C9M-4502-(†)-(††)	CSG-4532-P-(*) CGG-4532-P-(*)	
	X			Х	C9M-4503-(†)	CXX-4533-(*) CXX-4534-(*)	C9M-4503-(†)-(††)	CXX-4533-P-(*) CXX-4534-P-(*)	

	I	Manifold Mount Va	lves	Side Ported Valves				
	Plug-In	Plug-In I	Low watt	Port Size	Standard	Low	Watt	
		DC Only Option - 027	AC/DC Option - 043			DC Only Option - 027	AC/DC Option - 043	
		CSG-4232-027-P-(*)	CSG-4232-043-P-(*)	1/8" NPT	CSG-4222-(*)	CSG-4222-027-(*)	CSG-4222-043-(*)	
		-		1/8" NPT	CSG-4202-(*)	CSG-4202-027-(*)	CSG-4202-043-(*)	
Ī		CSG-4332-027-P-(*)	CSG-4332-043-P-(*)	1⁄4" NPT	CSG-4322-(*)	CSG-4322-027-(*)	CSG-4322-043-(*)	
		-		1⁄4" NPT	CSG-4302-(*)	CSG-4302-027-(*)	CSG-4302-043-(*)	
	CSG-4532-P-(*)	-		1/2" NPT	CSG-4522-(*)			
	CSG-4512-P-(*)	-		1/2" NPT	CSG-4502-(*)			
		CGG-4232-027-P-(*)	CGG-4232-043-P-(*)	1/8" NPT	CGG-4322-(*)	CGG-4222-027-(*)	CGG-4222-043-(*)	
				1/8" NPT	CGG-4202-(*)	CGG-4202-027-(*)	CGG-4202-043-(*)	
		CGG-4332-027-P-(*)	CGG-4332-043-P-(*)	1/4" NPT	CGG-4322-(*)	CGG-4322-027-(*)	CGG-4322-043-(*)	
				1/4" NPT	CGG-4302-(*)	CGG-4302-027-(*)	CGG-4302-043-(*)	
	CGG-4532-P-(*)			1/2" NPT	CGG-4522-(*)			
	CGG-4512-P-(*)			1/2" NPT	CGG-4502-(*)			
		CXX-4233-027-P-(*)	CXX-4233-043-P-(*)	1/8" NPT	CXX-4223-(*)	CXX-4233-027-(*)	CXX-4233-043-(*)	
				1/8" NPT	CXX-4203-(*)	CXX-4203-027-(*)	CXX-4203-043-(*)	
		CXX-4233-027-P-(*)	CXX-4233-043-P-(*)	1/4" NPT	CXX-4323-(*)	CXX-4233-027-(*)	CXX-4233-043-(*)	
				1/4" NPT	CXX-4303-(*)	CXX-4203-027-(*)	CXX-4203-043-(*)	
	CXX-4533-P-(*)			½" NPT	CXX-4523-(*)			
	CXX-4513-P-(*)			½" NPT	CXX-4503-(*)			
		CXX-4234-027-P-(*)	CXX-4234-043-P-(*)	⅓" NPT	CXX-4224-(*)	CXX-4234-027-(*)	CXX-4234-043-(*)	
				⅓" NPT	CXX-4204-(*)	CXX-4204-027-(*)	CXX-4204-043-(*)	
		CXX-4334-027-P-(*)	CXX-4334-043-P-(*)	1/4" NPT	CXX-4324-(*)	CXX-4334-027-(*)	CXX-4334-043-(*)	
				1/4" NPT	CXX-4304-(*)	CXX-4304-027-(*)	CXX-4304-043-(*)	
	CXX-4534-P-(*)			1⁄2" NPT	CXX-4524-(*)			
	CXX-4514-P-(*)			1⁄2" NPT	CXX-4504-(*)			
		CXX-4238-P-027-(*)	CXX-4238-P-043-(*)	1/8" NPT	CXX-4228-(*)	CXX-4238-027-(*)	CXX-4238-043-(*)	
				1/8" NPT	CXX-4208-(*)	CXX-4208-027-(*)	CXX-4208-043-(*)	
		CXX-4338-P-027-(*)	CXX-4338-P-043-(*)	1/4" NPT	CXX-4328-(*)	CXX-4338-027-(*)	CXX-4338-043-(*)	
				1/4" NPT	CXX-4308-(*)	CXX-4308-027-(*)	CXX-4308-043-(*)	
	CXX-4538-P-(*)			½" NPT	CXX-4528-(*)			
	CXX-4518-P-(*)			1/2" NPT	CXX-4508-(*)			

Manifold, Rack Mounted

Notes:
* Voltage options - see page 14-15

** Low watt option (DC - 027, AC - 043 or none)

† The number of stations - 2-12 1/2" manifold limited to 8 stations with multi pin connector

†† None Non Plug-In manifold Plug-In manifold

PLPlug-In manifold with lights* PMMulti-Pin connector left hand side

PML Multi-Pin connector left hand side with

lights*

PMR Multi-Pin connector right hand side PMRL Multi-Pin connector right hand side with lights*

* Lights require same voltage option as Solenoid valve being used

Rack Mounted Manifold								
Number of Stations	Manifold Part Number by Port Size							
	1/4" Ports	¾" Ports						
2	C5M-4300-2	C7M-4400-2						
3	C5M-4300-3	C7M-4400-3						
4	C5M-4300-4	C7M-4400-4						
5	C5M-4300-5	C7M-4400-5						
6	C5M-4300-6	C7M-4400-6						
7	C5M-4300-7	C7M-4400-7						
8	C5M-4300-8	C7M-4400-8						
9	C5M-4300-9	C7M-4400-9						
10	C5M-4300-10	C7M-4400-10						
	Mountable Solenoid	Valves†						
	CSG-4222-(**)-(*) CGG-4222-(**)-(*) CXX-4223-(**)-(*) CXX-4224-(**)-(*) CXX-4228-(**)-(*)	CSG-4222-(**)-(*) CGG-4222-(**)-(*) CXX-4223-(**)-(*) CXX-4224-(**)-(*) CXX-4228-(**)-(*)						



Valves Side Ported

Manually Actuated

					ACTUATI	ON
	FUNCTION			LEVER	виттом	ROTARY SWITCH
	Spring return	C5	1/6" NPT	CSL-4202	CSI-4202	N/A
5/2	Spring return	C7	1⁄4" NPT	CSL-4302	CSI-4302	IWA
5/2	Two Detent	C5	⅓" NPT	CZL-4202	CZI-4202	CZA-4202-357
		C7	1⁄4" NPT	CZL-4302	CZI-4302	CZA-4302-357
	Spring Centered (all ports blocked)	C5	⅓" NPT	CBL-4203	CBI-4203	
		C7	1⁄4" NPT	CBL-4303	CBI-4303	
	Spring Centered (Cylinder ports open to exhaust)	C5	⅓" NPT	CBL-4203	CBI-4203	N/A
		C7	1⁄4" NPT	CBL-4303	CBI-4303	IWA
	Spring Centered	C5	⅓" NPT	CBL-4204	CBI-4204	
5/3	(Inlet open to cylinder ports)	C7	1⁄4" NPT	CBL-4304	CBI-4304	
5/3	Three Detent	C5	⅓" NPT	CUL-4203	CUI-4203	CUA-4203-357
	(all ports blocked)	C7	1⁄4" NPT	CUL-4303	CUI-4303	CUA-4303-357
	Three Detent	C5	⅓" NPT	CUL-4204	CUI-4204	CUA-4204-357
	(Cylinder ports open to exhaust)	C7	1⁄4" NPT	CUL-4304	CUI-4304	CUA-4304-357
	Three Detent	C5	⅓" NPT	CUL-4208	CUI-4208	CUA-4208-357
	(Inlet open to cylinder ports)	C7	1/4" NPT	CUL-4308	CUI-4308	CUA-4308-357

Suffix Options for Manually Actuated Valves

-218A Lever is rotated 90° counter clockwise from vertical upright position.

Lever is rotated 180° counter clockwise from vertical upright position.

-218C Lever is rotated 270° counter clockwise from vertical upright position.

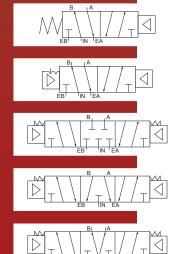
Large diameter 1.81" (46mm) black button. -25B

Large diameter 1.81" (46mm) green button. Large diameter 1.81" (46mm) Red button. -25BG

-25BR

-43 Additional panel nut for button or rotary switch valves. Reduces panel thickness from 0.56" (14.2) to 0.44" (11mm).

Pilot Actuated



4-Way		C5	⅓" NPT	CSP-4202-(*)
2-Position	Single Pilot spring return	C7	⅓" NPT	CSP-4302-(*)
5/2	J 7 3 3 3 3	C9	1/4" NPT	CSP-4502-(*)
4-Way	Double Pilot	C5	⅓" NPT	CPP-4202-(*)
2-Position	momentary	C7	1⁄8" NPT	CPP-4302-(*)
5/2	contact	C9	1/4" NPT	CPP-4502-(*)
4-Way	Double Pilot spring centered (all ports closed)	C5	⅓" NPT	CJJ-4203-(*)
3-Position		C7	⅓" NPT	CJJ-4303-(*)
5/3		C9	1/4" NPT	CJJ-4503-(*)
4-Way	Double Pilot	C5	⅓" NPT	CJJ-4204-(*)
3-Position	spring centered (cylinder ports	C7	⅓" NPT	CJJ-4304-(*)
5/3	open to Exhaust)	C9	1/4" NPT	CJJ-4504-(*)
4-Way	Double Pilot	C5	⅓" NPT	CJJ-4208-(*)
3-Position	spring centered (Inlet open to	C7	⅓" NPT	CJJ-4308-(*)
5/3	cylinder ports)	C9	1⁄4" NPT	CJJ-4508-(*)
	·			·

Note:

Manual and pilot valves may be mounted on both fix length and stacking manifolds.

Example for stacking manifold: change valve part number from CUL-4303 to CUL-4313.



Manifolds Plug-In

Versa's C manifold system provides single modular, stacking manifolds that can be joined together to form a very compact valve mounting platform up to 12 stations. Each module is able to mount any single solenoid or double solenoid actuated, 2 or 3 position valve within the specific C5, C7 or C9 series. Different types of valves and actuations within the same size series can be intermixed within the same manifold system. End Plates providing a common inlet and 2 common exhausts for each side of the manifold complete the assembly.

The modular concept allows systems to be easily changed in the field, or at any time, by addition or subtraction of valve stations or conversion to the Plug-In feature.

Cylinder ports are located in both the side and bottom of the manifold.



Regulators

Sandwich regulators complete with pressure gauge with inlet port pressure control can be provided for 4-way function on any valve stations that require this feature. Dual pressure for 5-Way regulators also available (see full description on page 11).



Bleed Control Plates that provide speed control through metering of the exhausts can be added as an option for any valve stations that require this feature (see page 12).



Multi-Pin Connector (Suffix -PM)

The Multi-Pin option utilizes a 25 pin plug (male side) Sub-D connector on the C5 and C7 and a 19 pin, NEMA 4 connector on the C9; all are pre-wired and factory tested. All stations on Multi-Pin connector equipped manifolds are always wired for double solenoid valves, whether the valves are single or double solenoid. This allows the pneumatic equipment designer to change valve function easily if design changes occur.

Connection to a programmable logic controller is possible without the normal labor cost associated with solenoid valve wiring. Remove three screws and the valve is removed from the manifold without touching any electrical or pneumatic connections (see notes page 8 for additional suffix details and page 14 for individual pin identification).



Indicator lights

Indicator lights are available in conjunction with the Plug-In electrical connection for all common voltages and are located in the cover of each junction box. These lights allow for easy manifold set-up and trouble shooting (see voltage codes page 6).



Plug-In electrical connection (Suffix -P)

Use of the Plug-In electrical connection option simplifies wiring, installation and servicing. Wiring connections are made within a junction box adapter so that there is no hard wiring to any valve. Installation or removal of a valve, accomplished by simply loosening or tightening 3 valve mounting screws, and the valve is disconnected pneumatically and electrically.

The grounds and commons are pre-wired at the factory, so that only one wire connection is necessary for each solenoid and this is further simplified by a unique terminal strip mounted in the end cover of each box.



Voltage Surge Protection (Suffix -SSD)

Surge limiting diodes are available for DC circuits (see pages 6 & 14).



Intermediate Supply Manifolds

In applications where air flow capacity might be compromised due to several valves functioning at the same time or where controlled accessories require large volumes, Intermediate Supply Manifolds can be inserted into the manifold assembly at strategic intervals and additional inlet supply can be connected to these Supply Ports in order to increase the available volume of air. Consult factory for application assistance.



Isolation Disc (Suffix-XS_)

Isolation Discs are small gasketed shields that can be placed between manifold stations, to effectively isolate each group of valves that utilize the same pressure. For example, a five station assembly could have two stations functioning at 50 psi and three stations functioning at 100 psi by simply placing an Inlet Isolation Disc at the intersection of valve station 2 & 3 (see page 6).



Spacer Plate

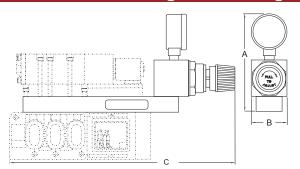
Required on C5 & C7 stacking manifold for mounting adjacent valves with hazardous service electrical operators or when mounting side by side regulators (see page 12).

10



Regulators

Regulators Plug-In Manifold



		Dimensions											
Series	А	В	С										
C5	3.79"	1.25"	8.94"										
	(96.3)	(31.6)	(227.1)										
C7	4.04"	1.5"	9.4"										
	(102.6)	(38.1)	(238.8)										
C9	5.33"	2.14"	13.67"										
	(135.4)	(54.4)	(347.2)										

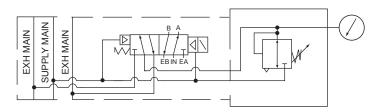
Metric dimensions in mm shown in parenthesis.

Series	4	way	5 WAY (Dual	pressure 4-Way)	Pressure
	Non Plug-In	Plug-In	Non Plug-In	Plug-In	Range psi
C5	C5AR-4060MG	C5AR-4060MG-P	NA	NA	5-60
	C5AR-4125MG	C5AR-4125MG-P	NA	NA	10-125
	Not Available	Not Available Not Available		C7AR-5010MG-P	1-10
C7	Not Available	Not Available	C7AR-5030MG	C7AR-5030MG-P	3-30
"	C7AR-4060MG	C7AR-4060MG-P	C7AR-5060MG	C7AR-5060MG-P	5-60
	C7AR-4125MG	C7AR-4125MG-P	C7AR-5125MG	C7AR-5125MG-P	10-125
	C9AR-4030MG	C9AR-4030MG-P	C9AR-5030MG	C9AR-5030MG-P	3-30
C9	C9AR-4060MG	C9AR-4060MG-P	C9AR-5060MG	C9AR-5060MG-P	5-60
	C9AR-4125MG	C9AR-4125MG-P	C9AR-5125MG	C9AR-5125MG-P	10-125

Notes:

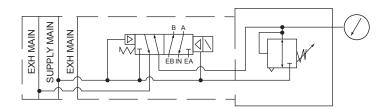
- 1) Regulator Assembly includes gauge, valve mounting screws and track-gasket.
- 2) For side by side mounting of regulators or for regulators on every station, consult factory.
- 3) Regulators for use with INPilot type valves only.
- 4) For 4-way type regulator, must specify 4-way valve. For 5-way type regulator, must specify 5-way valve. Change first 4 in valve part number to 5, for example, CSG-4332-043 changes to CSG-5332-043.
- 5) Minimum manifold inlet pressure based on valve type.

SINGLE PRESSURE (4-WAY) REGULATOR FLOW DIAGRAM



Flow Diagram above shows one single solenoid valve mounted on the Regulator Assembly.

DUAL PRESSURE (5-WAY) REGULATOR FLOW DIAGRAM

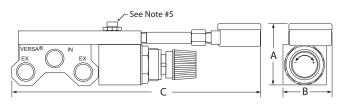


Flow Diagram above shows one single solenoid valve mounted on the Regulator Assembly. Supply Main pressure is supplied to the 'EB' (5) port and Regulated pressure is supplied to the 'EA' (3) port.



Regulators & Accessories

Regulators Extruded Manifold



	ı	Dimensions												
Series	А	В	С											
C5	2.12"	1.25"	6.79"											
	(53.8)	(31.8)	(172.5)											
C7	2.27"	1.7"	8.66"											
	(57.7)	(42.4)	(220)											

Metric dimensions in mm shown in parenthesis.

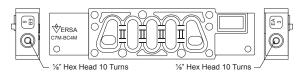
4	way	5 WAY (Dual	5 WAY (Dual pressure 4-Way)						
C5	C7	C5	C7	Range psi					
C5AR-4010G	C7AR-4010G	C5AR-5010G	C7AR-5010G	1-10					
C5AR-4030G	C7AR-4030G	C5AR-5030G	C7AR-5030G	3-30					
C5AR-4060G	C7AR-4060G	C5AR-5060G	C7AR-5060G	5-60					
C5AR-4125G	C7AR-4125G	C5AR-5125G	C7AR-5125G	10-125					

NOTES:

- 1) Regulator Assembly includes valve mounting screws and O-rings and can only be mounted on every other station. Alternate regulator assemblies for adjacent stations.
- 2) All valves must be EXPilot type. No auxiliary pilot pressure required (see diagrams).
- 3) Minimum manifold inlet pressure required is based on valve type. See Technical Information page 5.
- 4) C7 only: regulator assembly product numbers listed are for use with Expilot solenoid operated valves only. For pilot or lever operated valves add "P" to the product number shown. FOR EXAMPLE: C7AR-4010GP
- 5) C7 only: assemble the adapter assembly flush in the pilot port of solenoid valve using a 9/16" wrench.

Accessories Selection Guide

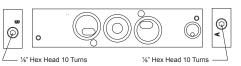
Plug-In Manifold Bleed Control



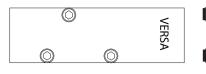
C5	C5M-BC4M
0.5	C5M-BC4M-P For Low Watt Plug-In valves
C7	C7M-BC4M
C/	C7M-BC4M-P For Low Watt Plug-In valves
C9	C9M-BC4M
C9	C9M-BC4M-P For Low Watt Plug-In valves

Extruded Manifold Bleed Control C5: C5M-BC4

C7: C7M-BC4



Plug-In Manifold Station Blank





Extruded Manifold Station Blank

C5: C5M-SB4 C7: C7M-SB4





Plug-In Manifold Spacer Plate



Hazardous Service and	C5	C5M-SP4M	0.55" wide
non Plug- In Valves	C7	C7M-SP4M	0.40" wide
Plug-In	C5	C5M-SP4M-P	0.55" wide
Valves	C7	C7M-SP4M-P	0.40" wide



/		SUFFIX	DETAIL by	SERIES	SOLEN		CONTINUOUS DUTY COILS			
٥	Coil Description	C5	C7	C9	OPERAT TYPE		Туре	Nominal		
	3 spade terminals, 11 mm, Mini DIN (DIN 43650 Form	Std	Std	Std		-		AC	DC	
	"B"). UL CSA Overrides G, M, & CML* 3 spade terminals ,11 mm, for use with Mini DIN connector (DIN 43650 Form "B"). Pg9 cord grip NEMA 4. UL CSA Overrides G, M, & CML*	-HC	-HC	-HC	Coils with spade terr nals (for M DIN conne NEMA 4/IF	lini ector,		C5/C7 8.5 Watts C9 5	C5/C7 10.5 Watts C9 4.8	
	3 spade terminals 11 mm, for use with $1\!\!/2"$ NPT Mini DIN connector. (DIN 43650 Form "B"). Overrides G, M, & CML*	HCC	HCC	-HCC			CLASS F, Epoxy	Watts	watts	
	Two leads (flying leads). Overrides G, M, & CML*	-243	-243	-C15 -243			encap- sulated, Rated voltage continu-	C5/C7/C9	C5/C7/C9	
	½" NPT conduit entry; integrally molded coil & conduit entry, NEMA 4/IP65. Overrides G, M, & CML*	-228L	-228L	-C15 -228L			ous duty 100%	8.5 Watts	10.5 Watts	
	3 spade terminals, 11 mm, Mini DIN for use with Versa socket on Plug-In manifolds C9. (DIN 43650 Form "B") NEMA 4/IP65. Overrides G, M, & CML*				5 Watts					
	½" NPT conduit, carbon steel, chromate coated. Overrides G, M, & CML*	C50	C50	C50				6	7	
	1/2" NPT conduit entry; potted coil NEMA 4 & 4x, 11, 12, and 13 carbon steel, chromate coated. Overrides G, PC PC PC M, & CML*							Watts	Watts	
	LOW-	WATT	0	PTION (27, 043					
	Coil 3 spade terminals, 8 mm, Micromini DIN (DIN 43650 Form "C"). Overrides M & CML*	STD	STD	NA	LOW- WATT coils with spade	Op- tion	CLASS		0.75 Watt	
	3 spade terminals, 8 mm, for use with Micromini DIN				terminals (For		CLASS F, Epoxy encap- sulated, Rated			
	connector. Pg9 cord grip NEMA 4 (DIN 43650 Form "C"). Overrides M & CML*	-HC	-HC	NA	Micromini DIN style 8 mm connector,		Rated voltage			
	connector. Pg9 cord grip NEMA 4 (DIN 43650 Form "C").	-HC -243	-HC -243	NA NA	DIN style 8 mm connector, NEMA 4/ IP65) or wire leads or LOW- WATT	043	Rated	3.7 @50 Hz 3.2 to 3.1VA @60Hz	2.9 Watt	
	connector. Pg9 cord grip NEMA 4 (DIN 43650 Form "C"). Overrides M & CML*				DIN style 8 mm connector, NEMA 4/ IP65) or wire leads or LOW-	043	Rated voltage continuous duty	3.2 to 3.1VA	2.9 Watt	
	connector. Pg9 cord grip NEMA 4 (DIN 43650 Form "C"). Overrides M & CML* Two leads (flying leads). Overrides M & CML* Coil with 3 spade terminals, 8 mm, Micromini DIN for use with Versa socket on Plug-In manifolds C5 & C7 (DIN 43650 Form "C"). Overrides M & CML*	-243	-243 -P	NA NA	DIN style 8 mm connector, NEMA 4/ IP65) or wire leads or LOW- WATT PLUG-I	043	Rated voltage continuous duty	3.2 to 3.1VA	2.9 Watt	
	connector. Pg9 cord grip NEMA 4 (DIN 43650 Form "C"). Overrides M & CML* Two leads (flying leads). Overrides M & CML* Coil with 3 spade terminals, 8 mm, Micromini DIN for use with Versa socket on Plug-In manifolds C5 & C7 (DIN 43650 Form "C"). Overrides M & CML*	-243 NA	-243 -P	NA NA	DIN style 8 mm connector, NEMA 4/ IP65) or wire leads or LOW- WATT PLUG-I	043	Rated voltage continuous duty	3.2 to 3.1VA	2.9 Watt	

^{*}for more information on overrides see page 3

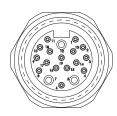
	CONTINUOUS DUTY COILS												
	AC \	/oltage	Inrush	Hold	ling		DC Voltage	9	Inrush & Holding				
Certs	Volts/Hz	Coil Code #	Amp	Amp	Ohm	Volts	Coil Code #	Ohm	amp				
UL CSA	24/60 110/50 120/60 220/50 240/60	A024 E110 A120 E220 A240	0.458 0.458 0.092 0.092 0.045	0.354 0.354 0.071 0.071 0.035	31.6 615 615 3400 3400	6 12 24 48	D006 D012 D024 D048	6.8 31.6 121 458	-				
				C5 8	& C7								
	24/60 110/50 120/60 220/50 240/50 240/60	A024 E110 A120 E220 E240 A240	0.63 0.13 0.13 0.06 0.06 0.06	0.50 0.10 0.10 0.05 0.05 0.05	26 647 647 2790 2790 2790	12 24 48	D012 D024 D048	15 55 222	0.87 0.43 0.22				
	24/60 110/50 120/60 220/50 240/50 240/60	A024 E110 A120 E220 E240 A240	0.63 0.13 0.13 0.06 0.06 0.06	0.50 0.10 0.10 0.05 0.05 0.05	26 647 647 2790 2790 2790	12 24 48	D012 D024 D048	15 55 222	0.87 0.43 0.22				
UL CSA		See C9 Above for Coil Electrical Values											
UL CSA			0.38 0.08 0.08 0.04 0.04 0.04	19 475 475 2030 2714 2000	6 12 24 48 125	D006 D012 D024 D048 D125	4.6 19 75 294 2030	1.30 0.63 0.32 0.16 0.06					
		L()W-WAT	T (OPTION	027 8	043						
							D006 D012 D024 D048	47 193 724 2310	0.125 0.063 0.031 0.017				
	24/50 24/60 110/50 110/60 120/60 220/50 220/60 240/60	E024 A024 E110 A110 A120 E220 A220 A240	0.21 0.19 0.045 0.041 0.042 0.023 0.023 0.021	0.16 0.13 0.035 0.028 0.032 0.017 0.017	78 78 1715 1715 1715 7750 7750	12 24 48	D012 D024 D048	47 193 724	0.24 0.12 0.06				
			HAZ	ARDOU	S LUCA	TIUN							
UL CSA	24/60 110/50 120/60 220/50 240/50 240/60	A024 E110 A120 E220 E240 A240	0.63 0.13 0.13 0.07 0.06 0.06	0.38 0.08 0.08 0.04 0.04 0.04	19 475 475 2030 2714 2000	6 12 24 48 125	D006 D012 D024 D048 D125	4.6 19 75 294 2030	1.30 0.63 0.32 0.16 0.06				

MULTI PIN CONNECTORS

Wire Lo	cation DB	25 CONNECTOR
Pin No.	Wire No.	Function
1	1	Valve 1, SOL A12
14	1	Valve 1, SOL B14
2	2	Valve 2, SOL A12
15	2	Valve 2, SOL B14
3	3	Valve 3, SOL A12
16	3	Valve 3, SOL B14
4	4	Valve 4, SOL A12
17	4	Valve 4, SOL B14
5	5	Valve 5, SOL A12
18	5	Valve 5, SOL B14
6	6	Valve 6, SOL A12
19	6	Valve 6, SOL B14
7	7	Valve 7, SOL A12
20	7	Valve 7, SOL B14
8	8	Valve 8, SOL A12
21	8	Valve 8, SOL B14
9	9	Valve 9, SOL A12
22	9	Valve 9, SOL A14
10	10	Valve 10, SOL A12
23	10	Valve 10, SOL B14
11	11	Valve 11, SOL A12
24	11	Valve 11, SOL B14
12	12	Valve 12, SOL A12
25	12	Valve 1, SOL B14
13	С	COMMON

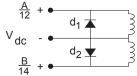
C5 & C7

C9



W	ire Location 19 Pin C	ONNECTOR										
Pin No.	Wire No.	Function										
1	VIOLET	Valve 1, SOL A12										
2	RED	Valve 1, SOL B14										
3	GREY	Valve 2, SOL A12										
4	RED/BLUE	Valve 2, SOL B14										
6	GREEN	Valve 3, SOL A12										
8	WHITE/GREEN	Valve 3, SOL B14										
9	WHITE/YELLOW	Valve 4, SOL A12										
10	WHITE/GREY	Valve 4, SOL B14										
11	BLACK	Valve 5, SOL A12										
13	YELLOW/BROWN	Valve 5, SOL B14										
14	BROWN/GREEN	Valve 6, SOL A12										
15	WHITE	Valve 6, SOL B14										
16	YELLOW	Valve 7, SOL A12										
17	PINK	Valve 7, SOL B14										
18	GREY/BROWN	Valve 8, SOL A12										
19	GRAY/PINK	Valve 8, SOL B14										
5	BLUE	COMMON										
12	GREEN/YELLOW	GROUND										
7	BROWN	NONE										

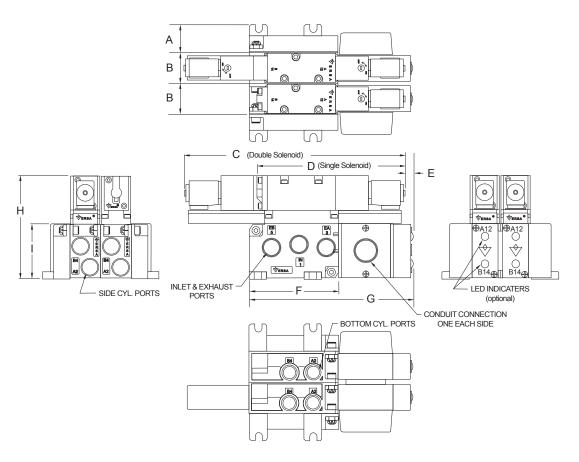
Surge Suppression Diode C5, C7 & C9





Dimensions

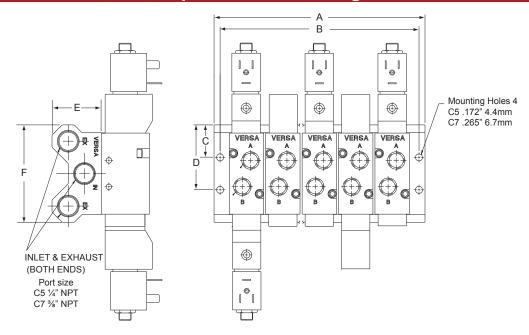
Manifolds, Stacking



			C5, C7 & C9 Stacking Manifolds Dimensions														
SERIES	Α	В	С	D	Е	F	G	Н	I	Cylinder Ports	Inlet Ports	Conduit Hub					
										Side							
C5 1" (25.4)		.95"	7.40"	4.76"	.33"	2.60"	5.35"	3.79" (96.3)	2.00"	1/8" or 1/4"	1/4"	1/2"					
	(25.4)	(24.1)	(188.1)	(121.0)	(8.4)	(66.0)	(135.9)		(50.8)	Bottom	NPT	NPT					
									1/8"								
		1" 1.12" 8.03" 5.39" .33" 3.24" 6.00" 3.75" (25.4) (28.5) (204) (136.9) (8.4) (82.4) (152.4)			Side												
C7	1"		8.03"						2.00" (50.8)	1⁄4" or 3⁄8"	3/8" NPT	½" NPT					
	(25.4)		(204)							Bottom							
										1/4"							
										Side							
00	1.75"	2.18"	10.75"	7.32"	0.25"	7.88"		7.86"	3.20"	1/2"	3/,"	1"					
C9	(44.5)	(55.4)	(273.1)	(185.9)	(6.4)	(200.2)	NA	(199.6)	(81.28)	Bottom	NPT	NPT					
										1/2"							

Metric dimensions in mm shown in parenthesis.

Valves Sideported & Fixed Length Manifold



								C	5 & C	7 Fixe	d Le	ngth l	Manif	olds	Dime	nsions						
		Length*															Mounting		Height	\\/idth		
	2 Sta	ation	3 Sta	ation	4 Sta	tion	5 Sta	tion	6 Station 7 Station			8 Station 9 Station		10 Station		Holes		rieigiit iv	vviulii			
Series	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	С	D	E	F
C5	2.50	2.19	3.44	3.13	4.38	4.06	5.31	5.0	6.25	5.93	7.19	6.88	8.13	7.81	8.13	9.06	10.0	9.69	1.48	2.27	3.00	1.25
C7	3.13	2.75	4.25	3.88	5.38	5.0	6.50	6.13	7.63	7.25	8.75	8.38	9.88	9.50	11.0	10.63	12.13	11.75	1.0	2.0	3.00	1.50

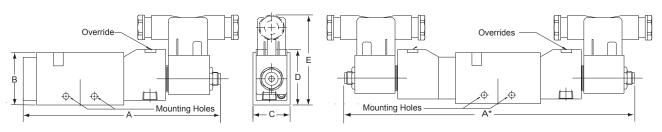
^{*} Dimensions: Inches

Fixed Length Manifold Part Number				
Valve Series	Part Number	Port Size		
C5	C5M-4300-(*number of stations)	1⁄4" NPT		
C7	C7M-4400-(*number of stations)	%" NPT		

*Indicate number of stations, 2 to 10

NOTE: manifolds available with ISO threads, consult factory.

Valves, Sideported



NOTE: valves available with ISO threads, consult factory.

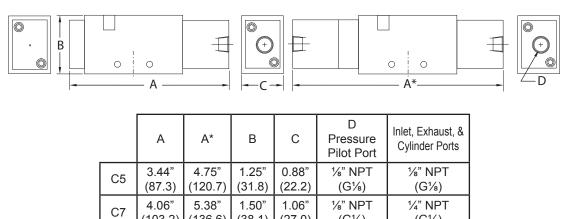
	А	A*	В	С	D	Е	Port Size	Mounting Holes Diameter
C5	5.03"	7.92"	1.25"	0.88"	1.46"	3.71"	⅓" NPT	0.144"
	(127.7)	(201.2)	(31.8)	(22.4)	(37.2)	(94.2)	(G⅓)	#8 Screw
C7	5.65"	8.55"	1.50"	1.06"	1.59"	4.02"	¼"NPT	0.172"
	(143.6)	(217.1)	(38.1)	(27.0)	(40.4)	(102.2)	(G¼)	#8 Screw
C9	7.45" (189)	10.75" 273	2.25" (57)	1.75" (44)	2.25" (57)	2.57" (63)	½" NPT	0.27" 1⁄4" Screw

Metric dimensions in mm, shown in parenthesis.



Dimensions

Valves, Pilot & Manual



(27.0)

2.0"

(50.8)

(G1/8)

1/8" NPT

 $(G\frac{1}{4})$

1/2" NPT

Metric dimensions in mm shown in parenthesis.

(136.6)

7.88"

(200)

(38.1)

1.73"

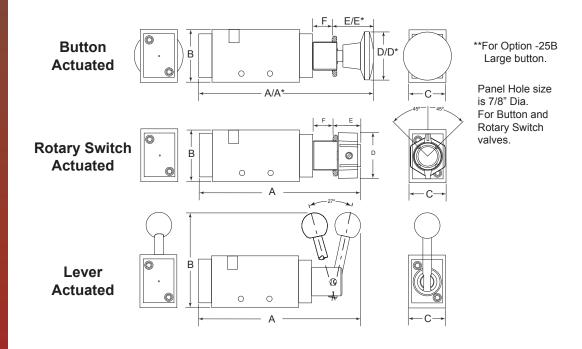
(43.9)

(103.2)

5.88"

(149)

C9



		А	A*	В	С	D	D** Large Button	E	E*	F	Inlet, Exhaust, & Cylinder Ports
Button Actuated	C5	4.37" (111.0)	4.66" 118.4	1.25" (31.8)	0.88" (22.2)	1.38" (35.1)	1.81" (46.0)	0.88" (22.4)	0.17" (4.3)	0.56" (14.2)	1⁄8" NPT G1⁄8
Valves	C7	4.99" 126.8 ()	5.28" (134.1)	1.50" (38.1)	1.06" (27.0)	1.38" (35.1)	1.81" (46.0)	0.88" (22.4)	0.17" (4.3)	0.56" (14.2)	1⁄4" NPT G1⁄4
Rotary Switch	C5	3.96" (100.6)		1.25" (31.8)	0.88" (22.2)			0.78" (19.8)		2.00" (50.8)	1/8" NPT G1/%
Actuated Valves	C7	4.58" (116.3)		1.50" (38.1)	1.06" (27.0)			0.78" (19.8)		2.62" (67.0)	1⁄4" NPT G1⁄4
Lever Actuated	C5	4.04" (102.7)		2.63" (66.8)	0.88" (22.2)						1/8 NPT G1/8
Valves	C7	4.04" (102.7)		2.75" (65.9)	1.06" (27.0)		-	-	-	-	1/4 NPT G1/4

Metric dimensions in mm shown in parenthesis.

NOTE: valves available with ISO threads, consult factory.



Repair Kits

Series C5 Valves

Repair Kit No.	For valve type
C-4202-SI	CSI-
C-4202-SL	CSL-
C-4202-ZI	CZI-
C-4202-ZL	CZL-
C-4203-BI	CBI-w/ 3 spool
C-4203-BL	CBL- w/ 3 spool
C-4203-UI	CUI-w/ 3 spool
C-4203-UL	CUL-w/ 3 spool
C-4204-BI	CBI-w/ 4 spool
C-4204-BL	CBL- w/ 4 spool
C-4204-UI	CUI-w/ 4 spool
C-4204-UL	CUL-w/ 4 spool
C-4222-PP	CGG- & CPP-
C-4222-SP	CSG- & CSP-
C-4223	CXX- & CJJ- w/ 3 spool
C-4224	CXX- & CJJ- w/ 4 spool

Series C7 Valves

Repair Kit No.	For valve type
C-4302-SI	CSI-
C-4302-SL	CSL-
C-4302-ZI	CZI-
C-4302-ZL	CZL-
C-4303-BI	CBI-w/ 3 spool
C-4303-BL	CBL- w/ 3 spool
C-4303-UI	CUI-w/ 3 spool
C-4303-UL	CUL-w/ 3 spool
C-4304-BI	CBI-w/ 4 spool
C-4304-BL	CBL- w/ 4 spool
C-4304-UI	CUI-w/ 4 spool
C-4304-UL	CUL-w/ 4 spool
C-4322-PP	CGG- & CPP-
C-4322-SP	CSG- & CSP-
C-4323	CXX- & CJJ- w/ 3 spool
C-4324	CXX- & CJJ- w/ 4 spool

Series C9 Valves

Repair Kit No.	For valve type
C-4522-PP	CGG- & CPP-
C-4522-SP	CSG- & CSP-
C-4523	CXX- & CJJ- w/ 3 spool
C-4524	CXX- & CJJ- w/ 4 spool

VALVE TYPE	SERIES	SOLENOID TYPE	COIL TYPE	COIL PRODUCT NUMBER
	C5 C7	Standard	3 spade terminals **	P-1005-02-HC-(*)
			Wire Leads	P-1005-02-243-(*)
Manifold Mounting or Body ported			Wire Leads with 1/2" NPT conduit connection	P-1005-02-228L-(*)
	C5 C7	Low-Watt	3 spade terminals ††	†P-1520-02-027-HC-(*) †P-1520-02-043-HC-(*)
	C5 C7	Low-wall	Wire Leads	†P-1520-02-027-243-(*) †P-1520-02-043-243-(*)
	C9	Standard	3 spade terminals ††	P-1580-02-HC-(*)

^{*} Add coil code from page 13

^{**} DIN connectors for this coil is P-1005-70-HC

[†] Match coil to valve product number using -027 or -043 designation (see page 7 for part number)

^{††} DIN connectors C5/C7 is P-1520-70-HC, C9 is P-1005-70-HC



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We have built a reputation for quality that is unsurpassed in the market for high performance solenoids, pneumatic relays, resets and pilot valves.



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