FOR INJECTION, SWITCHING, AND STREAM SELECTION

- Pressure ratings from 100 psi to 20,000 psi liq
- Inert, biocompatible construction
- Automated operation pneumatic or electric
- 4, 6, 8, and 10 port and internal sample two position models
- Multiposition stream selection versions with up to 28 positions

DESIGN

The basic Cheminert design involves a flat rotor which is engraved with slots which connect the ports. A stator is held at a constant, preset force against the rotor.

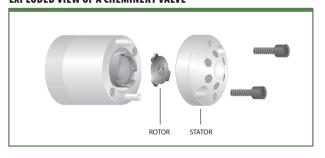
When repairs are required, all that is necessary for rotor access is the removal of two or three screws.

Remove the old rotor and replace it, put the screws back in and tighten them, and the valve is ready for use

at the factory-set pressure specification. No adjustments are possible, much less required. Other advantages of the design include easy panel mounting, low actuating torque, and compact size.

The flat plate design offers flow paths for basic flow switching, sample injection, and stream selection up to 10 positions (28 positions in some models).

EXPLODED VIEW OF A CHEMINERT VALVE



MATERIALS OF CONSTRUCTION

UHPLC models have stators of specially coated stainless steel, with PAEK rotors.

HPLC models have stators of Nitronic 60 stainless steel, PAEK, Hastelloy C, or titanium, all of which are compatible with common HPLC solvents. Many are available with a proprietary long-

life coating. Valcon H rotors are used with metal stators, and Valcon E with PAEK.

LOW PRESSURE models have PPS stators and rotors of Valcon E2, a proprietary reinforced PTFE composite.

SEE ALSO

Decoding product no's for Cheminert valves 256-257

Actuation 172-179

Applications . . 152-153

Materials

Valve descriptions

Cheminert valve product numbers

HPLC138-147,
162-167
Low pressure 148-151,
168-169
Nanovolume™134-135,
138-139, 154-155
OEM 162-171
Selectors 154-161
UHPLC134-137,
154-155

NANOVOLUME® VALVES

Cheminert Nanovolume® injectors, switching valves, and selectors are ideal for high speed, high throughput techniques which demand a valve and fitting system that minimize internal volume and eliminate dead volume.

A proprietary rotor material and stator coating achieve pressures to 20,000 psi. All models are compatible with any VICI actuation option.

NANOVOLUME® INJECTORS AND SWITCHING VALVES

Application	Fittings	Bore size	Pressure rating	More info
UHPLC	360 micron	100 or 150 μm	20,000 psi	vici.com
20,000 psi			15,000 psi	PAGE 134
15,000 psi			10,000 psi	vici.com
13,000 psi	1/32" stainless	100 or 150 μm	20,000 psi	vici.com
10,000 psi			15,000 psi	PAGE 135
			10,000 psi	vici.com
	1/16" stainless	150 μm	15,000 psi	vici.com
			10,000 psi	vici.com
HPLC	1/32" PEEK	100 or 150 μm	5,000 psi	PAGE 138
5,000 psi	or stainless			

NANOVOLUME® INTERNAL SAMPLE INJECTORS

Application	Fittings	Bore size	Sample sizes	Pressure rating	More info
UHPLC	360 micron	100 μm	4, 10, or	20,000 psi	vici.com
20,000 psi			20 nl	15,000 psi	vici.com
15,000 psi				10,000 psi	vici.com
		150 μm	10, 20,	20,000 psi	vici.com
10,000 psi			or 30 nl	15,000 psi	vici.com
				10,000 psi	vici.com
	1/32" stainless	100 μm	4, 10, or 20 nl	20,000 psi	vici.com
				15,000 psi	vici.com
				10,000 psi	vici.com
		150 μm	10, 20, or 30 nl	20,000 psi	vici.com
				15,000 psi	PAGE 135
				10,000 psi	vici.com
	1/16" stainless	150 μm	10, 20, or 50 nl	20,000 psi	vici.com
				15,000 psi	vici.com
				10,000 psi	vici.com
HPLC 5,000 psi	1/32" PEEK or stainless	100 μm or 150 μm	4, 10, or 20 nl	5,000 psi	PAGE 139

NANOVOLUME® SELECTORS

Application	Fittings	Bore size	Pressure rating	More info
UHPLC	1/32" stainless	100 or 150 μm	20,000 psi	vici.com
20,000 psi			15,000 psi	PAGE 154
15 000 pci			10,000 psi	vici.com
15,000 psi	1/16" stainless	150 μm	20,000 psi	vici.com
10,000 psi			15,000 psi	PAGE 155
			10,000 psi	vici.com

NANOVOLUME® VALVES ON VICI.COM

For complete lists of all valve options described here, go to:

www.vici.com/ cval/cval_nano.php



TECH TIP

For optimal zero dead volume connections, make sure your tubing meets the best industry standards. OD tolerance should be nominal dimension ± .002".

Fractional dimension	Nominal dimension
1/32"	.031"
1/16"	.062"
1/8"	.125"
1/4"	.250"
3/8"	.375"
1/2"	.500"

UHPLC VALVES

Cheminert UHPLC injectors, switching valves, and selectors are ideal for high speed, high throughput techniques which demand a valve and fitting system that minimize internal volume and eliminate dead volume.

VICI offers UHPLC versions for nanobore and microbore applications.

NANOVOLUME® UHPLC VALVES

See previous page for information about Nanovolume® UHPLC injectors, switching valves, and selectors.

MICROBORE UHPLC INJECTORS AND SWITCHING VALVES

Application	Fittings	Bore size	e Pressure rating	Catalog page
UHPLC	1/32" stainless	" stainless 250 µm		vici.com
20,000 psi	00 psi		15,000 psi	vici.com
15,000 psi			10,000 psi	vici.com
10,000 psi	1/16" stainless	250 μm	20,000 psi	vici.com
			15,000 psi	PAGE 136
			10,000 psi	vici.com

MICROBORE UHPLC INTERNAL SAMPLE INJECTORS

Application	Fittings	Bore size	Sample sizes	Pressure rating	Catalog page
UHPLC	1/32" stainless	250 μm	20, 50, or	20,000 psi	vici.com
20,000 psi			100 nl	15,000 psi	vici.com
15,000 psi				10,000 psi	vici.com
10,000 psi	1/16" stainless	250 μm	20, 50, or	20,000 psi	vici.com
	•		100 nl	15,000 psi	PAGE 137
				10,000 psi	vici.com

MICROBORE UHPLC SELECTORS

Application	Fittings	Bore size	Pressure rating	Catalog page
UHPLC	1/32" stainless	250 μm	20,000 psi	vici.com
20,000 psi			15,000 psi	vici.com
15,000 psi			10,000 psi	vici.com
10,000 psi	1/16" stainless	250 μm	20,000 psi	vici.com
	S P21		15,000 psi	PAGE 155
			10,000 psi	vici.com



HPLC INJECTORS AND SWITCHING VALVES

Application	Fittings	Bore size		Ports	Catalog page
NANOVOLUME 5,000 psi	1/32" PEEK or stainless	100 or 150 μm	Injector or switching valve	6 and 10	PAGE 138
MICROBORE 5,000 psi	1/16" stainless	0.25 mm	Injector or switching valve	4, 6, 8, and 10	PAGE 140
			Through-the-handle injector	6	PAGE 142
			Continuous flow through-the-handle injector	6	PAGE 142
			Continuous flow injector	6	PAGE 143
ANALYTICAL 5,000 psi	1/16" stainless	0.40 mm	Injector or switching valve	4, 6, 8, and 10	PAGE 144
5,000 p.s.			Through-the-handle injector	6	PAGE 146
			Continuous flow through-the-handle injector	6	PAGE 146
			Continuous flow injector	6	PAGE 147

The THROUGH-THE-HANDLE INJECTOR (front-loading) is designed for direct replacement of existing competitive models. These injectors are manual, with position feedback standard.

In the 6 port CONTINUOUS FLOW THROUGH-THE-HANDLE INJECTOR, an engraving on the stator maintains pump flow to the column during most of the switching cycle, virtually eliminating pressure spikes. Because the handle is integral to the design, all Model C1CF valves are manual, with position feedback standard.

The **CONTINUOUS FLOW INJECTOR** is designed to maintain pump flow during most of the switching cycle, virtually eliminating pressure spikes. This valve is available with a variety of actuation options.

HPLC INTERNAL SAMPLE INJECTORS

Application	Fittings	Bore size	Sample sizes	Catalog page
NANOVOLUME 5,000 psi	1/32" PEEK or stainless	100 μΙ	4 nl, 10 nl, or 20 nl	PAGE 139
MICROBORE 5,000 psi	1/16" stainless	0.15 mm	10 nl, 20 nl, or 50 nl	PAGE 141
ANALYTICAL 5,000 psi	1/16" stainless	0.25 mm	0.1 μl, 0.2 μl, or 0.5 μl	PAGE 145

AUTOSAMPLER **REPLACEMENTS**

We supply direct replacements for injectors in many popular autosamplers. Call technical support to determine which replacement is best for your application.

SEMI-PREP HPLC

Our basic injector/ switching valves are available with flow passages optimized for semi-preparative HPLC. Choose from 4, 6, 8, or 10 port versions. Contact our sales or technical support departments for more information.

MORE INFO

HPLC selectors132 Injectors and selectors for OEMs 162-171

LOW PRESSURE INJECTORS

	Fittings	Bore size	Specifications	Ports	Catalog page
VALCO ZDV FITTINGS Low pressure	1/16" PEEK (10-32)	0.75 mm	250 psi liq/ 75° C	4, 6, 8, and 10	PAGE 148
CHEMINERT 1/4-28 FITTINGS Low pressure	1/4-28 for 1/16" tubing	0.75 mm	250 psi liq/ 75° C	4, 6, 8, and 10	PAGE 149
	1/4-28 for 1/8" tubing	1.50 mm	250 psi liq/ 75° C	4, 6, 8, and 10	PAGE 149
1/2-20 FITTINGS Low pressure	1/2-20 for 1/4" tubing	2.8 mm - 4.6 mm (varies with number of ports)	100 psi liq/ 50° C	4, 6, and 8	PAGE 151

LOW PRESSURE VALVES WITH ZERO DEAD VOLUME FITTINGS (10-32 thread) are shipped with standard PEEK nuts and ferrules. Zero dead volume fingertight fittings and nuts and ferrules of other materials may be ordered separately. Standard specifications are 100 psi gas/250 psi liquid at 75°C. On request, the pressure rating can be as high as 600 psi liquid. **Caution:** Metal fittings will damage the threads and details

LOW PRESSURE VALVES FOR 1/4-28 FITTINGS

of low pressure valves. Use of metal

fittings voids the warranty.

come with multicolored Cheminert 1/4-28 flangeless fittings for 1/16" or 1/8" OD tubing (depending on the valve model.) Valve caps have female threads for direct connection of lines no couplings are required.

LOW PRESSURE INTERNAL SAMPLE INJECTORS

Application	Fittings	Bore size	Specifications	Sample sizes	Catalog page
VALCO ZDV FITTINGS Low pressure	1/16" PEEK (10-32)	0.40 mm	250 psi liq/ 75° C	0.2 μl, 0.5 μl, or 1.0 μl	PAGE 150
CHEMINERT 1/4-28 FITTINGS Low pressure	1/4-28 for 1/16" tubing	0.50 mm	250 psi liq/ 75° C	4, 6, 8, and 10	PAGE 150

(AUTION

Metal fittings will damage the threads and details of C20Z series valves (models C22Z, C24Z, C25Z). Use of metal fittings in a C20Z valve voids the warranty.



TECH TIP

Our life tests indicate that these valves will typically give more than 100,000 cycles before requiring any service. This assumes that the fluid used is free of particulates and not reactive toward the valve components. If the stream may contain particulates, or if it has high salt content which could precipitate within the sample lines, use an in-line filter. Note: Valves with purge ports are available on request.

MORE INFO

Decoding product no's for Cheminert valves 256-257 **Actuation** 172-179

Applications . . 152-153

Materials

Metals..... 246-247 Polymers 248 Valve rotors.....249

Valve descriptions

Cheminert for OEMs..... 131, 133 HPLC129 Low pressure130 Nanovolume®.....127 Selectors 132-133 UHPLC..... 127, 128 Diaphragm 122-123 Valco Injectors.....82-83 Selectors84-85

Cheminert valve

product numbers
HPLC138-147,
162-167
Low pressure 148-151,
168-169
Nanovolume™134-135,
138-139, 154-155
OEM 162-171
Selectors 154-161
UHPLC134-137,
154-155

INJECTORS FOR OEMS

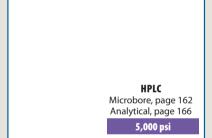
INTEGRATED MOTOR/INJECTOR ASSEMBLIES

Cheminert's HPLC and low pressure integrated motor/injectors are assemblies designed specifically to be built into an OEM system. Using the well-proven Cheminert injector designs and the 24 volt motor from our popular microelectric actuators, they need only to be connected to the instrument's power supply.

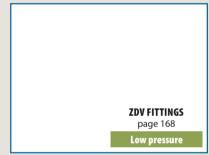
Control is simplified to require a single contact closure; the injector's position is determined by whether the closure is held high or low. There's even an easy way for the instrument to confirm the valve's position by sensing the output from a built-in sensor. In the default control mode, one contact

closure shifts the injector to inject and a second is required to shift it back to load. A simple jumper change shifts the mode to single contact closure, in which a contact closure moves the injector from load to inject, where it remains until the contact is broken and the injector reverts to the load position. Jumper settings can also be modified to change the motor's degree of rotation so it can be used with any of the valve models available.

All these features are built into a compact and lightweight package and are available in 4, 6, 8, and 10 port configurations. Serial communication via RS-232 or RS-485 is optional.





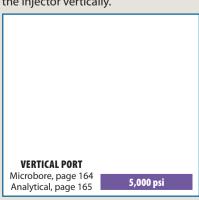


AUTOSAMPLER AND OTHER OEM INJECTORS

CENTERED-PORT INJECTORS offer a syringe injection port centered on the rear face of the valve (opposite the handle or actuator), allowing convenient syringe insertion when the valve is mounted on an actuator inside an instrument.

The **VERTICAL PORT INJECTOR** is designed specifically for use in an autosampler. It is like our standard injector except that the sample port is perpendicular to the valve axis. This permits the valve and actuator to be installed horizontally, while the syringe loads the injector vertically.





VALVES

NUNIVERSAL

ACTUATOR

The VICI universal actuator operates virtually any Valco or Cheminert rotary valve – two position and selector alike – greatly simplifying the electronic aspect of instrument

See page 133 for selector (multiposition) valves for OEMs.

UHPLC AND HIGH PRESSURE SELECTORS

UHPLC SELECTORS offer pressure ratings of 20,000 psi, 15,000 psi and 10,000 psi with 1/32" and 1/16" fittings for nanobore and microbore applications.

Our **HPLC SELECTOR** with Valco ZDV fitting details is available with 4, 6, 8, or 10 positions. Stators are available in Nitronic 60 stainless, titanium, and Hastelloy C-22, with rotors of Valcon H, all of which are compatible with common HPLC solvents. PAEK stators are used in combination with Valcon E rotors. This valve is the backbone of the Cheminert HPLC COLUMN SELECTOR **SYSTEM**, which includes two stream selection valves mounted on a single microelectric actuator. (Columns are not included.)

Consult the factory for information about a **UHPLC COLUMN SELECTOR SYSTEM**.

HPLC COLUMN **SELECTOR SYSTEM**

	Fittings	Bore size	Positions	Catalog page
NANOVOLUME 20,000 psi	1/32" stainless	150 μm (100 μm optional)	4, 6, 8, and 10	PAGE 154
15,000 psi 10,000 psi	1/16" stainless	150 μm	20,000 psi	vici.com
MICROBORE 20,000 psi	1/32" stainless	250 μm	4, 6, 8, and 10	vici.com
15,000 psi 10,000 psi	1/16" stainless	250 μm	4, 6, 8, and 10	PAGE 155

HPLC SELECTORS

	Fittings	Bore size	Positions	Catalog page
STREAM SELECTOR 5,000 psi	1/16" stainless	0.40 mm	4, 6, 8, and 10	PAGE 156
COLUMN SELECTOR SYSTEM 5,000 psi	1/16" stainless	0.40 mm	6, 8, and 10	PAGE 157



O UNIVERSAL ACTUATOR

VICI's universal actuator operates virtually any Valco or Cheminert rotary valve – two position and selector alike – greatly simplifying the electronic aspect of instrument design. See page 174.



CAUTION

Metal fittings will damage the threads and details of C25Z, C25G, and C65Z series valves.

Use of metal fittings in these valves voids the warranty.



MORE INFO

Actuation 172-179

Applications . . 152-153

Materials

Metals..... 246-247 Polymers248 Valve rotors249

Cheminert valve product numbers

HPLC138-147,
162-167
Low pressure 148-151,
168-169
Nanovolume™134-135,
138-139, 154-155
OEM 162-171
Selectors 154-161
UHPLC134-137,
154-155

LOW PRESSURE SELECTORS

	Fittings	Bore size	Specifications	Positions	Catalog page
VALCO ZDV FITTINGS Low pressure	1/16" PEEK (10-32)	0.75 mm	250 psi liq/ 75° C	4, 6, 8, 10, 12, and 14	PAGE 158
CHEMINERT 1/4-28 FITTINGS Low pressure	1/4-28 for 1/16" tubing	0.75 mm	250 psi liq/ 75° C	4, 6, 8, and 10	PAGE 159
	1/4-28 for 1/8" tubing	1.50 mm	250 psi liq/ 75° C	4, 6, 8, and 10	PAGE 159
20-28 STREAMS Low pressure	1/16" PEEK (6-40)	0.67 mm - 0.56 mm	100 psi liq/ 50° C	20, 24, and 28	PAGE 160
1/2-20 FITTINGS Low pressure	1/2-20 for 1/4" tubing	2.9 mm - 4.6 mm (varies with number of ports)	100 psi liq/ 50° C	4, 6, and 8	PAGE 161

SELECTORS FOR OEMS

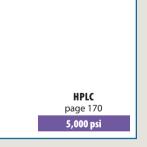
INTEGRATED MOTOR/STREAM SELECTORS

Cheminert's HPLC and low pressure integrated motor/ stream selectors are assemblies designed specifically to be built into an OEM system. The compact, lightweight package is available in 4, 6, 8, and 10 position configurations.

Using the well-proven Cheminert stream selector design and the 24 volt motor from our microelectric actuators, the Models C55, C65, and C65Z need only to be connected to an instrument's power supply. A single momentary contact closure steps the valve to the next position; a separate contact closure moves the valve to position 1 (Home).

See how our stream selectors can simplify your instrument design and minimize time to market – all while trimming your costs.

Serial communication via RS-232 or RS-485 is optional.







UHPLC Nanovolume® valves

15,000 psi

360 MICRON FITTINGS, 150 MICRON BORE (.006")

15,000 psi Nanobore 360 μm 150 μm Model C72MX includes stainless 360 micron fittings. Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options.





6 Port	10 F
od No	Prod No

	Prod No	Prod No		
Coated stainless stator				
Manual	C72MX-6676	C72MX-6670		
With universal actuator	C72MX-6676EUHA	C72MX-6670EUDA		
Replacement valve	C72MX-6676D	C72MX-6670D		
Replacement rotor	C72M-66R6	C72M-66R0		
Replacement stator	C72M-6C76	C72M-6C70		

SPECIFICATIONS

15,000 psi liq 50°C max

Stator: Stainless with inert coating Rotor: Valcon E3

OPTIONS

- 100 micron (.004") bore
- Internal sample injector (4 - 20 nl)
- 10,000 and 20,000 psi versions available
- 4 and 8 port versions available

6 PORT VALVE 360 micron fittings



TECH TIP

Increasing the pressure rating shortens valve lifetime.



MORE INFO

360 micron Nanovolume® fittingspp 42-44



UHPLC Nanovolume® valves

15,000 psi

1/32" VALCO STAINLESS FITTINGS, 150 MICRON BORE (.006")

SPECIFICATIONS

15,000 psi liq 50°C max

Stator: Stainless with inert coating Rotor: Valcon E3

Model C72NX includes stainless nuts and ferrules. Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options. 15.000 psi

Nanobore

OPTIONS

- 100 micron (.004") bore
- 250 micron (.010") bore
- 10,000 and 20,000 psi versions available
- 4 and 8 port versions available





Prod No

Prod No

Coated stainless stator				
Manual	C82NX-6676	C82NX-6670		
With universal actuator	C82NX-6676EUHA	C82NX-6670EUDA		
Replacement valve	C82NX-6676D	C82NX-6670D		
Replacement rotor	C72N-66R6	C72N-66 R0		
Replacement stator	C72N-6C76	C72N-6C70		



6 PORT VALVE 1/32" Valco stainless fittings

Sample loops

Each stainless steel loop includes two stainless 1/32" Valco fittings. Pressure rating > 20,000 psi.

Volume	Prod No

voidinc	1100110
1 μΙ	CSLN1K
1.5 µl	CSLN1.5K
2 μΙ	CSLN2K
5 μΙ	CSLN5K
10 µl	CSLN10K





INTERNAL SAMPLE INJECTOR 1/32" Valco stainless fittings

UHPLC Nanovolume® internal sample injectors

15,000 psi

1/32" VALCO STAINLESS FITTINGS, 150 MICRON BORE (.006")

SPECIFICATIONS

15,000 psi liq 50°C max

Stator: Stainless with inert coating Rotor: Valcon E3

Model C74NX includes stainless nuts and ferrules. Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes serial interface. See page 174 for other interface options.



15,000 psi Nanobore

1/32" 150 μm

OPTIONS

- 100 micron (.004") bore
- 250 micron (.010") bore
- 10,000 and 20,000 psi versions available



1/32" Valco nuts and ferrules..... pp 12, 14

Sample size: 10 nanoliters 20 nanoliters 30 nanoliters Prod No Prod No Prod No

Coated stainless stator					
Manual	C84NX-667401	C84NX-667402	C84NX-667403		
With universal actuator	C84NX-667401EUHA	C84NX-667402EUHA	C84NX-667403EUHA		
Replacement valve	C84NX-667401D	C84NX-667402D	C84NX-667403D		
Replacement rotor	C74N-66R01	C74N-66R02	C74N-66R03		
Replacement stator	C74N-6C7	C74N-6C7	C74N-6C7		

UHPLC microbore valves

15,000 psi

1/16" VALCO FITTINGS, 0.25 MM PORTS (.010")

15,000 psi 0.25 mm

Model C72X includes stainless steel nuts and ferrules. Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options.









	Prod No	Prod No	Prod No	Prod No
Manual	C82X-1674	C82X-1676	C82X-1678	C82X-1670
With universal act.	C82X-1674EUHA	C82X-1676EUHA	C82X-1678EUDA	C82X-1670EUDA
Replacement valve	C82X-1674D	C82X-1676D	C82X-1678D	C82X-1670D
Replacement rotor	C72-16R4	C72-16R6	C72-16R8	C72-16R0
Replacement stator	C72-1C74	C72-1C76	C72-1C78	C72-1C70

SPECIFICATIONS

15,000 psi liq 50°C max

Stator: Stainless with inert coating Rotor: Valcon E3

OPTIONS

- 0.15 mm ports (.006")
- 10,000 and 20,000 psi versions available

6 PORT VALVE 1/16" Valco stainless fittings

Stainless steel sample loops

Each loop includes two stainless steel nuts and ferrules.

These loops are for use with valves on this page.

Vo	olume	Prod No	Volume	Prod No	Volume	Prod No
	2 μΙ	CSL2	20 µl	CSL20	250 µl	CSL250
	5 μΙ	CSL5	50 μl	CSL50	500 μl	CSL500
	10 μΙ	CSL10	100 µl	CSL100	1 ml	CSL1K



ABOUT LOOPS

- Metal loops > 2 ml are made from 1/8" OD tubing with TIG welded 1/16" tube ends or reducing unions, and are not suitable for UHPLC use.
- Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.



UHPLC microbore internal sample injectors 15,000 psi

1/16" VALCO FITTINGS, 0.25 MM PORTS (.010")

SPECIFICATIONS

15,000 psi liq 50°C max

Stator: Stainless with inert coating

Model C74X includes stainless steel nuts and ferrules. Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options.



15,000 psi

Microbore

1/16" 0.25 mm

notor.	vaicon L3

• 0.15 mm ports (.006")

OPTIONS

- Other internal volumes are available on request
- 10,000 and 20,000 psi versions available

Sample volume	20 nanoliters	50 nanoliters	100 nanoliters	
	Prod No	Prod No	Prod No	
Manual	C84X-167402	C84X-167405	C84X-16741	
With universal actuator	C84X-167402EUHA	C84X-167405EUHA	C84X-16741EUHA	
Replacement valve	C84X-167402D	C84X-167405D	C84X-16741D	
Replacement rotor	C74-16R02	C74-16R05	C74-16R1	
Replacement stator	C74-1C7	C74-1C7	C74-1C7	



INTERNAL SAMPLE INJECTOR 1/16" Valco stainless fittings



Increasing the pressure rating shortens valve lifetime.



Actuators Microelectric 176 Universal 174-175 Materials

Metals..... 246-247 Polymers 248 Valve rotors.....249

Nanovolume® valves 5,000 psi

5,000 psi

100 um

Model C2N includes nuts and ferrules.

Valves with stainless stators have stainless fittings.

Valves with PAEK stators have PEEK fittings.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options.







Prod No

	1104110	1100110
N60 stainless stator		
Manual	C2N-4006	C2N-4000
With universal actuator	C2N-4006EUHA	C2N-4000EUHA
Replacement valve	C2N-4006D	C2N-4000D
Replacement rotor	C2N-40R6	C2N-40R0
Replacement stator	C2N-4C06	C2N-4C00
PAEK stator		
Manual	C2N-4346	C2N-4340
With universal actuator	C2N-4346EUHA	C2N-4340EUHA
Replacement valve	C2N-4346D	C2N-4340D
Replacement rotor	C2N-43R6	C2N-43R0
Replacement stator	C2N-4C46	C2N-4C40

SPECIFICATIONS

5,000 psi liq 50°C max

1/32" FITTINGS, 100 MICRON PORTS (.004")

Stator: Metal Rotor: Valcon H 5,000 psi liq

50°C max Stator: PAEK Rotor: Valcon E

OPTIONS

• 150 micron (.006") and 250 micron (.010") ports

6 PORT NANOVOLUME VALVE

1/32" stainless ZDV fittings

Sample loops

Each stainless loop includes two stainless steel nuts and ferrules. Each PEEK loop includes two PEEK nuts and ferrules.

These loops are for use with valves on this page.

	Stainless steel	PEEK
Volume	Prod No	Prod No
1 μΙ	CSLN1K	CSLN1KPK
2 μΙ	CSLN2K	CSLN2KPK
5 μΙ	CSLN5K	CSLN5KPK
10 µl	CSLN10K	CSLN10KPK



ABOUT LOOPS

• Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.

Nanovolume® internal sample injectors

5,000 psi

1/32" FITTINGS, 100 MICRON PORTS (.004")

SPECIFICATIONS 5,000 psi liq

50°C max
Stator: Metal
Rotor: Valcon H
5,000 psi liq
50°C max

Stator: PAEK
Rotor: Valcon E

OPTIONS

• 0.15 mm ports (.006")

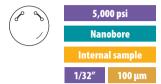
Model C4N includes nuts and ferrules.

Valves with stainless stators have stainless fittings.

Valves with PAEK stators have PEEK fittings.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply.

Includes RS232/485 serial interface. See page 174 for other interface options.



Sample volume	4 nanoliters	10 nanoliters	20 nanoliters
	Prod No	Prod No	Prod No
N60 stainless stator			
Manual	C4N-4004004	C4N-400401	C4N-400402
With universal actuator	C4N-4004004EUHA	C4N-400401EUHA	C4N-400402EUHA
Replacement valve	C4N-4004004D	C4N-400401D	C4N-400402D
Replacement rotor	C4N-40R004	C4N-40R01	C4N-40R02
Replacement stator	C4N-4C0	C4N-4C0	C4N-4C0
PAEK stator			
Manual	C4N-4344004	C4N-434401	C4N-434402
With universal actuator	C4N-4344004EUHA	C4N-434401EUHA	C4N-434402EUHA
Replacement valve	C4N-4344004D	C4N-434401D	C4N-434402D
Replacement rotor	C4N-43R004	C4N-43R01	C4N-43R02
Replacement stator	C4N-4C4H	C4N-4C4H	C4N-4C4H

INTERNAL SAMPLE INJECTOR 1/32" PEEK ZDV fittings



Microbore valves

1/16" VALCO FITTINGS, 0.25 MM PORTS (.010")

5,000 psi

0.25 mm

Model C2 includes nuts and ferrules.

Valves with metal stators have stainless steel nuts and ferrules of the stator material. Valves with PAEK stators have PEEK nuts and ferrules.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply.

Includes RS232/485 serial interface. See page 174 for other interface options.

Note: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.









	Prod No	Prod No	Prod No	Prod No
N60 stainless stator				
Manual	C2-1004	C2-1006	C2H-1008	C2H-1000
With universal act.	C2-1004EUHA	C2-1006EUHA	C2H-1008EUHA	C2H-1000EUHA
Replacement valve	C2-1004D	C2-1006D	C2H-1008D	C2H-1000D
Replacement rotor	C2-10R4	C2-10R6	C2-10R8H	C2-10R0H
Replacement stator	C-1C04	C-1C06	C-1C08H	C-1C00H
PAEK stator				
Manual	C2-1344	C2-1346	C2H-1348	C2H-1340
With universal act.	C2-1344EUHA	C2-1346EUHA	C2H-1348EUHA	C2H-1340EUHA
Replacement valve	C2-1344D	C2-1346D	C2H-1348D	C2H-1340D
Replacement rotor	C2-13R4	C2-13R6	C2-13R8H	C2-13R0H
Replacement stator	C-1C44	C-1C46	C-1C48H	C-1C40H
Titanium stator				
Manual	C2-1034	C2-1036	C2H-1038	C2H-1030
With universal act.	C2-1034EUHA	C2-1036EUHA	C2H-1038EUHA	C2H-1030EUHA
Replacement valve	C2-1034D	C2-1036D	C2H-1038D	C2H-1030D
Replacement rotor	C2-10R4	C2-10R6	C2-10R8H	C2-10R0H
Replacement stator	C-1C34	C-1C36	C-1C38H	C-1C30H

SPECIFICATIONS

5,000 psi liq 75°C max

Stator: Metal Rotor: Valcon H

5,000 psi liq 50°C max

Stator: PAEK Rotor: Valcon E

OPTIONS

- Continuous flow version is available as Model C6. See page 143.
- Hastelloy C stators
- Loop fill port assembly for injection from front of the valve. See page 31.
- 0.15 mm (0.006") bore

Sample loops

Each metal loop includes two stainless steel nuts and ferrules. Each PEEK loop includes two PEEK nuts and ferrules.

These loops are for use with valves on pages 140, 142, 143, 144, 146, 147, 163, 164, 165, and 167.

Stainless Steel PEEK (for PAEK stators)

Volume	Prod No	Prod No	
2 μΙ	CSL2	CZSL2PK	Titanium
5 μΙ	CSL5	CZSL5PK	Prod No
10 μΙ	CSL10	CZSL10PK	CSL10TI
20 μΙ	CSL20	CZSL20PK	CSL20TI
50 µl	CSL50	CZSL50PK	CSL50TI
100 μΙ	CSL100	CZSL100PK	CSL100TI
250 μΙ	CSL250	CZSL250PK	CSL250TI
500 μl	CSL500	CZSL500PK **	CSL500TI
1 ml	CSL1K	CZSL1KPK **	CSL1KTI
2 ml	CSL2K	CZSL2KPK **	
5 ml	CSL5K	CZSL5KPK **	
10 ml	CSL10K	** max pressure 2500 psi	

ABOUT LOOPS

- Other materials are available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, and PTFE.
- Metal loops > 2 ml are made from 1/8" OD tubing with TIG welded 1/16" tube ends or reducing unions.
- Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.

10 PORT VALVE 1/16" PEEK ZDV fittings



OPTIONAL FLOWPATH

Model C2 6 port valves can also be ordered with a dual 3-way rotor, as described in EPA Method 555.



To specify this flowpath, substitute "6X" for "6" in the valve or rotor prod no (e.g. C2-1006XEUHA).

Nanoliter internal sample injectors

1/16" VALCO FITTINGS, 0.15 MM PORTS (.006")

SPECIFICATIONS

5,000 psi liq 75°C max

Stator: Metal Rotor: Valcon H

50°C max Stator: PAEK Rotor: Valcon E Model C4 includes nuts and ferrules.

Valves with stainless stators have stainless fittings.

Valves with PAEK stators have PEEK fittings.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply.

Includes RS232/485 serial interface. See page 174 for other interface options. *Note*: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.

5,000 psi
Microbore
Internal sample
1/16" 0.15 mm

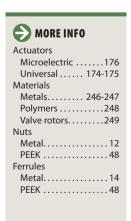
OPTIONS

- 100, 200, and 500 nl sample volumes are also available in 0.25 mm bore. See page 145.
- Loop fill port assembly for injection from front of the valve. See page 31.
- 0.25 mm (0.010") bore

Sample volume	10 nanoliters <i>Prod No</i>	20 nanoliters <i>Prod No</i>	50 nanoliters <i>Prod No</i>
N60 stainless stator			
Manual	C4-000401	C4-000402	C4-000405
With universal actuator	C4-000401EUHA	C4-000402EUHA	C4-000405EUHA
Replacement valve	C4-000401D	C4-000402D	C4-000405D
Replacement rotor	C4-00R01	C4-00R02	C4-00R05
Replacement stator	C4-0C0	C4-0C0	C4-0C0
PAEK stator			
Manual	C4-034401	C4-034402	C4-034405
With universal actuator	C4-034401EUHA	C4-034402EUHA	C4-034405EUHA
Replacement valve	C4-034401D	C4-034402D	C4-034405D
Replacement rotor	C4-03R01	C4-03R02	C4-03R05
Replacement stator	C4-0C4	C4-0C4	C4-0C4

INTERNAL SAMPLE INJECTOR

1/16" stainless ZDV fittings



Microbore continuous flow through-the-handle injectors

1/16" VALCO FITTINGS, 0.25 MM PORTS (.010")

5,000 psi
Microbore
Continuous flow

Through-handle

0.25 mm

Model C1CFI is available only in manual version. Position feedback included. Includes nuts and ferrules.

Valves with stainless stators have stainless fittings. Valves with PAEK stators have PEEK fittings.

Note: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.



N60 stainless stator
6 port injector C1CFI-1006
Replacement rotor C1-10R6
Replacement stator C1CF-1C06

PAEK stator
6 port injector C1CFI-1346
Replacement rotor C1-13R6

Replacement rotor C1-13R6
Replacement stator C1CF-1C46
Replacement injector fitting

C-261

SPECIFICATIONS

5,000 psi liq 75°C maxStator: Metal
Rotor: Valcon H

Rotor: Valcon H

5,000 psi liq

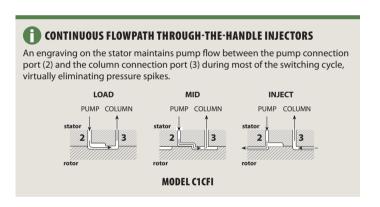
50°C max

Stator: PAEK Rotor: Valcon E

OPTIONS

• 0.40 mm bore (.016") on page 146.

Model C1CFI 1/16" ZDV fittings



5,000 psi

Microbore

CHEMINERT VALVES

Microbore continuous flow injectors

1/16" VALCO FITTINGS, 0.25 MM PORTS (.010")

SPECIFICATIONS

5,000 psi liq 75°C max

Stator: Metal Rotor: Valcon H 5,000 psi liq 50°C max Stator: PAEK

Rotor: Valcon E

Model C6 includes nuts and ferrules.

Valves with stainless stators have stainless fittings.

Valves with PAEK stators have PEEK fittings.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply.
Includes RS232/485 serial interface. See page 174 for other interface options.

Note: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.

Continuous flow
1/16" 0.25 mm



Prod No

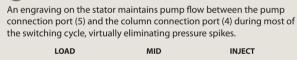
	1100110		
N60 stainless stator			
Manual	C6-1006		
With universal actuator	C6-1006EUHA		
Replacement valve	C6-1006D		
Replacement rotor	C2-10R6		
Replacement stator	C6-1C06		
PAEK stator			
Manual	C6-1346		
With universal actuator	C6-1346EUHA		
Replacement valve	C6-1346D		
Replacement rotor	C2-13R6		
Replacement stator	C6-1C46		

OPTIONS

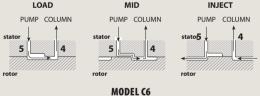
• 0.40 mm bore (.016") on page 147.

CONTINUOUS FLOW INJECTOR

1/16" stainless ZDV fittings



CONTINUOUS FLOWPATH INJECTORS



MORE INFO

Actuators
Microelectric176
Universal 174-175
Materials
Metals 246-247
Polymers 248
Valve rotors249
Nuts
Metal12
PEEK48
Ferrules
Metal14
PEEK48

ABOUT LOOPS

- Other materials are available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, and PTFE.
- Metal loops > 2 ml are made from 1/8" OD tubing with TIG welded 1/16" tube ends or reducing unions.
- Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.

Sample loops

Each metal loop includes two stainless steel nuts and ferrules. Each PEEK loop includes two PEEK nuts and ferrules.

These loops are for use with valves on pages 140, 142, 143, 144, 146, 147, 163, 164, 165, and 167.

Volume	Stainless Steel Prod No	PEEK (for PAEK stators) Prod No	
2 μΙ	CSL2	CZSL2PK	Titanium
5 μΙ	CSL5	CZSL5PK	Prod No
10 µl	CSL10	CZSL10PK	CSL10TI
20 μΙ	CSL20	CZSL20PK	CSL20TI
50 µl	CSL50	CZSL50PK	CSL50TI
100 µl	CSL100	CZSL100PK	CSL100TI
250 µl	CSL250	CZSL250PK	CSL250TI
500 μl	CSL500	CZSL500PK **	CSL500TI
1 ml	CSL1K	CZSL1KPK **	CSL1KTI
2 ml	CSL2K	CZSL2KPK **	
5 ml	CSL5K	CZSL5KPK **]
10 ml	CSL10K	** max pressure 2500	_
		psi	

Analytical valves

1/16" VALCO FITTINGS, 0.40 MM PORTS (.016")

5,000 psi Analytical

0.40 mm

Model C2 includes nuts and ferrules.

Valves with metal stators have stainless steel nuts and ferrules of the stator material. Valves with PAEK stators have PEEK nuts and ferrules.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply.

Includes RS232/485 serial interface. See page 174 for other interface options.

Note: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.









	Prod No	Prod No	Prod No	Prod No		
N60 stainless stator						
Manual	C2-2004	C2-2006	C2H-2008	C2H-2000		
With universal actuator	C2-2004EUHA	C2-2006EUHA	C2H-2008EUHA	C2H-2000EUHA		
Replacement valve	C2-2004D	C2-2006D	C2H-2008D	C2H-2000D		
Replacement rotor	C2-20R4	C2-20R6	C2-20R8H	C2-20R0H		
Replacement stator	C-2C04	C-2C06	C-2C08H	C-2C00H		
PAEK stator						
Manual	C2-2344	C2-2346	C2H-2348	C2H-2340		
With universal actuator	C2-2344EUHA	C2-2346EUHA	C2H-2348EUHA	C2H-2340EUHA		
Replacement valve	C2-2344D	C2-2346D	C2H-2348D	C2H-2340D		
Replacement rotor	C2-23R4	C2-23R6	C2-23R8H	C2-23R0H		
Replacement stator	C-2C44	C-2C46	C-2C48H	C-2C40H		
Titanium stator	Titanium stator					
Manual	C2-2034	C2-2036	C2H-2038	C2H-2030		
With universal actuator	C2-2034EUHA	C2-2036EUHA	C2H-2038EUHA	C2H-2030EUHA		
Replacement valve	C2-2034D	C2-2036D	C2H-2038D	C2H-2030D		
Replacement rotor	C2-20R4	C2-20R6	C2-20R8H	C2-20R0H		
Replacement stator	C-2C34	C-2C36	C-2C38H	C-2C30H		

SPECIFICATIONS

5,000 psi liq 75°C max

Stator: Metal Rotor: Valcon H 5,000 psi liq

50°C max Stator: PAEK Rotor: Valcon E

OPTIONS

- Continuous flow version is available as Model C6. See page 143.
- Hastelloy C stators
- Semi-prep version with 0.75 mm ports (.030") available
- Loop fill port assembly for injection from front of the valve. See page 41.

Sample loops

Each metal loop includes two stainless steel nuts and ferrules. Each PEEK loop includes two PEEK nuts and ferrules.

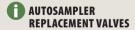
These loops are for use with valves on pages 140, 142, 143, 144, 146, 147, 163, 164, 165, and 167.

Stainless Steel PEEK (for PAEK stators)

Volume	Prod No	Prod No	
2 μΙ	CSL2	CZSL2PK	Titanium
5 μΙ	CSL5	CZSL5PK	Prod No
10 µl	CSL10	CZSL10PK	CSL10TI
20 µl	CSL20	CZSL20PK	CSL20TI
50 μl	CSL50	CZSL50PK	CSL50TI
100 µl	CSL100	CZSL100PK	CSL100TI
250 µl	CSL250	CZSL250PK	CSL250TI
500 μl	CSL500	CZSL500PK **	CSL500TI
1 ml	CSL1K	CZSL1KPK **	CSL1KTI
2 ml	CSL2K	CZSL2KPK **	
5 ml	CSL5K	CZSL5KPK **	
10 ml	CSL10K	** max pressure 2500 psi	



- Metal loops > 2 ml are made from 1/8" OD tubing with TIG welded 1/16" tube ends or reducing unions.
- Other materials are available in many sizes.



The Cheminert Model C2 6 port valve is an excellent replacement for the valve originally supplied in many autosamplers, including autosamplers manufactured by Beckman, Gilson, Spark-Holland, CTC, Thermo Fisher, and Varian. Call technical support to determine which replacement is best for your application.

6 PORT VALVE 1/16" stainless ZDV fittings



OPTIONAL FLOWPATH

Model C2 6 port valves can also be ordered with a dual 3-way rotor, as described in EPA Method 555.



To specify this flowpath, substitute "6X" for "6" in the valve or rotor prod no (e.g. C2-2006XEUHA).

Analytical internal sample injector

1/16" VALCO FITTINGS, 0.25 MM PORTS (.010")

SPECIFICATIONS

5,000 psi liq 75°C max Stator: Metal Rotor: Valcon H

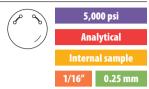
5,000 psi liq 50°C max

Stator: PAEK Rotor: Valcon E Model C4 includes nuts and ferrules.

Valves with metal stators have stainless steel nuts and ferrules of the stator material. Valves with PAEK stators have PEEK nuts and ferrules.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply.

Includes RS232/485 serial interface. See page 174 for other interface options. Note: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.



OPTIONS

- 0.05 μl sample volumes are also available.
- Loop fill port assembly for injection from front of the valve. See page 41.

0.1 μl	0.2 μΙ	0.5 μl
Prod No	Prod No	Prod No
C4-10041	C4-10042	C4-10045
C4-10041EUHA	C4-10042EUHA	C4-10045EUHA
C4-10041D	C4-10042D	C4-10045D
C4-10R1	C4-10R2	C4-10R5
C4-1C0	C4-1C0	C4-1C0
C4-13441	C4-13442	C4-13445
C4-13441EUHA	C4-13442EUHA	C4-134451EUHA
C4-13441D	C4-13442D	C4-13445D
C4-13R1	C4-13R2	C4-13R5
C4-1C4	C4-1C4	C4-1C4
C4-10341	C4-10342	C4-10345
C4-10341EUHA	C4-10342EUHA	C4-10345EUHA
C4-10341D	C4-10342D	C4-10345D
C4-10R1	C4-10R2	C4-10R5
C4-1C3	C4-1C3	C4-1C3
	C4-10041 C4-10041EUHA C4-10041D C4-10R1 C4-1C0 C4-13441 C4-13441EUHA C4-13441D C4-1381 C4-1C4 C4-10341 C4-10341EUHA C4-10341EUHA C4-10341D C4-10341D C4-10341D C4-10341D	Prod No Prod No C4-10041 C4-10042 C4-10041EUHA C4-10042EUHA C4-10041D C4-10042D C4-10R1 C4-10R2 C4-1C0 C4-1C0 C4-13441 C4-13442 C4-13441EUHA C4-13442EUHA C4-1381 C4-1382 C4-1C4 C4-1C4 C4-10341 C4-10342 C4-10341EUHA C4-10342EUHA C4-10341D C4-10342D C4-10R1 C4-10R2

MORE INFO

Actuators Microelectric176 Universal 174-175 Materials Metals..... 246-247 Polymers 248 Valve rotors.....249

INTERNAL SAMPLE INJECTOR

1/16" stainless ZDV fittings

Analytical continuous flow through-the-handle injectors

1/16" VALCO FITTINGS, 0.40 MM PORTS (.016")

5,000 psi Analytical

Continuous flow

Through-handle

16" 0.40 mm

Model C1CFI is available only in manual version.

Position feedback included.

Includes nuts and ferrules.

Valves with stainless stators have stainless fittings.

Valves with PAEK stators have PEEK fittings.

Note: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.



Prod No

N60 stainless stator				
6 port injector	C1CFI-2006			
Replacement rotor	C1-20R6			
Replacement stator	C1CF-2C06			
PAEK stator				
6 port injector	C1CFI-2346			
Replacement rotor	C1-23R6			
Replacement stator	C1CF-2C46			
Replacement injector fitting				
	C-261			

SPECIFICATIONS

5,000 psi liq 75°C max

Stator: Metal Rotor: Valcon H

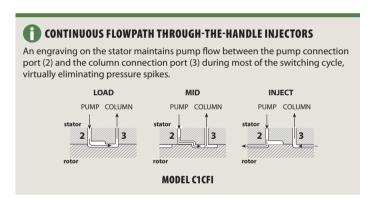
5,000 psi liq 50°C max

Stator: PAEK Rotor: Valcon E

OPTIONS

• 0.25 mm bore (.010") on page 142.

Model C1CFI 1/16" ZDV fittings



Analytical continuous flow injectors

1/16" VALCO FITTINGS, 0.40 MM PORTS (.016")

SPECIFICATIONS

5,000 psi liq 75°C maxStator: Metal Rotor: Valcon H

5,000 psi liq 50°C max Stator: PAEK

Rotor: Valcon E

OPTIONS

• 0.25 mm bore (.010") on page 143.

Model C6 includes nuts and ferrules.

Valves with stainless stators have stainless fittings.

Valves with PAEK stators have PEEK fittings.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply.

Includes RS232/485 serial interface. See page 174 for other interface options. *Note:* The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.

5,000 psi

Analytical

Continuous flow



Prod No

	7700710
N60 stainless stator	
Manual	C6-2006
With universal actuator	C6-2006EUHA
Replacement valve	C6-2006D
Replacement rotor	C2-20R6
Replacement stator	C6-2C06
PAEK stator	
Manual	C6-2346
With universal actuator	C6-2346EUHA
Replacement valve	C6-2346D
Replacement rotor	C2-23R6
Replacement stator	C6-2C46

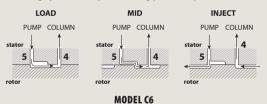
CONTINUOUS FLOW INJECTOR

1/16" stainless ZDV fittings



CONTINUOUS FLOWPATH INJECTORS

An engraving on the stator maintains pump flow between the pump connection port (5) and the column connection port (4) during most of the switching cycle, virtually eliminating pressure spikes.



MORE INFO

Actuators
Microelectric176
Universal 174-175
Materials
Metals 246-247
Polymers248
Valve rotors249
Nuts
Metal12
PEEK 48
Ferrules
Metal14
PEEK48

ABOUT LOOPS

- Other materials are available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, and PTFE.
- Metal loops > 2 ml are made from 1/8" OD tubing with TIG welded 1/16" tube ends or reducing unions.
- Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.

Sample loops

Each metal loop includes two stainless steel nuts and ferrules. Each PEEK loop includes two PEEK nuts and ferrules.

These loops are for use with valves on pages 140, 142, 143, 144, 146, 147, 163, 164, 165, and 167.

Stainless Steel PEEK (for PAEK stators)

Volume Prod No Prod No 2 μl CSL2 CZSL2PK Titanium CSL5 CZSL5PK Prod No 5 μΙ 10 μΙ CSL10 CZSL10PK CSL10TI 20 μΙ CSL20 CZSL20PK CSL20TI CSL50TI 50 μl CSL50 CZSL50PK 100 μl | CSL100 CZSL100PK CSL100TI C7SI 250PK CSL250TI CZSL500PK ** CSL500TI CSL500 CSL1KTI

Valves with 1/16" valco zdv fittings

Low pressure 10-32 ZDV

1/16" 0.75 mm

Model C22Z includes Valco ZDV PEEK nuts and ferrules. Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options. Sample loops are not included with valves. Order separately.









	4 Port	6 Port	8 Port	10 Port
	Prod No	Prod No	Prod No	Prod No
Manual	C22Z-3184	C22Z-3186	C22Z-3188	C22Z-3180
With universal act.	C22Z-3184EUHA	C22Z-3186EUHA	C22Z-3188EUHA	C22Z-3180EUHA
Replacement valve	C22Z-3184D	C22Z-3186D	C22Z-3188D	C22Z-3180D
Replacement rotor	C12-314	C12-316	C12-318	C12-310
Replacement stator	C22Z-384	C22Z-386	C22Z-388	C22Z-380

0.75 MM PORTS (.030")

SPECIFICATIONS

250 psi liq 75°C max

Stator: PPS Rotor: Valcon E2

OPTIONS

- Purge option
- Other polymeric rotors and stators are available.
- 12 and 14 port versions are available.

10 PORT VALVE 1/16" PEEK ZDV fittings

Sample loops

Loops include PEEK nuts and ferrules. Loops smaller than 500 μl are made from 1/16" OD tubing; loops 500 μ l or bigger are made from 1/8" OD tubing with polymeric unions and 1/16" ends.

These loops are for use with valves on this page.

	FEP	PTFE	PEEK
Volume	Prod No	Prod No	Prod No
5 μΙ	CZSL5FEP	CZSL5TF	CZSL5PK
10 μΙ	CZSL10FEP	CZSL10TF	CZSL10PK
20 μΙ	CZSL20FEP	CZSL20TF	CZSL20PK
50 µl	CZSL50FEP	CZSL50TF	CZSL50PK
100 μΙ	CZSL100FEP	CZSL100TF	CZSL100PK
250 μΙ	CZSL250FEP	CZSL250TF	CZSL250PK
500 μl	CZSL500FEP	CZSL500TF	CZSL500PK
1 ml	CZSL1KFEP	CZSL1KTF	CZSL1KPK
2 ml	CZSL2KFEP	CZSL2KTF	CZSL2KPK



ABOUT LOOPS

• Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.

PURGE OPTION

The purge option permits a flow of liquid or gas to flush the valve interior of potentially toxic or corrosive components. We recommend this option for applications using materials (such as salt solutions) that could damage the metal parts of the valve.

Consult our technical staff for details.

Valves with 1/4-28 FITTING DETAILS FOR 1/16" TUBING

0.75 MM PORTS (.030")

SPECIFICATIONS

250 psi liq 75°C max Stator: PPS Rotor: Valcon E2 Model C22 includes multicolored Cheminert 1/4-28 flangeless fittings for 1/16" tubing. Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options. Sample loops are not included with valves. Order separately.

Low pressure			
1/4-28 Internal			
1/16" 0.75 mm			









	4 Port	6 Port	8 Port	10 Port
	Prod No	Prod No	Prod No	Prod No
Manual	C22-3184	C22-3186	C22-3188	C22-3180
With universal actuator	C22-3184EUHA	C22-3186EUHA	C22-3188EUHA	C22-3180EUHA
Replacement valve	C22-3184D	C22-3186D	C22-3188D	C22-3180D
Replacement rotor	C22-314	C22-316	C22-318	C22-310
Replacement stator	C22-384	C22-386	C22-388	C22-380

6 PORT VALVE

1/4-28 fittings

Valves with 1/4-28 fitting details for 1/8" tubing

1.50 MM PORTS (.060")

SPECIFICATIONS

250 psi liq 75°C max

Stator: PPS Rotor: Valcon E2 Model C22 includes multicolored Cheminert 1/4-28 flangeless fittings for 1/8" tubing. Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options. Sample loops are not included with valves. Order separately.

Low pressure		
1/4-28 Internal		
1/8" 1.50 mm		

	4 Port	6 Port	8 Port	10 Port
	Prod No	Prod No	Prod No	Prod No
Manual	C22-6184	C22-6186	C22-6188	C22-6180
With universal actuator	C22-6184EUHA	C22-6186EUHA	C22-6188EUHA	C22-6180EUHA
Replacement valve	C22-6184D	C22-6186D	C22-6188D	C22-6180D
Replacement rotor	C22-614	C22-616	C22-618	C22-610
Replacement stator	C22-684	C22-686	C22-688	C22-680

Sample loops

Loops include flangeless fittings with white color nuts.

Loops smaller than 250 µl are made from 1/16" OD tubing; loops 250 µl or bigger are made from 1/8" OD tubing.

These loops are for use with valves on this page.





 Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.

	FEP	PTFE	PEEK
Volume	Prod No	Prod No	Prod No
20 μΙ	CFSL20FEP	CFSL20TF	CFSL20PK
50 μl	CFSL50FEP	CFSL50TF	CFSL50PK
100 μΙ	CFSL100FEP	CFSL100TF	CFSL100PK
250 μΙ	CFSL250FEP	CFSL250TF	CFSL250PK
500 μl	CFSL500FEP	CFSL500TF	CFSL500PK
1 ml	CFSL1KFEP	CFSL1KTF	CFSL1KPK
2 ml	CFSL2KFEP	CFSL2KTF	CFSL2KPK

Internal sample injectors

1/16" VALCO ZDV FITTINGS, 0.40 MM PORTS (.016")

Low pressure Internal sample Model C24Z includes Valco ZDV PEEK nuts and ferrules.
Universal actuator: 24 VDC, with autosensing 24 VDC power supply.
Includes RS232/485 serial interface. See page 174 for other interface options.



SPECIFICATIONS

250 psi liq 75°C max Stator: PPS Rotor: Valcon E2

10-32 ZDV 1/16" 0.40 mm

Sample volume	0.2 μΙ	0.5 μl	1 μΙ
	Prod No	Prod No	Prod No
Manual	C24Z-21842	C24Z-21845	C24Z-2184-1
With universal actuator C24Z-21842EUHA		C24Z-21845EUHA C24Z-2184-1EU	
Replacement valve	C24Z-21842D	C24Z-21845D	C24Z-2184-1D
Replacement rotor	C24-10R2	C24-10R5	C24-10R-1
Replacement stator	C24Z-1C8	C24Z-1C8	C24Z-1C8

OPTIONS

- 2.0 µl sample volumes are also available.
- Purge option

INTERNAL SAMPLE INJECTOR

1/16" PEEK ZDV fittings

Internal sample injectors, 1/4-28 FOR 1/16" TUBING

Low pressure Internal sample

1/4-28 Internal

1/16"

0.50 mm

Model C24 includes multicolored Cheminert 1/4-28 flangeless fittings for 1/16" tubing. Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options.



Sample volume	υ.5 μι	ıμι	2 μι
	Prod No	Prod No	Prod No
Manual	C24-21845	C24-2184-1	C24-2184-2
With universal act.	C24-21845EUHA	C24-2184-1EUHA	C24-2184-2EUHA
Replacement valve	C24-21845D	C24-2184-1D	C24-2184-2D
Replacement rotor	C24-10R5	C24-10R-1	C24-10R-2
Replacement stator	C24-1C8	C24-1C8	C24-1C8

0.50 MM PORTS (.020")



75°C max Stator: PPS Rotor: Valcon E2

OPTIONS

- 0.2 µl sample volumes are also available.
- Purge option
- Other polymeric rotors and stators are available. Consult the factory for prices and information.

PURGE OPTION

The purge option permits a flow of liquid or gas to flush the valve interior of potentially toxic or corrosive components. We recommend this option for applications using materials (such as salt solutions) that could damage the metal parts of the valve.

Consult our technical staff for details.

INTERNAL SAMPLE INJECTOR

1/4-28 fittings

Low pressure

CHEMINERT VALVES

Valves with 1/2-20 fittings for 1/4" tubing

2.9 - 3.2 MM (.110" - .125") PORTS

SPECIFICATIONS

100 psi liq 50°C max

Stator: PAEK Rotor: Valcon E2 Manual version not available.

Model C42R includes Cheminert 1/2-20 flangeless fittings for 1/4" tubing, Delrin nuts, and CTFE ferrules.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply.

Includes RS232/485 serial interface. See page 174 for other interface options.

1/2-20 Internal 1/4" 2.8 - 3.2 mm

OPTIONS

• 10 port version available with 2mm (.080") bore

• Other polymeric rotors and stators are available.

|--|

4 Ports

1/2-20





3.2 mm (.125") 3.2 mm (.125") 2.8 mm (.110") Prod No Prod No Prod No C42R-8146EUTA C42R-8148EUTA C42R-8144EUTA C42R-8144D C42R-8146D C42R-8148D C42R-81R4 C42R-81R6 C42R-81R8 C42R-8C44 C42R-8C46 C42R-8C48

Fittings

With universal actuator

Replacement valve

Replacement rotor

Replacement stator

	Prod No
Delrin nut	CFL-4D
CTFE ferrule	CFL-CB4KF-S

Call for a quote on CTFE or PPS 1/2-20 nuts and plugs.

6 PORT VALVE 1/2-20 fittings

Valves with 1/2-20 fittings for 1/4" tubing

3.9 - 4.6 MM (.155" - .180") PORTS

SPECIFICATIONS

100 psi liq 50°C max

Stator: PAEK Rotor: Valcon E2 Manual version not available.

Model C42R includes Cheminert 1/2-20 flangeless fittings for 1/4" tubing, Delrin nuts, and CTFE ferrules.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply.
Includes RS232/485 serial interface. See page 174 for other interface options.

1/2-20 Internal

OPTIONS

 Other polymeric rotors and stators are available.



Valve rotors.....249

4 Por 4.6 mm (. Prod No



4 Ports 4.6 mm (.180") 6 Ports 3.9 mm (.155") Prod No Prod No

	Prod No	Prod No
With universal actuator	C42R-9144EUTA	C42R-9146EUTA
Replacement valve	C42R-9144D	C42R-9146D
Replacement rotor	C42R-91R4	C42R-91R6
Replacement stator	C42R-9C44	C42R-9C46

APPLICATIONS FOR CHEMINERT TWO POSITION VALVES

These illustrations show basic sample injection techniques using Cheminert two position valves. With rare exceptions, there is no difference between switching valves and external volume sampling valves, so the same valve can be used for either function.

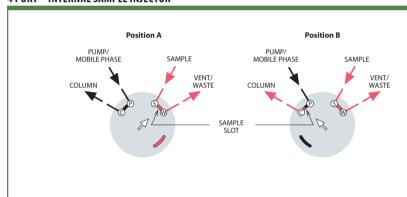
The unique advantage of 8 and 10 port valves is that they reduce extra column volume by combining sampling and switching functions in a single valve. This minimizes expense, maintenance, service, and risk of leaks as compared to multiple 6 port valve systems.

SEE VIDEOS

See VICI valve applications in motion in the support section of vici.com.



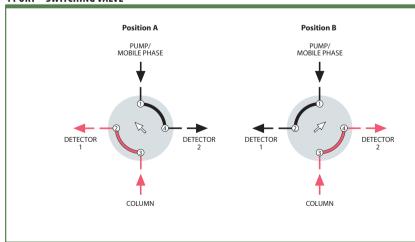
4 PORT - INTERNAL SAMPLE INJECTOR



MICROVOLUME SAMPLE INJECTION

The internal sample (fixed volume) flowpath is used when very small sample volumes are required. The sample size is determined by a passage engraved on the valve rotor, allowing precise, repeatable injections. In Position A, the sample flows through the sample passage while the mobile phase flows through to the column. The third passage is inactive. In Position B, the sample passage is in line with the column and the mobile phase injects the contents of the sample passage into the column. The passage which was inactive in Position A allows the sample to continue flowing without interruption.

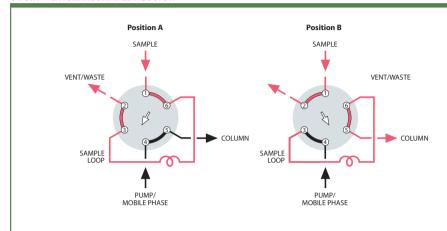
4 PORT – SWITCHING VALVE



DETECTOR SELECTION FROM TWO COLUMNS OR **ONE COLUMN AND AUXILIARY CARRIER**

This unique configuration allows analyses of different parts of one analysis with two different detectors, without splitting or multiple injections.

6 PORT - EXTERNAL SAMPLE INJECTOR



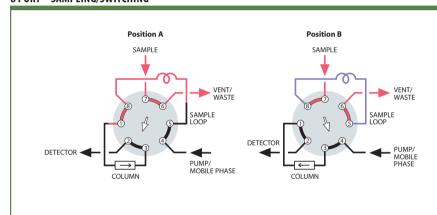
SAMPLE INJECTION

With the valve in Position A, sample flows through the external loop while the mobile phase flows directly through to the column. When the valve is switched to Position B, the sample contained in the sample loop and valve flow passage is displaced by the mobile phase and is carried into the column.

Note: Especially for partial-filled loops, the flow direction of the mobile phase through the loop should be opposite (backflush) to the flow direction during the loading of the loop.

More applicationspages 100-101

8 PORT - SAMPLING/SWITCHING

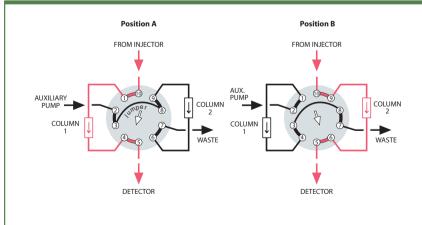


LOOP SAMPLING WITH BACKFLUSH TO DETECTOR

One valve performs the functions of sampling and backflush valves, simplifying operation and reducing cost. When components of interest are detected, the strongly retained components are backflushed and removed from the column without temperature programming.

More applicationspage 101

10 PORT - SAMPLING/SWITCHING



ALTERNATE COLUMN REGENERATION

When columns must be regenerated following each analysis, this technique permits automation of the process. While one column performs the analysis, the second column undergoes regeneration through use of an auxiliary pump. Once the first analysis is complete, the valve is switched and the regenerated column is ready for analytical use.

More applicationspages 102-103

15,000 psi UHPLC Nanovolume® selectors

1/32" VALCO FITTINGS, 150 MICRON PORTS (.006")

15,000 psi

Nanobore

Stream selector

1/32"

150 µm

Model C85NX includes Valco stainless steel fittings. Manual version not available.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface.

See page 174 for other interface options.

S5 + S8 INLET/ OUTLET S1 S2 S2

SPECIFICATIONS

15,000 psi liq 50°C max Stator: Stainless with

inert coating
Rotor: Valcon E3

	6 Position Prod No	8 Position <i>Prod No</i>	10 Position <i>Prod No</i>
With universal actuator	C85NX-6676EUHA	C85NX-6678EUHA	C85NX-6670EUHA
Replacement valve	C85NX-6676D	C85NX-6678D	C85NX-6670D
Replacement rotor	C75N-66R6	C75N-66R8	C75N-66R0
Replacement stator	C75N-6C76	C75N-6C78	C75N-6C70

OPTIONS

- 100 micron (.004") bore
- 250 micron (.010") bore
- 10,000 and 20,000 psi versions available
- 4 positions

10 POSITION SELECTOR

1/32" stainless Valco fittings

15,000 psi UHPLC microbore selectors

1/16" VALCO FITTINGS, 0.25 MM PORTS (.010")

SPECIFICATIONS

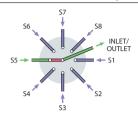
15,000 psi liq 50°C max

Stator: Stainless with inert coating Rotor: Valcon E3

Model C85 includes Valco stainless steel fittings. Manual version not available.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface.

See page 174 for other interface options.





OPTIONS

- 150 micron (.006") bore
- 10,000 and 20,000 psi versions available
- 4 positions

	45	0.0 ''	400 111
	6 Position	8 Position	10 Position
	Prod No	Prod No	Prod No
With universal actuator	C85-1676EUHA	C85-1678EUHA	C85-1670EUHA
Replacement valve	C85-1676D	C85-1678D	C85-1670D
Replacement rotor	C75-16R6	C75-16R8	C75-16R0
Replacement stator	C75-1C76	C75-1C78	C75-1C70

10 POSITION SELECTOR

1/16" stainless Valco fittings



Increasing the pressure rating shortens valve lifetime.



MORE INFO

Actuators Microelectric176 Universal 174-175 Materials

Metals..... 246-247 Polymers 248 Valve rotors.....249

HPLC stream selectors

1/16" VALCO ZDV FITTINGS, 0.40 MM PORTS (.016")

5,000 psi

Stream selector

10-32 ZDV

1/16" 0.40 mm

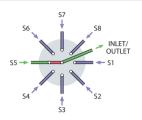
Model C5 includes nuts and ferrules.

Valves with metal stators have stainless steel nuts and ferrules of the stator material.

Valves with PAEK stators have PEEK nuts and ferrules.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface.

See page 174 for other interface options.



SPECIFICATIONS

5000 psi liq 75°C max

Stator: Metal Rotor: Valcon H

5000 psi liq 50°C max

Stator: PAEK Rotor: Valcon E

	4 Position Prod No	6 Position Prod No	8 Position <i>Prod No</i>	10 Position <i>Prod No</i>
N60 stainless stator				
Manual	C5-2004	C5-2006	C5H-2008	C5H-2000
With universal actuator	C5-2004EUHA	C5-2006EUHA	C5H-2008EUHA	C5H-2000EUHA
Replacement valve	C5-2004D	C5-2006D	C5H-2008D	C5H-2000D
Replacement rotor	C5-20R4	C5-20R6	C5-20R8H	C5-20R0H
Replacement stator	C5-2C04	C5-2C06	C5-2C08H	C5-2C00H
PAEK stator				
Manual	C5-2344	C5-2346	C5H-2348	C5H-2340
With universal actuator	C5-2344EUHA	C5-2346EUHA	C5H-2348EUHA	C5H-2340EUHA
Replacement valve	C5-2344D	C5-2346D	C5H-2348D	C5H-2340D
Replacement rotor	C5-23R4	C5-23R6	C5-23R8H	C5-23R0H
Replacement stator	C5-2C44	C5-2C46	C5-2C48H	C5-2C40H
Titanium stator				
Manual	C5-2034	C5-2036	C5H-2038	C5H-2030
With universal actuator	C5-2034EUHA	C5-2036EUHA	C5H-2038EUHA	C5H-2030EUHA
Replacement valve	C5-2034D	C5-2036D	C5H-2038D	C5H-2030D
Replacement rotor	C5-20R4	C5-20R6	C5-20R8H	C5-20R0H
Replacement stator	C5-2C34	C5-2C36	C5-2C38H	C5-2C30H

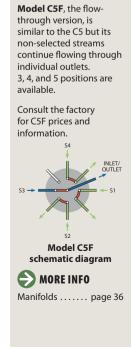
OPTIONS

- 2", 3", 4", and 6" standoffs
- Hastelloy C stator
- Optional 0.15 mm (.006") and 0.25 mm (.010") bores available
- Optional 0.75 mm (.030") bore for Prep HPLC available

OPTIONAL FLOWPATH



1/16" stainless Valco fittings



HPLC column selector systems

WITH 1/16" VALCO ZDV FITTINGS, 0.40 MM PORTS (.016")

SPECIFICATIONS

5000 psi liq 75°C max

Stator: Metal Rotor: Valcon H 5000 psi liq 50°C max

Stator: PAEK Rotor: Valcon E The system comprises two stream selection valves mounted on a single universal actuator. (See plumbing diagram below.) The actuator as supplied is set up for control via serial interface, but other options are available. (See page 174.)

 ${\sf Model\,C5\,column\,selector\,system\,includes\,nuts\,and\,ferrules.}$

Valves with stainless stators have stainless fittings.

Valves with PAEK stators have PEEK fittings.

Includes universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options.

5,000 psi				
Column selector system				
10-32 ZDV				
1/16" 0.40 mm				

OPTIONS

- 2", 3", 4", and 6" standoffs
- Hastelloy C stator
- Optional 0.25 mm (.010") and 0.15 mm (.006") bores available
- Optional 0.75 mm (.030") bore for Prep HPLC available

	6 Column Prod No	8 Column <i>Prod No</i>	10 Column <i>Prod No</i>
N60 stainless stato	r		
System	C5-2006EUTDA	C5H-2008EUTDA	C5H-2000EUTDA
Replacement rotor	C5-20R6	C5-20R8H	C5-20R0H
PAEK stator			
System	C5-2346EUTDA	C5H-2348EUTDA	C5H-2340EUTDA
Replacement rotor	C5-23R6	C5-23R8H	C5-23R0H

Note: Contact factory for replacement valves and stators, as valves for dual drive assemblies have mirror image stators.

Prod No

RS-232 interface cable



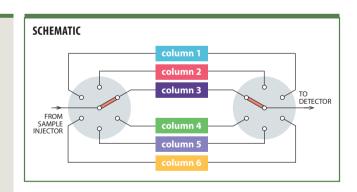
Valves for dual drive assemblies have mirror image stators. Consult Technical Support for correct product number before ordering.



Consult the factory for more information on UHPLC systems.

MORE INFO

Actuators
Microelectric176
Universal174-175
Materials
Metals246-247
Polymers248
Valve rotors249
Standoff
assemblies187-189



HPLC COLUMN SELECTOR SYSTEM

Columns not included

Stream selectors

1/16" VALCO ZDV FITTINGS, 0.75 MM PORTS (.030")

Low pressure
Stream selector

10-32 ZDV

Replacement stator

C25Z-386

0.75 mm

1/16"

Model C25Z includes Valco ZDV PEEK nuts and ferrules.
Universal actuator: 24 VDC, with autosensing 24 VDC power supply.
Includes RS232/485 serial interface.
See page 174 for other interface options.

C25Z-380

75°C max Stator: PPS Rotor: Valcon E2

SPECIFICATIONS

250 psi liq

10 Position 6 Position 8 Position 14 Position Prod No Prod No Prod No Prod No Manual C25Z-3186 C25Z-3188 C25Z-3180 C25Z-31814 C25Z-3186EUHA C25Z-3188EUHA C25Z-3180EUHA C25Z-31814EUHA With universal act. C25Z-3188D C25Z-3180D C25Z-31814D Replacement valve C25Z-3186D Replacement rotor C15-310 C15-310 C15-310 C25Z-325

C25Z-388

OPTIONS

- 4 and 12 positions available
- 2", 3", 4", and 6" standoffs
- Other polymeric materials are available. Consult the factory.

10 POSITION SELECTOR 1/16" PEEK ZDV fittings

C25Z-38-14



Model C25ZF, the flow-through version, is similar to the C25Z but its non-selected streams continue flowing through individual outlets, instead of being dead-ended. 3, 4, 5, 6, and 7 positions are available.

Consult the factory for C25ZF prices and information.

S4

INLET/
OUTLET

53

52

Stream selectors

1/4-28 FITTINGS FOR 1/16" TUBING, 0.75 MM PORTS (.030")

SPECIFICATIONS

250 psi liq 75°C max

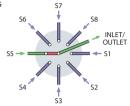
Stator: PPS Rotor: Valcon E2

OPTIONS

- 2", 3", 4", and 6" standoffs
- CTFE stator

Model C25 includes multicolored Cheminert 1/4-28 flangeless fittings for 1/16" tubing.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options.





	4 Position	6 Position	8 Position	10 Position
	Prod No	Prod No	Prod No	Prod No
Manual	C25-3184	C25-3186	C25-3188	C25-3180
With universal actuator	C25-3184EUHA	C25-3186EUHA	C25-3188EUHA	C25-3180EUHA
Replacement valve	C25-3184D	C25-3186D	C25-3188D	C25-3180D
Replacement rotor	C25-314	C25-316	C25-318	C25-310
Replacement stator	C25-384	C25-386	C25-388	C25-380

Stream selectors

1/4-28 FITTINGS FOR 1/8" TUBING, 1.50 MM PORTS (.060")

SPECIFICATIONS

250 psi liq 75°C max

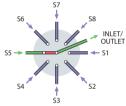
Stator: PPS Rotor: Valcon E2

OPTIONS

- 2", 3", 4", and 6" standoffs
- CTFE stator

Model C25 includes multicolored Cheminert 1/4-28 flangeless fittings
for 1/8" tubing.
Iniversal actuator: 24 VDC with autosensing 24 VDC nower supply

Includes RS232/485 serial interface. See page 174 for other interface options.



Low pressure		
Stream selector		
1/4-28 Internal		
1/8" 1.50 mm		

	4 Position	6 Position	8 Position	10 Position
	Prod No	Prod No	Prod No	Prod No
Manual	C25-6184	C25-6186	C25-6188	C25-6180
With universal actuator	C25-6184EUHA	C25-6186EUHA	C25-6188EUHA	C25-6180EUHA
Replacement valve	C25-6184D	C25-6186D	C25-6188D	C25-6180D
Replacement rotor	C25-614	C25-616	C25-618	C25-610
Replacement stator	C25-684	C25-686	C25-688	C25-680

OPTIONAL **FLOWPATH**

Model C25F is the flowthrough version of C25. (See discussion on facing page.) 3, 4, 5, 6, and 7 positions are available.

Consult the factory for C25F prices and information.

MORE INFO

Actuators Microelectric176 Universal 174-175 Materials Metals..... 246-247 Polymers 248 Valve rotors.....249 Standoff

assemblies 187-189

10 POSITION SELECTOR

1/4-28 Cheminert flangeless fittings

Stream selectors

1/16" CHEMINERT FITTINGS

Low pressure

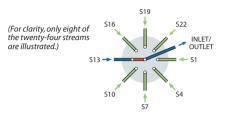
Stream selector

6-40 flat bottom

Model C25G includes 6-40 PEEK nut/bushings for 1/16" OD tubing.

Universal actuator: 24 VDC,

with autosensing 24 VDC power supply. Includes RS232/485 serial interface. See page 174 for other interface options.



SPECIFICATIONS

100 psi liq 50°C max Stator: PEEK Rotor: Valcon M

OPTIONS

- Fittings for use with 1/32" tubing
- 2", 3", 4", and 6" standoffs
- Consult the factory for optional materials.

	20 Position 0.67 mm (.026") <i>Prod No</i>	24 Position 0.61 mm (.024") <i>Prod No</i>	28 Position 0.56 mm (.022") <i>Prod No</i>
With universal actuator	C25G-24520EUTA	C25G-24524EUTA	C25G-24528EUTA
Replacement valve	C25G-24520D	C25G-24524D	C25G-24528D
Replacement rotor	C25G-24R20	C25G-24R24	C25G-24R28
Replacement stator	C25G-2C520	C25G-2C524	C25G-2C528

Fittings

6-40

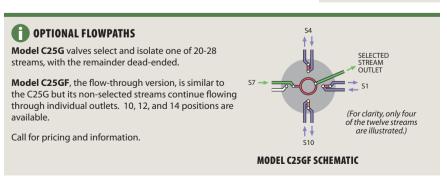
The C25G selector uses unique 6-40 fittings for flat-bottomed fitting details. As the fitting is tightened, the grooved area (supported by the stainless retainer) compresses enough to grip the tube for a low pressure connection. The bushing/nut is natural PEEK.

		Tube size	Prod No	
6-40 one piece nut/bushing with retainer	1/16"	CNNF1PK		
	1/32"	CNNF.5PK		
	Tightening tool		CGFT	



24 POSITION SELECTOR 1/16" 6-40 PEEK fittings





Stream selectors with 1/2-20 FITTINGS FOR 1/4" TUBING

2.9 - 3.2 MM (.110" - .125") PORTS

SPECIFICATIONS

100 psi liq 50°C max

Stator: PAEK Rotor: Valcon E2

OPTIONS

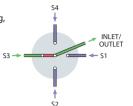
- Other polymeric rotors and stators are available.
- 10 position version

Manual version not available.

Model C45R includes Cheminert 1/2-20 flangeless fittings for 1/4" tubing, Delrin nuts, and CTFE ferrules.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface.

See page 174 for other interface options.



Low pressure 1/2-20 Internal 1/4" 2.8 - 3.2 mm

	4 Position 3.2 mm (.125")	6 Position 3.2 mm (.125")	8 Position 2.8 mm (.110")
	Prod No	Prod No	Prod No
With universal actuator	C45R-8144EUTA	C45R-8146EUTA	C45R-8148EUTA
Replacement valve	C45R-8144D	C45R-8146D	C45R-8148D
Replacement rotor	C45R-81R4	C45R-81R6	C45R-81R8
Replacement stator	C45R-8C44	C45R-8C46	C45R-8C48

Fittings

1/2-20

	Prod No
Delrin nut	CFL-4D
CTFE ferrule	CFL-CB4KF-S

Call for a quote on CTFE nuts and 1/2-20 plugs.

8 POSITION SELECTOR

1/2-20 fittings

6 Position

Stream selectors with 1/2-20 FITTINGS FOR 1/4" TUBING

3.9 - 4.6 MM (.155" - .180") PORTS

SPECIFICATIONS

100 psi liq 50°C max

Stator: PAEK Rotor: Valcon E2

OPTIONS

• Other polymeric rotors and stators are available.



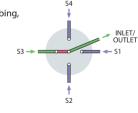
Microelectric176 Universal 174-175 Materials Metals..... 246-247 Polymers 248 Valve rotors.....249

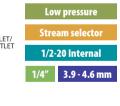
Manual version not available.

Model C45R includes Cheminert 1/2-20 flangeless fittings for 1/4" tubing, Delrin nuts, and CTFE ferrules.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply. Includes RS232/485 serial interface.

See page 174 for other interface options.





	4.0 11111 (. 160)	3.9 mm (.133)
	Prod No	Prod No
With universal actuator	C45R-9144EUTA	C45R-9146EUTA
Replacement valve	C45R-9144D	C45R-9146D
Replacement rotor	C45R-91R4	C45R-91R6
Replacement stator	C45R-9C44	C45R-9C46

4 Position

Integrated motor/valves

1/16" VALCO FITTINGS, 0.25 MM PORTS (.010")

5,000 psi

Microbore

Integrated 0.25 mm

C € ready*

Model C52 includes nuts and ferrules.

Valves with stainless stators have stainless fittings.

Valves with PAEK stators have PEEK fittings.

See page 131 for more information on integrated motor/valves.

Also available in vertical port version. Contact the factory.

Note: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.









	Prod No	Prod No	Prod No	Prod No	
N60 stainless stator	N60 stainless stator				
With integrated actuator	C52-1004I	C52-1006l	C52-1008I	C52-1000I	
Add RS-232 interface	C52-1004IA	C52-1006IA	C52-1008IA	C52-1000IA	
With motor/sensor only	C52-1004I-S	C52-1006I-S	C52-1008I-S	C52-1000I-S	
With motor only	C52-1004IX	C52-1006IX	C52-1008IX	C52-1000IX	
Replacement rotor	C2-10R4	C2-10R6	C2-10R8H	C2-10R0H	
Replacement stator	C52-1C04	C52-1C06	C52-1C08	C52-1C00	
PAEK stator					
With integrated actuator	C52-1344I	C52-1346I	C52-1348I	C52-1340I	
Add RS-232 interface	C52-1344IA	C52-1346IA	C52-1348IA	C52-1340IA	
With motor/sensor only	C52-1344I-S	C52-1346I-S	C52-1348I-S	C52-1340I-S	
With motor only	C52-1344IX	C52-1346IX	C52-1348IX	C52-1340IX	
Replacement rotor	C2-13R4	C2-13R6	C2-13R8H	C2-13R0H	
Replacement stator	C52-1C44	C52-1C46	C52-1C48	C52-1C40	

6 PORT INTEGRATED MOTOR/VALVE

1/16" stainless ZDV fittings

SPECIFICATIONS

5,000 psi liq 50°C max

Stator: N60 stainless Rotor: Valcon H 5,000 psi liq

50°C max Stator: PAEK Rotor: Valcon E

OPTIONS

- Vertical port version. (Model C52V) Contact the factory for more information.
- Optional 0.40 mm (.016") and 0.75 mm ports (.030") available
- Titanium and Hastelloy stators available
- Serial communication via RS-232 or RS-485 is available.



* CE READY

Since these integrated VICI motor/valves are designed as components to be embedded into other systems, they do not include a power supply. They have been tested according to the following EMC Standards: EN61326-1: 2006

Conducted emissions Radiated emissions

However, these results do not substitute for, preclude, or guarantee passage of any or all relevant compliance testing as required for a final product that includes these components.

Microbore centered port injectors

1/16" VALCO FITTINGS, 0.25 MM PORTS (.010")

SPECIFICATIONS

5000 psi liq 75°C max

Stator: N60 stainless Rotor: Valcon H 5000 psi liq 50°C max Stator: PAEK

Rotor: Valcon E

Model C3 includes nuts and ferrules.

Valves with stainless stators have stainless fittings. Valves with PAEK stators have PEEK fittings.

Includes syringe fill port for 22 gauge 3/4" and 2" needle. Universal actuator: 24 VDC, with autosensing 24 VDC power supply.

Includes RS232/485 serial interface. See page 174 for other interface options.

Note: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.



OPTIONS

• Titanium and Hastelloy stators available



N60 stainless stator				
Manual	C3-1006			
With universal actuator	C3-1006EUHA			
Replacement valve	C3-1006D			
Replacement rotor	C2-10R6			
Replacement stator	C3-1C06			
PAEK stator				
Manual	C3-1346			
With universal actuator	C3-1346EUT			
Replacement valve	C3-1346D			
Replacement rotor	C2-13R6			
Replacement stator	C3-1C46			

6 PORT CENTERED PORT INJECTOR 1/16" stainless ZDV fittings

Sample loops

Each metal loop includes two stainless steel nuts and ferrules. Each PEEK loop includes two PEEK nuts and ferrules. These loops are for use with valves on pages 140, 142, 143, 144, 146, 147, 163, 164, 165, and 167.

	Stailliess Steel	PEER (TOT PAER STATOTS)
Volume	Prod No	Prod No
2 μΙ	CSL2	CZSL2PK
5 μΙ	CSL5	CZSL5PK
10 μΙ	CSL10	CZSL10PK
20 µl	CSL20	CZSL20PK
50 µl	CSL50	CZSL50PK
100 µl	CSL100	CZSL100PK
250 µl	CSL250	CZSL250PK
500 μl	CSL500	CZSL500PK **
1 ml	CSL1K	CZSL1KPK **
2 ml	CSL2K	CZSL2KPK **
5 ml	CSL5K	CZSL5KPK **
10 ml	CSL10K	** max pressure 2500 psi

Stainless Steel DEEK (for DAEK stators)

ABOUT LOOPS

- Other materials are available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, and PTFE.
- Metal loops > 2 ml are made from 1/8" OD tubing with brazed or welded 1/16" tube ends or reducing unions.
- Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.

Microelectric176 Universal 174-175 Materials Metals..... 246-247 Polymers 248 Valve rotors.....249

Microbore vertical port injectors

1/16" VALCO FITTINGS, 0.25 MM PORTS (.010")

5,000 psi

Microbore

Vertical port

0.25 mm

Model C2V includes nuts and ferrules.

Valves with stainless stators have stainless fittings.

Valves with PAEK stators have PEEK fittings.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply.

Includes RS232/485 serial interface. See page 174 for other interface options.

Note: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.



	1100110			
N60 stainless stator				
Manual	C2V-1006			
With universal actuator	C2V-1006EUHA			
Replacement valve	C2V-1006D			
Replacement rotor	C2-10R6			
Replacement stator	C2V-1C06			
PAEK stator				
Manual	C2V-1346			
With universal actuator	C2V-1346EUHA			
Replacement valve	C2V-1346D			
Replacement rotor	C2-13R6			
Replacement stator	C2V-1C46			

5000 psi liq 75°C max

Stator: N60 stainless Rotor: Valcon H 5000 psi liq

SPECIFICATIONS

50°C max Stator: PAEK Rotor: Valcon E

OPTIONS

• Titanium and Hastelloy stators available

6 PORT VERTICAL PORT INJECTOR 1/16" PEEK ZDV fittings

INTEGRATED MOTOR/VERTICAL PORT INJECTOR

Available in analytical and microbore versions. Contact the factory for information.

Analytical vertical port injectors

1/16" VALCO FITTINGS, 0.40 MM PORTS (.016")

SPECIFICATIONS

5000 psi liq 75°C max

OPTIONS

Stator: N60 stainless Rotor: Valcon H 5000 psi liq 50°C max

O°C max Stator: PAEK Rotor: Valcon E

• Titanium and Hastelloy stators available

Model C2V includes nuts and ferrules.

Valves with stainless stators have stainless fittings.

Valves with PAEK stators have PEEK fittings.

Universal actuator: 24 VDC, with autosensing 24 VDC power supply.

Includes RS232/485 serial interface. See page 174 for other interface options. *Note*: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.

5,000 psi

Analytical

Vertical port

/16"

0.40 mm



Prod N

N60 stainless stator				
Manual	C2V-2006			
With universal actuator	C2V-2006EUHA			
Replacement valve	C2V-2006D			
Replacement rotor	C2-20R6			
Replacement stator	C2V-2C06			
PAEK stator				
Manual	C2V-2346			
With universal actuator	C2V-2346EUHA			
Replacement valve	C2V-2346D			
Replacement rotor	C2-23R6			
Replacement stator	C2V-2C46			

6 PORT VERTICAL PORT INJECTOR 1/16" PEEK ZDV fittings

MORE INFO

Actuators
Microelectric176
Universal 174-175
Materials
Metals 246-247
Polymers 248
Valve rotors 249

Integrated motor/valves

1/16" VALCO FITTINGS, 0.40 MM PORTS (.016")

5,000 psi

Analytical Integrated

0.40 mm C € ready

Model C52 includes nuts and ferrules.

Valves with stainless stators have stainless fittings. Valves with PAEK stators have PEEK fittings.nuts and ferrules. See page 131 for more information on integrated motor/valves.

Note: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.









	Proa No	Prod No	Prod No	Prod No
N60 stainless stator				
With integrated actuator	C52-2004l	C52-2006I	C52-2008I	C52-2000I
Add RS-232 interface	C52-2004IA	C52-2006IA	C52-2008IA	C52-2000IA
With motor/sensor only	C52-2004I-S	C52-2006I-S	C52-2008I-S	C52-2000I-S
With motor only	C52-2004IX	C52-2006IX	C52-2008IX	C52-2000IX
Replacement rotor	C2-20R4	C2-20R6	C2-20R8H	C2-20R0H
Replacement stator	C52-2C04	C52-2C06	C52-2C08	C52-2C00
PAEK stator				
With integrated actuator	C52-2344I	C52-2346I	C52-2348I	C52-2340I
Add RS-232 interface	C52-2344IA	C52-2346IA	C52-2348IA	C52-2340IA
With motor/sensor only	C52-2344I-S	C52-2346I-S	C52-2348I-S	C52-2340I-S
With motor only	C52-2344IX	C52-2346IX	C52-2348IX	C52-2340IX
Replacement rotor	C2-23R4	C2-23R6	C2-23R8H	C2-23R0H
Replacement stator	C52-2C44	C52-2C46	C52-2C48	C52-2C40

6 PORT INTEGRATED MOTOR/VALVE 1/16" stainless ZDV fittings



6 PORT VERTICAL PORT INTEGRATED MOTOR/VALVE

Contact the factory for information on this option.

SPECIFICATIONS

5,000 psi liq 50°C max

Stator: N60 stainless Rotor: Valcon H 5,000 psi liq 50°C max

Stator: PAEK Rotor: Valcon E

OPTIONS

- Vertical port version. (Model C52V) Contact the factory for more information.
- Optional 0.25 mm (.010") and 0.75 mm ports (.030") available
- Titanium and Hastelloy stators available
- Serial communication via RS-232 or RS-485 is available.



* CE READY

Since these integrated VICI motor/valves are designed as components to be embedded into other systems, they do not include a power supply. They have been tested according to the following EMC Standards: EN61326-1: 2006

Conducted emissions Radiated emissions

However, these results do not substitute for, preclude, or guarantee passage of any or all relevant compliance testing as required for a final product that includes these components.



Analytical centered port injectors

1/16" VALCO FITTINGS, 0.40 MM PORTS (.016")

SPECIFICATIONS

5000 psi liq 75°C max

Stator: N60 stainless Rotor: Valcon H 5000 psi liq 50°C max Stator: PAEK

Rotor: Valcon E

Model C3 includes nuts and ferrules.

Valves with stainless stators have stainless fittings. Valves with PAEK stators have PEEK fittings.

Includes syringe fill port for 22 gauge 3/4" and 2" needle. Universal actuator: 24 VDC, with autosensing 24 VDC power supply.

Includes RS232/485 serial interface. See page 174 for other interface options. *Note*: The fitting detail pilot depth in PAEK HPLC stators is slightly longer than standard.

5,000 psi Analytical

Centered port

16" 0.40 mm

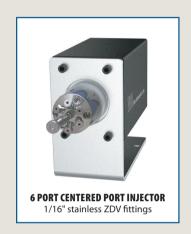
OPTIONS

• Titanium and Hastelloy stators available



Prod No

N60 stainless stator				
Manual	C3-2006			
With universal actuator	C3-2006EUHA			
Replacement valve	C3-2006D			
Replacement rotor	C2-20R6			
Replacement stator	C3-2C06			
PAEK stator				
Manual	C3-2346			
With universal actuator	C3-2346EUHA			
Replacement valve	C3-2346D			
Replacement rotor	C2-23R6			
Replacement stator	C3-2C46			



Sample loops

Each metal loop includes two stainless steel nuts and ferrules. Each PEEK loop includes two PEEK nuts and ferrules. These loops are for use with valves on pages 140, 142, 143, 144, 146, 147, 163, 164, 165, and 167.

	Stainless Steel	PEEK (for PAEK stators)
Volume	Prod No	Prod No
2 μΙ	CSL2	CZSL2PK
5 μΙ	CSL5	CZSL5PK
10 µl	CSL10	CZSL10PK
20 µl	CSL20	CZSL20PK
50 μl	CSL50	CZSL50PK
100 µl	CSL100	CZSL100PK
250 µl	CSL250	CZSL250PK
500 μl	CSL500	CZSL500PK **
1 ml	CSL1K	CZSL1KPK **
2 ml	CSL2K	CZSL2KPK **
5 ml	CSL5K	CZSL5KPK **
10 ml	CSL10K	** max pressure 2500 psi



- Other materials are available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, and PTFE.
- Metal loops > 2 ml are made from 1/8" OD tubing with brazed or welded 1/16" tube ends or reducing unions.
- Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.

Microelectric	176
Universal	174-175
Materials	
Metals	246-247
Polymers	248
Valve rotors	249

Integrated motor/valves

1/16" VALCO ZDV FITTINGS, 0.75 MM PORTS (.030")

Low pressure

Integrated

10-32 ZDV

1/16" 0.75 mm

Model C62Z includes Valco ZDV PEEK nuts and ferrules. Sample loops are not included with valves. Order separately.









	4 Port	o Port	8 PORT	10 Port
	Prod No	Prod No	Prod No	Prod No
With integrated actuator	C62Z-3184I	C62Z-3186I	C62Z-3188I	C62Z-3180I
Add RS-232 interface	C62Z-3184IA	C62Z-3186IA	C62Z-3188IA	C62Z-3180IA
With motor and sensor only	C62Z-3184I-S	C62Z-3186I-S	C62Z-3188I-S	C62Z-3180I-S
Replacement rotor	C62-314	C62-316	C62-318	C62-310
Replacement stator	C62Z-384	C62Z-386	C62Z-388	C62Z-380

OPTIONS

SPECIFICATIONS

250 psi liq

50°C max Stator: PPS

• Other polymeric rotors and stators are available

Rotor: Valcon E2

- Consult the factory for prices and information.
- Serial communication via RS-232 or RS-485 is available.

10 PORT INTEGRATED MOTOR/VALVE

1/16" PEEK ZDV fittings

Sample loops

Loops include PEEK nuts and ferrules. Loops less than 500 μl are made from 1/16" OD tubing; loops 500 μ l or greater are made from 1/8" OD tubing with polymeric unions and 1/16" ends.

These loops are for use with valves on this page.

	FEP	PTFE	PEEK
Volume	Prod No	Prod No	Prod No
5 μΙ	CZSL5FEP	CZSL5TF	CZSL5PK
10 µl	CZSL10FEP	CZSL10TF	CZSL10PK
20 µl	CZSL20FEP	CZSL20TF	CZSL20PK
50 μl	CZSL50FEP	CZSL50TF	CZSL50PK
100 µl	CZSL100FEP	CZSL100TF	CZSL100PK
250 µl	CZSL250FEP	CZSL250TF	CZSL250PK
500 μl	CZSL500FEP	CZSL500TF	CZSL500PK
1 ml	CZSL1KFEP	CZSL1KTF	CZSL1KPK
2 ml	CZSL2KFEP	CZSL2KTF	CZSL2KPK



ABOUT LOOPS

Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.



* CE READY

Since these integrated VICI motor/valves are designed as components to be embedded into other systems, they do not include a power supply. They have been tested according to the following EMC Standards:

EN61326-1: 2006 Conducted emissions Radiated emissions

However, these results do not substitute for, preclude, or guarantee passage of any or all relevant compliance testing as required for a final product that includes these components.



Materials

Metals..... 246-247 Polymers 248 Valve rotors.....249

Integrated motor/valves

1/4-28 FITTING DETAILS FOR 1/16" TUBING, 0.75 MM PORTS (.030")

SPECIFICATIONS

250 psi liq 50°C max Stator: PPS Rotor: Valcon E2 Model C62 includes multicolored Cheminert flangeless fittings for 1/16" tubing. Sample loops are not included with valves. Order separately.

Low pressure Integrated 1/4-28 Internal 1/16" 0.75 mm C∈ ready*

OPTIONS

• Serial communication via RS-232 or RS-485 is available.









	4 Port	6 Port	8 Port	10 Port
	Prod No	Prod No	Prod No	Prod No
With integrated actuator	C62-3184I	C62-3186I	C62-3188I	C62-3180I
Add RS-232 interface	C62-3184IA	C62-3186IA	C62-3188IA	C62-3180IA
With motor and sensor only	C62-3184I-S	C62-3186I-S	C62-3188I-S	C62-3180I-S
Replacement rotor	C62-314	C62-316	C62-318	C62-310
Replacement stator	C62-384	C62-386	C62-388	C62-380

Integrated motor/valves

1/4-28 FITTING DETAILS FOR 1/8" TUBING, 1.50 MM PORTS (.060")

SPECIFICATIONS

250 psi liq 50°C max

Stator: PPS Rotor: Valcon E2 Model C62 includes multicolored Cheminert flangeless fittings for 1/8" tubing. Sample loops are not included with valves. Order separately.

Low pressure Integrated 1/4-28 Internal 1/8" 1.50 mm C € ready*

OPTIONS

• Serial communication via RS-232 or RS-485 is available.

	4 Port Prod No	6 Port Prod No	8 Port Prod No	10 Port <i>Prod No</i>
With integrated actuator	C62-6184I	C62-6186I	C62-6188I	C62-6180I
Add RS-232 interface	C62-6184IA	C62-6186IA	C62-6188IA	C62-6180IA
With motor and sensor only	C62-6184I-S	C62-6186I-S	C62-6188I-S	C62-6180I-S
Replacement rotor	C62-614	C62-616	C62-618	C62-610
Replacement stator	C62-684	C62-686	C62-688	C62-680

Sample loops

Loops include flangeless fittings with natural color nuts. Loops less than 250 μl are made from 1/16" OD tubing; loops 250 μ l or greater are made from 1/8" OD tubing.

These loops are for use with valves on this page.

	FEP	PTFE	PEEK
Volume	Prod No	Prod No	Prod No
20 μΙ	CFSL20FEP	CFSL20TF	CFSL20PK
50 μl	CFSL50FEP	CFSL50TF	CFSL50PK
100 μΙ	CFSL100FEP	CFSL100TF	CFSL100PK
250 μΙ	CFSL250FEP	CFSL250TF	CFSL250PK
500 μl	CFSL500FEP	CFSL500TF	CFSL500PK
1 ml	CFSL1KFEP	CFSL1KTF	CFSL1KPK
2 ml	CFSL2KFEP	CFSL2KTF	CFSL2KPK

6 PORT INTEGRATED MOTOR/VALVE

1/4-28 fittings

Integrated motor/stream selectors

1/16" VALCO ZDV FITTINGS, 0.40 MM PORTS (.016")

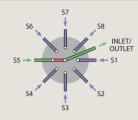
5,000 psi
Integrated
Stream selector
10-32 ZDV
1/16"
0.40 mm

Model C55 includes nuts and ferrules.

Valves with stainless stators have stainless fittings.

Valves with PAEK stators have PEEK fittings.

See page 133 for more information on integrated motor/selectors.



SPECIFICATIONS 5000 psi liq

50°C max
Stator: Metal
Rotor: Valcon H
5000 psi liq
50°C max
Stator: PAEK

Rotor: Valcon E

C C ready*	4 Position	6 Position	8 Position	10 Position
	Prod No	Prod No	Prod No	Prod No
N60 stainless stator				
With integrated actuator	C55-2004I	C55-2006I	C55-2008I	C55-2000I
Add RS-232 interface	C55-2004IA	C55-2006IA	C55-2008IA	C55-2000IA
With motor/sensor only	C55-2004I-S	C55-2006I-S	C55-2008I-S	C55-2000I-S
With motor only	C55-2004IX	C55-2006IX	C55-2008IX	C55-2000IX
Replacement rotor	C5-20R4	C5-20R6	C5-20R8H	C5-20R0H
Replacement stator	C55-2C04	C55-2C06	C55-2C08	C55-2C00
PAEK stator				
With integrated actuator	C55-2344I	C55-2346I	C55-2348I	C55-2340I
(Includes RS-232 interface)	C55-2344IA	C55-2346IA	C55-2348IA	C55-2340IA
With motor/sensor only	C55-2344I-S	C55-2346I-S	C55-2348I-S	C55-2340I-S
With motor only	C55-2344IX	C55-2346IX	C55-2348IX	C55-2340IX
Replacement rotor	C5-23R4	C5-23R6	C5-23R8H	C5-23R0H
Replacement stator	C55-2C44	C55-2C46	C55-2C48	C55-2C40

OPTIONS

- Optional bore: 0.25 mm (.010") 0.75 mm (.030")
- 4 and 8 positions available
- Stators are available in other metals and polymeric materials.
 Rotors are available in other materials
- Serial communication via RS-232 or RS-485 is available.

6 POSITION INTEGRATED MOTOR/SELECTOR

1/16" stainless ZDV fittings



* CE READY

Since these integrated VICI motor/valves are designed as components to be embedded into other systems, they do not include a power supply. They have been tested according to the following EMC Standards: EN61326-1: 2006

EN61326-1: 2006 Conducted emissions Radiated emissions

However, these results do not substitute for, preclude, or guarantee passage of any or all relevant compliance testing as required for a final product that includes these components.

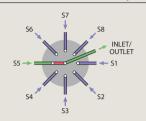


Materials

Integrated motor/stream selectors

1/16" VALCO ZDV FITTINGS, 0.75 MM PORTS (.030")

SPECIFICATIONS 250 psi liq 50°C max Stator: PPS Rotor: Valcon E2 Model C65Z includes Valco ZDV PEEK nuts and ferrules. See page 133 for more information on integrated motor/selectors.





	4 Position Prod No	6 Position Prod No	8 Position Prod No	10 Position <i>Prod No</i>
With integrated actuator	C65Z-3184I	C65Z-3186I	C65Z-3188I	C65Z-3180I
Add RS-232 interface	C65Z-3184IA	C65Z-3186IA	C65Z-3188IA	C65Z-3180IA
With motor and sensor only	C65Z-3184I-S	C65Z-3186I-S	C65Z-3188I-S	C65Z-3180I-S

Integrated motor/stream stream selectors

1/4-28 FITTINGS FOR 1/16" TUBING, 0.75 MM PORTS (.030")

SPECIFICATIONS 250 psi liq 50°C max Stator: PPS Rotor: Valcon F2

SPECIFICATIONS

Model C65 includes multicolored Cheminert flangeless fittings for 1/16" tubing. See page 133 for more information on integrated motor/selectors.

Low pressure Integrated Stream selector 1/4-28 Internal 1/16" 0.75 mm C∈ ready*

NOLOI: VAICOITEZ				
	4 Position	6 Position	8 Position	10 Position
	Prod No	Prod No	Prod No	Prod No
With integrated actuator	C65-3184I	C65-3186I	C65-3188I	C65-3180I
Add RS-232 interface	C65-3184IA	C65-3186IA	C65-3188IA	C65-3180IA
With motor and sensor only	C65-3184I-S	C65-3186I-S	C65-3188I-S	C65-3180I-S

Integrated motor/stream stream selectors

1/4-28 FITTINGS FOR 1/8" TUBING, 1.50 MM PORTS (.060")

See page 133 for more information on integrated motor/selectors. 250 psi liq 50°C max Stator: PPS Rotor: Valcon E2

Model C65 includes multicolored Cheminert flangeless fittings for 1/8" tubing.



	4 Position	6 Position	8 Position	10 Position
	Prod No	Prod No	Prod No	Prod No
With integrated actuator	C65-6184I	C65-6186I	C65-6188I	C65-6180I
Add RS-232 interface	C65-6184IA	C65-6186IA	C65-6188IA	C65-6180IA
With motor and sensor only	C65-6184I-S	C65-6186I-S	C65-6188I-S	C65-6180I-S

6 POSITION INTEGRATED MOTOR/SELECTOR 1/4-28 fittings