



# Valve Selection

Following is an overview of the many types of valves available from VICI.

### Valco Injectors and Valves for GC

*pages 96–99, 102–111*

For nearly 40 years Valco valves have been the industry standard in gas chromatography. Models are available with 3, 4, 6, 8, 10, 12, or 14 ports, with 1/32", 1/16", 1/8", or 1/4" fittings, and with bore sizes from 0.25 mm (.010") to 4 mm (.156"). In addition, Valco valves offer the widest range of rotor and body materials of any valve available, with alloys and polymer composites capable of meeting virtually any system requirement. All models can be ordered in manual, pneumatic, or electrically actuated versions.



### Valco Injectors and Valves for HPLC

*pages 96–99, 112–116*

A pioneer and industry leader in products for HPLC, Valco continues to offer the market's most diverse line in terms of number of ports, fitting sizes, materials of construction, and actuation. 3, 4, 6, 8, 10, 12 port versions are offered, with 1/32", 1/16", or 1/8" fittings. As with the GC line, Valco valves offer the widest range of rotor and body materials of any valves available, with alloys and polymer composites capable of meeting virtually any system requirement. All models can be ordered in manual, pneumatic, or electrically actuated versions.



### Valco Selectors

*pages 100–101, 122–133*

One inherent benefit of the Valco conical rotary design is that it allows multiple planes of ports, facilitating a variety of unique multiposition configurations useful for stream selection, column selection, or trapping. Versions are available for GC and HPLC applications, with 1/16", 1/8", or 1/4" fittings, with bore sizes from 0.40 to 4.0 mm (.016" to .156"). Selectors are available for up to 16 streams (34 ports), all with Valco's trademark flexibility in terms of actuation and material options.



### Diaphragm Valves for GC

*pages 140–143*

A diaphragm valve consists of plungers and ports arranged in a circular pattern, with the plungers controlled by the reciprocating action of two air actuated pistons. Extremely long lifetime (typically 1,000,000 cycles at ambient temperature; approximately 500,000 cycles at elevated temperatures), very short actuation time (10 milliseconds), minimum internal dead volume, and reliability have made this type of valve very successful in process gas chromatography for both sample injection and column switching. Our miniature version features 1/16" or 1/32" zero dead volume fittings, and is the first to offer a 10 port configuration in addition to the 6 port and internal sample 4 port models.



**CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: [sales@chromtech.net.au](mailto:sales@chromtech.net.au) Tel: 03 9762 2034**



### Cheminert Injectors for Nanovolume® HPLC and UHPLC

pages 146, 152–155

New nanovolume® injectors feature a uniform flowpath as small as 100 microns, with specially designed fittings for 1/32" or 360 micron PEEK, fused silica, or Valco electroformed nickel tubing. Models are rated from 5,000 to 20,000 psi, with most having a proprietary coated stainless stator and high-strength PAEK rotor to ensure long periods of maintenance-free operation.



### Cheminert Injectors and Valves for HPLC and UHPLC

pages 147, 156–163

The Cheminert line includes 4, 6, 8, and 10 port versions. The submicroliter injector has an injection volume as small as 10 nanoliters. Valves feature 1/16" zero dead volume fittings, with bore sizes from 0.15 mm (.006") to 0.75 mm (.030"). Most models are available in manual, air, or electrically actuated versions, and some can be ordered with a proprietary coated stainless stator and high-strength PAEK rotor to ensure long periods of maintenance-free operation.



### Cheminert Injectors and Valves for Low Pressure Applications

pages 148, 164–167

Cheminert's two position design offers 4, 6, 8, or 10 port configurations. The design features a choice of Valco 1/16" zero dead volume fittings or 1/4-28 Cheminert internal fittings for 1/16" or 1/8" OD tubing. All models are available in manual, air, or electrically actuated versions.



### Cheminert Selectors

pages 150-151, 170–177

Choose among 4, 6, 8, 10, 14, 20, 24, or 26 position stream selection valves, in high pressure and low pressure models. A variety of configurations are available with bore sizes from 0.10 mm (.004") for HPLC column selection to 4.6 mm (.180") for applications requiring minimal restriction across the valve. Metal or all-polymeric valves can be ordered, with models available in manual, pneumatic, or electrically actuated versions.



### 40,000 psi Ultra-High Pressure Injector System

page 84

The VICI 40K injector is comprised of six miniature air actuated needle valves, plumbed to simulate the flow path of a conventional rotor/stator injector. An integral controller sends the on/off positioning signals to each valve, coordinating them to perform load, inject, and flush functions.

#### FOR OEMs

See our injectors for autosamplers and our new low and high pressure integrated motor/injector and motor/selector assemblies designed specifically to be built into OEM systems.

HPLC ..... pp 178-181

Low pressure ... 182-183

Selectors ..... 184-185





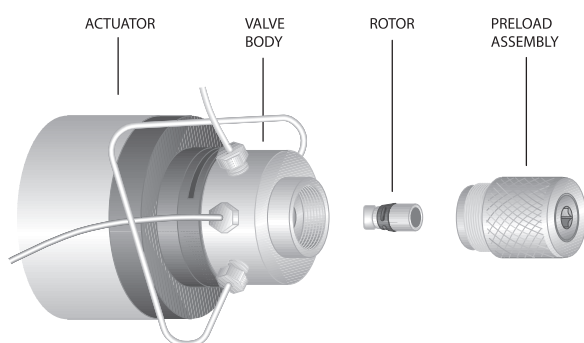
## Valco Injectors and Valves

- 1/32", 1/16", 1/8", or 1/4" Valco ZDV fittings
- 3, 4, 6, 8, 10, 12, and 14 port and internal sample two position versions
- Five multiposition flowpath configurations with as many as 16 positions
- A variety of materials for hostile environments and continuous use at elevated temperature
- Can be configured for use at temperatures up to 350°C or pressures up to 10,000 psi

The Valco design lends itself to a unique variety of connecting slots and port arrangements. The rotor is held in place by a preload assembly, which allows rotor replacement without removing loops and tubing and without disengaging the valve from the actuator or mounting bracket.

In addition, the preload assembly ensures that the valve is always reassembled to the factory-set tension.

**Two position injector** and valve descriptions are on page 99; product numbers and prices begin on page 102. For information on **selectors**, refer to pages 100-101.



### MORE INFORMATION

Decoding Valco valve product no's... 266-269

### Valve descriptions

Cheminert injectors..... 144-149  
Cheminert selectors 144, 150-151  
Diaphragm..... 140-141  
Valco two position..... 99  
Valco selectors..... 100-101

### Valco valve prices

GC ..... 102-111  
HPLC..... 112-116  
Selector ..... 122-133

### TECH TIP

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

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

CHROMalytic TECHnology Pty Ltd AUSTRALIAN Distributors e-mail: [sales@chromtech.net.au](mailto:sales@chromtech.net.au) Tel: 03 9762 2034

## Materials of Construction

The standard valve body material is Nitronic 60, a gall-resistant stainless steel which has proven superior to Type 316 or 303 in the majority of applications. Valves may also be ordered in Hastelloy C-22, Inconel 600, Type 316 stainless, Monel 400, Nickel 200, Nitronic 50, or Titanium.

Medium temperature GC valves have a rotor made of Valcon E, a polyaryletherketone/PTFE composite. The high temperature versions use a polyimide/PTFE/carbon composite designated Valcon T. Valcon H, a carbon-fiber-reinforced, PTFE-lubricated inert polymer, is standard in HPLC valves.

Appropriate fittings are supplied with all valves. Valves rated at 1000 psi or less have Type 303 stainless ferrules; those rated above 1000 psi have Type 316 stainless ferrules. A valve ordered with an optional body material is supplied with ferrules of the same material as the body, with Type 316 stainless nuts.

#### SPECIAL BODY MATERIAL— CODES AND PRICES

##### TWO POSITION VALVES

Body material	Code	1/32" and 1/4" fittings	1/16" and 1/8" fittings
HPLC grade Stainless steel	SS	Standard	Standard
Hastelloy C-22	HC		
Inconel 600	IN		
Monel 400	M4		
Nickel	NI		
Nitronic 50	N5		
Titanium *	TI		

\* Not available for WT, UWT, or T series valves (high temperature) due to material temperature limit.

##### MULTIPOSITION VALVES

Body material	Code	1/16" and 1/8" fittings SC and SD flowpaths	SF and ST flowpaths	1/4" fittings SD, SC, SF flowpaths
HPLC grade Stainless steel	SS	Standard, most versions	Standard, most versions	Standard
Hastelloy C-22	HC			
Inconel 600	IN			
Monel 400	M4			
Nickel	NI			
Nitronic 50	N5			
Titanium *	TI			

\* Not available for WT, UWT, or T series valves (high temperature) due to material temperature limit.

#### Specifying a Special Body Material

To specify a special valve body material, add the material code to the end of the valve product number, and add the amount listed in charts opposite to the base price.

*Example:*

*An A4C6WE (air actuated 1/16" 6 port WE valve with a 4" standoff) made of Hastelloy C-22 would be designated A4C6WEHC.*

*The cost is \$830 + \$170 = \$1000.*

Due to design requirements, several special grades of stainless steel may be used where "HPLC grade" is noted. The specific types include Nitronic 60, Type 316 stainless steel, and Type 316L stainless steel. VICI will select the material to be used based on availability and quality. HPLC grade stainless is the standard material for all Valco two position valves and high pressure multiposition valves.

#### MORE INFORMATION Materials

Metals..... pp 254-255  
Polymers .....256  
Valve rotors.....257

CHROMalytic TECHnology Pty Ltd AUSTRALIAN Distributors e-mail: [sales@chromtech.net.au](mailto:sales@chromtech.net.au) Tel: 03 9762 2034

## Leak Testing

The standard test methods for cross-port and outport leakage insure valve performance at pressures and temperatures up to the specifications listed. For valves used on mass spectrometers or for ultra-trace fixed gas analysis, we recommend an optional test method utilizing a helium mass spectrometer, which provides data on mechanical leaks and on those due to seal porosity and permeability. With this method, we can certify leak rates as low as  $10^{-10}$  cc-atm/sec.

Please consult the factory prior to ordering, since the minimum leak rate will vary widely depending on valve configuration.

### Leak Rates for Gas Sampling Valves

The actual minimum leak rates attainable vary widely with seal material and valve type. In general, the acceptable leak rates fall into three ranges. (See chart below.)

In order to seal to less than  $10^{-7}$ , the valve loading tension is increased, which somewhat lowers the maximum operating temperature and the valve lifetime. Currently, only select material can seal to  $10^{-8}$  in most valve styles. Valcon M rotor material can seal to  $10^{-10}$ , but has a temperature limit of 50°C.

Not all valves can achieve these leak rates. As a general rule, the larger the valve seal and port size, the higher the leak rate.

### Test Method for Liquid Sampling Valves

The standard test method for liquid valves is a pressure drop over time for both crossport and outport leakage, using isopropanol at the specified test pressure. This test is designed to ensure proper performance at the specification limit.

#### RANGES FOR ACCEPTABLE LEAK RATES

$10^{-4}$ to $10^{-5}$ cc-atm/sec	<b>Commercial use</b> Not normally sold by VICI
$10^{-6}$ to $10^{-7}$ cc-atm/sec	<b>General GC use</b> Standard tension and components
$10^{-8}$ to $10^{-10}$ cc-atm/sec	<b>Ultra trace gas analysis</b> (ppb range) Higher tension and specially processed stator and rotor material

#### OPTIONAL LEAK TESTING with Helium Mass Spectrometer

To order a valve certified to have helium leak rates less than  $10^{-7}$  cc-atm/sec, add the suffix "Z" to the valve product number and \$175 to the price.

Certified valves are supplied with gold-plated stainless steel ferrules.

We can generally tell you what leak rate is possible prior to manufacturing the valve.

CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: [sales@chromtech.net.au](mailto:sales@chromtech.net.au) Tel: 03 9762 2034

## About Two Position Injectors and Switching Valves



Two position injectors and switching valves have many applications, as shown in the section beginning on page 117. In this catalog, Valco two position valves are divided into GC and HPLC sections, with the GC section starting on page 102 and the HPLC section on page 112.

### Sample Injectors

Since the most common method of sample injection utilizes a 6 port valve with an external sample loop, 6 port valves are often referred to as "injectors." However, as the Applications section shows, 6 port valves can do more than inject sample, and 8 and 10 port valves can be sample injectors at the same time they're also being backflushers or column switchers. One more variation is the 4 port internal sampling valve (pages 102–103 and 112), which is used when the sample size must be smaller than the smallest available loop. The internal sample "loop" is actually an engraved connecting slot on the rotor which is sized to contain a specified amount of sample.

### Sample Loops

Loops are electrolytically cut and electrochemically polished to ensure square, burr-free ends, then cleaned with microfiltered steam from deionized water. Standard material is Type 316 stainless, but loops can be supplied in electroformed nickel, Hastelloy C, Nickel 200, titanium, or several polymers. Consult the factory for availability.

Valco sample loops are accurately sized for each valve type. The volume tolerance matches the ID tolerance of the tubing, which is typically  $\pm 0.001$ ". This results in a variance ranging from 30% with tubing of 0.005" diameter to 5% for loops made from tubing 0.040" in diameter.

### SPECIFICATIONS

#### VALCO TWO POSITION VALVES

Valve type	Standard rotor material	Max pressure	Max temp	Max pressure	Max temp
		Internal sample injectors		Sampling and switching valves	
GC					
W and UW	Valcon E	1000 psi liq	175°C	400 psi gas	225°C
	Valcon T	–	–	300 psi gas	330°C
MW	Valcon E2	–	–	100 psi gas	75°C
HPLC					
W and UW	Valcon H	5000 psi liq	75°C	5000 psi liq	75°C

### MORE INFORMATION

**Actuation** . . pp 186-209

**Applications** . 117-121

### Materials

Metals..... 254-255  
Polymers .....256  
Valve rotors.....257

### Valve descriptions

Cheminert injectors..... 144-149  
Cheminert selectors 144, 150-151  
Diaphragm .... 140-141  
Valco

### Valco valve prices

GC ..... 102-101  
HPLC ..... 112-116  
Selectors ..... 122-133

### VALVE TYPES

	Fitting size	Standard port diameter
W Type	1/32"	0.25 mm (.010")
	1/16"	0.40 mm (.016")
UW Type	1/16"	0.75 mm (.030")
	1/8"	0.75 mm (.030")
MW Type	1/4"	4.0 mm (.156")

For special port diameters, please consult the factory.

### OPTIONAL ROTORS

Valcon M	400 psi	50°C
Valcon P	400 psi	175°C
Valcon R	400 psi	75°C
Valcon TF	200 psi	50°C

See page 257 for a discussion of these optional rotor materials.

## About Selectors

Instead of the back and forth switching of two position valves, selectors (multiposition valves) step incrementally through continuous revolutions (bi-directionally with the microelectric actuator). While we can supply older models, all the valves in this catalog have a preload assembly. This design allows the rotor to be inspected or replaced without taking the valve off the actuator, and valves ordered with a microelectric actuator are permanently aligned.

### Flowpath Configurations

**SD (dead-ended)** valves select one of 4 to 16 dead-ended streams, directing it through the valve outlet to a sample valve, pressure sensor, detector, column, etc. The same configuration can also direct one stream to a number of outlets for fraction collection.

**SC (common outlet)** selectors are similar to SDs, except that instead of being dead-ended the non-selected streams flow to a common outlet.

**SF (flow-through)** selectors are similar to SDs and SCs, selecting a stream and sending it to the outlet. However, SFs allow the non-selected streams to flow through individual outlets instead of a common outlet.

**ST (trapping)** selectors are used for multi-column, multi-sample, or multi-trap operations.

**STF (trapping/flow-through)** selectors are similar to STs, with the single difference being that the non-selected streams are returned to their own vents or sources rather than being dead-ended or trapped as they are in the standard ST configuration.

#### PORT DIAMETERS—

##### Low pressure (MW)

Fitting size	No. of Positions	Standard port diameter
<b>SD</b>		
1/16"	4 - 16	0.75 mm (.030")
1/8"	4 - 16	1.0 mm (.040")
1/4"	4 - 10	4.0 mm (.156")
<b>SC</b>		
1/16"	4 - 16	1.0 mm (.040")
1/8"	4 - 16	1.0 mm (.040")
1/4"	4 - 8	4.0 mm (.156")
<b>SF</b>		
1/16"	4 - 16	1.0 mm (.040")
1/8"	4 - 16	1.0 mm (.040")
1/4"	4 - 8	4.0 mm (.156")
<b>ST</b>		
1/16"	4 - 16	0.75 mm (.030")
1/8"	4 - 16	1.0 mm (.040")
<b>STF</b>		
1/16"	4 - 16	0.75 mm (.030")
1/8"	4 - 16	1.0 mm (.040")

#### PORT DIAMETERS—

##### High pressure (UW)

Fitting size	No. of Positions	Standard port diameter
<b>SD</b>		
1/16"	4 - 12	0.40 mm (.016")
1/8"	4, 6, 8	0.75 mm (.030")
<b>ST</b>		
1/16"	4, 6	0.40 mm (.016")



#### MORE INFORMATION

**Actuation** .. pp 186-209

**Applications** . 134-139

#### Materials

Metals..... 254-255  
Polymers .....256  
Valve rotors.....257

Specifying a special body material ..... 97

#### Selector prices

Low pressure  
SD ..... 122-123  
SC..... 124-125  
SF..... 126-127  
ST..... 128-129  
STF..... 130-131  
High pressure  
SD .....132  
ST.....133

Loops, if required, are found on corresponding valve pages.

For special port diameters, please consult the factory.

**CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034**

### Low Pressure Selectors

Valco **MW Type** selectors are available with 1/16", 1/8", or 1/4" fittings. (For port diameters, refer to the chart on the preceding page.) The 1/16" and 1/8" selectors can be ordered with 4, 6, 8, 10, 12, or 16 positions, in any of the five flowpath configurations. Selectors with 1/4" fittings are available in SD, SC, and SF flowpaths: SDs have 4, 6, 8, or 10 positions; SCs and SFs have 4, 6, or 8.

Although not shown in this catalog, MW selectors are also available in a higher temperature version. While actual specifications vary with the configuration, typical specifications are 200 psi and 330°C. Consult our technical staff for more information.

#### SPECIFICATIONS

##### VALCO SELECTORS – Low pressure (MW)

Fittings size	Number of positions	Standard rotor material	Max pressure	Max temp	Max pressure	Max temp	Max pressure	Max temp
			<b>SD Dead-end flowpath</b>		<b>SC Common outlet flowpath</b>			
1/16"	4 - 16	Valcon E	400 psi gas	200°C	200 psi gas	200°C	Note: All low pressure 1/16" and 1/8" valves are also available in versions up to 330°C.	
1/8"	4 - 8	Valcon E	400 psi gas	200°C	200 psi gas	200°C		
	10 - 16	Valcon E	200 psi gas	200°C	200 psi gas	200°C		
1/4"	4 - 8	Valcon E2	100 psi gas	75°C	100 psi gas	75°C		
			<b>SF Flow-through flowpath</b>		<b>ST Trapping flowpath</b>		<b>STF Trapping/Flow-through flowpath</b>	
1/16"	4 - 16	Valcon E	200 psi gas	200°C	200 psi gas	200°C	200 psi gas	200°C
1/8"	4 - 16	Valcon E	200 psi gas	200°C	200 psi gas	200°C	200 psi gas	200°C
1/4"	4 - 8	Valcon E2	100 psi gas	75°C	—	—	—	—

### High Pressure Selectors

Valco **UW Type** high pressure selectors are available in SD and ST flowpaths. SD selectors with 1/16" fittings are available in 4, 6, 8, 10, or 12 positions, while 1/8" selectors can be

ordered with 4, 6, 8, or 10 positions. ST flowpath UW selectors have 1/16" fittings, with either 4 or 6 positions. (For port diameters, refer to the chart on the preceding page.)


#### SPECIFICATIONS

##### VALCO SELECTORS – High pressure (UW)

Fittings size	Number of positions	Standard rotor material	Max pressure	Max temp	Max pressure	Max temp
<div>SD Dead-end flowpath</div> <div>ST Trapping flowpath</div>						
1/16"	4 - 12	Valcon E	5000 psi liq	75°C	5000 psi liq	75°C
1/8"	4 - 8	Valcon E	5000 psi liq	75°C	–	–

## Internal sample injectors, 1/32" fittings, 0.25 mm ports (.010")

W Type

<b>Med temp</b>		Includes 2" standoff. Manual version is not available without standoff.		Standard electric actuator:					<b>SPECS</b> <b>1000 psi liq</b> <b>175°C max</b> Nitronic 60 valve body Valcon E rotor
<b>Internal sample</b>				110 VAC for USA;					
<b>1/32"</b>				110/230 VAC to 24 VDC power supply for international					
<b>0.25 mm</b>				Microelectric actuator: 24 VDC, with 110/230 VAC to 24 VDC power supply					
Sample volume		.06 µl		.1 µl		.2 µl			
		Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual with standoff		2NI4WE.06	\$775	2NI4WE.1		2NI4WE.2		2NI4WE.5	
With air actuator		A2NI4WE.06		A2NI4WE.1		A2NI4WE.2		A2NI4WE.5	
With standard electric actuator		E2NI4WE.06		E2NI4WE.1		E2NI4WE.2		E2NI4WE.5	
With microelectric actuator		EP2NI4WE.06		EP2NI4WE.1		EP2NI4WE.2		EP2NI4WE.5	
Replacement valve		DNI4WE.06		DNI4WE.1		DNI4WE.2		DNI4WE.5	
Replacement rotor		SSANI4WE.06		SSANI4WE.1		SSANI4WE.2		SSANI4WE.5	

**OPTIONS**


- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)

## OPTIONS

- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)

## Internal sample injectors, 1/16" fittings, 0.40 mm ports (.016")

W Type

<b>Med temp</b>		Includes 2" standoff. Manual version has no standoff.	Standard electric actuator: 110 VAC for USA; 110/230 VAC to 24 VDC power supply for international					<b>SPECS</b> <b>1000 psi liq</b> <b>175°C max</b> Nitronic 60 valve body Valcon E rotor	
<b>Internal sample</b>			Microelectric actuator: 24 VDC, with 110/230 VAC to 24 VDC power supply						
<b>1/16"</b>	<b>0.40 mm</b>								
<b>Sample volume</b>		<b>.06 µl</b>		<b>.1 µl</b>		<b>.2 µl</b>		<b>.5 µl</b>	
		<i>Prod No</i>	<i>Price</i>	<i>Prod No</i>	<i>Price</i>	<i>Prod No</i>	<i>Price</i>	<i>Prod No</i>	<i>Price</i>
Manual		CI4WE.06		CI4WE.1		CI4WE.2		CI4WE.5	
Manual with standoff		2CI4WE.06		2CI4WE.1		2CI4WE.2		2CI4WE.5	
With air actuator		A2CI4WE.06		A2CI4WE.1		A2CI4WE.2		A2CI4WE.5	
With standard electric actuator		E2CI4WE.06		E2CI4WE.1		E2CI4WE.2		E2CI4WE.5	
With microelectric actuator		EP2CI4WE.06		EP2CI4WE.1		EP2CI4WE.2		EP2CI4WE.5	
Replacement valve		DCI4WE.06		DCI4WE.1		DCI4WE.2		DCI4WE.5	
Replacement rotor		SSACI4WE.06		SSACI4WE.1		SSACI4WE.2		SSACI4WE.5	

**OPTIONS**

- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)

## OPTIONS

- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)



W Type  
1/16" fittings

## MORE INFORMATION

Actuators	
Air .....	page 195
Manual .....	204
Microelectric ..	188-189
Standard elec. ....	193
Materials	
Metals .....	254-255
Polymers .....	256
Valve rotors .....	257
Standoff assemblies .....	
	205

CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034

## Internal sample injectors, 1/16" fittings, 0.75 mm ports (.030")

UW Type

**SPECS**  
**1000 psi liq**  
**175°C max**Nitronic 60 valve body  
Valcon E rotorIncludes 2" standoff.  
Manual version has no  
standoff.Standard electric actuator:  
110 VAC for USA  
110/230 VAC to 24 VDC power supply for international  
Microelectric actuator:  
24 VDC, with 110/230 VAC to 24 VDC power supply

Med temp

Internal sample

1/16"

0.75 mm

**OPTIONS**

- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)

**Sample volume**

	<b>.2 µl</b>		<b>.5 µl</b>		<b>1 µl</b>		<b>2 µl</b>	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual	CI4UWE.2		CI4UWE.5		CI4UWE1		CI4UWE2	
Manual with standoff	2CI4UWE.2		2CI4UWE.5		2CI4UWE1		2CI4UWE2	
With air actuator	A2CI4UWE.2		A2CI4UWE.5		A2CI4UWE1		A2CI4UWE2	
With std electric actuator	E2CI4UWE.2		E2CI4UWE.5		E2CI4UWE1		E2CI4UWE2	
With microelectric actuator	ED2CI4UWE.2		ED2CI4UWE.5		ED2CI4UWE1		ED2CI4UWE2	
Replacement valve	DCI4UWE.2		DCI4UWE.5		DCI4UWE1		DCI4UWE2	
Replacement rotor	SSACI4UWE.2		SSACI4UWE.5		SSACI4UWE1		SSACI4UWE2	

## Internal sample injectors, 1/8" fittings, 0.75 mm ports (.030")

UW Type

**SPECS**  
**1000 psi liq**  
**175°C max**Nitronic 60 valve body  
Valcon E rotorIncludes 2" standoff.  
Manual version has no  
standoff.Standard electric actuator:  
110 VAC for USA  
110/230 VAC to 24 VDC power supply for international  
Microelectric actuator:  
24 VDC, with 110/230 VAC to 24 VDC power supply

Med temp

Internal sample

1/8"

0.75 mm

**OPTIONS**

- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)

**Sample volume**

	<b>.2 µl</b>		<b>.5 µl</b>		<b>1 µl</b>		<b>2 µl</b>	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual	I4UWE.2		I4UWE.5		I4UWE1		I4UWE2	
Manual with standoff	2I4UWE.2		2I4UWE.5		2I4UWE1		2I4UWE2	
With air actuator	A2I4UWE.2		A2I4UWE.5		A2I4UWE1		A2I4UWE2	
With std electric actuator	E2I4UWE.2		E2I4UWE.5		E2I4UWE1		E2I4UWE2	
With microelectric actuator	ED2I4UWE.2		ED2I4UWE.5		ED2I4UWE1		ED2I4UWE2	
Replacement valve	DI4UWE.2		DI4UWE.5		DI4UWE1		DI4UWE2	
Replacement rotor	SSAI4UWE.2		SSAI4UWE.5		SSAI4UWE1		SSAI4UWE2	

UW Type  
1/8" fittings

## Capillary GC

## Sampling and switching valves, 1/32" fittings, 0.25 mm ports (.010")

W Type

**Med temp**  
**1/32"** **0.25 mm**

Includes 4" standoff.  
 Manual version not  
 available without  
 standoff.

Standard electric actuator:  
 110 VAC for USA  
 110/230 VAC to 24 VDC power supply  
 for international  
 Microelectric actuator:  
 24 VDC, with 110/230 VAC to 24 VDC  
 power supply

Sample loops are not  
 included with valves.  
 Order separately.

## SPECS

**400 psi gas**  
**225°C max**

Nitronic 60 valve body  
 Valcon E rotor

For 300 psi, 350°C max,  
 see facing page.



4 Ports

Prod No Price



6 Ports

Prod No Price



8 Ports

Prod No Price



10 Ports

Prod No Price

Manual with standoff  
 With air actuator

4N4WE  
 A4N4WE

4N6WE  
 A4N6WE

4N8WE  
 A4N8WE

4N10WE  
 A4N10WE

With standard electric actuator  
 With microelectric actuator

E4N4WE  
 EH4N4WE

E4N6WE  
 EH4N6WE

E4N8WE  
 EH4N8WE

E4N10WE  
 EH4N10WE

Replacement valve  
 Replacement rotor

DN4WE  
 SSAN4WE

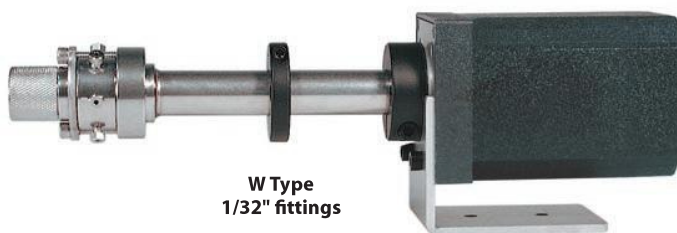
DN6WE  
 SSAN6WE

DN8WE  
 SSAN8WE

DN10WE  
 SSAN10WE

## OPTIONS

- 3 and 12 port valves available
- 2", 3", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)



W Type  
 1/32" fittings

## 1/32" Stainless steel loops

for W Type valves

Each stainless steel loop includes two stainless nuts and two stainless ferrules. Order special fittings separately.



Volume	Prod No	Price	Volume	Prod No	Price
2 µl	SL2NW		25 µl	SL25NW	
5 µl	SL5NW		50 µl	SL50NW	
10 µl	SL10NW		100 µl	SL100NW	
15 µl	SL15NW		250 µl	SL250NW	
20 µl	SL20NW		500 µl	SL500NW	

## MORE INFORMATION

## Actuators

Air ..... page 195  
 Manual ..... 204  
 Microelectric .. 188-189  
 Standard elec. .... 193

## Materials

Metals ..... 254-255  
 Polymers ..... 256  
 Valve rotors ..... 257  
 Standoff assemblies ..... 205

## ABOUT LOOPS

- Other materials available in many sizes: Electroformed Nickel, Nickel 200, PEEK, and PTFE

CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034

## High Temperature GC

## Sampling and switching valves, 1/32" fittings, 0.25 mm ports (.010")

W Type

## SPECS

300 psi gas  
350°C maxNitronic 60 valve body  
Valcon T rotorFor 400 psi, 225°C max,  
see facing pageIncludes 4" standoff.  
Manual version not  
available without  
standoff.

Standard electric actuator:

110 VAC for USA  
110/230 VAC to 24 VDC power supply for  
international

Microelectric actuator:

24 VDC, with 110/230 VAC to 24 VDC  
power supplySample loops are not  
included with valves.  
Order separately.

High temp

1/32"

0.25 mm

## OPTIONS

■ 3 and 12 port  
valves available

■ 2", 3", and 6" standoffs

■ Materials: Hastelloy C,  
Inconel 600, Monel 400,  
Nickel 200, Nitronic 50,  
Titanium, Zirconium  
(see pages 254-255)Manual with standoff  
With air actuatorWith standard electric actuator  
With microelectric actuatorReplacement valve  
Replacement rotor

## 4 Ports

Prod No Price

4N4WT \$725  
A4N4WT 885

## 6 Ports

Prod No Price

4N6WT \$780  
A4N6WT 940

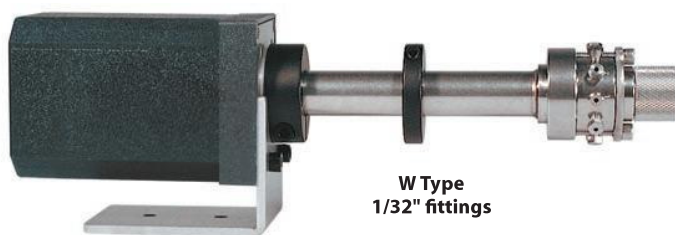
## 8 Ports

Prod No Price

4N8WT \$835  
A4N8WT 995

## 10 Ports

Prod No Price

4N10WT \$835  
A4N10WT 995E4N4WT 1205  
EH4N4WT 1375E4N6WT 1260  
EH4N6WT 1430E4N8WT 1315  
EH4N8WT 1485E4N10WT 1315  
EH4N10WT 1485DN4WT 635  
SSAN4WT 75DN6WT 690  
SSAN6WT 75DN8WT 745  
SSAN8WT 75DN10WT 745  
SSAN10WT 75W Type  
1/32" fittings

## ABOUT LOOPS

■ Other materials  
available in many  
sizes: Electroformed  
Nickel, Nickel 200,  
PEEK, and PTFE

## 1/32" Stainless steel loops

for W Type valves

Each stainless steel loop includes two stainless  
nuts and two stainless ferrules. Order special  
fittings separately.

Volume	Prod No	Price	Volume	Prod No	Price
2 µl	SL2NW	\$25.00	25 µl	SL25NW	\$25.00
5 µl	SL5NW	25.00	50 µl	SL50NW	27.50
10 µl	SL10NW	25.00	100 µl	SL100NW	27.50
15 µl	SL15NW	25.00	250 µl	SL250NW	31.25
20 µl	SL20NW	25.00	500 µl	SL500NW	37.50

CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034

## Sampling and switching valves, 1/16" fittings, 0.40 mm (.016")

W Type

## Med temp

1/16" 0.40 mm

Includes 4" standoff  
Manual version has no  
standoff

Standard electric actuator:  
110 VAC for USA  
110/230 VAC to 24 VDC power supply  
for international  
Microelectric actuator:  
24 VDC, with 110/230 VAC to 24 VDC  
power supply

Sample loops are not  
included with valves.  
Order separately.

## SPECS

400 psi gas

225°C max

Nitronic 60 valve body  
Valcon E rotor

For 300 psi, 350°C max,  
see page 108.



4 Ports

Prod No Price



6 Ports

Prod No Price



8 Ports

Prod No Price



10 Ports

Prod No Price

Manual  
Manual with standoff  
With air actuator

C4WE  
4C4WE  
A4C4WE

C6WE  
4C6WE  
A4C6WE

C8WE  
4C8WE  
A4C8WE

C10WE  
4C10WE  
A4C10WE

With standard electric actuator  
With microelectric actuator

E4C4WE  
EH4C4WE

E4C6WE  
EH4C6WE

E4C8WE  
EH4C8WE

E4C10WE  
EH4C10WE

Replacement valve  
Replacement rotor

DC4WE  
SSAC4WE

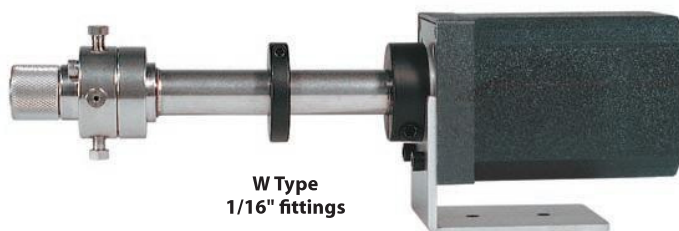
DC6WE  
SSAC6WE

DC8WE  
SSAC8WE

DC10WE  
SSAC10WE

## OPTIONS

- 3 and 12 port valves available
- 2", 3", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)



W Type  
1/16" fittings

## 1/16" Stainless steel loops

for W Type valves

Each stainless steel loop includes two stainless nuts and two stainless ferrules. Order special fittings separately.



Volume	Prod No	Price	Volume	Prod No	Price
2 µl	SL2CW		100 µl	SL100CW	
5 µl	SL5CW		250 µl	SL250CW	
10 µl	SL10CW		500 µl	SL500CW	
15 µl	SL15CW		1 ml	SL1KCW	
20 µl	SL20CW		2 ml	SL2KCW	
25 µl	SL25CW		5 ml	SL5KCW	
50 µl	SL50CW		10 ml	SL10KCW	

## MORE INFORMATION

## Actuators

Air ..... page 195  
Manual ..... 204  
Microelectric .. 188-189  
Standard elec. .... 193

## Materials

Metals ..... 254-255  
Polymers ..... 256  
Valve rotors ..... 257

## Standoff

assemblies ..... 205

## ABOUT LOOPS

- Other materials available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, PEEK, PTFE, and Titanium
- Loops > 2 ml are made from 1/8" OD tubing with brazed or welded 1/16" tube ends or reducing unions.

CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034

## Sampling and switching valves, 1/16" fittings, 0.75 mm ports (.030")

UW Type

## SPECS

400 psi gas

225°C max

Nitronic 60 valve body  
Valcon E rotorFor 300 psi, 330°C max,  
see page 109.Includes 4" standoff.  
Manual version has no  
standoff.Standard electric actuator:  
110 VAC for USA  
110/230 VAC to 24 VDC power supply  
for international  
Microelectric actuator:  
24 VDC, with 110/230 VAC to 24 VDC  
power supplySample loops are not  
included with valves.  
Order separately.

Med temp

1/16"

0.75 mm

## OPTIONS

- 3, 12 and 14 port valves available
- 2", 3", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)
- Larger bore available



## 4 Ports

Prod No Price

Manual C4UWE  
Manual with standoff 4C4UWE  
With air actuator A4C4UWE  
  
With standard electric actuator E4C4UWE  
With microelectric actuator ED4C4UWE  
  
Replacement valve DC4UWE  
Replacement rotor SSAC4UWE



## 6 Ports

Prod No Price

C6UWE \$570  
4C6UWE 615  
A4C6UWE 775  
  
E4C6UWE 1095  
ED4C6UWE 1325  
  
DC6UWE 525  
SSAC6UWE 75



## 8 Ports

Prod No Price

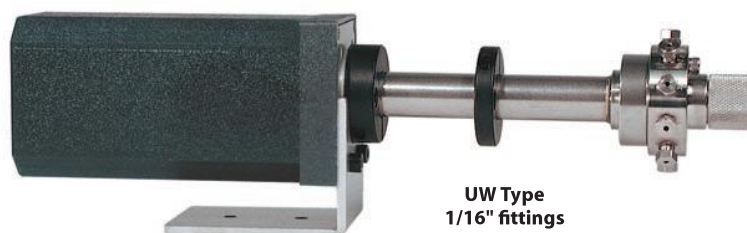
C8UWE  
4C8UWE  
A4C8UWE  
  
E4C8UWE  
ED4C8UWE  
  
DC8UWE  
SSAC8UWE



## 10 Ports

Prod No Price

C10UWE  
4C10UWE  
A4C10UWE  
  
E4C10UWE  
ED4C10UWE  
  
DC10UWE  
SSAC10UWE

UW Type  
1/16" fittings

## 1/16" Stainless steel loops

for UW Type valves

Each stainless steel loop includes two stainless nuts  
and two stainless ferrules. Order special fittings  
separately.

## ABOUT LOOPS

- Other materials available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, PEEK, PTFE, and Titanium
- Loops > 2 ml are made from 1/8" OD tubing with brazed or welded 1/16" tube ends or reducing unions.

Volume	Prod No	Price	Volume	Prod No	Price
5 µl	SL5CUW		100 µl	SL100CUW	
10 µl	SL10CUW		250 µl	SL250CUW	
15 µl	SL15CUW		500 µl	SL500CUW	
20 µl	SL20CUW		1 ml	SL1KCUW	
25 µl	SL25CUW		2 ml	SL2KCUW	
50 µl	SL50CUW		5 ml	SL5KCUW	
			10 ml	SL10KCUW	

CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034

## High Temperature GC

## Sampling and switching valves, 1/16" fittings, 0.40 mm ports (.016")

W Type

## High temp

1/16"

0.40 mm

Includes 4" standoff

Standard electric actuator:

110 VAC for USA

110/230 VAC to 24 VDC power supply  
for international

Microelectric actuator:

24 VDC, with 110/230 VAC to 24 VDC  
power supplySample loops are not  
included with valves.  
Order separately.

## SPECS

300 psi gas

350°C max

Nitrone 60 valve body  
Valcon T rotorFor 400 psi, 225°C max,  
see page 106.

4 Ports

Prod No Price



6 Ports

Prod No Price



8 Ports

Prod No Price



10 Ports

Prod No Price

Manual with standoff  
With air actuator

4C4WT

A4C4WT

4C6WT

A4C6WT

4C8WT

A4C8WT

4C10WT

A4C10WT

With standard electric actuator  
With microelectric actuator

E4C4WT

EH4C4WT

E4C6WT

EH4C6WT

E4C8WT

EH4C8WT

E4C10WT

EH4C10WT

Replacement valve  
Replacement rotor

DC4WT

SSAC4WT

DC6WT

SSAC6WT

DC8WT

SSAC8WT

DC10WT

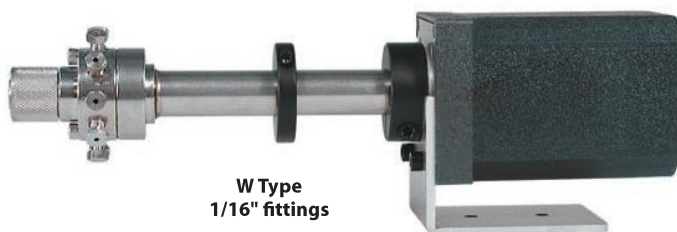
SSAC10WT

## OPTIONS

- 3 and 12 port valves available  
UW type: 3, 12, and 14  
port valves available

- 2", 3", and 6" standoffs

- Materials: Hastelloy C,  
Inconel 600, Monel 400,  
Nickel 200, Nitrone 50,  
Titanium, Zirconium  
(see pages 254-255)

W Type  
1/16" fittings

## 1/16" Stainless steel loops

for W Type valves

Each stainless steel loop includes two stainless nuts  
and two stainless ferrules. Order special fittings  
separately.

Volume	Prod No	Price	Volume	Prod No	Price
2 µl	SL2CW		100 µl	SL100CW	
5 µl	SL5CW		250 µl	SL250CW	
10 µl	SL10CW		500 µl	SL500CW	
15 µl	SL15CW		1 ml	SL1KCW	
20 µl	SL20CW		2 ml	SL2KCW	
25 µl	SL25CW		5 ml	SL5KCW	
50 µl	SL50CW		10 ml	SL10KCW	

## MORE INFORMATION

Actuators

Air ..... page 195

Manual ..... 204

Microelectric .. 188-189

Standard elec. .... 193

Materials

Metals ..... 254-255

Polymers ..... 256

Valve rotors. .... 257

Standoff

assemblies ..... 205

## ABOUT LOOPS

- Other materials available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, PEEK, PTFE, and Titanium

- Loops > 2 ml are made from 1/8" OD tubing with brazed or welded 1/16" tube ends or reducing unions.

## High Temperature GC

## Sampling and switching valves, 1/16" fittings, 0.75 mm ports (.030")

UW Type

## SPECS

300 psi gas  
330°C maxNitronic 60 valve body  
Valcon T rotorFor 400 psi, 225°C max,  
see page 107.

Includes 4" standoff

Standard electric actuator:

110 VAC for USA

110/230 VAC to 24 VDC power supply for  
international

Microelectric actuator:

24 VDC, with 110/230 VAC to 24 VDC  
power supply

Sample loops are not

included with valves.

Order separately.

High temp

1/16"

0.75 mm

## OPTIONS

- 3, 12 and 14 port valves available
- 2", 3", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)
- Larger bore available

Manual with standoff  
With air actuatorWith standard electric actuator  
With microelectric actuatorReplacement valve  
Replacement rotor

## 4 Ports

Prod No Price

4C4UWT  
A4C4UWT

## 6 Ports

Prod No Price

4C6UWT  
A4C6UWT

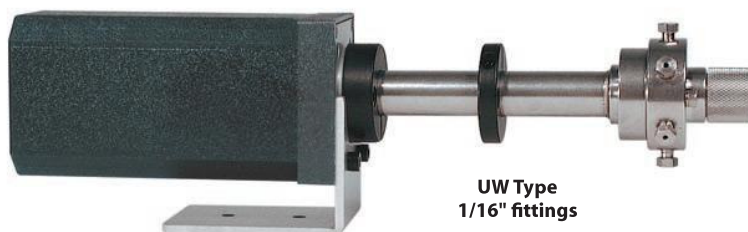
## 8 Ports

Prod No Price

4C8UWT  
A4C8UWT

## 10 Ports

Prod No Price

4C10UWT \$670  
A4C10UWTManual with standoff  
With air actuatorWith standard electric actuator  
With microelectric actuatorReplacement valve  
Replacement rotor4C4UWT  
A4C4UWTE4C4UWT  
ED4C4UWTDC4UWT  
SSAC4UWT4C6UWT  
A4C6UWTE4C6UWT  
ED4C6UWTDC6UWT  
SSAC6UWT4C8UWT  
A4C8UWTE4C8UWT  
ED4C8UWTDC8UWT  
SSAC8UWT4C10UWT  
A4C10UWTE4C10UWT  
ED4C10UWTDC10UWT  
SSAC10UWTUW Type  
1/16" fittings

## 1/16" Stainless steel loops

for UW Type valves

Each stainless steel loop includes two stainless nuts  
and two stainless ferrules. Order special fittings  
separately.

## ABOUT LOOPS

- Other materials available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, PEEK, PTFE, and Titanium
- Loops > 2 ml are made from 1/8" OD tubing with brazed or welded 1/16" tube ends or reducing unions.





Volume	Prod No	Price
5 µl	SL5CUW	
10 µl	SL10CUW	
15 µl	SL15CUW	
20 µl	SL20CUW	
25 µl	SL25CUW	
50 µl	SL50CUW	

Volume	Prod No	Price
100 µl	SL100CUW	
250 µl	SL250CUW	
500 µl	SL500CUW	
1 ml	SL1KCUW	
2 ml	SL2KCUW	
5 ml	SL5KCUW	
10 ml	SL10KCUW	

CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034

### Sampling and switching valves, 1/8" fittings, 0.75 mm ports (.030")

UW Type

Med temp		Includes 4" standoff. Manual version has no standoff.	Standard electric actuator: 110 VAC for USA 110/230 VAC to 24 VDC power supply for international Microelectric actuator: 24 VDC, with 110/230 VAC to 24 VDC power supply		Sample loops are not included with valves. Order separately (see facing page).				
1/8"	0.75 mm								
									
		<b>4 Ports</b>	<b>6 Ports</b>	<b>8 Ports</b>	<b>10 Ports</b>				
		<i>Prod No</i>	<i>Price</i>	<i>Prod No</i>	<i>Price</i>	<i>Prod No</i>	<i>Price</i>	<i>Prod No</i>	<i>Price</i>
Manual		4UWE		6UWE		8UWE		n/a	
Manual with standoff		44UWE		46UWE		48UWE		410UWE	
With air actuator		A44UWE		A46UWE		A48UWE		A410UWE	
With standard electric actuator		E44UWE		E46UWE		E48UWE		E410UWE	
With microelectric actuator		ED44UWE		ED46UWE		ED48UWE		ED410UWE	
Replacement valve		D4UWE		D6UWE		D8UWE		D10UWE	
Replacement rotor		SSA4UWE		SSA6UWE		SSA8UWE		SSA10UWE	

#### SPECS




**400 psi gas**  
**225°C max**  
Nitronic 60 valve body  
Valcon E rotor  
  
For 300 psi, 330°C max,  
see facing page.

#### OPTIONS

- 3, 12, and 14 port valves available
- 2", 3", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)
- Larger bore available

### Sampling and switching valves, 1/4" fittings, 4.0 mm ports (.156")

MW Type

Low temp		Includes 4" standoff. Manual version not available without standoff.	Standard electric actuator: 110 VAC for USA 110/230 VAC to 24 VDC power supply for international Microelectric actuator: 24 VDC, with 110/230 VAC to 24 VDC power supply				Sample loops are not available.
1/4"	4.0 mm						
							
		<b>4 Ports</b>		<b>6 Ports</b>		<b>8 Ports</b>	
		Prod No	Price	Prod No	Price	Prod No	Price
Manual with standoff		4VL4MWE2		4VL6MWE2		4VL8MWE2	
With air actuator		A4VL4MWE2		A4VL6MWE2		A4VL8MWE2	
With std electric actuator		E4VL4MWE2		E4VL6MWE2		E4VL8MWE2	
With microelectric actuator		ET4VL4MWE2		ET4VL6MWE2		ET4VL8MWE2	
Replacement valve		DVL4MWE2		DVL6MWE2		DVL8MWE2	
Replacement rotor		SSAVL4MWE2		SSAVL6MWE2		SSAVL8MWE2	

#### SPECS

**100 psi gas**  
**75°C max**  
Nitronic 60 valve body  
Valcon E2 rotor

#### OPTIONS

- 2", 3", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)



CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: [sales@chromtech.net.au](mailto:sales@chromtech.net.au) Tel: 03 9762 2034

## Sampling and switching valves, 1/8" fittings, 0.75 mm ports (.030")

UW Type

**SPECS**  
**300 psi gas**  
**330°C max**Nitronic 60 valve body  
Valcon T rotorFor 400 psi, 225°C max,  
see facing page.Includes 4" standoff.  
Manual version not  
available without  
standoff.Standard electric actuator:  
110 VAC for USA  
110/230 VAC to 24 VDC power supply for  
international  
Microelectric actuator:  
24 VDC, with 110/230 VAC to 24 VDC  
power supplySample loops are not  
included with valves.  
Order separately.**High temp****1/8"****0.75 mm****OPTIONS**

- 3, 12, and 14 port valves available
- 2", 3", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)
- Larger bore available

**4 Ports**

Prod No Price

**6 Ports**

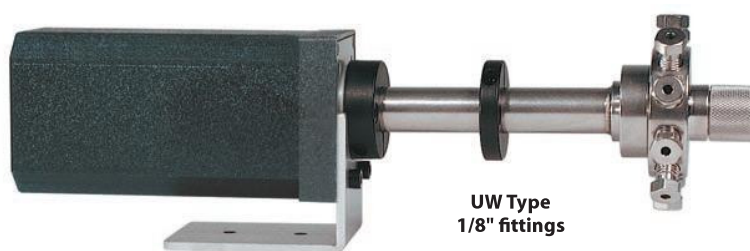
Prod No Price

**8 Ports**

Prod No Price

**10 Ports**

Prod No Price

Manual with standoff  
With air actuator44UWT  
A44UWTWith standard electric actuator  
With microelectric actuatorE44UWT  
ED44UWTReplacement valve  
Replacement rotorD4UWT  
SSA4UWT46UWT  
A46UWTE46UWT  
ED46UWTD6UWT  
SSA6UWT48UWT  
A48UWTE48UWT  
ED48UWTD8UWT  
SSA8UWT410UWT  
A410UWTE410UWT  
ED410UWTD10UWT  
SSA10UWT**UW Type**  
**1/8" fittings****MORE INFORMATION**

## Actuators

Air ..... page 195  
Manual ..... 204  
Microelectric .. 188-189  
Standard elec. .... 193

## Materials

Metals ..... 254-255  
Polymers ..... 256  
Valve rotors ..... 257

## Standoff

assemblies ..... 205

**ABOUT LOOPS**

- Other materials available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, PEEK, PTFE, and Titanium
- Loops <100 µl are made from 1/16" OD tubing with brazed or welded 1/8" tube ends.

**1/8" Stainless steel loops**

for UW Type valves

Each stainless steel loop includes two stainless nuts and two stainless ferrules. Order special fittings separately.

Volume	Prod No	Price	Volume	Prod No	Price
10 µl	SL10UW		250 µl	SL250UW	
15 µl	SL15UW		500 µl	SL500UW	
20 µl	SL20UW		1 ml	SL1KUW	
25 µl	SL25UW		2 ml	SL2KUW	
50 µl	SL50UW		5 ml	SL5KUW	
100 µl	SL100UW		10 ml	SL10KUW	
			20 ml	SL20KUW	

## HPLC Injectors

Internal sample injectors, 1/16" fittings, 0.40 mm ports (.016")  
0.25 mm column port diameter (.010")

W Type

5,000 psi

Internal sample

1/16" 0.40 mm

Standard electric actuator:

110 VAC for USA

110/230 VAC to 24 VDC power supply for international

Microelectric actuator:

24 VDC, with 110/230 VAC to 24 VDC power supply.



## SPECS

5000 psi liq

75°C max

Nitronic 60 valve body  
Valcon H rotor

## Sample volume

.06 µl

.1 µl

.2 µl

.5 µl

Prod No Price

Prod No Price

Prod No Price

Prod No Price

Manual

CI4W.06

CI4W.1

CI4W.2

CI4W.5

With air actuator

ACI4W.06

ACI4W.1

ACI4W.2

ACI4W.5

With standard electric actuator

ECI4W.06

ECI4W.1

ECI4W.2

ECI4W.5

With microelectric actuator

EPCI4W.06

EPCI4W.1

EPCI4W.2

EPCI4W.5

Replacement valve

DCI4W.06

DCI4W.1

DCI4W.2

DCI4W.5

Replacement rotor

SSACI4W.06

SSACI4W.1

SSACI4W.2

SSACI4W.5

W Type  
1/16" fittingsUW Type  
1/16" fittings

## OPTIONS

■ 2", 3", 4", and 6"  
standoffs■ Materials: Hastelloy C,  
Inconel 600, Monel 400,  
Nickel 200, Nitronic 50,  
Titanium, Zirconium  
(see pages 254-255)■ 1/32" fittings with  
0.25 mm bore (.010")  
also available. Consult  
factory for product  
number and pricing.

## Internal sample injectors, 1/16" fittings, 0.75 mm ports (.030")

UW Type

5,000 psi

Internal sample

1/16" 0.75 mm

Standard electric actuator:

110 VAC for USA

110/230 VAC to 24 VDC power supply for international

Microelectric actuator:

24 VDC, with 110/230 VAC to 24 VDC power supply.



## SPECS

5000 psi liq

75°C max

Nitronic 60 valve body  
Valcon H rotor

## Sample volume

.2 µl

.5 µl

1 µl

2 µl

Prod No Price

Prod No Price

Prod No Price

Prod No Price

Manual

CI4UW.2

CI4UW.5

CI4UW1

CI4UW2

With air actuator

ACI4UW.2

ACI4UW.5

ACI4UW1

ACI4UW2

With standard electric actuator

ECI4UW.2

ECI4UW.5

ECI4UW1

ECI4UW2

With microelectric actuator

EDCI4UW.2

EDCI4UW.5

EDCI4UW1

EDCI4UW2

Replacement valve

DCI4UW.2

DCI4UW.5

DCI4UW1

DCI4UW2

Replacement rotor

SSACI4UW.2

SSACI4UW.5

SSACI4UW1

SSACI4UW2

## OPTIONS

■ 2", 3", 4", and 6"  
standoffs■ Materials: Hastelloy C,  
Inconel 600, Monel 400,  
Nickel 200, Nitronic 50,  
Titanium, Zirconium  
(see pages 254-255)■ 1/32" fittings with  
0.25 mm bore (.010")  
also available. Consult  
factory for product  
number and pricing.

CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034

## Injectors and switching valves, 1/16" fittings, 0.40 mm ports (.016")

W Type

## SPECS

5000 psi liq  
75°C maxNitronic 60 valve body  
Valcon H rotor

Standard electric actuator:

110 VAC for USA

110/230 VAC to 24 VDC power supply for international

Microelectric actuator:

24 VDC, with 110/230 VAC to 24 VDC power supply

Sample loops are not  
included with valves.  
Order separately.

5,000 psi

Analytical

1/16"

0.40 mm

## OPTIONS

- 3 and 12 port valves available
- 2", 3", 4", and 6" standoffs
- 1/32" and 1/16" versions available with 0.25 mm (.010") bore
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)



## 4 Ports

Prod No Price

Manual  
With air actuatorC4W  
AC4WWith standard electric actuator  
With microelectric actuatorEC4W  
EPC4WReplacement valve  
Replacement rotorDC4W  
SSAC4W

## 6 Ports

Prod No Price

C6W  
AC6WEC6W  
EPC6WDC6W  
SSAC6W

## 8 Ports

Prod No Price

C8W  
AC8WEC8W  
EPC8WDC8W  
SSAC8W

## 10 Ports

Prod No Price

C10W  
AC10WEC10W  
EPC10WDC10W  
SSAC10WW Type  
1/16" fittings

## MORE INFORMATION

## Actuators

Air ..... page 195  
Manual ..... 204  
Microelectric .. 188-189  
Standard elec. .... 193

## Materials

Metals ..... 254-255  
Polymers ..... 256  
Valve rotors ..... 257

## Standoff

assemblies ..... 205

## ABOUT LOOPS

- Other materials available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, PEEK, PTFE, and Titanium
- Loops > 2 ml are made from 1/8" OD tubing with brazed or welded 1/16" tube ends or reducing unions.

## 1/16" Stainless steel loops

for W Type valves

Each stainless steel loop includes  
two stainless nuts and two stainless ferrules.  
Order special fittings separately.





Volume	Prod No	Price	Volume	Prod No	Price
2 µl	SL2CW		100 µl	SL100CW	
5 µl	SL5CW		250 µl	SL250CW	
10 µl	SL10CW		500 µl	SL500CW	
15 µl	SL15CW		1 ml	SL1KCW	
20 µl	SL20CW		2 ml	SL2KCW	
25 µl	SL25CW		5 ml	SL5KCW	
50 µl	SL50CW		10 ml	SL10KCW	

## Semi-Preparative HPLC

## Injectors and switching valves, 1/16" fittings, 0.75 mm ports (.030")

UW Type

<b>5,000 psi</b>	Standard electric actuator: 110 VAC for USA 110/230 VAC to 24 VDC power supply for international	Sample loops are not included with valves. Order separately.	<b>SPECS</b> <b>5000 psi liq</b> <b>75°C max</b> Nitronic 60 valve body Valcon H rotor
<b>Semi-prep</b>	Microelectric actuator: 24 VDC, with 110/230 VAC to 24 VDC power supply		
<b>1/16"</b> <b>0.75 mm</b>			

				
	<b>4 Ports</b>	<b>6 Ports</b>	<b>8 Ports</b>	<b>10 Ports</b>
	Prod No	Price	Prod No	Price
Manual	C4UW	C6UW	C8UW	C10UW
With air actuator	AC4UW	AC6UW	AC8UW	AC10UW
With standard electric actuator	EC4UW	EC6UW	EC8UW	EC10UW
With microelectric actuator	EDC4UW	EDC6UW	EDC8UW	EDC10UW
Replacement valve	DC4UW	DC6UW	DC8UW	DC10UW
Replacement rotor	SSAC4UW	SSAC6UW	SSAC8UW	SSAC10UW



**UW Type**  
**1/16" fittings**

**OPTIONS**

- 3, 12, and 14 port valves available
- 2", 3", 4", and 6" standoffs
- 1/32" and 1/16" versions available with 0.25 mm (.010") bore
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)
- Larger bore available.

## 1/16" Stainless steel loops

for UW Type valves

Each stainless steel loop includes two stainless nuts and two stainless ferrules.  
Order special fittings separately.



Volume	Prod No	Price	Volume	Prod No	Price
3 µl	SL3CUW		100 µl	SL100CUW	
5 µl	SL5CUW		250 µl	SL250CUW	
10 µl	SL10CUW		500 µl	SL500CUW	
15 µl	SL15CUW		1 ml	SL1KCUW	
20 µl	SL20CUW		2 ml	SL2KCUW	
25 µl	SL25CUW		5 ml	SL5KCUW	
50 µl	SL50CUW		10 ml	SL10KCUW	

**ABOUT LOOPS**

- Other materials available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, PEEK, PTFE, and Titanium
- Loops > 2 ml are made from 1/8" OD tubing with brazed or welded 1/16" tube ends or reducing unions.

**CHROMalytic TECHnology Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034**

## Semi-Preparative HPLC

## Injectors and switching valves, 1/8" fittings, 0.75 mm (.030")

UW Type

**SPECS**  
**5000 psi liq**  
**75°C max**Nitronic 60 valve body  
Valcon H rotorManual 10 port  
includes 2" standoff.Standard electric actuator:  
110 VAC for USA  
110/230 VAC to 24 VDC power supply for  
international  
Microelectric actuator:  
24 VDC, with 110/230 VAC to 24 VDC  
power supplySample loops are not  
included with valves.  
Order separately.**5,000 psi****Semi-prep****1/8"****0.75 mm****OPTIONS**

- 3 and 12 port valves available
- 2", 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)
- Larger bore available. (see page 116)

Manual  
With air actuator

With standard electric actuator  
With microelectric actuator

Replacement valve  
Replacement rotor

**4 Ports**

Prod No Price

4UW  
A4UW**6 Ports**

Prod No Price

6UW  
A6UW**8 Ports**

Prod No Price

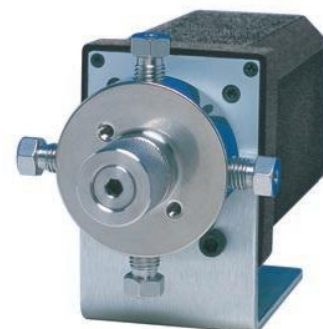
8UW  
A8UW**10 Ports**

Prod No Price

210UW \$720  
A10UW

E10UW 1200  
ED10UW 1430

D10UW  
SSA10UW

**UW Type**  
**1/8" fittings****MORE INFORMATION**

## Actuators

Air ..... page 195  
Manual.....204  
Microelectric .. 188-189  
Standard elec.....193

## Materials

Metals..... 254-255  
Polymers .....256  
Valve rotors.....257

## Standoff

assemblies .....205

**ABOUT LOOPS**

- Other materials available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, PEEK, PTFE, and Titanium
- Loops < 100 µl are made from 1/16" OD tubing with brazed or welded 1/8" tube ends.

**1/8" Stainless steel loops** for UW Type valves

Each stainless steel loop includes two stainless nuts and two stainless ferrules. Order special fittings separately.

Volume	Prod No	Price	Volume	Prod No	Price
10 µl	SL10UW		250 µl	SL250UW	
15 µl	SL15UW		500 µl	SL500UW	
20 µl	SL20UW		1 ml	SL1KUW	
25 µl	SL25UW		2 ml	SL2KUW	
50 µl	SL50UW		5 ml	SL5KUW	
100 µl	SL100UW		10 ml	SL10KUW	
			20 ml	SL20KUW	

## Preparative HPLC

## Injectors and switching valves, 1/8" fittings, large bore

UW Type

5,000 psi

Prep

1/8"

Large bore

Manual 10 port  
includes 2" standoff.

Standard electric actuator:  
110 VAC for USA  
110/230 VAC to 24 VDC power supply for  
international.

Microelectric actuator:  
24 VDC, with 110/230 VAC to 24 VDC  
power supply.

Sample loops are not  
included with valves.  
Order separately.

## SPECS

5000 psi liq

75°C max

Nitronic 60 valve body  
Valcon H rotor

## 4 Ports

1.7 mm (.067")

Prod No Price



## 6 Ports

1.7 mm (.067")

Prod No Price



## 8 Ports

1.3 mm (.050")

Prod No Price



## 10 Ports

1.0 mm (.040")

Prod No Price

Manual  
With air actuator

L4UW

AL4UW

L6UW

AL6UW

L8UW

AL8UW

2L10UW

AL10UW

With standard electric actuator  
With microelectric actuator

EL4UW

EDL4UW

EL6UW

EDL6UW

EL8UW

EDL8UW

EL10UW

EDL10UW

Replacement valve  
Replacement rotor

DL4UW

SSAL4UW

DL6UW

SSAL6UW

DL8UW

SSAL8UW

DL10UW

SSAL10UW

UW Type  
1/8" fittings

## OPTIONS

- 3 port valve available
- 2", 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-255)
- Smaller bore available. (see page 115)

## MORE INFORMATION

## Actuators

Air ..... page 195  
Manual ..... 204  
Microelectric .. 188-189  
Standard elec. .... 193

## Materials

Metals ..... 254-255  
Polymers ..... 256  
Valve rotors. .... 257

## Standoff

assemblies ..... 205

## 1/8" Stainless steel loops

for UW Type valves

Each stainless steel loop includes two stainless nuts and two stainless ferrules. Order special fittings separately.

Volume	Prod No	Price	Volume	Prod No	Price
100 µl	SL100UW		2 ml	SL2KUW	
250 µl	SL250UW		5 ml	SL5KUW	
500 µl	SL500UW		10 ml	SL10KUW	
1 ml	SL1KUW		20 ml	SL20KUW	



## ABOUT LOOPS

- Other materials available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, PEEK, PTFE, and Titanium
- Loops < 100 µl are made from 1/16" OD tubing with brazed or welded 1/8" tube ends..

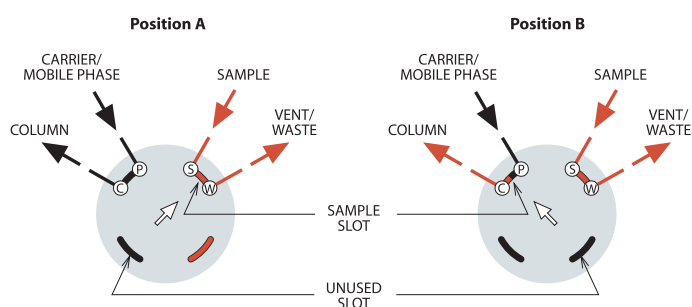
CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034

## Two Position Applications

These illustrations show basic sample injection techniques using Valco 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.

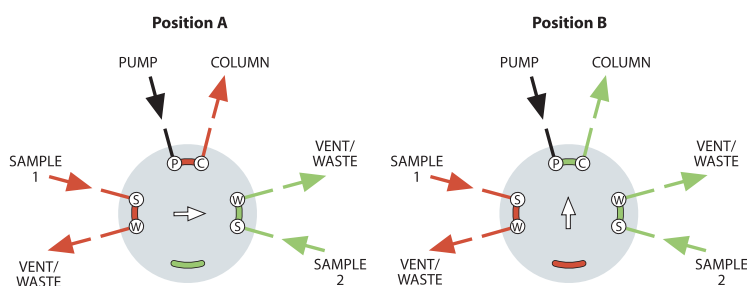
## 4 port internal sample injector



## 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 onto the column. The passage which was inactive in Position A allows the sample to continue flowing without interruption.

## 6 port internal sample injector



## DUAL MICROVOLUME SAMPLE INJECTION

This microvolume injector can be used to alternate between two different samples. Each time the valve is switched, a sample is injected. By connecting the two sample inlets in series, the valve injects the sample each time the valve switches. This is particularly useful in heavy duty cycle operations to minimize valve wear. The valve can also be used to make alternating injections of the same sample onto two different columns by swapping sample/waste and pump/column connections.

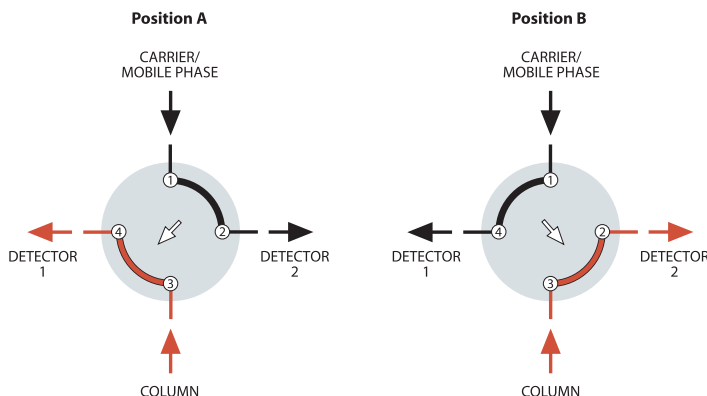
*Note:* This CI6 valve is not shown in this catalog. Call for details.

## Two Position Applications

### 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. For example, fixed gases can be analyzed with a thermal conductivity detector, followed by the analysis of a hydrocarbon fraction with a flame ionization detector.

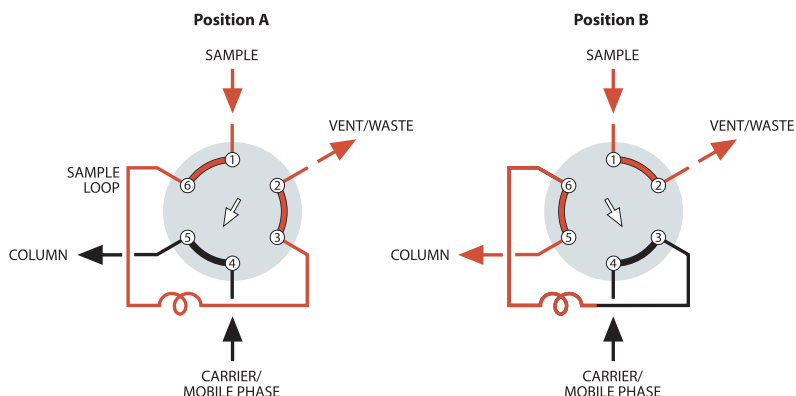


### 6 port external sample injector

#### SAMPLE INJECTION

With the valve in Position A, sample flows through the external loop while the mobile phase flows directly through to the chromatographic 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 onto the column.

*Note:* This is especially critical for partially-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.

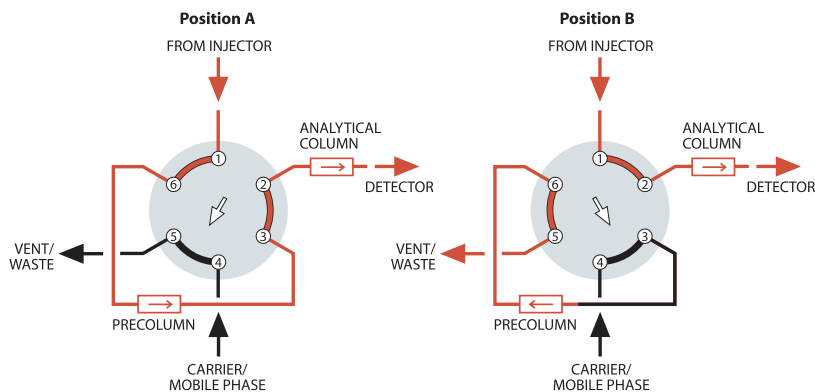


### 6 port column switching

#### BACKFLUSH OF PRECOLUMN TO VENT

This plumbing scheme allows slower eluting components (end cut) which are not of interest to be backflushed to vent. Often a shorter version of the analytical column is used as the precolumn. Once all the components of interest have entered the main column (at port 2), the valve switches, backflushing the precolumn to vent and reducing analysis time.

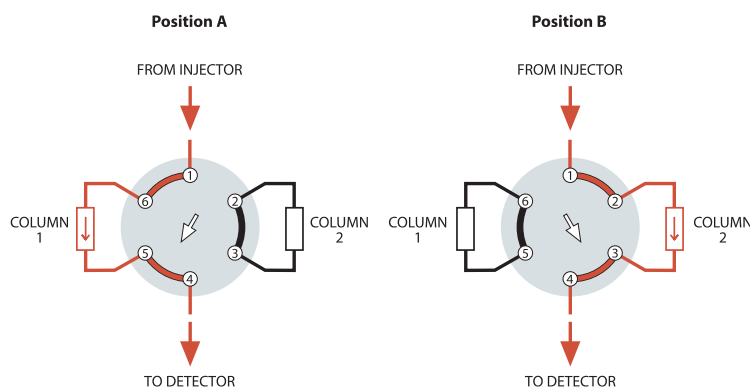
*Note:* An auxiliary source of carrier or mobile phase is required for this application.



CHROMalytic TEChnology Pty Ltd AUSTRALIAN Distributors e-mail: [sales@chromtech.net.au](mailto:sales@chromtech.net.au) Tel: 03 9762 2034

## Two Position Applications

## 6 port column selection

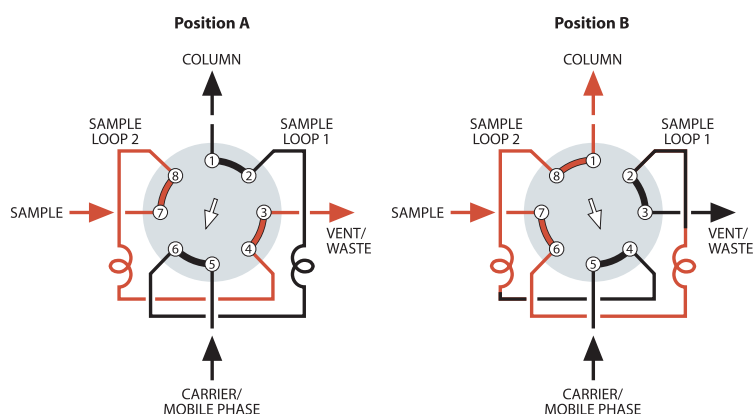


## TWO COLUMN SELECTION

When two different columns are required at frequent intervals at similar oven temperatures, a 6 port valve can provide rapid selection of the one to be used. The column not in use is protected by a blanket of inert mobile phase and may be rapidly brought to equilibrium when required.

*Note:* If flow must be maintained to the non-selected column, an 8 or 10 port valve is required.

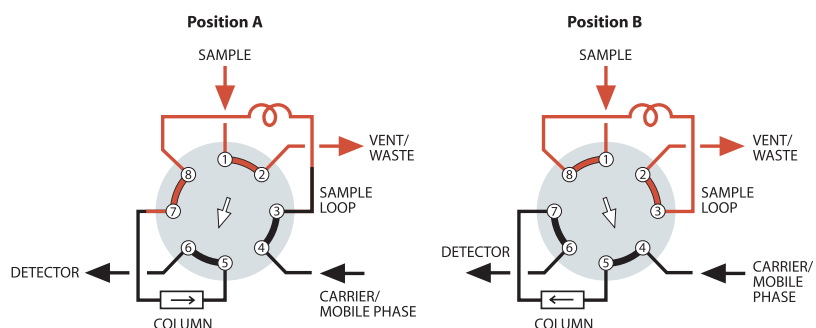
## 8 port dual external sample injector



## SAME SAMPLE TO DIFFERENT LOOPS

In a dual external sample loop configuration, sample is injected in both positions. In Position A, Loop 2 is loaded while the mobile phase flows through Loop 1 and onto the column. In Position B, the Loop 2 sample is injected into the column and another sample is loaded into Loop 1. When the valve is returned to Position A, the Loop 1 sample is injected onto the column and Loop 2 is reloaded.

## 8 port sampling/switching



## LOOP SAMPLING WITH BACKFLUSH TO DETECTOR

One valve functions as both a sampling and a backflush valve, 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.

## Two Position Applications

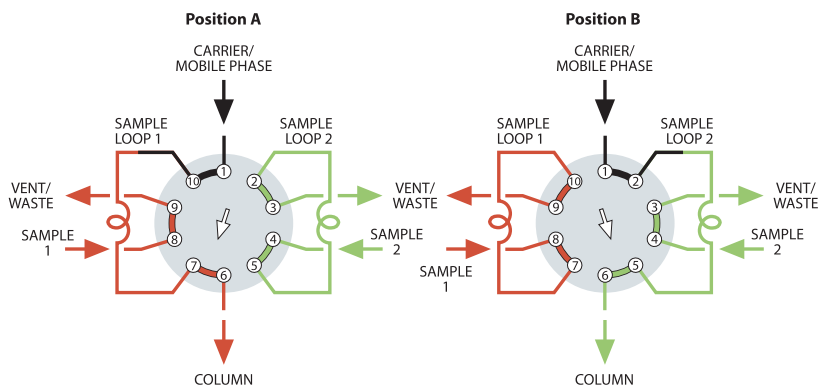
### 10 port dual external sampling

#### TWO DIFFERENT SAMPLES TO SAME COLUMN

A 10 port valve permits alternate injections from the two loops, which may be identical or of different sizes. This technique replaces a 4 port sample selector and a 6 port sample injector.

In Position A, Loop 2 is loaded with sample 2 while the mobile phase flows through Loop 1 and onto the column.

In Position B, the Loop 2 sample is injected onto the column and Loop 1 is loaded with sample 1. When the valve is returned to Position A, the Loop 1 sample is injected onto the column and Loop 2 is reloaded with sample 2.

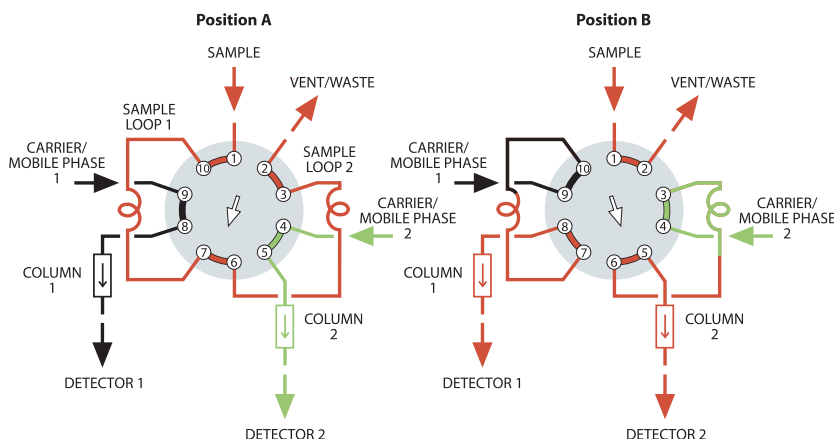


### 10 port dual external sampling

#### SIMULTANEOUS INJECTION OF THE SAME SAMPLE ONTO SEPARATE COLUMNS

In Position A, sample fills the two loops in series. In Position B, the sample is simultaneously injected into two separate flow systems. A single autosampler used with this flowpath can automate two analytical procedures for the same sample.

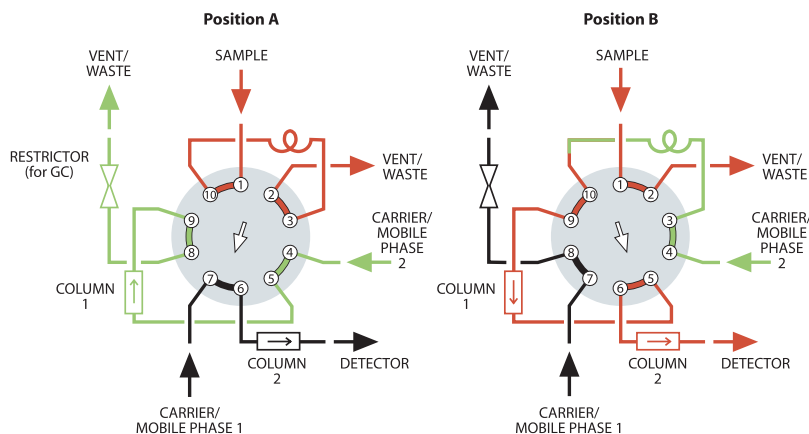
In an important non-chromatographic application, the roles of carrier and sample are reversed, permitting two different quantities of two different materials to be dispensed together, as in automatic dilution.



### 10 port sampling/switching

#### LOOP SAMPLING WITH BACKFLUSH OF PRE-COLUMN TO VENT

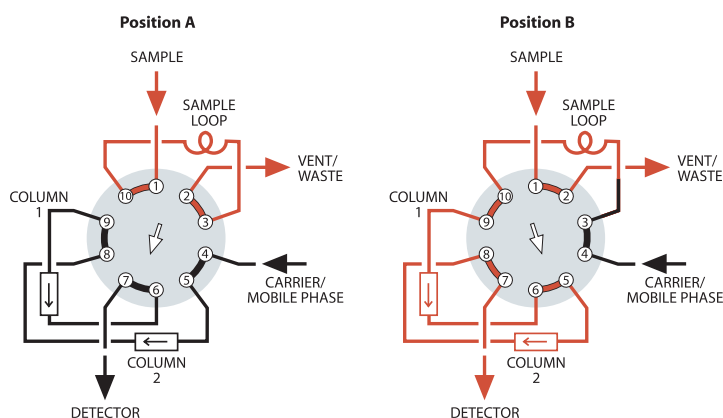
When components of interest have low boiling points, this plumbing scheme allows "heavy" components with long retention times to be backflushed to waste. After the sample loop is loaded in Position A, the valve is switched to Position B to inject the sample onto column 1. As soon as all components of interest have entered column 2, the valve is switched back to Position A. Column 1 is backflushed to vent during the analysis, reducing the total analysis time.



CHROMalytic TECHnology Pty Ltd AUSTRALIAN Distributors e-mail: [sales@chromtech.net.au](mailto:sales@chromtech.net.au) Tel: 03 9762 2034

## Two Position Applications

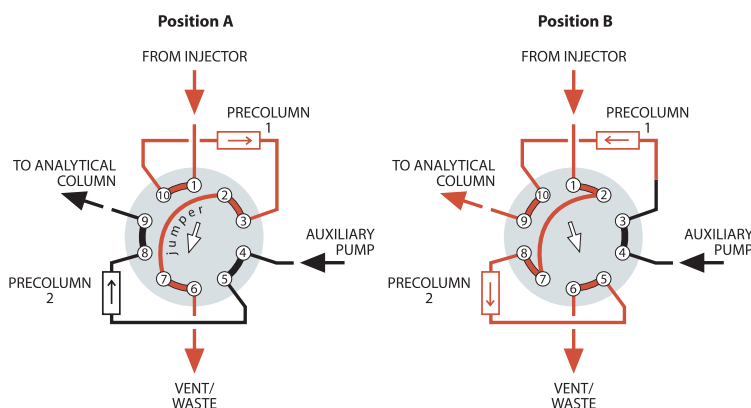
## 10 port sampling/switching



## LOOP SAMPLING WITH TWO COLUMN SEQUENCE REVERSAL

This is ideal for fixed-gas-from- $\text{CO}_2$  analysis where no "high boilers" are present. Column 1 is packed with a porous polymer and Column 2 with molecular sieve. The sample loop is loaded in Position A. When the valve is switched, the loop contents are sent onto Column 1. As the inorganic gases and methane leave Column 1 and enter Column 2, the valve is returned to Position A, reversing the column sequence.  $\text{CO}_2$  now leaves Column 1, becoming the first peak. The inorganics and methane are separated by the molecular sieve and pass through the porous polymer column to the detector.

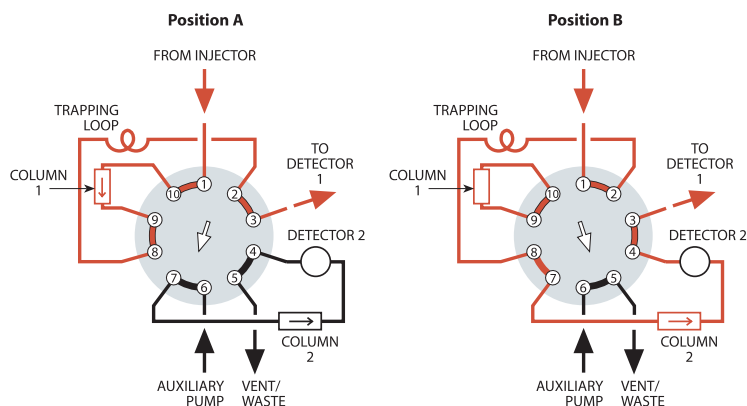
## 10 port column switching



## SAMPLE ENRICHMENT (CLEANUP) USING DUAL PRECOLUMNS

Sample is injected by a separate injector onto one of two precolumns (stripper). Early eluting components vent at port 6 while components of interest are retained on the stripper. When the valve is switched, a new injection is made onto the second stripper while components retained on the first stripper are backflushed onto the analytical column at port 9. *Note:* This application requires an auxiliary pump at port 4.

## 10 port column switching



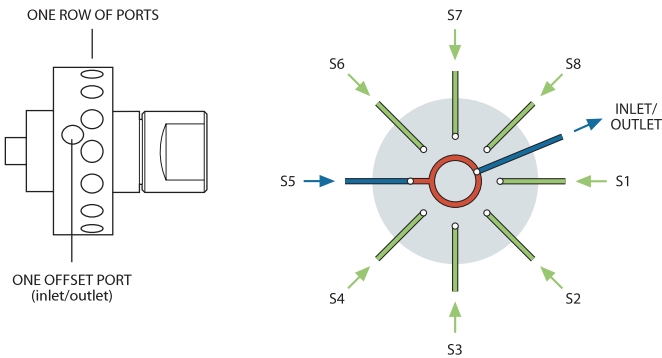
## HEART CUT TRAPPED IN A LOOP AND INJECTED ONTO A SECOND COLUMN

Sample is injected (using a separate injector) onto an analytical column. Early eluting components (front cut) pass through a trapping loop and are detected (at port 3). The valve is then switched, and the center (or heartcut) which was retained in the trapping loop is injected onto the second column to the detector (at port 4). Late eluting components (end cut) are trapped on the first column. When the valve is switched again, the end cut passes through the trapping loop to the first detector, completing the analysis.

Selectors – Low Pressure

Dead-end flowpath – SD configuration

SD valves select one of 4 to 16 dead-ended streams. The selected stream flows from the outlet to a sample valve, pressure sensor, detector, column, etc. The same flowpath can also be used to direct one stream to a number of outlets in applications such as fraction collection. For an application suggestion, see page 134.



1/16" fittings, 0.75 mm ports (.030")

MW Type

Low pressure

SD  
Dead-end

1/16" 0.75 mm

Includes 2" standoff.  
Ask about closemount assembly if valve will not be heated.

Standard electric actuators:  
110 VAC for USA  
110/230 VAC to 24 VDC power supply for international

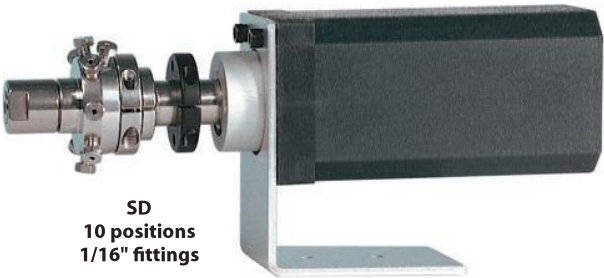
Microelectric actuators:  
24 VDC (includes a 110/230 VAC to 24 VDC power supply)

SPECS

400 psi gas  
200°C max  
Nitronic 60 body  
Valcon E rotor

- OPTIONS
- 4 and 8 positions available
  - 3", 4", and 6" standoffs
  - Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)
  - Larger bore available except 16 position

	6 Position		10 Position		12 Position		16 Position	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual (not recommended)	2CSD6MWE		2CSD10MWE		2CSD12MWE		2CSD16MWE	
With air actuator	A2CSD6MWE		A2CSD10MWE		A2CSD12MWE		A2CSD16MWE	
With standard electric actuator	E2CSD6MWE		E2CSD10MWE		E2CSD12MWE		E2CSD16MWE	
With microelectric actuator	EMT2CSD6MWE		EMT2CSD10MWE		EMT2CSD12MWE		EMT2CSD16MWE	
Replacement valve	DCSD6MWE		DCSD10MWE		DCSD12MWE		DCSD16MWE	
Replacement rotor	SSACSD6MWE		SSACSD10MWE		SSACSD12MWE		SSACSD16MWE	



MORE INFORMATION

Application..... page 134

Actuators

Air .....194

Microelectric .. 190-191

Standard elec.....193

Materials

Metals..... 254-255

Polymers .....256

Valve rotors.....257

Mounting hardware

Closemount .....208

Standoff.....205

## 1/8" fittings, 1.0 mm ports (.040")

MW Type

## SPECS

4-8 Positions:  
**400 psi gas**  
**200°C max**  
 10-16 Positions:  
**200 psi gas**  
**200°C max**  
 Nitronic 60 body  
 Valcon E rotor

Includes 2" standoff.  
 Ask about closemount  
 assembly if valve will  
 not be heated.

Standard electric actuators:  
 110 VAC for USA  
 110/230 VAC to 24 VDC power supply for international  
 Microelectric actuators:  
 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

Low pressure

SD  
Dead-end

1/8"

1.0 mm

## OPTIONS

- 4 and 8 positions available
- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)
- Larger bore available

	6 Position		10 Position		12 Position		16 Position	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual (not recommended)	2SD6MWE		2SD10MWE		2SD12MWE		2SD16MWE	
With air actuator	A2SD6MWE		A2SD10MWE		A2SD12MWE		A2SD16MWE	
With standard electric actuator	E2SD6MWE		E2SD10MWE		E2SD12MWE		E2SD16MWE	
With microelectric actuator	EMT2SD6MWE		EMT2SD10MWE		EMT2SD12MWE		EMT2SD16MWE	
Replacement valve	DSD6MWE		DSD10MWE		DSD12MWE		DSD16MWE	
Replacement rotor	SSASD6MWE		SSASD10MWE		SSASD12MWE		SSASD16MWE	

## 1/4" fittings, 4.0 mm ports (.156")

MW Type

## SPECS

**100 psi gas**  
**75°C max**  
 Nitronic 60 body  
 Valcon E2 rotor

Includes 2" standoff.  
 Ask about closemount  
 assembly if valve  
 will not be heated.

Manual version not  
 available.

Standard electric actuators:  
 110 VAC for USA  
 110/230 VAC to 24 VDC power supply for  
 international  
 Microelectric actuators:  
 24 VDC (includes a 110/230 VAC to 24 VDC  
 power supply)

Low pressure

SD  
Dead-end

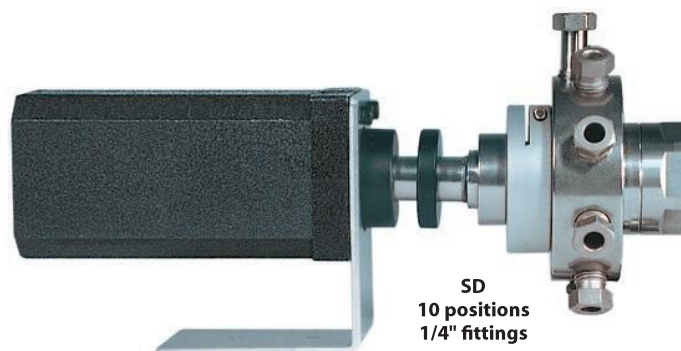
1/4"

4.0 mm

## OPTIONS

- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)

	4 Position		6 Position		8 Position		10 Position	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
With air actuator	AH2VLS4MWE2		AH2VLS6MWE2		AH2VLS8MWE2		AH2VLS10MWE2	
With std electric actuator	E2VLS4MWE2		E2VLS6MWE2		E2VLS8MWE2		E2VLS10MWE2	
With microelectric actuator	EMT2VLS4MWE2		EMT2VLS6MWE2		EMT2VLS8MWE2		EMT2VLS10MWE2	
Replacement valve	DVLS4MWE2		DVLS6MWE2		DVLS8MWE2		DVLS10MWE2	
Replacement rotor	SSAVLS4MWE2		SSAVLS6MWE2		SSAVLS8MWE2		SSAVLS10MWE2	



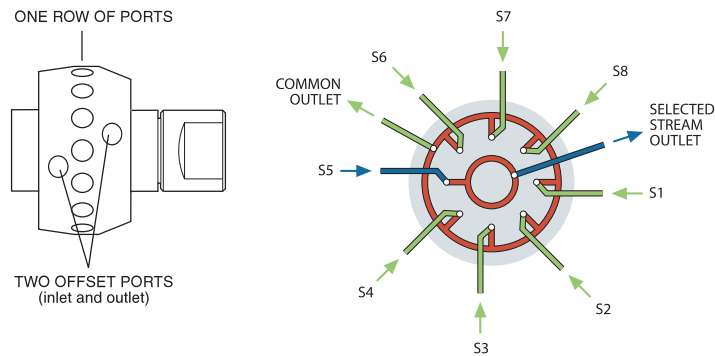
SD  
 10 positions  
 1/4" fittings

CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: [sales@chromtech.net.au](mailto:sales@chromtech.net.au) Tel: 03 9762 2034

Selectors – Low Pressure

Common outlet flowpath – SC configuration

SC selectors are similar to the SD configuration, except that instead of being dead-ended the non-selected streams flow to a common outlet. For an application suggestion, see page 135.



1/16" fittings, 1.0 mm ports (.040")

MW Type

Low pressure

SC  
Common outlet

1/16"1.0 mm

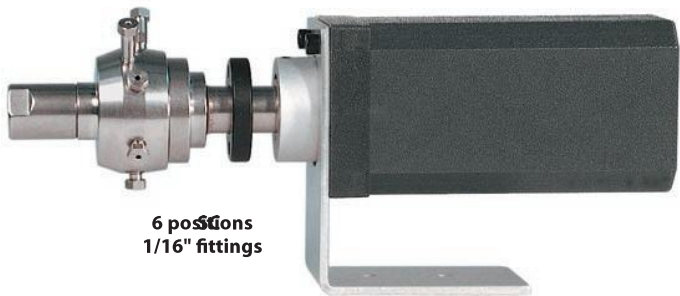
Includes 2" standoff.  
Ask about closemount assembly if valve will not be heated.

Standard electric actuators:  
110 VAC for USA  
110/230 VAC to 24 VDC power supply for international  
Microelectric actuators:  
24 VDC (includes a 110/230 VAC to 24 VDC power supply)

**SPECS**  
200 psi gas  
200°C max  
Nitronic 60 body  
Valcon E rotor

- OPTIONS**
- 4 and 8 positions available
  - 3", 4", and 6" standoffs
  - Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)

	6 Position		10 Position		12 Position		16 Position	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual (not recommended)	2CSC6MWE		2CSC10MWE		2CSC12MWE		2CSC16MWE	
With air actuator	A2CSC6MWE		A2CSC10MWE		A2CSC12MWE		A2CSC16MWE	
With standard electric actuator	E2CSC6MWE		E2CSC10MWE		E2CSC12MWE		E2CSC16MWE	
With microelectric actuator	EMT2CSC6MWE		EMT2CSC10MWE		EMT2CSC12MWE		EMT2CSC16MWE	
Replacement valve	DCSC6MWE		DCSC10MWE		DCSC12MWE		DCSC16MWE	
Replacement rotor	SSACSC6MWE		SSACSC10MWE		SSACSC12MWE		SSACSC16MWE	



**MORE INFORMATION**

Application.....	page 135
Actuators	
Air .....	194
Microelectric ..	190-191
Standard elec.....	193
Materials	
Metals.....	254-255
Polymers .....	256
Valve rotors.....	257
Mounting hardware	
Closemount .....	208
Standoff.....	205

CHROMalytic TECHnology Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034

## 1/8" fittings, 1.0 mm ports (.040")

MW Type

**SPECS**  
**200 psi gas**  
**200°C max**  
 Nitronic 60 body  
 Valcon E rotor

Includes 2" standoff.  
 Ask about closemount  
 assembly if valve will  
 not be heated.

Standard electric actuators:  
 110 VAC for USA  
 110/230 VAC to 24 VDC power supply for international  
 Microelectric actuators:  
 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

Low pressure

SC  
Common outlet

1/8"

1.0 mm

**OPTIONS**

- 4 and 8 positions available
- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)
- Larger bore available except 16 position

	6 Position		10 Position		12 Position		16 Position	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual (not recommended)	2SC6MWE		2SC10MWE		2SC12MWE		2SC16MWE	
With air actuator	A2SC6MWE		A2SC10MWE		A2SC12MWE		A2SC16MWE	
With standard electric actuator	E2SC6MWE		E2SC10MWE		E2SC12MWE		E2SC16MWE	
With microelectric actuator	EMT2SC6MWE		EMT2SC10MWE		EMT2SC12MWE		EMT2SC16MWE	
Replacement valve	DSC6MWE		DSC10MWE		DSC12MWE		DSC16MWE	
Replacement rotor	SSASC6MWE		SSASC10MWE		SSASC12MWE		SSASC16MWE	

## 1/4" fittings, 4.0 mm ports (.156")

MW Type

**SPECS**  
**100 psi gas**  
**75°C max**  
 Nitronic 60 body  
 Valcon E2 rotor

Includes 2" standoff.  
 Ask about closemount  
 assembly if valve  
 will not be heated.

Manual version not  
 available.

Standard electric actuators:  
 110 VAC for USA  
 110/230 VAC to 24 VDC power supply for  
 international  
 Microelectric actuators:  
 24 VDC (includes a 110/230 VAC to 24 VDC  
 power supply)

Low pressure

SC  
Common outlet

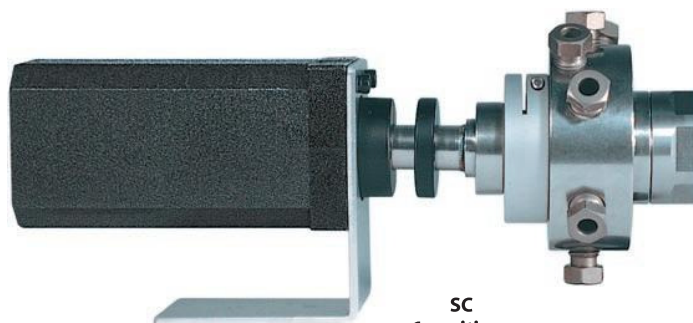
1/4"

4.0 mm

**OPTIONS**

- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)

	4 Position		6 Position		8 Position	
	Prod No	Price	Prod No	Price	Prod No	Price
With air actuator	AH2VLS4MWE2		AH2VLS6MWE2		AH2VLS8MWE2	
With std electric actuator	E2VLS4MWE2		E2VLS6MWE2		E2VLS8MWE2	
With microelectric actuator	EMT2VLS4MWE2		EMT2VLS6MWE2		EMT2VLS8MWE2	
Replacement valve	DVLS4MWE2		DVLS6MWE2		DVLS8MWE2	
Replacement rotor	SSAVLS4MWE2		SSAVLS6MWE2		SSAVLS8MWE2	

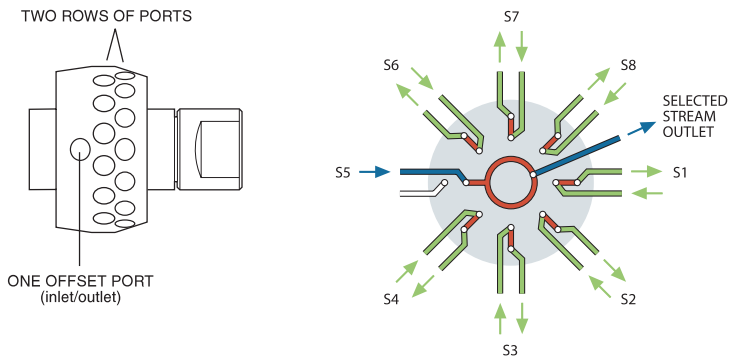


SC  
 6 positions  
 1/4" fittings

Selectors – Low Pressure

Flow-through flowpath – SF configuration

SD and SC valves select and isolate one of 4 to 16 streams, with the remainder dead-ended in the SD and flowing to a common outlet in the SC. The SF selector is similar, but carries the evolution a step further with the non-selected streams flowing through individual outlets. For an application suggestion, see page 136.



1/16" fittings, 1.0 mm ports (.040")

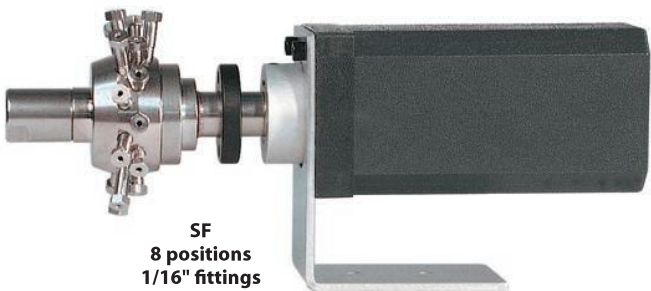
MW Type

<b>Low pressure</b>	Includes 2" standoff. Ask about closemount assembly if valve will not be heated.	Standard electric actuators: 110 VAC for USA 110/230 VAC to 24 VDC power supply for international Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)	<b>SPECS</b> <b>200 psi gas</b> <b>200°C max</b> Nitronic 60 body Valcon E rotor
<b>SF Flow-through</b>			
<b>1/16" 1.0 mm</b>			

OPTIONS

- 4 and 8 positions available
- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)

	6 Position		10 Position		12 Position		16 Position	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual (not recommended)	2CSF6MWE		2CSF10MWE		2CSF12MWE		2CSF16MWE	
With air actuator	A2CSF6MWE		A2CSF10MWE		A2CSF12MWE		A2CSF16MWE	
With standard electric actuator	E2CSF6MWE		E2CSF10MWE		E2CSF12MWE		E2CSF16MWE	
With microelectric actuator	EMT2CSF6MWE		EMT2CSF10MWE		EMT2CSF12MWE		EMT2CSF16MWE	
Replacement valve	DCSF6MWE		DCSF10MWE		DCSF12MWE		DCSF16MWE	
Replacement rotor	SSACSF6MWE		SSACSF10MWE		SSACSF12MWE		SSACSF16MWE	



MORE INFORMATION

- Application. . . . . page 136
- Actuators
  - Air . . . . . 194
  - Microelectric . . 190-191
  - Standard elec. . . . . 193
- Materials
  - Metals. . . . . 254-255
  - Polymers . . . . . 256
  - Valve rotors. . . . . 257
- Mounting hardware
  - Closemount . . . . . 208
  - Standoff. . . . . 205

## Selectors – Low Pressure

## 1/8" fittings, 1.0 mm ports (.040")

MW Type

**SPECS**  
**200 psi gas**  
**200°C max**  
 Nitronic 60 body  
 Valcon E rotor

Includes 2" standoff.  
 Ask about closemount  
 assembly if valve will  
 not be heated.

Standard electric actuators:  
 110 VAC for USA  
 110/230 VAC to 24 VDC power supply for international  
 Microelectric actuators:  
 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

Low pressure

SF  
Flow-through

1/8"

1.0 mm

**OPTIONS**

- 4 and 8 positions available
- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)
- Larger bore available except 16 position

	6 Position		10 Position		12 Position		16 Position	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual (not recommended)	2SF6MWE		2SF10MWE		2SF12MWE		2SF16MWE	
With air actuator	A2SF6MWE		A2SF10MWE		A2SF12MWE		A2SF16MWE	
With standard electric actuator	E2SF6MWE		E2SF10MWE		E2SF12MWE		E2SF16MWE	
With microelectric actuator	EMT2SF6MWE		EMT2SF10MWE		EMT2SF12MWE		EMT2SF16MWE	
Replacement valve	DSF6MWE		DSF10MWE		DSF12MWE		DSF16MWE	
Replacement rotor	SSASF6MWE		SSASF10MWE		SSASF12MWE		SSASF16MWE	

## 1/4" fittings, 4.0 mm ports (.156")

MW Type

**SPECS**  
**100 psi gas**  
**75°C max**  
 Nitronic 60 body  
 Valcon E2 rotor

Includes 2" standoff.  
 Ask about closemount  
 assembly if valve will  
 not be heated.

Manual version is not  
 available.

Standard electric actuators:  
 110 VAC for USA  
 110/230 VAC to 24 VDC power supply for  
 international  
 Microelectric actuators:  
 24 VDC (includes a 110/230 VAC to 24 VDC  
 power supply)

Low pressure

SF  
Flow-through

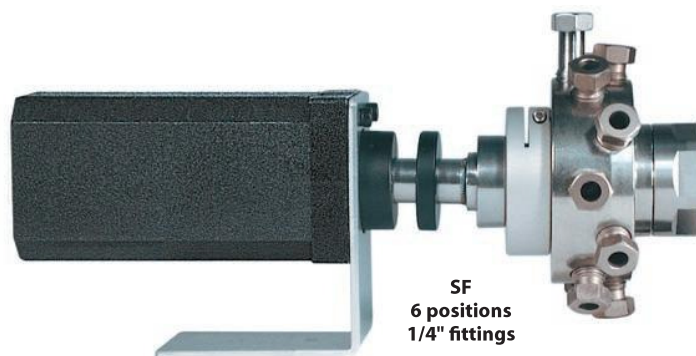
1/4"

4.0 mm

**OPTIONS**

- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)

	4 Position		6 Position		8 Position	
	Prod No	Price	Prod No	Price	Prod No	Price
With air actuator	AH2VLSF4MWE2		AH2VLSF6MWE2		AH2VLSF8MWE2	
With std electric actuator	E2VLSF4MWE2		E2VLSF6MWE2		E2VLSF8MWE2	
With microelectric actuator	EMT2VLSF4MWE2		EMT2VLSF6MWE2		EMT2VLSF8MWE2	
Replacement valve	DVLSF4MWE2		DVLSF6MWE2		DVLSF8MWE2	
Replacement rotor	SSAVLSF4MWE2		SSAVLSF6MWE2		SSAVLSF8MWE2	



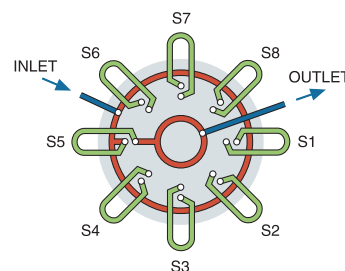
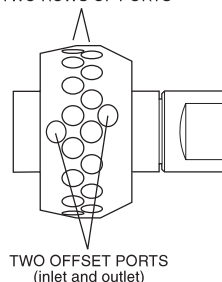
CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: [sales@chromtech.net.au](mailto:sales@chromtech.net.au) Tel: 03 9762 2034

## Selectors – Low Pressure

Trapping flowpath –  
ST configuration

ST selectors are used for multi-column, multi-sample, or multi-trap operations, and are available for use with 4 to 16 loops, or positions. For an application suggestion, see page 137.

TWO ROWS OF PORTS



## 1/16" fittings, 0.75 mm ports (.030")

MW Type

## Low pressure

ST  
Trapping

1/16" 0.75 mm

Includes 2" standoff.  
Ask about closemount  
assembly if valve will  
not be heated.

Standard electric actuators:  
110 VAC for USA  
110/230 VAC to 24 VDC power supply for international  
Microelectric actuators:  
24 VDC (includes a 110/230 VAC to 24 VDC power supply)

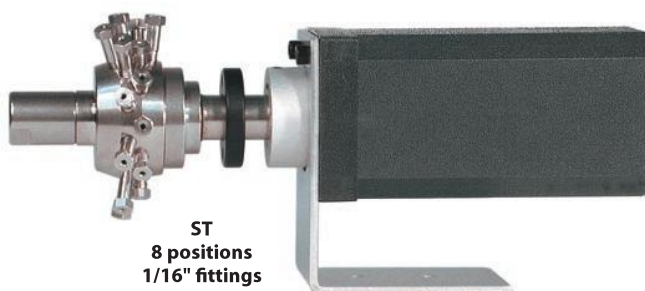
## SPECS

200 psi gas  
200°C max  
Nitronic 60 body  
Valcon E rotor

## OPTIONS

- 4 and 8 positions available
- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)

	6 Position		10 Position		12 Position		16 Position	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual (not recommended)	2CST6MWE		2CST10MWE		2CST12MWE		2CST16MWE	
With air actuator	A2CST6MWE		A2CST10MWE		A2CST12MWE		A2CST16MWE	
With standard electric actuator	E2CST6MWE		E2CST10MWE		E2CST12MWE		E2CST16MWE	
With microelectric actuator	EMT2CST6MWE		EMT2CST10MWE		EMT2CST12MWE		EMT2CST16MWE	
Replacement valve	DCST6MWE		DCST10MWE		DCST12MWE		DCST16MWE	
Replacement rotor	SSACST6MWE		SSACST10MWE		SSACST12MWE		SSACST16MWE	



## 1/16" Stainless steel loops for MW Type valves

Each stainless steel loop includes two stainless nuts and two stainless ferrules. Order special fittings separately. When a set of loops is ordered, loops will be supplied from the same lot.

Volume	Prod No	Price	Volume	Prod No	Price
50 µl	SL50CSTP		1 ml	SL1KCSTP	
100 µl	SL100CSTP		2 ml	SL2KCSTP	
250 µl	SL250CSTP		5 ml	SL5KCSTP	
500 µl	SL500CSTP		10 ml	SL10KCSTP	



## MORE INFORMATION

Application..... page 137  
Actuators  
Air .....194  
Microelectric .. 190-191  
Standard elec.....193  
Materials  
Metals..... 254-255  
Polymers .....256  
Valve rotors.....257  
Mounting hardware  
Closemount .....208  
Standoff.....205

CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: [sales@chromtech.net.au](mailto:sales@chromtech.net.au) Tel: 03 9762 2034

## 1/8" fittings, 1.0 mm ports (.040")

MW Type

**SPECS**  
**200 psi gas**  
**200°C max**  
 Nitronic 60 body  
 Valcon E rotor

Includes 2" standoff.  
 Ask about closemount  
 assembly if valve will  
 not be heated.

Standard electric actuators:  
 110 VAC for USA  
 110/230 VAC to 24 VDC power supply for international  
 Microelectric actuators:  
 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

Low pressure

ST  
Trapping

1/8"

1.0 mm

**OPTIONS**

- 4 and 8 positions available
- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (*see pages 254-255*)
- Larger bore available except 16 position

	6 Position		10 Position		12 Position		16 Position	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual (not recommended)	2ST6MWE		2ST10MWE		2ST12MWE		2ST16MWE	
With air actuator	A2ST6MWE		A2ST10MWE		A2ST12MWE		A2ST16MWE	
With standard electric actuator	E2ST6MWE		E2ST10MWE		E2ST12MWE		E2ST16MWE	
With microelectric actuator	EMT2ST6MWE		EMT2ST10MWE		EMT2ST12MWE		EMT2ST16MWE	
Replacement valve	DST6MWE		DST10MWE		DST12MWE		DST16MWE	
Replacement rotor	SSAST6MWE		SSAST10MWE		SSAST12MWE		SSAST16MWE	

**ABOUT LOOPS**

- Other materials are available in many sizes: Electroformed Nickel, Hastelloy C, Nickel 200, PEEK, PTFE, and Titanium
- 1/16" loops > 2 ml are made from 1/8" OD tubing with brazed or welded 1/16" tube ends or reducing unions.
- 1/8" loops < 100 µl are made from 1/16" OD tubing with brazed or welded 1/8" tube ends.

**1/8" Stainless steel loops**

for MW Type valves

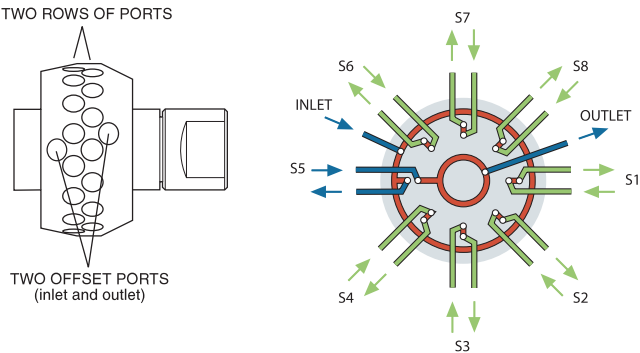
Each stainless steel loop includes two stainless nuts and two stainless ferrules. Order special fittings separately. When a set of loops is ordered, loops will be supplied from the same lot.

Volume	Prod No	Price	Volume	Prod No	Price
100 µl	SL100STP		1 ml	SL1KSTP	
250 µl	SL250STP		2 ml	SL2KSTP	
500 µl	SL500STP		5 ml	SL5KSTP	
			10 ml	SL10KSTP	

Selectors – Low Pressure

Trapping/flow-through flowpath – STF configuration

The STF selector is a variation of the ST flowpath, with the single difference that the non-selected streams are returned to their own vents or sources rather than being dead-ended or trapped as they are in the standard ST configuration. For an application suggestion, see page 138.



1/16" fittings, 0.75 mm ports (.030")

MW Type

<p><b>Low pressure</b></p> <p><b>STF</b></p> <p><b>Trap/ flow-throw</b></p> <p><b>1/16" 0.75 mm</b></p>	<p>Includes 2" standoff. Ask about closemount assembly if valve will not be heated.</p> <p>Standard electric actuators: 110 VAC for USA 110/230 VAC to 24 VDC power supply for international</p> <p>Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)</p>	<p><b>SPECS</b></p> <p><b>200 psi gas</b></p> <p><b>200°C max</b></p> <p>Nitronic 60 body</p> <p>Valcon E rotor</p>
---	---	---

OPTIONS

- 4 and 8 positions available
- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)

	6 Position		10 Position		12 Position		16 Position	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual (not recommended)	2CSTF6MWE		2CSTF10MWE		2CSTF12MWE		2CSTF16MWE	
With air actuator	A2CSTF6MWE		A2CSTF10MWE		A2CSTF12MWE		A2CSTF16MWE	
With standard elec actuator	E2CSTF6MWE		E2CSTF10MWE		E2CSTF12MWE		E2CSTF16MWE	
With microelectric actuator	EMT2CSTF6MWE		EMT2CSTF10MWE		EMT2CSTF12MWE		EMT2CSTF16MWE	
Replacement valve	DCSTF6MWE		DCSTF10MWE		DCSTF12MWE		DCSTF16MWE	
Replacement rotor	SSACSTF6MWE		SSACSTF10MWE		SSACSTF12MWE		SSACSTF16MWE	

MORE INFORMATION

Application. . . . page 138

Actuators

Air . . . . .194

Microelectric . . 190-191

Standard elec. . . . .193

Materials

Metals. . . . . 254-255

Polymers . . . . .256

Valve rotors. . . . .257

Mounting hardware

Closemount . . . . .208

Standoff. . . . .205

## 1/8" fittings, 1.0 mm ports (.040")

MW Type

**SPECS**  
**200 psi gas**  
**200°C max**  
 Nitronic 60 body  
 Valcon E rotor

Includes 2" standoff.  
 Ask about closemount  
 assembly if valve will  
 not be heated.

Standard electric actuators:  
 110 VAC for USA  
 110/230 VAC to 24 VDC power supply for international  
 Microelectric actuators:  
 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

Low pressure

STF  
Trap/ flow-throw

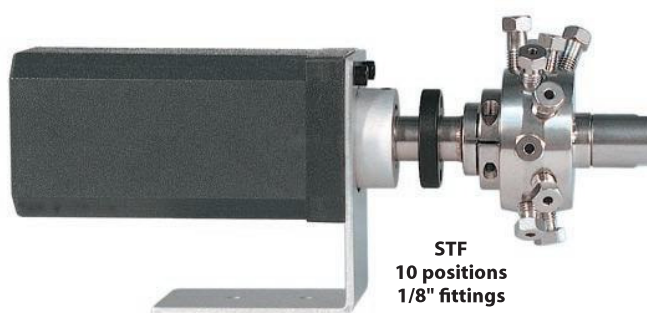
1/8"

1.0 mm

**OPTIONS**

- 4 and 8 positions available
- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)
- Larger bore available except 16 position

	6 Position		10 Position		12 Position		16 Position	
	Prod No	Price	Prod No	Price	Prod No	Price	Prod No	Price
Manual (not recommended)	2STF6MWE		2STF10MWE		2STF12MWE		2STF16MWE	
With air actuator	A2STF6MWE		A2STF10MWE		A2STF12MWE		A2STF16MWE	
With standard elec actuator	E2STF6MWE		E2STF10MWE		E2STF12MWE		E2STF16MWE	
With microelectric actuator	EMT2STF6MWE		EMT2STF10MWE		EMT2STF12MWE		EMT2STF16MWE	
Replacement valve	DSTF6MWE		DSTF10MWE		DSTF12MWE		DSTF16MWE	
Replacement rotor	SSASTF6MWE		SSASTF10MWE		SSASTF12MWE		SSASTF16MWE	

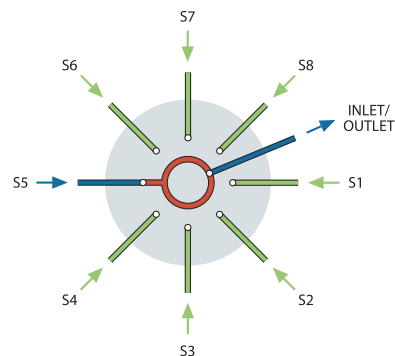
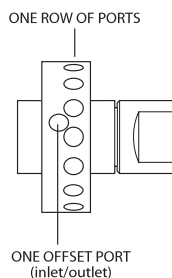


STF  
 10 positions  
 1/8" fittings

## Selectors – High Pressure

Dead-end flowpath –  
SD configuration

SD valves select one of 4 to 16 dead-ended streams. The selected stream flows from the valve outlet to a sample valve, pressure sensor, detector, column, etc. This configuration may also be used to direct one stream to a number of outlets for applications such as fraction collection. For an application suggestion, see page 139.



## 1/16" fittings, 0.4 mm ports (.016")

UW Type

5,000 psi

SD  
Dead-end

1/16" 0.40 mm

Standard electric actuators:

110 VAC for USA;

110/230 VAC to 24 VDC power supply for international

Microelectric actuators:

24 VDC (includes a 110/230 VAC to 24 VDC power supply)

## SPECS

5000 psi

75°C max

Nitronic 60 body

Valcon E rotor

## OPTIONS

- 8 and 12 positions available
- 2", 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)
- Low pressure, high temperature versions available
- Larger bore available except 10 and 12 positions

## 4 Position

Prod No Price

## 6 Position

Prod No Price

## 10 Position

Prod No Price

Manual (not recommended)

CSD4UW

CSD6UW

CSD10UW

With air actuator

ACSD4UW

ACSD6UW

ACSD10UW

With standard electric actuator

ECSD4UW

ECSD6UW

ECSD10UW

With microelectric actuator

EMTCS4UW

EMTCS6UW

EMTCS10UW

Replacement valve

DCSD4UW

DCSD6UW

DCSD10UW

Replacement rotor

SSACSD4UW

SSACSD6UW

SSACSD10UW

## 1/8" fittings, 0.75 mm ports (.030")

UW Type

5,000 psi

SD  
Dead-end

1/8" 0.75 mm

Standard electric actuators:

110 VAC for USA

110/230 VAC to 24 VDC power supply for international

Microelectric actuators:

24 VDC (includes a 110/230 VAC to 24 VDC power supply)

## SPECS

5000 psi liq

75°C max

Nitronic 60 body

Valcon E rotor

## OPTIONS

- 2", 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see page 254-255)
- Low pressure, high temperature versions available
- Larger bore available except 8 position

## 4 Position

Prod No Price

## 6 Position

Prod No Price

## 8 Position

Prod No Price

Manual (not recommended)

SD4UW

SD6UW

SD8UW

With air actuator

ASD4UW

ASD6UW

ASD8UW

With standard electric actuator

ESD4UW

ESD6UW

ESD8UW

With microelectric actuator

EMTSD4UW

EMTSD6UW

EMTSD8UW

Replacement valve

DSD4UW

DSD6UW

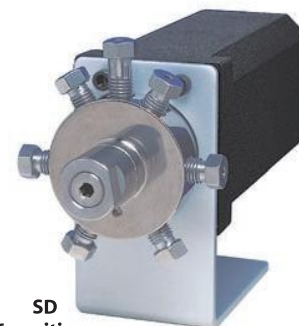
DSD8UW

Replacement rotor

SSASD4UW

SSASD6UW

SSASD8UW

SD  
6 positions  
1/8" fittings

CHROMalytic TECHNOlogy Pty Ltd AUSTRALIAN Distributors e-mail: sales@chromtech.net.au Tel: 03 9762 2034