

VALCO VALVES

**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

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



**SPECS**

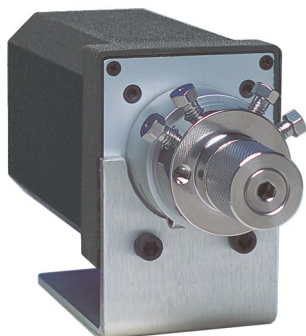
**5000 psi liq**  
**75°C max**

Nitronic 60 valve body  
 Valcon H rotor

**OPTIONS**

- 2", 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-5)
- 1/32" fittings with 0.25 mm bore (.010") also available. Consult factory for product number and pricing.

Sample volume	.06 µl <i>Prod No</i>	.1 µl <i>Prod No</i>	.2 µl <i>Prod No</i>	.5 µl <i>Prod No</i>
Manual	CI4W.06	CI4W.1	CI4W.2	CI4W.5
With air actuator	ACI4W.06	ACI4W.1	ACI4W.2	ACI4W.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" fittings

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

UW Type

- 5,000 psi
- Internal sample
- 1/16"
0.75 mm

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

**OPTIONS**

- 2", 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium, Zirconium (see pages 254-5)
- 1/32" fittings with 0.25 mm bore (.010") also available. Consult factory for product number and pricing.

Sample volume	.2 µl <i>Prod No</i>	.5 µl <i>Prod No</i>	1 µl <i>Prod No</i>	2 µl <i>Prod No</i>
Manual with 2" standoff	2CI4UW.2	2CI4UW.5	2CI4UW1	2CI4UW2
With air actuator	ACI4UW.2	ACI4UW.5	ACI4UW1	ACI4UW2
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



**UW Type**  
 1/16" fittings

**NOTE**

These valves are not available in manual closemount version.

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

*W Type*

**SPECS**





**5000 psi liq**  
**75°C max**  
 Nitronic 60 valve body  
 Valcon H rotor

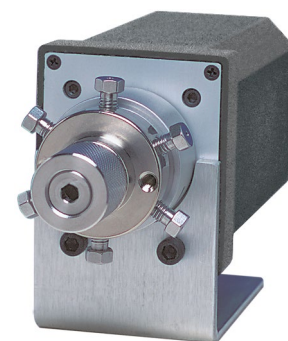
**OPTIONS**

- 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 254-5)

Microelectric actuator: 24 VDC, with 110/230 VAC to 24 VDC power supply  
 Sample loops are not included with valves. Order separately.

<b>5,000 psi</b>	
<b>Analytical</b>	
<b>1/16"</b>	<b>0.40 mm</b>

				
	<b>4 Ports</b> <i>Prod No</i>	<b>6 Ports</b> <i>Prod No</i>	<b>8 Ports</b> <i>Prod No</i>	<b>10 Ports</b> <i>Prod No</i>
Manual	C4W	C6W	C8W	C10W
With air actuator	AC4W	AC6W	AC8W	AC10W
With microelectric actuator	EPC4W	EPC6W	EPC8W	EPC10W
Replacement valve	DC4W	DC6W	DC8W	DC10W
Replacement rotor	SSAC4W	SSAC6W	SSAC8W	SSAC10W



**W Type**  
**1/16" fittings**

**OPTIONAL FLOWPATH**

Model C6W 6 port valves can also be ordered with a dual 3-way rotor, as described in EPA Method 555.

To specify this flowpath, substitute "2X3" for "6" in the valve or rotor product number.



**MORE INFORMATION**

Actuators

Air	.....	page 197
Manual	.....	204
Microelectric	.....	190-1
Universal	.....	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.
- Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.

**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.



<i>Volume</i>	<i>Prod No</i>	<i>Volume</i>	<i>Prod No</i>
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

VALCO VALVES

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

*UW Type*

- 5,000 psi**
- Semi-prep**
- 1/16"**
**0.75 mm**

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

**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 254-5)
- Larger bore available.

**NOTE**

These valves are not available in manual closemount version.



**4 Ports**  
*Prod No*



**6 Ports**  
*Prod No*



**8 Ports**  
*Prod No*



**10 Ports**  
*Prod No*

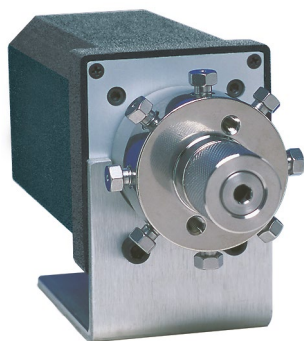
Manual with 2" standoff  
 With air actuator  
 With microelectric actuator  
  
 Replacement valve  
 Replacement rotor

2C4UW  
 AC4UW  
 EDC4UW  
  
 DC4UW  
 SSAC4UW

2C6UW  
 AC6UW  
 EDC6UW  
  
 DC6UW  
 SSAC6UW

2C8UW  
 AC8UW  
 EDC8UW  
  
 DC8UW  
 SSAC8UW

2C10UW  
 AC10UW  
 EDC10UW  
  
 DC10UW  
 SSAC10UW



**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.



Volume	Prod No	Volume	Prod No
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.
- Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.

**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 rotor

**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 254-5)
- Larger bore available. (see page 118)

**NOTE**





These valves are not available in manual closemount version.

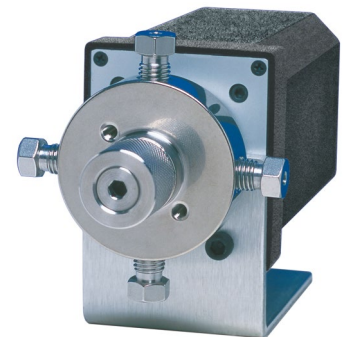
Manual 10 port includes 2" standoff.  
 Microelectric actuator: 24 VDC, with 110/230 VAC to 24 VDC power supply  
 Sample loops are not included with valves. Order separately.

**5,000 psi**

**Semi-prep**

**1/8" 0.75 mm**

				
	<b>4 Ports</b> <i>Prod No</i>	<b>6 Ports</b> <i>Prod No</i>	<b>8 Ports</b> <i>Prod No</i>	<b>10 Ports</b> <i>Prod No</i>
Manual with 2" standoff	24UW	26UW	28UW	210UW
With air actuator	A4UW	A6UW	A8UW	A10UW
With microelectric actuator	ED4UW	ED6UW	ED8UW	ED10UW
Replacement valve	D4UW	D6UW	D8UW	D10UW
Replacement rotor	SSA4UW	SSA6UW	SSA8UW	SSA10UW



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

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

**MORE INFORMATION**

Actuators

Air ..... page 197

Manual ..... 204

Microelectric ..... 190-1

Universal ..... 193

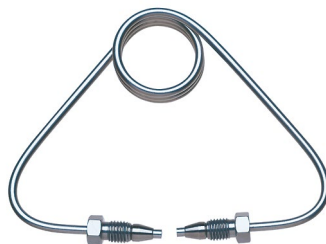
Materials

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	Volume	Prod No
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

VALCO VALVES

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.  
 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

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 254-5)
- Smaller bore available. (see page 117)

NOTE

These valves are not available in manual closemount version.



**4 Ports**  
 1.7 mm (.067")  
 Prod No



**6 Ports**  
 1.7 mm (.067")  
 Prod No



**8 Ports**  
 1.3 mm (.050")  
 Prod No



**10 Ports**  
 1.0 mm (.040")  
 Prod No

Manual with 2" standoff  
 With air actuator  
 With microelectric actuator

2L4UW  
 AL4UW  
 EDL4UW

2L6UW  
 AL6UW  
 EDL6UW

2L8UW  
 AL8UW  
 EDL8UW

2L10UW  
 AL10UW  
 EDL10UW

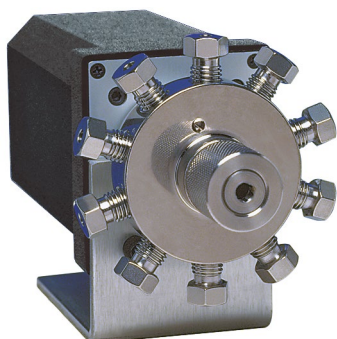
Replacement valve  
 Replacement rotor

DL4UW  
 SSAL4UW

DL6UW  
 SSAL6UW

DL8UW  
 SSAL8UW

DL10UW  
 SSAL10UW

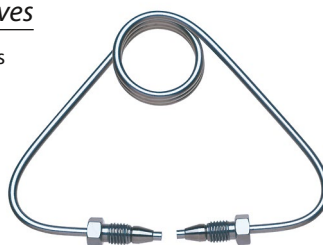


UW Type  
 1/8" fittings

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	Volume	Prod No
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.
- Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.

MORE INFORMATION

Actuators

Air	.....	page 197
Manual	.....	204
Microelectric	.....	190-1
Universal	.....	193

Materials

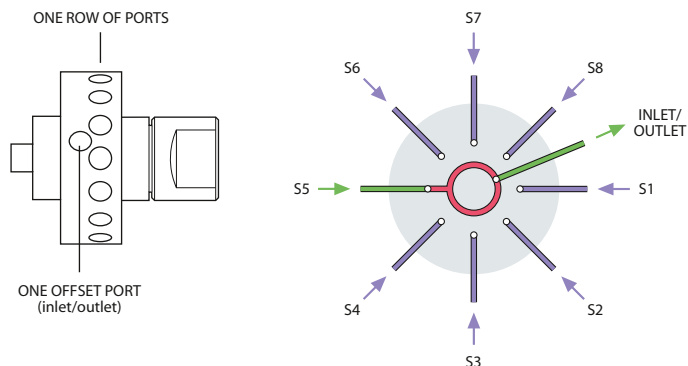
Metals	.....	254-255
Polymers	.....	256
Valve rotors	.....	257

Standoff assemblies .....205

**VALCO VALVES**

## Dead-end flowpath – SD configuration

SD valves select one of 4 to 12 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 136.



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

MW Type

**Low pressure**

**SD Dead-end**

**1/16" 0.75 mm**

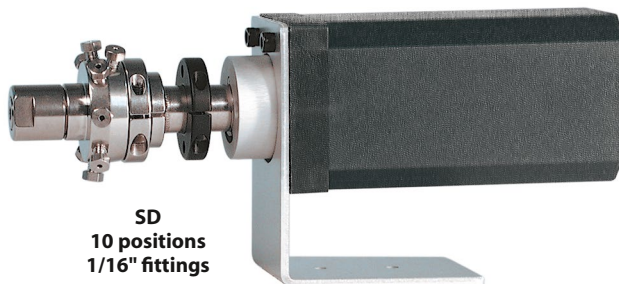
Includes 2" standoff. Ask about closemount assembly if valve will not be heated.  
Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

**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

	<b>6 Position</b> <i>Prod No</i>	<b>10 Position</b> <i>Prod No</i>	<b>12 Position</b> <i>Prod No</i>	<b>16 Position</b> <i>Prod No</i>
Manual (not recommended)	2CSD6MWE	2CSD10MWE	2CSD12MWE	2CSD16MWE
With air actuator	A2CSD6MWE	A2CSD10MWE	A2CSD12MWE	A2CSD16MWE
With microelectric actuator	EMT2CSD6MWE	EMT2CSD10MWE	EMT2CSD12MWE	EMT2CSD16MWE
Replacement valve	DCSD6MWE	DCSD10MWE	DCSD12MWE	DCSD16MWE
Replacement rotor	SSACSD6MWE	SSACSD10MWE	SSACSD12MWE	SSACSD16MWE



**MORE INFORMATION**

Application..... page 136

Actuators

- Air ..... 196
- Microelectric ..... 192
- Universal ..... 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.  
 Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

**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

Low pressure

SD  
 Dead-end

1/8"

1.0 mm

	<b>6 Position</b> <i>Prod No</i>	<b>10 Position</b> <i>Prod No</i>	<b>12 Position</b> <i>Prod No</i>	<b>16 Position</b> <i>Prod No</i>
Manual (not recommended)	2SD6MWE	2SD10MWE	2SD12MWE	2SD16MWE
With air actuator	A2SD6MWE	A2SD10MWE	A2SD12MWE	A2SD16MWE
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.  
 Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

**OPTIONS**

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

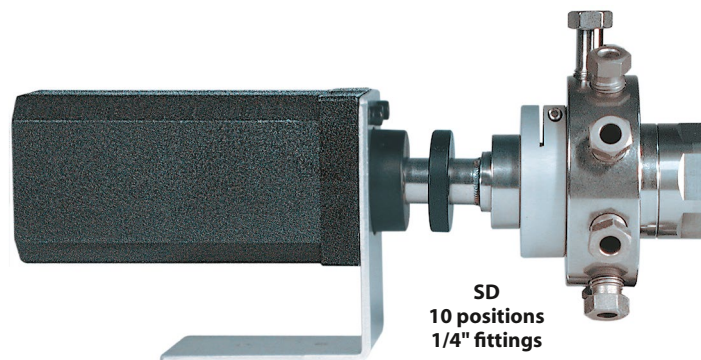
Low pressure

SD  
 Dead-end

1/4"

4.0 mm

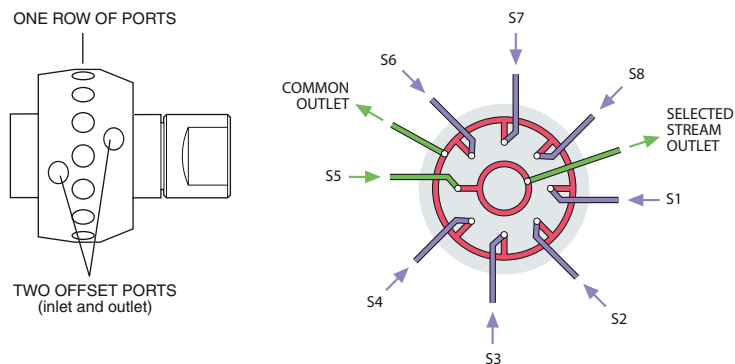
	<b>4 Position</b> <i>Prod No</i>	<b>6 Position</b> <i>Prod No</i>	<b>8 Position</b> <i>Prod No</i>	<b>10 Position</b> <i>Prod No</i>
With air actuator	AH2VLS4MWE2	AH2VLS6MWE2	AH2VLS8MWE2	AH2VLS10MWE2
With microelectric actuator	EMT2VLS4MWE2	EMT2VLS6MWE2	EMT2VLS8MWE2	EMT2VLS10MWE2
Replacement valve	DVLS4MWE2	DVLS6MWE2	DVLS8MWE2	DVLS10MWE2
Replacement rotor	SSAVLS4MWE2	SSAVLS6MWE2	SSAVLS8MWE2	SSAVLS10MWE2



**VALCO VALVES**

### 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 137.



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

MW Type

**Low pressure**

**SC**  
**Common outlet**

**1/16"** **1.0 mm**

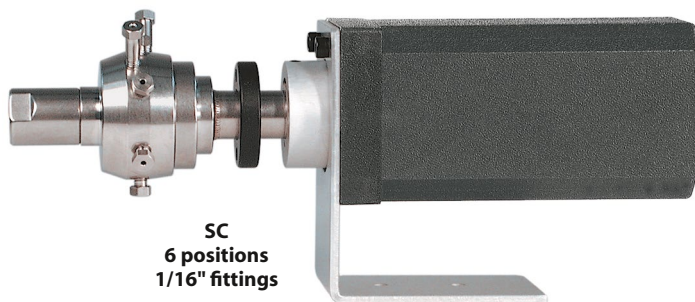
Includes 2" standoff. Ask about closemount assembly if valve will not be heated.  
Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

**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)

	<b>6 Position</b> <i>Prod No</i>	<b>10 Position</b> <i>Prod No</i>	<b>12 Position</b> <i>Prod No</i>	<b>16 Position</b> <i>Prod No</i>
Manual (not recommended)	2CSC6MWE	2CSC10MWE	2CSC12MWE	2CSC16MWE
With air actuator	AH2CSC6MWE	A2CSC10MWE	A2CSC12MWE	A2CSC16MWE
With microelectric actuator	EMT2CSC6MWE	EMT2CSC10MWE	EMT2CSC12MWE	EMT2CSC16MWE
Replacement valve	DCSC6MWE	DCSC10MWE	DCSC12MWE	DCSC16MWE
Replacement rotor	SSACSC6MWE	SSACSC10MWE	SSACSC12MWE	SSACSC16MWE



**MORE INFORMATION**

Application..... page 137

Actuators

- Air ..... 196
- Microelectric ..... 192
- Universal ..... 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.  
Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

**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

Low pressure

SC  
Common outlet

1/8" 1.0 mm

	<b>6 Position</b> <i>Prod No</i>	<b>10 Position</b> <i>Prod No</i>	<b>12 Position</b> <i>Prod No</i>	<b>16 Position</b> <i>Prod No</i>
Manual (not recommended)	2SC6MWE	2SC10MWE	2SC12MWE	2SC16MWE
With air actuator	AH2SC6MWE	A2SC10MWE	A2SC12MWE	A2SC16MWE
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.  
Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

**OPTIONS**

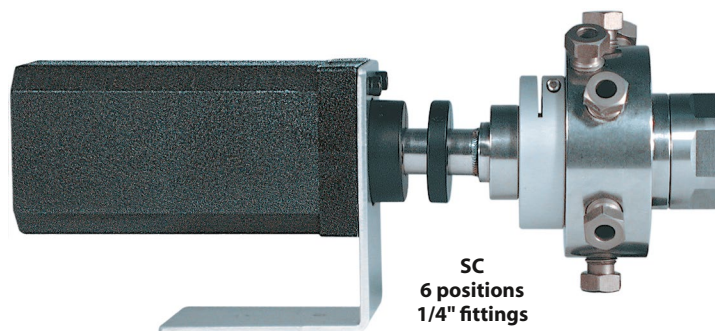
- 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see pages 254-255)

Low pressure

SC  
Common outlet

1/4" 4.0 mm

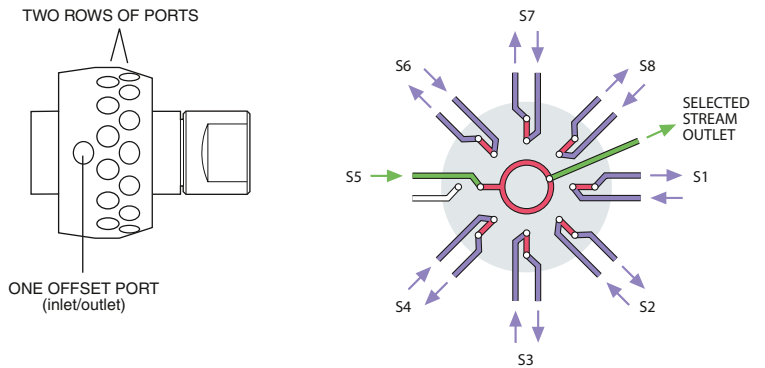
	<b>4 Position</b> <i>Prod No</i>	<b>6 Position</b> <i>Prod No</i>	<b>8 Position</b> <i>Prod No</i>
With air actuator	AH2VLSC4MWE2	AH2VLSC6MWE2	AH2VLSC8MWE2
With microelectric actuator	EMT2VLSC4MWE2	EMT2VLSC6MWE2	EMT2VLSC8MWE2
Replacement valve	DVLSC4MWE2	DVLSC6MWE2	DVLSC8MWE2
Replacement rotor	SSAVLSC4MWE2	SSAVLSC6MWE2	SSAVLSC8MWE2



**VALCO VALVES**

**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 138.



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

MW Type

**Low pressure**

**SF**  
**Flow-through**

**1/16"**   **1.0 mm**

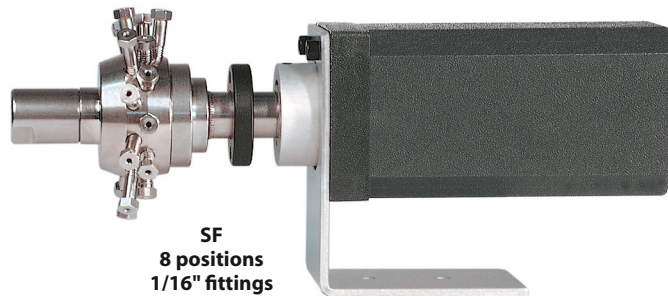
Includes 2" standoff. Ask about closemount assembly if valve will not be heated.  
Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

**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)

	<b>6 Position</b> <i>Prod No</i>	<b>10 Position</b> <i>Prod No</i>	<b>12 Position</b> <i>Prod No</i>	<b>16 Position</b> <i>Prod No</i>
Manual (not recommended)	2CSF6MWE	2CSF10MWE	2CSF12MWE	2CSF16MWE
With air actuator	AH2CSF6MWE	A2CSF10MWE	A2CSF12MWE	A2CSF16MWE
With microelectric actuator	EMT2CSF6MWE	EMT2CSF10MWE	EMT2CSF12MWE	EMT2CSF16MWE
Replacement valve	DCSF6MWE	DCSF10MWE	DCSF12MWE	DCSF16MWE
Replacement rotor	SSACSF6MWE	SSACSF10MWE	SSACSF12MWE	SSACSF16MWE



**MORE INFORMATION**

Application..... page 138

Actuators

- Air ..... 196
- Microelectric ..... 192
- Universal ..... 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.  
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

	<b>6 Position</b> <i>Prod No</i>	<b>10 Position</b> <i>Prod No</i>	<b>12 Position</b> <i>Prod No</i>	<b>16 Position</b> <i>Prod No</i>
Manual (not recommended)	2SF6MWE	2SF10MWE	2SF12MWE	2SF16MWE
With air actuator	AH2SF6MWE	A2SF10MWE	A2SF12MWE	A2SF16MWE
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.  
Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

Low pressure

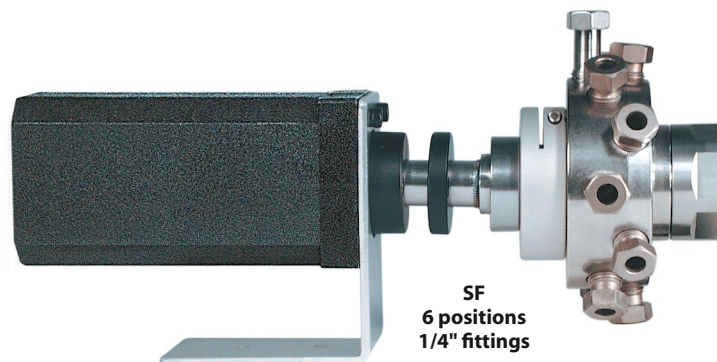
SF  
Flow-through

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)

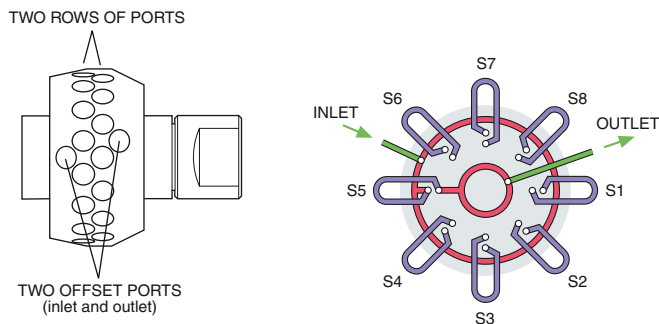
	<b>4 Position</b> <i>Prod No</i>	<b>6 Position</b> <i>Prod No</i>	<b>8 Position</b> <i>Prod No</i>
With air actuator	AH2VLSF4MWE2	AH2VLSF6MWE2	AH2VLSF8MWE2
With microelectric actuator	EMT2VLSF4MWE2	EMT2VLSF6MWE2	EMT2VLSF8MWE2
Replacement valve	DVLSF4MWE2	DVLSF6MWE2	DVLSF8MWE2
Replacement rotor	SSAVLSF4MWE2	SSAVLSF6MWE2	SSAVLSF8MWE2



**VALCO VALVES**

## 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 139.



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

MW Type

**Low pressure**

**ST Trapping**

**1/16" 0.75 mm**

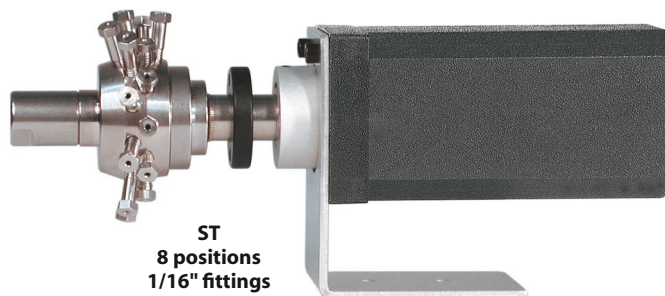
Includes 2" standoff. Ask about closemount assembly if valve will not be heated.  
Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

**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)

	<b>6 Position</b> <i>Prod No</i>	<b>10 Position</b> <i>Prod No</i>	<b>12 Position</b> <i>Prod No</i>	<b>16 Position</b> <i>Prod No</i>
Manual (not recommended)	2CST6MWE	2CST10MWE	2CST12MWE	2CST16MWE
With air actuator	AH2CST6MWE	A2CST10MWE	A2CST12MWE	A2CST16MWE
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. **Request matched loops when loops will be installed on a single valve.**

Volume	Prod No	Volume	Prod No
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 139

Actuators

- Air ..... 196
- Microelectric ..... 192
- Universal ..... 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.  
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 <i>Prod No</i>	10 Position <i>Prod No</i>	12 Position <i>Prod No</i>	16 Position <i>Prod No</i>
Manual (not recommended)	2ST6MWE	2ST10MWE	2ST12MWE	2ST16MWE
With air actuator	AH2ST6MWE	A2ST10MWE	A2ST12MWE	A2ST16MWE
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.
- Sample loop shape and dimensions may vary from batch to batch due to fluctuations in tubing ID. Loop volume is controlled as closely as possible, but is not calibrated.



1/8" Stainless steel loops for MW Type valves

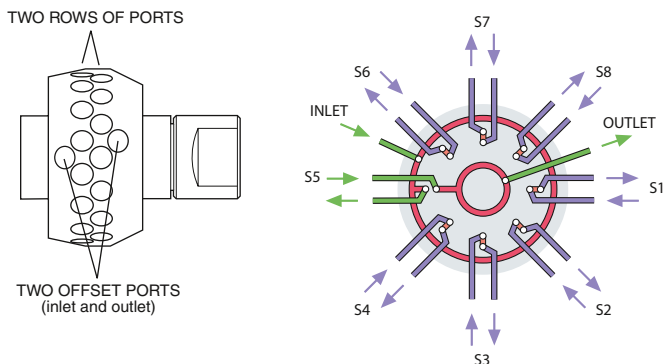
Each stainless steel loop includes two stainless nuts and two stainless ferrules. Order special fittings separately. **Request matched loops when loops will be installed on a single valve.**

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

**VALCO VALVES**

### 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 140.



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

MW Type

**Low pressure**

**STF**  
Trap/ flow-throw

**1/16"** **0.75 mm**

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

	<b>6 Position</b> <i>Prod No</i>	<b>10 Position</b> <i>Prod No</i>	<b>12 Position</b> <i>Prod No</i>	<b>16 Position</b> <i>Prod No</i>
Manual (not recommended)	2CSTF6MWE	2CSTF10MWE	2CSTF12MWE	2CSTF16MWE
With air actuator	AH2CSTF6MWE	A2CSTF10MWE	A2CSTF12MWE	A2CSTF16MWE
With microelectric actuator	EMT2CSTF6MWE	EMT2CSTF10MWE	EMT2CSTF12MWE	EMT2CSTF16MWE
Replacement valve	DCSTF6MWE	DCSTF10MWE	DCSTF12MWE	DCSTF16MWE
Replacement rotor	SSACSTF6MWE	SSACSTF10MWE	SSACSTF12MWE	SSACSTF16MWE

**MORE INFORMATION**

Application..... page 140

Actuators

- Air ..... 196
- Microelectric ..... 192
- Universal ..... 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.  
 Microelectric actuators: 24 VDC (includes a 110/230 VAC to 24 VDC power supply)

Low pressure

STF  
 Trap/ flow-throw

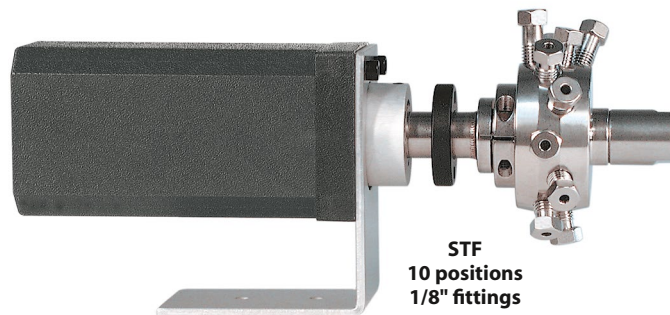
1/8"

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

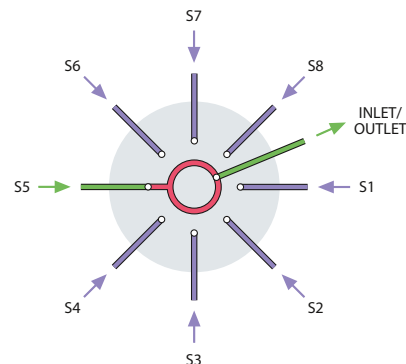
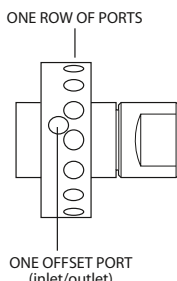
	<b>6 Position</b> <i>Prod No</i>	<b>10 Position</b> <i>Prod No</i>	<b>12 Position</b> <i>Prod No</i>	<b>16 Position</b> <i>Prod No</i>
Manual (not recommended)	2STF6MWE	2STF10MWE	2STF12MWE	2STF16MWE
With air actuator	AH2STF6MWE	A2STF10MWE	A2STF12MWE	A2STF16MWE
With microelectric actuator	EMT2STF6MWE	EMT2STF10MWE	EMT2STF12MWE	EMT2STF16MWE
Replacement valve	DSTF6MWE	DSTF10MWE	DSTF12MWE	DSTF16MWE
Replacement rotor	SSASTF6MWE	SSASTF10MWE	SSASTF12MWE	SSASTF16MWE



**VALCO VALVES**

## Dead-end flowpath – SD configuration

SD valves select one of 4 to 12 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 141.



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

UW Type

5,000 psi

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

SD  
Dead-end

**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 p.254-255)
- Low pressure, high temperature versions available
- Larger bore available except 10 and 12 positions

**SPECS**

5000 psi liq  
75°C max  
Nitronic 60 body  
Valcon E rotor

1/16" 0.40 mm

	<b>4 Position</b> <i>Prod No</i>	<b>6 Position</b> <i>Prod No</i>	<b>10 Position</b> <i>Prod No</i>
Manual (not recommended)	CSD4UW	CSD6UW	CSD10UW
With air actuator	ACSD4UW	ACSD6UW	ACSD10UW
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

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

SD  
Dead-end

**OPTIONS**

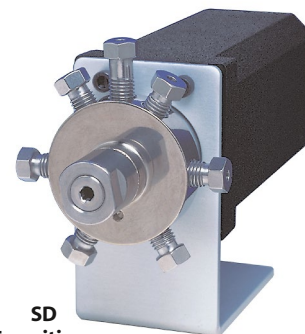
- 2", 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see p.254-255)
- Low pressure, high temperature versions available
- Larger bore available except 8 position

**SPECS**

5000 psi liq  
75°C max  
Nitronic 60 body  
Valcon E rotor

1/8" 0.75 mm

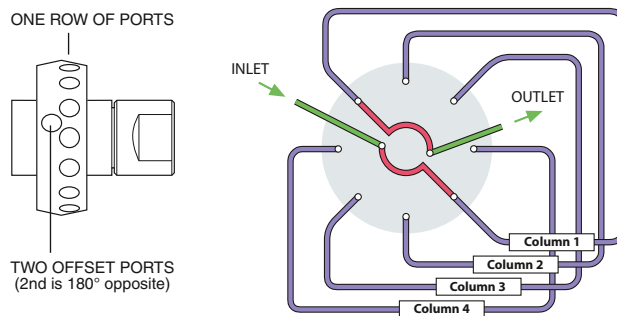
	<b>4 Position</b> <i>Prod No</i>	<b>6 Position</b> <i>Prod No</i>	<b>8 Position</b> <i>Prod No</i>
Manual (not recommended)	SD4UW	SD6UW	SD8UW
With air actuator	ASD4UW	ASD6UW	ASD8UW
With microelectric actuator	EMTSD4UW	EMTSD6UW	EMTSD8UW
Replacement valve	DSD4UW	DSD6UW	DSD8UW
Replacement rotor	SSASD4UW	SSASD6UW	SSASD8UW



SD  
6 positions  
1/8" fittings

## Both column ends selected – ST configuration

ST selectors are used for multi-column, multi-sample, or multi-trap operations. This valve can be used between an injector and detector to permit manual or automated HPLC column selection. For an application suggestion, see page 141.



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

UW Type

#### SPECS

5000 psi liq  
75°C max  
Nitronic 60 body  
Valcon E rotor

Manual versions are not available.

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

#### OPTIONS

- 2", 3", 4", and 6" standoffs
- Materials: Hastelloy C, Inconel 600, Monel 400, Nickel 200, Nitronic 50, Titanium (see p.254-255)
- Low pressure, high temperature versions available. (Consult factory.)

5,000 psi

ST Trapping

1/16" 0.4 mm

#### 4 Columns or Loops

Prod No

ACST4UW

EMTCST4UW

DCST4UW

SSACST4UW

#### 6 Columns or Loops

Prod No

ACST6UW

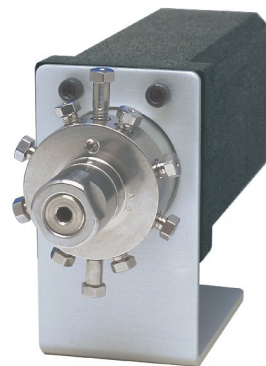
EMTCST6UW

DCST6UW

SSACST6UW

With air actuator  
With microelectric actuator

Replacement valve  
Replacement rotor



ST  
4 position  
1/16" fittings

#### ABOUT LOOPS

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



### 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. **Request matched loops when loops will be installed on a single valve.**

Volume	Prod No	Volume	Prod No
10 µl	SL10CSTUW	250 µl	SL250CSTUW
15 µl	SL15CSTUW	500 µl	SL500CSTUW
20 µl	SL20CSTUW	1 ml	SL1KCSTUW
25 µl	SL25CSTUW	2 ml	SL2KCSTUW
50 µl	SL50CSTUW	5 ml	SL5KCSTUW
100 µl	SL100CSTUW	10 ml	SL10KCSTUW