

## Transfer Valve

### TRANSFER VALVE L-MOTION, SERIES V74

For load lock and process chamber isolation in SEMI production system. Suitable for corrosive process such as Etch or CVD.



#### APPLICATIONS

- Semiconductor processing
- Plasma Etch, CVD, sputter deposition
- Manufacturing of solar panels
- LCD/flat panel process
- All other cluster vacuum systems

#### MAIN FEATURES

- Semi standard application (Semi E21- 94, Semi E24- 92, Semi- E21.1-1296)
- Patented L-motion link and dual shifts without springs in the actuator enable faster, smoother actuation with significantly reduced vibration
- Single pneumatic actuator
- Mechanical lock at the close position
- Welded bellows actuator seal
- Bonnet flange bolts are designed with retainers to eliminate bolts from falling out upon disassembly

#### OPTIONS

- Custom opening size available
- Stainless steel solution
- Various O-ring (Kalrez<sup>®</sup>, Chemraz<sup>®</sup> etc.)

#### Valve A = B with pneumatic actuator

with position indicator  
double action

DN mm	Ordering Number	
	blank aluminum	hard anodized aluminum
46 x 236	V74-P-423-2-1-BBAECAB-A	on request
50 x 336	V74-P-533-7-1-BFAHCAC-A	on request
Other size on request		

With solenoid valve is an option

#### Valve A < B with pneumatic actuator

with position indicator  
double action

DN mm	Ordering Number	
	blank aluminum	hard anodized aluminum
30 x 110	V74-P-310-1-1-DAAHCAB-A	on request
32 x 222	V74-P-322-1-1-CAAHBAB-A	on request
46 x 236	V74-P-423-2-1-DBAHCAB-A	on request
50 x 336	V74-P-533-7-1-CFABCAB-A	on request
Other size on request		

With solenoid valve is an option

Actuator		Pneumatic
Leak rates	Valve body, seat	$< 1 \times 10^{-9}$ mbar l/s
Pressure range		$1 \times 10^{-9}$ mbar to 1.2 bar
Differential pressure on the gate in opening direction		$\leq 1.2$ bar
Differential pressure on the gate in closing direction		$\leq 1.2$ bar
Differential pressure at the opening		$\leq 30$ mbar
Life cycle until first service	Mechanism O-ring	$\geq 2,000,000$
Temperature	Valve body Valve gate Actuator	$\leq 120^{\circ}\text{C}$ $\leq 120^{\circ}\text{C}$ $\leq 60^{\circ}\text{C}$
Material	Valve body Valve gate Bonnet Shaft Mechanism Bellow Bellow end piece	EN AW-6061 (3.3211) EN AW-6061 (3.3211) EN AW-6061 (3.3211) AISI 304 (1.4301) EN AW-6061 (3.3211) AISI 633 (AM350) AISI 316L (1.4435)
Surface treatment	Valve body Valve gate Bonnet Shaft Actuator	Bare Bare Bare Bare White hard anodization
Seal	Bonnet, gate	FKM (Viton <sup>®</sup> )
Feed through		Bellows
Solenoid valve		24V DC or on request
Position indicator	Type Voltage Current Connector	Micro switch 24V DC 0-80 mA D-Sub 9 pin male
Air pressure		4.5 - 6 bar
Mounting position		Actuator up or down
Air failure		Lock at close position
Compress air connection		Quick connector OD 6mm
Options		<ul style="list-style-type: none"> <li>·Hard anodized aluminum surface</li> <li>·Sealing surface or groove for O-ring seal</li> <li>·Screw holes outside or inside of the sealing line</li> <li>·FFKM sealing material is available</li> <li>·Other solenoid valve voltage (standard 24V DC)</li> </ul>