

# DELTA SWCIP4

DOUBLE SEAL VALVE





SPX is highly committed to delivering sustainable solutions, which exceed customer expectations in value and return through a focus on.

- Waste prevention and loss reduction
- Reuse of resources
- Improved value of raw materials
- Water and energy reduction
- Product safety and security
- Social responsibility

It's hard to find a more comprehensive portfolio of processing equipment anywhere else. Many of our designs incorporate patented features and our research and development efforts continue to produce ground breaking technologies. When you specify our equipment you get more than a product – you get a partner.

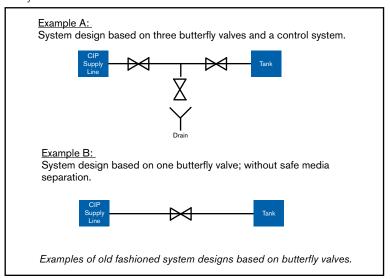
Engineering excellence, allied to stringent quality control, ensures that SPX's unrivalled range of APV products complies with the highest international standards for hygiene. In the light of growing pressure worldwide to deliver safe, high quality food, all SPX products are designed for easy cleanability, while minimizing the use of valuable resources, such as energy. The APV product portfolio includes a wide range of pumps, valves, heat exchangers, mixers and homogenizers designed for use in the food, dairy and brewing industries, as well as in chemical, healthcare, pharmaceutical processing and heavy industries.

### DELTA SWcip4 Double Seal Valves

#### PRODUCT BENEFITS AND FEATURES

### **Perfect for CIP Applications**

The DELTA SWcip4 valve is a modern double seal valve designed especially for CIP applications. The valve replaces old-fashioned block and bleed concepts based on three butterfly valves or double butterfly valves. With two serial seat seals and a separation cavity, the DELTA SWcip4 ensures that intermixing of CIP media is avoided. The valve is the answer to increasing product safety demands in CIP systems.



### **Simplified and Robust Design**

A simplified low-weight design with a sturdy globular valve body, two serial seat seals, only one leakage valve and a clamp housing closure, makes the DELTA SWcip4 valve a "fit for purpose" and price competitive solution.

### **Long Seal Life**

Sealings designed with metallic stop ensure limited elastomer compression and, consequently, avoidance of sealing overstress.

#### **Easy to Operate and Service**

The simplified design with a leakage discharge valve controlled via air hose from the pneumatic actuator makes it very easy to install and operate the valve. Furthermore, the easy access to the hexagon nut shaft coupling positioned at the top of the actuator makes it simple to handle the valve during service.

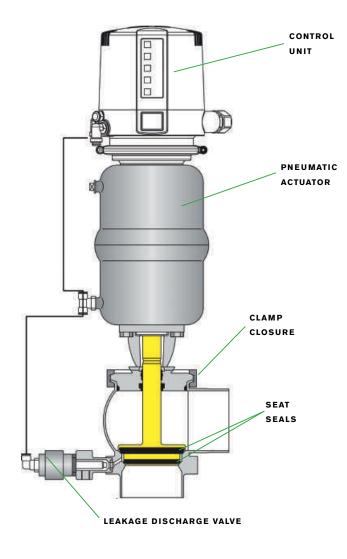
### **Optimal Resistance Against CIP Media**

The use of high-quality EPDM seals as well as high-quality stainless steel ensures optimal resistance against acids and caustic solutions. The profiled seat seals are marked with identification numbers preventing the installation of wrong seals.

### THEORY OF OPERATION

The DELTA SWcip4 design is universally applicable and stands out for its high mechanical reliability and its absolute ease of handling.

The SWcip4 valve is used for the safe separation of CIP liquids at crossover points of piping in CIP stations.



Separation is provided by two seat seals. A leakage chamber which is forcibly closed by a leakage valve or open to the atmosphere, is located between the seals. Leakage at the seat seals is indicated and discharged to the atmosphere by the leakage valve.

The valves are operated by a maintenance-free actuator.

# Typical product applications

The DELTA SWcip4 valve is relevant for applications in the CIP room that require safe liquid separation within the following sectors:

### **Beverage**



### Food



### Dairy



### **Pharmaceuticals**



### Chemical



## **Product Specifications**

### MATERIALS

PRODUCT WETTED METALLIC PARTS	SS 316L	
OTHER METALLIC PARTS	SS 304	
SEALS	EPDM (FDA compliant)	

### TECHNICAL DATA

FUNCTIONALITY	Shut-off
SIZES	DN25 to DN150 1" to 4"
MAX. LINE PRESSURE	10 bar (145 PSI)
MAX. OPERATING TEMPERATURE	EPDM 135°C / 275°F
MAX. TEMPERATURE (SHORT TERM)	EPDM 140°C / 284°F
AIR CONNECTION, HOSE	6x1 mm
MIN. CONTROL AIR PRESSURE	6 bar / 87 PSI
MAX. CONTROL AIR PRESSURE	8 bar / 116 PSI
CONNECTION, LEAKAGE VALVE	G 1/8"
ACTUATOR	Stainless steel and maintenance-free
CONNECTIONS	Butt-weld ends only



DELTA SWCIP41 HOUSING VARIANT



DELTA SWCIP42 HOUSING VARIANT

### Options & Accessories

DELTA SWcip4 valves are available with proximity switch holder or a control unit.

#### PROXIMITY SWITCH HOLDER

Proximity switches to signal the final position of the valve seat can be mounted to the proximity switch holders if required.

#### **DELTA CU CONTROL TOP**

The DELTA CU control units, used on various APV valve lines, are also available with the DELTA SWcip4 valves. The control unit operates as interface between process control and valve and controls the electric and pneumatic signals.

APV DELTA CU control units are very robust, easy to maintain, and designed to operate in tough environments. Signal data are easily visible on an exterior LED (electronic lights).

DELTA CU control units are available with or without a NOT element. A NOT element provides automatic air assist to back side of piston to increase product holding pressure

### INTERFACE OPTIONS

- DELTA CU4 Direct Connect (hard wire)
- DELTA CU4 AS-Interface, 31 or 62 slaves
- Profibus and DeviceNet (DELTA CU3)

### **POSITION INDICATION**

• 2 internal feedback sensor switches for valve open/valve closed position detection

### SOLENOID VALVES

1 Solenoid

### **PROTECTION CLASS**

- IP67
- NEMA 6

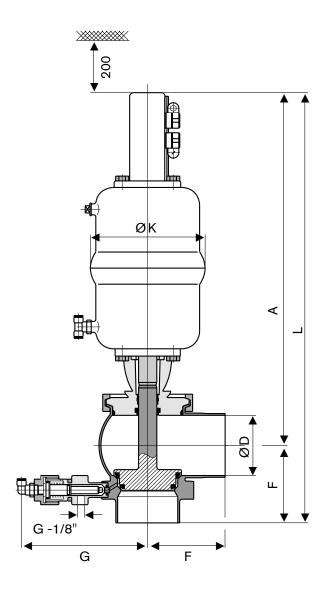


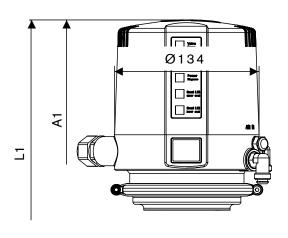




### Dimensional Data

VALVE	VALVE							WEIGHT	
SIZE	A	A1	ØD	F	G	øĸ	L	L1	KG
DN25	338	398	26	50	116	86	388	448	5.2
DN40	342	402	38	67	122	86	409	469	5.8
DN50	379	439	50	72	128	126	451	511	8.0
DN65	387	447	66	85	136	126	472	532	9.7
DN80	440	500	81	98	144	189	538	598	16.0
DN100	450	510	100	111	153	189	561	621	17.8
DN125	510	582	125	150	172	263	660	732	47.4
DN150	522	564	150	150	192	263	672	744	52.5
1"	336	396	22.6	50	116	86	386	446	5.2
1.5"	340	400	34.9	67	122	86	407	467	5.8
2"	378	438	47.6	72	128	126	450	510	8.0
2.5"	384	444	60.3	85	133	126	469	529	9.7
3"	435	495	72.9	90	140	189	525	585	16.0
4"	448	508	97.6	111	153	189	559	619	17.8

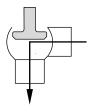




### Additional Technical Information

### MAX. HOLDING PRESSURES (WITHOUT NOT ELEMENT)

VALVE	DIAMETER, ACTUATOR					
SIZE	74 MM	110 MM	165 MM	255 MM		
DN25/1"	10.0 bar	-	-	-		
DN40/1.5"	6.0 bar	-	-	-		
DN50/2"	-	9.0 bar	-	-		
2.5"	-	6.0 bar	-	-		
DN65	-	5.7 bar	-	-		
3"	-	-	9.7 bar	-		
DN80	-	-	9.0 bar	-		
DN100/4"	-	-	5.7 bar	-		
DN125	-	-	-	5.0 bar		
DN150	-	-	-	6.8 bar		



### Kvs VALUES

	SWcip41, 42	SWcip41, 42	SWcip42			
VALVE Size	m³/h					
	-		-			
D N 2 5	16	13	28			
DN40	35	31	60			
DN50	63	57	120			
D N 6 5	131	112	215			
DN80	159	151	350			
DN100	207	209	540			
DN125	289	289	820			
DN150	406	406	1200			
1"	15	13	26			
1.5"	35	31	57			
2"	62	53	118			
2.5"	112	102	185			
3"	142	127	300			
4"	196	205	530			

### Double Seal Valves

**DELTA SWcip4** 



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#### ABOUT SPX

Based in Charlotte, North Carolina, SPX Corporation (NYSE: SPW) is a global Fortune 500 multi-industry manufacturing leader. For more information, please visit www.spx.com.

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