

APV VALVES

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.

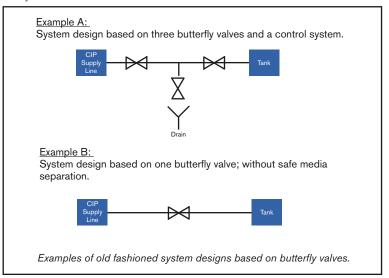
Engineering excellence, allied to stringent quality control, ensures that SPX's unrivalled range of APV products complies with the highest international standards for hygiene. In the light of growing pressure worldwide to deliver safe, high quality food, all SPX products are designed for easy cleanability, 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.

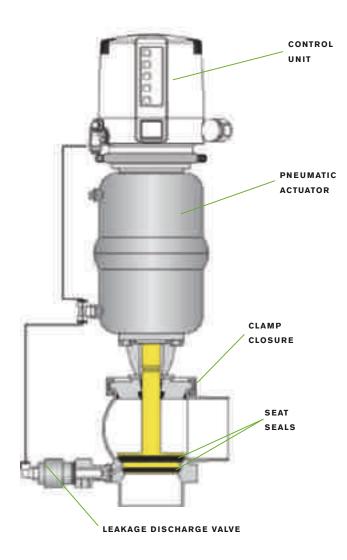
Optimal Resistance Against CIP Media

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





Dairy

Food



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

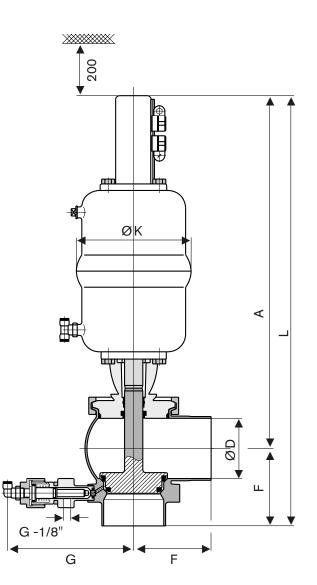


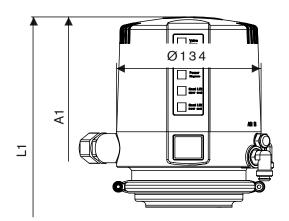




Dimensional Data

| VALVE | мм | | | | | | | WEIGHT | |
|-------|-----|-----|------|-----|-----|-----|-----|--------|------|
| SIZE | A | A1 | ØD | F | G | ØK | 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 |

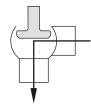




Additional Technical Information

| VALVE SIZE | DIAMETER, ACTUATOR | | | | | |
|---------------|--------------------|---------|---------|---------|--|--|
| | 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 | | |

MAX. HOLDING PRESSURES (WITHOUT NOT ELEMENT)



Kvs VALUES

| | SWcip41, 42 | SWcip41, 42 | SWcip42 | | | | |
|---------------|-------------|-------------|---------|--|--|--|--|
| VALVE | m³/h | | | | | | |
| VALVE SIZE | | | | | | | |
| DN25 | 16 | 13 | 28 | | | | |
| DN40 | 35 | 31 | 60 | | | | |
| DN50 | 63 | 57 | 120 | | | | |
| DN65 | 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 | | | | |

SPX.

Global locations

USA

SPX FLOW TECHNOLOGY

611 Sugar Creek Road Delavan, WI 53115 USA + 1-888 278 4321

APAC

SPX FLOW TECHNOLOGY 25 International Business Park #03-03/12, German Centre Singapore 609916 +65 6264 4366

EMEA

SPX FLOW TECHNOLOGY The Beehive, City Place Beehive Ring Road Gatwick, West Sussex RH6 0PA United Kingdom +44 (0) 1293 527 777

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.

SPX FLOW TECHNOLOGY

Zechenstraße 49 D-59425 Unna Germany Phone: +49(0) 23 03 / 108-0 Fax: +49(0) 23 03 / 108-210

SPX reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region. For more information visit www.spx.com.

The green ">" is a trademark of SPX Corporation, Inc.

APV-8041-GB Version: 02/2014 Issued: 02/2014

Double Seal Valves

DELTA SWcip4