

DELTA SW4 dn25 - dn150 (1" - 4", 6")

Based on more than 60 years experience in valve production SPX has developed the DELTA SW4 hygienic single seat valve: a modern, highly versatile single seat valve, which does not only fulfil the demands of today's process industry but also a great deal of tomorrow's.

Installing the DELTA SW4 valves is an investment in efficiency, production flexibility or in other words: in the future. When designing this valve great emphasis has been put on facilitating valve handling, installation and maintenance.



Characteristics

Its hygienic design makes it ideal for applications in the dairy, beverage and brewing industries, as well as the chemical and pharmaceutical industries.

The valve is EHEDG tested and it is available in on/off and change-over versions. The valve can also be supplied in 3A approved design.

Features & benefits

Sturdy ball shaped housing designed for optimum cleanability. The extra wall thickness of the valve housing minimises stresses in the seat area. At the same time the ball shaped housing effectively prevents sump or dome, making CIP-cleaning more efficient and more reliable. A comprehensive range of valve housings are available to cover any requests.

Controlled compression of seat seal

The metallic stop ensures defined compression of the seat seal, reducing material stress. Production downtime can by minimized. Furthermore, this arrangement ensures smooth product transition in this area. Wear resistant elastomer/PTFE shaft seal and shaft bearing arrangement increases seal lifetime and consequently minimises maintenance costs and general downtime.

Installation and maintenance convenience

- A handy clamp closure system or a few bolts (DN125-150 and 6") between housing and yoke provides quick and easy access to product-wetted parts. The housings (DN25-100 and 1" 4") may be orientated in various directions to ensure multiple installation possibilities.
- Moulded elastomer profile seals with clear identification markings ensure prompt and failsafe identification of seals during maintenance.
- Only one hexagonal nut outside the product area ensures quick and easy service of the valve.
- Different actuator sizes are available, and for DN40-100 and 1½" - 4" these are interchangeable. This means that different holding pressures can be handled.
- Actuator design prepared for NC/NO (Normally closed / normally open).
- Despite the thick-walled housing the valve is very low weight.
- Maintenance-free actuator, covered by our 5-year guarantee.



Control Units

The DELTA SW4 valves can be delivered with a comprehensive range of DELTA CU control units. The DELTA CU are electrically provided to connect direct to a PLC system (DELTA CU Direct connect). Optional to support fieldbus protocols like AS-i, Profibus and DeviceNet.

Options for DELTA SW4

In order to handle every inquiry the following options are available:

- Stroke limitator (DN25-100 and 1" 4")
- Crank handle for manual operation (DN25-150 and 1" 4", 6")
- Oil damp cylindre (DN25-100 and 1" 4")
- Steam barrier
- Long stroke (DN50-100 and 2" 4")
- Tangential inlet (1" 4" imperial sizes only)
- Proximity holder
- Tank outlet version
- 3.1 certificate
- 3A version



Technical data

| SIZES " | DN25 - DN150 (1" - 4", 6") |
|---------------------------|--|
| PRODUCT WETTED PARTS | 1.4404 / AISI 316L |
| NON-PRODUCT WETTED PARTS | 1.4301 / AISI 304 |
| SEAL MATERIALS | EPDM Optional: HNBR, FPM, VMQ |
| MAX. TEMPERATURE | EPDM, HNBR, FPM and VMQ: 135°C / 278°F (Short term: 140°c/284°F) VMQ and FPM should not be used with hot water/steam |
| MAX. LINE PRESSURE | 10 bar |
| MIN. CONTROL AIR PRESSURE | 6 bar |
| MAX. CONTROL AIR PRESSURE | 8 bar |

^a For fractional sizes, see DELTA SWmini4 data sheet.



Max. Holding Pressures

(Bold figures indicate the standard holding pressure)

| | SW41 (NC) SW43 (NC). LOWER SEAT | | | | SW41 (NO) SW43 (NO) 6 BAR AIR PRESSURE | | | SW43 (NC) UPPER SEAT 6 BAR AIR PRESSURE | | | | SW43 (NO) UPPER SEAT | | | | |
|-------------|------------------------------------|------|------|-----|--|------|------|--|------|------|------|----------------------|------|-----|------|-----|
| VALVE | DIAMETER. ACTUATOR (MM) | | | | | | | | | | | | | | | |
| SIZE | 74 | 110 | 165 | 255 | 74 | 110 | 165 | 255 | 74 | 110 | 165 | 255 | 74 | 110 | 165 | 255 |
| DN25 1" | 11.7 | - | - | - | 11.2 | - | - | - | 20.3 | - | - | - | 21.2 | - | - | - |
| DN40 1½" | 5 | 12.5 | - | - | 5.4 | 11.2 | - | - | 6.9 | 14.4 | - | - | 6 | 16 | - | - |
| DN50 2" | 2.8 | 7.6 | 19.6 | - | 3.4 | 7.1 | 16.8 | - | 4 | 8.3 | 19.5 | - | 3.3 | 8.8 | 22.8 | - |
| 2 1/2 " | 2 | 5.4 | 13.8 | - | 2.4 | 5 | 11.9 | - | 2.7 | 5.5 | 13.1 | - | 2.2 | 6 | 15.3 | - |
| DN65 | 1.7 | 5 | 11.7 | - | 2 | 5 | 10 | - | 2.2 | 5 | 10.9 | - | 1.8 | 5 | 12.7 | - |
| 3" | - | 3.8 | 9.9 | - | - | 3.6 | 8.5 | - | - | 3.8 | 9.1 | - | - | 4.1 | 10.6 | - |
| DN80 | - | 3.1 | 7.9 | - | - | 2.9 | 6.8 | - | - | 3 | 7.2 | - | - | 3.3 | 8.4 | - |
| DN100 4" | - | 2.1 | 5.3 | - | - | 1.9 | 5 | - | - | 2 | 5 | - | - | 2.1 | 5.5 | - |
| DN125 | - | - | - | 6.8 | - | - | - | 6.8 | - | - | - | 6.8 | - | - | - | 6.8 |
| DN150 | - | - | - | 5 | - | - | - | 5 | - | - | - | 5 | - | - | - | 5 |



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