

DELTA SW4 Series

SINGLE SEAT VALVES



Based on more than 60 years of experience in valve production SPX FLOW has developed the DELTA SW4 hygienic single seat valve: a modern, highly versatile valve, which fulfills the demands of today's food and beverage processing industry.

Installing the DELTA SW4 valves is an investment in efficiency, and production flexibility towards the future. When designing this valve, great emphasis was put on facilitating valve handling, installation and maintenance.

CHARACTERISTICS

The SW4 hygienic design makes it ideal for applications in the dairy, processed food, beverage and brewery industries, as well as chemical and pharmaceutical applications.

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

FEATURES & BENEFITS

Housing designed for optimum cleanability.

The globe shaped housing effectively prevents sump or dome, thus optimizing valve cleanability and reducing CIP-time. Also, the extra wall thickness of the valve housing minimizes stresses in the seat area. 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. This reduces stress on the seat material, extends seal life, and minimizes product downtime for maintenance. Furthermore, the wear resistant elastomer/PTFE shaft seal and shaft bearing arrangement increases seal life and consequently minimizes maintenance costs and general downtime.

Installation and maintenance convenience.

- A handy clamp closure system or a few bolts (only on 6" and DN125-150) between housing and yoke provides quick and easy access to product-wetted parts. The housings (1"-4" and DN25-100) may be orientated in various directions to ensure multiple installation possibilities
- Molded elastomer profile seals with clear identification markings ensures quick, easy, and error-free 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 1.5"-4" and DN40-100 these are interchangeable. This means that different holding pressures can be handled
- Actuator design is suited for NC/NO (Normally closed/ normally open) and the spring direction can be reversed easily in the field
- Despite the thick-walled housing, the valve is very light weight.
- Maintenance-free actuator; covered by the 5-year APV warranty

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) or optional fieldbus protocols like AS-i, Profibus and DeviceNet.

OPTIONS FOR DELTA SW4

In order to handle various inquiries and applications, the following options are available:

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

TECHNICAL DATA

SIZES □	1"-4", 6" (DN25 - DN150)
PRODUCT WETTED PARTS	AISI 316L
NON-PRODUCT WETTED PARTS	AISI 304
SEAL MATERIALS	EPDM Optional: HNBR, FPM, VMQ
MAX. TEMPERATURE	EPDM, HNBR, FPM and VMQ: 275°F/135°C (Short term: 284°F/140°C) VMQ and FPM should not be used with hot water/steam
MAX. LINE PRESSURE	145 PSI (10 bar)
MIN. CONTROL AIR PRESSURE	87 PSI (6 bar)
MAX. CONTROL AIR PRESSURE	116 PSI (8 bar)

□ For fractional sizes, see DELTA SWmini4 data sheet.

MAX. HOLDING PRESSURES: PSI (BAR) (GREEN FIGURES INDICATE THE STANDARD HOLDING PRESSURE)																
VALVE SIZE	SW41 (NC) SW43 (NC). LOWER SEAT				SW41 (NO) SW43 (NO) 87 PSI (6 BAR)				SW43 (NC) UPPER SEAT 87 PSI (6 BAR)				SW43 (NO) UPPER SEAT			
	2.9 (7.4)	4.3 (11.0)	6.5 (16.5)	10.0 (25.5)	2.9 (7.4)	4.3 (11.0)	6.5 (16.5)	10.0 (25.5)	2.9 (7.4)	4.3 (11.0)	6.5 (16.5)	10.0 (25.5)	2.9 (7.4)	4.3 (11.0)	6.5 (16.5)	10.0 (25.5)
DN25 1"	169.79 (11.7)	-	-	-	162.4 (11.2)	-	-	-	294.4 (20.3)	-	-	-	307.5 (21.2)	-	-	-
DN40 1.5"	72.5 (5)	181.3 (12.5)	-	-	78.3 (5.4)	162.4 (11.2)	-	-	100.1 (6.9)	208.9 (14.4)	-	-	87.0 (6)	232.1 (16)	-	-
DN50 2"	40.6 (2.8)	110.2 (7.6)	284.3 (19.6)	-	49.3 (3.4)	103 (7.1)	243.7 (16.8)	-	58.0 (4)	120.4 (8.3)	282.8 (19.5)	-	694.7 (3.3)	127.6 (8.8)	330.7 (22.8)	-
2.5"	29.0 (2)	78.3 (5.4)	200.2 (13.8)	-	34.8 (2.4)	72.5 (5)	172.6 (11.9)	-	39.2 (2.7)	79.8 (5.5)	190.0 (13.1)	-	462.7 (2.2)	87.0 (6)	221.9 (15.3)	-
DN65	24.7 (1.7)	72.5 (5)	169.7 (11.7)	-	29.0 (2)	72.5 (5)	145 (10)	-	31.9 (2.2)	72.5 (5)	158.1 (10.9)	-	378.5 (1.8)	72.5 (5)	184.2 (12.7)	-
3"	-	55.1 (3.8)	143.6 (9.9)	-	-	52.2 (3.6)	123.3 (8.5)	-	-	55.1 (3.8)	132.0 (9.1)	-	-	59.5 (4.1)	153.7 (10.6)	-
DN80	-	45.0 (3.1)	114.6 (7.9)	-	-	42.1 (2.9)	98.6 (6.8)	-	-	43.5 (3)	104.4 (7.2)	-	-	47.9 (3.3)	121.8 (8.4)	-
DN100 4"	-	30.5 (2.1)	76.9 (5.3)	-	-	27.6 (1.9)	72.5 (5)	-	-	29.0 (2)	72.5 (5)	-	-	30.5 (2.1)	79.8 (5.5)	-
DN125	-	-	-	98.6 (6.8)	-	-	-	98.6 (6.8)	-	-	-	98.6 (6.8)	-	-	-	98.6 (6.8)
DN150	-	-	-	72.5 (5)	-	-	-	72.5 (5)	-	-	-	72.5 (5)	-	-	-	72.5 (5)

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