



APV Delta SW4 Single Seat Valves

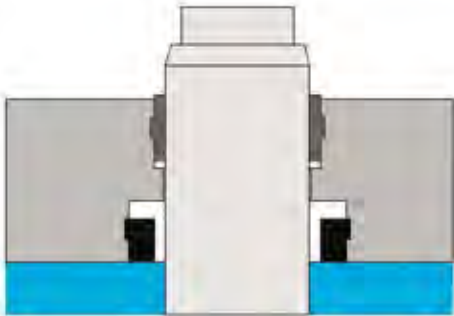
Efficient and Flexible



SW4 Hygienic Design

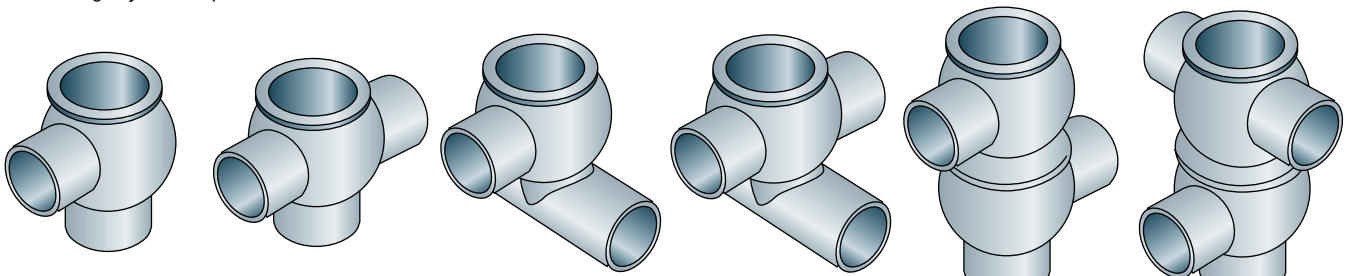


Ball-shaped, pocket- and crevice-free housing.



SW4 shaft seal and bushing arrangement. PTFE shaft seal (white) with elastomer seal (black) to maintain compression. Bushing (dark gray) assures alignment.

SW4 Housing Style Examples



Based on more than 30 years of experience in valve design and production, APV has developed the DELTA SW4 hygienic single seat valve: a modern and highly versatile single seat valve that meets the exceptional demands of today's process industry.

With a focus on uncompromised cleanability, modular design and ease of maintenance, the valve also features concepts that minimize valve weight and dramatically improve both shaft seal and seat seal life. As a result, installing DELTA SW4 valves is a true investment in efficiency and production flexibility.

Applications

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

Housings Provide Durability and Hygiene

Sturdy ball-shaped housings are designed for optimum cleanability. The extra wall thickness of the valve housing minimizes stresses in the seat area. At the same time, the ball-shaped housing effectively prevents sump or dome areas, thus optimizing valve cleanability and reducing CIP time. A comprehensive range of housing styles are available in shut-off, divert and matrix-body designs.

SW4 Seal Concepts Minimize Wear

The metal-to-metal stop ensures defined compression of seat area and minimizes stress and load on seat seals, which in the long run minimizes downtime.

Self-lubricating elastomer/PTFE shaft seal and shaft bushing arrangement increases seal lifetime and consequently minimizes maintenance costs and general downtime.



Modular and Ergonomic



Installation and Maintenance Convenience

A handy clamp closure system between housing and yoke provides quick and easy access to product-wetted parts, and housings may be orientated in various directions to ensure multiple installation possibilities.

Molded elastomer profile seals with clear identification markings ensure prompt and fail-safe identification of seals during maintenance.

Only one hexagonal nut outside the product area ensures quick and easy service of the valve.

A range of interchangeable actuator sizes is available. This means that different product pressures can be handled, i.e. for high pressure applications a larger actuator can be fitted on a small diameter housing.

Absolutely maintenance-free actuator utilizes noncorrosive and low weight components, and is backed by our 5-year guarantee. Actuator maintenance time, labor and parts costs are eliminated.

Fully drainable, even when valve is mounted upside down (outlet valves with large elbows are history).

Also available:

- Pneumatic stroke limitation (3-position)
- Manual operator
- Steam barrier yoke
- Long stroke actuators
- Tangential bodies
- Tank outlet



Reversible valve orientation for either normally closed or normally open operation.



Option examples (L to R): Tangential body (right hand type shown); SW4 6" OD tube size valve; and typical SW4 divert valve with CU control unit.

Advanced Controls



Control Units

DELTA SW4 valves can be delivered with a comprehensive range of DELTA CU control units. Available in Direct Connect (24 VDC or 110 VAC) and fieldbus technology (AS-Interface, DeviceNet and Profibus).



Proximity Switch Feedback Cover

When open and/or closed valve position feedback is all that is needed, consider this simple and cost-effective alternative.

Technical Data

Sizes

OD Tube	1"-4" Standard Stroke (74 mm, 110 mm or 165 mm diameter actuators)
	2"-4" Long Stroke (110 mm or 165 mm diameter actuators)
	6" (250 mm actuator)

Also available, DELTA SWmini4 Series

OD Tube	1/2" Tri-Clamp and 3/4" Tri-Clamp
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Materials

Product Wetted Parts	S31603 (AISI 316L)
Non-product Wetted Parts	S30400 (AISI 304)
Elastomer Options	EPDM, VMQ (Silicone), FPM (Viton) and HNBR
Seat Seals	Elastomer
Shaft Seals	PTFE/Elastomer

Operating Temperature (maximum)

EPDM/HNBR	275°F (135°C) or short time 284°F (140 °C)
VMQ (Silicone)	212°F (100°C)
FPM (Viton)	212°F (100°C) (do not use with hot water)

Pressure

Operating (max.)	150 psig (10 bar)
Product Holding (max.)	Normally closed shut-off valve with standard size actuator: 1"=172 psig (12 bar); 1.5"=73 psig (5 bar); 2"=111 psig (8 bar); 2.5"=79 psig (5 bar); 3"=145 psig (10 bar); 4"=78 psig (5 bar)
Control Air (min.)	88 psig (6 bar)
Control Air (max.)	117 psig (8 bar)



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