



# DELTA DA3+

The DELTA DA3+ double seat valve combines all the features of a state-of-the-art hygienic mixproof valve: Water hammer protection, a seat lifting device, leakage free change-over operation, and easy service and maintenance. The DELTA DA3+ is the ultimate solution for applications requiring seat lifting.

## Characteristics

The DELTA DA3+ valve is designed for hygienic applications, typically in the brewing, beverage and dairy industries as well as chemicals and pharmaceuticals.

The DELTA DA3+ valve enables complete and reliable cleaning of all product-wetted parts including seals. The seat lifting function also ensures efficient cleaning of the leakage chamber, thus eliminating the need for spraying of the leakage chamber after upper or lower seat lifting during CIP pipeline cleaning. If required, spraying of the leakage chamber can be carried out in critical applications - either in addition to seat lifting or after closing of the valve.

## Application Range

The DELTA DA3+ valve is perfect for installation in any hygienic process plant where safe separation of media from CIP fluid is essential. Any leakage that might occur will be safely drained off through the large leakage chamber.

## Features and Benefits

- Safe separation of fluids. Two independently working valve shafts in combination with a large leakage chamber ensure 100% safe separation of incompatible fluids.
- Free of operating leakages. The limited residual fluid trapped between the seat ring and the valve shaft drains off to the atmosphere via the leakage chamber only when the valve closes.
- Safe against water hammer. The valve is fully balanced and safeguards operation even in the event of water hammer.
- Integrated seat lifting cylinder. Flushing of all seat and shaft seals.
- Housing - without sump and dome. Hygienic valve design ensures perfect and fast CIP.
- Crevice-free sealing with marked profile seals.



## Features and Benefits cont'd.

- No gap between seal material and seal groove where product could get trapped. Marked profile seals prevent the installation of incorrect seals.
- Comprehensive cleanability of all product-wetted parts including shaft seal, seat seal and leakage chamber. All product-wetted surfaces are exposed to CIP-media.
- Minimum consumption of cleaning liquids. Reduced costs for CIP-media.
- Electropolished inner surfaces Ra 0.8 µm. Shorter cleaning time.
- Compact design. Low construction height and low weight. For easy and efficient maintenance.
- All movable parts are covered. No risk of injury.

## Technical Data

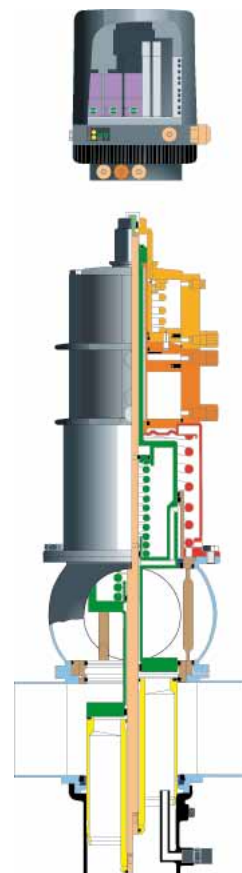
Sizes	DN 40 - 150 OD Tube 1,5" - 4" IPS Sh5 1,5" - 4" others on request
Housing types	31, 32, 33, 34
Product-wetted parts	1.4404/AISI 316L Other stainless steel parts 1.4301/AISI 304
Seal materials	EPDM/PTFE, HNBR/PTFE, FPM PTFE and Silicon/PTFE All seals comply with the FDA requirement
Surfaces	Inside electropolished Ra 0.8 mm outside glass beaded, satin finish
Product pressure	10 bar (145 psi)
Max. temperature	EPDM / HNBR 275°F / 135°C (short time 284°F / 140°C) VMQ 275°F / 135°C not to be used for hot water FPM 275°F / 135°C not to be used for steam
Sterilization temperature	(Short - time) 302°F / 150°C EPDM 284°F / 140°C HNBR
Required air pressure:	6 bar (87 psi), valve normally closed

## Simple Maintenance

Just 7 seals in the product chamber. All seat seals as well as shaft seals are identical. Within the subassemblies I (DN 40,50,65), II (DN 80,100) and III (DN 125,150) all seals are identical. Simple disassembly and assembly without compressed air. The CIP-hose does not need to be removed during maintenance.

## Control Units

DELTA DA3+ valves are available with a comprehensive range of DELTA CU control units. The DELTA CU control units are electrically equipped for direct connection to a PLC system (DELTA CU Direct connect). Optionally they can support fieldbus protocols such as AS-i, Profibus and DeviceNet.



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