

Liquids to Value



VESTA[®] Tank Bottom Valves

Made by GEA Tuchenhagen

Register



VESTA® Tank Bottom Valves

VESTA® tank bottom valves are used to shut off fluid media in tanks. They are designed to be fitted to the lowest point of the bottom to shut off the media flush with the tank bottom without any kind of sump.

The pocket free design provides complete draining of the tank and optimal CIP/SIP cleaning.



Thanks to the robust design of the body, and/or the body connection flange, the valve can be welded into place without any distortion. The extremely compact design allows VESTA® tank bottom valves to be fitted into the tightest of spaces.

In addition VESTA® tank bottom valves are available in various designs to meet the requirements, for example, with an additional valve for CIP/SIP or drainage with a flush front shut-off (pocket-free configuration).

VESTA® tank bottom valves are available in the following variants:

- with body to be welded in
- with body to be flanged in (body connection flange)

Body configurations:

- Model L (1 outlet)
- Model T (2 outlets) for ring circuits.

Tuchenhagen Service is always on hand to answer your questions and provide technical support for the selection of the optimal valve configuration for your application.

VESTA® Tank Bottom Valves

The design features

- Massive body - single piece manufactured from solid material
- Massive body connection flange
- PTFE bellows as shut-off element for universal applications
- Hermetic sealing of the valve interior space from the external environment using patented bellows sealing system
- Installation preferably at the lowest point of a tank bottom
- Compact design
- Self-locking groove nut connection



VESTA® tank bottom valve with body to be welded in



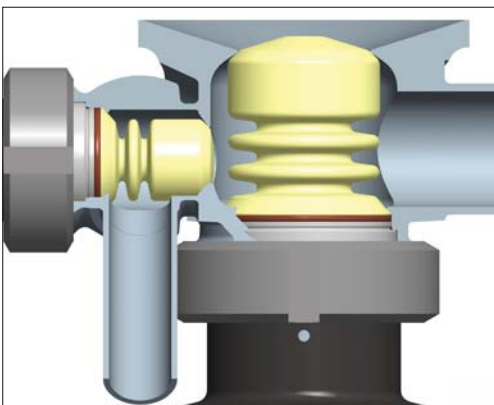
VESTA® tank bottom valve with body to be flanged in

The advantages

- Shut-off flush with the tank bottom, without sump
- Zero dead space design
- Self-draining, even when installed in the side of a tank wall
- Reliable CIP/SIP cleaning by means of flow-optimized design
- Long service life for the PTFE bellows
- Use of standard VESTA® pneumatically and manually driven valve inserts
- Easy and safe maintenance



Body connection flange



Cross-section of VESTA® tank bottom valve with additional CIP/SIP valve



VESTA® tank bottom valve with additional CIP/SIP valve

VESTA® Tank Bottom Valves

Field of application	Suitable for the control and regulation of all types of fluid and gaseous media
Operating pressure	max 6 bar (87 psi)
Control air pressure	NC actuator - min. 5 bar (72.5 psi), max. 8 bar (116 psi) NO actuator - min. 5 bar (72.5 psi), max. 6 bar (87 psi)
Operating temperature	-10 °C (+14° F) to max 135 °C (max. 275° F)
Sterilisation temperature	max 150 °C (302° F)
Installation orientation	Preferably horizontal (through-flow line), actuator vertical or horizontal
Materials	
<i>In contact with product</i>	body 1.4435 / AISI 316L, PTFE-bellows TFM 1705, FDA-conformity
<i>Non contact with product</i>	synthetic actuator polyphenylene sulphide (PPS) stainless steel actuator 1.4301 / AISI 304
Surfaces	
<i>Internal</i>	Ra ≤ 0.8 µm / Rz ≤ 32 µin (standard) Ra ≤ 0.4 µm / Rz ≤ 16 µin (as option)
<i>External</i>	bright metal (body and stainless steel drives) Synthetic actuator - surface structure in accordance with VDI 3400, roughness level 30
Nominal widths	DIN - DN 10 to DN 80 external diameter in accordance with DIN 11850 Series 2 / DIN 11866, Series A ISO - ISO 13.5 to ISO 88.9 External diameter in accordance with DIN EN ISO 1127 / DIN 11866, Series B OD - 1/2" OD to 3" OD External diameter in accordance with ASME BPE / DIN 11866, Series C (larger sizes on request)
Actuators	Manual actuator from synthetic material Pneumatic actuator from synthetic material Pneumatic actuator in stainless steel
Certifications	Documented verification of the following quality features - body with material inspection certificate in accordance with EN 10204/3.1 (on request) - documented verification of the surface roughness in form of a test report in accordance with EN 10204 (on request to 3.1) - documented verification of the delta ferrite content in form of a test report in accordance with EN 10204, optional (on request) - documented verification for the PTFE bellows in form of a test report in accordance with EN 10204 FDA certificate of conformity – FDA 21 § 177.1550 (on request to 3.1) - certificate for PTFE bellows (TFM 1705) concerning the documented evidence of biocompatibility in accordance with USP Class VI (on request)



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