

Tank Bottom Valve, Machined stainless steel body, Manually operated

- Compact design for space restricted applications
- Simplified welding with provision of welding neck
- Optimized flow geometry
- Hermetical separation of fluids from the operating mechanism by diaphragm
- Fully machined from SS 316L bar-stock – no welded components
- CIP/SIP capable and crevice free
- Zero dead leg and self-draining capabilities
- Fully Autoclavable
- Various internal surface finish available each with less than 0.40 Ra



Series 50 manually operated tank bottom valve has a body with attached welding neck and an inlet ports, a diaphragm seal, a bonnet, and a handle.

Tank bottom valves are normally used as outlet valves and are welded into the lowest point of the tank bottom enabling the tank to be self drained and cleaned or sterilized.

The most important design feature of the valve is that the weir is as close as possible to the internal contour of the tank. This enables the diaphragm seal to effectively become a continuation of the surface of the tank bottom with no dead leg.

The diaphragm is both a switch as well as a sealing element for the media. It is easily replaceable.

The bonnet is provided for the protection of diaphragm and handle-mechanism.

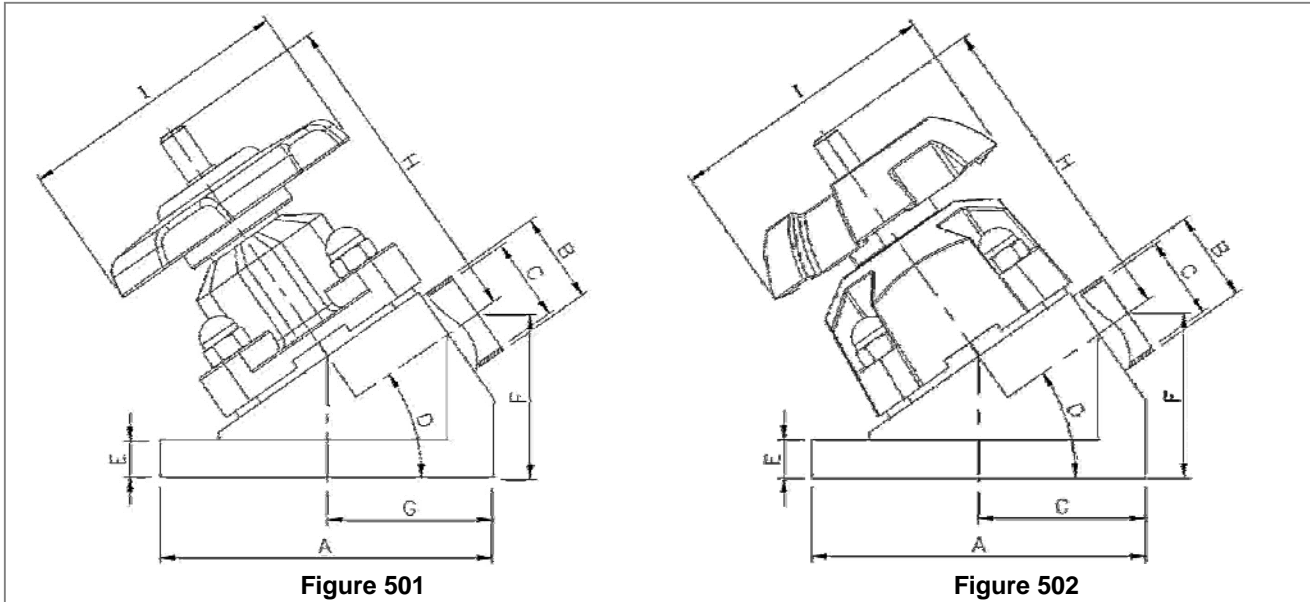
Flow can be continually adjusted with proper positioning of the handle. Position indicator is provided at top of the handle.

Modified versions of the tank bottom valves are designed for installation in the tank walls.

Technical Data

Connection Size	½" - 3"	
MOC – Wetted (Contact)	Stainless Steel 316L	
MOC – Non-wetted (Non- contact)	Polyamide or ASTM A351 CF8 (SS 304)	
Seal material	EPDM, PTFE	
Media	Neutral gases and liquids, high purity, sterile, aggressive or abrasive fluids	
Viscosity	Up to viscous	
Surface finish	Mechanical or Electro Polish	
Media temperature	EPDM	-10°C to +75 °C
	PTFE	-10°C to +90 °C
Ambient temperature	Up to +90 °C	
Sterilization temperature	EPDM	Briefly up to +130 °C
	PTFE	Briefly up to +150 °C
End connections	ASME BPE • Butt-Weld • V-band (Hygienic) Clamp - EN ISO 1127/ISO 4200 and BS 4825 are available on request	
Installation	As per design requirement	
Options	Locking function available with polyamide bonnet	

Tank bottom valve, stainless steel body machined from bar-stock, manually operated
Body with Butt-weld End



Dimensions for end connections according to ASME BPE connection type

Bonnet and Handle - Stainless Steel (Refer Figure 501)									
Conn. Size	Body OD	Pipe OD	Pipe ID	Port Angle from Body Face	Thickness of Body Welding Neck	Port Center to Body Face Distance		Max. Valve Length from Port Center	Outside Diameter of Handle
						Vertical	Horizontal		
						F	G		
A	B	C	D	E	F	G	H	I	
(mm)	(mm)	(mm)	(°)	(mm)	(mm)	(mm)	(mm)	(mm)	
1/2"	65.0	12.70	9.40	32	7.0	36.5	36.60	79.8	80.5
3/4"	65.0	19.05	15.75	32	7.0	33.8	38.30	92.0	80.5
1"	107.0	25.40	22.10	32	11.8	50.2	50.10	105.0	89.7
1 1/2"	140.0	38.10	34.80	35	16.0	71.3	62.80	134.9	115.8
2"	140.0	50.80	47.50	35	16.0	65.7	66.74	157.1	152.5
2 1/2"	174.5	63.50	60.20	35	20.0	76.3	80.30	164.3	152.5
3"	188.6	76.20	72.90	35	20.0	69.5	83.70	170.6	152.5

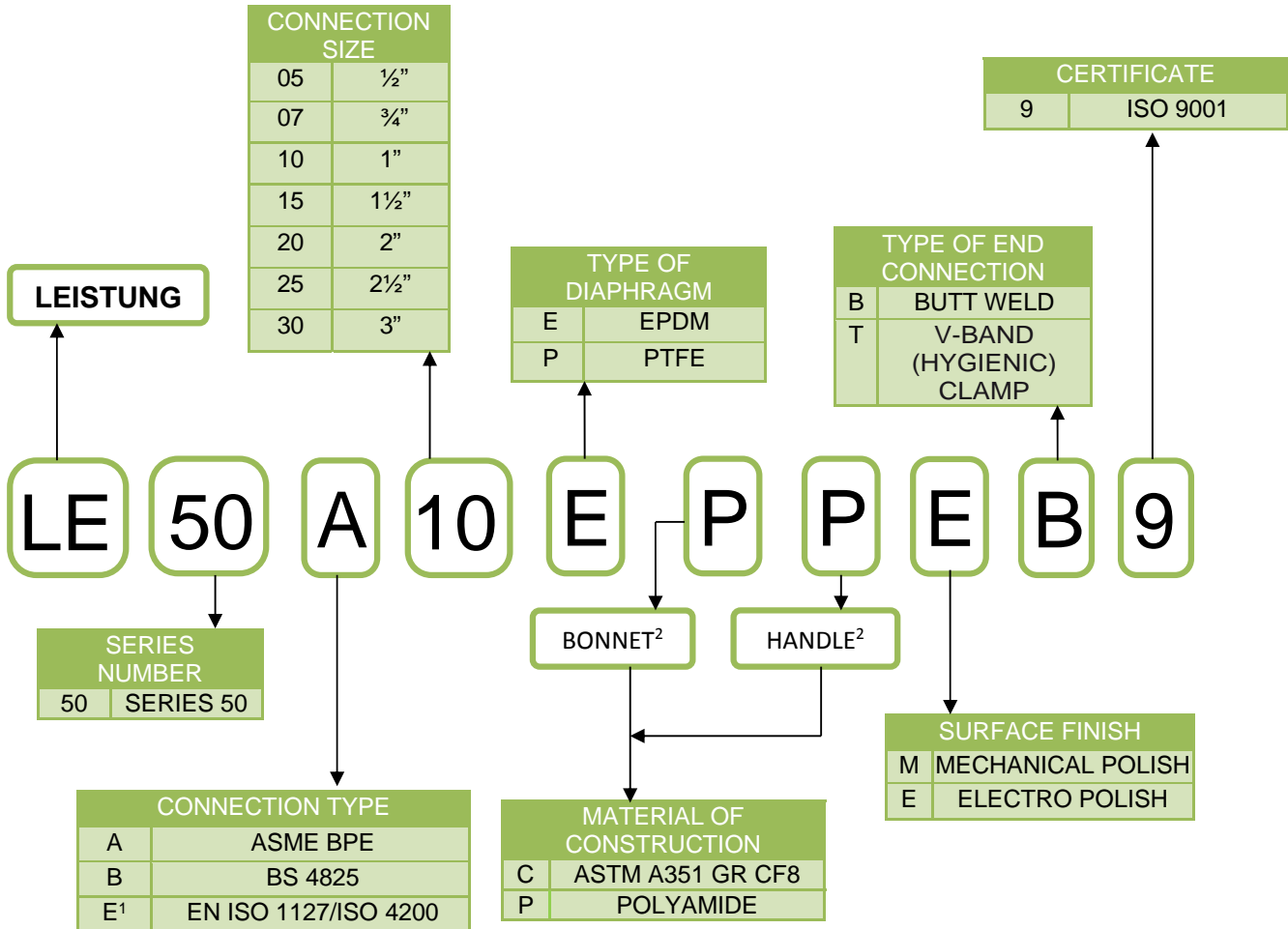
Bonnet and Handle - Polyamide (Refer Figure 502)									
Conn. Size	Body OD	Pipe OD	Pipe ID	Port Angle from Body Face	Thickness of Body Welding Neck	Port Center to Body Face Distance		Max. Valve Length from Port Center	Outside Diameter of Handle
						Vertical	Horizontal		
						F	G		
A	B	C	D	E	F	G	H	I	
(mm)	(mm)	(mm)	(°)	(mm)	(mm)	(mm)	(mm)	(mm)	
1/2"	65.0	12.70	9.40	32	7.0	36.5	36.60	85.0	80.8
3/4"	65.0	19.05	15.75	32	7.0	33.8	38.30	99.3	80.8
1"	107.0	25.40	22.10	32	11.8	50.2	50.10	110.5	94.0
1 1/2"	140.0	38.10	34.80	35	16.0	71.3	62.80	127.7	118.2
2"	140.0	50.80	47.50	35	16.0	65.7	66.74	165.1	149.7
2 1/2"	174.5	63.50	60.20	35	20.0	76.3	80.30	172.3	149.7
3"	188.6	76.20	72.90	35	20.0	69.5	83.70	178.6	149.7

Notes:

1. Dimensions and tolerances for end connections and face-to-face length are as per ASME BPE.
2. All other dimensions are approximate and subject to change without prior notice.
3. Dimensions for valves with stainless steel bonnet and polyamide handle will be provided on request.
4. Dimensions for valves with v-band (hygienic) clamp connections will be provided on request.

Ordering Chart

ORDER IDENTIFICATION NUMBER



- Notes:
- 1 – EN ISO 1127/ISO 4200 offers standards for butt-weld end connections only.
 - 2 – Combination of polyamide bonnet and steel handle (LE50XXXXPCXXX) is not available.
 - 3 – For V-band (Hygienic) clamp connections, clamp connector will be welded to the valve body with butt-weld end. Internal finish will be provided as per customer request.
 - 4 – Valves with end connection sizes according to EN ISO 1127/ISO 4200 and BS 4825 are available on request.

In case of special application conditions, please e-mail at: rnd@leistung.in
 The technical specifications are subject to change without notice.