2/2-way Drain Valve NC, DN 40

A. u. K. Müller

Solenoid valves
Control valves
Special valves and systems

A. u. K. Müller GmbH & Co. KG
Dresdener Str. 162
D-40595 Düsseldorf/Germany

Tel.: +49(0)211-7391-0
Fax: +49(0)211-7391-281

e-mail: info@akmueller.de
Internet: www.akmueller.de

Series 04.040.116



Valve body: PPE



Valve body: PPE



Valve body: Stainless steel



Valve body: PVDF

Description

2/2-way direct acting drain valve of nominal diameter DN 40 for controlling low aggressive liquid media, such as cleaning or disinfection agents, with normally closed operation mode NC (normally closed).

Valves of this type are medium separated having a single chamber valve body with the inlet at ninety degrees to the outlet. They can be manufactured in various materials and equipped with threaded or hose connections. Electrical operating safety is achieved by insulation class F and supported by an integrated protective circuit.

Protection type IP 68 is achieved in conjunction with cable connection, IP 65 by using a mounted connector.

The valves can be equipped with a manual emergency override, to ensure the drainage of tanks even in the case of a voltage breakdown.

Valve housings made of PPE are suitable for hot water. Furthermore we offer a PPE version that fulfills the EC 1935 requirements and is therefore approved for the usage with food. PVDF has a higher resistance to chemicals compared to PPE. Valve housings made of stainless steel combine chemical and a higher temperature resistance.

The smooth internal shape improves liquid flow and avoids dirt traps. The valve bodies can be equipped with an additional flush spout.

Applications

- Industrial washing machines and dishwashers
- Cleaning devices for medical equipment
- Cleaning and disinfection systems in the dairy industry and process engineering

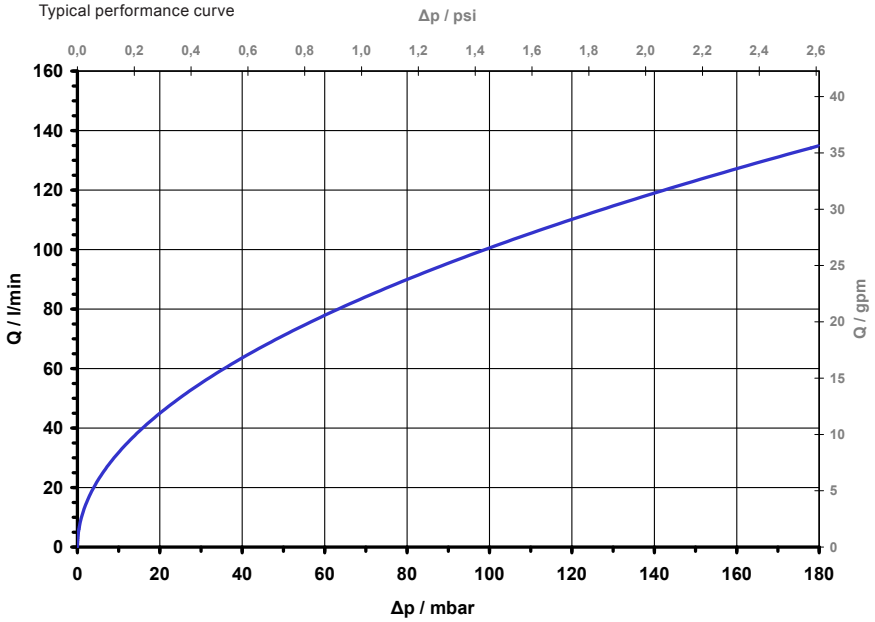
Characteristics

- Direct acting
- Protection type IP 68 using cable, respectively IP 65 using connector
- Normally closed (NC)
- Potted coil
- Coil system protected against corrosion by separation from medium by membrane
- Optional valve body made of PVDF or stainless steel and FKM membrane for higher resistance to chemicals
- Optional flush spout on valve body
- Optional manual emergency override
- Long term performance capability
- Maximum medium temperature 98 °C (208 °F)
- No minimal pressure required
- Suitable for spray and jet water
- High operating safety by the use of high quality materials and 100% final testing of the products

Possible approvals

- VDE
- UL
- EC 1935
- Other approved versions available on request

Typical performance curve



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Valve body: PPE



Valve body: PPE complies with EC 1935

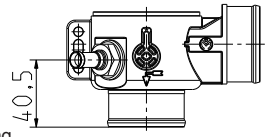


Valve body: Stainless steel

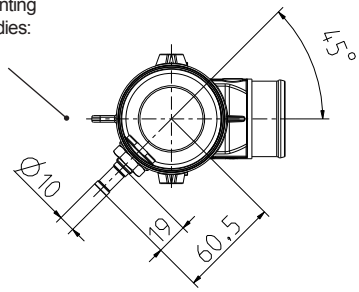


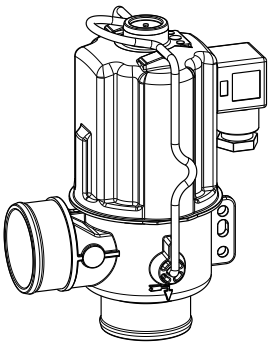
Valve body: PVDF

Optional flush spout



Thickness of the mounting flange for all valve bodies: 5 mm (0.197 in)





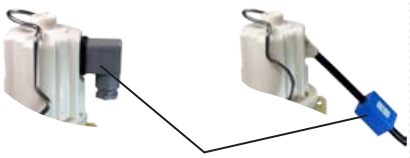
Technical Data

Type	drain valve	
Construction	2/2-way-solenoid valve, direct acting	
Function	NC (normally closed)	
Fitting position	Solenoid pointing upwards (horizontally on demand)	
Media	low aggressive media, such as cleaning or disinfection agents within potable water	
T-Medium **PPE** **Stainless steel** **PVDF**	 98 (208) 98 (208) 50 (122)	 °C (°F) max. °C (°F) max. °C (°F) max. (USA)
T-Ambient	60 (140)	°C (°F) max.
DN	40 (1.575)	mm (in)
p-Operating	0 - 180 (0 - 2.61)	mbar (psi)
Coil type	MS 10 integrated protection circuit (high voltage peak limitation) and rectifier	
Nominal voltage	12 24 24 110 200-240 400	V DC V DC V AC/DC V AC/DC V AC/DC V AC/DC *)
Voltage tolerance	±10%	
Duty cycle	100 %	
Nominal power	24	W
Protection Type	IP 68 IP 65	with cable according to EN 60529 with plug socket according to EN 175301-803
Insulation class	F	according to EN 60730
Protection class	I	according to EN 60730 (for incorporation in class I)

Materials

Valve body	PPE, PVDF, stainless steel
Plunger guide	stainless steel
Plunger and spring	stainless steel
Flush spout	stainless steel
Membrane and sealings	EPDM FKM
Coil coating	PBT PU potting

The combination of stainless steel valve body and FKM diaphragm is particularly recommended for use in sterilization and disinfection equipment.



*) Exception:

Depending on the required connection type, the rectifier for version 24 V AC/DC is located within a grey plug or within a sealed housing in line with the cable.

	KL
standard cable length (IP 68 only)	1000 mm (39.370 in)
other cable length on request	

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without emergency manual override

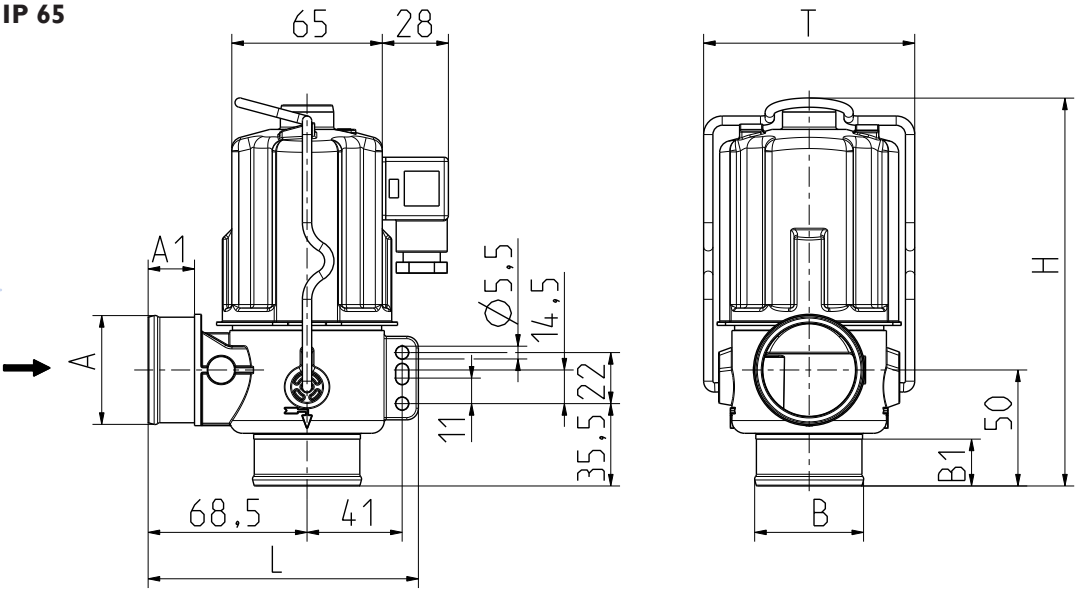
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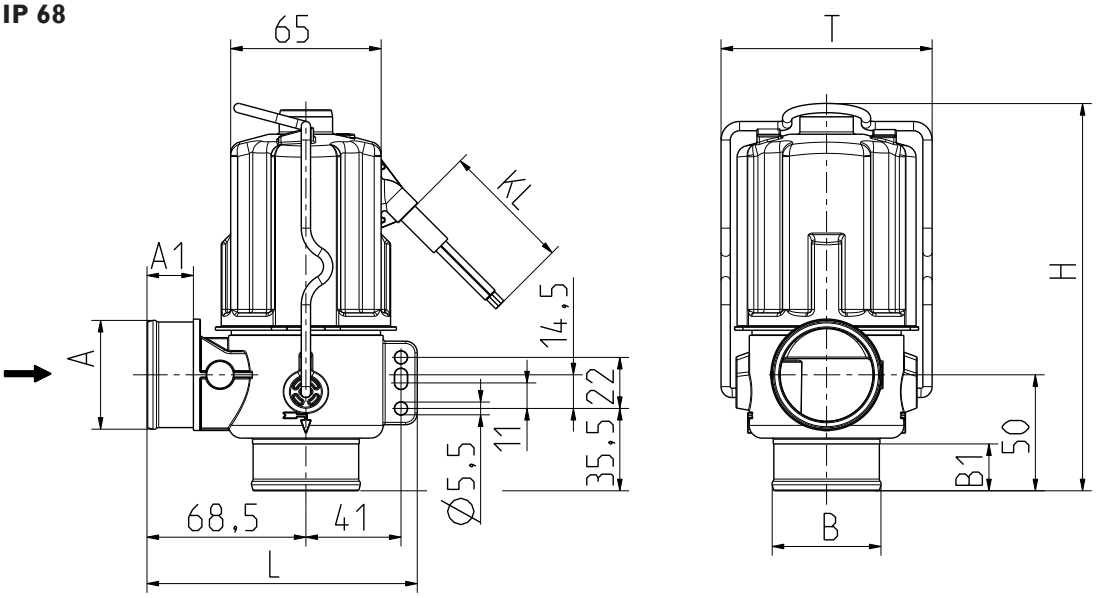
Options

Material	Inlet		Outlet		Length	Height without emergency manual override	Height with emergency manual override	Depth
	Ø A	A1 [mm]	Ø B	B1 [mm]	L [mm]	H [mm]	[mm]	T [mm]
PPE / PVDF	G 1 1/2	21 (0.827 in)	G 1 1/2	21 (0.827 in)	117 (4.606 in)	170 (6.693 in)	190 (7.480 in)	91 (3.583 in)
PPE / PVDF	G 1 1/2	21 (0.827 in)	nozzle 1 1/2"	21 (0.827 in)	117 (4.606 in)	170 (6.693 in)	190 (7.480 in)	91 (3.583 in)
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IP 65



IP 68



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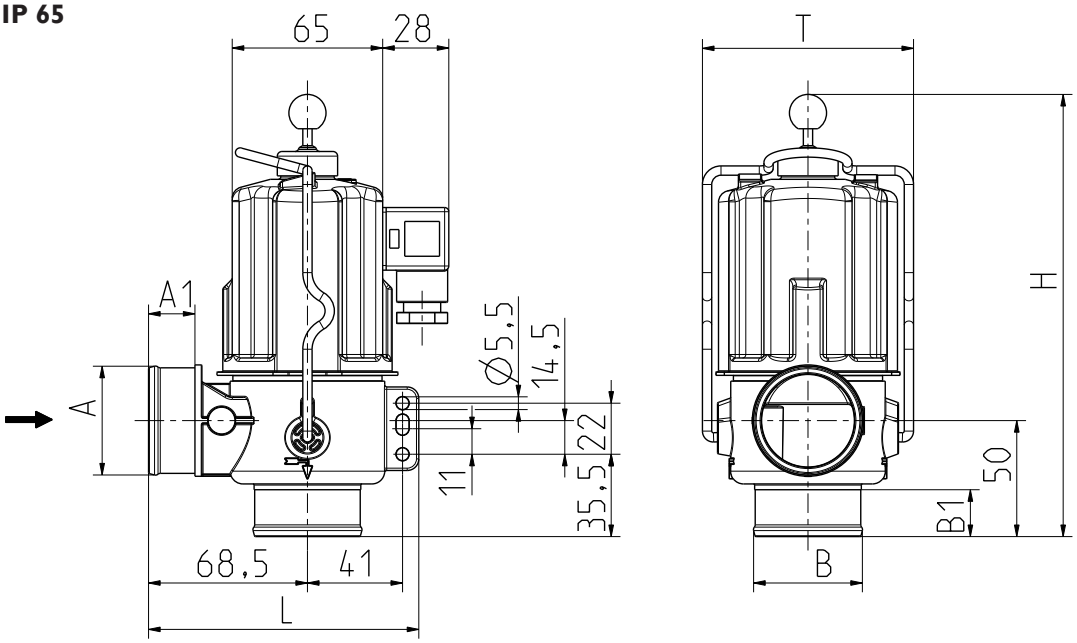
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with emergency manual override

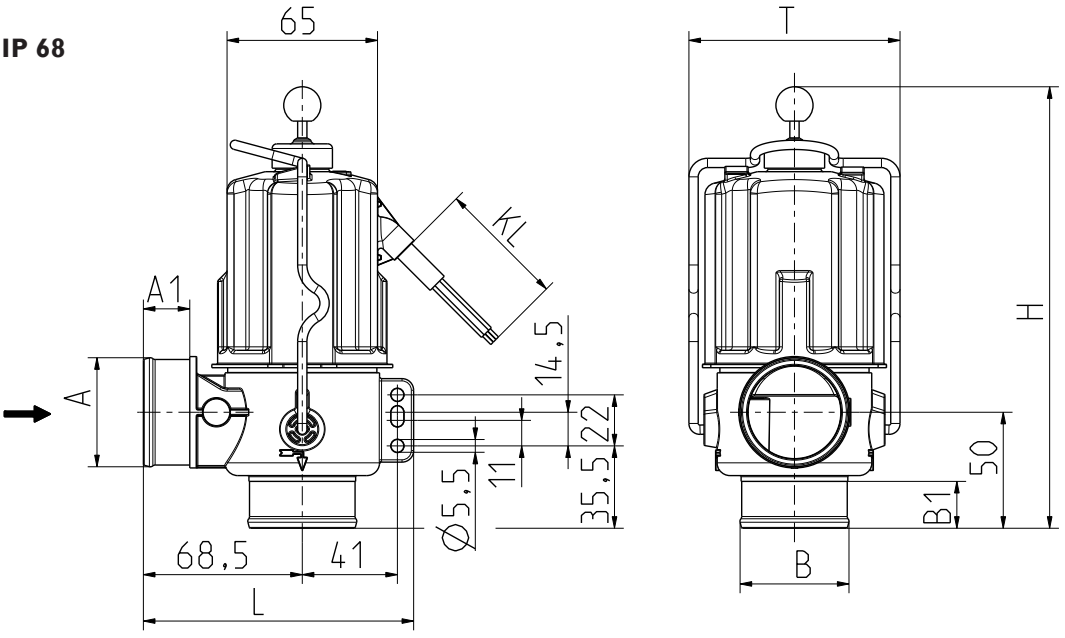
Pull ball handle to open the valve



IP 65



IP 68



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without emergency manual override

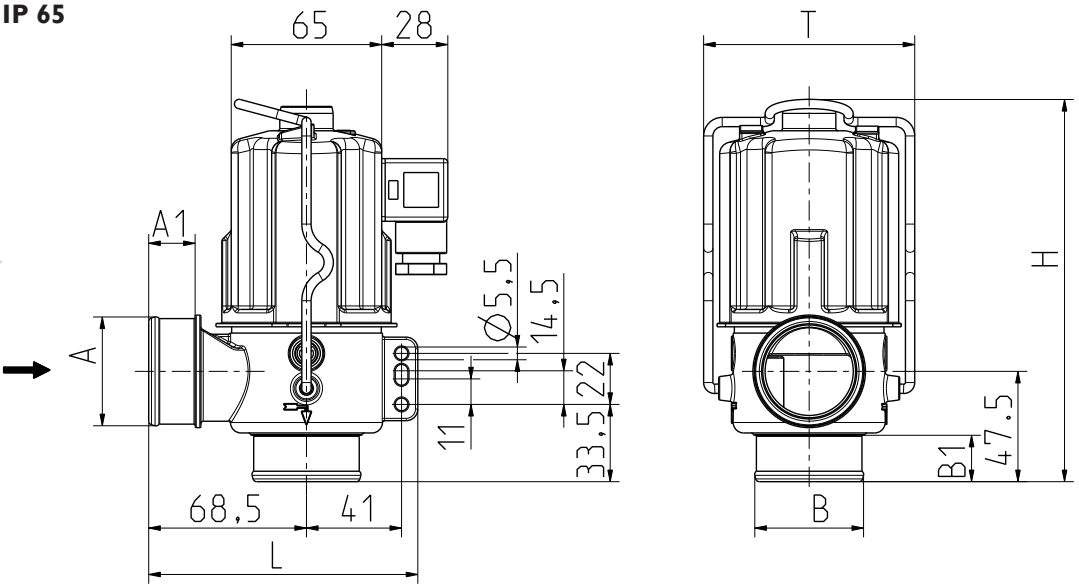
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Options

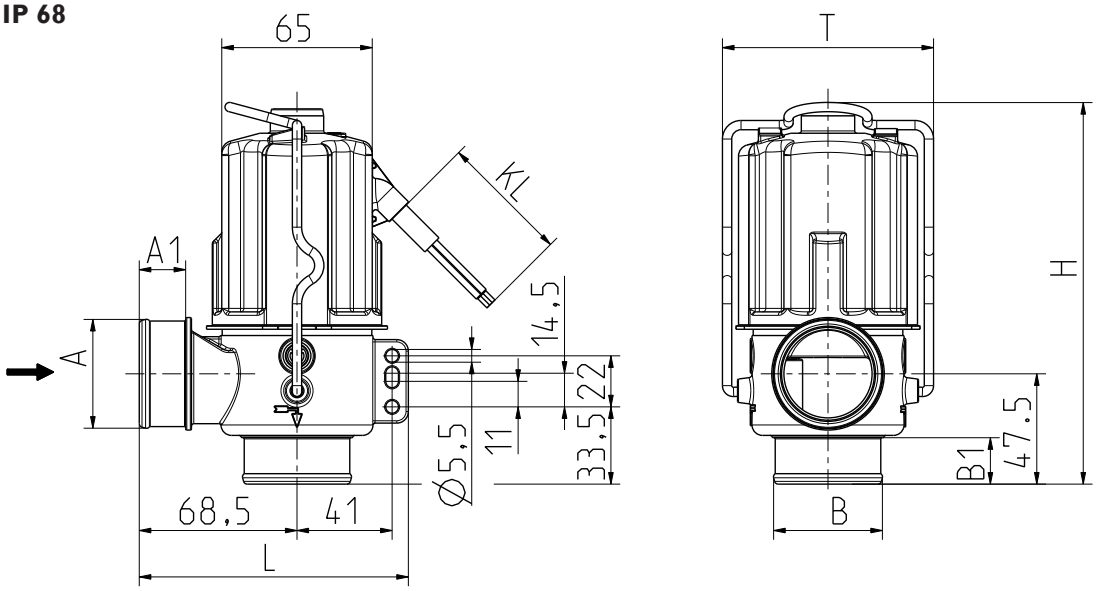
Material	Inlet		Outlet		Length	Height without emergency manual override	Height with emergency manual override	Depth
	Ø A	A1 [mm]	Ø B	B1 [mm]	L [mm]	H [mm]	[mm]	T [mm]
Stainless steel	G 1 1/2	21 (0.827 in)	G 1 1/2	21 (0.827 in)	117 (4.606 in)	168 (6,614 in)	188 (7,402 in)	91 (3.583 in)
Stainless steel	G 1 1/2	21 (0.827 in)	nozzle 1 1/2"	21 (0.827 in)	117 (4.606 in)	168 (6,614 in)	188 (7,402 in)	91 (3.583 in)
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IP 65



IP 68



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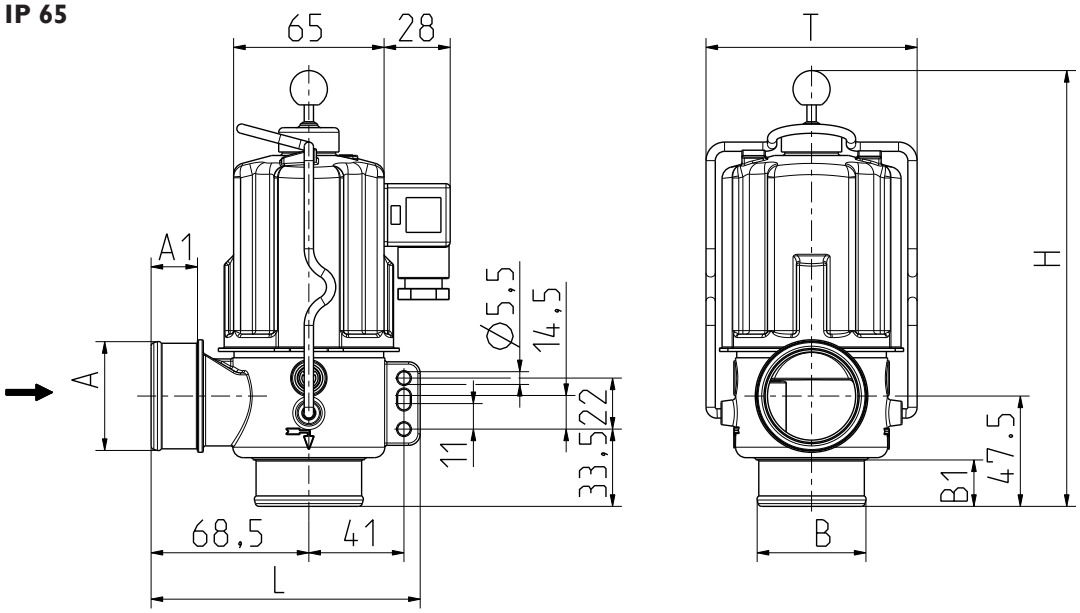
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with emergency manual override

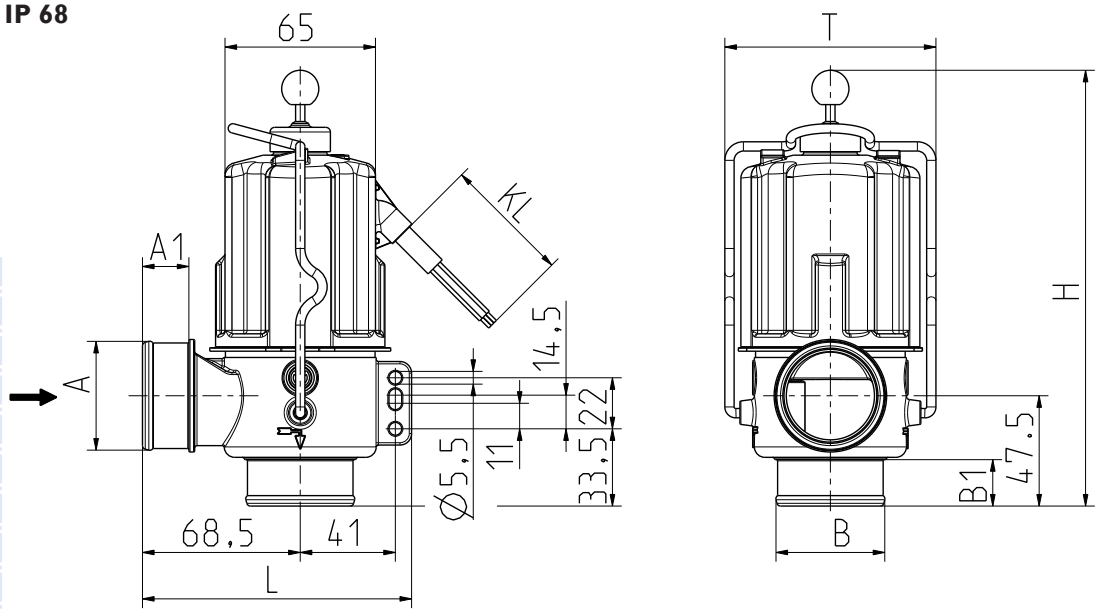
Pull ball handle to open the valve



IP 65



IP 68



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