

# Product Information

## 2/2-way drain valves NC, DN 50



### A. u. K. Müller

Solenoid valves  
Control valves  
Special valves and systems

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#### Series 04.050.116



Valve body: PPE



Valve body: PPE



Valve body: PVDF



Valve body: Stainless steel

#### Description

2/2-way direct acting dump valve of nominal diameter DN 50 for controlling low aggressive liquid media, such as cleaning or disinfection agents, direct acting 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 an emergency manual override, to ensure the drainage of tanks even in the case of a voltage breakdown.

Valve housing made of PPE are suitable for hot water. Furthermore we offer a 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

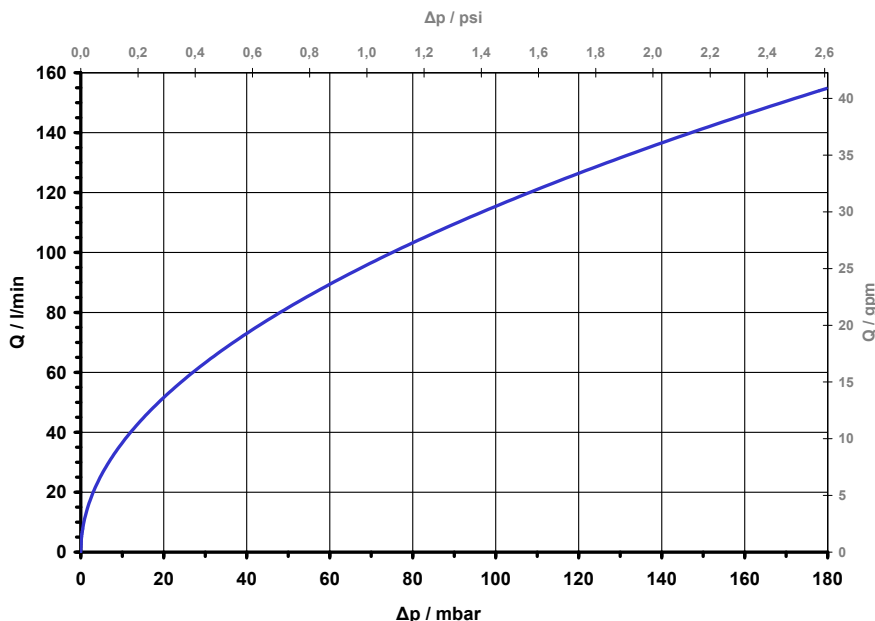
#### Characteristics

- 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 upon request

typical performance curve





Series 04.050.116



Valve body: PPE



Valve body: PPE

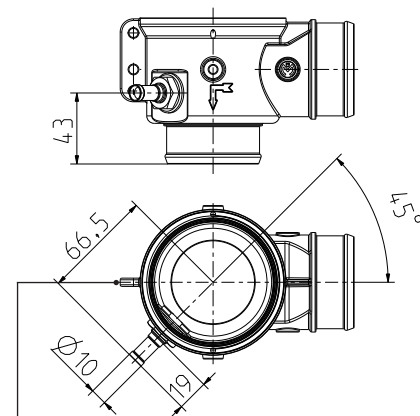


Valve body: PVDF

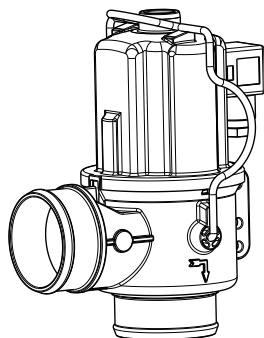


Valve body: Stainless steel

Optional flush spout



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



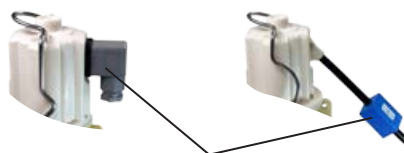
Technical Data

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	98 (208)	°C (°F) max.
PPE	98 (208)	°C (°F) max.
Stainless steel	50 (122)	°C (°F) max.
PVDF		
T-Ambient	60 (140)	°C (°F) max.
DN	50 (1.969)	mm (in)
p-Operating	0 - 180 (0-2.61)	mbar (psi)
Coil type	MS.010 integrated protection circuit (high voltage peak limitation) and rectifier	
Nominal voltage	12	V DC
	24	V DC
	24	V AC/DC *)
	110	V AC/DC
	200-240	V AC/DC
400	V AC/DC	
Voltage tolerance	±10%	
Duty cycle	100 %	
Nominal power	24	W
Protection Type	IP 68	With cable according to EN 60529
	IP 65	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.

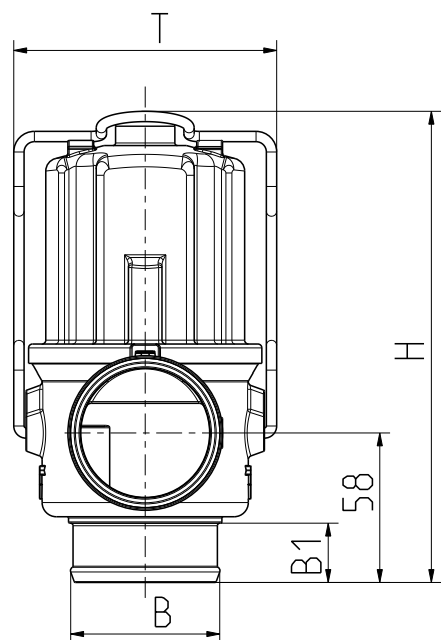
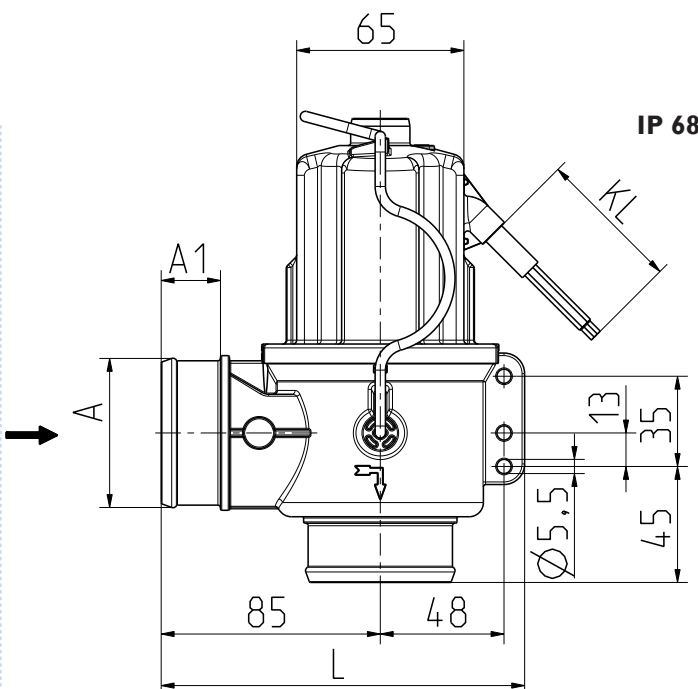
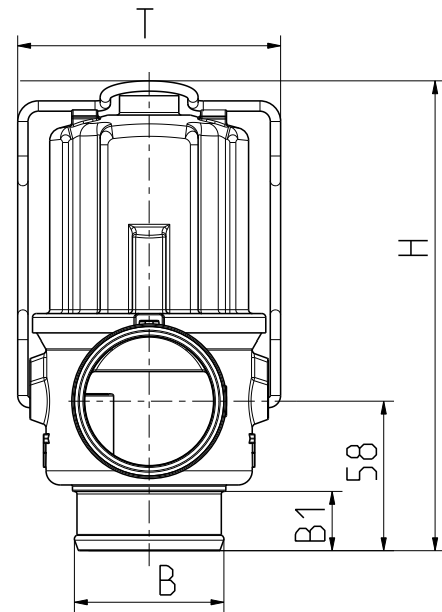
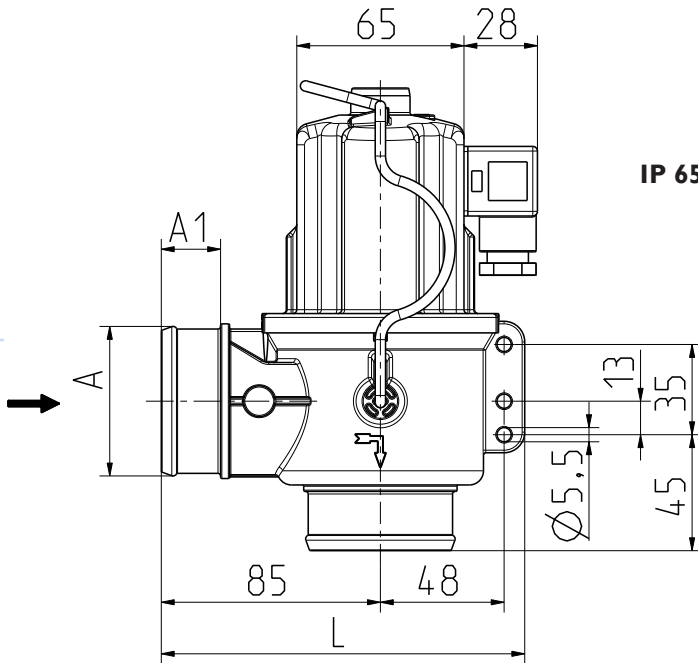
	KL
Standard cable length (IP 68 only)	1000 mm (39.370 in)
other cable length on request	



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	Ø B	B1	L	H		T
PPE / PVDF	G 2	23 (0.906 in)	G 2	23 (0.906 in)	141 (5.551 in)	185 (7.283 in)	206 (8.110 in)	103 (4.005 in)
PPE / PVDF	G 2	23 (0.906 in)	nozzle 2"	23 (0.906 in)	141 (5.551 in)	185 (7.283 in)	206 (8.110 in)	103 (4.005 in)
PPE / PVDF	nozzle 2"	23 (0.906 in)	G 2	23 (0.906 in)	141 (5.551 in)	185 (7.283 in)	206 (8.110 in)	103 (4.005 in)
PPE / PVDF	nozzle 2"	23 (0.906 in)	nozzle 2"	23 (0.906 in)	141 (5.551 in)	185 (7.283 in)	206 (8.110 in)	103 (4.005 in)





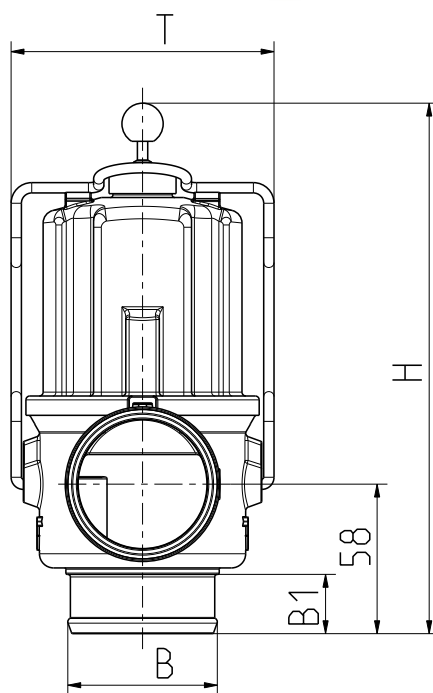
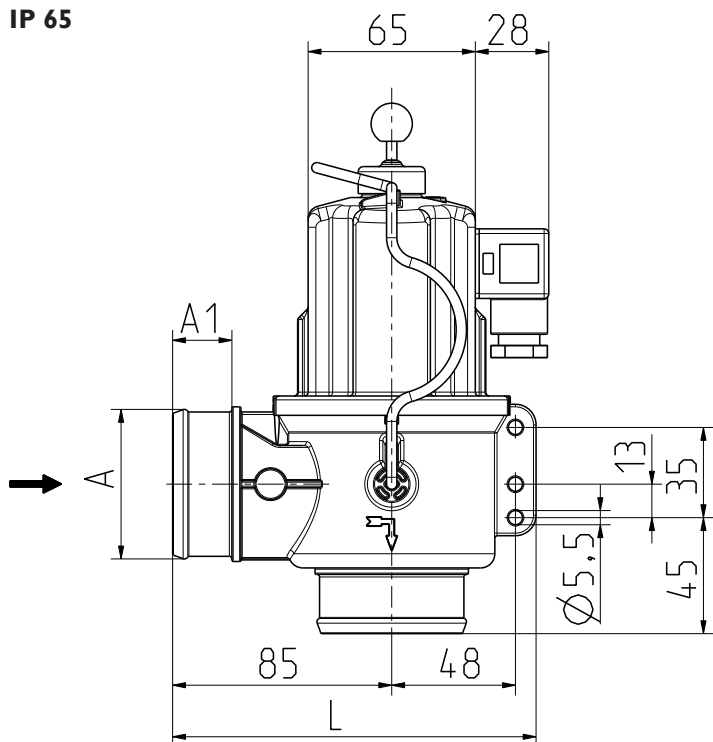
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with emergency manual override

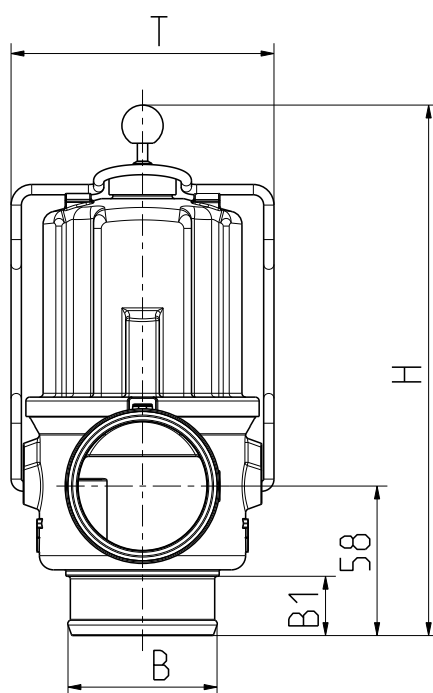
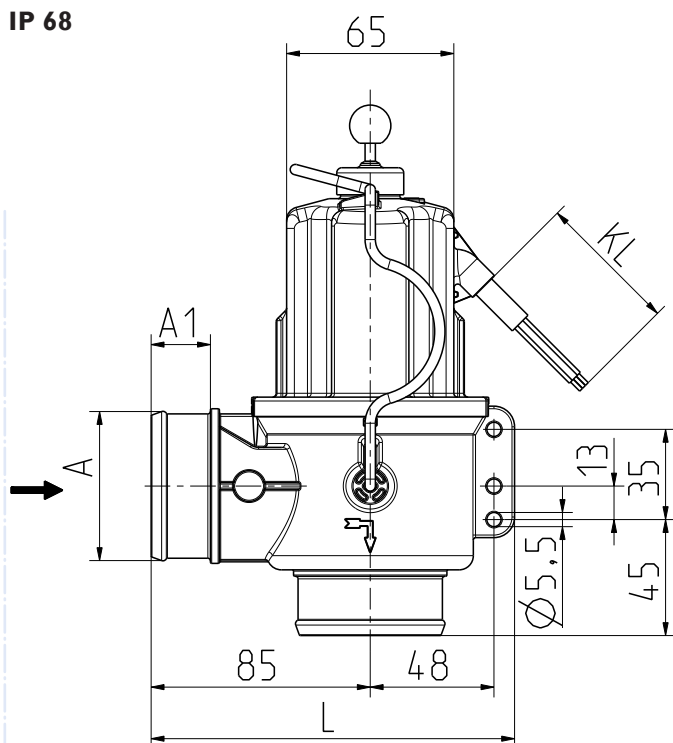
Pull ball handle to open the valve



IP 65



IP 68





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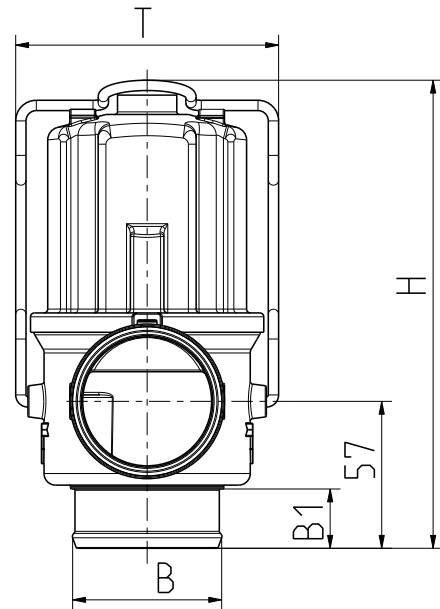
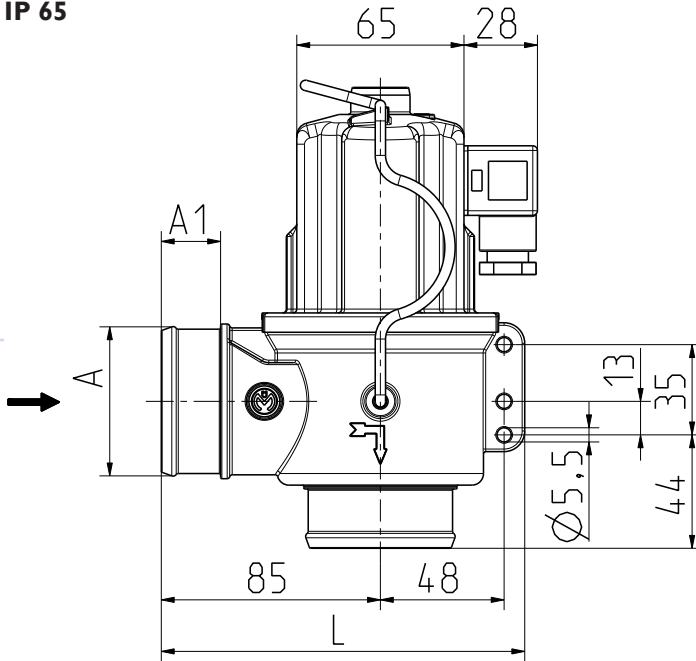
without emergency manual override



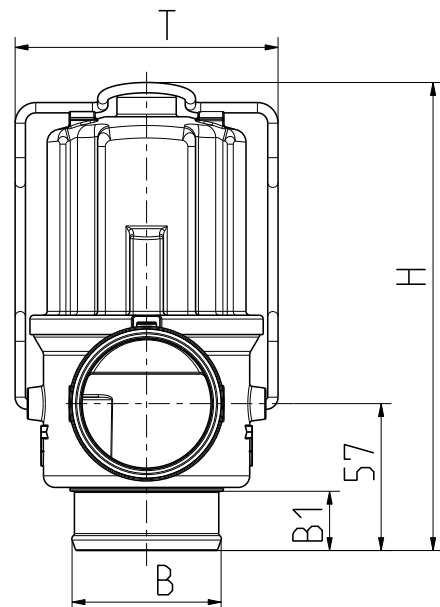
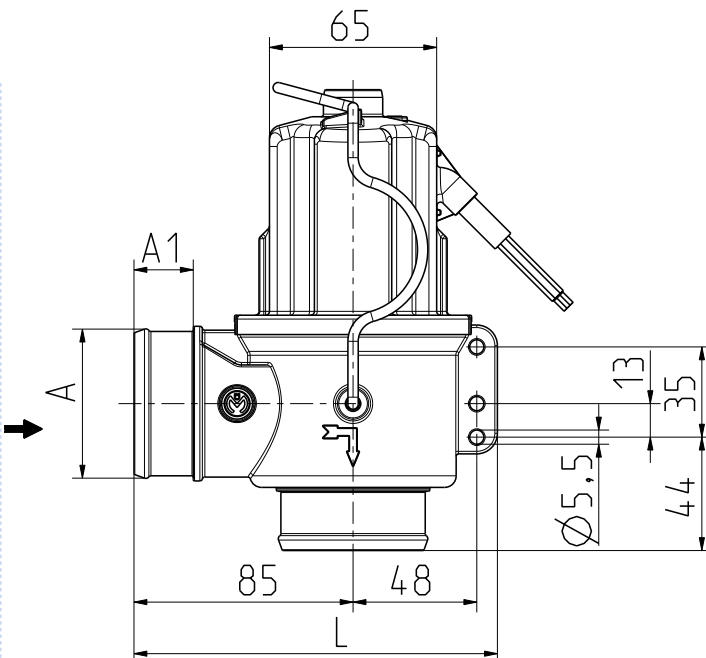
### Options

Material	Inlet		Outlet		Length	Height without emergency manual override	Height with emergency manual override	Depth
	Ø A	A1	Ø B	B1	L	H		T
Stainless steel	G 2	23 (0.906 in)	G 2	23 (0.906 in)	141 (5.551 in)	185 (7.283 in)	206 (8.110 in)	103 (4.005 in)
Stainless steel	G 2	23 (0.906 in)	nozzle 2"	23 (0.906 in)	141 (5.551 in)	185 (7.283 in)	206 (8.110 in)	103 (4.005 in)
Stainless steel	nozzle 2"	23 (0.906 in)	G 2	23 (0.906 in)	141 (5.551 in)	185 (7.283 in)	206 (8.110 in)	103 (4.005 in)
Stainless steel	nozzle 2"	23 (0.906 in)	nozzle 2"	23 (0.906 in)	141 (5.551 in)	185 (7.283 in)	206 (8.110 in)	103 (4.005 in)

### IP 65



### IP 68





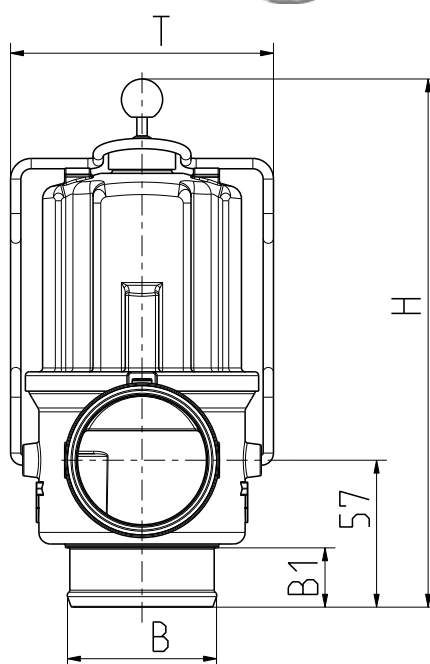
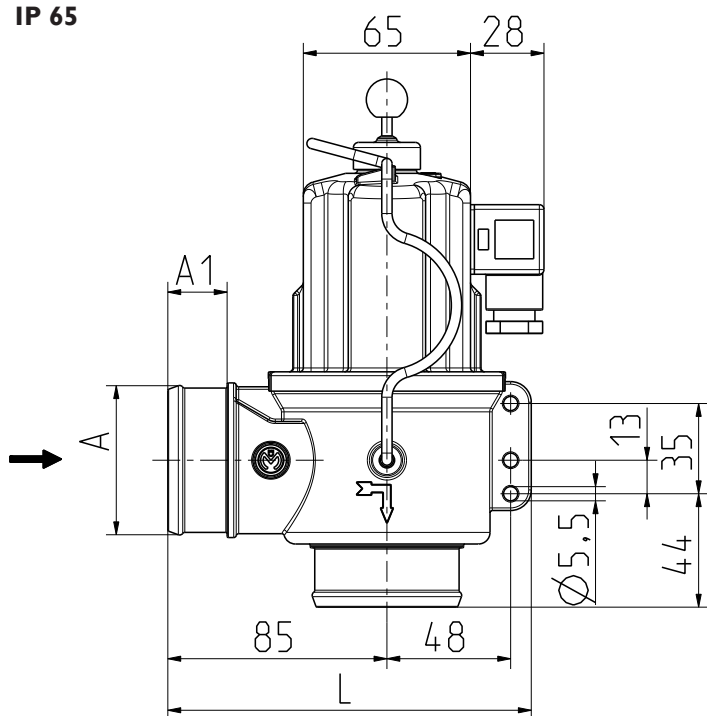
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with emergency manual override

Pull ball handle to open the valve



IP 65



IP 68

