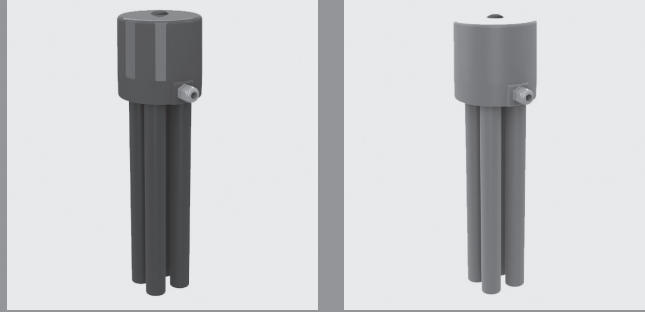


Level switch NIS



Advantage

- 1 to 4 switching points
- diaphragm pressure switch without medium contact
- pressure transmission by air
- low switching pressure
- corrosion resistant materials
- process automation, e.g. as an optical or acoustic signal

Application

- chemical plants
- industrial plants

Utilisation

- for monitoring fluid levels in pressureless containers or open pits
- for signalling if the level exceeds or falls below a set filling level

Attention

- The NIS is not approved as an overflow prevention system as per §19 WHG (Federal Water Act)!
- Due to the air absorption properties of most fluids, aerate the immersion tubes at regular intervals to prevent any displacement of the switching points.

Function

- The level switch NIS contains 1 to 4 diaphragm pressure switches and the same number of immersion tubes connected to them. When the fluid level rises, the air in the immersion tubes is compressed. At a pressure increase of max. 10 mbar (level difference of 100 mm H₂O), the diaphragm activates a snap-action switch. If the level drops by a maximum of 50 mm, the air pressure in the immersion tube drops and a reset occurs.

Flow Media

- Neutral and aggressive fluids free of solid particles, provided that the valve components coming into contact with the fluids are resistant at the operating temperature in accordance with the ASV resistance guide.

Fluid Temperature

- PVC-U: 0 to +60°C
- PP: 0 to +90°C

Body

- PVC-U
- PP

Diaphragm Pressure Switch

- Diaphragm: EPDM
- Diaphragm: FPM
- Switching pressure: 100 mm WC = approx. 10 mbar
- Reset pressure: 50 mm WC = approx. 5 mbar
- Pressure load of switches: max. 0.5 bar
- Switching tolerance: ±10% of respective switching pressure, but min. ±7.5 mm WC = approx. 0.75 mbar

Electric Switching Capacity

- max. values at resistive load
- AgNi contacts 6A / 250 V AC
- AgNi contacts 2A / 24 V DC
- Minimum switching current for the proper function of the contacts: 100 mA.

Electrical Connection

- AMP flat plug 6.3 x 0.8 according to DIN 46244
- cable screw connection PG 16
- protection type IP 65

Connection

- socket end for solvent welding DIN ISO (PVC-U), d 32
- fusion socket end DIN ISO (PP), d 32

Immersion Tube

- A: without immersion tube
- B: with 1,5m immersion tube
- C: with 2m immersion tube
- D: with 3m immersion tube
- E: with 4m immersion tube
- Length: >4 m on request!

Mounting

- vertical

Installation

- The level switch can be installed onto the non-pressurised container by means of two female threads or optionally by a flange or fixation plate, both of which are available as accessory. The switching points can be determined by drilling an 8 mm hole into the tube which needs to be 100mm lower on the tube as the required switching level. These holes have to be drilled by the installing assembly worker.

Colour

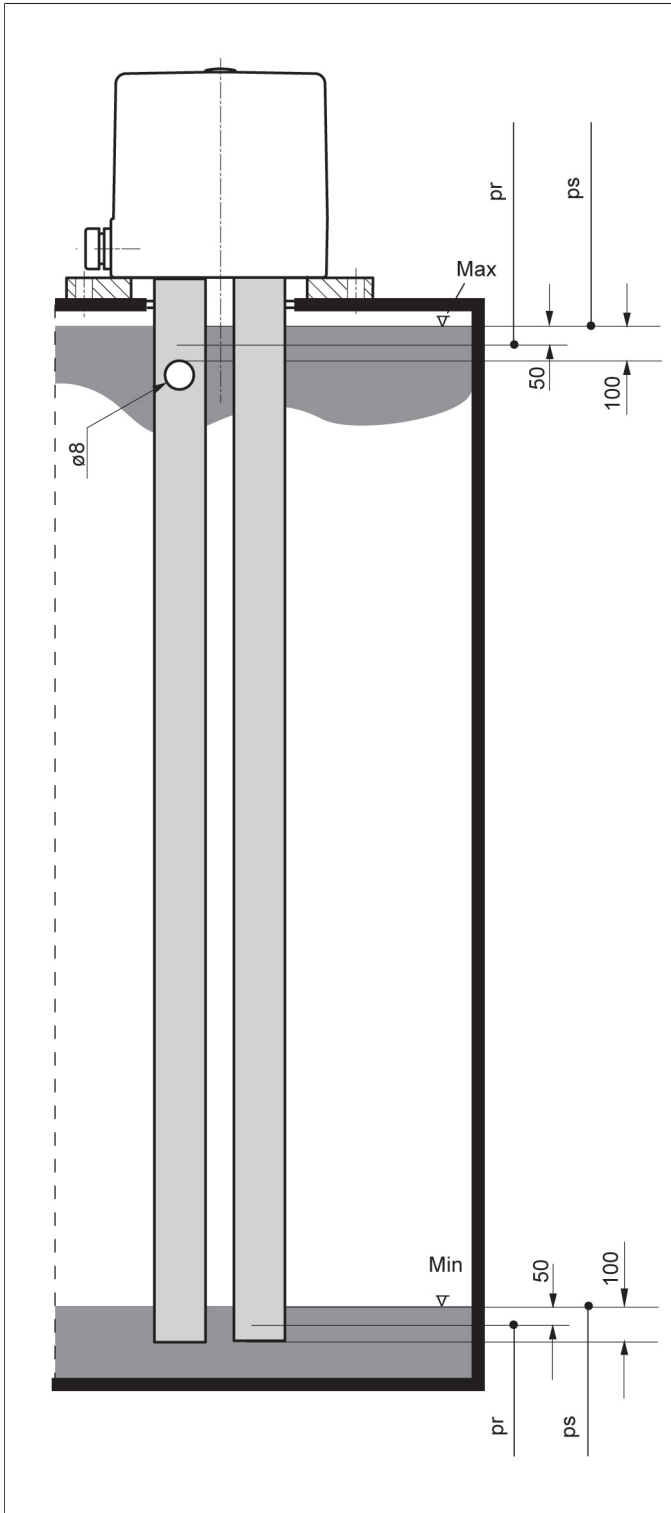
- body: PVC-U, grey, RAL 7011
- body: PP, grey, RAL 7032

Accessories

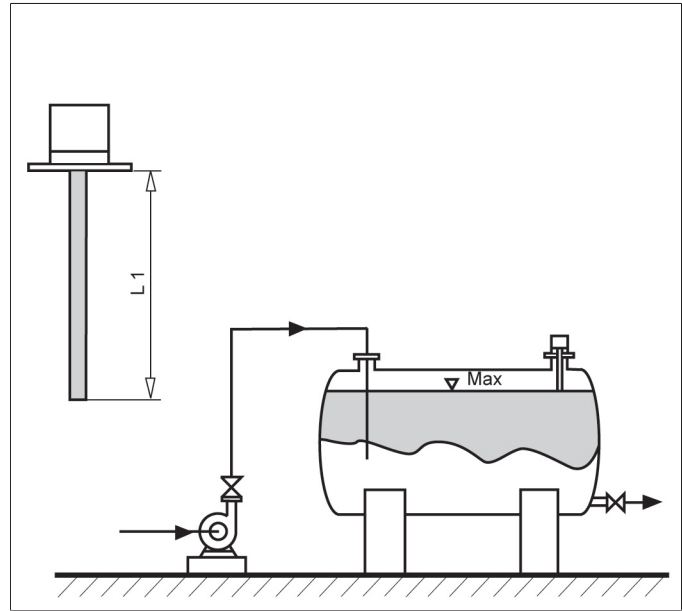
- Mounting plate
- Mounting-flange

Level measurement, Level switch NIS

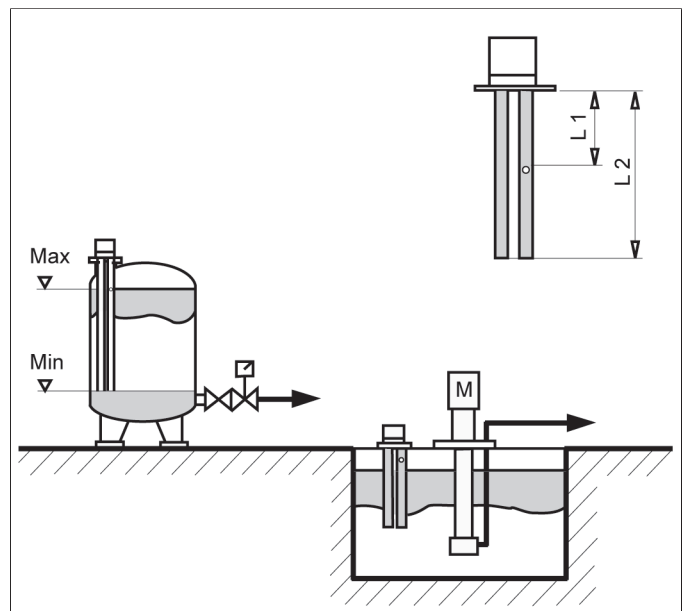
Switching points



NIS 1

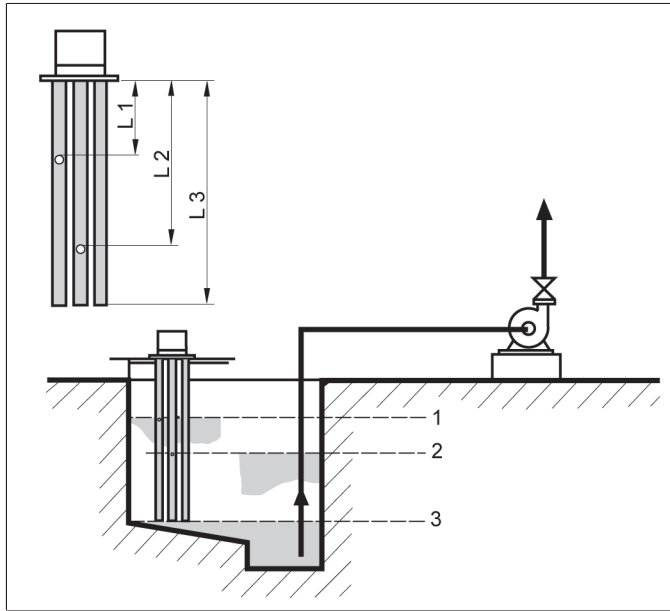


NIS 2

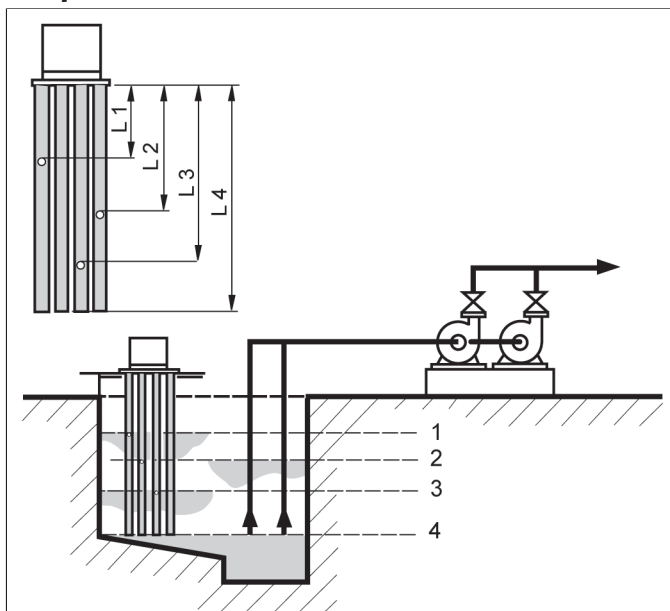


Level measurement, Level switch NIS

NIS 3



NIS 4

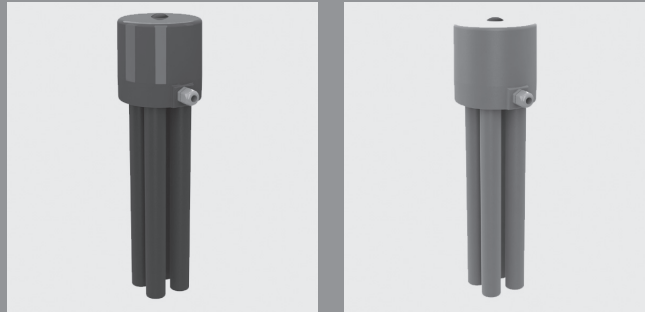


Operating note

Safe operation of the valve can only be ensured if it is properly installed, operated, serviced or repaired by qualified personnel according to its intended use while observing the accident prevention regulations, safety regulations, relevant standards, directives/technical regulations or codes of practice such as e.g. DIN, DIN EN, DIN ISO and DVS*. *DVS = German Welding Society

The intended use includes adhering to specified limit values for pressure and temperature, as well as checking the resistance. This requires all components coming into contact with the medium to be "resistant" in accordance with the ASV resistance guide.

Level measurement, Level switch NIS



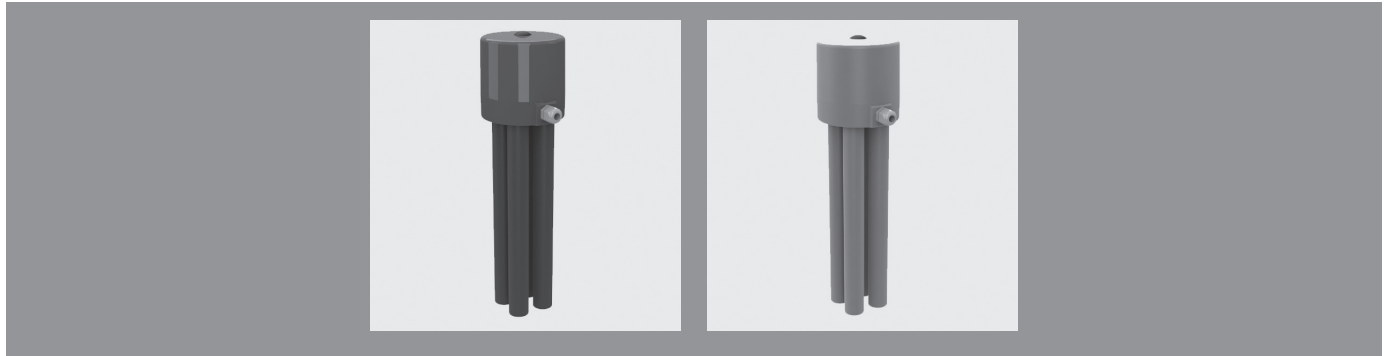
body PVC-U		A				
size pressure range	d(mm)		32	32	32	32
	L(mm)		0	0	0	0
	version		NIS 1	NIS 2	NIS 3	NIS 4
Connection	sealing	ident No.				
PVC-U socket end DIN ISO	EPDM		62134	62135	62136	62137
	FPM		52432	52431	52430	52429

body PVC-U		B				
size pressure range	d(mm)		32	32	32	32
	L1(mm)		1,500	1,500	1,500	1,500
	version		NIS 1	NIS 2	NIS 3	NIS 4
Connection	sealing	ident No.				
PVC-U socket end DIN ISO	EPDM		142107	142112	142117	142122
	FPM		142127	142132	142137	142142

body PVC-U		C				
size pressure range	d(mm)		32	32	32	32
	L2(mm)		2,000	2,000	2,000	2,000
	version		NIS 1	NIS 2	NIS 3	NIS 4
Connection	sealing	ident No.				
PVC-U socket end DIN ISO	EPDM		142108	142113	142118	142123
	FPM		142128	142133	142138	142143

body PVC-U		D				
size pressure range	d(mm)		32	32	32	32
	L3(mm)		3,000	3,000	3,000	3,000
	version		NIS 1	NIS 2	NIS 3	NIS 4
Connection	sealing	ident No.				
PVC-U socket end DIN ISO	EPDM		142109	142114	142119	142124
	FPM		142129	142134	142139	142144

Level measurement, Level switch NIS



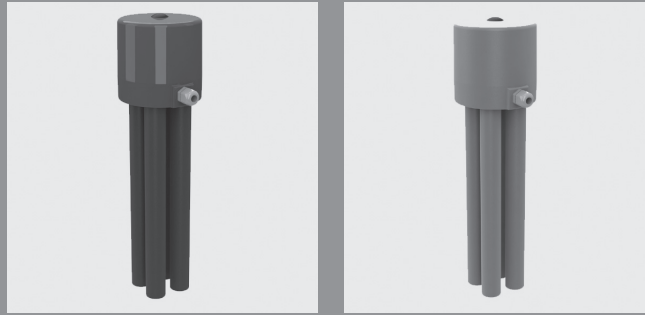
body PVC-U		E				
<i>size</i>	d(mm)		32	32	32	32
	<i>pressure range</i>	version	NIS 1	NIS 2	NIS 3	NIS 4
	L4(mm)		4,000	4,000	4,000	4,000
<i>Connection</i>	<i>sealing</i>	<i>ident No.</i>				
PVC-U socket end DIN ISO	EPDM	142110	142115	142120	142125	
	FPM	142130	142135	142140	142145	

body PP		A				
<i>size</i>	d(mm)		32	32	32	32
	<i>pressure range</i>	L(mm)	0	0	0	0
	version		NIS 1	NIS 2	NIS 3	NIS 4
<i>Connection</i>	<i>sealing</i>	<i>ident No.</i>				
PP socket end DIN ISO	EPDM	62138	62139	62140	62141	
	FPM	52433	52434	52435	52436	

body PP		B				
<i>size</i>	d(mm)		32	32	32	32
	<i>pressure range</i>	L1(mm)	1,500	1,500	1,500	1,500
	version		NIS 1	NIS 2	NIS 3	NIS 4
<i>Connection</i>	<i>sealing</i>	<i>ident No.</i>				
PP socket end DIN ISO	EPDM	142147	142152	142157	142162	
	FPM	142167	142172	142177	142182	

body PP		C				
<i>size</i>	d(mm)		32	32	32	32
	<i>pressure range</i>	L2(mm)	2,000	2,000	2,000	2,000
	version		NIS 1	NIS 2	NIS 3	NIS 4
<i>Connection</i>	<i>sealing</i>	<i>ident No.</i>				
PP socket end DIN ISO	EPDM	142148	142153	142158	142163	
	FPM	142168	142173	142178	142183	

Level measurement, Level switch NIS

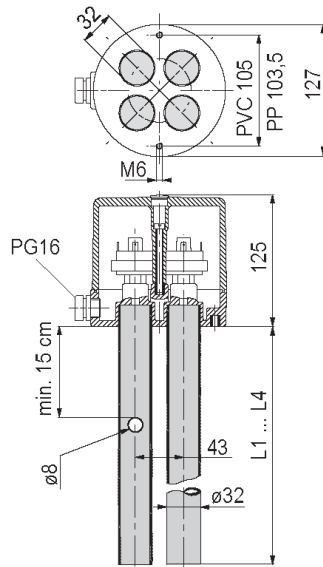


body PP		D				
size	d(mm)		32	32	32	32
	pressure range	L3(mm)	3,000	3,000	3,000	3,000
	version		NIS 1	NIS 2	NIS 3	NIS 4
Connection	sealing	ident No.				
PP socket end DIN ISO	EPDM		142149	142154	142159	142164
	FPM		142169	142174	142179	142184

body PP		E				
size	d(mm)		32	32	32	32
	pressure range	version	NIS 1	NIS 2	NIS 3	NIS 4
	L4(mm)		4,000	4,000	4,000	4,000
Connection	sealing	ident No.				
PP socket end DIN ISO	EPDM		142150	142155	142160	142165
	FPM		142170	142175	142180	142185

Level measurement, Level switch NIS

Standard

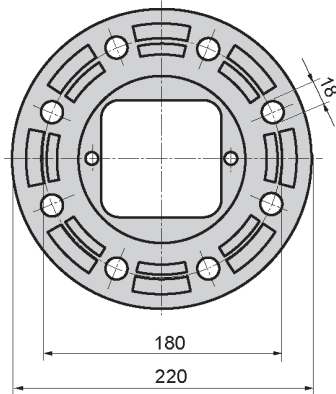


dimensions

d(mm)	32	32	32	32
version	NIS 1	NIS 2	NIS 3	NIS 4
dimensions(mm)				
d	32	32	32	32
d1	32	32	32	32
L	0	0	0	0
L1	1500	1500	1500	1500
L2	2000	2000	2000	2000
L3	3000	3000	3000	3000
L4	4000	4000	4000	4000

Accessories

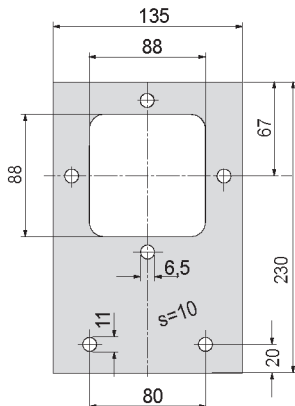
flange with mounting screws



Ident PVC-U = 50994
 Ident PP = 50997

Accessories

plate with mounting screws



Ident PVC-U = 62142
 Ident PP = 62143

