

Level switch

Ni1 L, Ni1 N, Ni1 G

Application and function

Signalling, 2 point control or regulation of liquid levels in tanks or pipelines.

The 2 point water level controller in the steam generator complies with EU Directive 2014/68/EU. Applied standards EN 12952 / EN 12953 and ASME-Boiler and Pressure Vessel Code. Regulations considered AD2000.

The fluid must not have a tendency to stick, resinify or crystallise, and the solids must not be magnetisable.

The minimum density of the medium is 0.4 kg/dm^3 .

The sensor magnet (permanent magnet) carried by the float lever switches the magnetic blocking switch located in the switch housing without contact through the pressure-resistant wall.

Technical basic equipment

- built-in magnetic blocking switch M130-KG according to DIN EN 61439-2 (VDE 0660)
- Protection class IP54 (DIN EN 60529 (IEC529/VDE 047 T1))
- Cable gland M20x1.5
- Stainless steel float

Optional versions

- Nickel-plated housing for type L for use in aggressive media
- Curved float rod for applications in which the float lever bearing must not be flooded by the medium.



Ni1-L



Ni1-G

Technical data

Operating limits Ni1	Perm. Pressure [PS]	Perm. Temperature [TS]
	5 bar 72 psig	160°C 320°F

Dimensions and sizes

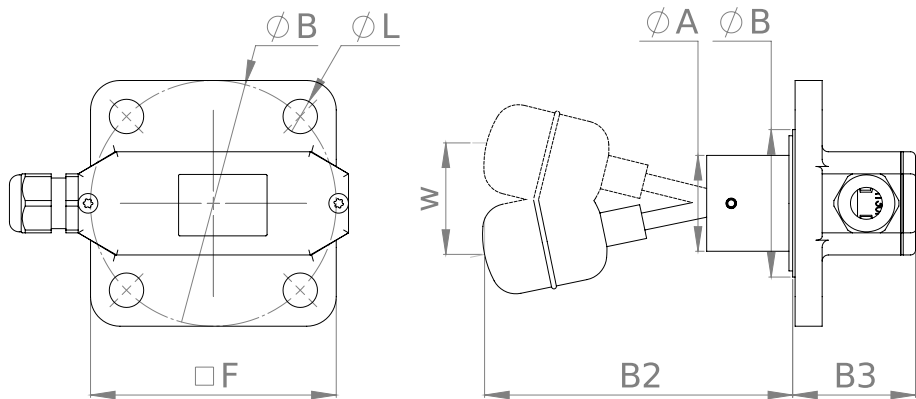


Fig.1 Ni1- (L oder N)

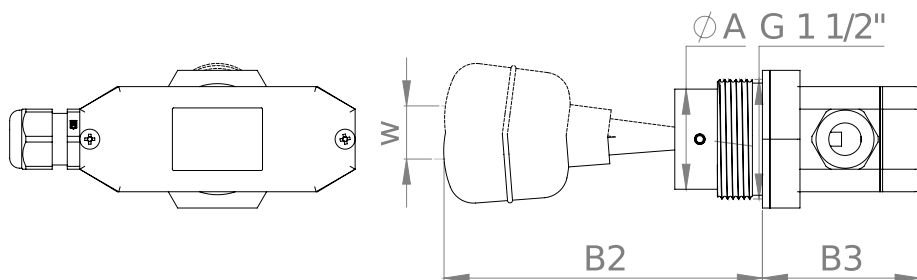
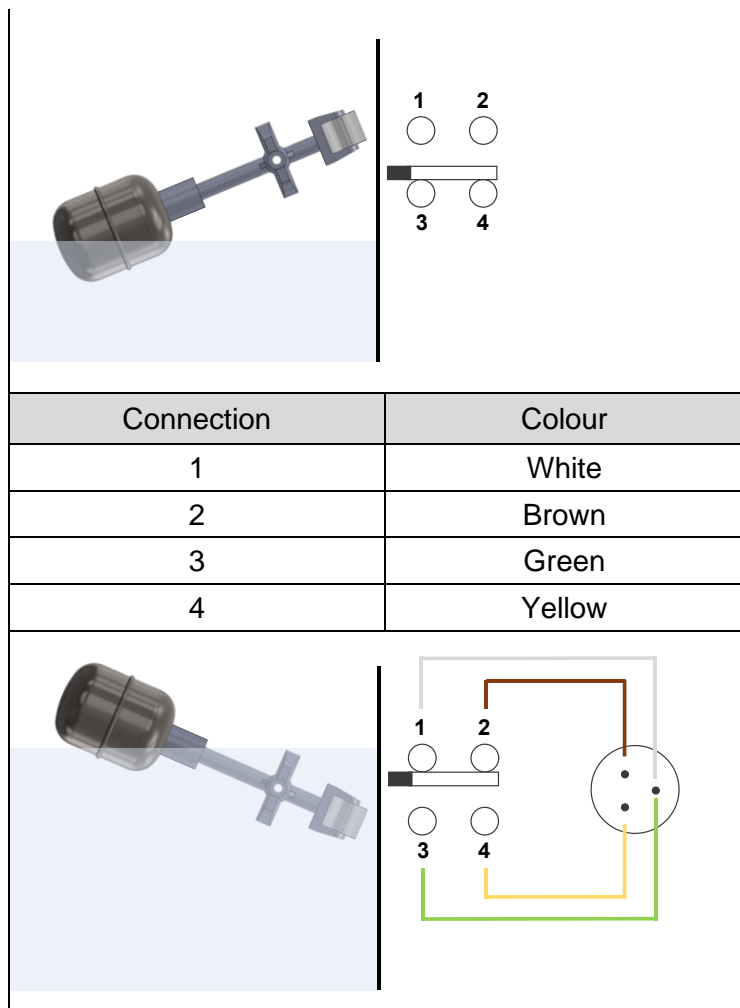


Fig. 2 Ni1-G (G1 1/2")

Type	w		B2		B3		ØA		Material
	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	
Ni1 -L	15-20	3/5-4/5	127	5	48-	1 8/9-	39	1 1/2	Light metal (Al)
Ni1 -N					60	2 1/3			Stainless steel
Ni1 -G					60	2 1/3			40

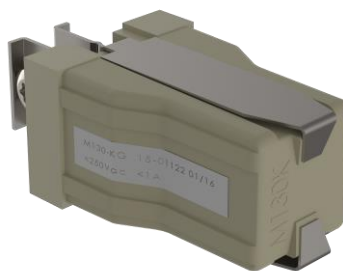
Flange connection	□ F		Ø B		Ø L		ØB	
	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
Ni1- (L or N)	100	4	100	4	14	5/9	60	2 1/3

Switch position and connection diagram



Basic equipment

The float switch Ni-1 is equipped with a magnetic switch M130-KG in the switch housing, which enables a normally closed contact and a normally open contact as switching functions.



Magnetic switch M130-KG

Type	Data sheet	Article No.
Magnetic switch M130-KG	D-07-D-50146-EN	15-01122

Optional versions

Version with bent float rod

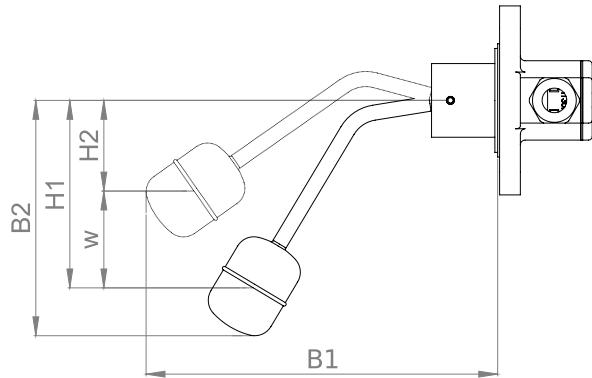


Fig. 3

	w		H1		H2		B1		B2	
	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
Horizontal installation position	15	$\frac{3}{5}$	65	$2 \frac{5}{9}$	50	2	150	6	95	$3 \frac{3}{4}$
	20	$\frac{4}{5}$	80	$3 \frac{1}{7}$	60	$2 \frac{1}{3}$	175	$6 \frac{8}{9}$	110	$4 \frac{1}{3}$
	22	$\frac{6}{7}$	95	$3 \frac{3}{4}$	73	$2 \frac{7}{8}$	190	$7 \frac{1}{2}$	125	5
	25	1	105	$4 \frac{1}{7}$	80	$3 \frac{1}{7}$	205	8	135	$5 \frac{1}{3}$

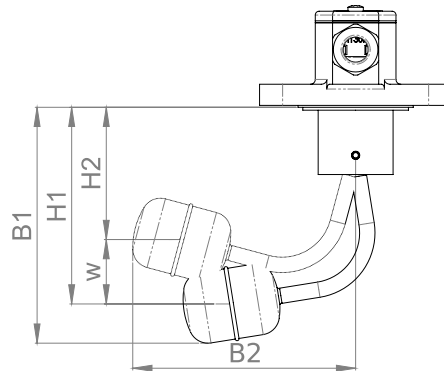


Fig. 4

Vertical installation position	15	$\frac{3}{5}$	115	$4 \frac{1}{2}$	100	4	135	$5 \frac{1}{3}$	95	$3 \frac{3}{4}$
	20	$\frac{4}{5}$	135	$5 \frac{1}{3}$	115	$4 \frac{1}{2}$	155	$6 \frac{1}{9}$	110	$4 \frac{1}{3}$
	25	1	155	$6 \frac{1}{9}$	130	$5 \frac{1}{8}$	175	$6 \frac{8}{9}$	120	$4 \frac{5}{7}$



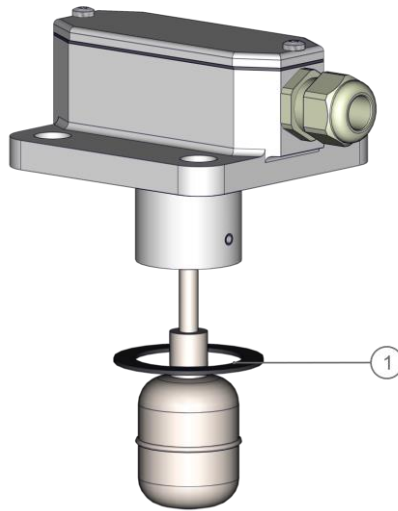
NOTICE

Units with a bent float rod must be protected against lateral inflow

- Attach baffles over the entire movement stroke.
- Do **not** choose baffles made of plastic or light metal.
- Install baffles with a distance of min. 5 mm between the float and the inside of the baffles.

Spare parts

Pos.	Description	Size	Article-No.	Quantity
1	Sealing ring	Ø55 x Ø40 x 1,5mm	40-00163	1



A suitable sealing material must be used to seal the thread insert on the Ni1-G.

Digital documentation



Direct download



Product page on the Internet

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