

## Float switch

Float switch with switches magnetically operated single or multiple Reed switches, including bistable types PN16 to PN64  
Threaded connection from 2", Flange connection from DN50/ANSI 2"  
All parts in contact with media are hermetically welded on demand

Product group **719**

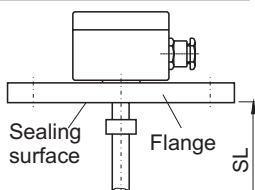
Type **0021**

Sheet: 1/2 Revision: 14

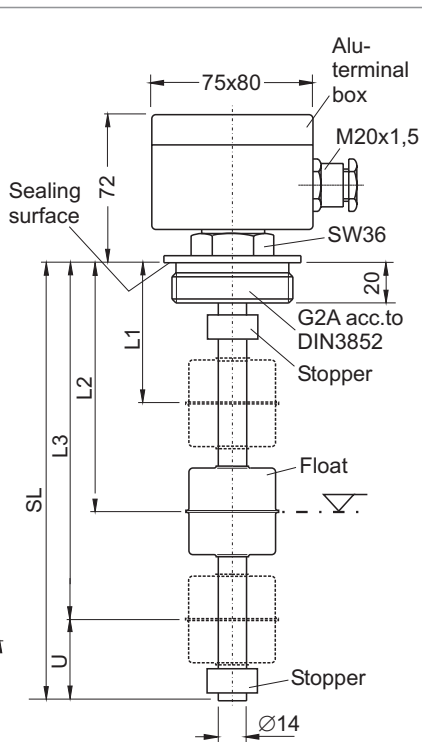
Date: 4/08



Version:  
flange  
cylinder float



measures in mm



Flanges and seal welding are accessories

## Field of application

The Float switch Type 719.0021 is for signalling liquid level limits. It has to be mounted from the top into tanks. Depending on the float design (1.4571, Titanium, ...) a broad range of process data can be achieved.

## General Data

Accuracy: ±5 mm  
Switch points position: fix or adjustable (optional)  
Temperature sensors and switches: on request  
Min. distance between two switches: 100 mm  
Hysteresis: 10 mm  
Elevation from vertical position: 30°  
L1 min: 42 mm  
Insertion length SL: from 150 to 5800 mm  
Connection: as standard G2A, other see ordering key  
Flanges are accessories  
Terminal box: Alu, 75x80x57 mm  
Weight: G2A: 0,9 kg + 7 g/cm

## Design Data

Pressure: see float table, max. 6,4 MPa  
Temperature of housing: -60 to +90 °C  
Operating temperature: -75 to +125 °C  
Density: >0,45...>0,80 g/cm<sup>3</sup>  
Materials in contact with media: 1.4571  
other materials on request

## Electrical Data

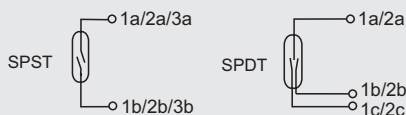
Switch voltage: 230 VDC/230 VAC  
Switch current: 1,0 A  
Rapt. capacity: 30 W/30 VA  
Contact function: NC, NO, SPDT potential free  
Wire cross section: max. 2,5 mm<sup>2</sup>  
Cable gland: M20x1,5  
Ingress protection EN 60529: IP 67

## Float table

Shape	Density [g/cm <sup>3</sup> ]	Press. [MPa]	Dimension HxDxD [mm]	U [mm]	Material
Cylinder	≥ 0,70	1,6	50x42x15,5	50	1.4571
Sphere	≥ 0,60	2,5	52x52x15,5	60	1.4571
Sphere	≥ 0,80	4,0	52x52x15,5	60	1.4571
Cylinder	0,45...0,60	2,5...6,4	156x56x16	165	3.7025

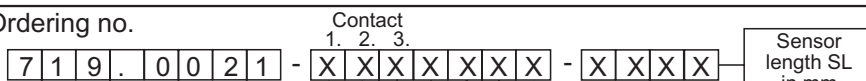
Floats for lower density, higher pressure and interface detection on request

## Electrical wiring hints



Subject to alterations

## Ordering no.

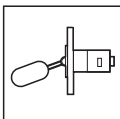


Special	9 9 9	F Fixed	Switch points
Switch NC monostable	N N N	V adjustably	
Switch NC bistable	O O O	1 G1/2A (if flange)	Connection
Switch NO monostable	R R R	2 G1 1/2A	
Switch NO bistable	S S S	3 G2A	
SPDT monostable	V V	4 1.4571	Material
SPDT bistable	W W	S Standard	Version

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## Float switch

Application hints, spare parts

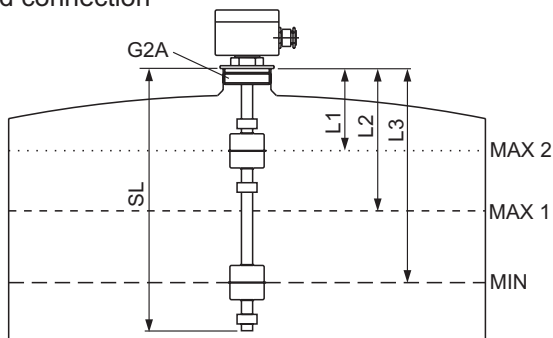
Product group **719**

Type **0021**

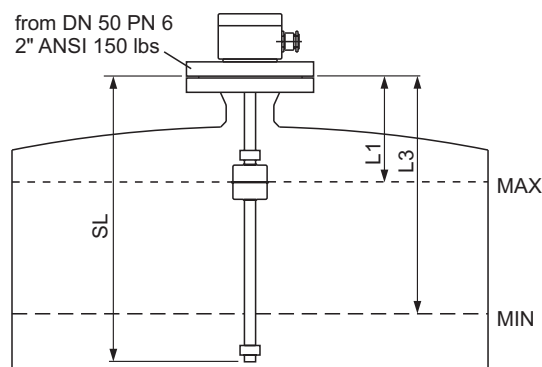
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### Thread connection



### Flange connection



### Installation hints

#### Threaded connection

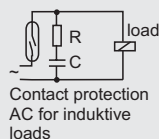
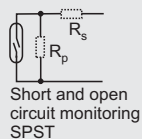
Top mounted into a tank with a 2" threaded connection. Equipped with 3 contacts and two floats for signalling 3 levels MIN, MAX1 and MAX2.

For passing through the float it is recommended that thread at least G2A, see also float table. SL equals dimension is length measured from sealing surface

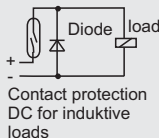
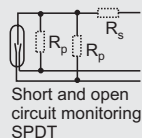
#### Flange connection

Top mounted into a tank with flange. Equipped with 2 contacts and one float for signalling 2 levels MIN and MAX. For passing through the float it is recommended that flange is at least DN50/2" ANSI, see also float table. SL equals insertion length measured from sealing surface flange.

### Electrical hints, contact protection recommendations

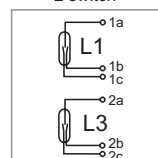
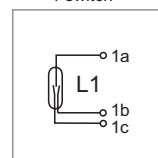
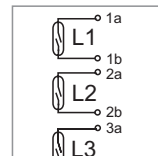
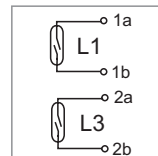
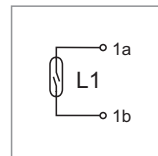


U[VAC]	I [A]	R[kΩ]	C [μF]
230	1	18	0,1
120	1	8,2	0,1
48	1	3,3	0,1
24	1	0,5	0,1



Details see TK-210

### Connection diagrams



For more than 3 switches/2 SPDT plugs are used for connection. Switches can be either N.O., N.C., monostable or bistable.

Contact function refers to rising level of liquid.

Subject to alterations

### Spare parts

#### Float table

Shape	Density[g/cm <sup>3</sup> ]	Pressure [Mpa]	Material	Dimension HxDxD [mm]	Ordering-no.
Cylinder	≥ 0,70	1,6	1.4571	43x43x15,5	SZ0431504444
Spherel	≥ 0,60	2,5	1.4571	52x52x15,5	SK0521505354
Sphere	≥ 0,80	4,0	1.4571	52x52x15,5	SK0521505254
Cylinder	0,45...0,60	2,5...6,4	3.7025	156x56x16	SZ1561605664

Denomination	Ordering-no.
Stopper 14,2x25x12	D007054142

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