



LS-10N

Float Switch for Level Detection

Features

- / Up to 15 m insertion length
- / Up to 150 bar and 250°C
- / Top, bottom or lateral mounting
- / Contacts available as NC-contact, NO-contact or change-over contact
- / High repeatability of set points
- / Optionally with temperature sensor
- / Customized designs
- / Stainless steel (ECTFE or PFA coated), Titanium, Alloy C, Brass, PVC, PP, PA, PVDF

Description:

The LS-10N series of level switches operates according to the principle of a float with magnetic transmission. The switch consists of a sliding tube with embedded reed contacts, one or more floats in which ring magnets are mounted, and a connecting module. The float is lifted inside the vessel due to the rising fluid level; subsequently, it actuates a reed contact as a result of the magnetic field of the permanent magnet situated in the float through the sliding tube wall. The reed contact can be designed to function as a NC-contact, NO-contact or change-over contact.

Application:

The LS-10N level switches are suited for monitoring the level of nearly all types of fluid media as an alarm for full or empty levels, for controlling valves and pumps or for alert signals. By deploying potential-free reed contacts, the level switches provide an ideal switching element in combination with PLC controls (apply PLC-contact or series resistor).



Ordering Codes:

Order number	LS-10N.	[][][][][][] . [][][][][][] .	S.	S.	LNO[].LNO[]...	0.	0.	S.	S.	S.	0.	0
LS-10N Float Switch												
Version /												
[][][][][] (e.g. VAG2G)												
Ins. length (L)* or center dist. for lateral connections (M) in mm /												
[][][][][] (*measured from the sealing edge of relevant connection joint)												
Electrical connection /												
S = acc. to variant standard K = connection cable; specify cable length and material in detailed text E = aluminium terminal box flat F = aluminium terminal box high DA = aluminium terminal box, flameproof enclosure for Ex d VA = stainless steel terminal box, flameproof enclosure for Ex d PA = polyester terminal box BA = ABS terminal box S1A (B) = connector M12, 3-pole (B = connector M12, 8-pole) S2A = plug Hirschmann DIN 43650 S3A (B) = plastic plug HTS straight (B = aluminium plug HTS straight) S4A (B) = plastic plug HTS angulate (B = aluminium plug HTS angulate)												
Float type /												
S = acc. to variant standard [][][][][] = special float type as per table spherical or cylindrical float (table 1 or 2)												
Level switching contact [position in mm from the sealing edge of relevant connection joint] /												
LNO [] = NO-contact [] increasing level LNC [] = NC-contact [] increasing level LUS [] = change-over-contact [] increasing level Example: LNO [100] LNC [580] = 2 contacts in engaging sequence from the sealing edge of relevant connection joint Contact No. 1 = NO-contact, position in 100 mm from the sealing edge of relevant connection joint Contact No. 2 = NC-contact, position in 580 mm from the sealing edge of relevant connection joint												
Temperature switching contact [temperature setpoint in °C] /												
0 = none TNO [] = NO-contact [] increasing temperature TNC [] = NC-contact [] increasing temperature Example: TNO [90] = NO-contact, setpoint at +90°C												
Temperature sensor /												
0 = none A = with built-in resistor Pt100, 3-wire B = with built-in resistor Pt1000, 3-wire 9 = special (please specify in detailed text)												
Material sliding tube and process connection /												
S = acc. to variant standard 9 = special (please specify in detailed text)												
Sliding tube diameter /												
S = acc. to variant standard 9 = special (please specify in detailed text)												
Process connection /												
S = acc. to variant standard 9 = special (please specify in detailed text)												
Approvals /												
0 = none 1 = with approval (please specify in detailed text e.g. Ex i, Ex d, WHG, GOST, PED, GL, BV, ABS)												
Options (multiple selections possible e.g. B/D) /												
0 = none A = counter plug M12x1 for electrical connection S1A or S1B B = contact function - protective circuit with 22 Ω / 0.21 W resistor C = contact function - protective circuit according to NAMUR EN 60947 D = contact function - high temperature 180°C to 250°C 9 = special (please specify in detailed text)												

When ordering, please specify in detailed text: medium, medium density, operating pressure, operating temperature and special issues



Versions:

Every float switch consists of following three main component groups which are available in different versions depending on the technical requirements:

- sliding tube
- float
- process connection

Sliding tube:

The sliding tube is the core of the float switch as it holds the reed contacts and it can be supplied in a number of materials and diameters.

For example:

- stainl. steel (Ø 8 mm, 12 mm, 14 mm, 16 mm, 18 mm, 40 mm)
- stainless steel electropolished (Ø 8 mm, 12 mm, 14 mm, 16 mm, 18 mm, 40 mm) / Ra appr. 0.8 µm (not attestable)
- stainless steel ECTFE coated (Ø 11 mm, 17 mm)
- stainless steel PFA coated (Ø 11 mm, 17 mm)
- Titanium (Ø 12 mm, 14 mm, 18 mm)
- Alloy C (Ø 12 mm, 18 mm)
- PVC (Ø 8 mm, 12 mm, 16 mm, 20 mm)
- PP (Ø 8 mm, 12 mm, 16 mm, 20 mm)
- PVDF (Ø 12 mm, 16 mm, 20 mm)

Float:

Each variant has a matching float. However, if the application requires other values in terms of maximum pressure, temperature or low specific gravity, an alternative float can also be fitted in as far as it fits with its bore on the sliding tube of that variant. Table 1 and 2 provides an overview of spherical and cylindrical floats, their dimensions, weights and immersion depths.

Process connection:

Various options are available as mechanical and electrical connections to the float switch. The following pages offer an overview about which variant suits to which process connections. Depending on whether the float fits through the threaded bore or not, the connecting threads are directed in different versions. "Up" installation through the interior, or "down" for the installation from the outside. If the electrical connection is realized via a cable, the maximum temperature on the cable sheath must be taken into account. Standard cable with PVC sheath ranges from -20...+80°C, the version with silicone sheath ranges from -60...+180°C. Other materials such as Teflon cord can also be offered on request for temperatures up to +200°C.

Switching contacts level:

These contacts are defined as normally open, normally closed or change-over with increasing level. The following switching values⁽¹⁾ are based on:

Reed contact values - Sliding tube < 12 mm

Function	Normally open	N. closed	change over
Switching voltage	150 V	150 V	150 V
Switching current	0.5 A	0.5 A	0.5 A
Switching load	10 VA	10 VA	10 VA

Reed contact values - Sliding tube ≥ 12 mm

Function	Normally open	N. closed	change over
Switching voltage	230 V	230 V	230 V
Switching current	1.0 A	0.5 A	0.5 A
Switching load	100 VA	40 VA	40 VA

Switching Contact Temp.:

In addition, the float switch for level detection can be equipped with a temperature switching contact. This contact is defined as NO or NC with increasing temperature. The following switching values⁽¹⁾ are based on:

Function	Normally open	Normally closed
Switch rating	230 V / 0.5 A / 40 VA	230 V / 0.5 A / 40 VA
Operating range	+80...+160°C	+50...+160°C
Graduation	every 5 K	every 5 K
Accuracy	± 5 K	± 5 K
Hysteresis	30 K ± 15 K	30 K ± 15 K
Sliding tube	≥ Ø 11 mm	≥ Ø 11 mm

Temperature Sensors:

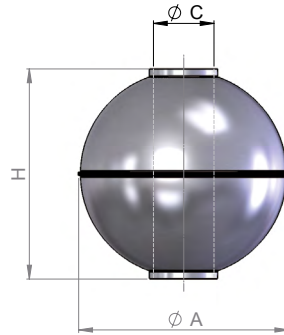
In the sliding tube of the LS-10N an additional temperature sensor can be installed as a Pt100 or Pt1000. The measuring resistors meet the following specifications:

Function	Normally open	Normally closed
Actuation temp.	-70...+400°C	-70...+400°C
Tolerance	Class B	Class B
Properties	from IEC 751	from IEC 751
Connection Type	2-, 3-, or 4-wire	2-, 3-, or 4-wire
Sliding tube	≥ Ø 8 mm	≥ Ø 8 mm

⁽¹⁾ The values shown are maximum values when using earth conductor. In some cases it is not always technically possible to provide an earth conductor, for example versions with cable- or plug connection and multiple number of contacts. Designs without earth connection should use low voltage only, for example contact protection relays or external protective earth. The electrical details apply to ohmic loads. Capacitive, inductive and lamp loads must be operated using a protective circuit.



Table 1: Spherical Float - Dimensions

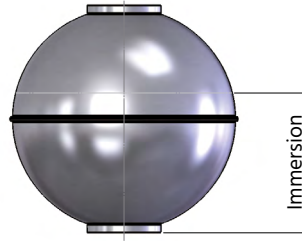


* = Design temperature 200°C, higher temperatures after calculating
 ** = acc. to Atex (conductive)

Type	Material	ØA	H	ØC	Density min.	Pressure range	Temperature range	L1 min.	U min.	Float distance min.	Mass
		(mm)	(mm)	(mm)	(kg/m ³)	(bar)	(°C)	(mm)	(mm)	(mm)	(g)
K29S9.4E	St. Steel	29	28	9.4	900	-1...+35	-156...+200	35	30	45	7
K42S9.4E	St. Steel	42	42	9.4	650	-1...+15	-156...+200	45	40	60	19
K52S15E1	St. Steel	52	52	15	680	-1...+30*	-156...+250	55	45	70	35
K52S15E2	St. Steel	52	52	15	750	-1...+50*	-156...+250	55	45	70	40
K62S15E	St. Steel	62	62	15	630	-1...+25*	-156...+250	60	50	80	60
K72S15E	St. Steel	72	71.5	15	530	-1...+25*	-156...+250	65	50	90	83
K82S15E	St. Steel	82	81	15	400	-1...+25*	-156...+250	70	55	100	88
K72S24.4E	St. Steel	72	70	24.4	620	-1...+25*	-156...+250	60	60	90	86
K80S23E1	St. Steel	80	75	23	630	-1...+25*	-156...+250	70	60	95	114
K80S23E2	St. Steel	80	73	23	750	-1...+40*	-156...+250	50	55	100	145
K98S23E	St. Steel	98	96	23	570	-1...+25*	-156...+250	80	70	115	222
K29S9.4T	Titan	29	28	9.4	700	-1...+15	-10...+150	35	30	45	6
K44S12T	Titan	44	44	12	780	-1...+100*	-10...+250	50	40	60	25
K52S14T	Titan	52	52	14	650	-1...+24	-10...+150	55	45	70	35
K52S15T	Titan	52	52	15	780	-1...+150*	-10...+250	55	45	70	42
K62S14T	Titan	62	62	14	450	-1...+25	-10...+150	60	50	80	41
K82S14T	Titan	82	80	14	500	-1...+16	-10...+150	70	55	100	108
K80S24T	Titan	80	76	24	600	-1...+16	-10...+150	70	60	95	103
K52S15A	Alloy C	52	52	15	1260	-1...+55*	-196...+250	55	45	70	68
K62S15A	Alloy C	62	62	15	700	-1...+25*	-196...+250	60	50	80	65
K82S15A	Alloy C	82	81	15	500	-1...+16*	-196...+250	70	55	100	95
K72S24.4A	Alloy C	72	70	24.4	830	-1...+25*	-196...+250	60	60	90	116
K80S23A	Alloy C	80	75	23	730	-1...+18*	-196...+250	70	60	95	125
K98S23A	Alloy C	98	96	23	550	-1...+16*	-196...+250	80	70	115	208
K53S14EC1	ECTFE coat.	53	53	14	900	-1...+40	-78...+150	70	70	80	49
K53S14EC2**	ECTFE coat.	53	53	14	900	-1...+40	-78...+150	70	70	80	49
K73S23EC1	ECTFE coat.	73	71	23	750	-1...+25	-78...+150	70	70	105	105
K73S23EC2**	ECTFE coat.	73	71	23	750	-1...+25	-78...+150	70	70	105	105
K53S14PF1	PFA coat.	53	53	14	950	-1...+40*	-100...+250	70	70	80	52
K53S14PF2**	PFA coat.	53	53	14	950	-1...+40*	-100...+250	70	70	80	52
K73S23PF1	PFA coat.	73	71	23	800	-1...+25*	-100...+250	70	70	105	110
K73S23PF2**	PFA coat.	73	71	23	800	-1...+25*	-100...+250	70	70	105	110



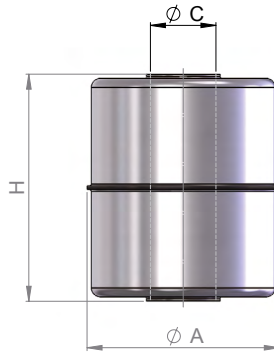
Spherical Float Immersion depth



Type	Specific weight of the medium (kg/m ³)											
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
	Immersion depth (mm)											
K29S9.4E						20.3	18.5	17.2	16.2	15.3	14.6	14.0
K42S9.4E				31.1	27.4	25.0	23.1	21.6	20.4	19.4	18.5	17.7
K52S15E1				38.6	34.1	31.1	28.8	27.0	25.5	24.2	23.1	22.2
K52S15E2					38.6	34.5	31.7	29.6	27.8	26.4	25.1	24.1
K62S15E				40.8	36.7	33.7	31.4	29.2	27.9	26.6	25.4	24.4
K72S15E			51.1	44.8	40.5	37.3	34.8	32.8	31.0	29.6	28.3	27.2
K82S15E	61.3	50.3	44.1	39.7	36.5	33.9	31.8	30.1	28.6	27.3	26.2	25.2
K72S24.4E				50.5	45.2	41.4	38.6	36.2	34.3	32.7	31.3	30.1
K80S23E1				56.2	49.9	45.6	42.3	39.7	37.5	35.7	34.1	32.8
K80S23E2					54.5	49.7	46.0	43.1	40.7	38.7	37.0	35.5
K98S23E			75.8	65.2	58.6	53.8	50.1	47.1	44.5	42.4	40.5	38.9
K29S9.4T				21.9	19.3	17.5	16.3	15.2	14.4	13.7	13.1	12.6
K44S12T					34.0	30.0	27.5	25.6	24.0	22.7	21.7	20.7
K52S14T				39.1	34.4	31.3	29.0	27.1	25.6	24.3	23.3	22.3
K52S15T					40.9	36.1	33.0	30.6	28.8	27.2	25.9	24.8
K62S14T		41.9	36.2	32.5	29.7	27.6	25.9	24.5	23.2	22.2	21.3	20.5
K82S14T		60.1	51.2	45.7	41.7	38.6	36.1	34.0	32.3	30.8	29.5	28.3
K80S24T			60.4	51.8	46.6	42.8	39.9	37.5	35.6	33.9	32.4	31.2
K52S15A										40.7	37.5	35.1
K62S15A				48.0	42.0	38.1	35.2	33.0	31.1	29.5	28.2	27.0
K82S15A		53.5	46.5	41.8	38.3	35.6	33.3	31.5	29.9	28.6	27.4	26.3
K72S24.4A						53.0	48.1	44.5	41.8	39.5	37.6	36.0
K80S23A				62.5	54.0	48.9	45.1	42.2	39.8	37.8	36.1	34.6
K98S23A			70.7	61.8	55.9	51.5	48.0	45.2	42.8	40.7	39.0	37.4
K53S14EC1						39.6	36.7	33.0	30.9	29.2	27.7	26.5
K53S14EC2**						39.6	36.7	33.0	30.9	29.2	27.7	26.5
K73S23EC1				59.8	51.5	46.5	43.0	40.2	37.9	36.0	34.4	33.0
K73S23EC2**				59.8	51.5	46.5	43.0	40.2	37.9	36.0	34.4	33.0
K53S14PF1							37.7	34.6	32.3	30.4	28.9	27.6
K53S14PF2**							37.7	34.6	32.3	30.4	28.9	27.6
K73S23PF1					54.4	48.7	44.8	41.8	39.3	37.3	35.6	34.1
K73S23PF2**					54.4	48.7	44.8	41.8	39.3	37.3	35.6	34.1



Table 2: Conical Float - Dimensions

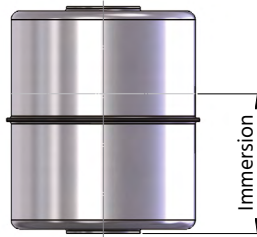


* = Design temperature 200°C, higher temperatures after calculating
 ** = acc. to Atex (conductive)

Type	Material	ØA	H	ØC	Density min.	Pressure range	Temperature range	L1 min.	U min.	Float distance min.	Mass
		(mm)	(mm)	(mm)	(kg/m ³)	(bar)	(°C)	(mm)	(mm)	(mm)	(g)
Z27S10E	St. Steel	27	31	10	800	-1...+6	-156...+200	30	30	45	7.8
Z44S15E	St. Steel	44	52	15	800	-1...+25*	-156...+250	50	45	70	43
Z44S14T	Titan	44	52	14	750	-1...+15	-10...+150	50	45	70	37
Z44S15A	Alloy C	44	52	15	1000	-1...+45*	-196...+250	50	45	70	52
Z18S11NB	NBR	18	25	11	800	-1...+6	-20...+80	15	40	40	2.5
Z19.5S8.4NB	NBR	19.5	20	8.4	850	-1...+6	-20...+80	15	35	35	3.3
Z23S8.4NB	NBR	23	25	8.4	800	-1...+6	-20...+80	15	40	40	5
Z25S09NB	NBR	25	14	9	800	-1...+6	-20...+80	15	30	30	3.5
Z30S13NB	NBR	30	45	13	700	-1...+6	-20...+80	20	65	60	14
Z40S15NB	NBR	40	30	15	700	-1...+6	-20...+80	25	50	45	17
Z50S20NB	NBR	50	45	20	700	-1...+6	-20...+80	30	70	60	41
Z42S14PC	PVC	42	44	14	800	-1...+1	-15...+60	50	40	65	32
Z54S22PC	PVC	54	55	22	750	-1...+1	-15...+60	65	50	75	64
Z78S25PC	PVC	78	80	25	600	-1...+1	-15...+60	80	65	100	164
Z28S08PP	PP	28	29	8	800	-1...+1	-10...+80	35	35	45	9
Z44S13PP	PP	44	43	13	700	-1...+1	-10...+80	50	40	65	25
Z44S21PP	PP	44	69	21	800	-1...+1	-10...+80	50	55	90	45
Z56S21PP	PP	56	54	21	600	-1...+1	-10...+80	65	50	75	50
Z80S24PP	PP	80	79	24	500	-1...+1	-10...+80	80	65	100	126
Z44S13PD	PVDF	44	55	13	850	-1...+1	-10...+100	50	55	70	46
Z56S21PD	PVDF	56	69	21	800	-1...+1	-10...+100	65	60	90	90
Z80S24PD	PVDF	80	79	24	700	-1...+1	-10...+100	80	65	100	192
Z45S14EC1	ECTFE coat.	45	53	14	950	-1...+25	-78...+150	70	70	80	54
Z45S14EC2**	ECTFE coat.	45	53	14	950	-1...+25	-78...+150	70	70	80	54
Z45S14PF1	PFA coat.	45	53	14	1000	-1...+25*	-100...+250	70	70	80	57
Z45S14PF2**	PFA coat.	45	53	14	1000	-1...+25*	-100...+250	70	70	80	57



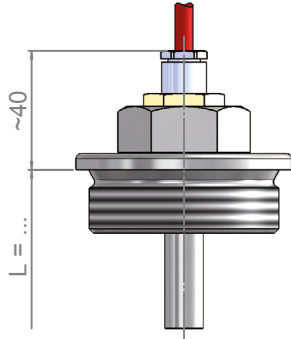
Conical Float Immersion depths



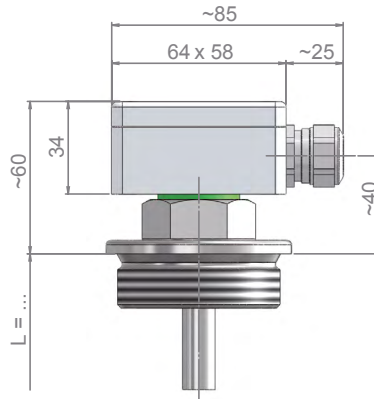
Type	Specific weight of the medium (kg/m ³)											
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
	Immersion depth (mm)											
Z27S10E					23.6	21.0	18.9	17.2	15.8	14.6	13.5	12.6
Z44S15E					44.5	39.5	35.6	32.3	29.6	27.4	25.4	23.7
Z44S14T					37.6	33.4	30.0	27.3	25.0	23.1	21.5	20.0
Z44S15A							43.0	39.1	35.9	33.1	30.7	28.7
Z18S11NB					19.6	17.4	15.7	14.3	13.1	12.1	11.2	10.5
Z19.5S8.4NB						15.2	13.6	12.4	11.3	10.5	9.7	9.1
Z23S8.4NB					17.4	15.4	13.9	12.6	11.6	10.7	9.9	9.3
Z25S09NB					10.2	9.1	8.2	7.4	6.8	6.3	5.9	5.5
Z30S13NB				34.8	30.5	27.1	24.4	22.2	20.3	18.8	17.4	16.3
Z40S15NB				22.5	19.7	17.5	15.7	14.3	13.1	12.1	11.1	10.5
Z50S20NB				35.5	31.1	27.6	24.9	22.6	20.7	19.1	17.8	16.6
Z42S14PC					32.5	28.9	26.0	23.6	21.7	20.0	18.6	17.3
Z54S22PC					41.9	37.2	33.5	30.5	27.9	25.8	23.9	22.3
Z78S25PC			63.8	54.6	47.8	42.5	38.3	34.8	31.9	29.4	27.3	25.5
Z28S08PP					24.1	21.4	19.3	17.5	16.0	14.8	13.8	12.8
Z44S13PP				29.0	25.4	22.6	20.3	18.5	16.9	15.6	14.5	13.5
Z44S21PP					56.0	49.7	44.8	40.7	37.3	34.4	32.0	29.8
Z56S21PP			43.6	37.4	32.7	29.1	26.2	23.8	21.8	20.1	18.7	17.5
Z80S24PP		58.8	49.0	42.0	36.7	32.7	29.4	26.7	24.5	22.6	21.0	19.6
Z44S13PD						41.5	37.4	34.0	31.1	28.7	26.7	24.9
Z56S21PD					58.9	52.4	47.1	42.8	39.3	36.2	33.7	31.4
Z80S24PD				64.0	56.0	49.8	44.8	40.7	37.3	34.4	32.0	29.9
Z45S14EC1							41.6	37.8	34.7	32.0	29.7	27.7
Z45S14EC2**							41.6	37.8	34.7	32.0	29.7	27.7
Z45S14PF1							43.9	39.9	36.6	33.8	31.4	29.3
Z45S14PF2**							43.9	39.9	36.6	33.8	31.4	29.3
K73S23EC1				59.8	51.5	46.5	43.0	40.2	37.9	36.0	34.4	33.0



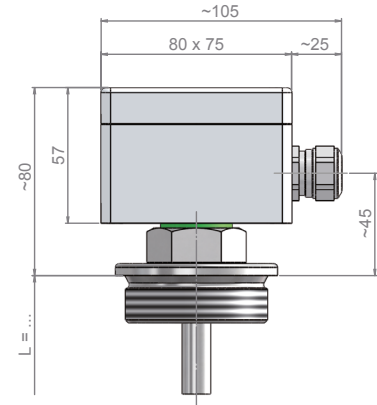
Table 3: Electrical Connection

Connection Type K
Connecting cable

Material: as defined cable
Cable gland: PG or M
Prot. class: IP55 (optional IP68)
Ambient temp.: -40...+200°C
No. of contact clamps: max. -

Connection Type E
Aluminium socket

Material: Al coated RAL 7001
Cable gland: M20 x 1,5
Prot. class: IP65
Ambient temp.: -40...+100°C
No. of contact clamps: max. 8

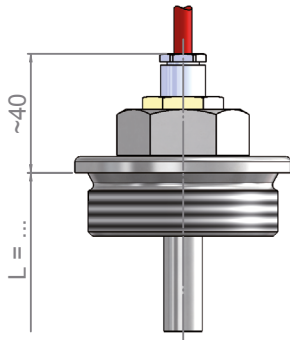
Connection Type F
Aluminium socket

Material: Al coated RAL 7001
Cable gland: M20 x 1,5
Prot. class: IP65
Ambient temp.: -40...+100°C
No. of contact clamps: max. 12

Version	● = compatible / ○ = incompatible	
VAG18PVC	●	●
VAG18SIL	●	●
VAG38PVC	●	●
VAG38SIL	●	●
VAG112G	●	●
VAG2G	●	●
VAF80G	●	●
VAF100G	●	●
VAF80FLEX	●	●
VAG1FLEX	●	●
VAVG12SIL	●	●
VAVG2G	●	●
VAWG38PVC	●	●
VAWG2G	●	●
VAFBHHG	●	●
VAFBHVH	●	●
VASBHHS	●	●
VASBHHG	●	●
VAFOPAS	●	●
VAFOVAS	●	●
VASG38SIL	●	●
VASMRG	●	●
VAG2HGG	●	●
VAG2HKG	●	●
VAG112PSG	●	●
VAG112PPG	●	●
MG18PVC	●	●
MG18SIL	●	●
MG38PVC	●	●

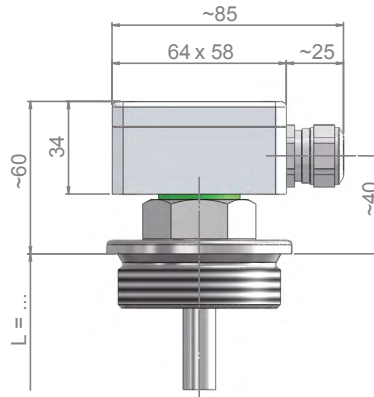


Connection Type K
Connecting cable



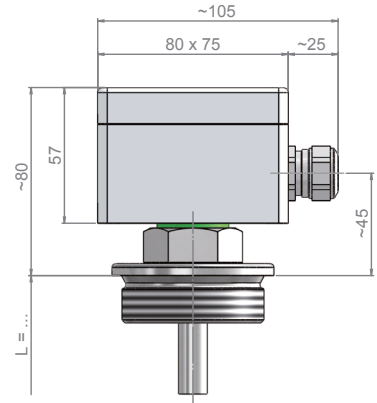
Material: as defined cable
Cable gland: PG or M
Prot. class: IP55 (optional IP68)
Ambient temp.: -40...+200°C
No. of contact clamps: max. -

Connection Type E
Aluminium socket



Material: Al coated RAL 7001
Cable gland: M20 x 1,5
Prot. class: IP65
Ambient temp.: -40...+100°C
No. of contact clamps: max. 8

Connection Type F
Aluminium socket

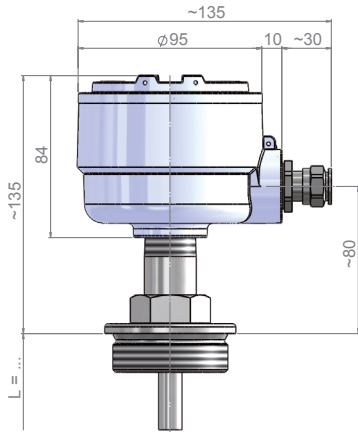


Material: Al coated RAL 7001
Cable gland: M20 x 1,5
Prot. class: IP65
Ambient temp.: -40...+100°C
No. of contact clamps: max. 12

Version	● = compatible	/	○ = incompatible
MG38SIL	●	●	●
MG112G	●	●	●
MG2G	●	●	●
PAG112FLEX	●	●	●
PAG2FLEX	●	●	●
VAF80GT	○	○	●
MG112GT	○	○	●
TG38PVC	●	●	●
TG38SIL	●	●	●
TG112G	●	●	●
TG2G	●	●	●
TF65G	●	●	●
TF100G	●	●	●
ALCG38SIL	●	●	●
ALCF80G	●	●	●
PVCG38PVC	●	○	○
PVCG1PVC	●	○	○
PPG18PVC	●	○	○
PPG38PVC	●	○	○
PPG1PVC16	●	○	○
PPG1PVC20	●	○	○
PPG2G	●	○	○
PPF65G	●	○	○
PVDFG38SIL	●	○	○
PVDFG1SIL	●	○	○
VAEBF50G	○	●	●
VAEBF80G	○	●	●
VAPBF50G	○	●	●
VAPBF80G	○	●	●

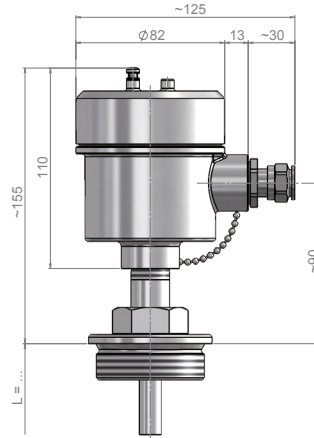


Connection Type DA (Exd)
Aluminium socket



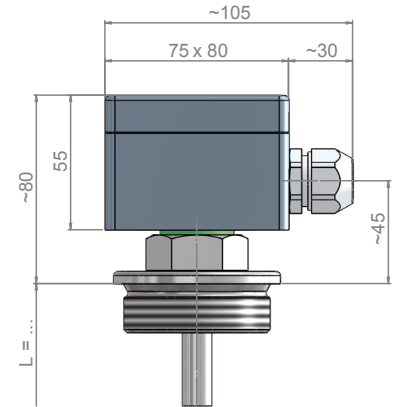
Material: Al coated RAL 9006
Cable gland: M20 x 1,5
Prot. class: IP68
Ambient temp.: -40...+100°C
No. of contact clamps: max. 8

Connection Type VA (Exd)
St. Steel socket



Material: St. Steel A4 (SS316)
Cable gland: M20 x 1,5
Prot. class: IP67 (Exd / IP68)
Ambient temp.: -40...+85°C
No. of contact clamps: max. 12

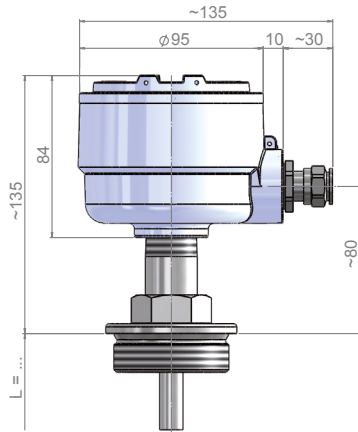
Connection Type PA
Polyester socket



Material: Polyester
Cable gland: M20 x 1,5
Prot. class: IP65
Ambient temp.: -10...+100°C
No. of contact clamps: max. 12

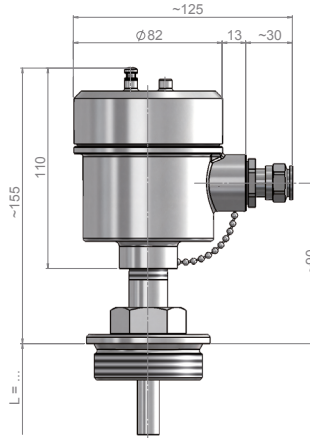
Version	● = compatible / ○ = incompatible	
VAG18PVC	●	○
VAG18SIL	●	○
VAG38PVC	●	○
VAG38SIL	●	○
VAG112G	●	○
VAG2G	●	○
VAF80G	●	○
VAF100G	●	○
VAF80FLEX	●	○
VAG1FLEX	●	○
VAVG12SIL	●	○
VAVG2G	●	○
VAWG38PVC	●	○
VAWG2G	●	○
VAFBHHG	●	○
VAFBHVg	●	○
VASBHHS	●	○
VASBHHG	●	○
VAFOPAS	●	○
VAFOVAS	●	○
VASG38SIL	●	○
VASMRG	●	○
VAG2HGG	●	○
VAG2HKG	●	○
VAG112PSG	●	○
VAG112PPG	●	○
MG18PVC	○	○
MG18SIL	○	○
MG38PVC	○	○

Connection Type DA (Exd)
Aluminium socket



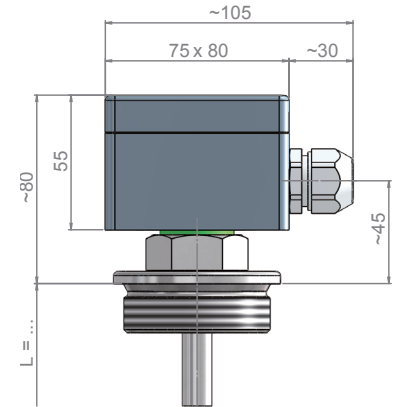
Material: Al coated RAL 9006
Cable gland: M20 x 1,5
Prot. class: IP68
Ambient temp.: -40...+100°C
No. of contact clamps: max. 8

Connection Type VA (Exd)
St. Steel socket



Material: St. Steel A4 (SS316)
Cable gland: M20 x 1,5
Prot. class: IP67 (Exd / IP68)
Ambient temp.: -40...+85°C
No. of contact clamps: max. 12

Connection Type PA
Polyester socket

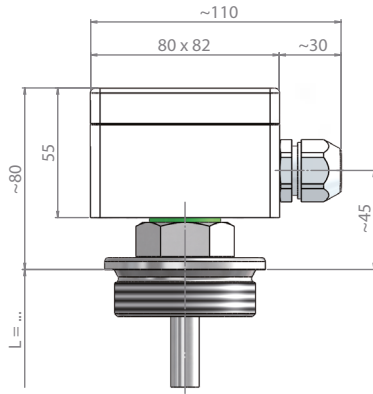


Material: Polyester
Cable gland: M20 x 1,5
Prot. class: IP65
Ambient temp.: -10...+100°C
No. of contact clamps: max. 12

Version	● = compatible	/	○ = incompatible
MG38SIL	○		○
MG112G	○		○
MG2G	○		○
PAG112FLEX	○		●
PAG2FLEX	○		●
VAF80GT	○		●
MG112GT	○		●
TG38PVC	●		○
TG38SIL	●		○
TG112G	●		○
TG2G	●		○
TF65G	●		○
TF100G	●		○
ALCG38SIL	●		○
ALCF80G	●		○
PVCG38PVC	○		●
PVCG1PVC	○		●
PPG18PVC	○		●
PPG38PVC	○		●
PPG1PVC16	○		●
PPG1PVC20	○		●
PPG2G	○		●
PPF65G	○		●
PVDFG38SIL	○		●
PVDFG1SIL	○		●
VAEBF50G	●		●
VAEBF80G	●		●
VAPBF50G	●		●
VAPBF80G	●		●

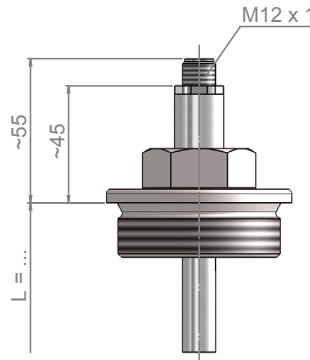


Connection Type BA
ABS socket



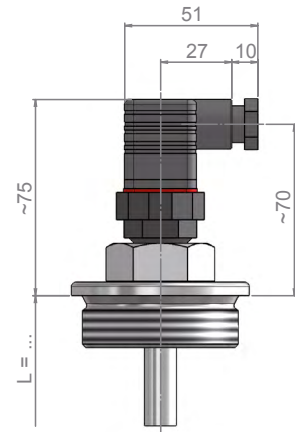
Material: ABS
Cable gland: M20 x 1,5
Prot. class: IP65
Ambient temp.: -10...+80°C
No. of contact clamps: max. 12

Connection Type S1A(B)
Plug connection M 12 3-wire (8-wire)



Material: Brass / PA
Cable gland: PG9
Prot. class: IP67
Ambient temp.: -25...+90°C
Anz. Kontaktkl.: S1A max. 3 (S1B max. 8)

Connection Type S2A
Connector Hirschmann DIN 43650

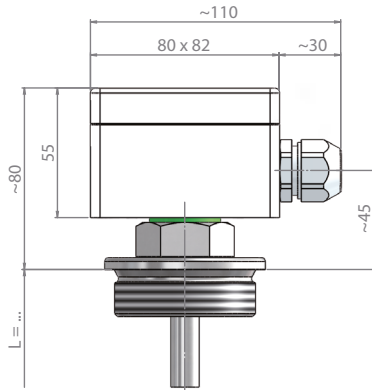


Material: PA
Cable gland: M16
Prot. class: IP65
Ambient temp.: -40...+125°C
No. of contact clamps: max. 3

Version	● = compatible	/	○ = incompatible	
VAG18PVC	○		○	●
VAG18SIL	○		○	●
VAG38PVC	○		○	●
VAG38SIL	○		○	●
VAG112G	○		○	●
VAG2G	○		○	●
VAF80G	○		○	●
VAF100G	○		○	●
VAF80FLEX	○		○	●
VAG1FLEX	○		○	●
VAVG12SIL	○		○	●
VAVG2G	○		○	●
VAWG38PVC	○		○	●
VAWG2G	○		○	●
VAFBHGG	○		○	●
VAFBHVG	○		○	●
VASBHHS	○		○	●
VASBHHG	○		○	●
VAFOPAS	○		○	●
VAFOVAS	○		○	●
VASG38SIL	○		○	●
VASMRG	○		○	●
VAG2HGG	○		○	●
VAG2HKG	○		○	●
VAG112PSG	○		○	●
VAG112PPG	○		○	●
MG18PVC	○		●	●
MG18SIL	○		●	●
MG38PVC	○		●	●

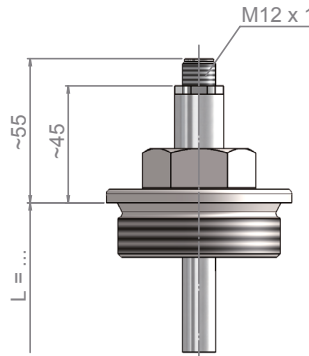


Connection Type BA
ABS socket



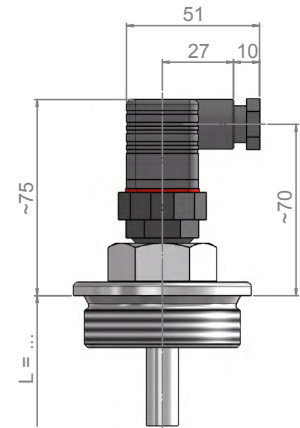
Material: ABS
Cable gland: M20 x 1,5
Prot. class: IP65
Ambient temp.: -10...+80°C
No. of contact clamps: max. 12

Connection Type S1A(B)
Plug connection M 12 3-wire (8-wire)



Material: Brass / PA
Cable gland: PG9
Prot. class: IP67
Ambient temp.: -25...+90°C
Anz. Kontaktkl.: S1A max. 3 (S1B max. 8)

Connection Type S2A
Connector Hirschmann DIN 43650

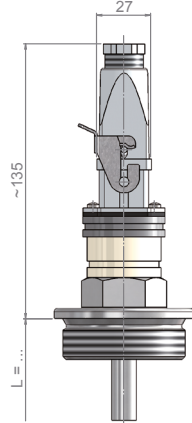


Material: PA
Cable gland: M16
Prot. class: IP65
Ambient temp.: -40...+125°C
No. of contact clamps: max. 3

Version	● = compatible	/	○ = incompatible
MG38SIL	○	●	●
MG112G	○	●	●
MG2G	○	●	●
PAG112FLEX	●	○	○
PAG2FLEX	●	○	○
VAF80GT	●	○	○
MG112GT	●	○	○
TG38PVC	○	○	●
TG38SIL	○	○	●
TG112G	○	○	●
TG2G	○	○	●
TF65G	○	○	●
TF100G	○	○	●
ALCG38SIL	○	○	●
ALCF80G	○	○	●
PVCG38PVC	●	○	●
PVCG1PVC	●	○	●
PPG18PVC	●	○	●
PPG38PVC	●	○	●
PPG1PVC16	●	○	●
PPG1PVC20	●	○	●
PPG2G	●	○	●
PPF65G	●	○	●
PVDFG38SIL	●	○	●
PVDFG1SIL	●	○	●
VAEBF50G	●	○	○
VAEBF80G	●	○	○
VAPBF50G	●	○	○
VAPBF80G	●	○	○

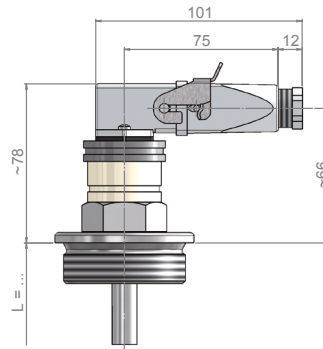


Connection Type S3A(B)
Connector HTS straight



Material: S3A = Plastic / S3B = Aluminium
Cable gland: PG11
Prot. class: IP65
Ambient temp.: -10...+80°C
No. of contact clamps: max. 6

Connection Type S4A(B)
Connector HTS angled

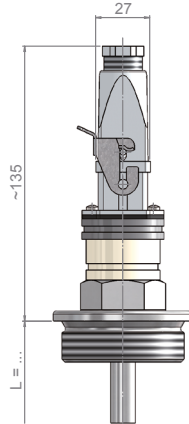


Material: S4A = Plastic / S4B = Aluminium
Cable gland: PG11
Prot. class: IP65
Ambient temp.: -10...+80°C
No. of contact clamps: max. 12

Version	● = compatible	/	○ = incompatible
VAG18PVC	○		○
VAG18SIL	○		○
VAG38PVC	○		○
VAG38SIL	○		○
VAG112G	○		○
VAG2G	○		○
VAF80G	○		○
VAF100G	○		○
VAF80FLEX	○		○
VAG1FLEX	○		○
VAVG12SIL	○		○
VAVG2G	○		○
VAWG38PVC	○		○
VAWG2G	○		○
VAFBHHG	○		○
VAFBHVH	○		○
VASBHHS	○		○
VASBHVG	○		○
VAFOPAS	○		○
VAFOVAS	○		○
VASG38SIL	○		○
VASMRG	○		○
VAG2HGG	○		○
VAG2HKG	○		○
VAG112PSG	○		○
VAG112PPG	○		○
MG18PVC	○		●
MG18SIL	○		●
MG38PVC	○		●

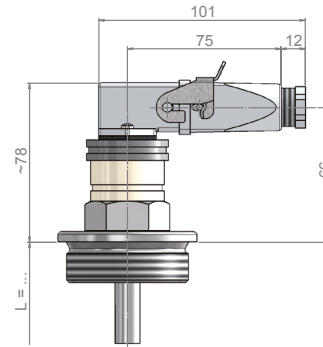


Connection Type S3A(B) Connector HTS straight



Material: S3A = Plastic / S3B = Aluminium
Cable gland: PG11
Prot. class: IP65
Ambient temp.: -10...+80°C
No. of contact clamps: max. 6

Connection Type S4A(B) Connector HTS angled

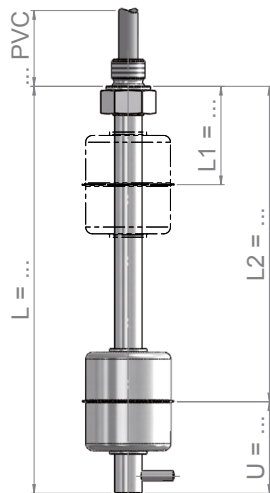


Material: S4A = Plastic / S4B = Aluminium
Cable gland: PG11
Prot. class: IP65
Ambient temp.: -10...+80°C
No. of contact clamps: max. 12

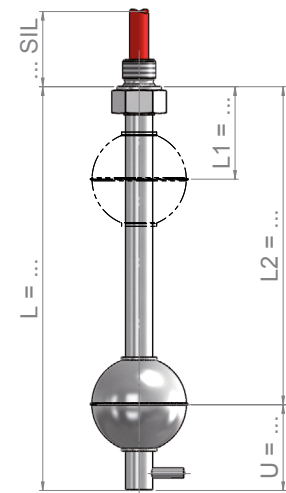
Version	● = compatible	/	○ = incompatible
MG38SIL	○		●
MG112G	○		●
MG2G	○		●
PAG112FLEX	○		●
PAG2FLEX	○		●
VAF80GT	○		○
MG112GT	○		○
TG38PVC	○		○
TG38SIL	○		○
TG112G	○		○
TG2G	○		○
TF65G	○		○
TF100G	○		○
ALCG38SIL	○		○
ALCF80G	○		○
PVCG38PVC	●		●
PVCG1PVC	●		●
PPG18PVC	●		●
PPG38PVC	●		●
PPG1PVC16	●		●
PPG1PVC20	●		●
PPG2G	●		●
PPF65G	●		●
PVDFG38SIL	●		●
PVDFG1SIL	●		●
VAEBF50G	○		○
VAEBF80G	○		○
VAPBF50G	○		○
VAPBF80G	○		○

**Float switch made of stainless steel with upward thread connection**

Version: VAG18PVC



Version: VAG18SIL

**Technical Specifications:**

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	PVC connecting cable
Process conn. /	G 1/8"-male upwards
Sliding tube /	ø 8 mm
Insertion length /	≤ 1000 mm
Float /	Z27S10E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . . +6 bar
Design temp. /	-20. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 30 mm, U = 30 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 45 mm

Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	PVC connecting cable
Process conn. /	G 1/8"-male upwards
Sliding tube /	ø 8 mm
Insertion length /	≤ 1000 mm
Float /	K29S9.4E
spec. Weight /	≥ 900 kg/m ³
Design pressure /	-1. . . +35 bar
Design temp. /	-30. . . +180°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 35 mm, U = 30 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 45 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	150 V / 0.5 A / 10 VA
max. Contacts:	3
Switching funct. /	opener /NC
Switch rating:	150 V / 0.5 A / 10 VA
max. Contacts:	3
Switching funct. /	change over /U
Switch rating:	150 V / 0.5 A / 10 VA
max. Contacts:	2
Prot. class /	IP55
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	-
Approvals:	ATEX, PED, GOST, GL, BV, ABS, WHG, SIL1

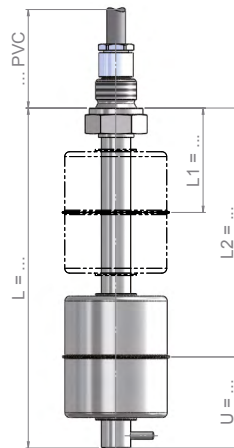
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	150 V / 0.5 A / 10 VA
max. Contacts:	3
Switching funct. /	opener /NC
Switch rating:	150 V / 0.5 A / 10 VA
max. Contacts:	3
Switching funct. /	change over /U
Switch rating:	150 V / 0.5 A / 10 VA
max. Contacts:	2
Prot. class /	IP55
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	-
Approvals:	ATEX, PED, GOST, GL, BV, ABS, WHG, SIL1

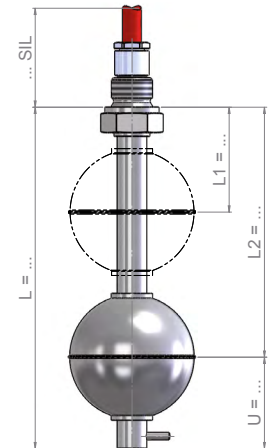


Float switch made of stainless steel with upward thread connection

Version: VAG38PVC



Version: VAG38SIL



Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	PVC connecting cable
Process conn. /	G 3/8"-male upwards
Sliding tube /	ø 12 mm (optional ø 14 mm)
Insertion length /	≤ 5000 mm**
Float /	Z44S15E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . . +25 bar
Design temp. /	-20. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 50 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, WHG, SIL1

Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Silicone connecting cable
Process conn. /	G 3/8"-male upwards
Sliding tube /	ø 12 mm (optional ø 14 mm)
Insertion length /	≤ 5000 mm**
Float /	K52S15E1
spec. Weight /	≥ 680 kg/m ³
Design pressure /	-1. . . +30 bar
Design temp. /	-30. . . +180°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 55 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

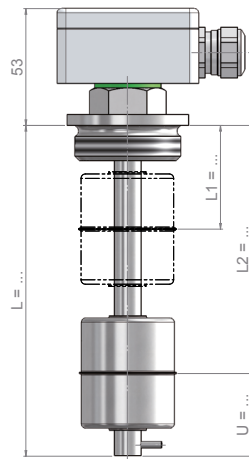
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, WHG, SIL1

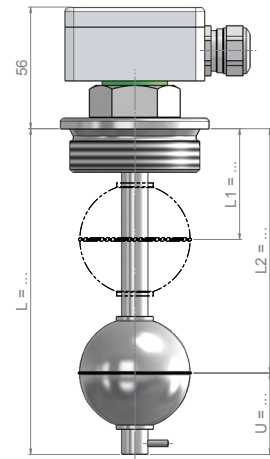
** ATEX = if length of instrument ≥ 4 m please choose diff. material quality for guide tube and float

**Float switch made of stainless steel with downward thread connection**

Version: VAG112G



Version: VAG2G

**Technical Specifications:**

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	G 1 1/2"-male downwards
Sliding tube /	ø 12 mm (optional ø 14 mm)
Insertion length /	≤ 5000 mm**
Float /	Z44S15E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . .+25 bar
Design temp. /	-30. . .+180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 50 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	G 2"-male downwards
Sliding tube /	ø 12 mm (optional ø 14 mm)
Insertion length /	≤ 5000 mm**
Float /	K52S15E1
spec. Weight /	≥ 680 kg/m ³
Design pressure /	-1. . .+30 bar
Design temp. /	-30. . .+180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 55 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, WHG, SIL1

Electrical Specifications:

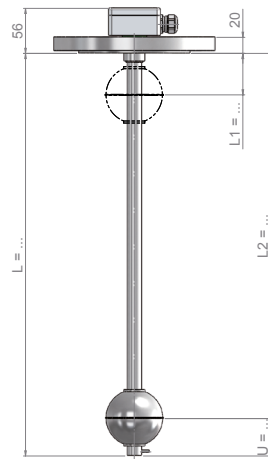
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, WHG, SIL1

** ATEX = if length of instrument ≥ 4 m please choose diff. material quality for guide tube and float

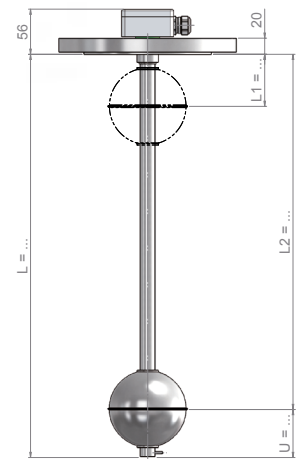


Float switch made of stainless steel with flange connection

Version: VAF80G



Version: VAF100G



Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	Flange EN DN80 / PN16 / Form B1
Sliding tube /	∅ 18 mm
Insertion length /	≤ 6000 mm**
Float /	K72S24.4E
spec. Weight /	≥ 620 kg/m ³
Design pressure /	-1. . .+16 bar (temperature-sensitive)
Design temp. /	-30. . .+180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 60 mm, U = 60 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 90 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, WHG, SIL1

Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	Flange EN DN80 / PN16 / Form B1
Sliding tube /	∅ 18 mm
Insertion length /	≤ 6000 mm**
Float /	K98S23E
spec. Weight /	≥ 570 kg/m ³
Design pressure /	-1. . .+16 bar (temperature-sensitive)
Design temp. /	-30. . .+180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 80 mm, U = 70 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 115 mm

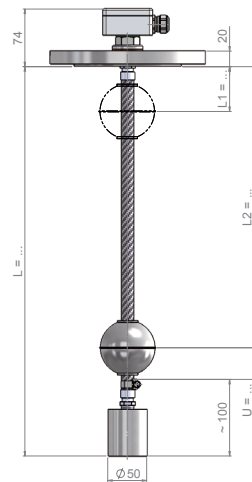
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, WHG, SIL1

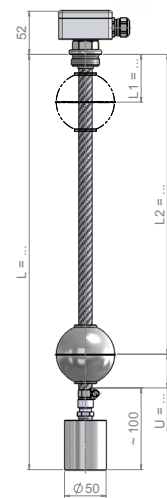
** ATEX = if length of instrument ≥ 4 m please choose diff. material quality for guide tube and float

**Float switch made of stainless steel - flexible**

Version: VAF80FLEX



Version: VAGIFLEX

**Technical Specifications:**

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	Flange EN DN80 / PN16 / Form B1
Sliding tube /	Ø 16 mm
Insertion length /	≤ 15000 mm**
Float /	K72S24.4E
spec. Weight /	≥ 620 kg/m ³
Design pressure /	-1. . .+16 bar (temperature-sensitive)
Design temp. /	-30. . .+180°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 60 mm, U = 60 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 90 mm

Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	G 1"-male downwards
Sliding tube /	Ø 16 mm
Insertion length /	≤ 15000 mm**
Float /	K72S24.4E
spec. Weight /	≥ 620 kg/m ³
Design pressure /	-1. . .+16 bar (temperature-sensitive)
Design temp. /	-30. . .+180°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 60 mm, U = 60 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 90 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, SIL1

Electrical Specifications:

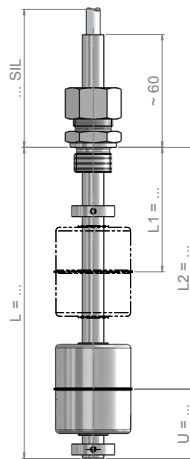
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, SIL1

** ATEX = if length of instrument ≥ 4 m please choose diff. material quality for guide tube and float



Float switch made of stainless steel - adjustable

Version: VAVG12SIL



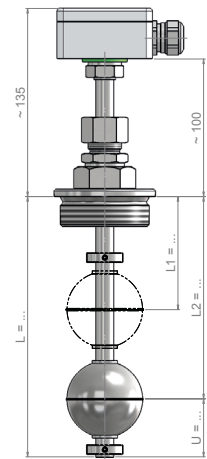
Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Silicone connecting cable
Process conn. /	G ½"-male downwards
Sliding tube /	∅ 12 mm, adjustable
Insertion length /	≤ 3000 mm
Float /	Z44S15E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. .+.3 bar
Design temp. /	-30. .+.180°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 50 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, SIL1

Version: VAVG2G



Technical Specifications:

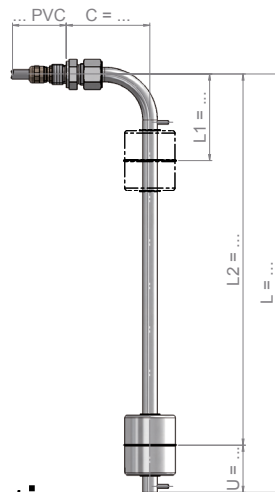
Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	G 2"-male downwards
Sliding tube /	∅ 12 mm, adjustable
Insertion length /	≤ 3000 mm
Float /	K52S15E1
spec. Weight /	≥ 680 kg/m ³
Design pressure /	-1. .+.3 bar (temperature-sensitive)
Design temp. /	-30. .+.180°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 55 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, SIL1

**Float switch made of stainless steel - angled**

Version: VAWG38PVC

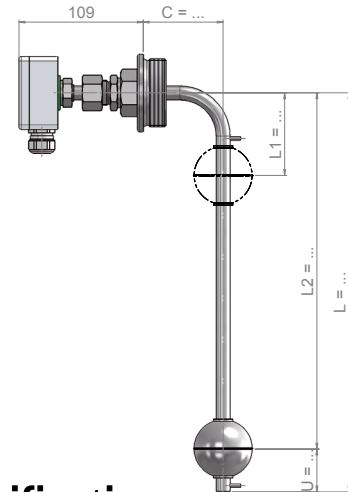
**Technical Specifications:**

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	PVC connecting cable
Process conn. /	G 3/8"-AG
Sliding tube /	ø 12 mm (optional ø 14 mm)
Insertion length /	≤ 3000 mm
Float /	Z44S15E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . .+25 bar
Design temp. /	-20. . .+80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 75 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, SIL1

Version: VAWG2G

**Technical Specifications:**

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	G 2"-AG
Sliding tube /	ø 12 mm (optional ø 14 mm)
Insertion length /	≤ 3000 mm
Float /	K52S15E1
spec. Weight /	≥ 680 kg/m ³
Design pressure /	-1. . .+30 bar (temperature-sensitive)
Design temp. /	-30. . .+180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 75 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

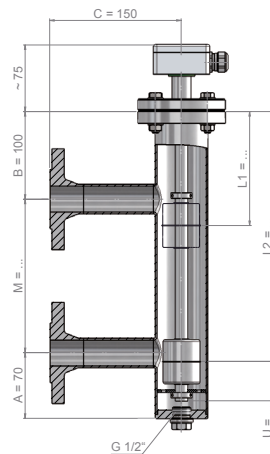
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP55
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, SIL1

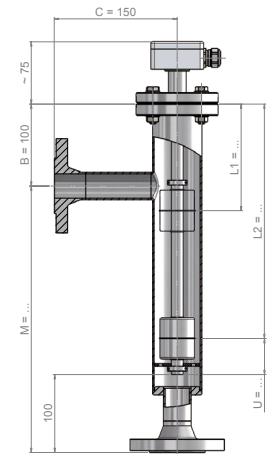


Float switch with bypass tube made of stainless steel

Version: VAFBHHG



Version: VAFBHV G



Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	Flange EN DN25 / PN16 / Form B1
Bypassgehäuse /	∅ 60.30 x 2.00 mm
Mittenabstand /	M ≤ 1000 mm
Float /	Z44S15E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . .+16 bar
Design temp. /	-30. . .+180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 130 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, SIL1

Technical Specifications:

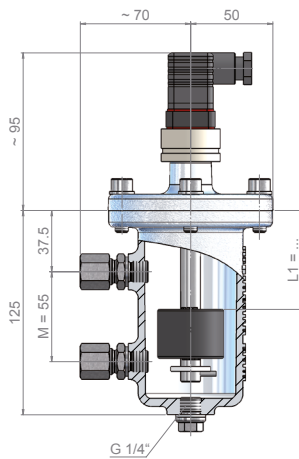
Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	Flange EN DN25 / PN16 / Form B1
Bypassgehäuse /	∅ 60.30 x 2.00 mm
Mittenabstand /	M ≤ 1000 mm
Float /	Z44S15E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . .+16 bar (temperature-sensitive)
Design temp. /	-30. . .+180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 130 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

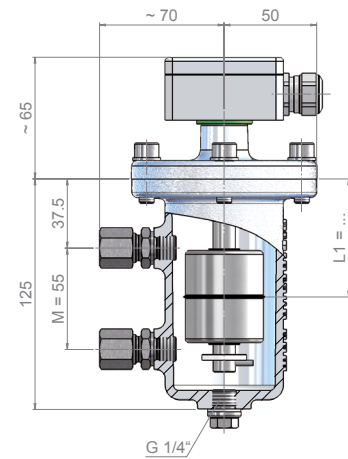
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, SIL1

**Float switch with bypass tube made of aluminium**

Version: VASBHHS



Version: VASBHHG

**Technical Specifications:**

Materials /	St. Steel/ Aluminium/ Buna
El. connection /	Connector Hirschmann DIN 43650
Process conn. /	Comp. type fitting / \varnothing 10 mm
Bypassgehäuse /	\varnothing 64.00 x 3.50 mm, Aluminium
Mittenabstand /	M = 55 mm
Float /	Z40S15NB
spec. Weight /	$\geq 700 \text{ kg/m}^3$
Design pressure /	-1. . . +6 bar
Design temp. /	-30. . . +80°C
Mounting pos. /	vertical $\pm 30^\circ$
min. Dimensions /	L1 $\geq 25 \text{ mm}$, U = - Contact clearance: - Float clearance: -

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	1
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Prot. class /	IP65
Optional /	
Temp.-sensor:	-
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, SIL1

Technical Specifications:

Materials /	St. Steel/ Aluminium
El. connection /	Type E - Aluminium socket
Process conn. /	Comp. type fitting / \varnothing 10 mm
Bypassgehäuse /	\varnothing 64.00 x 3.50 mm, Aluminium
Mittenabstand /	M = 55 mm
Float /	Z44S15E
spec. Weight /	$\geq 800 \text{ kg/m}^3$
Design pressure /	-1. . . +6 bar
Design temp. /	-30. . . +150°C (optional 250°C)
Mounting pos. /	vertical $\pm 30^\circ$
min. Dimensions	L1 $\geq 45 \text{ mm}$, U = - Contact clearance: - Float clearance: -

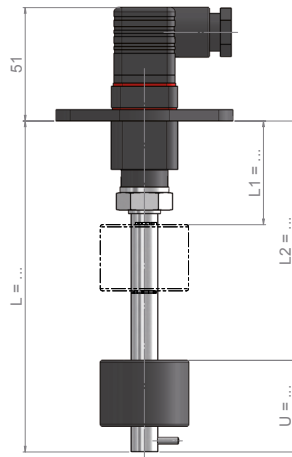
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	1
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 V
max. Contacts:	1
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, SIL1

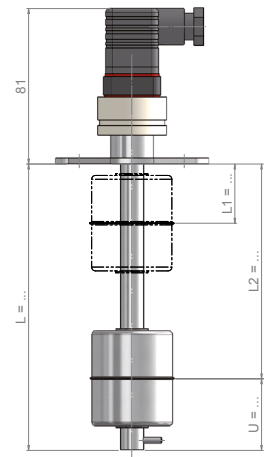


Float switch made of stainless steel - with oval flange

Version: VAFOPAS



Version: VAFOVAS



Technical Specifications:

Materials /	St. Steel/ Aluminium/ Buna
El. connection /	Connector Hirschmann DIN 43650
Process conn. /	Standard Oval flange 80 x 50 mm, PA
Sliding tube /	∅ 12 mm (optional 14 mm)
Insertion length /	≤ 5000 mm**
Float /	Z40S15NB
spec. Weight /	≥ 700 kg/m ³
Design pressure /	0...+0.5 bar
Design temp. /	-10...+80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 50 mm, U = 50 mm, Contact clearance: ≥ 20 mm Float clearance: ≥ 45 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	2
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	2
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Prot. class /	IP65
Optional /	
Temp.-sensor:	-
Temp.-contact:	NO or NC
Approvals:	PED, BV, SIL1

Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Connector Hirschmann DIN 43650
Process conn. /	Standard Oval flange 80 x 50 mm
Sliding tube /	∅ 12 mm (optional 14 mm)
Insertion length /	≤ 5000 mm**
Float /	Z44S15E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1...+1 bar
Design temp. /	-30...+150°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions	L1 ≥ 35 mm, U = 45 mm, Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

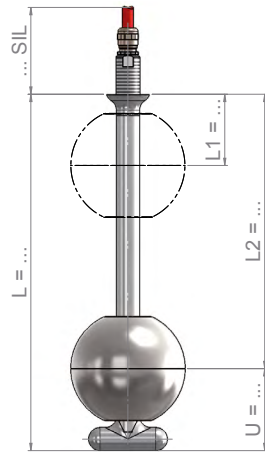
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	2
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	2
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Prot. class /	IP65
Optional /	
Temp.-sensor:	-
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, SIL1

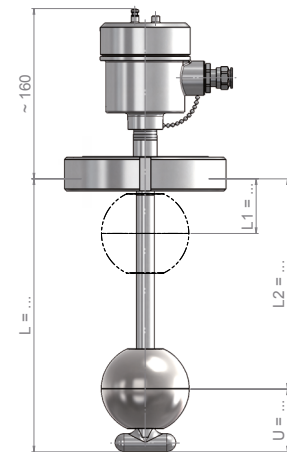
** ATEX = if length of instrument ≥ 4 m please choose diff. material quality for guide tube and float

**Float switch made of stainless steel - 3A sanitary standard**

Version: VASG38SIL



Version: VASMRG

**Technical Specifications:**

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti) roughness depth wetted $\leq 0,4 \mu\text{m}$
El. connection /	Silicone connecting cable
Process conn. /	G 3/8"-male upwards
Sliding tube /	$\varnothing 16 \text{ mm}$
Insertion length /	$\leq 5000 \text{ mm}^{**}$
Float /	K80S23E2
spec. Weight /	$\geq 750 \text{ kg/m}^3$
Design pressure /	-1. . .+40 bar
Design temp. /	-30. . .+180°C
Mounting pos. /	vertical $\pm 30^\circ$
min. Dimensions /	L1 $\geq 50 \text{ mm}$, U = 55 mm Contact clearance: $\geq 20 \text{ mm}$ Float clearance: $\geq 100 \text{ mm}$

Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti) roughness depth wetted $\leq 0,4 \mu\text{m}$
El. connection /	Type VA - St. Steel socket
Process conn. /	G 2"-AG
Sliding tube /	$\varnothing 16 \text{ mm}$
Insertion length /	$\leq 5000 \text{ mm}^{**}$
Float /	K80S23E2
spec. Weight /	$\geq 750 \text{ kg/m}^3$
Design pressure /	-1. . .+6 bar
Design temp. /	-30. . .+180°C
Mounting pos. /	vertical $\pm 30^\circ$
min. Dimensions /	L1 $\geq 50 \text{ mm}$, U = 55 mm Contact clearance: $\geq 20 \text{ mm}$ Float clearance: $\geq 100 \text{ mm}$

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, WHG, 3A, SIL1

Electrical Specifications:

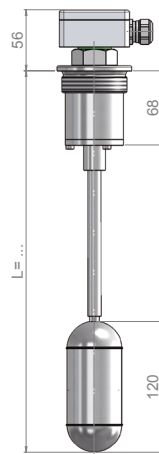
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP67
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, WHG, 3A, SIL1

**** ATEX** = if length of instrument $\geq 4 \text{ m}$ please choose diff. material quality for guide tube and float

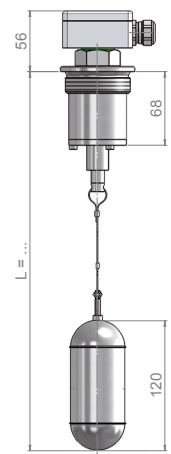


Float switch made of stainless steel - with hub float

Version: VAG2HGG



Version: VAG2HKG



Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	G 2"-AG
Schw.-Gestänge /	∅ 12 mm
Insertion length /	≤ 500 mm
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . . +16 bar
Design temp. /	-30. . . +180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions /	L1: -, U = - Contact clearance: - Float clearance: -

Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	G 2"-AG
Schw.-Gestänge /	-
Insertion length /	≤ 3000 mm
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . . +16 bar
Design temp. /	-30. . . +180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions	L1: -, U = - Contact clearance: - Float clearance: -

Electrical Specifications:

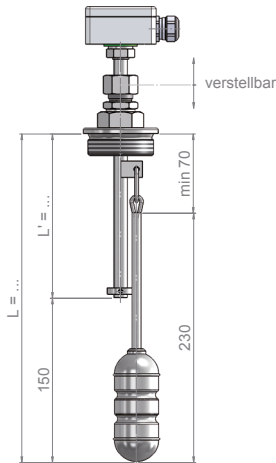
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	1
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Prot. class /	IP65
Optional /	
Temp.-sensor:	-
Temp.-contact:	-
Approvals:	ATEX, PED, GOST, SIL1

Electrical Specifications:

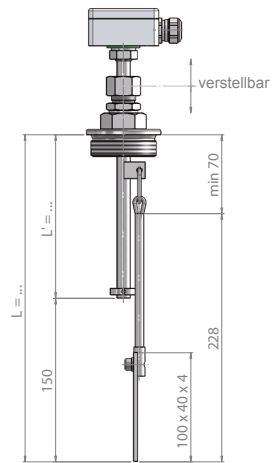
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	1
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 V
max. Contacts:	2
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Prot. class /	IP65
Optional /	
Temp.-sensor:	-
Temp.-contact:	-
Approvals:	ATEX, PED, GOST, SIL 1

**Float switch made of stainless steel - with pendulum switch**

Version: VAG112PSG



Version: VAG112PPG

**Technical Specifications:**

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	G 1 1/2"-male downwards
Schw.-Gestänge /	ø 12 mm
Insertion length /	≤ 3000 mm
spec. Weight /	≥ 1000 kg/m ³
Design pressure /	-1...+3 bar
Design temp. /	-30...+180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions /	L': ≥ 150 mm, U = - Contact clearance: - Float clearance: -

Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type E - Aluminium socket
Process conn. /	G 1 1/2"-male downwards
Sliding tube /	ø 12 mm
Insertion length /	≤ 3000 mm
Float /	Flat paddle 100 x 40 mm
spec. Weight /	-
Design pressure /	-1...+3 bar
Design temp. /	-30...+180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions /	L': ≥ 150 mm, U = - Contact clearance: - Float clearance: -

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	1
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Prot. class /	IP65
Optional /	
Temp.-sensor:	-
Temp.-contact:	-
Approvals:	PED, SIL1

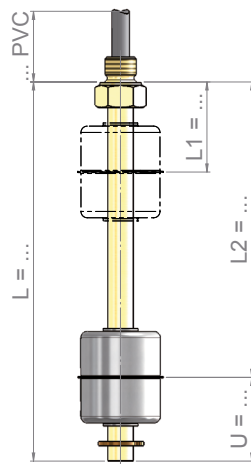
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	1
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Prot. class /	IP65
Optional /	
Temp.-sensor:	-
Temp.-contact:	-
Approvals:	PED, SIL1



Float switch made of brass with upward thread connection

Version: MG18PVC



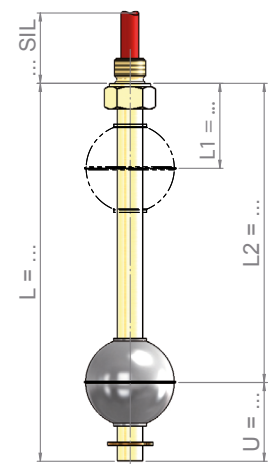
Technical Specifications:

Materials /	Brass (Float St. Steel)
El. connection /	PVC connecting cable
Process conn. /	G 1/8"-male upwards
Sliding tube /	ø 8 mm
Insertion length /	≤ 1000 mm
Float /	Z27S10E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. .+.6 bar
Design temp. /	-10. .+.80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 30 mm, U = 30 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 45 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	3
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	2
Prot. class /	IP55
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	-
Approvals:	PED, SIL1

Version: MG18SIL



Technical Specifications:

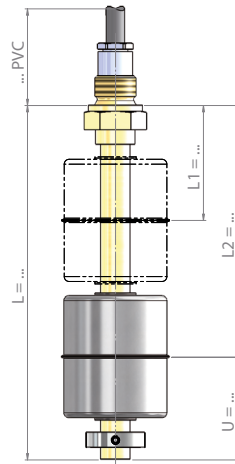
Materials /	Brass (Float St. Steel)
El. connection /	Silicone connecting cable
Process conn. /	G 1/8"-male upwards
Sliding tube /	ø 8 mm
Insertion length /	≤ 1000 mm
Float /	K29S9.4E
spec. Weight /	≥ 900 kg/m ³
Design pressure /	-1. .+.6 bar
Design temp. /	-10. .+.150°C
Mounting pos. /	vertical ±30°
min. Dimensions	L1 ≥ 35 mm, U = 30 mm, Contact clearance: ≥ 20 mm Float clearance: ≥ 45 mm

Electrical Specifications:

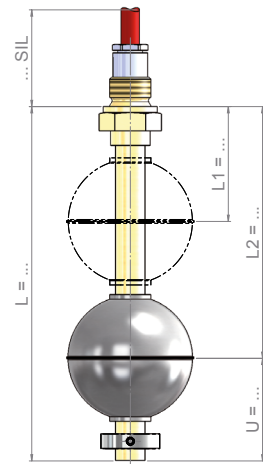
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	3
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 V
max. Contacts:	3
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Prot. class /	IP55
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	-
Approvals:	PED, SIL1

**Float switch made of brass with upward thread connection**

Version: MG38PVC



Version: MG38SIL

**Technical Specifications:**

Materials /	Brass (Float St. Steel)
El. connection /	PVC connecting cable
Process conn. /	G 3/8"-male upwards
Sliding tube /	ø 12 mm (optional ø 14 mm)
Insertion length /	≤ 5000 mm
Float /	Z44S15E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . . +16 bar
Design temp. /	-10. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 50 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Technical Specifications:

Materials /	Brass (Float St. Steel)
El. connection /	Silicone connecting cable
Process conn. /	G 3/8"-male upwards
Sliding tube /	ø 12 mm (optional ø 14 mm)
Insertion length /	≤ 5000 mm
Float /	K52S15E1
spec. Weight /	≥ 680 kg/m ³
Design pressure /	-1. . . +16 bar
Design temp. /	-10. . . +150°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 55 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, SIL1

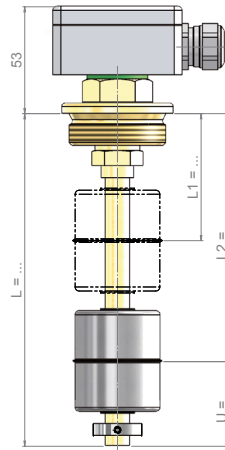
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, SIL1

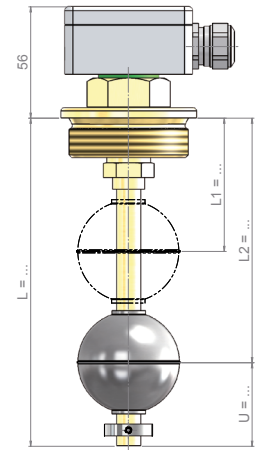


Float switch made of brass with downward thread connection

Version: MG112G



Version: MG2G



Technical Specifications:

Materials /	Brass (Float St. Steel)
El. connection /	Type E - Aluminium socket
Process conn. /	G 1 1/2"-male downwards
Sliding tube /	∅ 12 mm
Insertion length /	≤ 5000 mm
Float /	Z44S15E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . . +16 bar
Design temp. /	-10. . . +150°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 65 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Technical Specifications:

Materials /	Brass (Float St. Steel)
El. connection /	Type E - Aluminium socket
Process conn. /	G 2"-male downwards
Sliding tube /	∅ 12 mm
Insertion length /	≤ 5000 mm
Float /	K52S15E1
spec. Weight /	≥ 680 kg/m ³
Design pressure /	-1. . . +16 bar
Design temp. /	-10. . . +150°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 70 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

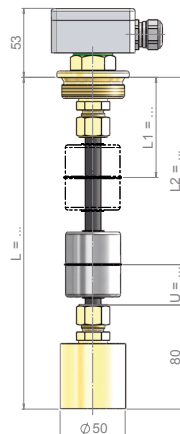
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, SIL1

Electrical Specifications:

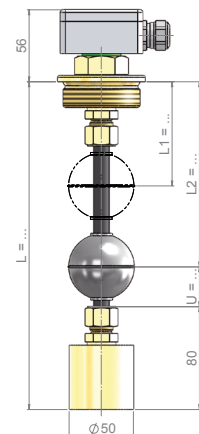
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, SIL1

**Float switch made of Polyamide - flexible**

Version: PAG112FLEX



Version: PAG2FLEX

**Technical Specifications:**

Materials /	Polyamid, Brass, St. Steel
El. connection /	Type E - Aluminium socket
Process conn. /	G 1 1/2"-male downwards
Sliding tube /	Ø 12 mm
Insertion length /	≤ 5000 mm
Float /	Z44S15E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-10. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 70 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Technical Specifications:

Materials /	Polyamid, Brass, St. Steel
El. connection /	Type E - Aluminium socket
Process conn. /	G 2"-male downwards
Sliding tube /	Ø 12 mm
Insertion length /	≤ 5000 mm
Float /	K52S15E1
spec. Weight /	≥ 680 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-10. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 70 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, SIL1

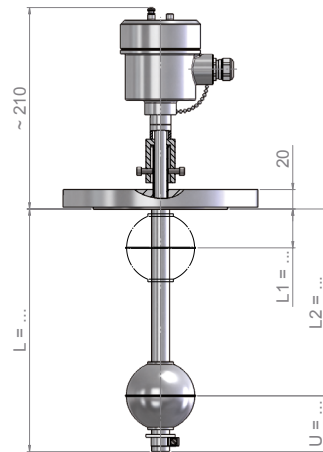
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, SIL1



Float switch made of stainless steel / brass - with test function

Version: VAF80GT



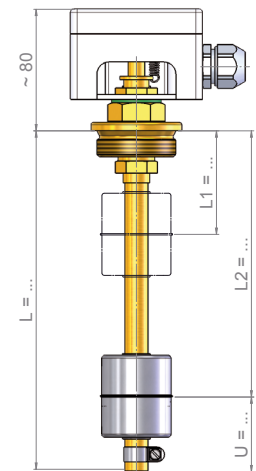
Technical Specifications:

Materials /	1.4404/ 1.4435/ 1.4571 (316L/ 316Ti)
El. connection /	Type VA - St. Steel socket
Process conn. /	Flange EN DN80 / PN16 / Form B1
Sliding tube /	∅ 18 mm
Insertion length /	≤ 6000 mm
Float /	K72S24.4E
spec. Weight /	≥ 620 kg/m ³
Design pressure /	-1. . .+16 bar (temperature-sensitive)
Design temp. /	-30. . .+180°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 60 mm, U = 60 mm Contact clearance: ≥ 90 mm Float clearance: ≥ 90 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3
Prot. class /	IP67
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, GL, BV, ABS, WHG, SIL1

Version: MG112GT



Technical Specifications:

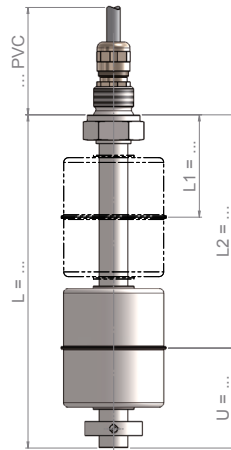
Materials /	Brass (Float St. Steel)
El. connection /	Type BA - ABS socket
Process conn. /	G 1 1/2"-male downwards
Sliding tube /	∅ 14 mm
Insertion length /	≤ 5000 mm
Float /	Z44S15E
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . .+16 bar
Design temp. /	-10. . .+100°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 65 mm, U = 45 mm Contact clearance: ≥ 70 mm Float clearance: ≥ 70 mm

Electrical Specifications:

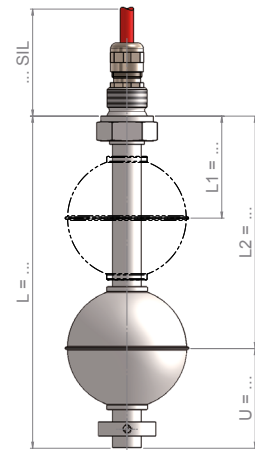
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, SIL1

**Float switch made of Titanium with upward thread connection**

Version: TG38PVC



Version: TG38SIL

**Technical Specifications:**

Materials /	Titan
El. connection /	PVC connecting cable
Process conn. /	G 3/8"-male upwards
Sliding tube /	ø 12 mm
Insertion length /	≤ 5000 mm
Float /	Z44S14T
spec. Weight /	≥ 750 kg/m ³
Design pressure /	-1. . . +15 bar
Design temp. /	-10. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 50 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Technical Specifications:

Materials /	Titan
El. connection /	Silicone connecting cable
Process conn. /	G 3/8"-male upwards
Sliding tube /	ø 12 mm
Insertion length /	≤ 5000 mm
Float /	K52S14T
spec. Weight /	≥ 650 kg/m ³
Design pressure /	-1. . . +24 bar
Design temp. /	-10. . . +150°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 55 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, WHG, SIL1

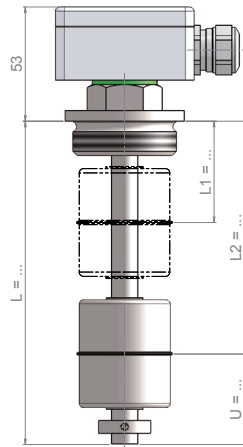
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, WHG, SIL1

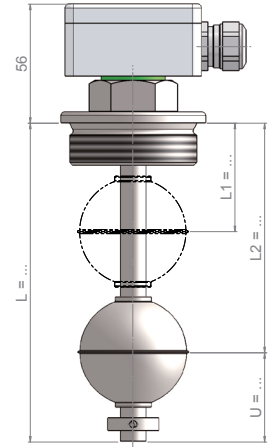


Float switch made of Titanium with downward thread connection

Version: TG112G



Version: TG2G



Technical Specifications:

Materials /	Titan
El. connection /	Type E - Aluminium socket
Process conn. /	G 1 1/2"-male downwards
Sliding tube /	∅ 12 mm
Insertion length /	≤ 5000 mm
Float /	Z44S14T
spec. Weight /	≥ 750 kg/m ³
Design pressure /	-1. . . +15 bar
Design temp. /	-10. . . +150°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 50 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Technical Specifications:

Materials /	Titan
El. connection /	Type E - Aluminium socket
Process conn. /	G 2"-male downwards
Sliding tube /	∅ 12 mm
Insertion length /	≤ 5000 mm
Float /	K52S14T
spec. Weight /	≥ 650 kg/m ³
Design pressure /	-1. . . +24 bar
Design temp. /	-10. . . +150°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 55 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, WHG, SIL1

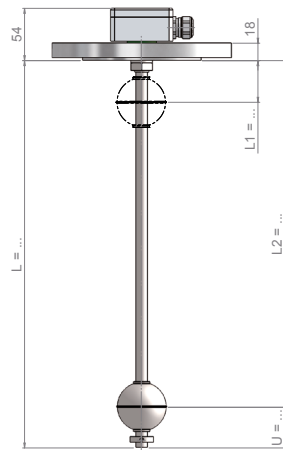
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, WHG, SIL1

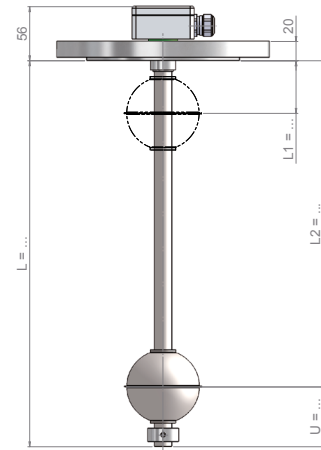


Float switch made of Titanium with flange connection

Version: TF65G



Version: TF100G



Technical Specifications:

Materials /	Titan
El. connection /	Type E - Aluminium socket
Process conn. /	Flange EN DN65 / PN16 / Form B1
Sliding tube /	∅ 12 mm
Insertion length /	≤ 5000 mm
Float /	K52S14T
spec. Weight /	≥ 660 kg/m ³
Design pressure /	-1. . . +16 bar (temperature-sensitive)
Design temp. /	-10. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 55 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Technical Specifications:

Materials /	Titan
El. connection /	Type E - Aluminium socket
Process conn. /	Flange EN DN100 / PN16 / Form B1
Sliding tube /	∅ 18 mm
Insertion length /	≤ 6000 mm
Float /	K80S24T
spec. Weight /	≥ 600 kg/m ³
Design pressure /	-1. . . +16 bar (temperature-sensitive)
Design temp. /	-10. . . +150°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 70 mm, U = 60 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 95 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, WHG, SIL1

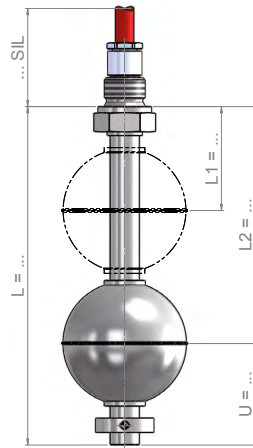
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, WHG, SIL1

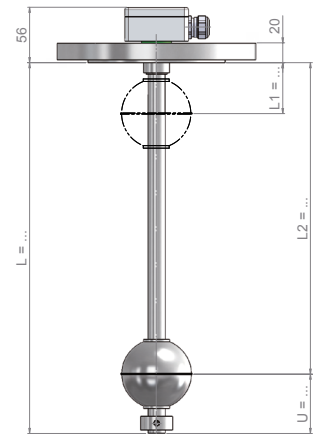


Float switch made of Alloy C

Version: ALCG38SIL



Version: ALCF80G



Technical Specifications:

Materials /	Alloy C
El. connection /	Silicone connecting cable
Process conn. /	G 3/8"-male upwards
Sliding tube /	∅ 12 mm
Insertion length /	≤ 3000 mm
Float /	K52S15A
spec. Weight /	≥ 1260 kg/m ³
Design pressure /	-1. . . +55 bar
Design temp. /	-40. . . +180°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 55 mm, U = 45 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Technical Specifications:

Materials /	Alloy C
El. connection /	Type E - Aluminium socket
Process conn. /	Flange EN DN80 / PN16 / Form B1
Sliding tube /	∅ 18 mm
Insertion length /	≤ 6000 mm
Float /	K72S24.4A
spec. Weight /	≥ 820 kg/m ³
Design pressure /	-1. . . +16 bar (temperature-sensitive)
Design temp. /	-40. . . +200°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 60 mm, U = 60 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 90 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, WHG, SIL1

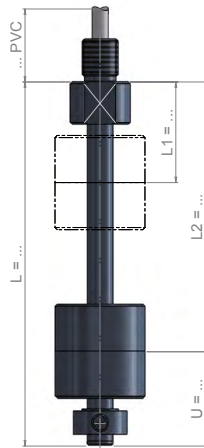
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4x (5x with Type F - Alu. socket)
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3x (4x with Type F - Alu. socket)
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, WHG, SIL1

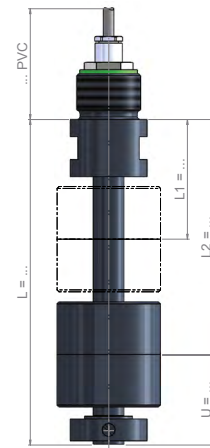


Float switch made of PVC with upward thread connection

Version: PVCG38PVC



Version: PVCG1PVC



Technical Specifications:

Materials /	PVC
El. connection /	PVC connecting cable
Process conn. /	G 3/8"-male upwards
Sliding tube /	∅ 12 mm
Insertion length /	≤ 3000 mm
Float /	Z42S14PC
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-15. . . +60°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 50 mm, U = 40 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 65 mm

Technical Specifications:

Materials /	PVC
El. connection /	PVC connecting cable
Process conn. /	G 1"-male upwards
Sliding tube /	∅ 16 mm
Insertion length /	≤ 3000 mm
Float /	Z54S22PC
spec. Weight /	≥ 750 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-15. . . +60°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 65 mm, U = 50 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 75 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, WHG, SIL1

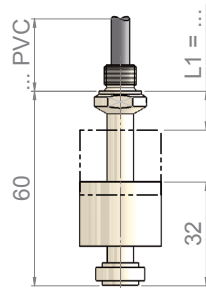
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP65 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, WHG, SIL1



Float switch made of Polypropylene with upward thread connection

Version: PPG18PVC



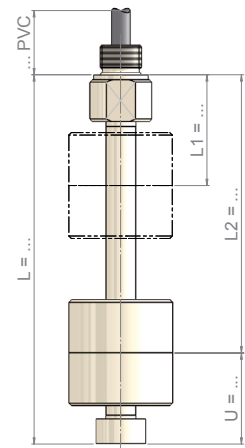
Technical Specifications:

Materials /	Polypropylene
El. connection /	PVC connecting cable
Process conn. /	G 1/8"-male upwards
Sliding tube /	∅ 8 mm
Insertion length /	60 mm
Float /	special
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-10. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 12 mm, U = 32 mm Contact clearance: - Float clearance: -

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	1
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	1
Prot. class /	IP55
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, WHG, SIL1

Version: PPG38PVC



Technical Specifications:

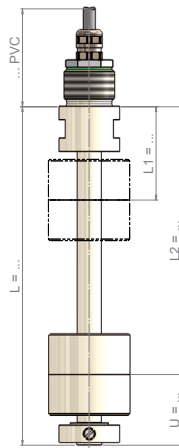
Materials /	Polypropylene
El. connection /	PVC connecting cable
Process conn. /	G 3/8"-male upwards
Sliding tube /	∅ 12 mm
Insertion length /	≤ 3000 mm
Float /	Z44S13PP
spec. Weight /	≥ 700 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-10. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 40 mm, U = 40 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 65 mm

Electrical Specifications:

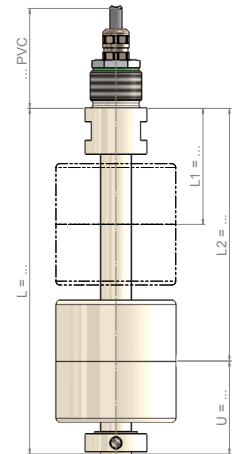
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, WHG, SIL1

**Float switch made of Polypropylene with upward thread connection**

Version: PPG1PVC16



Version: PPG1PVC20

**Technical Specifications:**

Materials /	Polypropylene
El. connection /	PVC connecting cable
Process conn. /	G 1"-male upwards
Sliding tube /	∅ 16 mm
Insertion length /	≤ 3000 mm
Float /	Z56S21PP
spec. Weight /	≥ 600 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-10. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 65 mm, U = 50 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 75 mm

Technical Specifications:

Materials /	Polypropylene
El. connection /	PVC connecting cable
Process conn. /	G 1"-male upwards
Sliding tube /	∅ 20 mm
Insertion length /	≤ 6000 mm
Float /	Z80S24PP
spec. Weight /	≥ 500 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-10. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 80 mm, U = 65 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 100 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, WHG, SIL1

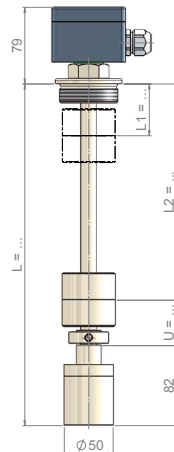
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, WHG, SIL1

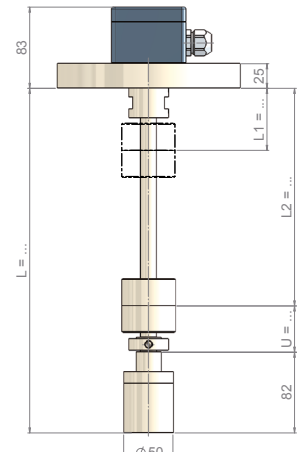


Float switch made of Polypropylene

Version: PPG2G



Version: PPF65G



Technical Specifications:

Materials /	Polypropylene
El. connection /	Type A - Polyester socket
Process conn. /	G 2"-male upwards
Sliding tube /	Ø 16 mm
Insertion length /	≤ 3000 mm
Float /	Z56S21PP
spec. Weight /	≥ 600 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-10. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 65 mm, U = 50 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 75 mm

Technical Specifications:

Materials /	Polypropylene
El. connection /	Type PA - Polyester socket
Process conn. /	Flange EN DN65 / PN10 / Form A
Sliding tube /	Ø 16 mm
Insertion length /	≤ 3000 mm
Float /	Z56S21PP
spec. Weight /	≥ 600 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-10. . . +80°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 65 mm, U = 50 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 75 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	SIL

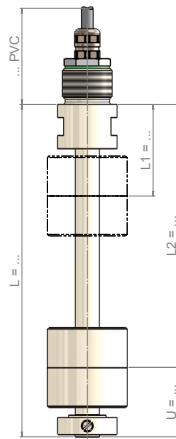
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP65
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	SIL

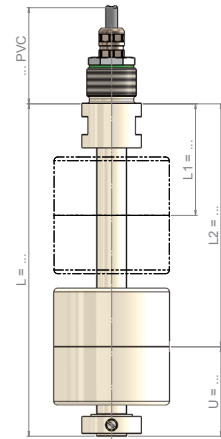


Float switch made of PVDF with upward thread connection

Version: PVDFG38SIL



Version: PVDFG1SIL



Technical Specifications:

Materials /	PVDF
El. connection /	Silicone connecting cable
Process conn. /	G 3/8"-male upwards
Sliding tube /	∅ 12 mm
Insertion length /	≤ 3000 mm
Float /	Z44S13PD
spec. Weight /	≥ 850 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-10. . . +100°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 50 mm, U = 55 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 70 mm

Technical Specifications:

Materials /	PVDF
El. connection /	Silicone connecting cable
Process conn. /	G 1"-male upwards
Sliding tube /	∅ 16 mm
Insertion length /	≤ 3000 mm
Float /	Z56S21PD
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . . +1 bar
Design temp. /	-10. . . +100°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 65 mm, U = 60 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 90 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	2
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, WHG, SIL1

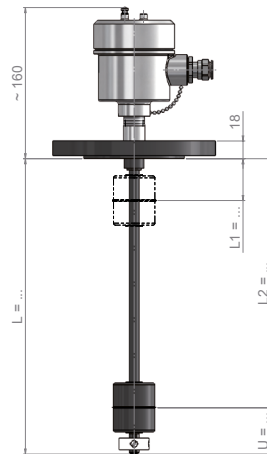
Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	2
Prot. class /	IP55 (optional IP68)
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	PED, WHG, SIL1

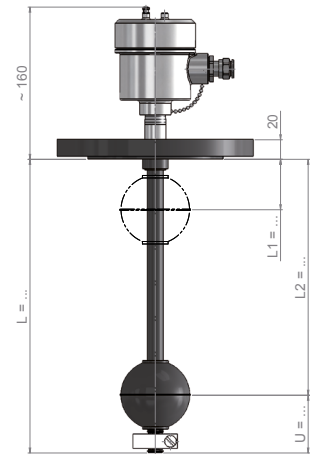


Float switch made of stainless steel - ECTFE coated

Version: VAEBF50G



Version: VAEBF80G



Technical Specifications:

Materials /	St. Steel ECTFE coated
El. connection /	Type VA - St. Steel socket
Process conn. /	Flange EN DN50 / PN16 / Form B1
Sliding tube /	∅ 11 mm
Insertion length /	≤ 3000 mm
Float /	KZ45S14EC1
spec. Weight /	≥ 950 kg/m ³
Design pressure /	-1. . . +16 bar (temperature-sensitive)
Design temp. /	-30. . . +150°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 65 mm, U = 50 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 80 mm

Technical Specifications:

Materials /	St. Steel ECTFE coated
El. connection /	Type VA - St. Steel socket
Process conn. /	Flange EN DN80 / PN16 / Form B1
Sliding tube /	∅ 17 mm
Insertion length /	≤ 3000 mm
Float /	K73S23EC1
spec. Weight /	≥ 750 kg/m ³
Design pressure /	-1. . . +16 bar (temperature-sensitive)
Design temp. /	-30. . . +150°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 70 mm, U = 70 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 105 mm

Electrical Specifications:

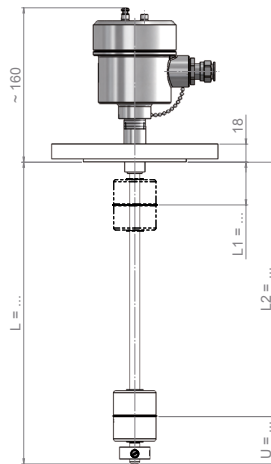
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	3
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3
Prot. class /	IP67
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, BV, WHG, SIL1

Electrical Specifications:

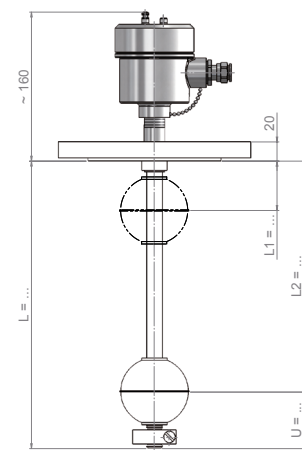
Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP67
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, BV, WHG, SIL1

**Float switch made of stainless steel - PFA coated**

Version: VAPBF50G



Version: VAPBF80G

**Technical Specifications:**

Materials /	St. Steel PFA coated
El. connection /	Type VA - St. Steel socket
Process conn. /	Flange EN DN50 / PN16 / Form B1
Sliding tube /	∅ 11 mm
Insertion length /	≤ 3000 mm
Float /	Z45S14PF1
spec. Weight /	≥ 1000 kg/m ³
Design pressure /	-1. . . +16 bar (temperature-sensitive)
Design temp. /	-30. . . +180°C (optional 250°C)
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 65 mm, U = 50 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 80 mm

Technical Specifications:

Materials /	St. Steel PFA coated
El. connection /	Type VA - St. Steel socket
Process conn. /	Flange EN DN80 / PN16 / Form B1
Sliding tube /	∅ 17 mm
Insertion length /	≤ 3000 mm
Float /	K73S23PF1
spec. Weight /	≥ 800 kg/m ³
Design pressure /	-1. . . +16 bar (temperature-sensitive)
Design temp. /	-30. . . +180°C
Mounting pos. /	vertical ±30°
min. Dimensions /	L1 ≥ 70 mm, U = 70 mm Contact clearance: ≥ 20 mm Float clearance: ≥ 105 mm

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	3
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	3
Prot. class /	IP67
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, SIL1

Electrical Specifications:

Switching funct. /	closer /NO
Switch rating:	230 V / 1.0 A / 100 VA
max. Contacts:	5
Switching funct. /	opener /NC
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	5
Switching funct. /	change over /U
Switch rating:	230 V / 0.5 A / 40 VA
max. Contacts:	4
Prot. class /	IP67
Optional /	
Temp.-sensor:	Pt100 / Pt1000 IEC 751 Cl. B
Temp.-contact:	NO or NC
Approvals:	ATEX, PED, GOST, SIL1