Illustration shows example

Level switch KFA-A

- **max. three bistable switching points for level monitoring**
- **One switching point for temperature monitoring**
- **Simple installation**
- **Small size**
- **PUR float**

Application:

Monitoring of levels and temperatures of liquids.

Function - level switch:

When the level decreases and the float reaches the switching points, the contacts will be actuated magnetically. The switching positions of the contacts are maintained until the float moves over them again by virtue of the raising level.
Example NC contact:
Level
under the switching point: Contact open
over the switching point: Contact closed

Function - thermostat:

A bimetal disc which can be influenced by temperature is switching as soon as the adjusted switching temperature is reached. Thermostates with various switching temperatures and voltages are available (see order designation).

Technical data general:

Operating pressure:	max. 1 bar
Ambient temperature:	-20 ... +80 °C
Medium temperature:	0 ... 90 °C
Medium density:	>0,7 g/cm³
Mounting position:	vertical ±10°
Material	
Tube and thermostat:	Brass
Float:	Polyurethane foam
Flange:	Brass
Sealing:	FPM
Protection class:	DIN EN 60529 IP65
Male:	See order designation
Weight at L=300:	0,16 kg

This float is suited for mineral oils and water. If it is to be used with other media, user should check the float's compatibility, if necessary.

For operation in inherently safe electric systems see data sheet A0905.

Technical data Reed contact:

Switching voltage at	
male Z3/Z6A:	max. 250 VUC
male Z5/Z8:	max. 30 VDC
Switching current:	max. 0,5 A
Switching power:	max. 30 W/VA

For inductive an capacitive loads, suppressor circuits shall be provided for.
(Diode, RC element, varistor)

Technical data thermostat B 30 VDC:

Switching voltage:	max. 30 VDC
Switching current:	max. 2 A
Tolerance of rated temperature:	±4 K
Switching hysteresis:	approx. 2 K
Temperature changing speed:	max. 1 K/min

Technical data thermostat C 250 VUC:

Switching voltage:	max. 250 VUC
Switching current:	max. 2 A
Tolerance of rated temperature:	±5 K
Switching hysteresis:	2 ... 10 K
Temperature changing speed:	max. 1 K/min

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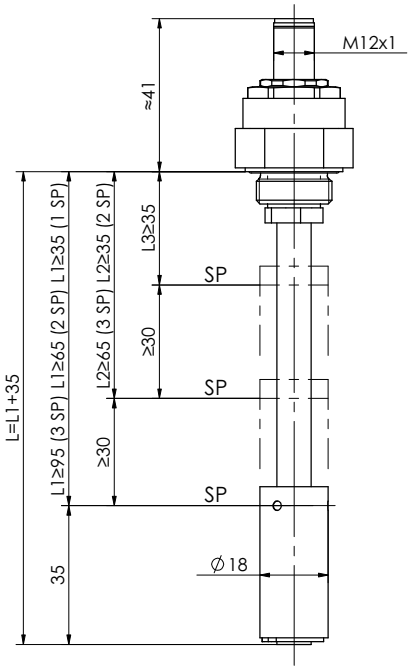
Data sheet **P0496.07.22 EN**
Replaces P0496.03.18 EN

Level switch

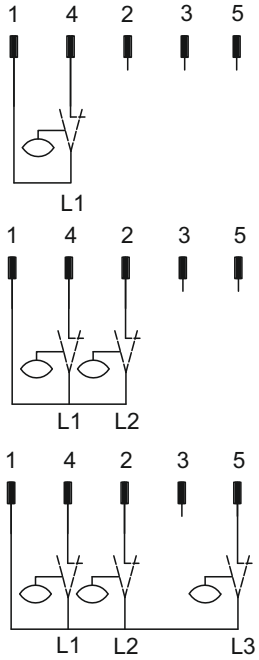
Version 30 VDC

Male **Z5N**, M12x1, 5-pin

1 ... 3 Level switching contacts



SP = Switch point

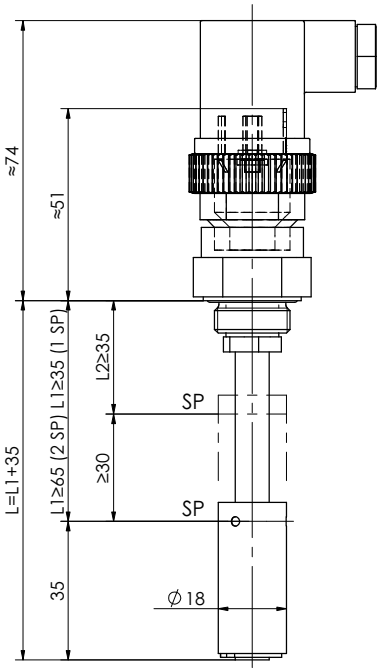


L1 = NC or NO contact
L2 = NC or NO contact
L3 = NC or NO contact
Pin adapter 913.405-85 for retrofitting, on request.

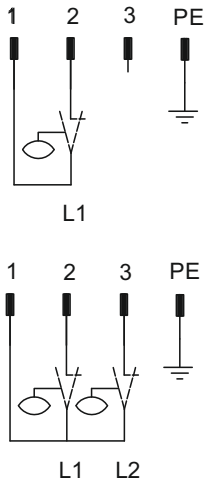
Version 250 VUC

Male **Z3N**, DIN EN 175301-803, shape A, 3-pin + PE

1 ... 2 Level switching contacts



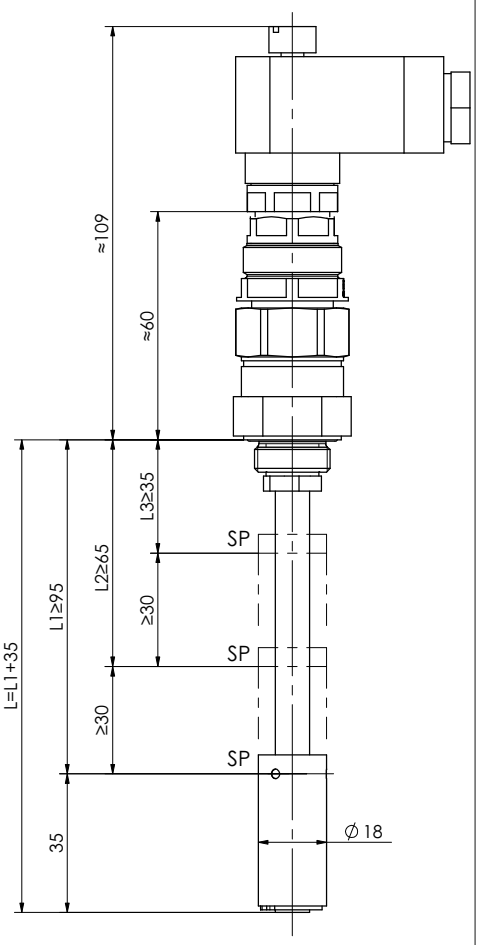
SP = Switch point



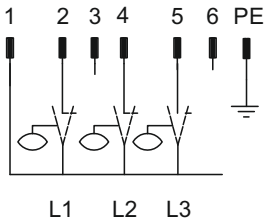
L1 = NC or NO contact
L2 = NC or NO contact

Male **Z6AN**, DIN EN 175201-804, 6-pin + PE

3 Level switching contacts



SP = Switch point



L1 = NC or NO contact
L2 = NC or NO contact
L3 = NC or NO contact

- Subject to modifications -

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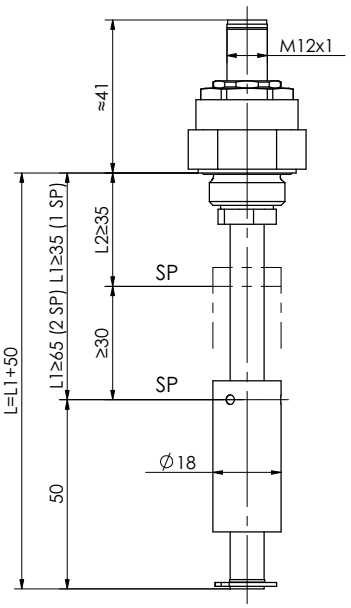
Level - temperature switch

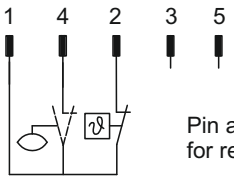
Version 30 VDC

Male **Z5N**
M12x1, 5-pin

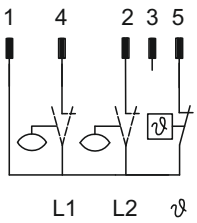
1 ... 2 Level switching contacts
1 Temperature switching contact



SP = Switch point



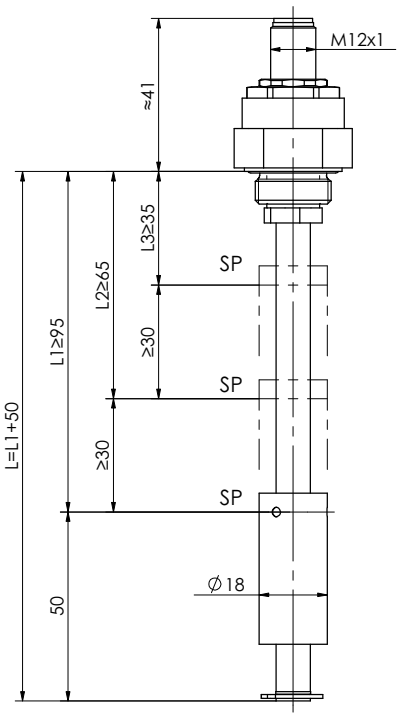
Pin adapter 913.405-85
for retrofitting on request.



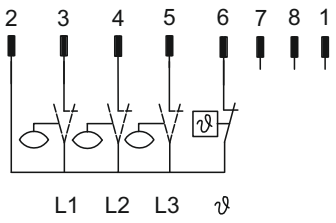
L1 = NC or NO contact
L2 = NC or NO contact
ϑ = Temperature NC contact

Male **Z8N**
M12x1, 8-pin

3 Level switching contacts
1 Temperature switching contact



SP = Switch point



L1 = NC or NO contact
L2 = NC or NO contact
ϑ = Temperature NC contact (option)

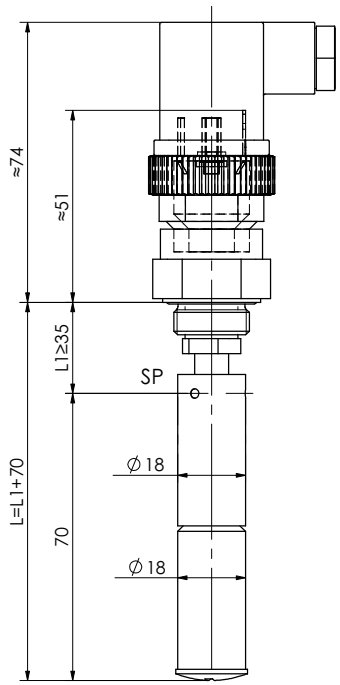
- Subject to modifications -

Level - temperature switch

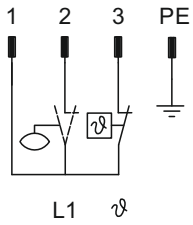
Version 250 VUC

Male **Z3N**
DIN EN 175301-803, shape A
3-pin + PE

1 Level switching contact
1 Temperature switching contact



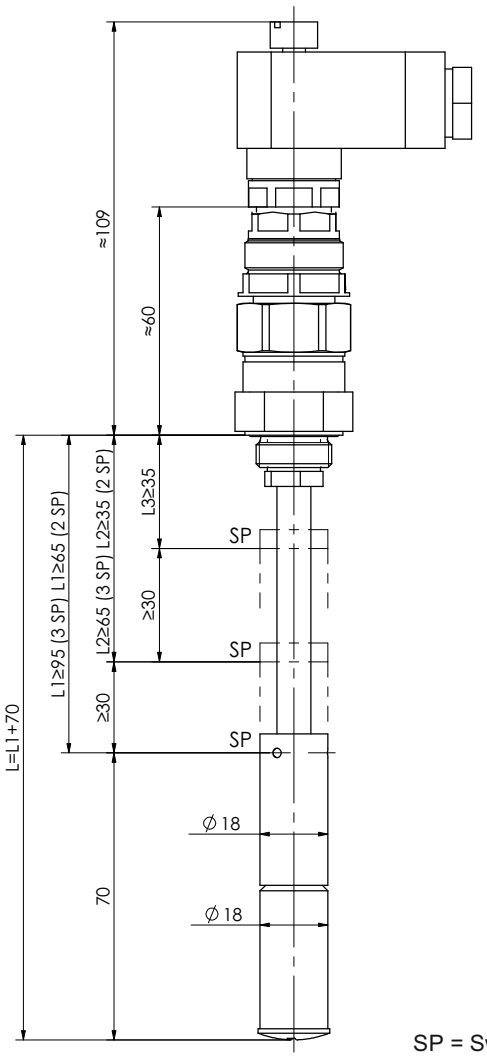
SP = Switch point



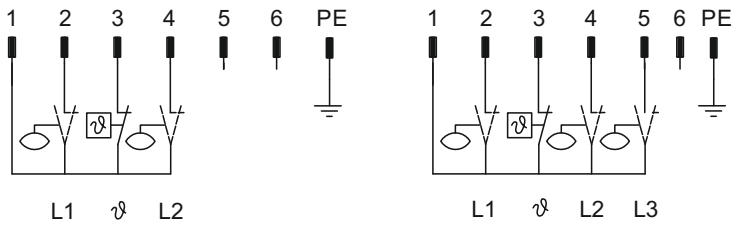
L1 = NC or NO contact
ϑ = Temperature NC contact

Male **Z6AN**
DIN EN 175201-804,
6-pin + PE

2 ... 3 Level switching contacts
1 Temperature switching contact



SP = Switch point



L1 = NC or NO contact
L2 = NC or NO contact
L3 = NC or NO contact
ϑ = Temperature NC contact (option)

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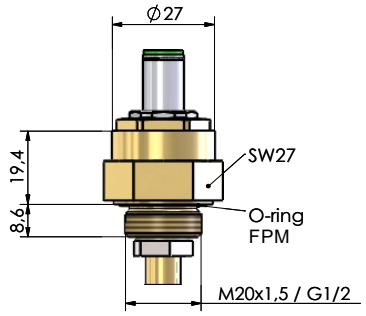
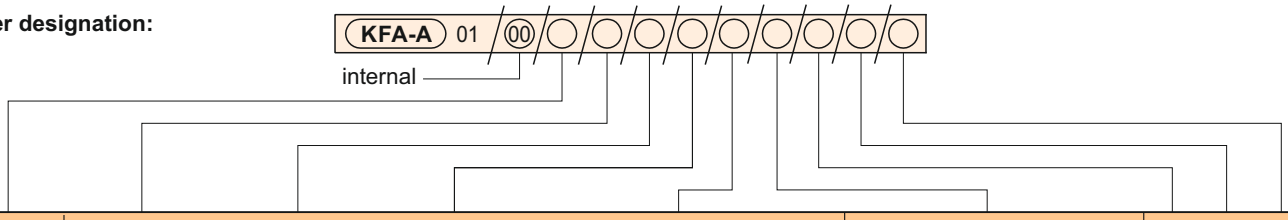
Flange



Order designation:



Flange	Switching functions: L1 Switch point bottom level decreasing	L2 Switch point middle / top level decreasing	L3 Switch point top level decreasing	Thermostat	Male without / with cable jack	Length * L1 mm	* L2 mm	* L3 mm
M20x1,5 (F)	NC contact (0) NO contact (S) without (N)	NC contact (0) NO contact (S) without (N)	NC contact (0) NO contact (S) without (N)	NC contact 30 V 56 °C (056B) NC contact 30 V 63 °C (063B) NC contact 30 V 70 °C (070B) NC contact 30 V 80 °C (080B) without (N)	up to 3 switch functions **30 V**, M12x1, 5-pin without cable jack (Z5N)	specify when ordering, please		
	NC contact (0) NO contact (S)	NC contact (0) NO contact (S)	NC contact (0) NO contact (S)	NC contact 30 V 56 °C (056B) NC contact 30 V 63 °C (063B) NC contact 30 V 70 °C (070B) NC contact 30 V 80 °C (080B)	4 switch functions **30 V** M12x1, 8-pin without cable jack (Z8N)			
G 1/2 (G)	NC contact (0) NO contact (S) without (N)	NC contact (0) NO contact (S) without (N)	without (N)	NC contact 250 V 56 °C (056C) NC contact 250 V 63 °C (063C) NC contact 250 V 70 °C (070C) NC contact 250 V 80 °C (080C) without (N)	up to 2 switch functions **250 V** 3-pin + PE without cable jack (Z3N) with cable jack (Z3)			
	NC contact (0) NO contact (S)	NC contact (0) NO contact (S)	NC contact (0) NO contact (S) without (N)	NC contact 250 V 56 °C (056C) NC contact 250 V 63 °C (063C) NC contact 250 V 70 °C (070C) NC contact 250 V 80 °C (080C) without (N)	3 to 4 switch functions **250 V** 6-pin + PE without cable jack (Z6AN) with cable jack (Z6A)			
	Note: The connectors Z3/Z3N can only be selected for up to two switching functions, Z5N only for up to three switching functions, Z8N only for up to 4 switching functions and Z6A/Z6AN only for three or four switching functions.					* if there is no switching point existing: L1≙L - The switching dimensions refer to a density of 1 g/cm³		

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