



- Subject to modifications -



Illustration shows example

Level switch KFA-V

- max. three bistable switching points for level monitoring
- One switching point for temperature monitoring
- Simple installation
- Small size
- Float made from stainless steel 1.4541

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:	>0,9 g/cm ³
Mounting position:	vertical ±10°
Material:	

Tube and thermostat:	Brass or stainless steel
Float:	Stainless steel
Flange:	Brass or stainless steel
Seal:	FPM
Protection class:	DIN EN 60529 IP65
Male:	see order designation
Weight at L=300:	0,16 kg
Viscosity:	max. limit 800 cSt at operating temperature

This float is suited for synthetic oils, mineral oils, glycoles, esters as well as biological oils. It can also be used for fuels. (Mind Ex-protection!)

For operation in inherently safe electric systems see data sheet P0468.

Technical data Reed contact:

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

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

Technical data thermostat B 30 VDC:

Switching voltage:	max. 30 VDC
Switching current:	max. 2A
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. 2A
Tolerance of rated temperature:	±5 K
Switching hysteresis:	2 ... 10 K
Temperature changing speed:	max. 1 K/min

Level switch KFA-V

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Data sheet

Replaces
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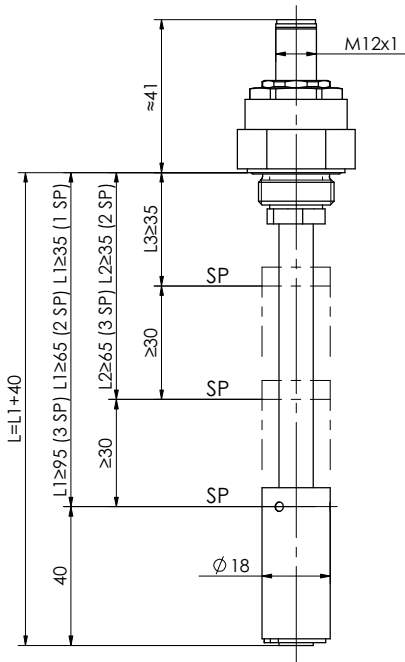
P0520.07.22 EN
 P0520.03.18 EN



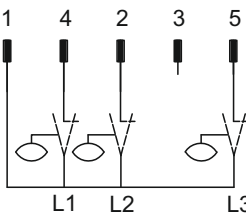
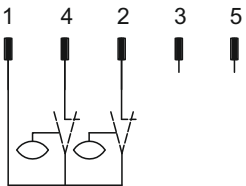
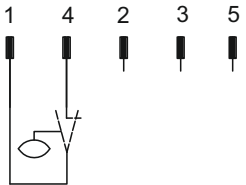
Version 30 VDC

Male Z5N M12x1, 5-pin

1 ... 3 Level switching contacts



SP = Switch point



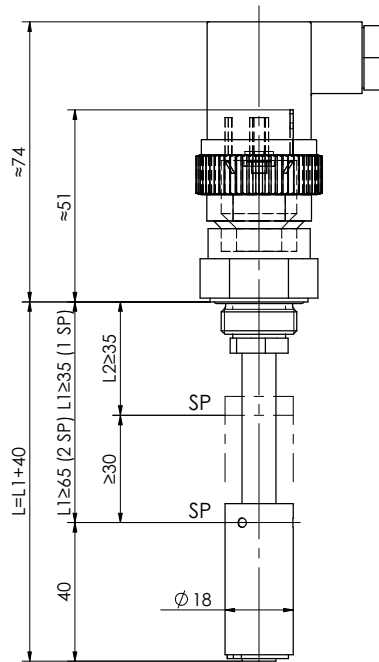
L1 = NC or NO contact
 L2 = NC or NO contact
 L3 = NC or NO contact
 Pin adapter 913.405-85 for retrofitting, on request.

Level switch

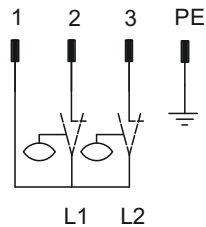
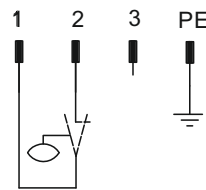
Version 250 VUC

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

1 ... 2 Level switching contacts



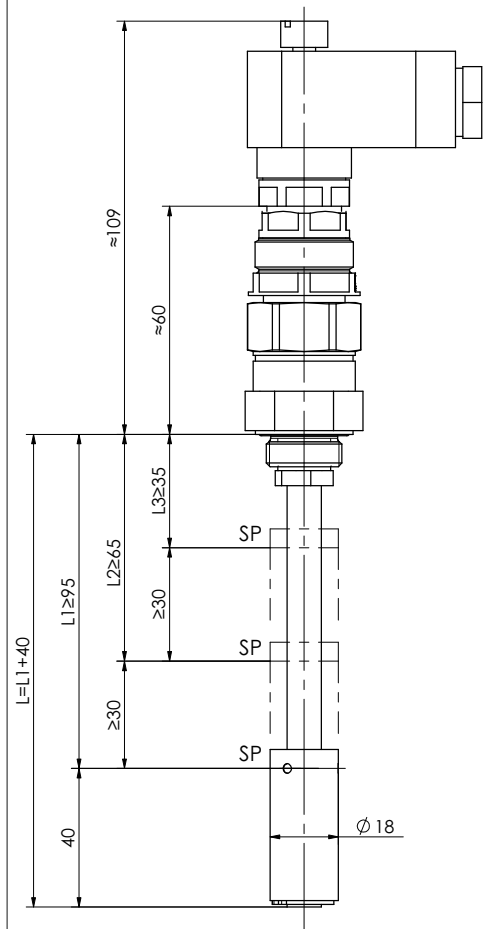
SP = Switch point



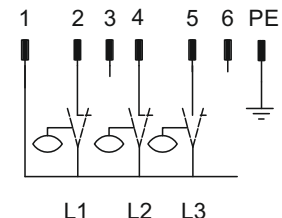
L1 = NC or NO contact
 L2 = NC or NO contact

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

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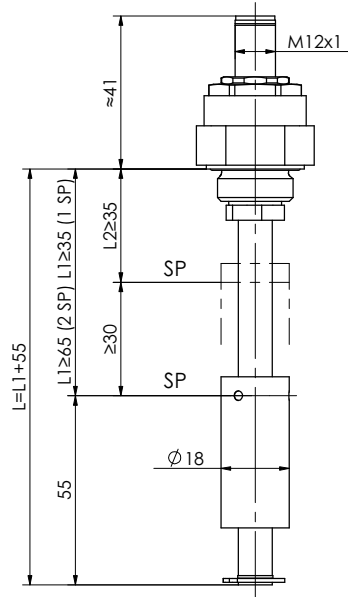


Level - Temperature switch

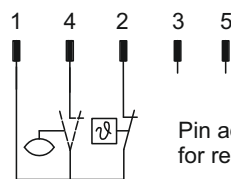
Version 30 VDC

Male **Z5N**
M12x1, 5-pin

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

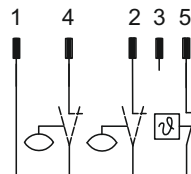


SP = Switch point



Pin adapter 913.405-85
for retrofitting, on request.

L1 ∅

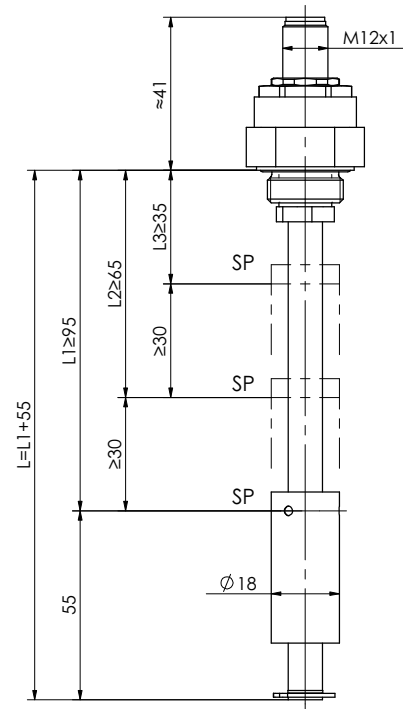


L1 L2 ∅

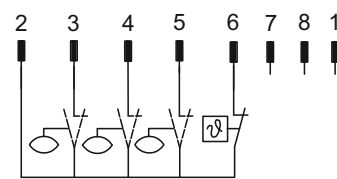
L1 = NC or NO contact
L2 = NC or NO contact
∅ = Temperature NC contact

Male **Z8N**
M12x1, 8-pin

3 Level switching contacts
1 Temperature switching contact



SP = Switch point



L1 L2 L3 ∅

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

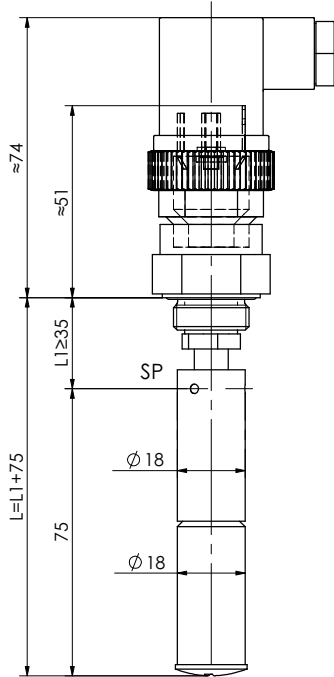
- Subject to modifications -

Level - Temperature switch

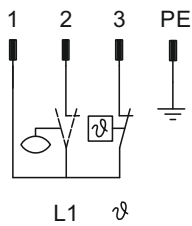
Version 250 VUC

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

1 Level switching contact
1 Temperature switching contact



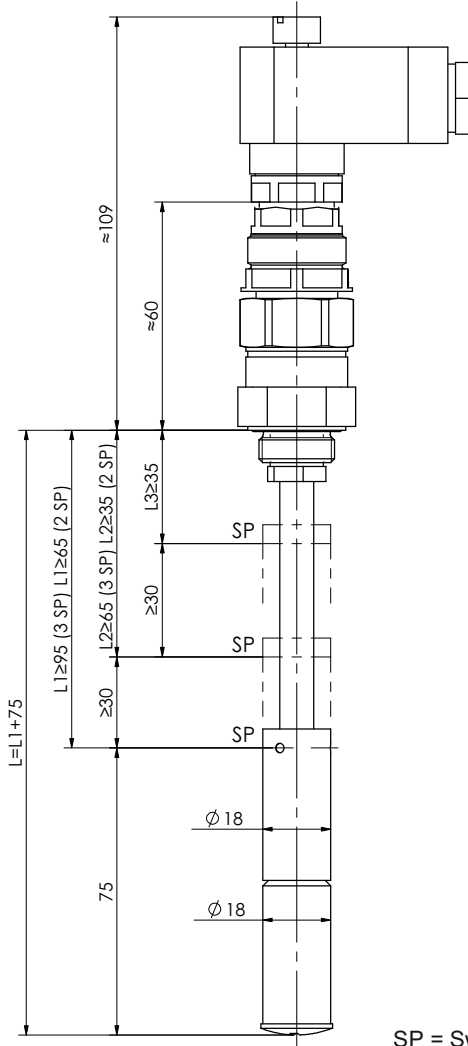
SP = Switch point



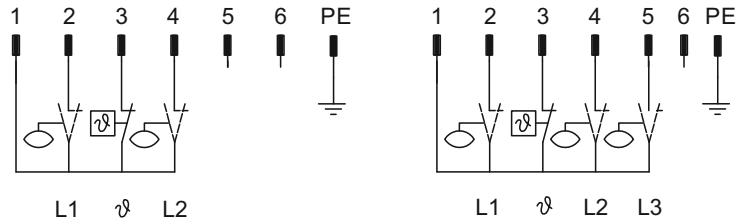
L1 = NC or NO contact
☉ = Temperature NC contact

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

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

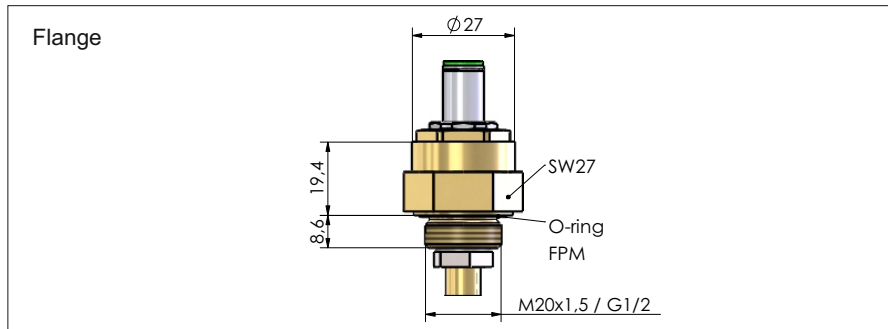


SP = Switch point

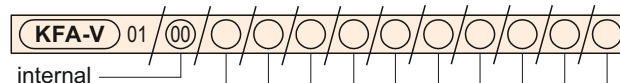


L1 = NC or NO contact
L2 = NC or NO contact
L3 = NC or NO contact
☉ = temperature NC contact (option)

- Subject to modifications -



Order designation:



- Subject to modifications -

Switch-material	Flange	Switching functions				Thermostat	Male without / with cable jack	Lengths		
		L1 Switch point bottom level decreasing	L2 Switch point middle / top level decreasing	L3 Switch point top level decreasing	* L1 mm			* L2 mm	* L3 mm	
VA (V)	M20x1,5 (F)	NC contact (O)	NC contact (O)	NC contact (O)	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	* if there is no switching point existing: L1 ≧ L	- The switching dimensions refer to a density of 1 g/cm³	
		NO contact (S)	NO contact (S)	NO contact (S)						
	G 1/2 (G)	NC contact (O)	NC contact (O)	NC contact (O)	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)				
		NO contact (S)	NO contact (S)	without (N)						
Brass (M)	G 1/2 (G)	NC contact (O)	NC contact (O)	NC contact (O)	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)				
		NO contact (S)	NO contact (S)	NO contact (S) without (N)						
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.										

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