

## sensor capacitively



**PRODUCT:** thread devices:V2A  
**concisely, not concisely**

**DESIGN:**

05	M5x0,5
08	M8x1
12	M12x1
18	M18x1
30	M30x1,5
32	M32x1,5
75	amplifier 75x47x30

**Ambient temperature  
-200°C bis + 250°C**



- large ambient temperature range
- -200°C to +250°C
- high switching gaps
- stainless steel housing
- 2m FEP cable with plug
- short circuit proof and polarity safely
- antivalent switching
- exits 2 years warranty!
- Supply completely in the stackable cardboard

### Function

Owing to separate evaluation electronics and the used encasing materials the capacitive sensors of the ipf electronics are suitable for the employment in high- and low temperature range from -200°C to +250°C. With this measurement principle an electrode is outward shifted. The protective grounding potential is included as an electrode into the measurement. The evaluation is made by separate electronics. The system seizes smallest changes of capacity.

### Application

The capacitive sensors are suitable for level monitoring of liquids, pastes and bulk materials in machines and plants. Besides they are applicable also as limit switches, or to the monitoring and positioning and pulse generator for countings.

### References

If the sensor is not built into metal, it is to be noted that a galvanic connection must take place from the amplifier to the protective grounding potential. Per amplifier only one sensor can be attached. The connection is made directly by the plug, which is moulded on at the cable of the sensor.

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## Technical data and article list sensors

	KN056050	KN086050	KN126050	KN186050	KN306050	KN326050
Switching gap	0 to 5mm	0 to 10mm	1 to 25mm	2 to 50mm	5 to 100mm	5 to 120mm
Fig.	1	2	3	4	5	6
Enclosure	IP67 (EN 60529)					
Ambient temperature	-200 to+250°C					
Housing material	V2A					
Active surface	PTFE					
Connection	2m FEP, Triax					

Fig. 1

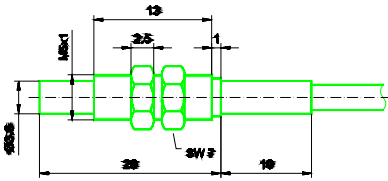


Fig.2

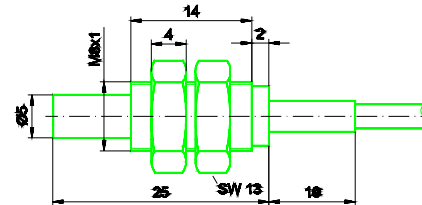


Fig.3

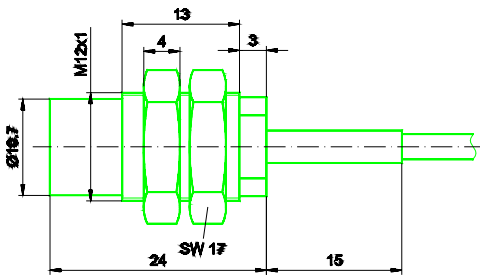


Fig.4

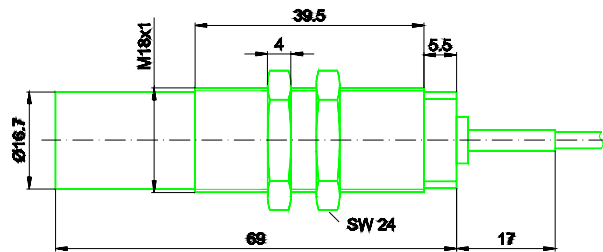


Fig.5

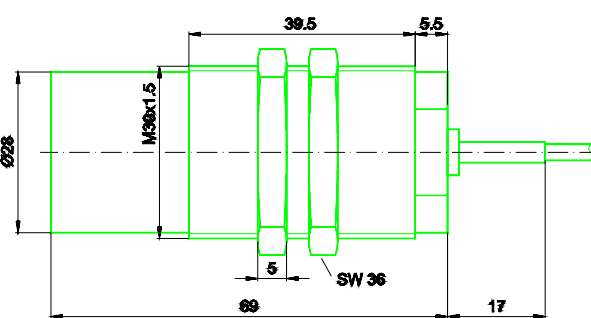
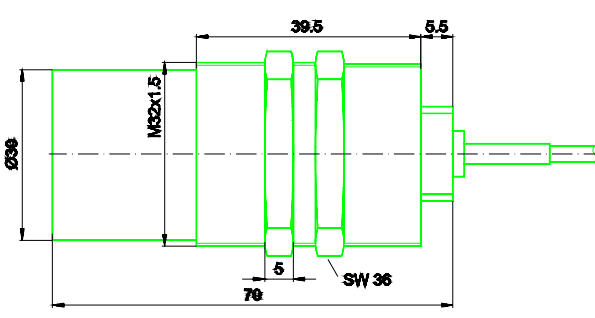


Fig.6



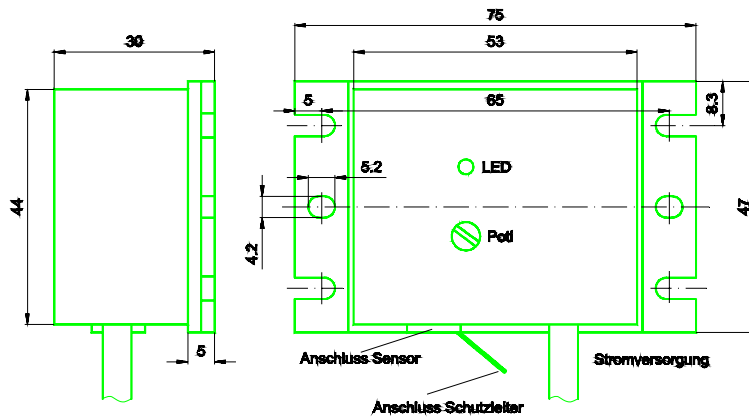
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Technical data and article list amplifier

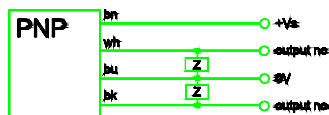
	KV750450	KV750455
Fig.	7	7
Operating voltage	18 to 36V DC, short circuit proof, polarity safely	
Power input	<50mA	
Voltage drop	<2,5V	
Remaining ripple	40%	
Switching exit	pnp, antivalent	
Acceptable current load	2 x 250mA	
Switching frequency	50Hz	
Switching hysteresis	<20%	
Repetition accuracy	<1%	
Enclosure	IP65 (EN 60529)	
Ambient temperature	-25 bis +55°C	
Housing material	PA	
Connection	2m PUR cabel 4x0,14mm2	

**KV750450 for the connection to the sensors of the design 05, 08 and 12.**  
**KV750455 for the connection to the sensors of the design 18, 30 and 32.**

Fig. 7



Connection Cable equipment



Vein colours: bn = brown (1), wh = white (2), bu = blue (3), bk = black (4)

**Note:** The employment of these devices in applications, where security depends on persons on their functions, is inadmissible!

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**Product:** thread devices high temperature

artikel-nr	design	description	comment	housing	voltage	exit	sn	connector	fig.
KN056050	M5x0,5	sensor		V2A/PTFE	Connection at amplifiers		5	FEP-cbl,connec	1
KN086050	M8x1	sensor		V2A/PTFE	Connection at amplifiers		10	FEP-cbl,connec	2
KN126050	M12x1	sensor		V2A/PTFE	Connection at amplifiers		25	FEP-cbl,connec	3
KV750450	75x47x30	amplifier	50Hz	PA	18-36V DC	pnp,no/nc		2m PUR cabel	7
KN186050	M18x1	sensor		V2A/PTFE	Connection at amplifiers		50	FEP-cbl,connec	4
KN306050	M30x1,5	sensor		V2A/PTFE	Connection at amplifiers		100	FEP-cbl,connec	5
KN326050	M32x1,5	sensor		V2A/PTFE	Connection at amplifiers		120	FEP-cbl,connec	6
KV750455	75x47x30	amplifier	50Hz	PA	18-36V DC	pnp,no/nc		2m PUR cabel	7

The article list contains only the available DC (pnp) remarks. With other base functions we ask for their let us inquiree.

**KV750450 for the connection to the sensors of the design 05, 08 and 12.**

**KV750455 for the connection to the sensors of the design 18, 30 and 32.**