

## 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

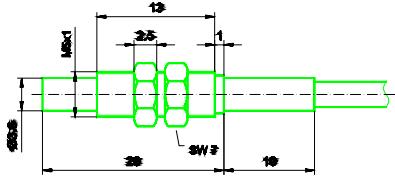
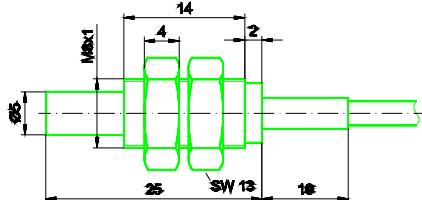
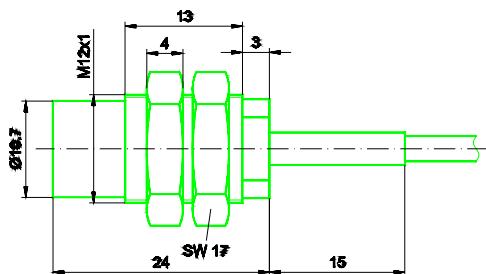
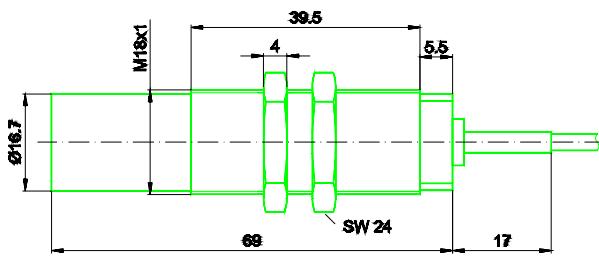
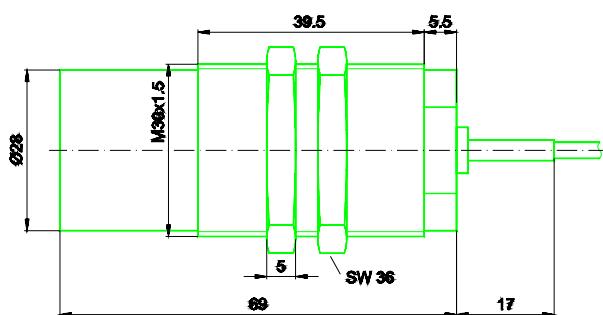
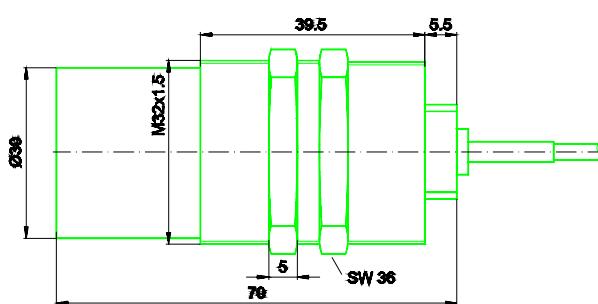
The capacitive sensors are suitable for level monitoring of liquids, pastes and bulk materials in machines and plants. Besides they are applicable also as limit switches, or to the monitoring and positioning and pulse generator for countings.

### 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.

**Technical data and article list sensors**

	<b>KN056050</b>	<b>KN086050</b>	<b>KN126050</b>	<b>KN186050</b>	<b>KN306050</b>	<b>KN326050</b>
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**


Technical data and article list amplifier

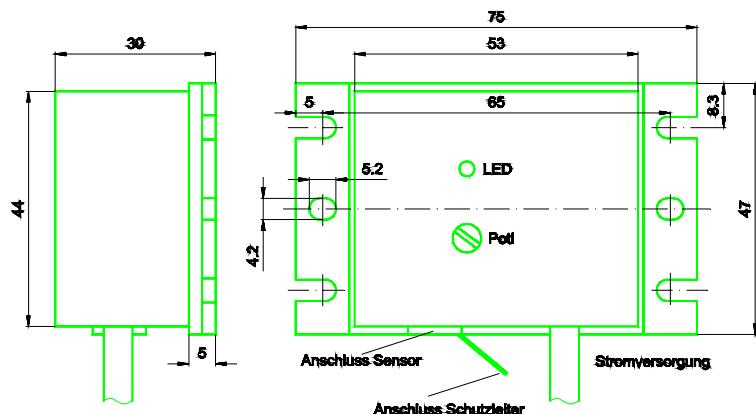
**KV750450**

Fig.	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 cable 4x0,14mm <sup>2</sup>

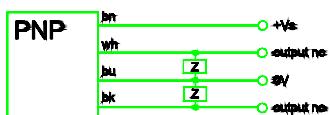
**KV750455**

**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!

**Product:** thread devices high temperature

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

**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.**