

dimensions	Ø 30 x 87mm	
	Ø 46 x 95mm	
	Ø 60 x 95mm	
connection	thread	G <sup>3</sup> / <sub>4</sub>
		G1 <sup>1</sup> / <sub>4</sub>
		G1 <sup>1</sup> / <sub>2</sub>



- ✓ easy filling level measurement via screwing in capacitive sensors
- ✓ teflon sleeve: anti-electrostatic, acid and alkali proof
- ✓ crastin sleeve pressure resistant up to 6bar
- ✓ sensor installation after mounting the sleeve
- ✓ alignment of the sensors under operational conditions

**mounting sleeves for save filling level measurements**



### description

Mounting sleeves are provided to hold capacitive sensors. All media surrounding the mounting sleeve influence the installed sensor as well as changing the dielectric state of balance between the sensor's measuring electrode and the surrounding space. This process is converted into a switch signal. Use the sensor's potentiometer for an optimal setting of the sensitivity.

Mounting sleeves with integrated capacitive sensors are used to detect liquid, viscous, powder- and granular-like media.

The electronics of the sensors have been fully potted with resin to protect them against many environmental influences, e.g. soiling, humidity, shock etc. The mounting sleeve

should penetrate the container wall by 15mm at least. The alignment of the sensors with the surrounding medium is done under operating conditions. Starting from its left end stop, turn the alignment potentiometer to the right, until the switching output becomes conductive.

To ensure safe operation, turn the potentiometer half to one turn more to the right.

With mounting sleeves and capacitive sensors easy and accurate filling level measurements can be realized.

### application examples

- ▶ filling level measurements of liquid and viscous mediums

article-no.

AF000001

AF000002

AF000003

limiting pressure

3bar

3bar

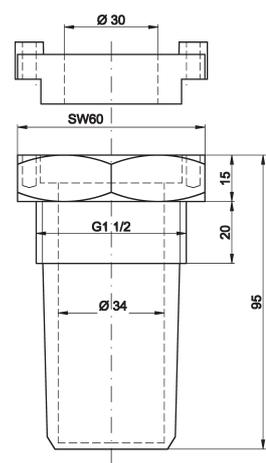
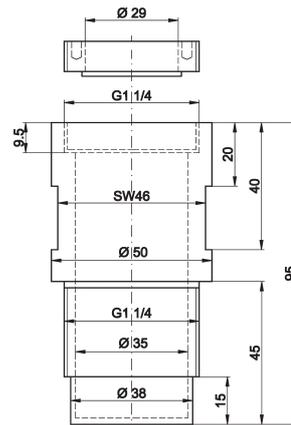
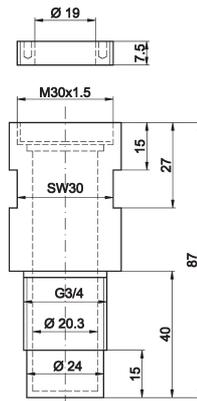
6bar

thread

G $\frac{3}{4}$

G1 $\frac{1}{4}$

G1 $\frac{1}{2}$



### TECHNICAL DATA

housing material

PTFE (teflon)

PTFE (teflon)

polyamide (crastin)

thread

G $\frac{3}{4}$

G1 $\frac{1}{4}$

G1 $\frac{1}{2}$

tightening torque

< 1Nm

< 1Nm

< 3Nm

limiting pressure

3bar

3bar

6bar

mounting depth

40mm

45mm

60mm

dimensions

Ø 30x87mm

Ø 46x95mm

Ø 60x95mm

accessories

KN200187

KN340107

KN340107

KN204187

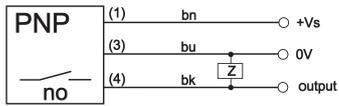
KN344107

KN344107

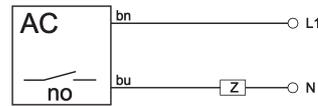
article-no.	KN200107	KN204107	KN340107	KN344107
operating range	1 ... 15mm	1 ... 15mm	6 ... 30mm	6 ... 30mm
operating range	pnp, no	AC, no	pnp, no	AC, no
<b>TECHNICAL DATA</b>				
sensing range (S <sub>n</sub> )	1 ... 15mm	1 ... 15mm	6 ... 30mm	6 ... 30mm
output signal	pnp, no	AC, no	pnp, no	AC, no
mounting	non-flush	non-flush	non-flush	non-flush
operating voltage	10 ... 55V DC	20 ... 250V AC	10 ... 60V DC	20 ... 250V AC
current consumption (w/o load)	≤ 4.0mA	≤ 2.5mA	≤ 20mA	≤ 5mA
minimum load current	-	5mA	-	3mA
output current (max. load)	400mA	400mA	400mA	300mA
voltage drop (max. load)	1.5V	10.0V	3.0V	10.0V
hysteresis	5 ... 15%	5 ... 15%	5 ... 15%	5 ... 15%
sampling frequency	25Hz	15Hz	15Hz	15Hz
correction factors	wood, glass approx. 0.6 oil, PVC approx. 0.5			
status display	yellow LED	yellow LED	yellow LED	yellow LED
operating display			green LED	green LED
short-circuit protection	+	-	+	-
reverse polarity protection	+	+	+	+
adjustment (sensitivity)	potentiometer	potentiometer	potentiometer	potentiometer
dimensions	∅ 20mm	∅ 20mm	∅ 34mm	∅ 34mm
length (thread/complete)	- / 78mm	- / 78mm	- / 81mm	- / 81mm
housing material	PBT	PBT	PBT	PBT
front cap material	PBT	PBT	PA 6.6	PA 6.6
operating temperature	-25 ... +70°C	-25 ... +70°C	-25 ... +70°C	-25 ... +70°C
system of protection (EN 60529)	IP67	IP67	IP67	IP67
connection	2m PVC-cable, 3-wire	2m PVC-cable, 2-wire	2m PVC-cable, 3-wire	2m PVC-cable, 2-wire
mounting accessories (enclosed)	clip	clip	clip	clip

### connection

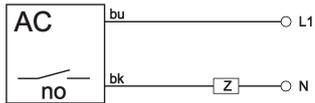
cable device DC



cable device KN204187



cable device KN344107



**wire colors:** bn = brown (1), bu = blue (3), bk = black (4)

### notice:

To achieve full resistance to pressure, the thread should be engaged by about 20mm. A screwed flange must be attached to the wall of the container, if needed. To seal the thread either use hemp and a sealing paste to DIN-DVGW or teflon sealing tape for a higher chemical resistance.

When screwing in, the specified tightening torque must not be exceeded.

This data sheet contains the available standard versions only. Kindly request the availability of other output- and connection functions.

**Warning:** Never use these devices in applications where the safety of a person depends on their functionality.

You also find this data sheet, as well as contact details under [www.ipf-electronic.com](http://www.ipf-electronic.com)

