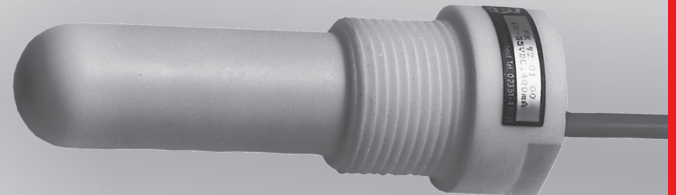
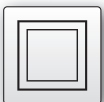
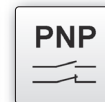
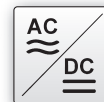


design	M30 x 1.5 G3/4" G1"	
level detection	operating point	media touching



- ✓ very insensitive to all kinds of soiling
- ✓ function display by LED
- ✓ high quality components for long life
- ✓ fully electronic with integrated amplifier
- ✓ DC-devices short-circuit and reverse polarity protected

**anti-electrostatic teflon housing
acid and alkali proof**



description

Any material surrounding the sensor head will change the dielectric balance between the meter electrode and the surrounding space. This process is converted into a switch signal. A potentiometer (which is protected by a plastic screw) is provided to change sensitivity. The sensor should penetrate the tank wall by at least 15mm.

The sensitivity adjustment with the surrounding medium must be done under operating conditions.

Start with the sensitivity potentiometer on the left stop position. Turn the pot clockwise to the point where the output switches to the on-state.

Continue turning the potentiometer clockwise for a further half or up to a full turn to obtain a safe operating position. The sensors demonstrate outstanding capabilities with

liquid and semi-liquid media. An internal de-coupling electrode excludes to a large extent false readings resulting from the formation of drops or a liquid film. The electronics have been compound-filled to protect them from aggressive media, humidity and shocks.

Basins that are made of metal or with a metallic coating as well as plastic basins with electrically conductive materials should be grounded.

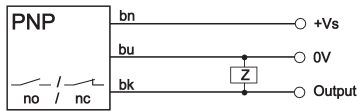
application examples

- ▶ filling level detection of liquid or viscous mediums
- ▶ also capable of filling level detection of grained, pulverized and granulated materials

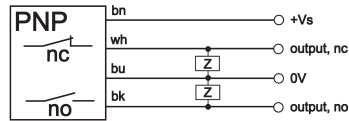
article-no.	FK300100	FK304100
version	M30x1.5	M30x1.5
output	pnp, no	AC, no
article-no.	FK300200	-
version	M30x1.5	-
output	pnp, nc	-
TECHNICAL DATA		
operating point	sensor head touching the medium	sensor head touching the medium
output signal	see above	see above
operating voltage	10 ... 55V DC	20 ... 250V AC
current consumption (w/o load)	≤ 4mA	≤ 2.5mA
output current (max. load)	400mA	400mA
voltage drop (max. load)	1V DC	8V AC
switching current (min. load)	-	5mA
sampling frequency	10Hz	10Hz
display (signal)	yellow	yellow
display (operation)	-	-
sensitivity adjustment	potentiometer	potentiometer
short-circuit protection	+	-
reverse polarity protection	+	-
design	M30x1.5	M30x1.5
length (thread/complete)	65mm/95mm	65mm/95mm
housing material	PTFE (teflon)	PTFE (teflon)
operating temperature	-25 ... +75°C	-25 ... +75°C
system of protection (EN 60529)	IP67	IP67
connection	2m cable, PVC 3-wire, 0.5mm ²	2m cable, PVC 2-wire, 0.5mm ²

article-no.	FK910100	FK914100	FK920400	FK924100
version	G3/4"	G3/4"	G1"	G1"
output	pnp, no	AC, no	pnp, no/nc	AC/DC, no
article-no.	FK910200	-	-	FK924200
version	G3/4"	-	-	G1"
output	pnp, nc	-	-	AC/DC, nc
TECHNICAL DATA				
operating point	sensor head touching the medium	sensor head touching the medium	sensor head touching the medium	sensor head touching the medium
output signal	see above	see above	see above	see above
operating voltage	10 ... 55V DC	20 ... 250V AC	10 ... 35V DC	20 ... 250V AC/DC
current consumption (w/o load)	≤ 4mA	≤ 2.5mA	≤ 15mA	≤ 2.5mA
output current (max. load)	400mA	400mA	2 x 250mA	250mA
voltage drop (max. load)	1V DC	8V AC	2V DC	6V AC/DC
switching current (min. load)	-	5mA	-	5mA
sampling frequency	10Hz	10Hz	50Hz	25Hz
display (signal)	yellow	yellow	yellow	yellow
display (operation)	-	-	green	-
sensitivity adjustment	potentiometer	potentiometer	potentiometer	potentiometer
short-circuit protection	+	-	+	-
reverse polarity protection	+	-	+	-
design	G3/4"	G3/4"	G1"	G1"
length (thread/complete)	65mm/95mm	65mm/95mm	25mm/113mm	25mm/113mm
housing material	PTFE (teflon)	PTFE (teflon)	PTFE (teflon)	PTFE (teflon)
operating temperature	-25 ... +75°C	-25 ... +75°C	-25 ... +70°C	-25 ... +70°C
system of protection (EN 60529)	IP67	IP67	IP67	IP67
connection	2m cable, PVC 3-wire, 0.5mm ²	2m cable, PVC 2-wire, 0.5mm ²	2m cable, PUR 4-wire, 0.5mm ²	2m cable, PUR 2-wire, 0.75mm ²

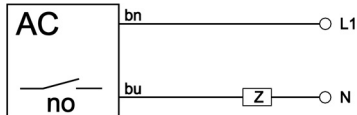
connection DC-devices, 3-wire



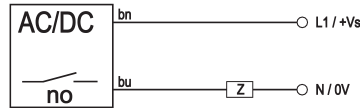
DC-devices, 4-wire



connection AC-devices, 2-wire

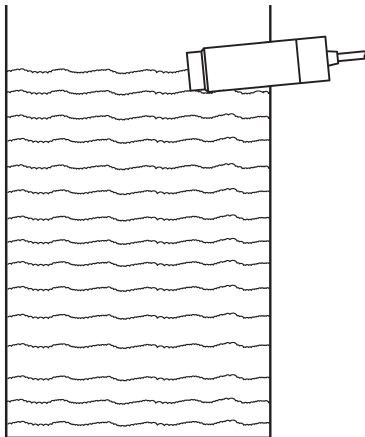


AC/DC-devices, 2-wire



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

application example



Note: An angular mounting of approx. 20° is recommended, so that no deposit accumulation can take place.

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

We will be pleased to supply the matching cable socket for your devices with connector. Please refer to the list in catalog chapter “accessories” under “cable sockets” -SENSORFLEX® or search our website for “VK”.

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