

design	52 x 21 x 14mm	
level detection	pendulum length	100mm 200mm 300mm



- ✓ flexible mounted pendulum
- ✓ switch signal via integrated inductive proximity switch
- ✓ status display by LED
- ✓ connection with M8-connector

filling level monitoring of bulk materials in oscillating conveyors



description

The inductive filling level sensors in the **FI52** series serve the task of automatically checking the bulk material filling levels in oscillation and vibration conveyors, sorting equipment, bunker systems etc.

The querying of the filling level takes place via an integrated inductive proximity switch which is actuated by a metal element.

The metal element is installed in a flexibly-mounted pendulum. If the filling level in the vibration conveyor decreases, the angle of the deflected pendulum becomes smaller. If the metal element approaches the vicinity of the inductive sensor's active surface, the sensor output becomes conductive. An LED shows that the output is switched.

The pendulum is made of plastic and can be shortened to

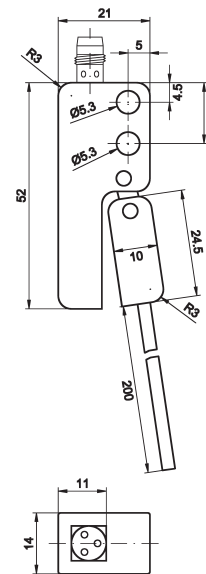
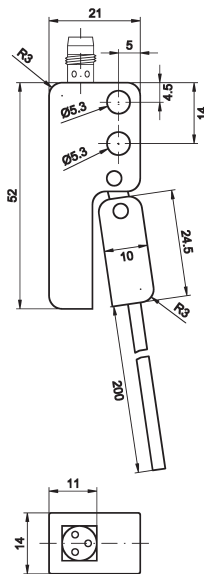
any length. Lengths of 100, 200 or 300mm are available as factory standards. According to the version, the pendulum is mounted in a plastic or stainless steel joint.

The **FI520172** offers a special feature: The 100mm pendulum rod is manufactured from thin stainless steel and by bending, it can be adjusted to the bulk good which is to be recognized. It is not possible to implement longer stainless steel pendulums.

application examples

- ▶ checking the filling level in oscillation/vibration conveyors
- ▶ checking the presence of goods e.g. packages

article-no.	FI520170	FI520171
pendulum length	200mm	200mm
output signal	pnp, no	pnp, no
version	plastic joint / plastic pendulum	stainless steel joint / plastic pendulum
article-no.	-	FI520271
pendulum length	-	200mm
output signal	-	pnp, nc
version	-	stainless steel joint / plastic pendulum



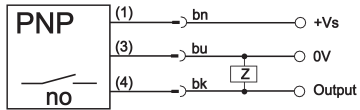
TECHNICAL DATA

pendulum length	200mm	200mm
output signal	pnp, no	see above
operating voltage	10 ... 30V DC	10 ... 30V DC
current consumption (w/o load)	≤ 15mA	≤ 15mA
output current (max. load)	200mA	200mA
voltage drop (max. load)	2.0V DC	2.0V DC
display (signal)	yellow LED	yellow LED
short-circuit protection	+	+
reverse polarity protection	+	+
design	52x21x14mm	52x21x14mm
housing material	polyamide	polyamide
operating temperature	0 ... +50°C	0 ... +50°C
system of protection (EN 60529)	IP67	IP67
connection	M8-connector, 3-pin	M8-connector, 3-pin
connection accessories	e.g. VK200075 , 2m, straight, PUR	e.g. VK200075 , 2m, straight, PUR

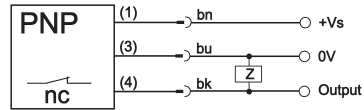
article-no.	FI520172	FI520173
pendulum length	100mm	300mm
output signal	pnp, no	pnp, no
version	stainless steel joint / plastic pendulum	stainless steel joint / plastic pendulum
TECHNICAL DATA		
pendulum length	100mm	300mm
output signal	pnp, no	pnp, no
operating voltage	10 ... 30V DC	10 ... 30V DC
current consumption (w/o load)	≤ 15mA	≤ 15mA
output current (max. load)	200mA	200mA
voltage drop (max. load)	2.0V DC	2.0V DC
display (signal)	yellow LED	yellow LED
short-circuit protection	+	+
reverse polarity protection	+	+
design	52x21x14mm	52x21x14mm
housing material	polyamide	polyamide
operating temperature	0 ... +50°C	0 ... +50°C
system of protection (EN 60529)	IP67	IP67
connection	M8-connector, 3-pin	M8-connector, 3-pin
connection accessories	e.g. VK200075 , 2m, straight, PUR	e.g. VK200075 , 2m, straight, PUR

connection

normally open



normally closed



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

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 **ipf-SENSORFLEX**" or search our website for "VK".

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