

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



- ✓ flexibly mounted pendulum
- ✓ switching signal through integrated inductive proximity switch
- ✓ switching state display by LED
- ✓ connection with M8-connector

**filling level monitoring of bulk materials on oscillation conveyors**

DC  
=

PNP  
—

M8  
⊙

□

**description**

The inductive filling level sensors of the **F152** series are used for the automatic filling level monitoring of bulk materials on oscillation and vibration conveyors, sorting equipment, bunker systems, etc.

The filling level is queried via an integrated inductive proximity switch that is actuated by a metal element.

The metal element is mounted in a flexibly mounted pendulum. If the filling level decreases on the vibration conveyor, the angle of the deflected pendulum also becomes smaller. If the metal element gets close to the active surface of the inductive sensor, the output of the sensor switches. An LED indicates that the output has switched.

The pendulum is made of plastic and can be shortened to any length. Lengths of 100, 200 or 300mm are available ex works. Depending on the version, the pendulum is mounted in a plastic or stainless steel joint.

The **F1520172** offers a special feature: the 100mm long pendulum rod is manufactured from thin stainless steel and can be adapted to the bulk material that is to be detected. Longer stainless steel pendulums cannot be realized.

**application examples**

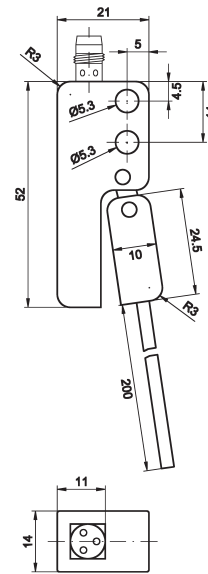
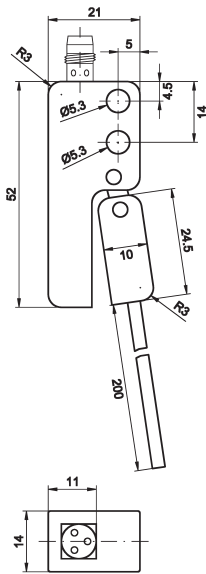
- ▶ filling level monitoring on oscillation/vibration conveyors
- ▶ presence checking, e.g., of packages

# FILLING LEVEL SENSORS

1300 INDUCTIVE FILLING LEVEL SENSORS

**IPF** ELECTRONIC

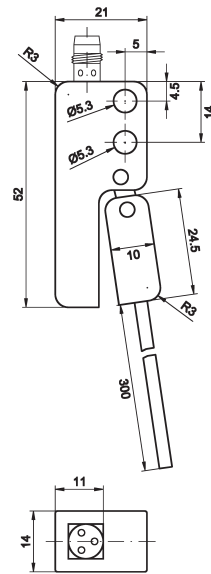
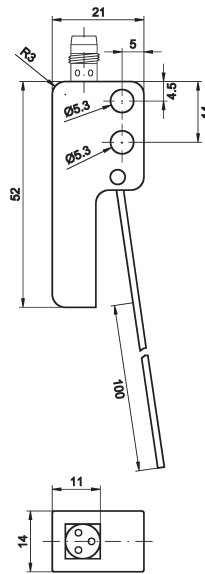
article-no.	F1520170	F1520171
pendulum length	200mm	200mm
output signal	pnp, no	pnp, no
version	plastic joint/plastic pendulum	stainless steel joint/plastic pendulum
article-no.	-	F1520271
pendulum length	-	200mm
output signal	-	pnp, nc
version	-	stainless steel joint/plastic pendulum



## 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	+	+
dimensions	52x21x14mm	52x21x14mm
housing material	polyamide	polyamide
operating temperature	0 ... +50°C	0 ... +50°C
degree of protection (EN 60529)	IP67	IP67
connection	M8-connector, 3-pin	M8-connector, 3-pin
connection accessories	e.g. VK200075	e.g. VK20007

article-no.	<b>FI520172</b>	<b>FI520173</b>
pendulum length	<b>100mm</b>	<b>300mm</b>
output signal	<b>pnp, no</b>	<b>pnp, no</b>
version	<b>stainless steel joint/stainless steel pendulum</b>	<b>stainless steel joint/plastic pendulum</b>

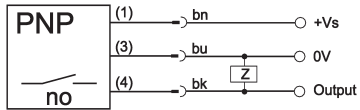


**TECHNICAL DATA**

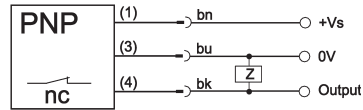
pendulum length	100mm	300mm
output signal	pnp, no	pnp, no
operating voltage	10 ... 30V DC	10 ... 30V DC
current consumption (w/o load)	≤ 15mA	≤ 15mA
output current (max. load)	200mA	200mA
voltage drop (max. load)	2.0V DC	2.0V DC
display (signal)	yellow LED	yellow LED
short-circuit protection	+	+
reverse polarity protection	+	+
dimensions	52x21x14mm	52x21x14mm
housing material	polyamide	polyamide
operating temperature	0 ... +50°C	0 ... +50°C
degree of protection (EN 60529)	IP67	IP67
connection	M8-connector, 3-pin	M8-connector, 3-pin
connection accessories	e.g. <b>VK200075</b>	e.g. <b>VK200075</b>

## connection

normally open



normally closed



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

This data sheet only contains the available standard variants. For other output / connection variants, we kindly ask that you contact us.

We are happy to supply the right cable socket for the plug equipment. You will find a list in the “accessories” section of the catalog under **ipf-SENSORFLEX**® “cable sockets” or in the search window on our homepage [www.ipf-electronic.com](http://www.ipf-electronic.com) (using the search term “VK”).

**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)