**INDUCTIVE FILLING LEVEL SENSORS 1300** 

dimensions 52 x 21 x 14mm

level detection pendulum length

100mm 200mm 300mm



- ✓ 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









# description

The inductive filling level sensors of the **FI52** 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





pendulum length output signal version article-no. pendulum length	FI520170 200mm pnp, no plastic joint/plastic pendulum	FI520171 200mm pnp, no stainless steel joint/plastic pendulum FI520271 200mm
output signal version	21	pnp, nc stainless steel joint/plastic pendulum
	95.3 95.3 95.3 95.3 95.3 95.3 95.3 95.3	95.3 95.3 96.3 96.3 96.3 96.3 96.3 96.3 96.3 96
	4 - 0	2 - 60
	, 122	4 60
endulum length	200mm	200mm see ahove
pendulum length output signal	200mm pnp, no	see above
endulum length utput signal perating voltage	200mm pnp, no 10 30V DC	see above 10 30V DC
endulum length utput signal perating voltage urrent consumption (w/o load)	200mm pnp, no	see above
pendulum length putput signal perating voltage urrent consumption (w/o load) putput current (max. load)	200mm pnp, no 10 30V DC ≤ 15mA	see above  10 30V DC  ≤ 15mA  200mA  2.0V DC
pendulum length putput signal perating voltage current consumption (w/o load) putput current (max. load) voltage drop (max. load) display (signal)	200mm pnp, no 10 30V DC ≤ 15mA 200mA 2.0V DC yellow LED	see above  10 30V DC  ≤ 15mA  200mA  2.0V DC  yellow LED
pendulum length putput signal perating voltage current consumption (w/o load) putput current (max. load) voltage drop (max. load) display (signal)	200mm pnp, no  10 30V DC ≤ 15mA 200mA 2.0V DC yellow LED +	see above  10 30V DC  ≤ 15mA  200mA  2.0V DC  yellow LED  +
pendulum length putput signal perating voltage current consumption (w/o load) putput current (max. load) roltage drop (max. load) display (signal) chort-circuit protection everse polarity protection	200mm pnp, no  10 30V DC ≤ 15mA 200mA 2.0V DC yellow LED + +	see above  10 30V DC  ≤ 15mA  200mA  2.0V DC  yellow LED  + +
pendulum length putput signal perating voltage putrent consumption (w/o load) putput current (max. load) proltage drop (max. load) display (signal) phort-circuit protection everse polarity protection	200mm pnp, no  10 30V DC ≤ 15mA 200mA 2.0V DC  yellow LED + + + 52x21x14mm	see above  10 30V DC  ≤ 15mA  200mA  2.0V DC  yellow LED  + + + 52x21x14mm
pendulum length putput signal perating voltage purrent consumption (w/o load) putput current (max. load) poltage drop (max. load) poltage drop (max. load) putput (signal) port-circuit protection peverse polarity protection pousing material	200mm pnp, no  10 30V DC ≤ 15mA 200mA 2.0V DC yellow LED + + + 52x21x14mm polyamide	see above  10 30V DC  ≤ 15mA  200mA  2.0V DC  yellow LED  + + + 52x21x14mm polyamide
pendulum length putput signal perating voltage current consumption (w/o load) putput current (max. load) voltage drop (max. load) display (signal) chort-circuit protection reverse polarity protection dimensions nousing material perating temperature	200mm pnp, no  10 30V DC ≤ 15mA 200mA 2.0V DC  yellow LED + + + 52x21x14mm	see above  10 30V DC  ≤ 15mA  200mA  2.0V DC  yellow LED  + + + 52x21x14mm
pendulum length cutput signal experating voltage current consumption (w/o load) cutput current (max. load) coltage drop (max. load) display (signal) chort-circuit protection dimensions cousing material experating temperature degree of protection (EN 60529) connection	200mm pnp, no  10 30V DC ≤ 15mA 200mA 2.0V DC  yellow LED + + + 52x21x14mm polyamide 0 +50°C	see above  10 30V DC  ≤ 15mA  200mA  2.0V DC  yellow LED  + +  52x21x14mm  polyamide  0 +50°C

**INDUCTIVE FILLING LEVEL SENSORS 1300** 

article-no. FI520172 FI520173 pendulum length 100mm 300mm output signal pnp, no pnp, no **10** version stainless steel joint/stainless steel pendulum stainless steel joint/plastic pendulum **TECHNICAL DATA** pendulum length 100mm 300mm output signal pnp, no pnp, no 10 ... 30V DC 10 ... 30V DC operating voltage ≤ 15mA current consumption (w/o load) ≤ 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 0 ... +50°C 0 ... +50°C operating temperature degree of protection (EN 60529) IP67 IP67 connection M8-connector, 3-pin M8-connector, 3-pin connection accessories e.g. VK200075 e.g. VK200075

## 1300 INDUCTIVE FILLING LEVEL SENSORS



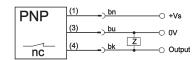
#### connection

### normally open



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

### normally closed



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-sensoretex® "cable sockets" or in the search window on our homepage 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.