

FI520172

FILLING LEVEL SENSORS • INDUCTIVE

Filling level and level sensors operate according to different measuring principles. The selection of the sensor depends on the medium to be detected and the ambient conditions. The material flow in a vibratory bowl can be excellently queried with inductive filling level sensors whose pendulum is moved by the material in the pot. The detection of liquid or solid media is, for instance, possible with capacitive filling level sensor technology. These work according to the principle of the condensator, the medium changes the dielectricity between two electrodes. The resulting change is converted into a digital output signal. A further alternative for the detection of filling levels of conductive media is provided by conductive filling level relays. The resistance between reference and measuring electrode is determined. If a set threshold is exceeded, a relay output switches.



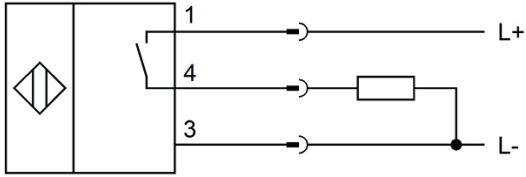
MECHANICAL DATA

| | |
|---------------------------|-----------------|
| Ambient temperature (MAX) | 50 °C |
| Degree of protection (IP) | IP67 |
| Depth | 14 mm |
| Height | 21 mm |
| Housing design | Cuboid |
| Housing material | Polyamid |
| Pendulum length | 100 mm |
| Sensing element material | Stainless steel |
| Sensor height | 21 mm |
| Sensor length | 14 mm |
| Sensor width | 52 mm |
| Width | 52 mm |

ELECTRICAL DATA

| | |
|--|-----------------------|
| Max. output current | 0.2 A |
| No-load current | 15 mA |
| Number of contacts as normally open contact | 1 |
| Number of pins | 3 |
| Physical measurement principle | Inductive |
| Rated control supply voltage U_s at DC (MAX) | 30 V |
| Rated control supply voltage U_s at DC (MIN) | 10 V |
| Reverse polarity protection | Yes |
| Short-circuit-proof | Yes |
| Type of electrical connection | Connector M8 |
| Type of switching function | Normally open contact |
| Type of switching output | PNP |
| Voltage drop | 2 V |
| Voltage type for actuation | DC |
| With LED display | Yes |

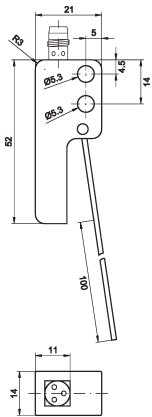
CONNECTION



Colors: 1 = BN (brown), 3 = BU (blue), 4 = BK (black)

Functions: 1 = L+, 3 = L-, 4 = PNP NO

DIMENSIONAL DRAWING



INSTALLATION



Mounting / Installation may only be carried out by a qualified electrician!

DISPOSAL



SAFETY WARNINGS

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!

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