

FK92C959
FILLING LEVEL SENSORS • CAPACITIVE

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	-25 °C ... 70 °C
Degree of protection (IP)	IP67
Housing design	Special construction
Housing material	Stainless steel 1.4571
Medium temperature	-25 °C ... 120 °C
Pressure resistance	16 bar
Probe diameter	26 mm
Probe length	400 mm
Sensing element material	PTFE
Sensor diameter	53 mm
Sensor length	490 mm
Thread length	25 mm
Thread size, inches	1 inch
Type of process connection	G1 inch

ELECTRICAL DATA

Max. output current	0.4 A
No-load current	4 mA
Physical measurement principle	Capacitive
Rated control supply voltage U_s at DC	10 V ... 55 V
Response sensitivity, adjustable	Yes
Reverse polarity protection	Yes
Setting procedure	Manual adjustment
Short-circuit-proof	Yes
Switching frequency	5 Hz
Type of electrical connection	Clamp
Type of switching function	Normally closed contact/normally open contact
Type of switching output	PNP
Voltage drop	2 V

ELECTRICAL DATA

Voltage type for actuation

DC

With LED display

Yes

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!