

**FK924100**

**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 (MAX)	70 °C
Ambient temperature (MIN)	-25 °C
Cable length	2 m
Degree of protection (IP)	IP67
Housing design	Special construction
Housing material	PTFE
Material of cable sheath	PUR (Polyurethane)
Medium temperature (MAX)	75 °C
Medium temperature (MIN)	-25 °C
Number of wires	2
Probe diameter	26 mm
Probe length	68 mm
Sensing element material	PTFE
Sensor diameter	40 mm
Sensor length	113 mm
Thread length	25 mm
Thread size, inches	1 inch
Type of process connection	G1 inch
Wire cross section	0.75 mm <sup>2</sup>

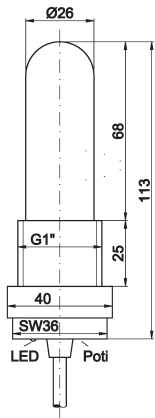
**ELECTRICAL DATA**

Max. output current	0.25 A
Min. current load	5 mA
No-load current	2.5 mA
Number of contacts as normally closed contact	1
Physical measurement principle	Capacitive
Rated control supply voltage Us at AC 50HZ (MAX)	250 V
Rated control supply voltage Us at AC 50HZ (MIN)	20 V
Rated control supply voltage Us at DC (MAX)	250 V

## ELECTRICAL DATA

Rated control supply voltage $U_s$ at DC (MIN)	20 V
Response sensitivity, adjustable	Yes
Setting procedure	Manual adjustment
Switching frequency	25 Hz
Type of electrical connection	Cable
Type of switching function	Normally open contact
Type of switching output	Two-wire
Voltage drop	6 V
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!

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