

FY98C186

FILLING LEVEL SENSORS • OPTICAL

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 50 °C
Cable length	2 m
Degree of protection (IP)	IP67
Depth	37.2 mm
Height	10.5 mm
Housing design	Cuboid
Material of cable sheath	PVC
Medium temperature	-25 °C 50 °C
Number of wires	3
Sensing element material	PFA
Width	23 mm

ELECTRICAL DATA

Max. output current	0.05 A
No-load current	30 mA
Number of contacts as normally closed contact	1
Number of pins	3
Physical measurement principle	Optic
Rated control supply voltage Us at DC	12 V 24 V
Reverse polarity protection	Yes
Short-circuit-proof	Yes
Type of electrical connection	Cable
Type of switching function	Breaker contact
Type of switching output	PNP
Voltage drop	1 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!