

## FV98A052

### FILLING LEVEL SENSORS • SWITCHING AMPLIFIERS

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

Degree of protection (IP)	IP54
Depth	2 mm
Device design	Field device
Height	58 mm
Housing design	Cuboid
Housing material	Aluminium
Length	2 mm
Material of cable sheath	PVC
Mounting method	Floor fastening
Number of wires	3
Width	80 mm

#### ELECTRICAL DATA

Amplifier for capacitive sensors	Yes
Galvanic isolation between input and output	No
Galvanic isolation between inputs	No
Galvanic isolation between supply voltage and all other current circuits	No
Inherently safe according to EN 60947-5-6 NAMUR	No
Input voltage tolerance	10 %
Malfunction message output	No
No-load current	50 mA
Number of channels	1
Number of output circuits, transistor pnp	1
Number of pins	3
Power consumption	1.2 W
Rated supply voltage at DC (MAX)	24 V
Rated supply voltage at DC (MIN)	24 V
Suitable for safety functions	No
Switching capacity	9.6 VA

**ELECTRICAL DATA**

Switching frequency	10 Hz
Switching voltage	24 V
Type of electrical connection	Plug-in connection M12
Type of voltage supply	Active
With LED display	Yes

**OTHER DATA**

Operating temperature (MAX)	60 °C
Operating temperature (MIN)	-20 °C

**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.