

#### 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 FEATURES**

Degree of protection (IP)	IP54
Depth	2 mm
Device design	Field device
Height	58 mm
Housing design	Cuboid
Housing material	Aluminum
Length	125 mm
Material of cable sheath	PVC
Mounting method	Floor fastening
Number of cores	3
Width	80 mm

## **ELECTRICAL FEATURES**

ELECTRICAL FEATURES	
Amplifier for capacitive sensors	+
Galvanic isolation between input and output	-
Galvanic isolation between inputs	-
Galvanic isolation between supply voltage and all other current circuits	-
Inherently safe according to EN 60947-5-6 NAMUR	-
Input voltage tolerance	10 %
Malfunction message output	-
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	24 V 24 V
Suitable for safety functions	-
Switching capacity	9.6 VA
Switching current	0.4 A
Switching frequency	10 Hz
Switching voltage	24 V
Type of electrical connection	Plug-in connection M12
Type of switching function	Normally open/normally closed



## **ELECTRICAL FEATURES**

Type of switching output	PNP
Type of voltage supply	Active
Voltage type	DC
With LFD display	+

#### **OTHER FEATURES**

Operating temperature	-20 °C 60 °C
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#### Other

Packaging dimensions	125.0mm x 89.0mm x 205.0mm
Shipping weight	0.1kg
Tariff code	85365019

## Classification

ipf product group	700
eClass 8.0	27371813
eClass 9.0	27371813
eClass 9.1	27371813
ETIM-5.0	EC001485
ETIM-6.0	EC001485
ETIM-7.0	EC001485

## Connection

# **Dimensional drawing**

## Installation



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

# Disposal



#### Software

Please download the software or driver required for operating your new device on our homepage: www.ipf.de

# 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.

LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.