

Warning device for containers and tanks



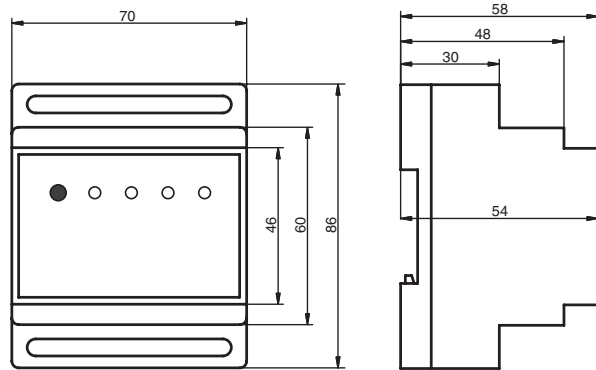
NVO5-11



Features

- 230 V AC supply voltage
- Two independent, potential-free changeover contacts
- Visual and acoustic alarm
- Connection to central monitoring system
- Easy installation on DIN rail

Dimensions



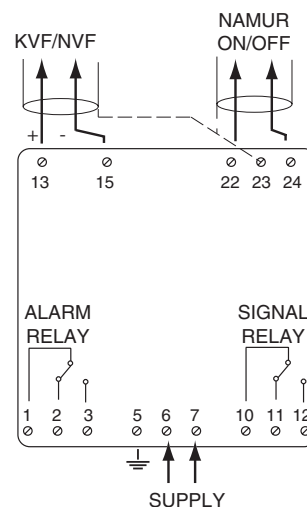
Function

The warning device is used for monitoring of containers, tanks or double-walled pipes. Over a sensor in the system the warning device can monitoring following functions:

- Monitoring of layer thickness, i. e. when a given percentage of the max. accumulation capacity for liquid has been reached.
- Monitoring of liquid overflow, i. e. in connection with a blocked coalescence filter or when a float stop blocks the outlet and the liquid level rises.
- Monitoring of sinking liquid level, i. e. in connection with a leaky system.

The warning device has a built-in acoustic alarm and LEDs which show the actual operation mode. Furthermore there are two independent, potential-free changeover contacts for the connection of central monitoring system or external remote alarm.

Electrical connection



Supply	
Connection	terminals 5, 6, 7
Rated voltage	230 V AC ± 10 %, 50/60 Hz
Fusing	max. 10 A
Power consumption	6 VA
Indicators/operating means	
Display elements	LED SUPPLY (power supply), one yellow LED LED SYSTEM OK (indication operating status), one green LED LED ALARM (alarm active), one yellow LED LED SENSOR FAILURE (sensor fault), one red LED
Operating elements	button ALARM RESET: reset of the alarm relays and of the acoustic alarm
Input	
Connection	input 1: sensors KVF/NVF terminals 13+, 15- input 2: NAMUR ON/OFF terminals 22+, 24-
Output	
Connection	output 1: terminals 1, 2, 3; output 2: terminals 10, 11, 12
Output	potential free changeover contact
Contact loading	250 V AC/4 A/100 VA
Electrical isolation	
Output/power supply	reinforced insulation acc. to EN 50178, rated insulation voltage 300 V _{eff}
Output/output	reinforced insulation acc. to EN 50178, rated insulation voltage 300 V _{eff}
Directive conformity	
Electromagnetic compatibility	
Directive 89/336/EC	EN 61000-6-2 , EN 61000-6-3
Conformity	
Electrical isolation	EN 50178
Protection degree	IEC 60529
Ambient conditions	
Ambient temperature	-15 ... 40 °C (258 ... 313 K)
Mechanical specifications	
Protection degree	IP20
Mass	325 g
Dimensions	70 x 86 x 58 mm (2.8 x 3.4 x 2.3 in)
Mounting	DIN rail, system M36
Data for application in conjunction with hazardous areas	
EC-Type Examination Certificate	DEMKO 07 ATEX 142589
Group, category, type of protection	⊕ II (1)G [Ex ia] IIB
Voltage U _o	input 1: 21 V ; input 2: 12.6 V
Current I _o	input 1: 300 mA ; input 2: 300 mA
Power P _o	input 1: 1.55 W ; input 2: 1.2 W
External capacitance	input 1: 0.6 µF ; input 2: 0.3 µF
External inductance	input 1: 0.5 mH ; input 2: 0.5 mH
Directive conformity	
Directive 94/9 EC	EN 50014, EN 50020, EN 60079-14
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .

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Product program**Warning device**

Intrinsically safe warning device, 230 V AC

NVO5-11

Sensors

Overflow sensor for overflow monitoring

NVF-104/34-PF

Overflow sensor for overflow monitoring

NVFRH-125

Layer thickness sensor for oil layer thickness monitoring

KVF-103-PF

Gas sensor for monitoring the state of aggregation
(no longer in the delivery program)

NVF-027

Accessories

Cable connector for 1 sensor, IP67

NVO5-SK3

Mounting set for 1 sensor

NVO5-B

Installation housing with DIN rail

NVO5-KV

For additional information see data sheets.