



Type code

NVFR-125E

Features

- 24 V DC supply voltage
- Monitoring of overflow of inflammable liquids
- Capable of distinguishing between air and liquid
- Sensor without connection head
- Delivery in single components

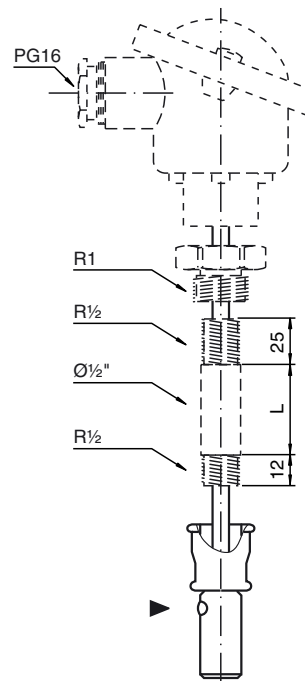
Function

The level sensor NVFR-125E is a sensor for overflow protection in containers or tanks with inflammable liquids such as petrol or oil. The sensor NVFR-125E must always be connected to an ATEX-approved, intrinsically safe warning device of type NVO5-11.

The sensor is a PTC resistor sensor. It is energized via an intrinsically safe relay. The sensor warms up if it is enclosed by air and, at the same time as falling current, the ohmic resistance in the sensor increases. The intrinsically safe relay is in normal status. If the sensor is enclosed by liquid, it does not heat up and the current increases. The intrinsically safe relay switches to alarm position. The sensor can distinguish between liquid and air.

The sensor is encapsulated in a plastic tube.

Dimensions



Technical data

Supply	
Rated voltage	24 V DC
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	-25 ... 80 °C (248 ... 353 K)
Mechanical specifications	
Protection degree	IP54 connection head side IP68 container or tank side
Connection	terminals in the connection head
Material	distance tube: steel, provided by customer sensor protection tube: plastic
Mass	approx. 500 g
Dimensions	see dimensions
Data for application in conjunction with hazardous areas	
EC-Type Examination Certificate	DEMKO 07 ATEX 142588
Group, category, type of protection, temperature classification	⊕ Ex II 1G Ex ia IIB T3
Voltage U_i	24 V DC
Current I_i	400 mA
Power P_i	1.6 W
Internal capacitance C_i	600 pF 0.1 μ F for extension cable
Internal inductance L_i	0.1 mH 0.3 mH for extension cable
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. For information see www.pepperl-fuchs.com .