



Type code

NVFRH-125E

Features

- 24 V DC supply voltage
- Monitoring of overflow of inflammable liquids
- Capable of distinguishing between air and liquid
- Sensor with connection head
- Delivery in single components

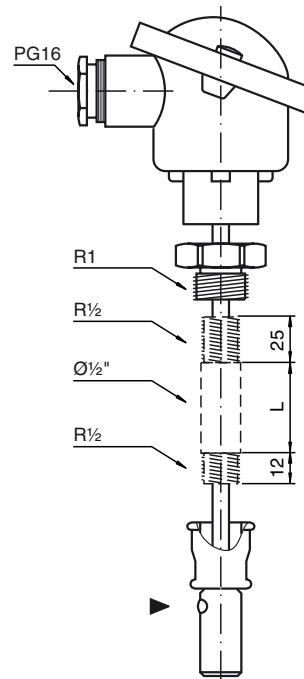
Function

The level sensor NVFRH-125E is a sensor for overflow protection in containers or tanks with inflammable liquids such as petrol or oil. The sensor NVFRH-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		connection head: aluminium 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 µF 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 where applicable. For information see www.pepperl-fuchs.com .