

Dräger PIR 3000 Fixed gas detector

The Dräger PIR 3000 is an explosion proof infrared gas detector for continuous monitoring of combustible gases and vapors. Based on a stainless steel SS 316 enclosure as well as on a good measuring performance, this transmitter offers an excellent price-performance-ratio.



ST-9025-2005

ENTERING INFRARED TECHNOLOGY

Technological preferences of infrared technology (such as fail safe operation and immunity to poison) are known and valued in the market since years. The Dräger PIR 3000 offers this plus for an economic use, aligned with a long lifetime and reduced maintenance costs.

SUITABLE FOR HARSHTEST ENVIRONMENTS

Based on an outstanding product quality, the Dräger PIR 3000 is equipped with a robust stainless steel enclosure and provides high reliability and excellent measuring performance, e.g. in terms of fast response and long-term stability. The temperature range is specified from - 40 to + 65 °C, and, due to the heated optics, the sensor can be operated in humid environments from 0 to 100 %RH.

UNIVERSAL 4 TO 20 MA INTERFACE

With its universal 4 to 20 mA interface, the Dräger PIR 3000 can be connected to any 4 to 20 mA control system available in the market (e.g. Dräger REGARD). A fault signal is provided with 1 mA for unmistakable interpretation.

Already mounted junction boxes can be further used because of metric M25 as well as 3/4" NPT thread available for the transmitter.

ADVANCED FLEXIBILITY

The customer can choose from three different gas categories – methane, propane and ethylene – all listed in one internal gas library. Individual linearisation curves offer temperature-compensated readings.

And if the target gas changes after commissioning? Or if only one stock for different applications is required? – No issue, the gas category can be changed easily by the customer himself via a magnetic wand with just a few turns.

The mounting orientation is completely flexible and the transmitter is approved according to worldwide preferred standards: ATEX, IECEx, UL and CSA. Weather protection is secured by the attached splash guard, included in delivery and certified with IP 66 and IP 67.

A wide range of accessories including calibration adapter, process adapter and duct mount set meet the advanced requirements for special applications.



ST-8822-2005

Dräger PIR 3000

Smart infrared 4 to 20 mA gas detector for reliable detection of combustible gases and vapors.

TECHNICAL DATA

Type	Explosion proof gas detector with infrared sensor technology	
Working principle	Temperature-compensated infrared absorption	
Gases and ranges	Methane, propane, ethylene: 0 to 100 %LEL (further substances on request)	
Measuring performance (methane)	Digital resolution	0.5 %LEL
	Repeatability	≤ ± 2 %LEL
	Response time $t_{0.90}$	≤ 30 seconds (with splash guard and calibration adapter)
Electrical data	Output signal	4 to 20 mA
	Fault signal	1 mA
	Power supply	10 to 30 V DC
	Power consumption	≤ 2 W
Ambient conditions	Temperature	- 40 to + 65 °C / - 40 to + 150 °F
	Pressure	700 to 1300 hPa / 23.6 to 32.5 inch Hg
	Humidity	0 to 100 %RH
Enclosure	Material	Stainless steel SS 316
	Connecting thread	M25 or 3/4" NPT
	Weight	550 g
	Size	170 mm x Ø 37 mm / 6.7" x Ø 1.45"
	Ingress protection	IP 65, IP 66 and IP 67
Approvals	ATEX	II 2G Ex d(e) IIC T6, II 2D IP6X T80 °C
	IECEx	Ex d(e) IIC T6, DIP A21 IP6X T80 °C
	UL	Class I, Div. 1, Groups A, B, C, D, Class II, Div. 1, Groups E, F, G
	CSA	Class I, Div. 1, Groups A, B, C, D
	CE mark: electromagnetic compatibility (directive 89/336/EEC)	

ORDER INFORMATION

Dräger PIR 3000 (M25)	68 10 810
Dräger PIR 3000 (NPT)	68 11 080
Dräger PIR 3000 complete set e	68 11 160
Dräger PIR 3000 complete set e2	68 11 270
Dräger PIR 3000 complete set d	68 11 180

All transmitters are equipped with splash guard and calibration adapter.
The complete set contains a junction box, already pre-assembled.