

Dräger Polytron[®] Pulsar 2 Open Path Gas Detector

The Dräger Polytron[®] Pulsar 2 represents the latest infrared technology in open path gas detection. Equipped with all the same functions as the standard Dräger Pulsar, Dräger Pulsar 2 is fitted with an ABS molded cover and comes with either a junction box or certified connector to provide installation flexibility.



Dräger. Technology for Life®

Benefits

Easy adjustment and commissioning

Designed for one person installation and commissioning the Pulsar does not require specialized training. Through use of a hand-held terminal the Pulsar transmitter and receiver can be accurately aligned, gas level zeroed and commissioned with maximum efficiency. The factory calibration of the Polytron Pulsar makes manual setting and test gas superfluous.

High performance

The Pulsar receiver communicates to the transmitter via a digital link which allows the receiver to identify and adjust to difficult environmental conditions. The microprocessor built into the receiver unit instructs the transmitter unit to increase the flash rate for increased performance and accuracy. The Polytron Pulsar is resistant to influences such as sunlight, gas flares, arc welding or resonance effects due to vibrations of rotating parts, as well as to environmental influences such as mist, drizzle or snow. The flash rate is also increased upon the detection of gas to ensure both accuracy and fast response.

System stability

The detector is designed so that no fault remains undetected. During normal operation, the output signal is between 4 to 20 mA, depending on the measured gas concentration. A signal of < 1 mA represents a fault due to a constant beam block or hardware failure requiring immediate attention. However, a signal of 2 mA identifies a beam block and will go to fault if this persists for more than 60 minutes. The Pulsar will also output a 3.5 mA signal to indicate pre-warning where the optics may be dirty or mis-aligned. During the period which the Pulsar displays 'Pre-warning' it will still detect gas allowing the customer to schedule maintenance on the detector therefore reducing down time. The Polytron Pulsar is suitable for SIL 2 rated systems.

DrägerSensor technology

High sensitivity, long term stability and no false alarms are the hallmark of the new and improved third generation of sensors. Sensors are the keystones of any gas detection system. Fastest response to the target gas combined with minimal interference by other gases or environmental influences (no false alarms) as well as the sensor life-time determine the reliability and the operating cost of a system.

Heated optics

Regulated internal lens heaters protect against build up of ice and snow under adverse weather conditions. They also prevent condensation on the lenses.

Built-in database

The Receiver logs records and details a report of the last seven working days and a summary of the last 32 weeks. These reports contain important information such as measuring values, events such as "beam block" and gas alarms, warning signals, signal strength, adjustments, supply voltage and operating temperature.

Benefits

HART Communication

The HART Communication of the Polytron Pulsar allows for digital communication between the explosionproof and secure areas. Without additional cabling, you can obtain real-time access to the status of individual detectors and to the configuration and historical data of each device.

Extensive access to the secure area

The optional AI500 Digital Interface can provide easy access to configuration, current measured values and the internal data-logger from a non-hazardous area through digital communication. For large and complex installations, up to 32 AI500's can be multidropped; therefore allowing access to up to 128 Pulsars—useful for planning service and maintenance.

System Components



AI500 digital interface

Digital interface for remote access to up to four Pulsars. Order no: 23 50 306

System Components



Dräger REGARD 7000

When you need to monitor and analyze a number of various gases and vapors, the Dräger REGARD 7000 is a modular and highly expandable analysis tool. Suitable for gas warning systems with various levels of complexity and numbers of transmitters, the Dräger REGARD 7000 is exceptionally reliable and efficient. An additional benefit is the system's backward compatibility with legacy REGARD controllers.

Accessories



Tool set

Remote control and foils for alignment and function test. Order No.: 23 50 325

Services



Dräger Service

When your operation's safety equipment is backed by over 125 years of experience and supported by the same team that engineered it, you can rely on service and rental solutions that are tailored to meet your unique needs. With Dräger's safety solutions, you get complete peace of mind, budget security, and full-service support that you can count on every step of the way. That's the Dräger Service Advantage.

Related Products



Dräger PIR 7000

Constant monitoring of flammable gases and vapors is essential for a safe workplace. The Dräger PIR 7000 is an explosion-proof point gas detection transmitter that uses infrared (IR) technology to continuously monitor flammable gases and vapors. With its stainless steel SS 316L enclosure and drift-free optics, this detector is built for the harshest industrial environments, including offshore installations.



DrägerSensor[®] IR

Upgrade to infrared technology in an instant. The DrägerSensor[®] IR can replace catalytic Ex sensors (catalytic bead sensors, pellistors) without additional installation work.

Technical Data

Туре	Exploscion proof Open Path gas detector utilizing dual wavelength infrared absorption		
Gases	Wide range of hydrocarbons including the alkane series from methane to hexane,		
	propylene, ethanol and methanol		
Range	From U to 4 up to U to 8 LEL*m		
Factory calibration	Methane or propane, selectable. Other hydrocarbon gases on request		
Operating distance	4 to 60 m, 30 to 120 m or 100 to 200 m, 13 to 197 ft, 98 to 394 ft or 328 to 656 ft separation of transmitter and receiver		
Signal output	Analog	Measuring 4 to 20 mA	
	Pre-warning	3.5 mA, dirty optics or misalignment	
	Beam block	2 mA	
	Fault	< 1 mA	
	Digital	HART®	
Supply Voltage	ATEX	18 to 32 VDC	
	UL, CSA	18 to 27 VDC	
Power Consumption	Max. 0.95 A @ 24 V, with full heating and all source lamps operating		
Response time t ₉₅	< 2 s		
Ambient conditions	Temperature	-40 to +60 °C, -40 to +140 °F	
	Pressure	800 to 1100 hPa, 23.6 to 32.5 inch Hg	
	Humidity	0 to 100 %RH, non-condensing	
Enclosure	IP 66, stainless steel		
Size (W x H x D, approx.)	260 x 340 x 220 mm, 10.25" x 13.3" x 8.5", each		
Weight (approx.)	6 kg, 12.2 lbs, each		
Approvals	ATEX	II 2GD EEx d [ia] IIC T6/T5, -40 to +40 / +60 ℃	
	IECEx	Ex d [ia] IIC T6/T5, -40 to +40 / +60 °C	
	UL	Class I, Div 1, Group C, D	
	CSA, NRTL/C	Class I, Div 1, Group C, D	

Ordering Information

Dräger Polytron [®] Pulsar 2—variations by max. operating range and approval—transmitter and receiver, each fitted with an ABS moulded cover.	
Supplied with EEx e junction box or EEx d certified plug and socket.	
Dräger Polytron® Pulsar, Short Range 4 to 60m, UL version	SC05510
Dräger Polytron [®] Pulsar, Medium Range 30 to 120m UL Version	SC05511
Dräger Polytron [®] Pulsar, Long Range 100 to 200m UL Version	SC05512
Dräger Polytron® Pulsar, Medium Range 30 to 120m CSA Version	SC05501
Dräger Polytron® Pulsar, Long Range 100 to 200m CSA Version	SC05502
Accessories	
AI500 digital interface	23 50 306
Alignment kit with HHT, test cards and ball driver with case	23 50 325
Adapter AI500 to HHT or PC	23 50 326
Dräger Polytron [®] Pulsar PC software with cable (supports Dräger	23 50 327
Polytron [®] Pulsar, AI500 and HHT)	

Notes

Notes

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