

Dräger Polytron® 8200 CAT Detection of flammable gases and vapors

The Dräger Polytron® 8200 CAT is an advanced explosion proof transmitter for the detection of flammable gases in the lower explosion limit (LEL). It uses a catalytic bead DrägerSensor® Ex ... DD, which will detect most flammable gases and vapors. Besides a 3 wire 4 to 20 mA analog output with relays, it also offers HART, Modbus and Fieldbus protocols making it compatible with most control systems.



Benefits

Fast and stable – the DrägerSensor® Ex ... DD

The latest generation type DD gas sensor is based on the proven catalytic bead principle. Innovative dual active elements result in very good long-term zero stability. Dräger has raised the bar yet again for poison resistance. The resulting long service life provides you with low ownership costs. Measuring performance has also been improved. The innovative gas inlet allows the sensor to respond to gas within a matter of seconds.

In addition to the common HART® communication system, the fieldbus interfaces PROFIBUS® PA, FOUNDATION fieldbus™ H1, and Modbus RTU are also available.

The large graphic backlit display shows status information clearly and in an easy to use format. The measured gas concentration, selected gas type, and measuring unit are displayed during normal operation. Colored LEDs (green, yellow and red) provide additional alarm and status information.

The Dräger Polytron 8200 can be supplied with three integrated relays. This enables you to use it as an independent gas detection system with two user adjustable concentration alarms and one fault alarm.

Polytron 8200 features a Class I, Div. 1 rated explosion proof enclosure made from aluminum or stainless steel.

An available remote sensor conduit housing allows the sensor to be installed up to 30 meters (100 feet) away from the Polytron transmitter. The sensor splash guard with integrated tubing nipple permits one person to perform a full calibration of a remote mounted sensor from the transmitter.

Accessories



D-65369-2013

Splash guard

The Splash guard protects the sensor against splash water and dirt.



D-65369-2013

Duct mount kit

The duct mount kit enables gas monitoring inside ventilation ducts while keeping the transmitter outside.

Technical Data

Dräger Polytron® 8200 CAT

Type	Explosion proof / flameproof enclosed transmitter ("d")		
Gases	Flammable gases and vapors		
Measuring range	DD	0 to 100% LEL	
	LC	0 to 10% LEL	
Display	Backlit graphic LCD; 3 Status LEDs (green/yellow/red)		
Electrical data	Signal output analog	Normal operation 4 to 20 mA	
	Signal output digital	HART®, PROFIBUS® PA, FOUNDATION fieldbus™ H1 and Modbus RTU	
	Power supply	10 to 30 V DC, 3-wire	
	Power consumption (max.)	DrägerSensor® Ex ... DD, w/o relay, non-remote	105 mA at 24 V
		DrägerSensor® Ex ... DD, w/ relay, remote	145 mA at 24 V
		DrägerSensor® Ex LC, w/o relay, non-remote	130 mA at 24 V
		DrägerSensor® Ex ... DD, w/ relay, remote	165 mA at 24 V
Relay specification (option)	2 alarm relays and 1 fault relay, single-pole two-way contact 5 A @ 230 VAC, 5 A @ 30 VDC, resistance-bound		
Environmental conditions (see sensor data sheet)	Temperature	-40 to 80°C (-40 to 176°F) without relay -40 to 70°C (-40 to 158°F) with relay	
	Pressure	20.7 to 38.4 inch Hg / 700 to 1,300 mbar	
	Humidity	0 to 100% r. h., non-condensing	
Housing	Transmitter housing	Epoxy coated copper-free aluminum or stainless steel SS316 L	
	Sensor housing	Stainless steel 303	
	Enclosure protection type	NEMA 4X & 7, IP65/66/67	
	Cable entry point	3/4" NPT threaded holes	
	Dimensions (H x W x D), approx.	11.0" x 5.9" x 5.1" / 280 x 150 x 130 mm	
		11.0" x 7.1" x 7.5" / 280 x 180 x 190 mm	
	Weight, approx.	Aluminum	4.9 lbs / 2.2 kg
SS316 L		8.8 lbs / 4.0 kg	
Approvals*	UL	Class I, Div 1, Groups A, B, C, D; Class II, Div 1, Groups E, F, G; Class I, Zone 1, Group IIC; T-Code T6/T4	
		CSA	
	IECEX	Class I, Div 1, Groups A, B, C, D; Class I, Zone 1, Group IIC; T-Code T6/T4 CSA C22.2 No. 152	
		Ex db IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+80°C; 'd' version Ex db e IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+80°C; 'e' version Ex tb IIIC T80/130°C Db	
	CE markings	ATEX (Directive 2014/34/EU) Electromagnetic Compatibility (Directive 2014/30/EU) Low Voltage (Directive 2014/35/EU)	
		Shipping approvals (for DD sensor only)	
MED approval B (for DD sensor only)		DNV GL, ABS	
MED approval D (for DD sensor only)		Certificate no. 61549/ 50 – 13 HH	
SIL 2 certified by TUEV Sued		Certificate no. 12031 – 10 HH	
		Certificate no. Z10 1207 53474 013	

Ordering Information

Dräger Polytron® 8200 CAT

Dräger Polytron® 8200 CAT DD d A 4-20/HART®	83 44 439
Dräger Polytron® 8200 CAT DD d A 4-20/HART® relay	83 44 440
Dräger Polytron® 8xx0 Kit (Custom configuration e. g. stainless steel housing)	83 44 800

Accessories

Magnetic wand	45 44 101
Pipe mount bracket	45 44 198
Duct mount kit	68 12 725
IR Connection Kit Polytron® 5000/8000	45 44 197
PolySoft	83 23 405
PolySoft premium	83 23 411
Splash guard	68 12 510
Gassing adapter	PE incl. tubing 45 09 314
Calibration adapter Viton®	68 10 536
Process adapter (Stainless steel) for DD	68 12 470
Prozess adapter (Stainless steel) for LC	68 12 465

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FOUNDATION fieldbus™ is a registered trademark of the Fieldbus Foundation™.

PROFIBUS® is a registered trademark of PROFIBUS and PROFINET International (PI).

PACTware™ is a registered trademark of Pepperl+Fuchs GmbH.

Viton® is a registered trademark of the DuPont company.

