



# Dräger Polytron 5200 CAT

## Detection of flammable gases and vapours

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The Dräger Polytron 5200 CAT is a cost-effective, explosion-proof transmitter designed for detecting flammable gases and vapours. It uses the catalytic DrägerSensor Ex... DQ. Due to the 3-wire operation and the 4 to 20 mA analogue output, you can combine the transmitter with most evaluation systems in your gas detection system.

# Dräger Polytron 5200 CAT



# Benefits

## Fast and stable: The DrägerSensor Ex ... DQ

The built-in type-DQ gas sensor is based on the proven catalytic bead measuring principle. It has excellent long-term stability with outstanding poison resistance. And this is the reason for its durability. Due to the novel gas inlet opening, the sensor responds to gas in only a few seconds. This allows you to react immediately with countermeasures and prevent the development of a flammable atmosphere.

## Same design, same operating principle

The Dräger Polytron 5200 belongs to the Polytron 5000 series. All transmitters in this series have the same design and user interface. This allows for uniform operation with reduced training and maintenance requirements. The large graphic backlit display shows status information clearly and in an easy to use format. The measured gas concentration and measuring unit are displayed during normal operation. Coloured LEDs (green, yellow and red) provide additional alarm and status information. You can evaluate the sensor signal by using the 4 to 20 mA output. The Polytron 5200 is operated by means of a magnetic wand over contact surfaces.

## Three relays for controlling external equipment

Upon request, the Dräger Polytron 5200 can also be supplied with three integrated relays. This enables you to use it as an independent gas detection system with two arbitrarily adjustable concentration alarms and one fault alarm. Audible alarms, signal lights or similar devices can thus be controlled locally without an additional cable between the transmitter and central controller.

## Safe, robust housing for every application

The Polytron 5200 is explosion-proof and conforms to explosion protection type "d". For the increased safety type 'e' protection, an additional terminal box is available. This also makes pre-assembly easier. Depending on the environmental conditions, you can choose the Dräger Polytron 5200 with either an aluminium or stainless steel housing.

## Make the impossible possible with the remote sensor

The remote sensing head allows you to install the sensor separately from the transmitter. This allows you to simply place the sensor closer to the gas cloud in hard-to-reach locations. The display remains visible at eye level.

# System Components

D-4806-2016



## Dräger REGARD 7000

The Dräger REGARD 7000 is a modular and therefore highly expandable control system for monitoring various gases and vapours. Suitable for gas warning systems with various levels of complexity and numbers of transmitters, the Dräger REGARD 7000 also features exceptional reliability and efficiency. An additional benefit is the backward compatibility with the REGARD.

D-1130-2010



## Dräger REGARD 3900 Series

The devices of the Dräger REGARD 3900 series can be used as standalone controllers. You can configure up to 16 measuring channels. In addition, the modular setup enables you to customise the control units to the demands of your plant. You can also embed further features to existing alarms.

D-39957-2021



## Dräger REGARD 3000

Monitor various gases and vapours with the modular Dräger REGARD 3000 control system. Its multi-coloured status light signals the status of your gas detection system. The controller allows you to combine three different modules: Input, Relay and Gateway module. You can connect up to four analogue transmitters and eight relays in combination.

# Accessories

D-15035-2010



## Docking station

A docking station is available for the increased-safety protection type "e" version. This also makes pre-assembly easier. The docking station is included with all transmitters in the Polytron 5000 and Polytron 8000 series with increased safety.

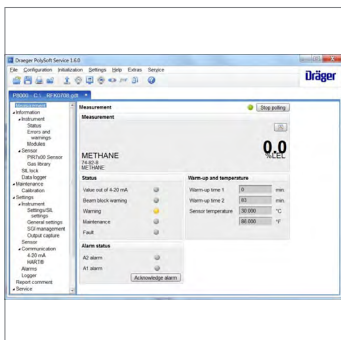
D-85345-2013



## Duct mount kit

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

D-4316-2019



## Dräger PolySoft software

The optional Dräger PolySoft Windows® software is used for configuration, firmware upgrades, diagnostics, and downloading the Polytron's built in datalogger. All from the comfort of your control room using the digital HART® signal that is modulated on top of the analog 4 – 20 mA signal. Out in the field, an available non-intrusive IR dongle easily connects Polytron to PolySoft.

## Related Products

102037



### Dräger Polytron 8200 CAT

The Dräger Polytron 8200 CAT is an explosion-proof high-end transmitter designed for detecting flammable gases and vapours. It uses the catalytic DrägerSensor Ex... DQ. In addition to the 3-wire operation with a 4 to 20 mA analogue output, it also offers HART, fieldbus options and Modbus, allowing you to integrate the transmitter with most control systems in your gas detection system.

D-1047-2024



### Dräger PEX 3000

The Dräger PEX 3000 transmitter detects flammable gases and vapours in concentrations below their lower explosive limit (100 % LEL). It helps you to increase the explosion protection of your plant. Its heat-tone sensor reacts to gas within just a few seconds, and the measurement signal remains particularly stable over the long term.

D-6572-2023



### Dräger PointGard 3200

The Dräger PointGard 3200 is a complete 1-channel gas detection system for measuring combustible gases or vapours in ambient air. In its robust yet compact housing with IP66 protection class, you have all the necessary alarm equipment needed.

# Technical Data

## Dräger Polytron 5200

Type	Explosion-proof transmitter ("d") or combined with increased safety ("d/e")		
Gases	Flammable gases and vapours		
Measurement ranges	DQ	0 to 100% LEL	
	LC	0 to 10% LEL	
Display	4-digit backlit graphic LCD 3 status LEDs (green/yellow/red)		
Performance characteristics	Accuracy/repeatability	Zero	≤ 1% LEL
		Sensitivity	≤ 1% LEL
		Long-term drift	≤ 3% LEL after 6 months
	Response time	T50	5 seconds (methane)
		T90	10 seconds (methane)

## Electrical data

Signal output analogue	Normal operation	+ 4 to 20 mA
	maintenance	Constant 3.4 mA or 4 mA ± 1 mA 1 Hz modulation; (adjustable)
	Fault	< 1.2 mA
Power supply	10 to 30 V DC, 3-wire	
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	

## Housing

Transmitter housing	Powder coated copper-free aluminium or stainless steel SS316 L	
Sensor housing	Stainless steel 303 or 316L	
Housing protection type	NEMA 4X, IP65/66/67	
Cable gland	3/4" NPT threaded holes or M20 cable gland	
Dimensions (H x W x D), approx.	w/o docking station	11.0" x 5.9" x 5.1" / 280 x 150 x 130 mm
	With Docking Station	11.0" x 7.1" x 7.5" / 280 x 180 x 190 mm
Weight, approx.	w/o docking station, aluminium	4.9 lbs / 2.2 kg
	w/o docking station, SS316 L	8.8 lbs / 4.0 kg
	w/ docking station, aluminium	7.7 lbs / 3.5 kg
	w/ docking station, SS316 L	11.9 lbs / 5.4 kg

## 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
Humidity	0 to 100% R. Humidity, non-condensing
Pressure	20.7 to 38.4 inch Hg / 700 to 1,300 mbar

# Technical Data

## 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	Class I, Div 1, Groups A, B, C, D;
	Class I, Zone 1, Group IIC;
	T-Code T6/T4 CSA C22.2 No. 152
IECEX	Ex db IIC T6/T4 Gb, $-40 \leq T_a \leq +40/+80$ °C; "d" version
	Ex db eb IIC T6/T4 Gb, $-40 \leq T_a \leq +40/+80$ °C; "e" version
	Ex tb IIIC T80/130 °C Db
ATEX	II 2G Ex db IIC T6/T4 Gb, $-40 \leq T_a \leq +40/+70$ °C; "d" version
	II 2G Ex db eb IIC T6/T4 Gb, $-40 \leq T_a \leq +40/+70$ °C; "e" version;
	II 2D Ex tb IIIC T135 °C Db
CE labelling	ATEX (Directive 2014/34/EU)
	Electromagnetic compatibility (Directive 2014/30/EU)
	Low voltage (Directive 2014/35/EU)
Metrological suitability test (only for DQ sensors)	TUEV 19 ATEX 8435X
* All docking station versions are only ATEX/IECEX approved	



# Ordering Information

Dräger Polytron 5200 CAT	Approval code	Order number
Dräger Polytron 5200 CAT DQ d A	XTR 0210	83 44 150
Dräger Polytron 5200 CAT DQ d A relay	XTR 0211	83 44 151
Dräger Polytron 5200 CAT DQ d S	XTR 0310	83 44 152
Dräger Polytron 5200 CAT DQ d S relay	XTR 0311	83 44 153
Dräger Polytron 5200 CAT DQ e A (incl. Docking Station)	XTR 021I	83 44 154
Dräger Polytron 5200 CAT DQ e A relay (incl. Docking Station)	XTR 021J	83 44 155
Dräger Polytron 5xx0 kit (configuration acc. to customer specifications; e.g. stainless steel housing)		83 44 500
Accessories		Order number
DrägerSensor PR NPT DQ		68 14 150
DrägerSensor PR NPT DQ S		37 01 800
DrägerSensor LC NPT		68 10 675
Dräger Polytron SE Ex PR M1 DQ		68 12 711
Dräger Polytron SE Ex PR M2 DQ		68 12 710
Dräger Polytron SE Ex PR LC M1		68 12 722
Dräger Polytron SE Ex PR LC M2		68 12 721
Dräger Remote Sensor DQ NPT Alu		37 06 933
Dräger Remote Sensor DQ NPT Steel		37 06 934
Magnetic wand		45 44 101
Pipe mount kit		45 44 198
Duct mount kit		68 12 725
IR Connection Kit Polytron 5000/8000		45 44 197
PolySoft licence (1 year)		83 28 600
PolySoft licence (subscription)		83 28 601
Splash guard		68 12 510
Gassing adapter	PE, Europe	68 06 978
	PE incl. tubing	45 09 314
Calibration adapter Viton®		68 10 536
Remote calibration adapter for DQ		68 12 480
Remote calibration adapter for LC		68 12 482
Process adapter (stainless steel, with M30 x 1.5 union nut) for DQ		68 12 470
Process adapter (stainless steel, with M36 x 1.5 union nut) for LC		68 12 465
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Windows® is a registered trademark of Microsoft Corporation.		

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