

# Dräger Polytron 8200 Stationary gas detector (CatEx)

Quick, reliable and cost-effective detection of combustible gases and vapours in the ambient air: the microprocessor-based transmitter is the result of more than 40 years of experience in measurement technology. In addition, the Polytron 8200 can also be integrated into your digital fieldbus system, thus providing additional diagnostic functions.



## SIMPLE INSTRUMENT MANAGEMENT THANKS TO DIGITAL COMMUNICATION

With its HART® ability, the Dräger Polytron 8200 allows remote access using the Dräger PolySoft software for the quick and convenient evaluation of the instrument status. Integration in existing management systems (e.g. PactWare) is also possible using DTM. In addition, fieldbus systems such as Foundation Fieldbus or Profibus are supported by corresponding interfaces.

## DRÄGERSENSOR EX...DD – QUICK AND STABLE

The integrated type DD gas sensor functions according to the heat-of-combustion principle. You'll be surprised by its long-term stability as well as by its poison resistance which is just as excellent – some of the reasons for its increased life time. Thanks to the innovative gas access

design, the sensor responds to gas within seconds. This allows you to quickly take counter-measures, thus preventing a potentially explosive atmosphere.

## PROVEN – AND STILL GETTING BETTER: DRÄGER MEASUREMENT TECHNOLOGY

Dräger has been developing and manufacturing sensors and gas detectors for industrial use for more than 40 years. And with each new instrument generation, we drive our measurement technology a bit further. With the Polytron 8200, you will definitely benefit from this experience and power of innovation. For the more sophisticated DrägerSensor Ex...DD is also traditionally manufactured by Dräger.



D-15005-2010\_SDA\_LC

**Dräger Polytron 8200 LC**  
with DrägerSensor Ex PR LC for  
detecting low concentrations of  
combustible gases and vapours.

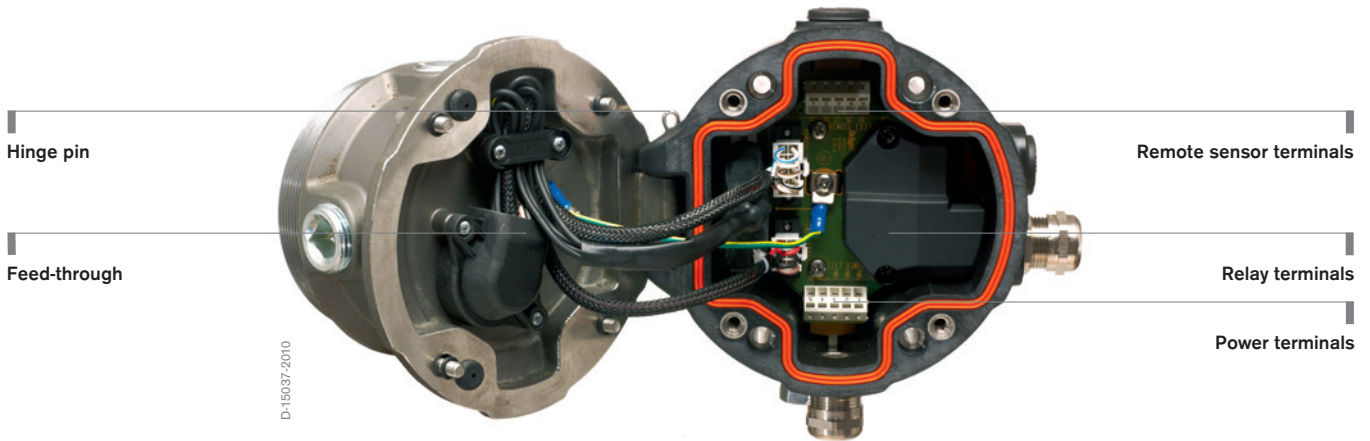
### Same design, same operating principle: The Polytron 8000 series

The Dräger Polytron 8200 is part of the Polytron 8000 series. All transmitters of this series have the same design and user interface, which guarantees a uniform operating philosophy. Your advantage: less training requirement and easier maintenance.

### Other transmitters of the Polytron 8000 series:

- Dräger Polytron 8000  
(EC stationary gas detector)
- Dräger Polytron 8310  
(DSIR stationary gas detector)
- Dräger Polytron 8700  
(PIR 7000 stationary gas detector)
- Dräger Polytron 8720  
(PIR 7200 stationary gas detector)

## DRÄGER POLYTRON 8000 WITH E-BOX / DOCKING STATION ATTACHED



### OPTIONAL: THREE RELAYS FOR CONTROLLING EXTERNAL EQUIPMENT

On request, the Dräger Polytron 8200 can be equipped 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. Audio alarms, signal lights, or similar devices can, thus, be controlled locally – without an additional cable between the transmitter and a central controller. The sensor signal can be evaluated using the 4 to 20 mA signal.

### OPTIONAL: TWO MOUNTING SETS FOR EASY FLANGE-MOUNTING

The housing has four mounting holes. Two different mounting sets are available for installing the Polytron 8200: a duct-mount and a pipe-mount set. This means that the transmitter can be easily installed anywhere – e.g., on a smooth wall, a pipe or an exhaust duct.

### QUICK AND EASY WIRING

The electronics and the bezel form a single unit. Simply pull them out of the housing. Then insert the three-wire cable into the terminals. Finally, plug the terminal block into the PCB.

### FURTHER ADVANTAGES:

- Easy and cost-effective: one-man calibration
- Available as flameproof or increased safety version
- Aluminium or 316 L stainless steel housing for the most extreme industrial conditions
- Extremely user-friendly software thanks to a minimum number of menu items
- Backlit display: easy to read, even in the dark and without a flash light
- Traffic light status indicator (green = no danger, yellow = error, flashing red = gas alarm)
- Can also be used as an early warning system (0–10% LEL) for ammonia
- Matrix display allows the flexible setting of measuring ranges and units
- DD version: SIL 2 certified by the German TÜV Süd

## TECHNICAL DATA

### DRÄGER POLYTRON 8200

Type	Flameproof 'd' or combined increased safety 'd/e' transmitter			
Gases	Different combustible gases and vapours (depending on the sensor used)			
Measuring ranges		DD:	0 to 100% LEL	
		LC:	0 to 10% LEL	
Display	Backlit graphic LCD; 3 status LEDs (green/yellow/red)			
Electrical data	Analogue signal output	Normal operation	4 to 20 mA	
		Maintenance	Steady 3.4 mA or 4 mA ± 1 mA 1 Hz modulation; user selectable	
		Fault	< 1.2 mA	
	Digital signal output	HART®		
	Supply voltage	10 to 30 V DC, 3-wire		
	Relay rating (option)	2 alarm, 1 fault relay, SPDT 5 A @ 230 VAC, 5 A @ 30 VDC, resistive load		
Ambient conditions (see also sensor data sheet)	Temperature	- 40 to + 176 °F / - 40 to + 80 °C		
	Pressure	20.7 to 38.4 inch Hg / 700 to 1300 mbar		
	Humidity	0 to 100% RH, non-condensing		
Enclosure	Transmitter housing	Epoxy-coated copper free aluminium or 316L stainless steel		
	Enclosure rating	NEMA 4X & 7, IP 65/66/67		
	Cable entry	¾" NPT female conduit or M20 cable gland		
	Size (l x w x d, approx.)	without e-Box	7.0" x 5.8" x 5.1" / 180 x 150 x 130 mm	
		with e-Box	7.3" x 7.1" x 7.4" / 185 x 180 x 190 mm	
	Weight (approx.)	without e-Box aluminium	4.9 lbs / 2.2 kg	
		without e-Box, 316 stainless steel	8.8 lbs / 4.0 kg	
		with e-Box aluminium	7.7 lbs / 3.5 kg	
		with e-Box, 316 stainless steel	11.9 lbs / 5.4 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 ***)		Class I, Div 1, Groups A, B, C, D Class I, Zone 1, Group IIC; T-Code T6 / T4		
IECEX		Ex d IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+80 °C; 'd' version		
		Ex de IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+80 °C; 'e' version;		
		Ex tb IIIC T80/130 °C Db		
ATEX		II 2G Ex d IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+80 °C; 'd' version		
	II 2G Ex de IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+80 °C; 'e' version;			
	II 2D Ex tb IIIC T80/130 °C Db			
CE markings	ATEX (Directive 94/9/EC) Electromagnetic Compatibility (Directive 2004/108/EC) Low Voltage (Directive 2006/95/EC)			

\*) Dräger Polytron 8200 LC and all e-Box versions are only ATEX / IECEx approved.

\*\*) With relays Ta ≤ +70 °C

\*\*\*) Pending

## ORDER INFORMATION

### DRÄGER POLYTRON 8200 DD AND DRÄGER POLYTRON 8200 LC

	Aluminium 'd'	SS316L 'd'	Aluminium 'e'	SS316L 'e'
Without relays (DD)	45 44 439	45 44 448	45 44 457**)	45 44 466**)
Without relays (LC)	45 44 475	45 44 484	45 44 493**)	45 44 502**)
With relays (DD)	45 44 440	45 44 449	45 44 458***)	45 44 467***)
With relays (LC)	45 44 476	45 44 485	45 44 494***)	45 44 503***)
Remote version w/o relays (DD)			45 44 511*)	45 44 520*)
Remote version w/o relays (LC)			45 44 529*)	45 44 538*)
Remote version w/ relays (DD)			45 44 512*)	45 44 521*)
Remote version w/ relays (LC)			45 44 530*)	45 44 539*)

\*) Order respective Sensing Head Polytron SE Ex Remote 'e' Version and e-Box 68 12 275 separately.

\*\*\*) Order e-Box 68 12 420 for power only wires separately.

\*) Order e-Box 68 12 275 for power and/or relay wires separately.

Magnetic wand for menu access (blue body, white logo)	45 44 101
e-Box Power only version (includes 1 cable gland) / Docking Station	68 12 420
e-Box Power, Relay and/or Remote version (includes 2 cable glands) / Docking Station	68 12 275
Cable Gland e-Box	68 12 868
Pipe Mount Kit	45 44 198
Duct Mount Kit	68 12 725
Junction Box Aluminium for Remote Mount 'd'	45 44 099
Junction Box Stainless Steel for Remote Mount 'd'	45 44 098

#### Remote 'e' Versions for

	Dräger Polytron 8200 DD	Dräger Polytron 8200 LC
Sensing Head Polytron SE Ex PR (DD / LC) M1 for remote 'e' versions	68 12 711	68 12 722
Sensing Head Polytron SE Ex PR (DD / LC) M2 for remote 'e' versions	68 12 710	68 12 721
Sensing Head Polytron SE Ex PR (DD / LC) M3 for remote 'e' versions	68 12 718	68 12 719
Sensing Head Polytron SE Ex HT (DD) M for remote 'e' versions	68 12 720	

#### Accessories

Splash guard	68 12 510
Calibration Adapter PE	45 09 314
Calibration Adapter PE, Europe	68 06 978
Calibration Adapter Viton	68 10 536
Process Adapter (stainless steel, with lock nut M30 x 1.5) for DD	68 12 470
Process Adapter (stainless steel, with lock nut M36 x 1.5) for LC	68 12 465

#### HEADQUARTERS

Dräger Safety AG & Co. KGaA  
Revalstrasse 1  
23560 Lübeck, Germany

www.draeger.com

#### SYSTEM CENTERS

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