

## Dräger Polytron 5000 Stationary gas detector (EC)

The microprocessor-based transmitter can be equipped with various electrochemical DrägerSensors. This way, you can detect oxygen and various toxic gases in ambient air – reliably, quickly and cost-effectively, as the Polytron 5000 is the result of more than 40 years of experience in measurement technology.



### 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 device generation, we drive our measurement technology a bit further. With the Polytron 5000, you will definitely benefit from this experience and power of innovation:

- durable sensors
- short response times
- high sensitivity
- high accuracy
- low sensitivity to other gases or changing ambient conditions

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

The housing has four mounting holes. Two different mounting sets are available for installing the Polytron 5000: 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 two-wire cable into the terminals. Finally plug the terminal block into the PCB.



D-150065-2010

**Dräger Polytron 5000**  
Flameproof transmitter for monitoring toxic gases and oxygen.

### Same design, same operating principle: The Polytron 5000 series

The Dräger Polytron 5000 is part of the Polytron 5000 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 5000 serie:

- Dräger Polytron 5200  
(CatEx stationary gas detector)
- Dräger Polytron 5310  
(DSiR stationary gas detector)
- Dräger Polytron 5700  
(PIR 7000 stationary gas detector)
- Dräger Polytron 5720  
(PIR 7200 stationary gas detector)

**EASY AND COST-EFFECTIVE:  
SINGLE-OPERATOR CALIBRATION**

The transmitter settings can be changed and maintenance carried out without opening the housing. Declassification of the hazardous, classified area is not necessary. Use the magnetic wand to

quickly and easily select menu items and functions. An additional hand held terminal is not required. The sensor contains an integrated database where all important information is stored. This enables you to use pre-calibrated sensors.

**FURTHER ADVANTAGES:**

- Aluminum or 316 L stainless steel housing for the most extreme industrial conditions
- Extremely user-friendly software thanks to a minimum number of menu items

## TECHNICAL DATA

### Dräger Polytron 5000

Type	Explosion proof transmitter			
Gases and Ranges	Toxic gases and oxygen in discrete pre-set values, user selectable			
Display	3-digit LCD			
FSD (Full Scale Deflection)	O <sub>2</sub>		25 vol%	
	CO		50 / 100 / 200 / 300 / 500 ppm	
	H <sub>2</sub> S zero-bias		10 / 20 / 50 / 100 ppm	
	H <sub>2</sub> S LC		10 / 20 / 50 / 100 ppm	
	H <sub>2</sub> S HC		100 / 200 / 300 / 500 ppm	
	H <sub>2</sub>		500 ppm	
	Cl <sub>2</sub> **)		5 / 10 / 20 / 50 ppm	
	EO *)		20 / 50 / 100 ppm	
	NH <sub>3</sub> LC **)		50 / 100 ppm	
	NH <sub>3</sub> HC **)		300 / 500 ppm	
	NO *)		50 / 100 ppm	
	NO <sub>2</sub> **)		5 / 10 / 20 / 50 / 100 ppm	
	SO <sub>2</sub> **)		5 / 10 / 20 / 50 / 100 ppm	
	H <sub>2</sub> O <sub>2</sub> LC **)		5 / 10 / 20 / 50 / 100 ppm	
Electrical data	Signal Output	Normal operation	4 to 20 mA	
		Maintenance	4 mA ± 1 mA 1 Hz modulation, or steady 3 mA; user selectable	
		Fault	< 2 mA	
	Supply Voltage		16 to 30 VDC, 2-wire	
Ambient conditions (see also sensor data sheet)	Temperature		-40 to + 150 °F / - 40 to + 65 °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 aluminum or 316L stainless steel	
	Sensor housing		316L stainless steel	
	Enclosure Rating		NEMA 4X & 7, IP 65/66/67	
	Cable Entry		3/4" NPT female conduit entry	
	Size (l x w x d, approx.)		9.5" x 5.8" x 5.1" / 240 x 150 x 130 mm	
	Weight (approx.)	aluminum		5.9 lbs / 2.7 kg
		stainless steel		9.7 lbs / 4.4 kg
Approvals	UL, CSA ***)		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 -40°C ≤ Ta ≤ +40/+80°C	
	ATEX, IECEx		II 2G Ex d IIC T6/T4 Gb, -40°C ≤ Ta ≤ +40/+80°C; II 2D Ex tb IIIC T80/130°C Db, -40°C ≤ Ta ≤ +40/+80°C	
	CE-mark		ATEX (directive 94/9/EC) Electromagnetic compatibility (directive 2004/108/EC) Low voltage (directive 2006/95/EC)	

\*) Notice: Gases which react with moisture will not repeatably pass through the wire mesh, if the transmitter is installed in a non-climate controlled environment. If it can be ensured, that condensation on the wire mesh will not occur; all sensors can be used in the explosion proof versions 45 44 120, 45 44 122. Other wise, these sensors should only be used with Polytron 5000 General Purpose 45 44 165.

\*\*) Notice: Only to be used with Polytron 5000 General Purpose 45 44 165.

\*\*\*) CSA Pending

## ORDER INFORMATION

Dräger Polytron 5000 aluminum enclosure without sensor; UL, CSA, ATEX ***)	45 44 120
Dräger Polytron 5000 316L stainless steel enclosure without sensor; UL, CSA, ATEX ***)	45 44 122
Dräger Polytron 5000 aluminum enclosure without sensor; general purpose	45 44 165
Magnetic wand for menu access (blue body, white logo)	45 44 101
Pipe Mount Kit	45 44 198
Duct Mount Kit Polytron 5000	68 12 725
Splash Guard	68 12 510
Calibration Adapter PE	45 09 314
Calibration Adapter PE, Europe	68 06 978
Calibration Adapter Viton	68 10 536
DrägerSensor O <sub>2</sub> LS	68 09 630
DrägerSensor CO	68 09 605
DrägerSensor H <sub>2</sub> S zero-bias	68 10 435
DrägerSensor H <sub>2</sub> S LC	68 09 610
DrägerSensor H <sub>2</sub> S HC	68 09 710
DrägerSensor H <sub>2</sub>	68 09 685
DrägerSensor Cl <sub>2</sub> **)	68 09 665
DrägerSensor EO*)	68 10 740
DrägerSensor NH <sub>3</sub> LC**)	68 09 680
DrägerSensor NH <sub>3</sub> HC**)	68 09 645
DrägerSensor NO*)	68 09 625
DrägerSensor NO <sub>2</sub> **)	68 09 655
DrägerSensor SO <sub>2</sub> **)	68 09 660
DrägerSensor H <sub>2</sub> O <sub>2</sub> LC**)	68 09 705

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\*\*) CSA Pending

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