

Dräger Polytron 5720

Fixed Gas Detector



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Infrared DrägerSensor PIR 7200 to detect Carbon Dioxide



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Including e-Box for increased safety wiring



The Dräger Polytron 5720 is an economical, microprocessor-based gas detector for continuous Carbon Dioxide. Non-intrusive calibration and maintenance is performed using a magnetic wand to access the software through the enclosure window – no need to open the enclosure and obtain special work permits to perform routine calibrations.

EASY TO INSTALL

The enclosure provides four mounting holes. Using the pipe or duct mount kit the transmitter can be mounted on different structures. For easy wiring, bezel and electronics is one unit, and can be pulled out. The field wires, fed through a sealed conduit, are terminated at pluggable connectors on the printed circuit board. For the increased safety installation, the field wires are fed through M20 cable glands and terminated in the e-Box.

ONE MAN CALIBRATION

All setup and maintenance is performed without opening the transmitter or declassifying the hazardous area. Tapping a magnetic wand at the three buttons through the window gives full access to the menu and the calibration procedure. No need for an additional handheld terminal.

STAND ALONE SYSTEM

With the three built-in relays, Dräger Polytron 5720 can be used as an independent stand-alone unit. Two adjustable gas alarm levels and a fault alarm make it convenient to switch warning devices on-site, without having to run cables back and forth to a central controller. The sensor signal can still be transmitted using the 4 to 20 mA signal output.

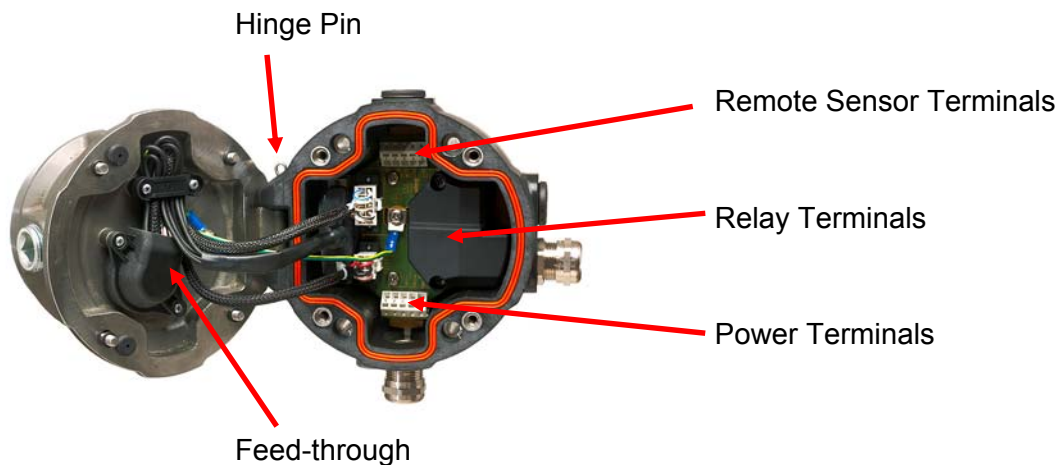
DRÄGERSENSOR TECHNOLOGY

The new, innovative and patented optical system ensures that the DrägerSensor PIR 7200 fulfills the requirements of “no false alarms”, longer intervals between maintenance and a drift-free signal output. The design is without beam splitter, but a set of various non-imaging reflectors for maximum light collection and a 4-beam signal stabilizing system. The double-compensated, open optical system guarantees a fast response and is virtually immune to dust, condensation, insects or built-up of deposits on the optical surfaces.

FEATURES AND BENEFITS

- Economical
- Non-intrusive calibration
- DrägerSensor technology
- Simple software menu
- Aluminum or 316L stainless steel enclosure
- Optional relays on board

PRINCIPLE OF THE E-BOX CONNECTION



Dräger Polytron 5000 with e-Box attached

PRODUCT MATRIX

		Aluminum 'd'	SS316L 'd'	Aluminum 'e'	SS316L 'e'
Polytron 5720	Without relays	4544200	4544202	4544204**)	4544208**)
	With relays	4544201	4544203	4544205 ***)	4544209 ***)
Type CO ₂	Remote version w/o relays *)			4544206	4544210
	Remote version w/relays *)			4544207	4544211

*) order Dräger PIR 7200 Remote 'e' Version and e-Box 6812275 separately

**) order e-Box 6812420 for power only wires separately

***) order e-Box 6812275 for power and/or relay wires separately

ORDER INFORMATION

Magnetic Wand (for menu access; blue body, white logo)	4544101
e-Box Power only version (includes 1 cable gland)	6812420
e-Box Power, Relay and/or Remote version (includes 2 cable glands)	6812275
Cable Gland e-Box	6812868
Pipe Mount Kit	4544198
Duct Mount Kit Polytron 5720 for PIR 7X00	6812300
Duct Mount Kit Flow Cell for PIR 7X00	6811945
Duct Mount Kit Bump Test Adapter for PIR 7X00	6811990
Polytron 5720 Status Indicator PIR for 7200	6811920
Polytron 5720 Splash Guard for PIR 7200	6811912
Polytron 5720 Flow Cell for PIR 7200	6811910
Polytron 5720 Bump Test Adapter for PIR 7200	6811930
Insect Guard for PIR 7X00	6811609
Hydrophobic Filter for PIR 7X00	6811890
Calibration Adapter for PIR 7X00	6811610
Process Adapter for PIR 7X00, POM (Polyoxymethylene)	6811915
Process Adapter for PIR 7X00, Stainless Steel	6811415
Junction Box Aluminum for Remote Mount 'd'	4544099
Junction Box Stainless Steel for Remote Mount 'd'	4544098
Spacer	6812617
Dräger PIR 7200 CO ₂ for Remote 'e' Version	6812290

TECHNICAL DATA

Type	Explosion proof 'd' or combined increased safety 'de' transmitter	
Gases	Combustible gases and vapors	
Ranges	0 to 0.2 up to 30 Vol%; discrete values for ppm or Vol%; user selectable	
Display	4-digit backlit LCD; 3 status LEDs (green/yellow/red)	
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
Supply Voltage	10 to 30 VDC, 3-wire	
Relay Rating (option)	Two alarm, one fault relay, SPDT	
	5 A @ 230 VAC, 5 A @ 30 VDC, resistive load	
Ambient Conditions	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	epoxy-coated copper free aluminum or 316L stainless steel	
Enclosure Rating	NEMA 4X & 7, IP 65/66/67	
Cable Entry	3/4" NPT female conduit or M20 cable gland	
Size (l x w x d, approx.)	without e-Box	5.9" x 11.4" x 5.1" / 150 x 290 x 130 mm
	with e-Box	7.1" x 11.8" x 7.4" / 180 x 300 x 190 mm
Weight (approx.)	without e-Box, aluminum	8.5 lbs / 3.9 kg
	without e-Box, stainless steel 316	12.6 lbs / 5.7 kg
	with e-Box, aluminum	11.5 lbs / 5.2 kg
	with e-Box, stainless steel 316	15.6 lbs / 7.1 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 T4/T6	
	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 T4/T6	
	ATEX, II 2G Ex d IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+80 °C; 'd' version	
	IECEX 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-mark	electromagnetic compatibility (directive 2004/108/EC)	

*) All e-Box versions are only ATEX / IECEx approved

**) with relay Ta ≤ 70 °C

***) pending