

Dräger Polytron® 5700 IR Detection of flammable gases and vapors

The Dräger Polytron® 5700 IR is a cost effective explosion proof transmitter for the detection of flammable gases in the lower explosion limit (LEL). It uses a high performance infrared Dräger PIR 7000 sensor, which will quickly detect most common hydrocarbon gases. A 3 wire 4 to 20 mA analog output with optional relays makes it compatible with most control systems.



Technical Data

Dräger Polytron® 5700 IR

Type	Explosion proof / flameproof enclosed transmitter ("d")			
Gases	Flammable hydrocarbon gases and vapors			
Measuring range	Methane, propane, ethylene	0 to 20 ... 100 % LEL		
	250+ tested substances	0 to 350 ppm ... 100 % LEL		
	Methane	0 to 100 % vol.		
Display	Backlit LCD; 3 Status LEDs (green/yellow/red)			
Electrical data	Signal output analog	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		
	Power consumption (max.)	w/o relay, non-remote	300 mA at 24 V	
		w/ relay, remote	350 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- -50 to 85 °C (-122 to 185 °F) remote sensor		
	Pressure	23.6 to 38.4 inch Hg / 800 to 1,200 mbar		
	Humidity	5 to 95 % 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 or M20 cable gland		
	Dimensions (H x W x D)	11.0" x 5.9" x 5.1" / 280 x 150 x 130 mm		
	Weight, approx.	Aluminum	4.9 lbs / 2.2 kg	
		SS316 L	8.8 lbs / 4.0 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		
	IECEX	Ex db IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+70 °C;		
	ATEX	II 2G Ex db IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+70 °C;		
	CE markings	ATEX (Directive 2014/34/EU) Electromagnetic Compatibility (Directive 2014/30/EU) Low Voltage (Directive 2014/35/EU)		
Performance approval	BVS 15 ATEX G 001 X			

Ordering Information

Dräger Polytron® 5700 IR (incl. splash guard and status indicator)

Dräger Polytron® 5700 IR 334 d A	83 44 220
Dräger Polytron® 5700 IR 334 d A relay	83 44 221
Dräger Polytron® 5700 IR 340 d A	83 44 240