

Electrochemical (EC) DrägerSensor® for Fixed Gas Detectors

Fast response, high accuracy, great stability, long life. Electrochemical DrägerSensors offer all these benefits. You can use the robust and long-life sensors for the selective measurement of the smallest concentrations of toxic gases and oxygen in ambient air.



Benefits

Long lifetime

The electrochemical are designed to provide a reliable und stable measurement function over a long period of time. The use of resistant plastics, such as PTFE, and the purest catalysts make this possible. Additionally, a huge electrolytic reservoir and large electrode areas provide sufficient reserves for a long lifetime. The construction of the DrägerSensors offers you long stability and a low age-related drift.

Ready for immediate use

All DrägerSensors are factory calibrated with the target gas. These values are saved in the internal, electronic memory. You can use the sensors in the field immediately. For some sensors other tagret gases can be selected from the internal gas library.

Comprehensive range of applications

All sensors have an internal temperature sensor. Between -40 °C and +65 °C, the temperature influence is compensated for zero and sensitivity. The patented internal pressure compensation balances adverse ambient conditions, such as humidity changes or barometric variation. Due to this fact, you can use the sensors even in high or low pressure. For some sensors you can reduce the disturbing influence of cross-sensitivities by combining selective filters.

Performance features

- Low detection limits
- Optimised selectivity
- Excellent accuracy of measurements
- Fast response
- Comprehensive self-diagnosis options
- It is possible to choose between oxygen sensors for partial pressure measurement or volume percent measurement
- Sensors with organic electrolyte for detection limits in lower ppb range
- Acid gas sensor AC with unlimited lifetime, due to refillable electrolyte

System Components



D-2947-2018

Dräger Polytron® 8100 EC

The Polytron® 8100 EC is Dräger's top of the line explosion-proof transmitter for the detection of toxic gases or oxygen. It uses a high performance plug and play electrochemical DrägerSensor to detect a specific gas. Besides having a 3-wire 4 to 20 mA analog output with relays, it also offers HART®, Modbus and Fieldbus protocol, making it compatible with most control systems.



D-4653-2019

Dräger Polytron® 6100 EC WL

The Dräger Polytron 6100 EC WL is a wireless transmitter for continuous monitoring of toxic gases and oxygen. The intrinsically safe, SIL2-rated transmitter features completely wireless signal transmission and a power supply. The internal battery pack continuously powers the transmitter for up to 24 months. This makes the Polytron 6100 a flexible and cost efficient solution for plant expansions, upgrades, and new installations.



D-158-2016-wg

Dräger Polytron® 5100 EC

The Dräger Polytron® 5100 EC is a cost-effective explosion proof transmitter for the detection of toxic gases or oxygen. It uses a high performance plug and play electrochemical DrägerSensor® to detect a specific gas. A 2 or 3 wire 4-to-20 mA output with relays make it compatible with most control systems.



D-7353-2016

Dräger PointGard 2100

The Dräger PointGard 2100 series is a self-contained gas detection system for the continuous area monitoring of toxic gases in ambient air. PointGard 2100's rugged, water-resistant housing comes complete with a horn and strobes, a built-in power supply, and reliable DrägerSensor®.

System Components



Dräger Polytron® 7000

The Dräger Polytron® 7000 gas detector can satisfy all toxic gas and oxygen measurement applications on a single platform. It meets compliance requirements, as well as the high specification requirements of customized solutions.

Accessories



Gassing Adapter

This hard PE adapter is designed for gassing of electrochemical sensors in Dräger Transmitters during calibration, and is also suitable for continuous gassing when used with a suction unit.
Part number: 68 06 978



Viton® Calibration Adapter

This soft adapter is made of Viton®, for gassing during zero-point testing and when calibrating electrochemical sensors in Dräger transmitters.
Part number: 68 10 536

Accessories



ST-5679-2006

Remote Calibration Adapter

This adapter is designed for calibrations in transmitters with electrochemical sensors that are mounted in locations with poor accessibility.

Part number: 68 07 955



ST-5716-2006

Dust Filter

This hydrophobic dust filter is designed for electrochemical polytron sensors (also see the corresponding sensor data specification).

Part number: 68 09 595



ST-5660-2006

Start-Up Kit AC, AC L and HF/HCl L

For filling of sensors (Part No. 6809375, 6810595) and Dräger Polytron HF/HCl L (Part No. 6809360), the kit includes bottles with electrolyte and pipette.

Part number: 68 09 381



D-4788-2017

Selective Filters

Selective filters absorb interfering gases in the ambient air. They are located in the sensor opening of the DrägerSensor and can easily be replaced if worn out.

Accessories



Calibration/Process Adapter AC

This gassing adapter is designed for calibration of DrägerSensor AC (Part No. 6810595) and for continuous gassing when used with a suction unit.

Part number: 68 09 380



Splash Guard

This splash guard protects DrägerSensors AC (Part No. 6810595) against dripping water.

Part number: 68 09 379

Related Products



DrägerSensor® IR

Upgrade to infrared technology in an instant. The DrägerSensor® IR can replace catalytic Ex sensors (catalytic bead sensors, pellistors) without additional installation work.

Related Products



D-100889-2018

Catalytic Bead DrägerSensor®

The DrägerSensor® ... DQ detects flammable gases and vapours such as hydrogen. Due to the double-detector compensation method, the catalytic sensor is particularly long-term stable. The wire mesh at the gas inlet serves as a flame barrier. So it ensures explosion protection at the same time short response time.

Ordering Information

Target gas	DrägerSensor	Part number	Detection limit	max. range	Comment
			Vol%	Vol%	
Oxygen	O ₂	68 09 720	0.5	100	partial pressure
Oxygen	O ₂ LS	68 09 630	0.5	25	

Target gas	DrägerSensor	Part number	Detection limit	max. range	Comment
			ppm	ppm	additional gases
Ammonia	NH ₃ TL	68 13 095	1	300	amines
Ammonia	NH ₃ FL	68 13 260	1	300	
Ammonia	NH ₃ HC	68 09 645	30	1,000	
Ammonia	NH ₃ LC	68 09 680	5	300	amines
Carbon monoxide	CO LS	68 09 620	10	5,000	
Carbon monoxide	CO LH	68 12 570	15	300	
Carbon monoxide	CO	68 09 605	5	1,000	
Chlorine	Cl ₂	68 09 665	0.05	100	halogene
Ethylene oxide	OV1	68 10 740	5	200	organic vapours
Ethylene oxide	OV2	68 10 745	5	100	organic vapours
Hydrazine	Hydrazin	68 10 180	0.02	5	derivitives
Hydrogen	H ₂	68 09 685	15	3,000	
Hydrogen chloride	AC	68 10 595	0,5	30	acidic compounds
Hydrogen chloride	HCl	68 09 640	1	100	halides
Hydrogen cyanide	HCN	68 09 650	1.5	50	
Hydrogen cyanide	HCN LC	68 13 200	0.1	50	
Hydrogen peroxide	H ₂ O ₂ HC	68 09 675	100	7,000	
Hydrogen peroxide	H ₂ O ₂ LC	68 09 705	0.1	300	
Hydrogen sulfide	H ₂ S HC	68 09 710	10	1,000	
Hydrogen sulfide	H ₂ S LC	68 09 610	1	100	mercaptane
Hydrogen sulfide	H ₂ S	68 10 435	0.5	100	
Nitrogen dioxide	NO ₂	68 09 655	0.3	100	
Nitrogen dioxide	NO ₂ LC	68 13 205	0.05	20	
Nitrogen monoxide	NO	68 09 625	3	200	
Ozone	Ozon	68 14 005	0.02	5	
Phosgene	COCl ₂	68 09 930	0.02	20	
Phosphine	Hydride	68 09 635	0.03	20	hydrides
Phosphine	PH ₃ / ASH ₃	68 09 695	0.02	20	
Phosphine	Hydride SC	68 09 980	0.01	1	hydrides
Sulfur dioxide	SO ₂	68 09 660	0.5	100	

Accessories

Calibration bottle	68 03 407
Dust filter	68 09 595
Dust filter T stamped	68 12 224
Selective filter A2F (CO, CO LS, H ₂)	68 09 684
Selective filter K2F (COCl ₂)	68 09 933
Selective filter NF (HCl)	68 09 643
Selective filter HSF (Hydride)	68 09 862
Selective filter MF (PH ₃ , AsH ₃)	68 09 638
Selective filter K1F (SO ₂)	68 09 663

Viton® Calibration adapter 68 10 536

Further calibration accessories on request

Viton® is a registered trademark of the DuPont company

Notes

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