

# Dräger Polytron 2 XP Tox Fixed Gas Detector

The Dräger Polytron 2 XP Tox is an explosion proof gas detector for continuous monitoring of toxic gases and oxygen in ambient air. The transmitter converts the signal from an electrochemical sensor to a 4 to 20 mA analog or HART® or RS 485 digital signal output. The unit is designed for one-man calibration, and offers a variety of diagnostics and self test features.



The configuration and calibration of the transmitter is menu guided and easy to perform, using either the infrared remote control, the built-in push buttons, or a HART® hand held terminal. With the optional relays, Dräger Polytron 2 XP Tox can be operated as 'stand alone' unit.

## EASY TO INSTALL

The enclosure provides two mounting holes. For easy wiring, the electronics is enclosed in a 'bucket', and can be pulled out as one unit, held by a tether. The three wire cable, fed through a sealed conduit, is terminated in a pluggable connector at the printed circuit board.

## ONE MAN CALIBRATION

All setup and maintenance can be performed without opening the transmitter or declassifying the hazardous area. An infrared remote control, beaming through the window, gives full access to the menu and calibration procedure. The menu can also be accessed using the built-in push buttons or a HART® hand held terminal. All menu items and messages are displayed in plain English. Other, user selectable languages are French, Spanish and German.

## DRÄGERSENSOR TECHNOLOGY

High sensitivity, long term stability and no false alarms are the hallmark of the new and improved third generation of sensors. Sensors are the keystones of any gas detection system. Fastest response to the target gas combined with minimal interference by other gases or environmental influences (no false alarms) as well as the sensor life-time determine the reliability and the operating cost of a system.

## STAND ALONE SYSTEM

With the three built-in relays, Dräger Polytron 2 XP Tox 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 either the 4 to 20 mA, HART® or RS 485 signal output.

## FEATURES/BENEFITS

- DrägerSensor® technology
- Fast, accurate response
- Non-intrusive calibration
- Backlit LC-Display
- 4 to 20mA, HART®, RS 485 interface
- Multidrop capability, reduced wiring costs
- Optional relays on board
- ATEX, UL and CSA approved



Dräger Polytron 2 XP Tox  
Electrochemical sensor to  
detect toxic gases and oxygen.

## TECHNICAL DATA

Type	Explosion proof transmitter		
Gases and Ranges	Toxic gases and oxygen in user selectable ranges (see sensor data sheet)		
Display	Backlit LCD; 2 lines, 20 characters Menu structure and messages in real text		
Signal Output	Analog	Normal operation	4 to 20 mA
		Warning, configurable	fault signal every 10 s for 1 s, or off; user programmable
		Maintenance	4 ± 1 mA 1 Hz modulation, or steady; user programmable
	Fault	< 1.2 mA	
	Digital	HART®, RS 485	
Relays (optional)	Two alarm relays, one fault relay SPDT; user programmable Rating: 5A 230 VAC, 5A 30 VDC		
Supply Voltage	10 to 32 VDC, 3-wire		
Ambient Conditions	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 (see sensor data sheet)	
Enclosure	NEMA 4X & 7, IP 66; 3/4" NPT female conduit entry		
Size (h x w x d, approx.)	10 3/4" x 5" x 5" / 275 x 130 x 130 mm		
Weight (approx.)	5.3 lbs / 2.4 kg		
Approvals	UL, CSA	Class I, Div 1, Group B, C, D	
	ATEX	II 2G EEx d [ia] IIC T6/T4, II 3D IP66 T85°C; - 40 ≤ Tamb ≤ + 40 / + 65 °C	
	CE-mark	electromagnetic compatibility (directive 89/336/EEC)	

HART® is registered trademark of HCF, Austin, TX

## ORDER INFORMATION

Dräger Polytron 2 XP Tox without sensor and relays; UL, CSA, ATEX version	45 43 070
Dräger Polytron 2 XP Tox without sensor, with relays; UL, CSA, ATEX version	45 43 200

### HEADQUARTERS:

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

[www.draeger.com](http://www.draeger.com)

### SYSTEM CENTERS:

#### P. R. CHINA

Beijing Fortune Draeger Safety  
Equipment Co., Ltd.  
A22 Yu An Rd, B Area,  
Tianzhu Airport Industrial Zone,  
Shunyi District,  
Beijing 101300  
Tel +86 10 80 49 80 00  
Fax +86 10 80 49 80 05

#### GERMANY

Dräger Safety AG & Co. KGaA  
Revalstrasse 1  
23560 Lübeck  
Tel +49 451 882-2794  
Fax +49 451 882-4991

#### FRANCE

Dräger Safety France SAS  
3c route de la Fédération, BP 80141  
67025 Strasbourg Cedex 1  
Tel +33 3 88 40 59 29  
Fax +33 3 88 40 76 67

#### SINGAPORE

Draeger Safety Asia Pte Ltd  
67 Ayer Rajah Crescent #06-03  
Singapore 139950  
Tel +65 68 72 92 88  
Fax +65 65 12 19 08

#### UNITED KINGDOM

Draeger Safety UK Ltd.  
Blyth Riverside Business Park  
Blyth, Northumberland NE24 4RG  
Tel +44 1670 352 891  
Fax +44 1670 544 475

#### USA

Draeger Safety, Inc.  
505 Julie Rivers, Suite 150  
Sugar Land, TX 77478  
Tel +1 281 498 10 82  
Fax +1 281 498 51 90