FALCO

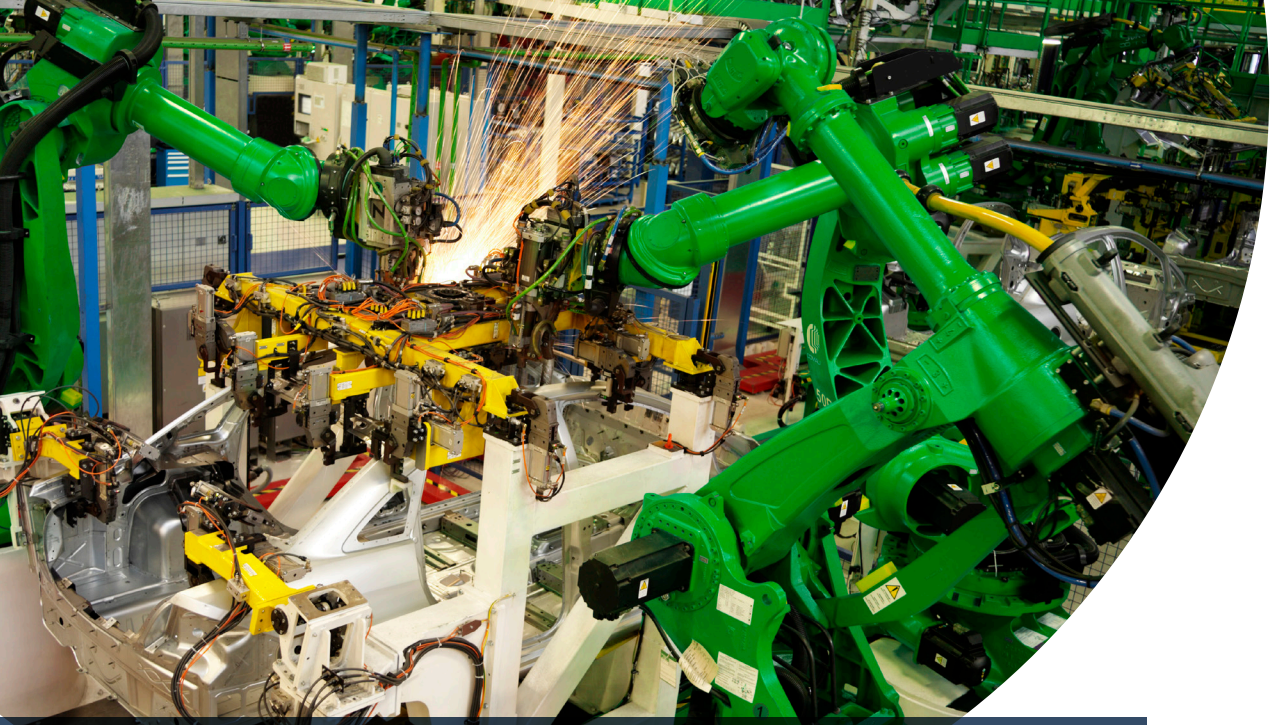
FIXED VOC DETECTOR

DESGINED FOR CONDENSING ATMOSPHERES AND EXTREME WEATHER.

ionscience.com

Unrivalled Gas Detection.

ION



WORLD'S SAFEST PID TECHNOLOGY IS NOW EVEN SAFER! FALCO EVEN WORKS WITHIN CONDENSING ATMOSPHERES AND EXTREME WEATHER.

Ultimate performance

- The only VOC detector specifically designed for extreme weather
- Typhoon Technology stops condensation forming within the PID
- Cutting-edge sensor performance minimises drift & downtime

Ultimate safety

- Eliminates false readings found with other PIDs
- Multi-coloured status display seen from 20 metres in sunlight
- Fitted with long-life lamp for one year of continuous use
- Ex d approved
- Intrinsically safe; meets ATEX, IECEx, North American and
- Canadian standards

Ultimate flexibility

- Pumped or diffused models available
- Pumped unit ideal for difficult to access locations
- Diffused model reduces servicing costs
- Four detection ranges available
- Selectable response factor for varying VOC selection

...PID detection you can trust!

FALCO is the latest generation of fixed photoionisation detectors (PIDs) from ION Science that continuously detect a wide range of volatile organic compounds (VOCs).

Unique to FALCO is its revolutionary Typhoon Technology safeguarding the sensor from condensing moisture for added reliability in severe weather conditions. In addition FALCO incorporates patented Fence Electrode Technology, which negates the effects of airborne humidity.

FALCO gives you cutting-edge performance; reliability, accuracy and results you can trust so you can be sure workforce and plant receive on-going maximum protection. With its humidity resistance and anti-contamination design drift is minimised and run-time extended, saving both time and cost to your business.

Offering the ultimate in safety FALCO overcomes false readings found with other PIDs. Its multi-coloured LED status display can be seen from a distance of twenty metres in direct sunlight ensuring you are clearly alerted to hazards present.

FALCO has an externally located Intrinsically Safe sensor for quick and easy servicing without the need for a hot work permit. Dual certification allows FALCO to be serviced in a hazardous environment without having to remove power.

Simple to operate FALCO has an intuitive user interface. It has five magnetic switches with LED confirmation, a high contrast OLED screen and graphical interface ensuring installation and servicing are both quick and easy.

RS485 (Modbus®), 4-20 mA and Relay outputs are standard for all models. The Relay outputs are configurable for either high and low alarms, fault conditions or test cycle synchronisation.

FALCO offers the ultimate in flexibility and can be purchased as one of four detection ranges in either a pumped or diffused variant. With a diffused model servicing costs are kept to a minimum with no pump to maintain.

Type	0-10 ppm	0-50.0 ppm	0-1000 ppm	0-3000 ppm
Sensitivity	0.001 ppm	0.01 ppm	0.1 ppm	1 ppm
Pumped	✔			
		✔		
			✔	
				✔
Diffused	✔			
		✔		
			✔	
				✔

Extend your FALCO instrument warranty

Registering your product online within one month of purchase will extend its warranty. Visit www.ionscience.com/instrument-registration

Applications include:

- Manufacturing
- Processing
- Refineries & Petrochemical
- Chemical
- Waster water treatment
- Pulp & paper
- Pharmaceutical
- IAQ
- Solvent recovery systems
- Industrial painting & coating
- Fenceline monitoring
- Outdoor air quality
- Tankfarms
- Bunkering

Technical specifications

Sensor
- Photoionisation with 10.6 eV lamp

Detection ranges and sensitivity
- 10.0 ppm* 0.001 ppm
- 50.0 ppm* 0.01 ppm
- 1000 ppm* 0.1 ppm
- 3000 ppm* 1 ppm

Detection time (T90)
- <30 seconds (diffused)**

User interface
- Display: OLED high contrast white on black: 128 (w) x 64 (h) pixels
- Screen size: 35 mm (w) x 17.5 mm (h)
- 5 magnetic switches with LED confirmation (up, down, left, right & enter). Magnetic actuator supplied.

Status indicator
- Bright visible status indicator: RED, AMBER, GREEN

Certification
- II 2G Ex d ib IIC T4 Gb
- Class 1, Div 1 Groups ABCD T4
- ISO9001:2008

Environmental specification
- Without pump: -40oC to 60oC (-40oF to 140oF)
- With pump: -20oC to 60oC (-4oF to 140oF)
- 0-100% RH and condensing humidity

Mechanical interface
- 2 x cable entry points with 3/4" NPT threads (left and right)
- 2 x 3/4" NPT to M20 Stainless steel (supplied)

Dimensions
- Without pump: 200 (h) x 190 (w) x 125 (d) mm
- With pump: 290 (h) x 190 (w) x 125 (d) mm

Mounting points
- 2 x M8

Input power
- Working voltage: 12 to 40 Vdc
- Max. power: 7 watts

FALCO V1.5 UK This publication is not intended to form the basis of a contract and specification can change without notice.

* Based on Isobutylene gas
** When set to continuous measurement
Modbus® is a registered trademark of Schneider Electric

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