

THE ENCYCLOPAEDIC RANGE OF DETECTORS FOR ALL TYPES OF APPLICATION.

The Xgard gas detector range has been specifically designed to meet your requirements. The dangers posed by toxic or flammable gases as well as oxygen deficiency vary depending on the application.

The Xgard range features three different sensor concepts, so you can choose the model that provides exactly what your site needs.

It is available in flameproof, intrinsically safe, or safe area formats and can therefore be installed in all environments, whatever the classification.



| Gas | Type 1 | Type 2 | Type 3, 4, 5 & Xsafe | Type 6 |
|--|---|--|-------------------------------------|---|
| Acetylene (C ₂ H ₂) | - | - | 0-100%* LEL | - |
| Ammonia (NH ₃) | 50, 100, 250, 500, 1000 ppm | - | 0-25%* LEL | - |
| Argon (Ar) | - | - | - | Contact us |
| Arsine (AsH ₃) | 1 ppm | - | - | - |
| Bromine (Br ₂) | 3 ppm | - | - | - |
| Butane (C ₄ H ₁₀) | - | - | 0-100%* LEL* | - |
| Carbon dioxide (CO ₂) | - | - | - | Contact us |
| Carbon monoxide (CO) | 50, 100, 200, 250, 500, 1000, 2000 ppm | 50, 100, 200, 250, 500, 1000, 2000 ppm | - | - |
| Chlorine (Cl ₂) | 3, 5, 10, 20, 50, 100 ppm | - | - | - |
| Chlorine Dioxide (ClO ₂) | 1 ppm | - | - | - |
| Diborane (B ₂ H ₆) | 1 ppm | - | - | - |
| Ethane (C ₂ H ₆) | - | - | 0-100%* LEL | - |
| Ethylene (C ₂ H ₄) | - | - | 0-100%* LEL | - |
| Ethylene oxide (C ₂ H ₄ O) | 10, 50, 100 ppm | - | - | - |
| Fluorine (F ₂) | 1 ppm | - | - | - |
| Germane (GeH ₄) | 2 ppm | - | - | - |
| Helium (He) | - | - | - | Contact us |
| Hydrogen (H ₂) | 200, 2000 ppm | 200, 2000 ppm 100% LEL | 0- 100%* LEL 50% LEL 100% LEL | 0-5%, 10%, 50% vv (in air) 0-20%, 25%, 30%, 50% vv (H ₂ in N ₂) |
| Hydrogen chloride (HCl) | 10, 25 ppm | - | - | - |
| Hydrogen cyanide (HCN) | 25 ppm | - | - | - |
| Hydrogen fluoride (HF) | 10 ppm | - | - | - |
| Hydrogen sulphide (H ₂ S) | 5, 10, 20, 25, 50, 100, 200, 250, 300, 1000 ppm | 5, 10, 20, 25, 50, 100, 200 ppm | - | - |
| LPG | - | - | 0- 100% LEL | - |
| Methane (CH ₄) | - | - | 0- 100% LEL | - |
| Nitric Oxide (NO) | 25, 50, 100 ppm | - | - | - |
| Nitrogen dioxide (NO ₂) | 10, 50, 100 ppm | - | - | - |
| Ozone (O ₃) | 1 ppm | - | - | - |
| Oxygen (O ₂) | 25% Vol | 25% Vol | - | - |
| Pentane (C ₅ H ₁₂) | - | - | 0- 100%* LEL | - |
| Petrol vapour | - | - | 0- 100%* LEL | - |
| Phosgene (COCl ₂) | 1 ppm | - | - | - |
| Phosphine (PH ₃) | 1 ppm | - | - | - |
| Propane (C ₃ H ₈) | - | - | 0- 100%* LEL | - |
| Silane (SiH ₄) | 1 ppm | - | - | - |
| Sulphur Dioxide (SO ₂) | 10, 20, 50, 100, 250 ppm | - | - | - |
| Vinyl chloride (VCM) (CH ₂ =CHCl) | - | - | 0- 100%* LEL | - |
| Volatile organics (VO)*2 | 0-100 ppm *2 | - | - | - |

* Ranges not available for Xsafe or Xgard Type 4

XGARD RANGE



TYPE 1:
Toxic gases and oxygen detection, ntrinsically Safe



TYPE 2:
Toxic gases and oxygen detection, Flameproof



TYPE 3:
Flammable gas detection, Flameproof



TYPE 4:
Flammable gas detection, Flameproof for high temperature



TYPE 5:
Flammable gas detection, Flameproof with 4-20mA output



TYPE 6:
Flameproof gas detection with, thermal conductivity sensors



XSAFE:
Flammable gas detection for safe area

TECHNICAL DATA

| | Type 1 | Type 2 | Type 3 | Type 4 | Type 5 | Type 6 | Xsafe |
|-------------------------------------|--|--|---|--|---|-----------------------------|---|
| Enclosure material | ATEX certified: Class reinforced nylon or 316 S/S UL Certified: Aluminium or 316 S/S | Aluminium or 316 Stainless Steel | | Aluminium | Aluminium or 316 Stainless Steel | | Aluminium |
| Size | 6.1 x 6.5 x 4.3 in. (15.6 x 16.6 x 11.1 cm) | | | 7.6 x 6.5 x 4.3 in. (19.5 x 16.6 x 11.1 cm) | 6.1 x 6.5 x 4.3 in. (15.6 x 16.6 x 11.1 cm) | | |
| Weight | Nylon: 1.1 lbs (0.5kg) Alloy: 2.2 lbs (1kg) 316 S/S: 6.8 lbs (3.1kg) | Aluminium: 2.2 lbs (1kg) Stainless steel: 6.8 lbs (3.1kg) | | 3.3 lbs (1.5kg) | Aluminium: 2.2 lbs (1kg) Stainless steel: 6.8 lbs (3.1kg) | | 2.2 lbs (1kg) |
| Protection Class | IP65 | | | IP54 | IP65 | | |
| Cable entries | 1 x M20, 1/2 "NPT or 3/4 NPT" on right-side | | | | | | |
| Terminations | 0.5 to 2.5 mm ² | | | | | | |
| Sensor types | Electrochemical | Electrochemical | Catalytic bead | 316 S/S sensor housing with catalytic beads | Catalytic bead | Thermal conductivity | Catalytic bead |
| Operating temperature | -4 to 122°F (-20 to +50°C) | | -40 to 176°F (-40 to +80°C) | -4 to 302°F (-20 to +150°C) | -40 to 131°F (-40 to +55°C) | +50 to 301°F (+10 to +55°C) | mV: 40 to 176°F (-40 to +80°C) mA: -40 to 131°F (-40 to +55°C) |
| Humidity | 0-90% RH non-condensing | | 0-99% RH non-condensing | | | 0-90% RH non-condensing | 0-99% RH non-condensing |
| Repeatability Zero drift | <2% FSD (Typical) <2% FSD per Month (Typical) | | | | | | |
| Response time | T90 <15s Oxygen (sensor dependant) T90 <30s to 120s Toxic (sensor dependant) | | T90 <15s (Typical) | | | | |
| Operating voltage | 8- 30V dc | | 2.0V dc +/- 0.1V (Typical) | | 10-30V dc | | mA: 10- 30V dc mV: 2.0Vdc |
| Power requirements | 24mA maximum | | 24mA maximum | | 50mA at 24V, dc 1.2W | | mA: 50mA at 24V, dc 1.2W mV: 300mA (Typical) |
| Electrical output | 2-wire 4-20mA (current sink) | | 3- wire mV bridge Typical signal: 12-15 mV/%LEL CH ₄ | 3- wire mV bridge Typical signal: >10 mV/%LEL CH ₄ | 3- wire 4-20mA (current sink or source) | | mA: 3- wire, 4-20mA (current sink or source) mV: 3- wire mV, bridge Typical signal: 12-15mV/ %LEL CH ₄ |
| Approvals | ATEX: II 1 G Exia IIC T4 Ga (Tamb -40 to +55°C) UL/cUL: Class I, Div. 1 Groups A, B, C, D IECEX EAC | ATEX: II 2 GD Exd IIC T6 Gb (Tamb -40 to +50°C) UL: Class I, Div. 1 Groups B, C, D IECEX EAC* | ATEX: II 2 GD Exd IIC T4 Gb (Tamb -40 to +80°C) Exd IIC T6 Gb (Tamb -40 to +50°C) Ex tb IIC T180oc Db UL: Class I, Div. 1 Groups B, C, D IECEX EAC | ATEX: II 2 GD Exd IIC T3 Gb (Tamb -40 to +150°C) | ATEX: II 2 GD Exd IIC T6 Gb (Tamb -40 to +50°C) Exd IIC T4 Gb (Tamb -40 to +80°C) Ex tb IIC T180oc Db UL: Class I, Div. 1 Groups B, C, D IECEX EAC | | / |
| EMC compliance | EN 50270 FCC Part 15 ICES- 003 | | | | | | |

* 3/4 "(19mm) cable entry is only available on aluminum junction boxes.