



## F1 GAS SENSOR

Remote fixed detector for Flammable Oxygen and Toxic Gases

Specification Sheet ref C105-B

- Engineered for ease of maintenance and reduced running costs
- Widest range of sensors
- In situ replaceable plug in sensors
- Low cost stock holding
- Reduced replacement costs
- Catalytic
- Electrochemical
- Thermal Conductivity
- Semiconductor
- Infrared
- Replaceable sintered disc
- Harsh environment use
- Corrosion resistant stainless steel housing



### Application

Extremely high quality and cost effective sensor providing a wide choice of sensor elements. Compact innovative design ensures fast response to gas with high accuracy measurement. Designed to operate in a full range of environments from commercial premises through to heavy industrial applications which may require hazardous area sensing. A range of accessories is available enabling the sensor to be used in diverse applications such as HVAC ducting, flowline systems or freestanding open air applications.

### Technical Data

#### Classification

- Certified flameproof
- ATEX / IECEx – Exd IIC T6 Gb (also available: T3, T4, T5)
- CSA/US Class 1 Groups A, B, C, D.
- High temperature versions

#### ATEX SCS Cert No.

- 03ATEX1176X

#### CSA/US Cert No.

- LR115863-1

#### IECEX SCS Cert No.

- IECEx SIRO6.0016X

#### UK Design patent

- No. 2025396

#### Housing Material

- Stainless Steel 316 S16

#### Dimensions

- Body length 32mm dia 33mm

#### Weight

- 165gms

#### Cable Exit Mounting Thread

- 20mm 1.5 pitch – options available 25mm, 3/4 NPT

#### Accessory Mounting Thread

- 33mm 1.25 pitch

#### Lock Screw

- 3mm-1mm key

#### Housing Components

- Body ref. 001-002
- End cap ref. 001-003

#### Ingress Protection

- IP63 + water shield IP65

#### Approved sensor junction boxes

- Type XDI – EExd IIC T6  
Material – aluminium alloy – option - stainless steel
- Type 3000 – EExd IIC T6  
Material – Cast Iron – IP66
- Type 9000 – EExe II T6  
Material – GRP - IP66

## Sensor Detail

ref C105-B

Sensor Device	Gas Type	Range	XDI JB output	3000 JB output	9000 JB output	Performance Data Sheet
Pellistor CAT300A	Hydrocarbons	% L.E.L.	A.B.D	A.B	A	C398
Thermal Conductivity	Hydrocarbons	100% vol	A.B.D	A.B	A	C399
Semiconductor	Refrigerant Gases	0-5000 ppm	A.B.D	A.B	A	C400
Electrochemical	Oxygen	0-30% vol	B.C.D	B.C		C402
Electrochemical	Carbon Monoxide	0-250ppm	B.C.D	B.C		C403
Electrochemical	Hydrogen Sulphide	0-50ppm	B.C.D	B.C		C404
Electrochemical	Sulphur Dioxide	0-10ppm	B.C.D	B.C		C405
Electrochemical	Nitrogen Dioxide	0-10ppm	B.C.D	B.C		C406
Electrochemical	Hydrogen	0-2000ppm	B.C.D	B.C		C407
Electrochemical	Hydrogen Cyanide	0-25ppm	B.C.D	B.C		C409
Electrochemical	Nitric Oxide	0-100ppm	B.C.D	B.C		C410
Electrochemical	Ammonia	0-100ppm	B.C.D	B.C		C411
Electrochemical	Ozone	0-2ppm	B.C.D	B.C		C412
Electrochemical	Ethylene Oxide	0-25ppm	B.C.D	B.C		C413
Infrared	Carbon Dioxide	0-2% vol	B	B		C510
Infrared	Hydrocarbons	% L.E.L. – % vol	B	B		C419

## Detector Head



XDIwin – F1



XDI – F1



3000 –F1



9000 –F1

### Electrical Outputs

A – 3 wire mV

B – 3 wire 4-20mA

C – 2 wire 4-20mA

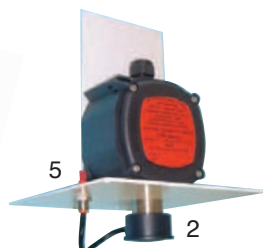
D – CAN bus

## Sensor Accessories

- 003-010 Collector Cone & Universal Fitting
- 003-020 Universal Fitting, (Test Gas Applicator/ Spray Deflector)
- 003-031 Filter - Particulate
- 008-311 Flow Adaptor
- 003-090 Duct Mount Kit
- 003-035 Water Shield



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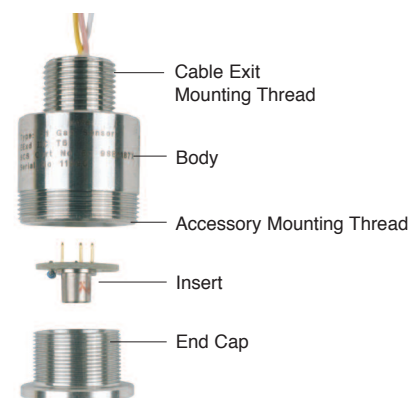
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