

PRODUCT DATA SHEET

www.internationalgasdetectors.com



Control Systems

Transmitters

Sensors

Accessories

MKII ATEX

'Pellistor' Flammable Gas Detector



Bridge Circuit 3 Wire
 Compact Size
 Exd Certified
ATEX Certified
 Ingress Protection IP66
 Stainless Steel Construction
 High Power 360mA
 Poison Resistant Sensor
 Manufactured by Oliver IGD

Better known as the UK's oldest manufacturer of gas monitoring and gas analysis systems, *Oliver-IGD* have produced the MKIII-DCP **flammable** gas measuring sensor for over 45 years.

The MKIII-DCP has the reputation for being the most poison proof pellistor available, with many clients experiencing over 10 years satisfactory service.

Basic Specification

Bridge Supply	360mA±5mA
Electrical Outputs	3 Wire Bridge
Temperature	-30°C to +55°C
Humidity	15 to 90% RH non-condensing
Ingress Protection	IP66
Housing Material	Stainless Steel 316 S16
Explosion Protection	Flameproof
Approval Code	EEx d IIC T6
Dimensions (mm)	33 Diameter x 52 Length
Mounting Thread	M20X1.75
Weight	210 grams



Pellistor Sensor Production

IP66
 II 2 GD
 -20°C ≤ Ta ≤ +55°C
 Ex db IICT5 Gb
 Ex tb IIIC T100°C Db
 -20°C ≤ Ta ≤ +40°C
 Ex db IICT6 Gb
 Ex tb IIIC T85°C Db
 ExVeritas 16ATEX0142X
 IECEx EXV16.0004x



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 England

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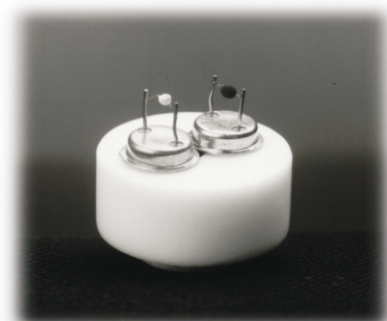
FS646773
 Ref ROS67B

MKIII & Type B

SENSORS & ACCESSORIES

MKIII-DCP Pellistor Flammable Gas Sensor

Sensor Data	
Measuring Range	0 to 100% LEL
Resolution	2% FSD
Warm Up Time	<30 Minutes
Response Time T90	<10 Seconds
Repeatability	± 0.1% LEL
Long Term Drift	± 0.05% LEL/Month
Power	<1.1 Watt
Max Air Velocity Without Additional Protection	6M/s
Weight	210gms
Linearity	Sensibly linear up to 3% Vol Methane



Correction Factors & Calibration Constants

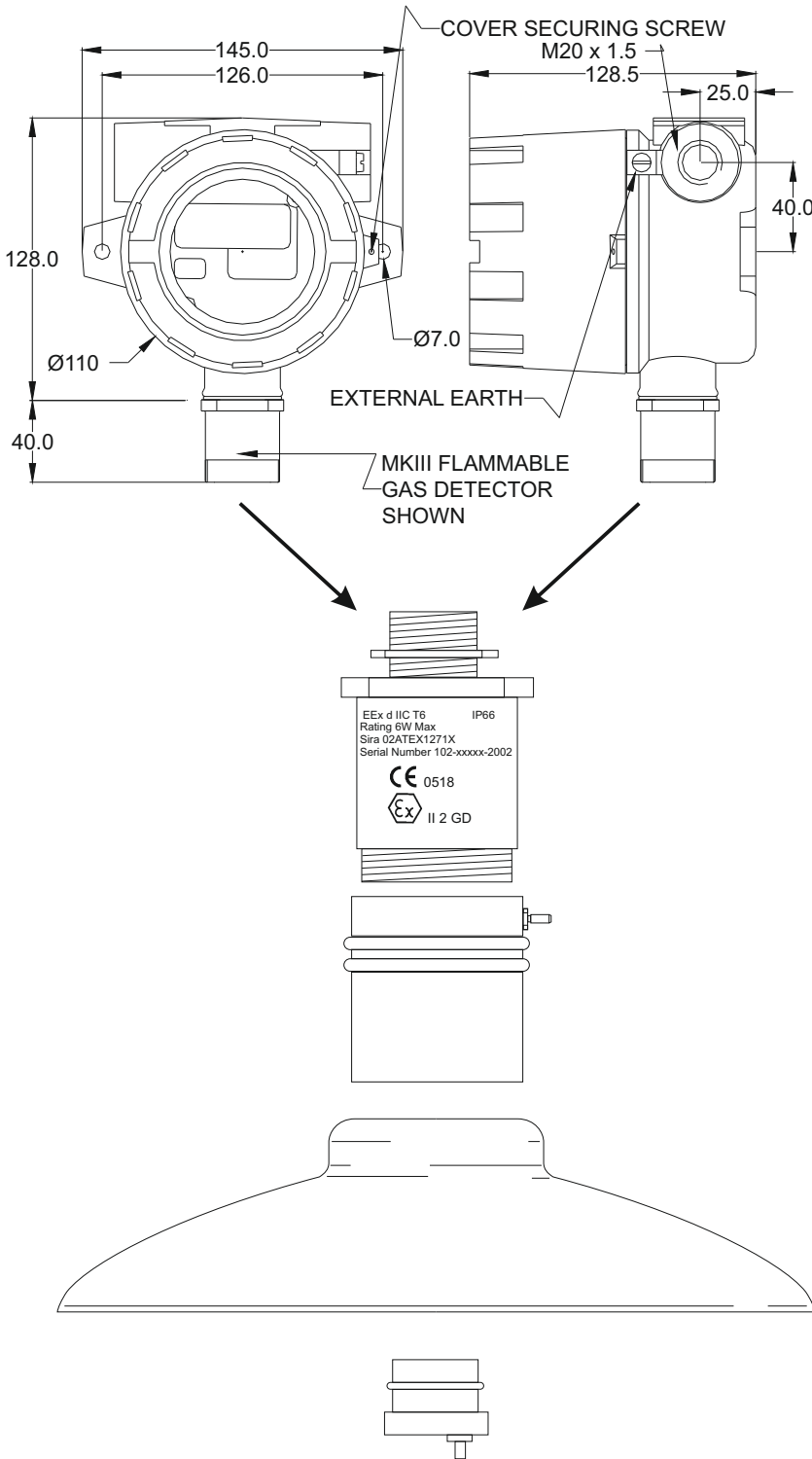
Gas / Vapour	Relative Sensitivity	With 1% Methane In Air Adjust Calibration to Display (in LEL)
Methane	1.00	20
Propane	0.63	35
n-Butane	0.59	35
n-Pentane	0.53	40
n-Hexane	0.42	50
N-Heptane	0.42	50
n-Octane	0.39	55
Hydrogen	0.69	30
Methanol	0.70	30
Ethanol	0.48	40
Iso Propyl Alcohol	0.38	55
Acetone	0.41	50
Methyl Ethyl Ketone	0.41	50
Benzene	0.39	55
Toluene	0.34	60
Di-ethyl Ether	0.52	10
Cyclohexane	0.43	50
Ammonia	1.24	15

**HYDROGEN
METHANE
PROPANE
BUTANE
AVIATION FUEL
ETHANOL
PENTANE
n-OCTANE
n-HEPTANE
n-HEXANE
AND MORE....**

Oliver IGD Ltd have a large Library of calibration factors for different flammable target gases relating to the MKIII and Type B Detectors. If the target gas of interest is not indicated in the table, contact Oliver IGD Ltd for further information

MKIII & Type B

SENSORS & ACCESSORIES



Ordering Note:

For a complete MK3 detector head, JB3 Junction box with electronics for both 4-20mA or Addressable operation see part number: 5131401ATEX (previously 5108601) listed as a Tocsin 102 Series Gas Detector.

Standard MK3 Accessories

Standard Junction Box P/N 5045802

MKIII Flammable Gas Detector P/N 501001

Type B Flammable Gas Detector P/N 501051

Weather Protection Assembly And Test Gas Applicator P/N 401451

Collector Cone P/N 401061

Test Gas applicator P/N 401101A

Optional Applicator Locking Ring P/N 401101D

EC Declaration of Conformity

Issuers name and address:

Oliver IGD Limited of
Triton House
Crosby St,
Stockport,
United Kingdom



MKIII & TYPE B

Pellistor based point flammable hydrocarbon gas detectors certified for use in potentially explosive atmospheres

Are in conformity with the provisions of the following European Directive(s) when installed, operated, serviced and maintained in accordance with the installation and operating instructions contained in the product documentation.

2004/108/EC **EMC Directive**
94/9/EC **ATEX Directive**

And that the standards and/or technical specifications referenced below have been applied or considered.

EN 60079-0:2012	Equipment for use in explosive atmospheres. General requirements
EN 60079-1:202014	Equipment for use in explosive atmospheres. Flameproof enclosures 'd'
EN 60079-31:2014	Equipment for use in explosive atmospheres. Housing Markings
EN 61241-0:2006	Electrical apparatus for use in the presence of combustible dust. General Requirements
EN 61241-1:2004	Electrical apparatus for use in the presence of combustible dust. Protection by enclosures "tD"
EN 61779-1:2000	Electrical apparatus for the detection and measurement of flammable gases
EN 50271:2010	Electrical apparatus for the detection and measurement of combustible gases, toxic gases or Oxygen: requirements and tests for apparatus using software and or digital technologies. <i>Excluding requirements for SIL</i>
EN 61000-6-2: 2005	EMC Generic standards. Immunity for industrial environments
EN 61000-6-4: 2007	EMC Generic standards. Emission standard for industrial environments
EN 61000-3-2/A2: 2009	EMC Limits. Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
EN 61000-3-3: 2008	EMC Limits. Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase
Technical File references	MK3-TF9 Technical construction File AD198 ATEX Approval Document File

Product Markings

IP66

-20°C ≤ Ta ≤ +40°C

II 2 GD

Ex db IICT6 Gb

ATEX Approved
IECEX Approved

Serial Number- xxxxxxYear

-20°C ≤ Ta ≤ +55°C

Ex tb IIIC T85°C Db

Ex db IICT5 Gb

ExVeritas 16ATEX0142X

Ex tb IIIC T100°C Db

IECEX EXV16.0004x



2585

Oliver IGD Limited Operate and Independently assessed ATEX/IECEX QAN.

Oliver IGD Limited operate an independently assessed ISO9001:2008 Quality Management System.

Testing Agency:

Quality Assurance Certificate Number
ExVeritas 16PQAN0014

Quality Management Certificate Number
FS 646773

TUV - SUD
Octagon House
Concorde Way
PO 15 5RL
Fareham



Quality Assurance Notification Number:
2585

ExVeritas,
Units 16-18,
Abenbury Way,
Wrexham Industrial Estate,
Wrexham, UK, LL13 9UZ

BSI Assurance UK LTD,
Chiswick High Road,
London
W4 4AL
UK

Mehr Sicherheit.
Mehr Wert.

IECEX Certificate can be checked on-line at

<http://iecex.iec.ch/iecex/iecexweb.nsf/421ce8815c53a3afc1257a1e00576486/d4ff3ce4ea691cc1c1257f480051b574?OpenDocument>

TUV Certificates and reports can be checked on-line at https://www.tuev-sued.de/industry_and_consumer_products/certificates

Issued by: Oliver IGD Limited, Stockport, SK2 6SH, United Kingdom

Signature:

Declaration of Conformity in accordance with EN ISO/IEC 17050-1:2010

Name

Andrew J Collier M.I.O.D

Position:

Managing Director

Date: 10.June 2016

Declaration Ref: MK3-DEC-7



International Gas Detectors

CH₄ H₂S CO₂
NH₃ SO₂ NO₂ CO



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