

Status:

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx BAS 14.0003X**

Current

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Issue No: 12

Issue 11 (2021-11-29) Issue 10 (2021-05-24)

Issue 9 (2020-07-03) Issue 8 (2019-12-19)

Certificate history:

Issue 7 (2018-05-15) Issue 6 (2018-02-15)

Issue 5 (2016-09-20)

Issue 4 (2016-08-09)

Issue 3 (2015-12-03) Issue 2 (2015-07-15)

2023-08-01 Date of Issue:

Applicant: **Longvale Limited**

Lancaster Park Needwood Burton-upon-Trent Staffordshire **DE13 9PD United Kingdom**

Equipment: **Euroswitch**

Optional accessory:

Intrinsic Safety (Gas & Dust) Type of Protection:

Marking: See Annex

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature: (for printed version)

(for printed version)

R S Sinclair

Technical Manager

1/8/2023

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Certificate issued by:

SGS UK Limited Rockhead Business Park Staden Lane **Buxton, Derbyshire SK17 9RZ United Kingdom**





IECEx Certificate of Conformity

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Date of issue: 2023-08-01 Issue No: 12

Manufacturer: Longvale Limited

Lancaster Park Needwood Burton-upon-Trent Staffordshire DE13 9PD United Kingdom

Manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/BAS/ExTR14.0017/00	GB/BAS/ExTR14.0331/00	GB/BAS/ExTR15.0208/00
GB/BAS/ExTR15.0349/00	GB/BAS/ExTR16.0201/00	GB/BAS/ExTR16.0252/00
GB/BAS/ExTR17.0197/00	GB/BAS/ExTR18.0093/00	GB/BAS/ExTR19.0304/00
GB/BAS/ExTR19.0321/00	GB/BAS/ExTR20.0104/00	GB/BAS/ExTR21.0204/00
GB/SGS/ExTR23.0015/00		

Quality Assessment Report:

GB/SIR/QAR07.0013/15



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The euroswitch range of proximity sensors consist of up to two sets of volt-free switch contacts, either normally-open, normally-closed or change-over, which are actuated by either an external or integral magnet.

The proximity sensors come in various shapes, sizes and external materials of construction (stainless steel, brass, plastic). In all cases the switch contacts are encapsulated into the outer enclosure.

Electrical connections are made to the Gas and Dust certified proximity sensors via an integral cable, separately certified Ex e terminals in a terminal chamber or via a plug and socket connector.

See Certificate Annex for Model details and electrical parameters.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1. Non-metallic proximity sensors may pose an electrostatic risk. This should be taken into account during installation.
- 2. Metallic proximity sensors or metallic parts of non-metallic proximity sensors may pose an electrostatic risk if not earthed. This should be taken into account during installation.
- 3. Integral cables shall be fixed and effectively protected against damage as required of a Type B cable as defined in clause 9.5.3 of IEC 60079-25: 2010.
- 4. External cabling to the proximity sensors shall use either type A or type B cable as defined in clause 9.5.2 & 9.5.3 of IEC 60079-25: 2010.
- 5. Junction boxes used to extend the sensor cabling, that are located in a dust hazardous area must be separately certified and appropriate for use in that hazardous area.
- 6. Where a sensor has two sets of switching contacts, both sets of switching contacts are considered to be part of the same single intrinsically safe circuit, not separate intrinsically safe circuits.
- 7. The VDHA type Euroswitch bodies may be manufactured from Titanium and so must be mounted in such a way as to avoid impact or friction.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 12.1

To permit an alternative housing construction.

Variation 12.2

To permit an alternative construction to include a connector assembly.

ExTR: GB/SGS/ExTR23.0015/00 File Reference: 23/0119

Annex:

IECEx BAS 14.0003X Annex 12_1.pdf

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ANNEX to IECEx BAS 14.0003X

Issue No. 12

Date: 21 July 2023

Marking for the METALLIC Group IIC & IIIC versions (excluding LFM and connector versions) as detailed on drawing **ENG002**:

Ui	= 30V
li li	= 250 mA
Pi	
Ci	= 0 or 120 pF/m of cable for non-wireable types
Li	= 0 or 0.7 µH/m of cable for non-wireable types
Li	
The Wireable types shall be marked (met	l allic IP66/67/68 enclosures only)
II 1G	II 1D
Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +125°C)	Ex ia IIIC T135°C IP66/67/68 Da (-60°C ≤ Ta ≤ +125°C)
Ex ia IIC T6 Ga (-60°C \le Ta \le +80°C)	Ex ia IIIC T35°C IP66/67/68 Da (-60°C \leq Ta \leq +80°C)
Ex la 11C 10 Ga (-00 C 5 1a 5 +00 C)	EX IA IIIC 103 C IP00/01/00 Da (-00 C \(\frac{1}{2} \) \(\frac{1}{2} \) \(\frac{1}{2} \)
The Non-Wireable types with PVC integra	 cable types shall be marked
	I Total Control of the Control of th
II 1G	1D
Ex ia IIC T6 Ga (-20°C ≤ Ta ≤ +80°C)	Ex ia IIIC T85°C IP66/67/68 Da (-20°C ≤ Ta ≤ +80°C)
The Nen Wireshle types with Delveletin in	atogral apple types shall be marked
The Non-Wireable types with Polyolefin in	I Table 1
II 1G	II 1D
Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +125°C)	Ex ia IIIC T135°C IP66/67/68 Da (-60°C ≤ Ta ≤ +125°C)
Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +80°C)	Ex ia IIIC T85°C IP66/67/68 Da (-60°C ≤ Ta ≤ +80°C)
The Non-Wireable types with Teflon integ	
II 1G	II 1D
Ex ia IIC T3 Ga (-40°C ≤ Ta ≤ +175°C)	Ex ia IIIC T200°C IP66/67/68 Da (-40°C ≤ Ta ≤ +175°C)
Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +125°C)	Ex ia IIIC T135°C IP66/67/68 Da (-40°C ≤ Ta ≤ +125°C)
Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +80°C)	Ex ia IIIC T85°C IP66/67/68 Da (-40°C ≤ Ta ≤ +80°C)
The Non-Wireable types with Silicone into	egral wiring shall be marked
II 1G	II 1D
Ex ia IIC T3 Ga (-55°C ≤ Ta ≤ +175°C)	Ex ia IIIC T200°C IP66/67/68 Da (-55°C ≤ Ta ≤ +175°C)
Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +125°C)	Ex ia IIIC T135°C IP66/67/68 Da (-55°C ≤ Ta ≤ +125°C)
Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +80°C)	Ex ia IIIC T85°C IP66/67/68 Da (-55°C ≤ Ta ≤ +80°C)
The Non-Wireable types with Polyurethar	ne (PUR) integral cable types shall be marked
II 1G	II 1D
Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C)	Ex ia IIIC T135°C IP66/67/68 Da (-40°C ≤ Ta ≤ +90°C)
Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +80°C)	Ex ia IIIC T85°C IP66/67/68 Da (-40°C ≤ Ta ≤ +80°C)
, ,	· · ·
The Non-Wireable types with PEEK integ	ral wiring shall be marked
II 1G	II 1D
Ex ia IIC T3 Ga (-60°C ≤ Ta ≤ +175°C)	Ex ia IIIC T200°C IP66/67/68 Da (-60°C ≤ Ta ≤ +175°C)
Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +125°C)	Ex ia IIIC T135°C IP66/67/68 Da (-60°C ≤ Ta ≤ +125°C)
Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +80°C)	Ex ia IIIC T85°C IP66/67/68 Da (-60°C ≤ Ta ≤ +80°C)

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ANNEX to IECEx BAS 14.0003X

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Marking for the **METALLIC Group IIC & IIIC** versions (ES Series LFM versions only. Excluding connector versions), as detailed on drawing **ENG002**:

	= 30V								
li	= 250 mA								
Pi	11811								
Ci	The second of th								
Li	= 0 or 0.7 µH/m of cable for non-wireable types								
The Wireable types shall be marked (metallic IP66/67 enclosures only)									
II 1G	II 1D								
Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +105°C)	Ex ia IIIC T185°C IP66/67/68 Da (-60°C ≤ Ta ≤ +125°C)								
Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +55°C)	Ex ia IIIC T140°C IP66/67/68 Da (-60°C ≤ Ta ≤ +80°C)								
The Non-Wireable types with PVC integr	al cable types shall be marked								
II 1G	II 1D								
Ex ia IIC T6 Ga (-20°C ≤ Ta ≤ +55°C)	Ex ia IIIC T140°C IP66/67/68 Da (-20°C ≤ Ta ≤ +80°C)								
,	,								
The Non-Wireable types with Polyolefin	integral cable types shall be marked								
II 1G	II 1D								
Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +105°C)	Ex ia IIIC T185°C IP66/67/68 Da (-60°C ≤ Ta ≤ +125°C)								
Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +55°C)	Ex ia IIIC T140°C IP66/67/68 Da (-60°C ≤ Ta ≤ +80°C)								
,	, ,								
The Non-Wireable types with Silicone int	tegral cable types shall be marked								
II 1G	II 1D								
Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C)	Ex ia IIIC T185°C IP66/67/68 Da (-55°C ≤ Ta ≤ +125°C)								
Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C)	Ex ia IIIC T140°C IP66/67/68 Da (-55°C ≤ Ta ≤ +80°C)								
	, , , , , , , , , , , , , , , , , , ,								
The Non-Wireable types with Polyuretha	ne (PUR) integral cable types shall be marked								
II 1G	II 1D								
Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C)	Ex ia IIIC T150°C IP66/67/68 Da (-40°C ≤ Ta ≤ +90°C)								
Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +55°C)	Ex ia IIIC T140°C IP66/67/68 Da (-40°C ≤ Ta ≤ +80°C)								
,	, ,								
The Non-Wireable types with PEEK integ	gral cable types shall be marked								
II 1G	II 1D								
Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +105°C)	Ex ia IIIC T185°C IP66/67/68 Da (-60°C ≤ Ta ≤ +125°C)								
Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +55°C)	Ex ia IIIC T140°C IP66/67/68 Da (-60°C ≤ Ta ≤ +80°C)								
, ,	,								
The Non-Wireable types with Teflon inte	gral wiring shall be marked								
II 1G	II 1D								
Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +105°C)	Ex ia IIIC T185°C IP66/67/68 Da (-40°C ≤ Ta ≤ +125°C)								
Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +55°C)	Ex ia IIIC T40°C IP66/67/68 Da (-40°C ≤ Ta ≤ +80°C)								
, , , , , , , , , , , , , , , , , , , ,									

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ANNEX to IECEx BAS 14.0003X

Issue No. 12

Date: 21 July 2023

Marking for the METALLIC Group IIC & IIIC versions (FS series LFM versions only. Excluding connector versions), as detailed on drawing **ENG002**:

Ui	= 30V								
	= 250 mA								
	= 650mW								
	= 0 or 120 pF/m of cable for non-wireable types								
Li	= 0 or 0.7 µH/m of cable for non-wireable types								
The Wireable types shall be marked (metallic IP66/67/68 enclosures only)									
II 1G	II 1D								
Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +105°C)	Ex ia IIIC T185°C IP66/67/68 Da (-60°C ≤ Ta ≤ +125°C)								
Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +55°C)	Ex ia IIIC T140°C IP66/67/68 Da (-60°C ≤ Ta ≤ +80°C)								
The Non-Wireable types with PVC integral	al cable types shall be marked								
II 1G	II 1D								
Ex ia IIC T6 Ga (-20°C ≤ Ta ≤ +55°C)	Ex ia IIIC T140°C IP66/67/68 Da (-20°C ≤ Ta ≤ +80°C)								
The Non-Wireable types with Polyolefin	integral cable types shall be marked								
II 1G	II 1D								
Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +105°C)	Ex ia IIIC T185°C IP66/67/68 Da (-60°C ≤ Ta ≤ +125°C)								
Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +55°C)	Ex ia IIIC T140°C IP66/67/68 Da (-60°C ≤ Ta ≤ +80°C)								
The Non-Wireable types with Silicone int									
II 1G	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C)	II 1D Ex ia IIIC T185°C IP66/67/68 Da (-55°C ≤ Ta ≤ +125°C)								
II 1G	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C)	II 1D Ex ia IIIC T185°C IP66/67/68 Da (-55°C ≤ Ta ≤ +125°C) Ex ia IIIC T140°C IP66/67/68 Da (-55°C ≤ Ta ≤ +80°C)								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha	II 1D Ex ia IIIC T185°C IP66/67/68 Da (-55°C ≤ Ta ≤ +125°C) Ex ia IIIC T140°C IP66/67/68 Da (-55°C ≤ Ta ≤ +80°C) ne (PUR) integral cable types shall be marked								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha II 1G	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C)	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha II 1G	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C \leq Ta \leq +105°C) Ex ia IIC T6 Ga (-55°C \leq Ta \leq +55°C) The Non-Wireable types with Polyuretha II 1G Ex ia IIC T4 Ga (-40°C \leq Ta \leq +90°C) Ex ia IIC T6 Ga (-40°C \leq Ta \leq +55°C)	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C) Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +55°C) The Non-Wireable types with PEEK integ	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C) Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +55°C) The Non-Wireable types with PEEK integ II 1G	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C) Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +55°C) The Non-Wireable types with PEEK integ II 1G Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +105°C)	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C) Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +55°C) The Non-Wireable types with PEEK integ II 1G	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C) Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +55°C) The Non-Wireable types with PEEK integ II 1G Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +55°C)	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C) Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +55°C) The Non-Wireable types with PEEK integ II 1G Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +55°C) The Non-Wireable types with Teflon integral of the second content of the second conten	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C) Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +55°C) The Non-Wireable types with PEEK integ II 1G Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +55°C) The Non-Wireable types with Teflon integral 1G	II 1D								
II 1G Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +55°C) The Non-Wireable types with Polyuretha II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C) Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +55°C) The Non-Wireable types with PEEK integ II 1G Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +105°C) Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +55°C) The Non-Wireable types with Teflon integral of the second content of the second conten	II 1D								

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Marking for the Connector type versions as detailed on drawing ENG002

Ui	= 30V
li	= 250 mA
Pi	= 550mW
Ci	= 0
Li	= 0
The Connector types shall be marked	
II 1G	II 1D
Ex ia IIC T6 Ga (-20°C ≤ Ta ≤ +80°C)	Ex ia IIIC T135°C IP66/67/68 Da (-20°C ≤ Ta ≤ +80°C)
The Connector type LFM versions shall	
be marked:	
II 1G	II 1D
Ex ia IIC T6 Ga (-20°C ≤ Ta ≤ +55°C)	Ex ia IIIC T135°C IP66/67/68 Da (-20°C ≤ Ta ≤ +80°C)

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Marking for the **NON-METALLIC Group IIC & IIIC** versions as detailed on drawing ENG005:

	= 30V
	= 250 mA
	= 650 mW
Ci	= 0 or 120 pF/m of cable for non-wireable types
Li	= 0 or 0.7 μH/m of cable for non-wireable types
The Non-Wireable types with PVC integra	al cable types shall be marked
II 1G	II 1D
Ex ia IIC T6 Ga (-20°C ≤ Ta ≤ +80°C)	Ex ia IIIC T75°C IP54 Da (-20°C ≤ Ta ≤ +70°C)
, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,
The Non-Wireable types with Polyolefin in	ntegral cable types shall be marked
II 1G	II 1D
Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +125°C)	Ex ia IIIC T75°C IP54 Da (-20°C ≤ Ta ≤ +70°C)
Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +80°C)	,
, , ,	
The Non-Wireable types with Silicone into	egral cable types shall be marked
II 1G	II 1D
Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +125°C)	Ex ia IIIC T75°C IP54 Da (-20°C ≤ Ta ≤ +70°C)
Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +80°C)	,
, , , , , , , , , , , , , , , , , , ,	
The Non-Wireable types with Polyurethan	ne (PUR) integral cable types shall be marked
II 1G	II 1D
Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +90°C)	Ex ia IIIC T75°C IP54 Da (-20°C ≤ Ta ≤ +70°C)
Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +80°C)	
,	
The Non-Wireable types with PEEK integ	ral cable types shall be marked
II 1G	II 1D
Ex ia IIC T4 Ga (-60°C ≤ Ta ≤ +125°C)	Ex ia IIIC T75°C IP54 Da (-20°C ≤ Ta ≤ +70°C)
Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +80°C)	
The Non-Wireable types with Teflon integ	gral wiring shall be marked
II 1G	II 1D
Ex ia IIC T3 Ga (-40°C ≤ Ta ≤ +175°C)	Ex ia IIIC T200°C IP54 Da (-40°C ≤ Ta ≤ +175°C)
Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +125°C)	Ex ia IIIC T135°C IP54 Da (-40°C ≤ Ta ≤ +125°C)
Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +80°C)	Ex ia IIIC T85°C IP54 Da (-40°C ≤ Ta ≤ +80°C)
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Part number matrix Metallic switches (Drawing SWM5)

Switch Type/Description	XX	-	Х	Х	X	Х	-	Х
Euroswitch	ES	-					-	
Ferro switch	FS	-					-	
Safety switch	ES	-					-	
90 x 20 x 23 rectangular switch	ES only	-	0				-	
80 x 20 x 25 rectangular switch	ES only	-	1				-	
55 x 20 x 25 rectangular switch	ES only	-	2				-	
M18 x 1 cylindrical switch	ES only	-	3				-	
M18 x 1 cylindrical switch	ES only	-	4				-	
5/8" UNF cylindrical switch	ES only	-	5				-	
M18 x 1 cylindrical switch	ES only	-	6				-	
5/8" UNF cylindrical switch	ES only	-	7				-	
M18 x 1 cylindrical switch	ES only	-	8				-	
5/8" UNF cylindrical switch	ES only	-	9				-	
M18 x 1 cylindrical switch	ES only	-	10				-	
5/8" UNF cylindrical switch	ES only	-	11				-	
M18 x 1 cylindrical switch	ES only	-	12				-	
3/8" UNF cylindrical switch	ES only	-	13				-	
M12 x 1 cylindrical switch	ES only	-	14				-	
3/8" UNF cylindrical switch	ES only	-	15				-	
M12 x 1 cylindrical switch	ES only	-	16				-	
87 x 15 x 22 rectangular switch	ES only	-	44				-	
67 x 19 x 13 rectangular switch	ES only	-	45				-	
35 x 13 x 16 rectangular switch	ES only	-	46				-	
80 x 16 x 21 rectangular switch	ES only	-	BZ18				-	
91 x 22 x 36 rectangular safety switch	ES only	-	SS				-	
M18 x 1 cylindrical switch	FS only	-	Α				-	
5/8" UNF cylindrical switch	FS only	-	В				-	
M18 x 1 cylindrical switch	FS only	-	С				-	
5/8" UNF cylindrical switch	FS only	-	D				-	
M18 x 1 cylindrical switch	FS only	-	Е				-	
3/4"-16 UNF cylindrical switch	FS only	-	F				-	
5/8" UNF cylindrical switch	FS only	-	Н				-	
M18 x 1 cylindrical switch	FS only	-	I				-	
5/8" UNF cylindrical switch	FS only	-	J				-	
M18 x 1 cylindrical switch	FS only	-	K				-	
5/8" UNF cylindrical switch	FS only	-	L				-	
M18 x 1 cylindrical switch	FS only	-	M				-	
3/8" UNF cylindrical switch	FS only	-	N				-	
M12 x 1 cylindrical switch	FS only	-	0				-	
3/8" UNF cylindrical switch	FS only	-	Р				-	
M12 x 1 cylindrical switch	FS only	-	Q				-	
1" -14 UNF cylindrical switch	FS only	-	R				-	
Flange mount s/w	FS only	-	CYL				-	

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90 x 20 x 23 rectangular switch	FS only	-	Z					
ATEX/IECEx Markings		-		2			-	
Multiple Certification Markings (Exia only)		-		_E_			-	
Other regional Exia certification		-		F-Z			-	
Brass housing		-			1		_	
Stainless steel housing		+-			2		-	
Stairliess steer flousing		+-					-	
PVC cable		-				1	-	
PVC Leads		-				1L	-	
Polyolefin cable		-				2	-	
Polyurethane (PUR) Cable		-				3	-	
Teflon Leads		-				4L	-	
PEEK Leads						5L		
Silicon Cable						6		
Options (may be combined eg -LE)								
1A Switching	ES only	-					-	Α
20W Reed	ES only	-					-	В
3A switching N/O	ES only	-					-	С
DPDT		-					-	D
Earth wire		-					-	Е
Latching/bi-stable	ES only	-					-	F
Fully Potted		-					-	FP
Line Fault Monitoring (Normally open)		-					•	LFM/LFO
Line Fault Monitoring (Normally closed)		-					-	LFC
Normally Open Form A (2-wire)		-					-	NO
Normally Closed Form B (2-wire)		-						NC
5000 psi pressure resistant end cap		-					-	5K
10000 psi pressure resistant end cap		-					-	10K
Side entry teflon leads		-					•	SE
Back wireable (cylindrical only)		•					-	W
Side wireable (cylindrical only)		•					-	WL
Rotatable side wireable (cylindrical only)		•					-	WLR
Twin entry rotatable side wireable (cylindrical							_	WLRT
only)		-					-	VVLKI
Customer requests not affecting certification		-					-	(X)
Male adaptor thread M20, ½"NPT or ¾"NPT		_					-	(M), (N) or (3N)
Metric micro change connector (* denotes no. of pins)		-					-	V2-*
Imperial micro change connector (* denotes no. of pins)		_					-	V5-*
Mini change connector (* denotes no. of pins)								V3-*

Part number matrix Non-Metallic switches (Drawing SWM8)

Switch Type/Description	XX	-	Х	Х	Х	Х	-	Х
Euroswitch - Resin Series	RS	-					-	
65 x 15 x 25 rectangular switch		-	V1				-	

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ATEX/IECEx Markings	-	2			-	
Multiple Certification Markings (Exia only)	•	E			-	
Other regional Exia certification	-	F-Z			-	
Plastic housing	-		0			
PVC cable	-			1	-	
PVC Leads	-			1L	-	
Polyolefin cable	-			2	-	
Options (may be combined eg -DF)						
Double pole changeover	-				-	D
Latching/bi-stable	-				-	F
Metric micro change connector (* denotes no. of pins)	-				_	V2-*
Imperial micro change connector (* denotes no. of pins)	-				-	V5-*
Single pole normally open	-				-	NO
Customer requests not affecting certification	-				-	(X)

Euroswitch - Resin Series	RS	-					-	
28 x 9 x 16 rectangular switch		-	V3				-	
ATEX/IECEx Markings		-		2			-	
Multiple Certification Markings (Exia only)		-		E			-	
Other regional Exia certification		-		F - Z			-	
Plastic housing		-			0		-	
PVC cable		-				1	-	
PVC Leads		-				1L	-	
Options								
Single pole normally open		-					-	NO
Customer requests not affecting certification		-					•	(X)

Euroswitch - Resin Series	RS	-				-	
M12 x 1 x 60mm cylindrical switch			M12				
M18 x 1 x 60 cylindrical switch		-	M18			-	
·							
ATEX/IECEx Markings		-		2		-	
Multiple Certification Markings (Exia only)		-		Е		-	
Other regional Exia certification		-		F-Z		-	
Plastic housing					0		
-							

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PVC cable		-		1	-	
PVC Leads		-		1L	-	
Polyolefin cable		-		2	•	
Options						
Single pole normally open		-			•	NO
Short housing		-			•	K40
Double pole changeover		-			-	D
Metric micro change connector						V2-*
(* denotes no. of pins)		-			-	VZ-
Imperial micro change connector						V5-*
(* denotes no. of pins)		-			-	٧٥-
Customer requests not affecting certification		-			-	(X)

The Part Number format for other switches can be summarised as follows:

Valve Position Switch (4-wire)	X	-	VIP	-	X	
Plastic housing	MI	-	VIP	-	4	
Stainless Steel housing	MS	-	VIP	-	I	

The customer special switch types can be summarised as follows:

DIFFERENTIAL PRESSURE SWITCH	ESI	-	VDHA	-	XXXX	
Single Pole Changeover – Titanium	ESI	-	VDHA	-	1035	
Single Pole Changeover – Stainless Steel	ESI	-	VDHA	-	700	
Single Pole Changeover – Stainless Steel	ESI	-	VDHA	-	450	

80 x 20 x 25 rectangular switch – 5m of pvc cable	ES only	-	HLS-25i
80 x 20 x 25 rectangular switch – 10m of pvc cable	ES only	-	HLS-210i

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