

420-0004-497		Sht. 1 of 4	APP'D BY SGA
ISSUE	EDO NO.	APP'D	DATE
1	2-15-113	SGA	2.20.15



# 1 EC-TYPE EXAMINATION CERTIFICATE

- 2 Equipment or Protective systems intended for use in Potentially Explosive Atmospheres - Directive 94/9/EC
- 3 EC-Type Examination Certificate No: FM14ATEX0049
- 4 Equipment or protective system:  
(Type Reference and Name) R\*L2-\*\*\*\*, R\*L2-0\*\*\*, R\*T2-\*0\*\*, R\*T2-00\*\*, S\*R\*T2\*0\*\*, and S\*R\*T2-00\*\* IntelliPoint RF Transmitter with Integral and Remote Sensor
- 5 Name of Applicant: AMETEK Drexelbrook
- 6 Address of Applicant: 205 Keith Valley Road, Horsham, PA 19044 USA
- 7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.
- 8 FM Approvals Ltd, notified body number 1725 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- The examination and test results are recorded in confidential report number:  
3051517 dated 8<sup>th</sup> January 2015
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:  
EN 60079-0+A11:2013, EN60079-1:2007, EN60079-11:2012, EN 60079-26:2007, EN 60079-31:2013, EN 60529+A2:2013
- 10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- 11 This EC-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.



Mick Gower  
on Mick Gower, on FM Approvals, on  
em@fmapprovals.com  
or  
2015.01.23 15:59:21 Z

**Mick Gower**  
Certification Manager, FM Approvals Ltd.

Issue date: 23<sup>rd</sup> January 2015

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

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## SCHEDULE



to EC-Type Examination Certificate No. FM14ATEX0049

12 The marking of the equipment or protective system shall include:



**IntelliPoint Transmitter with Remote Sensor**

II 2 (1) G Ex d [ia] IIC T5...T2 -30°C ≤ TAMB ≤ +70°C; IP66  
II 2 (1) D Ex tb [ia] IIIC T90°C -30°C ≤ TAMB ≤ +70°C; IP66



**IntelliPoint Transmitter with Integral Sensor**

II 2 (1) G Ex d [ia] IIC T5...T2 -30°C ≤ TAMB ≤ +70°C; IP66  
II 2 (1) D Ex tb [ia] IIIC T90°C -30°C ≤ TAMB ≤ +70°C; IP66



**IntelliPoint Two-Wire Transmitter with Remote Sensor**

II 1 G Ex ia IIC T5...T2 -30°C ≤ TAMB ≤ +70°C; IP66  
II 1 D Ex ia IIIC T90°C -30°C ≤ TAMB ≤ +70°C; IP66



**IntelliPoint Two-Wire Transmitter with Integral Sensor**

II 1 G Ex ia IIC T5...T2 -30°C ≤ TAMB ≤ +70°C; IP66  
II 1 D Ex ia IIIC T90°C -30°C ≤ TAMB ≤ +70°C; IP66



**SIL IntelliPoint Two-Wire Transmitter with Remote Sensor**

II 1 G Ex ia IIC T5...T2 -30°C ≤ TAMB ≤ +70°C; IP66  
II 1 D Ex ia IIIC T90°C -30°C ≤ TAMB ≤ +70°C; IP66



**SIL IntelliPoint Two-Wire Transmitter with Integral Sensor**

II 1 G Ex ia IIC T5...T2 -30°C ≤ TAMB ≤ +70°C; IP66  
II 1 D Ex ia IIIC T90°C -30°C ≤ TAMB ≤ +70°C; IP66



**700-\*, IntelliPoint Sensors**

II 1 G Ex ia IIC T5...T2 -30°C ≤ TAMB ≤ +70°C; IP66  
II 1 D Ex ia IIIC T90°C -30°C ≤ TAMB ≤ +70°C; IP66

13 **Description of Equipment or Protective System:**

The IntelliPoint RF Point Level System (RxLx) and IntelliPoint RF Two-Wire Point Level System (RxTx) consist of a transmitter, a 700 series level sensor and a 380 series connecting cable used for the remote version of the sensor. The system using the remote sensor may also include an RF filter. The transmitter provides intrinsically safe outputs to the sensing elements. It converts a capacitive level measurement into a relay contact signal. The 700 Series Sensors are passive devices having a capacitance of less than 1µF. The SIL version of the IntelliPoint RF Two-Wire Point Level System (SxTx) is identical in design to the RxTx.

Operation Temperature Ranges:

The ambient operating temperature range of the The IntelliPoint RF Point Level System (RxLx) and IntelliPoint RF Two-Wire Point Level System (RxTx) is -30°C to 70 °C. Process temperature range is -30°C to 230°C.

Electrical data:

The IntelliPoint RF Point Level System transmitter is powered by a maximum voltage of 250VAC and has a maximum power rating of 2.0W. The IntelliPoint RF Two-Wire Point Level System transmitter is powered by a maximum voltage of 30VDC and has a maximum power rating of 1.0W.

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**SCHEDULE**

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**Model Options:*****RaL2-bcde. IntelliPoint Transmitter with Remote Sensor.***

a = Calibration: N, M, H, G, L, T, V, or P.

b = Cable Length: 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, J, or K.

c = Relays: 1 or 2.

d, e = Sensor, Sensor housing, Spark Protector Assembly: 00 through 04, 06, 07, 09 through 20, 31 through 35, 50 through 55, 60 through 62, or ZZ.

***RaL2-0bcd. IntelliPoint Transmitter with Integral Sensor.***

a = Calibration: N, M, H, G, L, T, V, or P.

b = Relays: 1 or 2.

c, d = Sensor, Cable: 00, 01, 02, or 03.

***RaT2-b0cd. IntelliPoint Two-Wire Transmitter with Remote Sensor.***

a = Calibration: N, M, H, G, L, T, V, or P.

b = Cable Length: 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, J, or K.

c, d = Sensor, Sensor housing, Spark Protector Assembly: 00 through 04, 06, 07, 09 through 20, 31 through 35, 50 through 55, 60 through 62, or ZZ.

**Entity Parameters:**

Vmax = 30V, Imax = 140 mA, Pi = 1 W, Ci = 0, Li = 145  $\mu$ H

***RaT2-00bc. IntelliPoint Two-Wire Transmitter with Integral Sensor.***

a = Calibration: N, M, H, G, L, T, V, or P.

b, c = Sensor, Cable: 00, 01, 02, 03, 04, 06, 07, 09, 11, 12, 13, 16, 17, 18, 19, 25, 26, 27, 28, or ZZ.

**Entity Parameters:**

Vmax = 30V, Imax = 140 mA, Pi = 1 W, Ci = 0, Li = 145  $\mu$ H

***SaRbT2c0de. SIL IntelliPoint Two-Wire Transmitter with Remote Sensor.***

a = SiL Level: Option not evaluated by FM Approvals.

b = Calibration: N, M, H, G, L, T, V, or P.

c = Cable Length 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, J, or K.

d, e = Sensor, Sensor housing, Spark Protector Assembly: 00 through 04, 06, 07, 09 through 20, 31 through 35, 50 through 55, 60 through 62, or ZZ.

**Entity Parameters:**

Vmax = 30V, Imax = 140 mA, Pi = 1 W, Ci = 0, Li = 145  $\mu$ H

***SaRbT2-00cd. SIL IntelliPoint Two-Wire Transmitter with Integral Sensor***

a = SiL Level: Option not evaluated by FM Approvals.

b = Calibration N, M, H, G, L, T, V, or P.

c, d = Sensor, Cable: 00, 01, 02, 03, 04, 06, 07, 09, 11, 12, 13, 16, 17, 18, 19, 25, 26, 27, 28, or ZZ.

**Entity Parameters:**

Vmax = 30V, Imax = 140 mA, Pi = 1 W, Ci = 0, Li = 145  $\mu$ H

***700-a, IntelliPoint Sensors.***

a = Any 7 digit numeric combination maintaining the limits of 420-0004-146-CD or 420-0004-175-CD.

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**SCHEDULE**

to EC-Type Examination Certificate No. FM14ATEX0049

**14 Specific Conditions of Use:**

None

**15 Essential Health and Safety Requirements:**

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

**16 Test and Assessment Procedure and Conditions:**

This EC-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Ltd's ATEX Certification Scheme.

**17 Schedule Drawings**

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

**18 Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
23 <sup>rd</sup> January 2015	Original Issue.

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