# 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: FM09ATEX0045

4 Equipment or protective system: (Type Reference and Name)

**805 Series Pressure Transmitter** 

5 Name of Applicant:

SOR, Inc.

6 Address of Applicant:

14685 West 105<sup>th</sup> Street Lenexa, KS 66215 United States

- 7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.
- 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:

3035996EC dated 16 September 2009

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: 2006, EN 60079-1: 2007, EN 60529:1991 +A1: 2000

- 10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- 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.

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



II 2 G Ex d IIC T5 Ta = -40°C to +80°C IP66

Mick Gower Certification Manager, FM Approvals Ltd.

Issue date: 9th November 2012

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

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### **SCHEDULE**



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

The 805 Series Pressure Transmitter consists of an assembly of a hermetically sealed, stainless steel housing that includes a  $\frac{1}{2}$  inch – 14 NPT (male) wiring entry and a  $\frac{1}{2}$  inch – 18 NPT (female),  $\frac{1}{2}$  inch NPT (male) and a 9/16 inch – 18 UNF process connection. The housing is composed of 4 main sections, the potted conduit assembly which is welded to the enclosure body, which is welded to the process connection, which is welded to the transducer assembly. The electrical conduit connection is  $\frac{1}{2}$  inch – 14 NPT (male) and is internally potted with Emerson Cuming Stycast 2651MM with Catalyst #9. Each section of the Series 805 Series Pressure Transmitter is constructed of CF-8M, 316 and 17-4 Stainless Steel. The equipment is provided with an external grounding facility. The equipment has an approximate free internal volume of 2.2 in3 (36.1 in3).

Supply voltage to the Series 805 Series Pressure Transmitter is 8 to 30VDC with a configurable output of 4-20mA or 1-5VDC. Working pressure rating is configurable from 0 to 10,000 psi (68,950 kPa).

#### 805a-bc-d. Series Pressure Transmitter.

II 2 G Ex d IIC T5 Ta =  $-40^{\circ}$ C to  $+80^{\circ}$ C, IP66

a = Product: PT or QS.

b = Output: C, V or R.

c = Ranges: 10, 00, 01, 02, 03, 04, 05, 06, 07, 08 or 09.

d = Process Connection: A, B or S.

#### 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:

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Date	Description
29 <sup>th</sup> September 2009	Original Issue.
10 <sup>th</sup> December 2010	Supplement 1: Report Reference: 3035996rev101021 dated 7 <sup>th</sup> December 2010 Description of the Change: Update of drawing revisions not affecting compliance with the ATEX Directive.
9 <sup>th</sup> November 2012	Supplement 2: Report Reference: 3046985 dated 31October 2012 Description of the Change: Added Product option QS and low pressure options. The model code structure was revised to add "a" Product Name, "b" Output, "c" Ranges, and "d" Process Connection for equipment clarification for product options. The name of the product was changed from a Series 805PT Pressure Transmitter to 805 Series Pressure Transmitter. Addition of a low pressure transducer. The low pressure transducer has a maximum working pressure of 1 psi to 500 psi which was process pressure tested under this project.



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## **Blueprint Report**

SOR Inc (1000003480)

Class No 3615

Original Project I.D. 3035996 Certificate I.D. FM09ATEX0045

	Revision		<u>Last</u>	<u>Electronic</u>
<b>Drawing No.</b>	<u>Level</u>	<u>Drawing Title</u>	Report	<u>Drawing</u>
1435	07.10	805PT PRESSURE TRANSMITTER GENERAL INSTRUCTIONS	10/21/10	Yes (pdf)
1547_805QS	-	805QS GENERAL INSTRUCTIONS	3046895	Yes (pdf)
		CERTIFICATION DRAWING FOR HERMETICALLY SEALED		
9231009	3	PRESSURE TRANSMITTER	3046985	Yes (pdf)

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