

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**

2. **Certificate No:** FM18US0267
3. **Equipment:** RL9000TWM Load Cell
(Type Reference and Name)

4. **Name of Listing Company:** Rice Lake Weighing Systems

5. **Address of Listing Company:** 230 West Coleman St.
Rice Lake, WI 54868
United States

6. The examination and test results are recorded in confidential report number:
PR451737 dated 23rd January 2019

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:
FM Class 3600:2018, FM Class 3610:2010, FM Class 3810:2005, ANSI/NEMA 250:1991, ANSI/ISA 60079-0:2009, ANSI/ISA 60079-11:2011

8. 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.

9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

10. **Equipment Ratings:**

Intrinsically Safe for use in Class I, II and III, Division 1, Groups A, B, C, D, E, F and G; nonincendive for use in Class I, Division 2, Groups A, B, C and D; suitable for Class II, III, Division 2, Groups F and G; Hazardous (Classified) Locations when installed in accordance with Entity requirements and Rice Lake Weighing Systems Control Drawing Number 192150 indoor/outdoor Type 4X.

Certificate issued by:



J.E. Marquedant
VP, Manager - Electrical Systems

23 January 2019

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

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

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
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SCHEDULE



US Certificate Of Conformity No: FM18US0267

11. The marking of the equipment shall include:

IS for Class I / II / III Division 1, Groups A, B, C, D, E, F, G; T4 Ta = -18°C to +40°C; Type 4X

Class I, Division 2, Groups A, B, C, D; T6 Ta = -18°C to +40°C; Type 4X

Class II / III; Division 2, Groups F, G; T6 Gb Ta = -18°C to +40°C; Type 4X

12. **Description of Equipment:**

General - The load cells produce an output signal proportional to the applied weight of force. The conversion of load measurements to electrical signals is made through the use of strain gauges. These are arranged in a balanced bridge configuration so that the deflection of the strain gauges causes a change in their resistance and unbalances the bridge circuit. For a given input voltage, the output voltage of the bridge will vary with the applied load or pressure.

Ratings - The load cells maintain a maximum operating temperature range of -18 °C to 40 °C and a maximum operating voltage of 21.1 V dc.

Entity Parameters:

$V_{Max} = 21.1 \text{ V}$, $I_{Max} = 400 \text{ mA}$, $C_i = 0$, $L_i = 0$, $P_i = 1.3 \text{ W}$.

IS / I,II,III / 1 / ABCDEFG / T4 Ta = -18°C to +40°C; Type 4X

NI / I / 2 / ABCD / T6 Ta = -18°C to +40°C; Type 4X

S / II,III / 2 / FG / T6 Ta = -18°C to +40°C; Type 4X

13. **Specific Conditions of Use:**

None

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
23 rd January 2019	Original Issue.

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