CERTIFICATE OF CONFORMITY

1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** **FM17US0120X**
3. **Equipment:** **Models RL20001-T10, RL20000B, RL30000, RL30002, RL30000W, RL35023SS, RL35023-N5, RL35023, RL90000, RL1521, RL75016, RL75016SS, RL70000C, RL75058B, RL75040, RL75223B**
   (Type Reference and Name) **Load Cell**
4. **Name of Listing Company:** **Rice Lake Weighing Systems**
5. **Address of Listing Company:** **230 W Coleman St, Rice Lake, Wisconsin 54868 USA**
6. The examination and test results are recorded in confidential report number:

   3062444 dated 8th September 2017

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 3610:2018, FM Class 3611:2016, FM Class 3810:2005, ANSI/ISA 60079-0:2013, ANSI/ISA 60079-11:2014, ANSI/ISA 61010-1:2012

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.

Certificate issued by:

J. E. Marquedant
VP, Manager - Electrical Systems

3 September 2021
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

SCHEDULE

US Certificate Of Conformity No: FM17US0120X

10. Equipment Ratings:

Intrinsically Safe for Class I, II, III Division 1, Groups A, B, C, D, E, F and G using Control Drawing 53414; Non-Incendive for Class I, Division 2, Groups A,B,C and D, Suitable for use in Class II and III, Division 2, Groups F and G per DWG 53414 hazardous (classified) locations with a T5 rating and an ambient temperature rating of -20°C to +60°C

11. The marking of the equipment shall include:

IS Class I, II, III, Division 1, Groups A, B, C, D, E, F and G; T5; Ta = -20°C to +60°C; Entity; Per Dwg 53414;

NI Class I, Division 2, Groups A, B, C, and D; T5 Ta = -20°C to +60°C; NIFW; Per Dwg 53414;

Suitable Class II, III, Division 2, Groups F and G; T5 Ta = -20°C to +60°C; NIFW; Per Dwg 53414;

12. **Description of Equipment:**

General – The Load cells produce an output signal proportional to the applied weight 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.

Enclosure:
The circuitry of the Load Cell is encapsulated within the housing.

Ratings:
The Load Cells operate at 12 Vdc. The load cells are rated for use in an ambient temperature range of -20°C to +60°C.

Models *RL20001-T10, RL20000B, RL30000, RL30002, RL30000W, RL35023SS, RL35023-N5, RL35023, RL90000, RL1521, RL75016, RL75016SS, RL70000C, RL75058B, RL75040, RL75223B* **Load Cell**

All Models contain model suffix option –a. a = capacitiy. Not relevant for safety.

Entity / NIFW Parameters:
V_{Max} = 12 V, I_{Max} = 100 mA, C_i = 0, L_i = 0.

13. **Specific Conditions of Use:**

Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of model RL20001-T10, RL30000, RL30002, RL30000W, RL35023SS, RL35023-N5, RL35023, RL75016, RL75016SS and RL70000C may generate an ignition-capable level of electrostatic charges. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charges on such surfaces. Additionally, the equipment shall only be cleaned with a damp cloth.

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

SCHEDULE

US Certificate Of Conformity No: FM17US0120X

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
8th September 2017	Original Issue. The product was Approved in 2000 under Project ID 3009330. There was no certificate issued at the time. A new Approval has been issued with Project ID 3062444 to address the following: • Clarify Approved Models • Add FM Canadian mark to product. • Update standards. • Clean up marking information. • Update documents. • Issue certificates of compliance.
3rd September 2021	Supplement 1: Report Reference: Project ID PR453582 dated 3rd September 2021. Added Model RL30002.

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

CERTIFICATE OF CONFORMITY

1. **HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS**
2. **Certificate No:** **FM17CA0062X**
3. **Equipment:**
   (Type Reference and Name) **Models RL20001-T10, RL20000B, RL30000, RL30002, RL30000W, RL35023SS, RL35023-N5, RL35023, RL90000, RL1521, RL75016, RL75016SS, RL70000C, RL75058B, RL75040, RL75223B**
   Load Cells
4. **Name of Listing Company:** **Rice Lake Weighing Systems**
5. **Address of Listing Company:** **230 W Coleman St, Rice Lake, Wisconsin 54868 USA**
6. The examination and test results are recorded in confidential report number:

   3062444 dated 8th September 2017
7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

   CAN/CSA-C22.2 No. 60079-0:2015, CAN/CSA-C22.2 No. 60079-11:2014, CAN/CSA-C22.2 No. 213:2015, CAN/CSA-C22.2 No. 61010-1:2012.
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.

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

3 September 2021
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
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

SCHEDULE

Canadian Certificate Of Conformity No: FM17CA0062X

10. Equipment Ratings:

Intrinsically Safe for Class I, II, III Division 1, Groups A, B, C, D, E, F and G per Control Drawing 53414; Non-Incendive for Class I, Division 2, Groups A,B,C and D, Dust-ignitionproof for Class II and III, Division 2, Groups F and G per Control Drawing 53414 hazardous (classified) locations with a T5 rating and an ambient temperature rating of -20°C to +60°C

11. The marking of the equipment shall include:

IS Class I, II, III, Division 1, Groups A, B, C, D, E, F and G; T5; Ta = -20°C to +60°C; Entity; Per Dwg 53414

NI Class I, Division 2, Groups A, B, C, and D; T5 Ta = -20°C to +60°C; NIFW; Per Dwg. 53414;

Dust-ignitionproof Class II, III, Division 2, Groups F and G; T5 Ta = -20°C to +60°C; NIFW; Per Dwg. 53414

12. **Description of Equipment:**

General – The Load cells produce an output signal proportional to the applied weight 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.

Enclosure:
The circuitry of the Load Cell is encapsulated within the housing.

Ratings:
The Load Cells operate at 12 Vdc. The load cells are rated for use in an ambient temperature range of -20°C to +60°C.

Models *RL20001-T10, RL20000B, RL30000,* RL30002, *RL30000W, RL35023SS, RL35023-N5, RL35023, RL90000, RL1521, RL75016, RL75016SS, RL70000C, RL75058B, RL75040, RL75223B* Load Cell

All Models contain model Model suffix option –a. a = capacitiy. Not relevant for safety.

Entity/NIFW Parameters
V_{Max} = 12 V, I_{Max} = 100 mA, C_i = 0, L_i = 0 .

13. **Specific Conditions of Use:**

Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of model RL20001-T10, RL30000, RL30002, RL30000W, RL35023SS, RL35023-N5, RL35023, RL75016, RL75016SS and RL70000C may generate an ignition-capable level of electrostatic charges. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charges on such surfaces. Additionally, the equipment shall only be cleaned with a damp cloth.

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

SCHEDULE

Canadian Certificate Of Conformity No: FM17CA0062X

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

This Certificate has been issued in accordance with FM Approvals Canadian Certification Scheme.

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
8th September 2017	Original Issue. The product was originally Approved for FM US under Project ID 3009330. There was no certificate issued at the time. Added FM Canadian mark to product.
3rd September 2021	Supplement 1: Report Reference: Project ID PR453582 dated 3rd September 2021. Added Model RL30002.

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