

CERTIFICATE OF CONFORMITY



- HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
- Certificate No:** FM17US0121
- Equipment:** Model RL1010, RL1040, RL1250, RL1140, RLHTO, RL1042, RL1260, RL1521A, RLHBB
(Type Reference and Name) Load Cells.
- Name of Listing Company:** Rice Lake Weighing Systems
- Address of Listing Company:** 230 W Coleman St, Rice Lake, Wisconsin 54868 USA
- The examination and test results are recorded in confidential report number:

3011095 dated 29th May 2001
- 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 3810:2005, ANSI/ISA 60079-0:2013, ANSI/ISA 60079-11:2014, ANSI/ISA 61010-1:2012
- 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.
- 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



US Certificate Of Conformity No: FM17US0121

10. Equipment Ratings:

Intrinsically Safe for Class I, II, III Division 1, Groups A, B, C, D, E, F and G using Control Drawing 66090 in hazardous (classified) locations with a T4 rating and an ambient temperature rating of -25°C to +40°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; T4; Ta = -25°C to +40°C; Entity; 66090

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 30 Vdc. The load cells are rated for use in an ambient temperature range of -25°C to +40°C.

Model RL1010, RL1040, RL1140, RLH10, RL1260, RL1521A, RLHBB

Entity Parameters:

$V_{Max} = 27\text{ V}$, $I_{Max} = 400\text{ mA}$, $P_i = 2.7\text{ W}$, $C_i = 0$, $L_i = 0$.

Model RL1042 and RL1250

Entity Parameters:

$V_{Max} = 30\text{ V}$, $I_{Max} = 600\text{ mA}$, $P_i = 4.5\text{ W}$, $C_i = 0$, $L_i = 0$.

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.

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@fmaprovals.com www.fmaprovals.com

SCHEDULE



US Certificate Of Conformity No: FM17US0121

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
29 th May 2001	Original Issue.
8 th September 2017	<u>Supplement 2:</u> Report Reference: – Project ID 3062444 dated 8 th September 2017. Description of the Change: Added FM Canadian mark to product and updated standards. Cleaned up marking information. Updated certificates to new format. Updated documents.
3 rd September 2021	<u>Supplement 3:</u> Report Reference: – Project ID PR453582 dated 3 rd September 2021. Description of the Change: Updated PLA agreement

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@fmaprovals.com www.fmaprovals.com

CERTIFICATE OF CONFORMITY

- HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS**
- Certificate No:** FM17CA0063
- Equipment:** Model RL1010, RL1040, RL1250, RL1140, RLHTO, RL1042, RL1260, RL1521A, RLHBB
(Type Reference and Name) Load Cell
- Name of Listing Company:** Rice Lake Weighing Systems
- Address of Listing Company:** 230 W Coleman St, Rice Lake, Wisconsin 54868 USA
- The examination and test results are recorded in confidential report number:
3062444 dated 8th September 2017
- 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. 61010-1:2012
- 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.
- 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.
- Equipment Ratings:

Intrinsically Safe for Class I, II, III Division 1, Groups A, B, C, D, E, F and G using Control Drawing 66090 in hazardous (classified) locations with a T4 rating and an ambient temperature rating of -25°C to +40°C

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: FM17CA0063

11. The marking of the equipment shall include:

IS Class I, II, III, Division 1, Groups A, B, C, D, E, F and G; T4; Ta = -25°C to +40°C; Entity; 66090

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 30 Vdc. The load cells are rated for use in an ambient temperature range of -25°C to +40°C.

Model RL1010, RL1040, RL1140, RLHTO, RL1260, RL1521A, RLHBB

Entity Parameters:

$V_{Max} = 27\text{ V}$, $I_{Max} = 400\text{ mA}$, $P_i = 2.7\text{ W}$, $C_i = 0$, $L_i = 0$.

Models RL1042 and RL1250

Entity Parameters:

$V_{Max} = 30\text{ V}$, $I_{Max} = 600\text{ mA}$, $P_i = 4.5\text{ W}$, $C_i = 0$, $L_i = 0$.

13. **Specific Conditions of Use:**

None

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:

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@fmaprovals.com www.fmaprovals.com

SCHEDULE



Canadian Certificate Of Conformity No: FM17CA0063

Date	Description
8 th September 2017	Original Issue. Description of the Change: Product originally Approved under project ID 3011095. Added FM Canadian mark to product .
3 rd September 2021	Supplement 1: Report Reference: – Project ID PR453582 dated 3 rd September 2021. Description of the Change: Updated PLA agreement.

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@fmaprovals.com www.fmaprovals.com