

1 EU-TYPE EXAMINATION CERTIFICATE



2 Equipment or Protective systems intended for use in Potentially
Explosive Atmospheres - Directive 2014/34/EU

3 EU-Type Examination Certificate No: FM21ATEX0026X

4 Equipment or protective system: 101, 102, 106, 107, 108, 110, 112, 202, 247, 266, 276, 296,
(Type Reference and Name) 363, 535, 563, 651 series Load Cells,
J04, J06, J08, J12 series Junction Boxes

5 Name of Applicant: Anyload Weigh & Measure Inc.

6 Address of Applicant: 6855 Antrim Avenue
Burnaby, British Columbia V5J 4M5
Canada

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 Europe Ltd, notified body number 2809 in accordance with Article 17 of Directive 2014/34/EU of 26 February 2014, 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:

PR456856 dated 16th August 2022

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 IEC 60079-0:2018, EN 60079-11:2012, EN 60529:1992+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 EU-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 2014/34/EU. 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.

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



Installations with single load cells (no junction boxes)

II 1 G Ex ia IIC T6 Ga; $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$;
II 1 D Ex ia IIC T83°C Da; $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$;

Installations with multiple load cells and junction boxes

II 1 G Ex ia IIC T4 Ga; $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$;

Martin Crowe
Certification Manager, FM Approvals Europe Ltd.

Issue date: 15th November 2022

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

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13 Description of Equipment or Protective System:

General – The 101 – 651 series are load cells, and the J04 – J12 series are junction boxes. The load cells can be powered directly from intrinsically safe barriers, or they can be powered from the barriers through junction boxes. A single load cell can be connected directly to the barriers while as many as 12 load cells can be connected to a single junction box or a combination of junction boxes. The Control Drawing shows the details for the allowed number of load cells to be connected through a junction box or boxes. In all cases, a maximum of two barriers can be connected to the load cell(s) or junction box(es). The first barrier will be connected at the input(s) to supply power, while the second barrier is connected to the output(s). The second barrier is not connected to any supply voltage. The models have IP ratings between IP65 and IP68, depending on the model and variant.

Construction – The enclosures are made of stainless steel, aluminum, or alloy steel.

Ratings - $U_i = 15V$, $I_i = 306\text{ mA}$, $P_i = 1.15W$ (for multiple load cells);
 $U_i = 15V$, $I_i = 44\text{ mA}$, $P_i = 165\text{ mW}$ (for single load cells).

abcde-f-g-h-Ex. Load Cell.

abc: Model series

101, 102, 106, 107, 108, 110, 112, 202, 247, 266, 276, 296, 363, 535, 563 or 651;

d: Structural code

A to Z (minor differences in enclosure shape, not affecting the interfaces);

e: Enclosure material

A (aluminum), H (alloy steel), S (stainless steel);

f: Structural variations (optional)

including seal type, threading, shape, size or dimensions, load cell sensitivity, equipped with lightning/surge protection

101: LE, GS, AK, LS, LK or blank

102: EL, GT, 02 or blank

106: 20, 02, CP, F, FB, ES or blank

107: 02, 20, 30 or blank

108: 3MUN, TD, UN, AD, AL, YM, 01, LL, MT, FL, ST, VS, LP or blank

110: BL or blank

112: blank

202: blank

247: LH, UN, WM, LL, 01, 02, 03 or blank

266: PT or blank

276: blank

296: blank

363: AN or blank

535: blank

563: 30, RS, SB, MT, WBL, 23, 23SE, 23LE, FK, RT, MS, LB, LF, GS, AS, BK, UN or blank

651: 22, 55, UN, 66, BC, UN, CS, GS or blank

g: Capacity code:

101: 1kg-20t

102: 100kg-200t

106: 100kg-600t

107: 1t-20t

108: 100g-2t

110: 1t-120t

112: 0.14Nm-11.3Nm

202: 3.75kg-275kg

247: 1kg-10t

266: 25kg-100t

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276: 5t-100t
296: 5kg-10t
363: 500kg-300t
535: 2t-100t
563: 5kg-20t
651: 6kg-1t

- h: Other variations (optional)
signifying parameters not affecting the electrical circuitry, interfaces, or the main structural design, such as cable length, cable type, connector type, labeling, etc.
- 101: YZ, xxm (xx can be any number) or blank
102: YZ, xxm (xx can be any number) or blank
106: YZ, xxm (xx can be any number) or blank
107: YZ, xxm (xx can be any number) or blank
108: YZ, xxm (xx can be any number) or blank
110: YZ, xxm (xx can be any number) or blank
112: xxm (xx can be any number) or blank
202: xxm (xx can be any number) or blank
247: YZ, xxm (xx can be any number) or blank
266: YZ, xxm (xx can be any number) or blank
276: xxm (xx can be any number) or blank
296: YZ, xxm (xx can be any number) or blank
363: YZ, xxm (xx can be any number) or blank
535: YZ, xxm (xx can be any number) or blank
563: YZ, xxm (xx can be any number) or blank
651: YZ, xxm (xx can be any number) or blank

abcde-f-Ex. Junction Box.

- abc: Model series
J04, J06, J08 or J12;
- d: Trimming code
E (excitation trimming), S (signal trimming);
- e: Enclosure material
A (aluminum), S (stainless steel);
- f: Variations
16 (year 2016 released version), E (expansion port), FS (smaller in size), I (no section trimming and lightning protection), II (no section trimming but with lightning protection), III (with section trimming and lightning protection) or blank

14 Specific Conditions of Use:

1. The enclosure contains aluminum and is considered a potential risk of ignition by impact or friction.
Care must be taken during installation to prevent impact or friction.
2. When two barriers are used, both barriers shall be connected to the same ground reference.

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:

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This EU-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 Europe 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 Europe 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
19 th August 2022	Original Issue.
15 th November 2022	<u>Supplement 1:</u> Report Reference: Revision Request RR234722 dated 8 th November 2022. Description of the Change: Model code changes, not affecting safety.

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Blueprint Report

ANYLOAD Weigh & Measure (258866)

Class No 3610

Original Project I.D. 456856

Certificate I.D. FM21ATEX0026X

<u>Drawing No.</u>	<u>Revision Level</u>	<u>Drawing Title</u>	<u>Last Report</u>
CD2005606	0	Construction Drawing for Waterproof Joints	PR456856
CD2005607	0	Assembly and Outline Drawing for ANYLOAD Junction Boxes	PR456856
CD2005608	0	Assembly and Outline Drawing for ANYLOAD Load Cells	PR456856
ED2005605	0	Ex Control Drawing	PR456856
IP Ratings per model	July 2020	List of ANYLOAD Load Cells and Junction Boxes with IP Rating Target	PR456856
LB2005604	0	Ex Label Marking	PR456856
Manual (Junction boxes)	1.0	Installation Manual (Junction boxes)	PR456856
Manual (Load cells)	1.0	Installation Manual (Load cells)	PR456856
NS2005603	1	ANYLOAD Product Model Naming System	RR234722
SD2005601	0	Schematics and PCBs of ANYLOAD Load Cells	PR456856
SD2005602	0	Schematics and PCBs of ANYLOAD Junction Boxes	PR456856