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: (Type Reference and Name)** **101, 102, 106, 107, 108, 110, 112, 202, 247, 266, 276, 296, 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°C ≤ Ta ≤ +60°C;
II 1 D Ex ia IIIC T83°C Da; -40°C ≤ Ta ≤ +60°C;

Installations with multiple load cells and junction boxes
II 1 G Ex ia IIC T4 Ga; -40°C ≤ Ta ≤ +60°C;

Martin Crowe
Certification Manager, FM Approvals Europe Ltd.

Issue date: 19th August 2022

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SCHEDULE

to EU-Type Examination Certificate No. FM21ATEX0026X

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 - Ui = 15V, Ii = 306 mA, Pi = 1.15W (for multiple load cells);
Ui = 15V, Ii = 44 mA, Pi = 165 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
including seal type, threading, shape, size or dimensions, load cell sensitivity, equipped with lightning/surge protection
101: LE, GS, AK, LS, LK
102: EL, GT, 02
106: 20, 02, CP, F, FB, ES
107: 02, 20, 30
108: 3MUN, TD, UN, AD, AL, YM, 01, LL, MT, FL, ST, VS, LP
110: BL
112: blank
202: blank
247: LH, UN, WM, LL, 01, 02, 03
266: PT
276: blank
296: blank
363: AN
535: blank
563: 30, RS, SB, MT, WBL, 23, 23SE, 23LE, FK, RT, MS, LB, LF, GS, AS, BK, UN
651: 22, 55, UN, 66, BC, UN, CS, GS

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

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

h: Other variations
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)

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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to EU-Type Examination Certificate No. FM21ATEX0026X

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
19th August 2022	Original Issue.

FM Approvals Europe Limited, One Georges Quay Plaza, Dublin. Ireland. D02 E440
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Blueprint Report

ANYLOAD Weigh & Measure (258866)

Class No 3610

Original Project I.D. 456856

Certificate I.D. FM21ATEX0026X

Drawing No.	Revision Level	Drawing Title	Last Report
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	0	ANYLOAD Product Model Naming System	PR456856
SD2005601	0	Schematics and PCBs of ANYLOAD Load Cells	PR456856
SD2005602	0	Schematics and PCBs of ANYLOAD Junction Boxes	PR456856