

## TEST CERTIFICATE

First addition to number E-15.02.C01 (First modification).

### LOAD CELL TYPE GS-2

Issued by: LGAI TECHNOLOGICAL CENTER S.A.  
(Notified body 0370).  
Campus de la U.A.B.  
Ronda de la Font del Carme, s/n.  
E-08193 BELLATERRA SPAIN.

In accordance with Paragraph 3.10 of the European Standard "Metrological aspects of non-automatic weighing instruments" EN 45501:2015. The applied error fraction  $\pi$  with reference to paragraphs 3.10.2.1 of this standard is 0,7. In accordance with paragraph F.2 of Annex F of this standard, the tests have been performed according to the OIML International Recommendation, OIML R 60 (2000).

Issued to: TRANSDUTEC, S.A.  
Calle Industria, 1.  
E-08390 MONTGAT ESPAÑA.

In respect of: The model of a load cell, tested as part of a non-automatic weighing instrument.  
Manufacturer: TRANSDUTEC, S.A.  
Type: GS-2.  
This first addition complements the test certificate number E-15.02.C01, with changes relatives a new external geometry, a new version and the change of address of the manufacturer.

#### Characteristics:

Classification	C3↓			C4↓			---
Maximum number of LC verification intervals $n_{LC}$	3000			4000			---
Maximum capacity $E_{max}$	40	50	75	100	150	200	kg
Ratio minimum LC verification interval $Y = E_{max}/V_{min}$	10000						---
additional marking	temperature limits	rated output	impedance input	minimum dead load	safe overload		
--	-10°C/+40°C	C = 2 mV/V	$R_{LC} = 383 \Omega$	$E_{min} = 0 \text{ kg}$	$E_{min}/E_{max} = 125\%$		

The main characteristics are shown in the descriptive annex, which is an integral part of the test certificate and consists of 6 pages.

The type is described in the submitted technical documentation, identified with number 03/15. The changes covered by this first addition are described in the submitted additional technical documentation, identified with number 04/17 (17/34551457-D).

Managing Director  
Product Conformity B.U.

*LGAI Technological Center S.A.*  
Xavier Ruiz Peña  
Bellaterra, 09 may 2018

This document shall not be reproduced except in full, with the annex.  
This test certificate refers only to metrological requirements.  
This test certificate cannot be used without applicant's authorization.

Descriptive annex to first addition to the test certificate number E-15.02.C01 (First modification).

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**Descriptive annex to first addition to the test certificate number E-15.02.C01 (First modification).**

**1.- Name and type of the instrument.**

Load cell type GS-2.

Manufactured by:

TRANSDUTEC, S.A.  
Calle Industria, 1.  
E-08390 MONTGAT ESPAÑA.

It is using any concrete trade mark.

**2.- Description of the modification.**

This annex to first addition to the test certificate number E-15.02.C01 describes a modification of the type GS-2.

This first addition to the test certificate number E-15.02.C01 describes changes relatives a new external geometry, a new version and the change of address of the manufacturer.

This first addition affects paragraph 1, paragraph 2, paragraph 5 and Figure 7 of the descriptive annex to the test certificate number E-15.02.C01.

This first additional is affected by the addition of Figure 8 and Figure 9 of this descriptive annex.

**3.- Text after modification**

Paragraph 1 of the annex to the test certificate number E-15.02.C01 were made void and replaced by paragraph 1 of this descriptive annex.

Paragraph 2 of the annex to the test certificate number E-15.02.C01, were made void and replaced by paragraph 3.1 of this descriptive annex.

Paragraph 5 of the annex to the test certificate number E-15.02.C01, were made void and replaced by paragraph 3.2 of this descriptive annex.

Figure 7 (drawing gs2-06) of the annex to the test certificate number E-15.02.C01, were made void and replaced by Figure 7 (drawing gs2-06) of this descriptive annex.

This first addition includes Figure 8 (drawing gs2-2\_02) and Figure 9 (drawing gs2-1a\_02) of this descriptive annex.

**Descriptive annex to first addition to the test certificate number E-15.02.C01 (First modification).**

**3.1.- Functional description.**

Load cell type GS-2 is a bending load cell. The principle of measurement is that of strain gauges, as a full bridge, in an elastic element.

Load cell type GS-2 has two versions, the GS-2-1A version and GS-2-2 version.

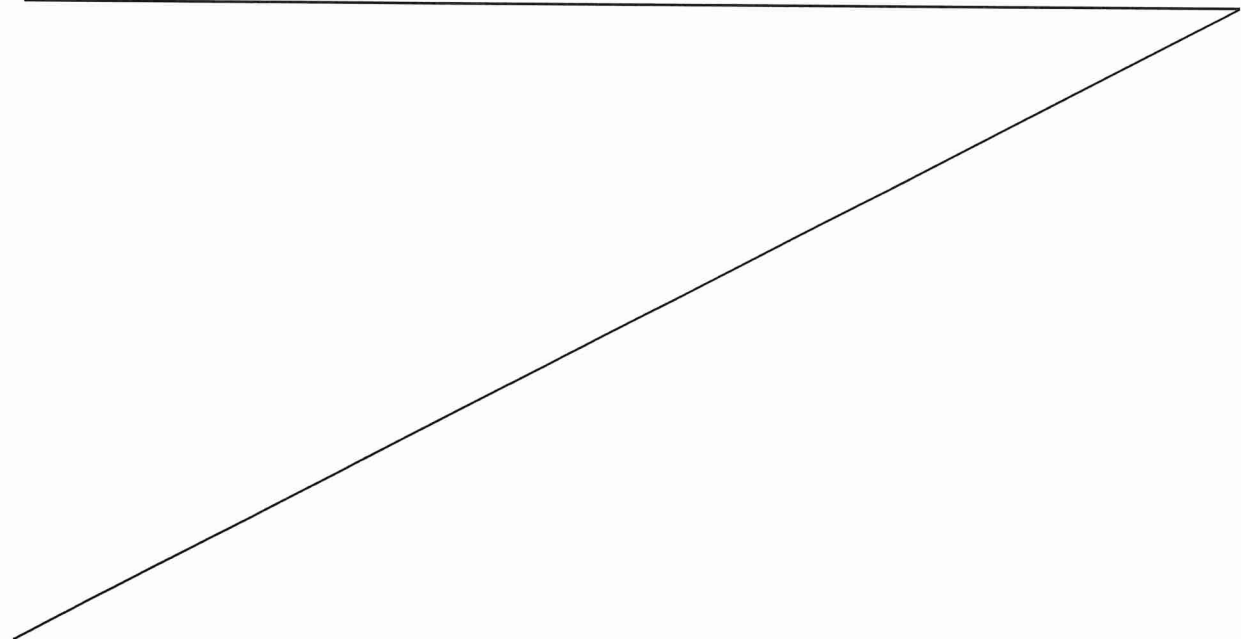
Load cell type GS-2 is clamped with two screws in an end.

Reference is made to Figure 1 (general view), Figure 2 (drawing gs2-01), Figure 3 (drawing gs2-02) and Figure 4 (drawing gs2-03) of the annex to the test certificate number E-15.02.C01 and Figure 8 (drawing gs2-2\_02) and Figure 9 (drawing gs2-1a\_02) of this descriptive annex.

**3.2.- Location of the indications.**

The indications required according to point 4.6 of OIML R 60 (2000) are in characteristics label.

Reference is made to Figure 6 (drawing gs2-05) of the annex to the test certificate number E-15.02.C01 and Figure 7 (drawing gs2-06) of this descriptive annex.



Description of the modification M1:

The unit "t" has been modified in the characteristics table by "kg". This certificate cancels and replaces the previous First addition to the Test Certificate number E-15.02.C01 dated 2018-01-23. It is the responsibility of the petitioner to annul the certificates that are replaced by the same.

"The present document is a translation of the First addition to the Test Certificate number E-15.02.C01 (First modification). In case of dispute, the valid document is the original Spanish version"

Descriptive annex to first addition to the test certificate number E-15.02.C01 (First modification).

Figure 7.- Drawing gs2-06: labels description.

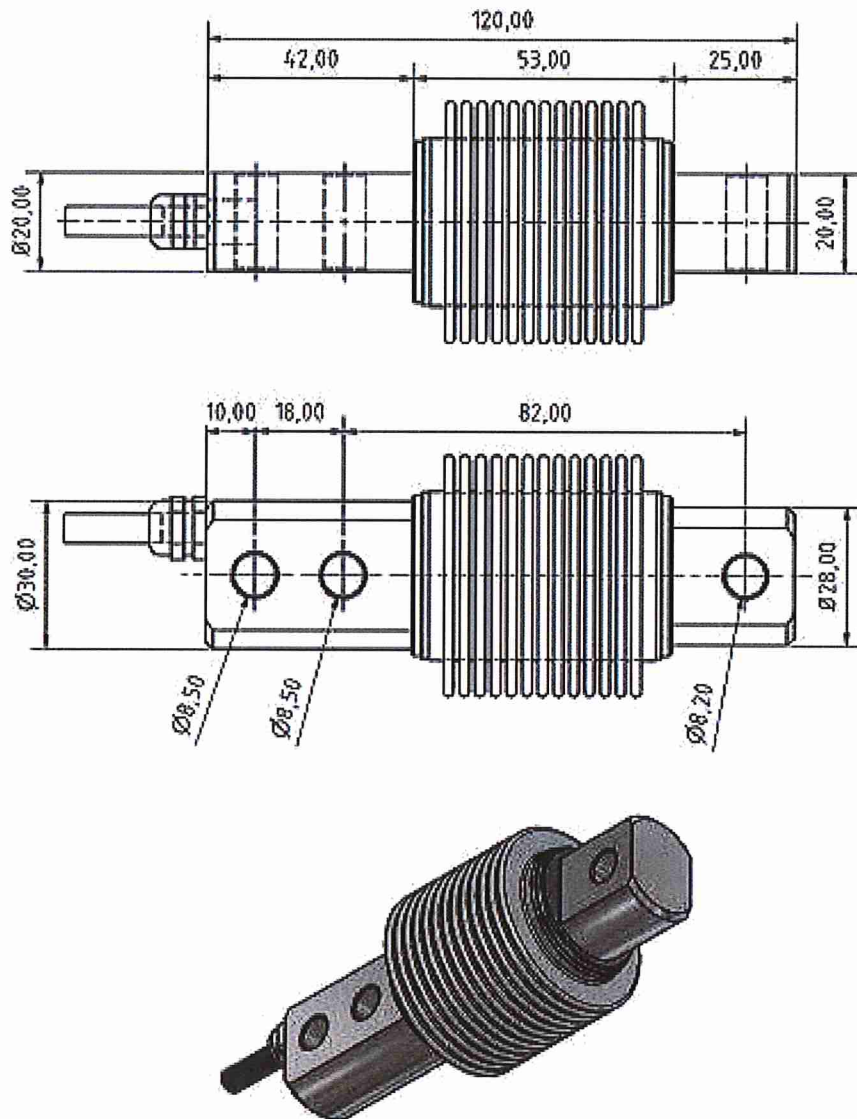
**transdubec, s.a.**  
C/Industria, 1 - B1  
08930 Montgat - Barcelona  
Tel: +34 933810004 - Fax: +34 934620599  
Designation: GS2  
Number: 98601  
Year: 2017  
E-15.02.C01

**C3 ↓ -10°C / +40°C**  
Emin:      Emax:    kg    L:      kg  
Vmin:      g            Sensitivity: 2mV/V  
Range of excitation: 5...12V  
Rin: 383 Ohms ± 2%      Rout: 350 Ohms ± 2%

**C4 ↓ -10°C / +40°C**  
Emin:      Emax:    kg    L:      kg  
Vmin:      g            Sensitivity: 2mV/V  
Range of excitation: 5...12V  
Rin: 383 Ohms ± 2%      Rout: 350 Ohms ± 2%

Descriptive annex to first addition to the test certificate number E-15.02.C01 (First modification).

Figure 8.- Drawing gs2-2\_02: dimensions load cell version GS-2-2.



Descriptive annex to first addition to the test certificate number E-15.02.C01 (First modification).

Figure 9.- Drawing gs2-2\_1a: dimensions load cell version GS-2-1A.

