



## EU-TYPE EXAMINATION CERTIFICATE

- 1)
- 2) Equipment or protective system intended for use in potentially explosive atmospheres — Directive 2014/34/EU
- 3) EU-Type Examination Certificate Number : **SCA22ATEX147X**
- 4) Equipment or Protective System : **Load cell**  
TYPES: **Compression Type, S-Type, Shear Beam Type, Double Shear Beam Type, Bending Beam Type, Pin Type, Tension Type and Single Point Type**
- 5) Manufacturer: **Tuna Tartı ve Elektronik Sistemler Ltd. Şti.**
- 6) Address : **Halkapınar Mah. 1202/2 Sokak No:31 D:112 Konak-İZMİR/TURKEY**
- 7) This equipment or protective system and/or any acceptable variation there to is specified in the schedule to this certificate and the documents therein referred to.
- 8) SCA Belgelendirme ve Özel Egt. Hizm. Ltd. Sti. Notified Body number 2336 in accordance with the Council Directive 2014/34/EU, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment or protective system intended for use in potentially explosive atmospheres given in 2014/34/EU.  
  
\* The examination and test results are recorded in the confidential report B/2021-10-220/Rp.02
- 9) Essential Health and Safety Requirements is made about reference standard.  
  
EN IEC 60079-0:2018, EN 60079-11:2012
- 10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions of safe use specified in the schedule to this certificate.
- 11) This EU-Type examination certificate relates only to the design and construction of the specified equipment or protective equipment in the scope of 2014/34/EU. Future requirements of the Directive applies to the production process and the provision of equipment or protective system. These are not discussed in this certificate.
- 12) Marking of the equipment or protective system must include the following :

 II 2G Ex ib IIC T4 Gb

Digitally  
Signed

**The competent person**  
**SCA Technical Manager**  
**İsmail OĞLAKCIOĞLU**



Date of Approval : 02.06.2022

SCA Belgelendirme ve Özel Eğitim Hizmetleri Ltd. Sti.  
Halkapınar Mh. Pakistan Blv. 1203.Sokak No:13 Onuk Plaza K:9 D:909 Konak-İZMİR / TURKEY  
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www.scaatex.com e-mail: info@scaatex.com

This Certificate May Only Be Reproduced In Its Entirety And Without Change



## 13) SCHEDULE

14) EU-Type Examination Certificate : SCA22ATEX147X

15) Description of Equipment and/or Protective System:

Strain gauge load cells are weighing equipment which convert a load into an electrical signal. Load cells connect to indicator and show the weight of the measured object.

Load cells bodies are made of stainless steel and/or nickel-containing stainless steel. Just single point type model load cells bodies are made of aluminium alloy.

The circuits are encapsulated with compound.

### Technical Parameters

**Ambient temperature** : -10°C to +80°C

**Resistance Values** : 350Ω, 700Ω, 1000Ω

### Intrinsically safe circuit parameters

PCB Type	Circle PCB	Square PCB	Dual PCB	TCT PCB
<i>Ui</i>	10V	10V	10V	10V
<i>li</i>	42mA	42mA	42mA	42mA
<i>Pi</i>	0.7W	0.7W	0.7W	0.7W
<i>Ci</i>	0	0	0	0
<i>Li</i>	0	0	0	0

### Other requirements

-Load cells power has supply from the separately certified intrinsically safe barrier. Barrier's specifications at least should be in accordance with below values.

*Uo*: 10V, *Po*: 0.7 W, *Io*: 42 mA, *Co*: 0 (negligible small), *Lo*: 0 (negligible small)

-The cable glands should be "Ex db" or "Ex eb" certified and glands threaded entry size should be in accordance with technical file and technical drawings.

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## CONTINUATION OF SCHEDULE TO EU TYPE EXAMINATION CERTIFICATE SCA22ATEX147X

### Type Parameters

Load Cell Type	Load Cell Model
Compression Type	CTD, TCT, TRC, TCP, SCX, BK-ENG-FS, FSH-HSCX, THC, FS-HSCX-W
S Type	ST, ST-A, STT
Shear Beam	SB, SBSS, TSB, SB2-SS, TSB-SS, LT, T-SBD, TBS
Double Shear Beam Type	DSB, HLT
Bending Beam	BBT, BBT-SS
Pin Type	LP1, LP2, LP3
Tension Type	TT, TW, TW-F
Single Point Type	SP1, SP2, SP3, SP4, SP5, SP6, SP7, SP8, SP9

16) Test and Assessment Report [B/2021-10-220/Rp.02](#)

17) Special Conditions for Safe Use (X):

-Tamb: -10°C to +80°C

-Load cells power has supply from the separately certified intrinsically safe barrier. Barrier's specifications at least should be in accordance with below values.

$U_o$ : 10V,  $P_o$ : 0.7 W,  $I_o$ : 42 mA,  $C_o$ : 0 (negligible small),  $L_o$ : 0 (negligible small)

18) Essential Health and safety Requirements :

Met by compliance with the standards listed in Section 9 of this certificate.

19) Drawing and Documents :

Technical file TUNA-EX-01/Rev.00 dated 18.03.2002 includes drawings, safety, maintenance and mounting instructions.

Drawing No	Title	Pages	Rev.	Date
2009/LC0002	CTD and TCT model load cell	01	00	10.05.2019
2009/LC00021	TCP model load cell	01	00	10.05.2019
2009/LC00022	SCX model load cell	01	00	10.05.2019
2009/LC00023	TRC model load cell	01	00	10.05.2019
200001.01	TCT PCB	01	00	10.05.2019
200001.02	Dual PCB	01	00	10.05.2019
200001.04	Square PCB	01	00	10.05.2019
200001.05	Circle PCB	01	00	10.05.2019

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Drawing No	Title	Pages	Rev.	Date
2009/LC00024	FSH-HSCX model load cell	01	00	10.05.2019
2009/LC00025	FS-HSCX-W model load cell	01	00	10.05.2019
2009/LC00026	THC model load cell	01	00	10.05.2019
2009/LC00027	BK-ENG-FS model load cell	01	00	10.05.2019
2009/LC00051	ST model load cell	01	00	10.05.2019
2009/LC00052	ST-A model load cell	01	00	10.05.2019
2009/LC00053	STT model load cell	01	00	10.05.2019
2009/LC00061	SB2-SS, LT and T-SBD model load cell	01	00	10.05.2019
2009/LC00062	SB and SBSS model load cell	01	00	10.05.2019
2009/LC00063	TSB, TSB-SS and TBS model load cell	01	00	10.05.2019
2009/LC00031	DSB model load cell	01	00	10.05.2019
2009/LC00032	HLT model load cell	01	00	10.05.2019
2009/LC0001	BBT and BBT-SS model load cell	01	00	10.05.2019
2009/LC00041	LP1 model load cell	01	00	10.05.2019
2009/LC00042	LP2 model load cell	01	00	10.05.2019
2009/LC00043	LP3 model load cell	01	00	10.05.2019
2009/LC00081	TT model load cell	01	00	10.05.2019
2009/LC00082	TW model load cell	01	00	10.05.2019
2009/LC00083	TW-F model load cell	01	00	10.05.2019
2009/LC00071	SP1 model load cell	01	00	10.05.2019
2009/LC00072	SP2 model load cell	01	00	10.05.2019
2009/LC00073	SP3 model load cell	01	00	10.05.2019
2009/LC00074	SP4 model load cell	01	00	10.05.2019
2009/LC00075	SP5 model load cell	01	00	10.05.2019
2009/LC00076	SP6 model load cell	01	00	10.05.2019
2009/LC00077	SP7 model load cell	01	00	10.05.2019
2009/LC00078	SP8 model load cell	01	00	10.05.2019
2009/LC00079	SP9 model load cell	01	00	10.05.2019

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