

## (1) EU-Type-Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 2014/34/EU**



(3) **Certificate Number** TÜV CY 18 ATEX 0206102 X Issue 01

(4) for the equipment: Load cells / force transducers  
Types C2S, C2SV, C8S; TCE, TCETM; CBS;  
TS, TSA; T20; F1; FT1, FT1A; FT2

(5) of the manufacturer: **AEP Transducers S.r.l.**

(6) Address: Via Bottego 33/A  
I-41126 Cognento (MO)

Order number: 0206102

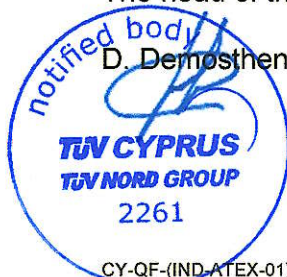
Date of issue: 2024-07-16

- (7) The design of this equipment or protective system and any acceptable variation thereto are specified in the schedule to this EU-Type-Examination Certificate and the documents therein referred to.
- (8) TÜV CYPRUS Ltd, notified body No. 2261 in accordance with Article 17 of the Council Directive of 2014/34/EU of February 26, 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential report No. 24 0206102.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- 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 for safe 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 in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment which are not covered by this certificate.
- (12) The marking of the equipment or protective system must include the following:

 II 2G Ex ib IIC T6 Gb                      or                       II 2G Ex ib IIC T5 Gb  
II 2D Ex ib IIIC T70°C Db                      II 2D Ex ib IIIC T115°C Db

TÜV CYPRUS Ltd (TUV NORD Group),  
The head of the notified body,

D. Demosthenous



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Excerpts or changes shall be allowed by the TÜV CYPRUS Ltd

(13) **SCHEDULE**

(14) **EU-Type-Examination Certificate No. TÜV CY 18 ATEX 0206102 X Issue 01**

(15) Description of equipment

The load cells / force transducers types C2S, C2SV, C8S; TCE, TCETM; CBS; TS, TSA; T20; F1; FT1, FT1A; FT2 are used for the conversion of mechanical forces (tension and compression) into electrical signals through Wheatstone bridges according to the table below.

The load cells / force transducers can be operated in explosion hazardous area zone 1, 2, 21, 22.

Permissible range of ambient temperature:  $-20\text{ °C} \leq T_a \leq +60\text{ °C}$

The Issue 01 includes: change of some components with consequent change of PCB for all product; eliminated stainless steel coding; added other cable as option.

Identification code:

Type	Measurement of	Marking
C2S, C2SV, C8S	Compression	II 2G Ex ib IIC T5 Gb II 2D Ex ib IIIC T115°C Db
TCE, TCETM	Tension and compression	II 2G Ex ib IIC T6 Gb II 2D Ex ib IIIC T70°C Db
CBS	Compression	II 2G Ex ib IIC T5 Gb II 2D Ex ib IIIC T115°C Db
TS, TSA; T20	Tension and compression	II 2G Ex ib IIC T6 Gb II 2D Ex ib IIIC T70°C Db
F1; FT1, FT1A; FT2	Force via shear beam	II 2G Ex ib IIC T6 Gb II 2D Ex ib IIIC T70°C Db

Electrical Data:

Power Supply and Signal circuit.....  
(cable connection; +AL, -AL, S+, S-)

In type of protection intrinsic safety Ex ib IIC only  
for connection to certified intrinsically safe circuits

Sum of maximum values:

$U_i = 12\text{ V}$

$I_i = 175\text{ mA}$

$P_i = 525\text{ mW}$

Characteristic line: linear

$C_i = \text{negligible}$

$L_i = \text{negligible}$

Parameters of the connected cable with length  $l_{\text{cable}}$ :

$C_i = 200\text{ nF/km} \times l_{\text{cable}}$

$L_i = 1\text{ mH/km} \times l_{\text{cable}}$

Warning labels:

None.

(16) Test documents are listed in the test report No. 24 0206102.

(17) Special conditions for safe use

The load cells / force transducers are suitable for use for dust with a smouldering temperature greater than 200°C.

The potential equalization in the complete cable line shall be guaranteed, internal and external to the explosion hazardous area.

The load cells / force transducers are not marked with the ambient temperature. The maximum permissible ambient temperature is + 60 °C.

(18) Essential Health and Safety Requirements

This EU-Type Examination certificate covers only the Essential Health and Safety Requirements related to the Directive 2014/34/EU.