

KSC POLAND Sp. z o.o.

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 No.: **KSCP 22ATEX0001X**, Issue: 0
- (4) Product: **Automatic Tank Gauge System HM900S Probe &
HM900C Safety Barrier**
- (5) Manufacturer: **HUMANENTEC**
- (6) Address: **#101, 93, Beoman-ro, Suseong-Gu, Daegu, 42200,
Republic of Korea**
- (7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) KSC POLAND Sp. z o.o., Notified Body number 2877, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential Report No. **KSCP/AR/22/Q00180**
- (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 product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- (11) This EU – Type Examination Certificate relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- (12) The marking of the product shall include the following:

**II 1G Ex ia IIA T4 Ga for HM900S****II (1)G [Ex ia Ga] IIA for HM900C**

Signature
President of the Board

Katowice, 21st January, 2022

KSC POLAND Sp. z o.o.

SCHEDULE

CERTIFICATE No.: KSCP 22ATEX0001X, Issue:0

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(15) Description of Product:

Automatic Tank Gauge (ATG) is constructed of two main parts: Probe model HM900S & Safety barrier model HM900C. The Probe model HM900S is magnetostrictive sensor to measure oil and water levels and oil temperature in storage tank. It can calculate the level of oil and water by Sensor-Coil detecting the Pulse from reflection of the magnetic Floaters. The oil temperature is checked from three Temperature Sensors located inside probe shaft. The Probe has been assessed for EPL Ga. The Probe sensor consists of Magnetostrictive Sensor, Main Housing (SUS), Connector and magnetic Floater (NBR). Magnetostrictive Sensor includes its Control PCB and Wave-Guide (SUS), and they are protected inside Main Housing. Up to two magnetic Floaters can be fitted to the probe shaft. Power for the Probe model HM900S is separately provided with the designated Safety-Barrier model HM900C installed at non-hazardous area. No entity parameters are defined for either version as the barrier and the probe are connected together as a system where the capacitance/inductance of the cables was taken into account.

Rating:

Ambient temperature:	-40 °C to +60 °C
HM900S :	
Maximum input voltage:	Ui = 13.65 V,
Maximum input current:	Ii = 168 mA,
Maximum input power:	Pi = 571 mW,
Maximum internal capacitance :	Ci = 14.67 μ F (14.69 μ F including up to 100m cable),
Maximum internal inductance:	Li = 39.6 μ H (139.6 μ H including up to 100m cable)
HM900C:	
Maximum voltage:	Um = 12 V,
Maximum output voltage:	Uo = 13.65 V,
Maximum output current:	Io = 168 mA,
Maximum output power:	Po = 571 mW,
Maximum external capacitance:	Co = 18.1 μ F,
Maximum external inductance:	Lo = 10.078 mH

(16) Report Number:

– KSCP/AR/22/Q00180

