Certificate No: TO.DEB.20-0981-02



## **TÜRK LOYDU**

## TYPE APPROVAL CERTIFICATE

This Certificate consists of 2 pages.

This is to certify that the

LEVEL SENSING ELEMENT (WITH RELAY CIRCUIT UNIT)

With type designations

AU 21, AU 22

Manufactured by

## HACI AYVAZ ENDÜSTRİYEL MAMULLER SANAYİ VE TİCARET A.Ş.

Is found to comply with

"TL Rules, Part A, Chapter 2, Material July 2019", "TL Rules, Part B, Chapter 4, Machinery January 2020".

**Application** 

: For level monitoring / detection / control / alarm of liquid in ships

Design

: Max. Operating Temperature: 150 °C, Max. Operating Pressure: 16 Bar, Voltage: 180-230 V AC, 50 Hz, Level Sensing: According to Order

**Sizes** 

: for AU21: L= 100, 200, 300, 400, 500, 700 mm for AU22: L= 300, 500, 700, 1000, 1200, 1500, 2000

**Address of Manufacturer** 

: Hadımköy Mah.Mustafa Inandi Cad.No:44 No.77

Arnavutköy/İSTANBUL

Place and date

: İSTANBUL / 01.07.2021

Subject to the conditions referred to in the following pages, this certificate is valid until 14.04.2025

Emrah SÖĞÜT

New Building Division Manager



Product description

: Level Sensing Element

**Type Designation** 

: AU 21, AU 22 Level Sensing Element (with relay circuit unit)

Materials used

: Flange: PN 16 DN 100 Carbon Steel or Stainless Steel

Tube: Stainless Steel

Float: Stainless Steel or Teflon

Cover: Aluminium injection with anti-corrosive paint Sensor System: Permanent Magnet and Reed Switch

## Application/Limitation (Approval conditions):

- Not allowed to use in hazardous areas where there is explosion risks existing.

- The user manual (maintenance, repair, and identification information), of the magnetic level gauge should be included in its own file.

**Documentation** : To be referred to the approved drawing dated 27.10.2020, 08.01.2021 with: Ref: PAE-EPAS/007699/20-0981/VA, PAE-EPAS/008338/20-0981/VA

Test carried out (and results): Following tests were carried out,

- Vibration test: IEC 60068-2-6 or MIL-STD-10 514.6

- Cold temperature test: IEC 60062-2-1 or MIL-STD-810G 502.5 and dry heat test : IEC 60062-2-2 or MIL-STD-810G 501.5
- Salt mist (corrosion ) test: IEC 60062-2-52 and IEC 60062-2-11 or MIL-STD-810G 509.5
- Damp heat (humidity)test: IEC 60068-2-3 or MIL-STD-810G 507.5
- Rain and spray test: IEC-60068-2-18 or MIL-STD-810G 506.5
  - 1,5 times of design pressure test.
- Functionality check

Found satisfactory.

Place of test carried out

: For routine test AYVAZ-Hadımköy, İSTANBUL

**Marking of product:** The product to be marked same as below mentioned.

- Marker's name or trade mark,
- Type desinguation,
- Serial No.

Surveyor

This certificate is subject to terms and conditions described below:

Any significant change in design or construction may render this Certificate invalid. Type Approval Certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. This certificate is not valid for products without marking above mentioned. The manufacturer should notify TÜRK LOYDU of any modifications or changes to the equipment in order to obtain valid certificate. This certificate shows that tested specimens as representative of the product complies of the TÜRK LOYDU rules, and relevant international instruments that apply to it.