Certificate no.:
**TAD00001ND**

# TYPE APPROVAL CERTIFICATE

## This is to certify:

**that the Miscellaneous**

with type designation(s)
**PTEC, EROSION PROBE, 300mm LG NECK, OMNITEC MK2, 10K, CANBUS, P6000204515**

issued to
## Teledyne Instruments, Inc. dba Teledyne Oil & Gas
**Daytona Beach, FL, USA**

is found to comply with
**DNV-OS-E101 – Drilling facilities, Edition July 2021**
**DNV-OS-E201 – Oil and gas processing systems, Edition July 2022**

## Application:

**See Page 2.**

Issued at **Houston** on **2024-08-02**
This Certificate is valid until **2029-08-01**.
DNV local unit: **Certification & Inspection Services**

for **DNV**

Approval Engineer: **M. Kevin Mandeville Jr.**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

## The following codes and standards were used as a reference:

API Specification 6A, *Specification for Wellhead and Tree Equipment*, 21st Edition
API Specification 17D, *Specification for Subsea Wellhead and Tree Equipment,* 3rd Edition
NACE MR0175, *Petroleum and Natural Gas Industries – Materials for use in $H_2S$-containing environments in oil and gas production*, 4th Edition

## Product description

PTEC Probe, API 6A 2-1/16”-10K flange, 300mm long neck, 10ksi Pressure Rating, with a 3000m depth rating

## Application/Limitation

| Design Parameter | Value | Equivalent |
|---|---|---|
| Maximum Allowable Working Pressure | 10,000 psi | 689.5 bar |
| Hydrostatic Test Pressure | 15,000 psi | 1,034 bar |
| Temperature Range (Process) | -49°F to 250°F | -45°C to 121°C |
| Temperature Range (Electronics) | 23°F to 104°F | -5°C to 40°C |
| Medium | Wellbore Fluid, Seawater | |
| Supply Voltage | 24 (+/-6) VDC | |
| Maximum Depth | 9,843 ft | 3,000 m |

## Type Approval documentation

## Tests carried out
Test carried out on SN: 1122218-53 on 2024-07-23 per reference ATP-331-40.

## Marking of product
For traceability the following marking is to be carried out on each product:

1. Serial No.
2. Manufacturer's Name or trademark
3. Additional marking at the manufacturer's discretion

## Certificate Retention Survey
For retention of the Type Approval Certificate, DNV's surveyor shall perform a survey after two and three-and-a-half years in accordance with DNV's Class Program DNV-CP-0388, 2021 edition.

## Other conditions/comments
• DNV Ref. Project No. A1536975

END OF CERTIFICATE