

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Level Switches**

with type designation(s)

2001/4201 Horizontal Mounting, 2002/4202 Vertical Mounting

Issued to

SIGEVAL, S.A.**Torrejon de Ardoz, Madrid, Spain**

is found to comply with

DNV GL rules for classification – Ships and offshore units**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Location classes:**

Temperature	B
Humidity	B
Vibration	A
EMC	N/A
Enclosure	B

This Certificate is valid until **2021-06-30**.Issued at **Høvik** on **2016-06-29**for **DNV GL**DNV GL local station: **Madrid**Approval Engineer: **Ståle Sneen**

Odd Magne Nesvåg
Head of Section

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.

Job Id: **262.1-004685-4**
Certificate No: **TAA00000J5**

Product description

FLOAT GAUGE LEVEL INDICATOR

Types:

2001 Horizontal Mounting	aluminium housing
4201 Horizontal Mounting	stainless steel housing
2002 Vertical Mounting/ with Cranked Float Arm	aluminium housing
4202 Vertical Mounting/ with Cranked Float Arm	stainless steel housing

Materials:

House: Aluminium/Stainless Steel AISI 316

Floater: Stainless Steel 316

Packing: Nitrile

Design:

The float level switch is magnetically operated.

Electrical:

Output: 1 c/o micro switch contact

Rating: 6 A 250 V AC

Application/Limitation

Maximum working pressure float assembly: 20 bar

Temperature rating: -20°C to 90°C

Minimum fluid density: 0.75 g/cm³

Pressure testing to 1.5 times system pressure to be performed if used for overpressure tank atmosphere.

The gauges are only to be used for liquids that will not corrode or in any other way attack the materials used.

Remark: A3 This gauge is classified as closed, according to DNV GL Rules Pt.5 Ch.5 Sec.9 [3].

The float level indicator can be used on tanks with the following liquids:

1. Fresh water 2. Sea water 3. Fuel oil 4. Lubricating oil 5. Cargo oil 6. Bilge systems

Type Approval documentation

Tests carried out

Guidelines for the Performance of Type Approvals VI-7-2 Edition 2003

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Marking of product

For identification to this type approval, the products are to be marked with:

- Manufacturer's name: SIGEVAL
- Type designation

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE