



Marine & Offshore
Division

Certificate number: 39677/A0 BV

File number: ACM 141/2531/1

Product code: 3714H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

SPIRAX SARCO SRL

Nova Milanese (MB) - ITALY

for the type of product

LEVEL GAUGES / INDICATORS

Colima Viscorol Magnetic Level Indicator

Requirements:

- BUREAU VERITAS Rules for the Classification of Steel Ships

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 10 Nov 2020

For BUREAU VERITAS,

At BV GENOA, on 10 Nov 2015,

Carlo Bozzetti



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=0npy4musyp>

BV Mod. Ad.E 530 October 2014

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

Colima Viscorol Magnetic Level Indicator

1.1 Design Specification

Colima Viscorol magnetic level indicators are installed on the side of the tank (bypass system) or vertically on the top of the tank.

Models:

LL	Side/ side connections
LF	Side/ bottom connections
LT	Side/ top connections
TF	Top/ bottom connections
R	Top connection
GDV	Side/ side connections

Size	Ø25 - Ø40 - Ø50 - Ø60 - Ø70
Maximum allowable pressure depending on the temperature	120 bar at 300°C 140 bar at 150°C
Allowable temperature range depending on the body diameter	Ø40: -25 up to + 180 °C Ø50 - Ø60 - Ø70: -25 up to + 300 °C
End connections	Flanged, socket welded, butt welded, screwed, threaded
Protection degree graduated scale	IP65

The electrical equipment is covered by the ATEX certificate No. IMQ11ATEX033X issued on 12/07/2012.

1.2 Materials

Indicator body	304/316L/316Ti
Glass tube	Polycarbonate or Pyrex
Float	316L/316Ti/ Titanium/ Hastelloy

When other choices of materials are used per manufacturer's recommendations, the BV agreement is to be obtained.

2. DOCUMENTS AND DRAWINGS

- Specification Sheet N° TI-P329-01-E rev 03 dated 2013
- Document N° 7A.501-E rev 01 dated April 2009
- Drawing N° 6.795.9999.001BV rev 0 dated 29/09/2014

No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.

3. TEST REPORTS

- Inspection test N° M-COL 02
- Vibration and shock test report N° IND 02304-1/03 rev.0 dated 10/12/2003

4. APPLICATION / LIMITATION

4.1 Magnetic Level Indicators Viscorol are to be used for tanks intended for water, fuel oil and other flammable oils according to requirements in Part C, Ch 1, Sec 10 [2.9.2] of BUREAU VERITAS Rules.

4.2 In passenger ships, the level gauges are not admitted for fuel oil and other flammable oils where penetration below tank top would be necessary and their failure or overfilling of the tanks is not to permit release of fuel into the space, unless otherwise permitted on case by case ship basis.

4.3 In cargo ships, their failure or overfilling of the tanks is not to permit release of fuel into the space.

4.4 BUREAU VERITAS Environmental Category, EC Code: 21.

4.5 Approval valid for ships intended to be granted with the notations: AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.

4.6 The fittings of the level gauges are to be in accordance with the manufacturer's instructions as well as the Rules and Regulations applicable to each particular ship.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 The products are to be supplied by **SPIRAX SARCO SRL** in compliance with the type described in this certificate and in compliance with the requirements stated on the front page of this certificate. This type of product is within the category HBV of BUREAU VERITAS Rule Note NR 320.

5.2 **SPIRAX SARCO SRL** has to make the necessary arrangements to have its works recognized by BUREAU VERITAS in compliance with the requirements of NR 320 for HBV products.

5.3 No BUREAU VERITAS certificate is required.

Place of production

SPIRAX SARCO SRL
Via Mestre 11
I 20063 Cernusco S/N (MI)
ITALY

6. MARKING OF PRODUCT

The product shall be marked with at least:

- Manufacturer's name or logo
- Type designation
- Operational data

7. OTHERS

This approval is given on the understanding that the manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper methods of fitting and general maintenance of the products and of the conditions of this approval.

***** END OF CERTIFICATE *****