

**MARINE DIVISION**  
17 Bis Place des Reflets - La Défense 2  
92400 Courbevoie - France  
Tel. 33 1 42 91 53 48  
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Published on <http://www.veristar.com>

Certificate N°:  
09241/B0 BV

The attached Schedule forms part of the certificate

File Number : ACM 141/0903/001  
Product Code : 3714H

**BUREAU  
VERITAS**

## CERTIFICATE OF TYPE APPROVAL

*This is to certify that the product identified below was found to be in compliance with the relevant hereunder stated Regulations & standards*

**LEVEL GAUGES / INDICATORS**  
ITA-3-BV and ITA-6-BV.

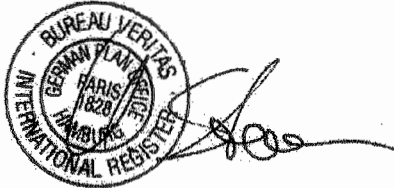
MANUFACTURED BY:

**INTRA-AUTOMATION GmbH**  
Grevenbroich - GERMANY


SPECIFIED REGULATIONS & STANDARDS :  
BUREAU VERITAS Rules for the Classification of Steel Ships.

The Approval is valid until : 20.10.2009

BUREAU VERITAS HAMBURG



At Paris la Défense, on : 20.10.2004

  
**J. BENOIT**  
For the Secretary

This Certificate remains valid until the date stated on, hereunder, unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory into service.

This 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 without the stamp of the above mentioned BUREAU VERITAS Inspection Center.

The manufacturer should notify BUREAU VERITAS of any modification or changes to the equipment in order to obtain a valid Certificate.

The latest published Regulations or Standards referred to, above, and the Marine Division General Conditions are applicable.



## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION :

**LEVEL GAUGE** of types ITA-3-BV and ITA-6-BV.

These level gauges are magnetic level indicator, consisting of a vertical tube, a float, an indication rail and tank connections (external bottom side installation).

The fluid level is indicated directly with a separation of the measurement and indication area.

Max. working pressure:       - ITA-3-BV: 16 bar  
  - ITA-6-BV: 40 bar  
Test pressure:                   1.5 times the working pressure.

Float chamber dimensions:    Ø 60.3 x 2.0.

### 2. DESIGN DRAWINGS and/or SPECIFICATIONS

ITA-3-BV:           drawing n° KN-02007e-K-0000-4 Rev.0  
ITA-6-BV:           drawing n° KN-02007e-K-0001-4 Rev.0.

### 3. TYPE TEST REPORTS / LABORATORY RECOGNITION STATUS

Vibration test report n° 13 0732 2 84 at MPA Dortmund dated 17/01/1995.

### 4. MATERIALS and/or COMPONENTS REQUIRED TO BE TYPE APPROVED

#### 5. OTHER MATERIALS and/or COMPONENTS

Float chamber:    Stainless steel 1.4571 as per DIN 17457.  
Flange:            C22.8 or 1.4571.  
Float:             Titanium.  
Indication rail:   MacroIon or Aluminium.

#### 6. APPLICATION / LIMITATION OF USE

6.1 - These equipments are intended for machinery installations and are not allowed on cargo storage and handling systems.

6.2 - Fitting on fuel tanks on board passenger ships (SOLAS ships) is subject to special authorization granted by the National Authorities or their representatives.

#### 7. PRODUCTION SURVEY REQUIREMENTS

Inspection at workshops by the Society Surveyors as per NR 266 DNC - Section M12, required for equipment covered by an RMC-Notation.

#### 8. ON BOARD INSTALLATION & MAINTENANCE REQUIREMENTS

These equipment are to be fitted and tested according to the Manufacturer's instructions.

**9. MARKING FOR IDENTIFICATION**

- Serial number
- Date of final fitting
- Size
- Maximum working pressure
- Maximum working temperature
- Ip class.

**10. OTHERS**

10.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that INTRA-AUTOMATION GmbH, ~~Otto-Hahn~~ *Otto-Hahn* Strasse 20, Grevenbroich - GERMANY, will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

10.2 - This certificate supersedes the Type Approval Certificate N° 09241/A0 BV issued on 21/10/1999 by the Society.

**\*\*\* Last page (End of Document) \*\*\***

BUREAU VERITAS HAMBURG

BUREAU VERITAS Section: *ACH144/090311*

**REVIEWED**

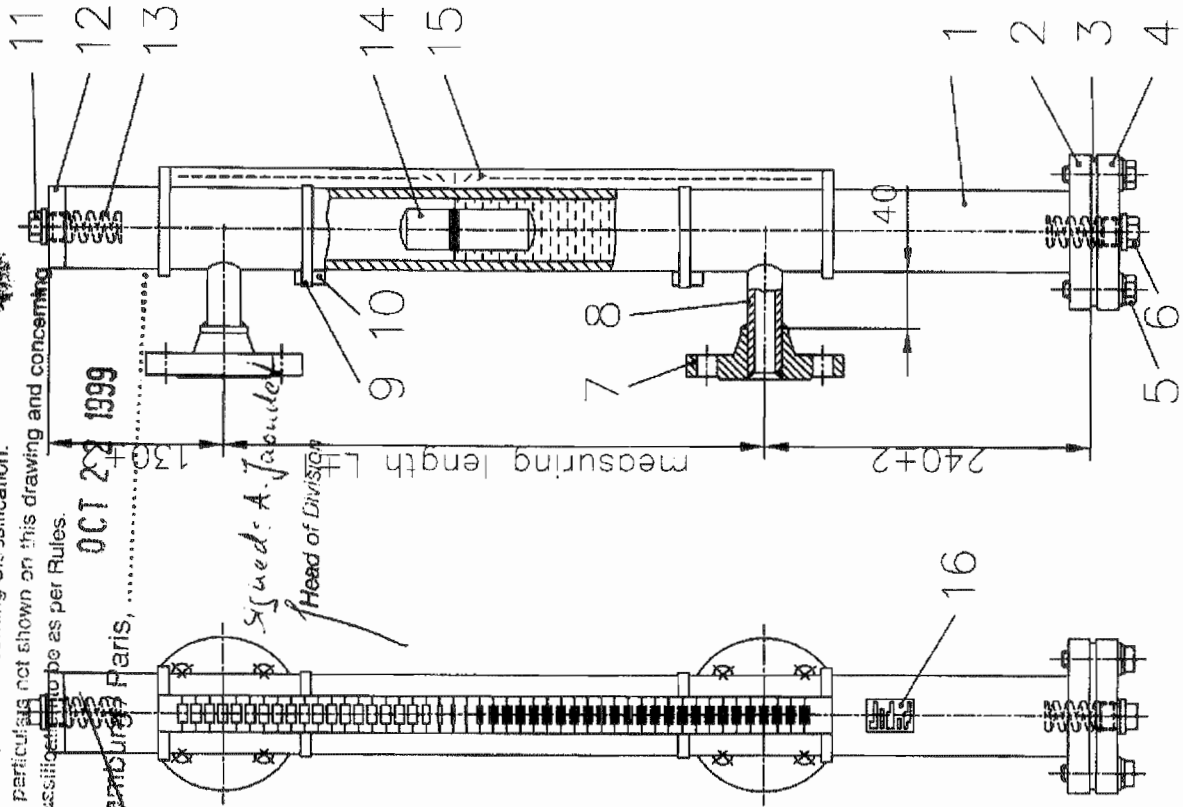
only for parts concerning Classification.  
 All particulars not shown on this drawing and concerning Classification to be as per Rules.

OCT 22 1999

Hamburg Paris, .....

*Signed: A. Joubert*

Head of Division



client	
quot./order no.	
meas. length L	
TAG no.	
medium	
pressure	
temperature	
density	

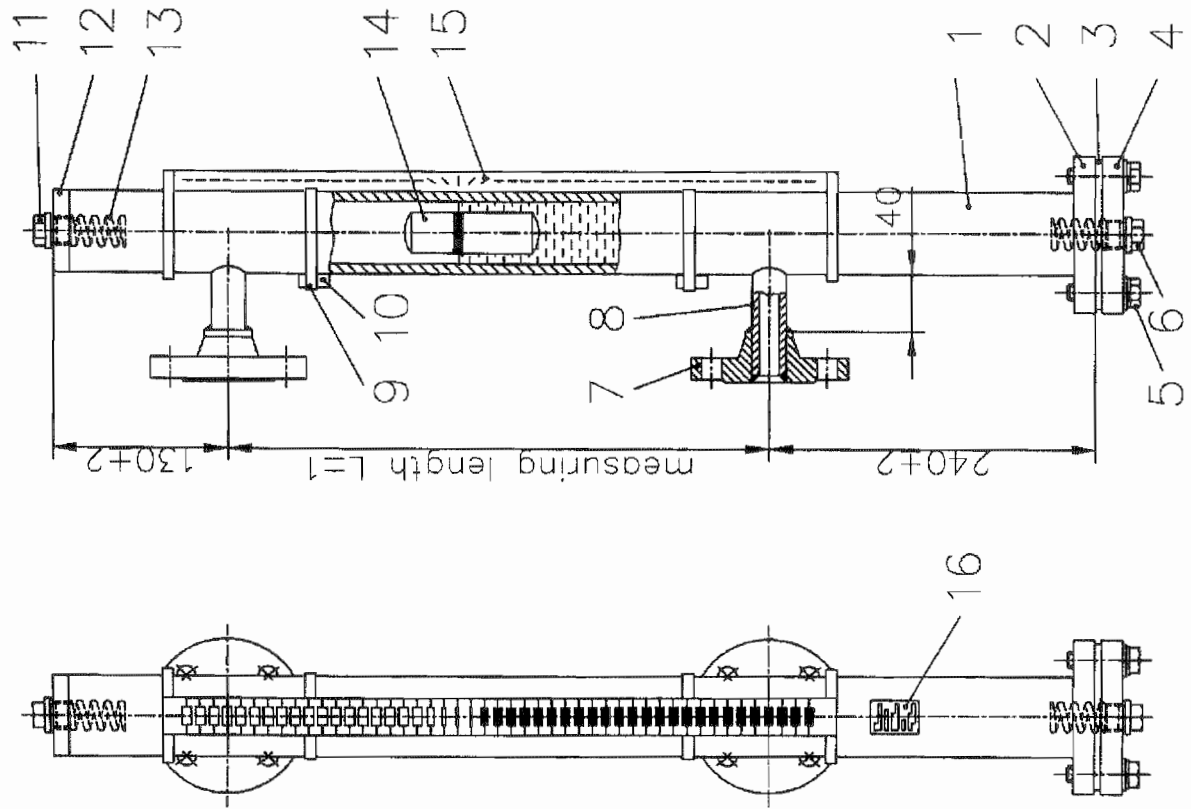
16	TAG plate	1	1.4301	Aluminium
15	indication rail	1	1.4571	titanium
14	float Ø52	1	1.4401	
13	spring	2	1.4571	
12	end cap	1	1.4571	
11	vent plug R1/2"	1	DIN 910	
10	switch	-		
9	mounting clip	-	1.4401	
8	side stud	2	1.4571	
7	weld neck flange DN15 to DN50 PN16	2	DIN 2633	1.4571
	weld neck flange 1/2" to 2" 150# RF		ANSI B16.5	C21
6	drain plug R1/2"	1	DIN 910	1.4571
5	screws M12x45	4	DIN 931	5.6
4	blind flange DN25/PN16	1	DIN 2527/B	C22.8
3	gasket	1		PTFE
2	flange DN25/PN16	1	DIN 2527	C22.8
1	float chamber Ø60,3x2,0 welded	1	DIN 17457	1.4571
item	description	pc.	standard/dwg	material

Benennung:		magnetically controlled liquid level gauge PN16 type ITA-3-BV	
Gez.	10.11.98	Name	N.Evers
Gepr.			
Norm			
Zeichnungs-Nr.:		KN-02007e-K-0000-4	
Ers. für:		DOS-Bez.:	
Index Änderung	DeLum Name	Rev.	Blatt:
		0	1/1

client	
quot./order no.	
meas. length L	
TAG no.	
medium	
pressure	
temperature	
density	

16	TAG plate	1	1.4301	Aluminium
15	indication rail	1	Macrolon	Aluminium
14	float Ø52	1	1.4571	titanium
13	spring	2	1.4401	
12	end cap	.	1.4571	
11	vent plug R1/2"	1	DIN 910	
10	switch	-		
9	mounting clip	-	1.4401	
8	side stud	2	1.4571	
7	weld neck flange DN15 to DN50 PN40	2	DIN 2635 C22.8	1.4571
	weld neck flange 1/2" to 2" 300# RF		ANSI B16.5 C21	
6	drain plug R1/2"	1	DIN 910	1.4571
5	screws M12x45	4	DIN 931	5.6
4	blind flange DN25/PN40	1	DIN 2527/B C22.8	1.4571
3	gasket	1	PIFE	Klingersil
2	flange DN25/PN40	1	DIN 2527 C22.8	1.4571
1	float chamber Ø60,3x2,0 welded	1	DIN 17457	1.4571
item	description	pc.	standard/dwg	material
				alternat.ve

Benennung:		magnetically controlled liquid level gauge PN40 type ITA-6-BV	
Datum	Name	Maßstab	Format
10.11.98	N.E.vers	/.	A4
Gez.		INTRA-AUTOMATION GmbH	
Gepr.		Otto-Hahn-Straße 20	
Norm		41515 Grevenbroich	
Zeichnungs-Nr.:		Rev.	Blatt
KN-02007e-K-0001-4		0	1/1
Ursprung:		DOS-Bez.:	



**BUREAU  
VERITAS**

Régistre International de Classification  
des Navires et d'Aéronefs S.A.  
Zweigniederlassung Hamburg  
HAMBURG OFFICE



Bureau Veritas - Hamburg Office - Postfach 10 09 40 - D-20026 Hamburg

**INTRA-AUTOMATION GmbH**  
**Postfach 100327**

**D - 41487 Grevenbroich**

GPO. 99.1090.US

Hamburg, 04.11.1999

Ref.: Your letter N.Evers-ra dated 17.8.99  
BV Sec. No.: **ACM 141/0903/001**

Subject: **Type Approval Certificat for Level gauges / indicators types ITA-3BV  
and ITA-6-BV**

Dear Sirs,

We are sending you the drawings and documents listed below which have been reviewed by the Society and which are intended for your use.  
The Type Approval Certificate and our invoice will be sent you with a separate letter.

Yours faithfully,

**BUREAU VERITAS**  
GPO Hamburg

U. Storm  
Your correspondent

  
S. D'Souza  
Head of Division

Enclosures:

- KN-02007e-K-0000-4 Rev. 0, magn. control. liquid level gauge PN 16 type ITA-3-BV
- KN-02007e-K-0001-4 Rev. 0, magn. control. liquid level gauge PN 40 type ITA-6-BV

Number of copies: one(1)

cc + encl.: ☐ ➔ BV Essen

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Telefax 040-2 36 25-620  
<http://www.bureauveritas.com>

Name und Sitz der Gesellschaft  
Bureau Veritas, 17 bis, Place des Reflets  
La Défense 2, F-92400 COURBEVOIE  
Kapital FF 101.942.105  
Handelsregister Nr. Nanterre B 775 690 621

Bankverbindung  
Deutsche Bank AG, Hamburg  
Kto.-Nr. 83/01111  
BLZ 200 700 00