

TYPE APPROVAL CERTIFICATE

DNV GL

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No. **79 900 - 95 HH**

Company **HACI AYVAZ Endüstriyel Mamuller Sanayi ve Ticaret A.S.
Atatürk Sanayi Bölgesi
Mustafa Inan cad. No: 36
34555 Hadimköy, Istanbul, TURKEY**

Product Description **MAGNETIC LEVEL INDICATORS**

Type **MG-33
MG-33S (SMALL)**

Environmental Category **None**

Technical Data /
Range of Application **Tube / Float: AISI 304 (1.4301), 316 (1.4401) / AISI 316 (1.4401)
Flanges: S235 JR (1.0037), AISI 304 (1.4301), AISI 316 (1.4401)
Indicating Scale: AlMgSi (3.3206)
Size of tube / flanges [mm]: DN 50 / DN 20 (MG-33),
DN 25 / DN 15, DN 20 (MG-33S)
PN [bar]: 16 (MG-33) / 10 (MG-33S)
M.A.W.T. [°C]: 180
Pipe class: III**

RANGE OF APPLICATION

The magnetic level gauge of type MG-33/MG-33S is type approved for the use on tanks arranged above the double bottom.

LIMITATIONS

Side mounting devices are not approved on passenger ships for tanks carrying flammable liquids. Combination of magnetic level gauge and level alarm sensors is not approved for high or low level alarms required by the Rules.

Test Standard **GL Rules VI-7-8 Test Requirements for Components and Systems of Mechanical Engineering and Offshore Technology, 2013.**

Documents **- Drawings 704.201.005.105, 704.208.000.100 to 125, 604.040.111.360
- Test report No. 12 0421 2 95 of MPA NRW, Dortmund/Germany
- QMS-ISO 9001:2008-cert.no. 153115142 (TÜV-Süd)
- GL-Approval ref. no. 10-121461, 15-051920.**

Remarks **Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL. (Continuation of remarks on page 2)**

Valid until **2020-07-13**

Page **1 of 2**

File No. **II.B.06**

Hamburg, 2015-11-10

Type Approval Symbol



DNV GL

Hanspeter Raschle
Hanspeter Raschle

Plamen Dinkov
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REMARKS (Continuation from page 1):

Installation: If magnetic level indicators are to be installed as a means of level indication for tanks containing flammable fluids, they shall be fitted with a self-closing valve at each end and shall be protected against mechanical damage.

Side mounted magnetic level indicators are not approved on passenger ships for tanks carrying flammable liquids.

MARKING:

Each device shall bear legible and durable marking on the body or on a name plate fixed securely to the body as follows:

• Manufacturers Trademark • Type • Nominal Diameter • Nominal pressure • Body material •

Valid until **2020-07-13**

Page **2 of 2**

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Plamen Dinkov



Type Approval Certificate

Germanischer Lloyd

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Certificate No.	7990095 HH
Company	HACI AYZAZ Endüstriyel Mamuller Sanayi ve Ticaret A.S. Atatürk Sanayi Bölgesi Mustafa Inan cad. No: 36 34555 Hadimköy, Istanbul, TURKEY
Product Description	MAGNETIC LEVEL INDICATORS
Type	MG-33 MG-33S (SMALL)
Environmental Category	None
Technical Data / Range of Application	TECHNICAL DATA Tube / Float: AISI 304 (1.4301) , 316 (1.4401) / AISI 316 (1.4401) Flanges: S235 JR (1.0037), AISI 304 (1.4301), AISI 316 (1.4401) Indicating Scale: AlMgSi (3.3206) Size of tube / flanges: DN 50 / DN 20 (MG-33), DN 25 / DN 15, DN 20 (MG-33S) PN: 16 (MG-33) / 10 (MG-33S) M.A.W.T.: 180[°C] Pipe class: III RANGE OF APPLICATION The magnetic level gauge of type MG-33/MG-33S is type approved for the use on tanks arranged above the double bottom. LIMITATIONS Side mounting devices are not approved on passenger ships for tanks carrying flammable liquids. Combination of magnetic level gauge and level alarm sensors is not approved for high or low level alarms required by the Rules.
Test Standard	Regulations for the Performance of Type Tests, Part 6-Test Requirements for Mechanical Components and Equipment : 1998.
Documents	- Drawings 704.201.005.105,704.208.000.100 to 125, 604.040.111.360 - Test report No. 12 0421 2 95 of MPA NRW, Dortmund/Germany
Remarks	Refer to page 2
Valid until	2015-07-13
Page 1 of 2	Type Approval Symbol
File No. II.B.06	
Hamburg, 2010-11-05	

Germanischer Lloyd

Hanspeter Raschle

Hagen Markus

This certificate is issued on the basis of "Regulations for the Performance of Type Tests, Part 0, Procedure".



Type Approval Certificate

Germanischer Lloyd

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No. **7990095 HH**

Remarks

Marking:

Each device shall bear legible and durable marking on the body or on a name plate fixed securely to the body as follows:

• Manufacturers Trademark • Type • Nominal Diameter • Nominal pressure • Body material •

Valid until **2015-07-13**

Page **2 of 2**

File No. **II.B.06**

Hamburg, 2010-11-05

Type Approval Symbol



Germanischer Lloyd

Hanspeter Raschle

Hagen Markus

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