



CERTIFICATE NUMBER
16-HG1563199-PDA

DATE
02 Nov 2016

ABS TECHNICAL OFFICE
Hamburg Engineering Department

CERTIFICATE OF DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of
WEKA AG

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: **Level Transmitter**
Model: **Series XM-36000E, XT-36000E**

This Product Design Assessment (PDA) Certificate 16-HG1563199-PDA, dated 02/Nov/2016 remains valid until 01/Nov/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Dagmar Gramatzki
Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

WEKA AG
SCHUERLISTR. 8
BAERETSWIL
Switzerland CH-8344
Telephone: 41-43-833-43-43
Fax: 41-43-833-43-49
Email: info@weka-ag.ch
Web: www.weka-ag.ch

Tier: 2 - PDA Issued

Product: Level Transmitter
Model: Series XM-36000E, XT-36000E
Intended Service:
Transmitters for Tank Level Indication Systems.

Description:

Level Transmitters: XM-36425E (XT-36425E), XM-36428E (XT-36428E), XM-36460E, XM-36465E, XM-36470E, XM-36475E, XM-36480E / XM-36485E, XM-36490E (XT-26490E), XM-36492E (XT-36492E).
Connection Cables: 36880E, 36885E, 36890E, 36880E-SS, 36885E-SS, 36890E-SS, 36880E-Hal.
Float Types: C1 (Cr-Ni Steel 1.4571, 118mm Dia.); C2 (Cr-Ni Steel 1.4571, 203mm Dia.); E (Ecco, 140mm Dia.); H (Hycel, 102mm Dia.); N (Buna N, 102mm Dia.); H (Hycel); P1 (Polyurethane, 200mm Dia.); P2 (Polyurethane, 200mm Dia.).

Rating:

Operating voltage: max. 30 VDC = stabilized.

Service Restriction:

- Unit Certification is not required for this product. If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- Equipment is not to be used in hazardous locations unless certified and approved for the particular atmosphere and application.

Comments:

- Each particular installation is to be approved in conjunction with the relevant level indication system.
- The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Document No. Typenblatt_E Nr, Technical Information, Revision: -, Pages: 10.

Terms of Validity:

This Product Design Assessment (PDA) Certificate 16-HG1563199-PDA, dated 02/Nov/2016 remains valid until 01/Nov/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

2016 Steel Vessel Rules 1-1-4/7.7, 1-1-Appendix 3 and 4, 4-9-8/7 /13.

National:

NA

WEKA AG
SCHUERLISTR. 8
BAERETSWIL
Switzerland CH-8344
Telephone: 41-43-833-43-43
Fax: 41-43-833-43-49
Email: info@weka-ag.ch
Web: www.weka-ag.ch

Tier: 2 - PDA Issued

International:
NA

Government:
NA

EUMED:
NA

OTHERS:
NA



CERTIFICATE NUMBER
16-HG1563187-PDA

DATE
02 Nov 2016

ABS TECHNICAL OFFICE
Hamburg Engineering Department

CERTIFICATE OF DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of
WEKA AG

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: **Tank Level, Magnetic Liquid Level Indicator**

Model: **Magnetic Liquid Level Indicator WEKA-Standard / Smart / Economy Line**


This Product Design Assessment (PDA) Certificate 16-HG1563187-PDA, dated 02/Nov/2016 remains valid until 01/Nov/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING


Dagmar Gramatzki
Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

WEKA AG
SCHUERLISTR. 8
BAERETSWIL
Switzerland CH-8344
Telephone: 41-43-833-43-43
Fax: 41-43-833-43-49
Email: info@weka-ag.ch
Web: www.weka-ag.ch

Tier: 2 - PDA Issued

Product: Tank Level, Magnetic Liquid Level Indicator
Model: Magnetic Liquid Level Indicator WEKA-Standard / Smart / Economy Line
Intended Service:
Liquid Level Indication.

Description:

Indicators:

- Standard 6: 23614E-A, -K; Standard 28: 34300-A, -B, -K, -O; Standard 50: 32755-A, -B, -K, -O.
- Smart Line 50: 34000-A, -B, -K, -O; 34110-K, -O (with shut-off valves).
- Economy Line 6: 34000E-A, -B, -K, -O, 23614E-A, -B, -K, -O.

Floats: 33433, 33115, 33279, 33278 for media density 0.6 to 1.2 g/cm³.

Magnetic switches: 31160-NN, 31160-ND, 31160-NI, 31160-NP.

Accessories: 20060307/40 heating jackets, 20060903 measuring scales, indicator rails.

Rating:

Indicators: nominal pressure PN6, PN28, PN50; degree of protection: min. IP54.

Magnetic switches: contact rating 250 V; degree of protection: min. IP 65.

Indicator rails: degree of protection: min. IP 54.

For more details refer to attached document "Additional Product Details".

Service Restriction:

- Unit Certification is not required for this product. If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

- If the tank level indicators are installed at tank locations where they are subjected to a static head of liquid they are to be fitted with valves or arranged such that they may be removed without emptying the tank. For passenger vessels the level indicators are not to be installed on oil tanks where they require tank wall penetration below tank top.

Comments:

- Each particular installation and rating is to be approved in conjunction with the relevant system and tank arrangements.

- The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Document No. DS_Economy_E, Technical Information Economy Line 6, Revision: -, Pages: 9.

Document No. DS_Floats_EN, Technical Information Float, Revision: -, Pages: 56.

Document No. DS_Indication_Rails_2015_05_26_E, Technical Information Indication Rails, Revision: 24.07.2012 Oe, Pages: 11.

Document No. DS_Insulations_Heating_Systems_E_2009_03_20, Technical Information Insulation Heating 20060307/40, Revision: -, Pages: 8.

Document No. DS_Magnetic_Switches_E_2016_05_23, Technical Information Magnetic Switches, Revision: -, Pages: 29.

Document No. DS_VLI_Smart_2015_10_06_E, Technical Information Smart Line, Revision: -, Pages: 10.

Document No. DS_VLI_Standard_2011_02_03_E, Technical Information Standard, Revision: -, Pages: 20.

Document No. DS_VLI_Top_of_Tank_Line_20150826_E, Technical Information Top of Tank Line, Revision: -, Pages: 15.

Document No. TD, Technical Drawings, Revision: -, Pages: 24.

Document No. 34110-KB, Technical Drawing 34110-KB, Revision: -, Pages: 1.

Document No. 34110-OB, Technical Drawing 34110-OB, Revision: -, Pages: 1.

Document No. 39977, Technical Drawing Measuring Scale 39977, Revision: -, Pages: 1.

Document No. 39765, Technical Drawing Measuring Scale 39765, Revision: -, Pages: 1.

Document No. Installation Manual, Installation and Operation Instructions, Revision: -, Pages: 2.

WEKA AG
SCHUERLISTR. 8
BAERETSWIL
Switzerland CH-8344
Telephone: 41-43-833-43-43
Fax: 41-43-833-43-49
Email: info@weka-ag.ch
Web: www.weka-ag.ch

Tier: 2 - PDA Issued

Document No. TR Shock of 3 Jun 1986, Test Report Shock of 3 Jun 1986, Revision: -, Pages: 14.
Document No. TR of 9 July 1984, Test Reports of 9 July 1984, Revision: -, Pages: 36.

Terms of Validity:

This Product Design Assessment (PDA) Certificate 16-HG1563187-PDA, dated 02/Nov/2016 remains valid until 01/Nov/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

2016 Steel Vessel Rules 1-1-4/7.7, 1-1-Appendix 3 and 4, 4-6-2/9.11.3, 4-6-4/13.5.6(b)/ 15.3.4(b), 4-9-8/ 7/ 13, Guide for Passenger Vessels, Section 5/11.9.

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA

Additional Product Details

WEKA AG
PDA Certificate No. 16-HG1563187-PDA

Magnetic Liquid Level Indicator

Model Name: WEKA Standard / Smart / Economy Line

Magnetic Level Indicators					
Product No.	Product Type	Rating	Operating Pressure	Design Temperature	Material
23013	Top of Tank Line, SS	min. IP54	PN6	-80 °C ... +400 °C	Stainless Steel 316 / 316 L
25270	Top of Tank Line, SS	min. IP54	PN6, PN28, PN50	-80 °C ... +400 °C	Stainless Steel 316 / 316 L
34000E-A 34000E-K 23614E-A 23614E-K	Economy Line 6	IP54	PN6	-40 °C ... +100 °C	Stainless Steel 316 / 316 L
34000-A 34000-B 34000-K 34000-O 34110-K 34110-O	Smart Line 50	min. IP65	PN50	-80 °C ... +250 °C	Stainless Steel 316 / 316 L
23614-A 23614-B 23614-K 23614-O	Standard 6	min. IP54	PN6	-80 °C ... +150 °C	Stainless Steel 316 / 316 L
34300-A 34300-B 34300-K 34300-O	Standard 28	min. IP54	PN28	-100 °C ... +400 °C	Stainless Steel 316 / 316 L
32755-A 32755-B 32755-K 32755-O	Standard 50	min. IP54	PN50	-80 °C ... +400 °C	Stainless Steel 316 / 316 L

Magnetic Switches						
Product No.	Product Type	Rating	Contact Rating	Ambient Temperature	Housing	Certified
31160-NN	Change-over, bistable Standard with plastic cable gland	IP68 - 5bar	max. 230 V	-20 °C ... +80 °C	Stainless Steel 316 / 316 L	n/a
31160-ND	Change-over, bistable Flameproof enclosure	IP66 & IP68 - 10bar	max. 230 V	-20 °C ... +80 °C	Stainless Steel 316 / 316 L	II 2 G Ex d IIC T6 Gb / II 2 D T85°C Ex tb IIIC
31160-NI	Change-over, bistable, intrinsically safe	IP68 - 10bar	max. 230 V	-20 °C ... +65 °C	Stainless Steel 316 / 316 L	II 2 G Ex ia IIC T6 Gb / II 2 D Ex iaD IIIC T85°C
31160-NP	Change-over, bistable Standard with connector M12 A	IP68 - 5bar	max. 230 V	-20 °C ... +80 °C	Stainless Steel 316 / 316 L	n/a