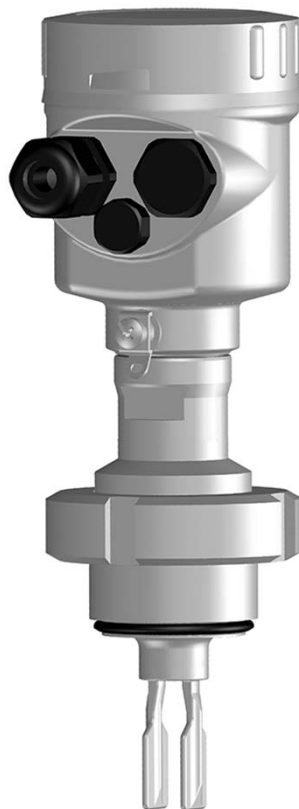


Hygienic Instruction

EHEDG, Installation and Cleaning Instructions

VEGASWING 51, 53, 61, 63

Hygienic process fittings



Document ID: 35487



VEGA

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1 About this document

1.1 Function

This manual provides you with the most important information for the use of VEGASWING level switches according to "EHEDG Doc. 2, Doc. 8, Doc. 10".

1.2 Scope

These instructions apply to limit switches VEGASWING with hygienic process fittings and seals. You can find the fittings and seals in the manufacturer declaration of this document.

2 EHEDG-Standards - Meaning and implementation

Meaning of EHEDG

The European Hygienic Engineering & Design Group (EHEDG) is a consortium of equipment and food manufacturers, food industry suppliers, research institutes and universities. The main objective is to promote safe food by improving hygiene technology and design in all areas of food production. To this end, the EHEDG has drawn up guidelines for the hygienic design of machines and plants as well as the infrastructure of food production.

Use of instruments according to EHEDG

For use according to EHEDG, increased or special requirements apply compared to standard applications. This applies in particular to:

- Version of the housing (e.g. easy cleaning)
- Configuration of the process fitting (e.g. visibility of possible leakage)
- Seals (e.g. according to FDA and EG1935/2004, or resistant to process and cleaning media)
- Installation position on the vessel (e.g. self-drainage)
- Cleaning and maintenance (e.g. intervals, methods)

The EHEDG logos prove that the device version has been tested and certified. The certificate always refers to a combination of sensor and process fitting.

3 Instrument versions

Process fittings

Only process fittings listed in chapter "*Manufacturer declaration*" may be used for installations according to EHEDG standards.

They meet the hygienic requirements of EHEDG standards Doc. 2 and 8.

Seals

For use according to EHEDG standard, only seals in original size and made of EHEDG conform materials must be used where in contact with the medium.

4 Mounting

Note the following items for a measuring point according to EHEDG standard:

- All parts of the measuring point must comply with EHEDG
- The mounting position must allow the self-drainage of the sensor as well as the hole for leakage detection
- The hole for leakage detection in the process fitting must be visible after mounting and possibly point vertically downward
- Welded connections must have a surface roughness $R_a \leq 0.8 \mu\text{m}$
- Welding sockets must be welded flush with the inside of the vessel. The welding standard AWS D18.3 must be observed for hygienic welding

Installation position

The following illustration shows for allowed mounting positions for hygienic processes in flow direction.



2 Flow direction

Socket

If possible, the front-flush installation position should be preferred. If this is not possible, a longer or more difficult cleaning has to be expected.

Such difficult-to-clean spots must be taken into account by the operator for cleaning validation.

In cases where mounting in pipe sockets cannot be avoided, short sockets should be used.

Acc. to 3-A Standard 00- the height of the socket (h) can be at most twice as large as the difference between the sensor and the pipe inner diameter.

The following formula is applicable: $h = (D - d) \cdot 2$

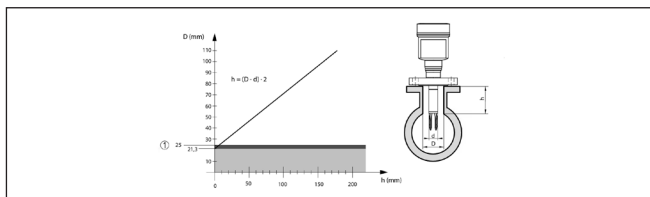


Fig. 1: Socket table

h Permissible socket height (sealing surface to tube inner diameter)

D Socket inner diameter

d Sensor diameter: 21.3 mm (0.84 in)

1 Technical lower limit of the socket inner diameter: DN 25, 1"

For EHEDG, note that the formula $h = (D - d)$ must be used. Compared to 3-A, only half as high a socket is allowed as with EHEDG (see EHEDG Position Paper V5, June 2019).

Housing

For hygienical reasons, the following single chamber housings are recommended.

- Aluminium single chamber housing
- Stainless steel single chamber housing - precision casting
- Plastic single chamber housing

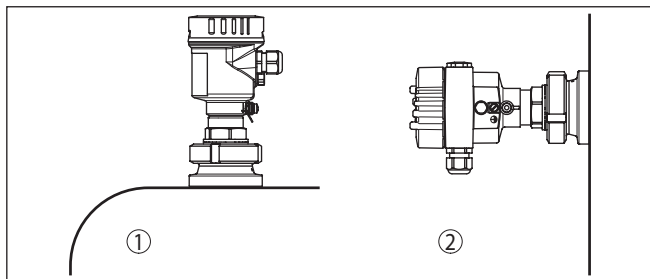


Fig. 2: Housing

- 1 Vertical mounting only with stainless steel housing, electropolished
- 2 Lateral mounting also with other single chamber housings possible (e.g. aluminium single chamber housing)

If the sensor should be mounted vertically, is recommended the stainless steel housing, electropolished.

5 Maintenance, cleaning

Maintenance

It is the responsibility of the user to ensure the hygienically safe condition of the sensor during its entire service life.

This includes selecting the seal material according to process specific requirements. A leaky seal represents a hygienic risk. To avoid this, the seals should be replaced with new ones at regular intervals and the sensor checked for damage. The accessible surface must be cleaned carefully when the seal is exchanged.

The user plans the intervals according to the process conditions and seal materials.

Cleaning

The sensor should be kept clean by using validated, state-of-the-art cleaning processes. Success should be checked by dismounting the sensor. The user is responsible for ensuring that the seal material as well as the sensor itself are resistant to the medium and the cleaning process. Resistance lists as well as the technical data of the respective sensor can serve as a basis for selection.

6 Manufacturer declaration

We hereby declare that the instrument and process fitting combinations of the following versions of VEGASWING meet the requirements of EHEDG Doc. 2, Doc. 8 and Doc. 10 as well as EHEDG Position Paper V5.

VEGASWING 51, 53

In the version SG51(*).H[ab]*****

In the version SG53(*).H[ab]*****

[ab]: 2-digit alphanumeric code to define allowed Process Connections.

Clamp (DIN32676, ISO2852)

[ab] = [CM, CN]

(Only in combination with Tri-Clamp seals Combifit International B.V., The Netherlands)

DIN 11851

[ab] = [RM, RN]

(only in combination with ASEPTO-STAR k-flex upgrade gaskets Kieselmann GmbH, Germany)

Hygienic Fitting with compression nut:

[ab] = [LA]

VEGASWING 61, 63

In the version SWING61(*)[abc]****(*)**

In the version SWING63(*)[abc]****(*)**

[abc]: 3-digit alphanumeric code to define allowed Process Connections.

Clamp (DIN32676, ISO2852)

[abc] = [CCN, CCA, CCB, CCP, CC1, CBN, CBB, CBA, CBP, CB1, CG1, CAN, CAA, CAB, CA2, CAP, CA1, CFP, CDN, CDP, CEN, CE1, CEP]

(Only in combination with Tri-Clamp seals Combifit International B.V., The Netherlands)

DIN 11864-1

[abc] = [RPA, RPP, RCA, RFP, RGP, RCI, RDI, RDA, RDP, RAC, RBC]

DIN 11864-2

[abc] = [SLP, SLN, STN, STP, RSP, STO, SGE, SK6, SKA, SK2, S7P, RWP, SHP, SK5, SD1, LFP, SK1, LFV, SK3, SK4, SJP]

DIN 11864-3

[abc] = [SGD, LVP, LDP, LEP, LHP, LFV]

Varivent

[abc] = [TAN, TAA, TAY, TAP, TNP]

Bioconnect

[abc] = [DBI, SBA, SEI, SFP]

Hygienic Fitting with compression nut:

[abc] = [LAN, LAP]

DIN 11851

[abc] = [REN, REP, RCN, RCP, RAN, RAP, RBN, RBP, RAE, RHP]

(only in combination with ASEPTO-STAR k-flex upgrade gaskets
Kieselmann GmbH, Germany)

7 Certificate

CERTIFICATE OF COMPLIANCE



EL Class I

Date of issue: 12 December 2017

Valid until: 12 December 2022

EHEDG hereby declares that the product

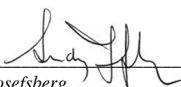
Level sensor VEGASWING Series SWING61, SWING63 & SG51 with EHEDG approved process connections

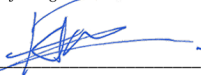
from

VEGA Grieshaber KG, Am Hohenstein 113, 77761 Schiltach, Germany

has/have been evaluated for compliance and meets/meet the current criteria for Hygienic Equipment Design of the EHEDG

Certificate No. Actalia-2/2017

Signed  President EHEDG
Ludvig Josefsberg

Signed  EHEDG Certification Officer
Kartlijn Faber

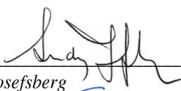
EHEDG
Gooimeer 1
1411 DC Naarden
Netherlands


©EHEDG



CERTIFICATE OF COMPLIANCE

**EL Class I****Date of issue: 30 April 2020****Valid until: 31 December 2022***EHEDG hereby declares that the product***VEGASWING 53***from**VEGA Grieshaber KG, Am Hohenstein 113, 77761 Schiltach, Germany**has/have been evaluated for compliance and meets/meet the current criteria for
Hygienic Equipment Design of the EHEDG***Certificate No. EHEDG-C2000019**

Signed  President EHEDG
Ludvig Josefsberg

Signed  EHEDG Certification Officer
Karljnt Faber

EHEDG
Gooimeer 1
1411 DC Naarden
Netherlands

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Appendix 3

EHEDG Certification – Equipment Evaluation Form

Date: 14.11.2019

EHEDG File Number: EHEDG- C2000019

Certification Type: EL CLASS I

Applicant: VEGA Grieshaber KG
Equipment : Level sensor

Type or model No/s.: VEGASWING 53
Other essential identification:

Evaluated by:

Name: Nicolas ROSSI [AEO]

Approved by:

Name: Alan Friis

Title: [AEO]

Date, Signature: 7/4 - 2020 

<p>1. Results of inspection for compliance with the EHEDG Hygienic Design Criteria. Conclusion:</p> <p>The equipment complies with the criteria.</p> <p>The use of the EHEDG Certification logo is justified:</p>	<p>YES <input type="checkbox"/></p> <p>MAYBE <input checked="" type="checkbox"/></p>
<p>2. Evidence for compliance provided and convincing for Certification. Conclusion:</p> <p>The equipment complies with the criteria where possible.</p> <p>The use of the EHEDG Certification logo is justified:</p>	<p>YES <input checked="" type="checkbox"/></p>

Signature



Date: 27 avril 2020

The original of this form will be kept by EHEDG together with the application, the inspection report, the evidence provided and any other relevant documentation, as listed on the back.

Appendix 3

EHEDG Certification – Equipment Evaluation Form

1	EHEDG Certificate of Compliance
2	Contract to use the EHEDG Certification Logo for equipment
3	Appendix 1: Equipment intended for cleaning in place with liquids without dismantling
4	Appendix 2: Conditions for use of the EHEDG Certification Logo
5	Appendix 3: Equipment evaluation form
6	EHEDG hygienic design criteria evaluation report 001ACT2020
7	Drawings and technical detail of the : MB7356 & GE3114
8	Test report no. 002ACT2017 (2017-3-SE)
9	Example Logo EL class I

Printing date:

VEGA

All statements concerning scope of delivery, application, practical use and operating conditions of the sensors and processing systems correspond to the information available at the time of printing.

Subject to change without prior notice

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