

# CERTIFICATE OF CONFORMITY



1. **ELECTRICAL EQUIPMENT PER US REQUIREMENTS**

2. **Certificate No:** FM16NUS0005
3. **Equipment:  
(Type Reference and Name)** VEGADIS DIS81 & DIS82  
Display and Adjustment Unit
4. **Name of Listing Company:** Vega Grieshaber KG
5. **Address of Listing Company:** Am Hohenstein 113  
Schiltach  
D-77761  
Germany

6. The examination and test results are recorded in confidential report number:  
3056711 dated 26<sup>th</sup> July 2016

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3810:2005, ANSI/NEMA 250:2014, ANSI/IEC 60529:2004, ANSI/ISA 61010-1:2012

8. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

9. **Equipment Ratings:**

Electrically Safe for use in Ordinary Locations, indoors Type 1 and IP40 or indoors and outdoors Type 4X/6P and IP66/IP68.

**Certificate issued by:**



J. E. Marquedant  
Manager, Electrical Systems

26 July 2016  
Date

To verify the availability of the Approved product, please refer to [www.approvalguide.com](http://www.approvalguide.com)

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

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# SCHEDULE



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to US Certificate Of Conformity No: FM16NUS0005

## 10. Description of Equipment:

**General** - The VEGADIS DIS81 Display and Adjustment Units are used for remote operation and visualization of measurement data via connection with the various VEGA sensors (e.g. VEGAPULS radar sensor, VEGAFLEX microwave sensor, VEGASON ultrasonic sensor, VEGABAR pressure sensor) using a BUS signal.

The VEGADIS DIS82 Display and Adjustment Units are used for remote operation and visualization of measurement data and are looped into the signal circuit of the sensor and work without an additional power supply.

Remote sensor adjustment is possible with the VEGADIS by using the display and adjustment module PLICSCOM with magnetic pen and Bluetooth options, or optionally with interface adapter VEGACONNECT and a computer. VEGACONNECT can only be used when it is ensured that no explosive atmosphere is present. Communications options include 4...20mA/HART (VEGADIS DIS82) and I2C digital (VEGADIS DIS81).

**Construction** - The VEGADIS DIS81 and DIS82 Display and Adjustment Unit consists of a single compartment enclosure with an integrated electronics module. The electronics come optionally with PLICSCOM display and adjustment module. For housing model code option "S" with Type 1 and IP40 indoor ratings, the enclosure is plastic and has electrical connections for rack or panel mounting. All other housing options have Type 6P and IP66/IP68 indoor and outdoor ratings, and the enclosure is constructed of Aluminum or Stainless Steel, with a threaded cover with optional glass display window, and has two (2) M20x1.5 or ½ inch NPT openings for electrical connections.

**Ratings** - The VEGADIS DIS81 Display and Adjustment Units operate at  $U \leq 6.4V$  DC and  $P = 500mW$ . The VEGADIS DIS82 Display and Adjustment Units operate at  $U \leq 35 V$  DC and  $I = 3.5$  to  $22.5$  mA. The transmitters are intended for use in an ambient temperature range of  $-40^{\circ}C$  to  $+60^{\circ}C$ .

### **VEGADIS DIS81(\*)*abcdefghi*. Display and Adjustment Unit**

Type 4X6P; IP66/IP68\*\*

a = scope: F

b = approval: X

c = electronics: I

d = housing: A, V, H

e = protection: N

f = cable entry / connection: D, 1, N, Q or any certified connection or conduit system that is NRTL listed as suitable for the application

g = adjustment and indication unit PLICSCOM: X, A, F, K, U, E, H

h = kind of mounting: E, A, D

i = certificates: M, X

*\*Optional alphanumeric character not relevant to safety*

*\*\*IPX8 ratings based on a submersion depth of 2 meters for 30 minutes.*

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## **VEGADIS DIS82(\*)*.abcdefghi. Display and Adjustment Unit***

Type 1, Type 4X/6P; IP40, IP66/IP68\*\*;

a = scope: F

b = approval: X

c = electronics: X, H

d = housing: A, V, H, S\*\*\*

e = protection: N, S

f = cable entry / connection: D, 1, N, Q or any certified connection or conduit system that is NRTL listed as suitable for the application

g = adjustment and indication unit PLICSCOM: X, A, F, K, U, E, H

h = kind of mounting: E, A, D, F

i = certificates: M, X

*\*Optional alphanumeric character not relevant to safety*

*\*\*IPX8 ratings based on a submersion depth of 2 meters for 30 minutes.*

*\*\*\*Housing option "S" is rated Type 1 & IP40. All other housings are rated Type 4X/6P & IP66/IP68*

### 11. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

### 12. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

### 13. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
26 <sup>th</sup> July 2016	Original Issue.

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