


Translation

1st Supplement to the EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6
- (3) No. of EC-Type Examination Certificate: **BVS 07 ATEX E 017**
- (4) Equipment: **Vibrating level switch type VEGAWAVE WAVES61.EEJ*T/R***
- (5) Manufacturer: **VEGA Grieshaber KG**
- (6) Address: **Am Hohenstein 113, 77761 Schiltach, Germany**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in the Test and Assessment Report BVS PP 07.2011 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
EN 60079-0:2012 General requirements
IEC 60079-31:2013 Protection by enclosure "t"
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the appendix to this certificate.
- (11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

 **II 1/3D Ex ta/tc IIIC T* Da/Dc**
IP66 * see manual

DEKRA EXAM GmbH
Bochum, dated 2014-04-24

Signed: Dr. Eickhoff

Signed: Schumann

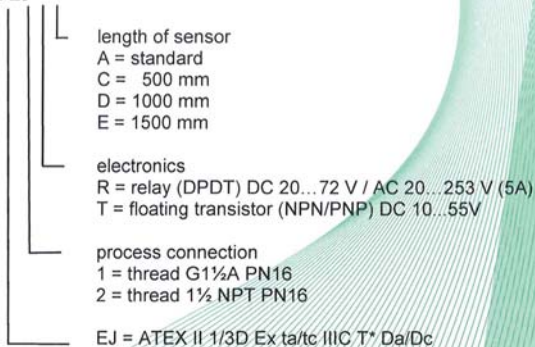
Certification body

Special services unit



- (13) Appendix to
- (14) **1st Supplement to the EC-Type Examination Certificate
BVS 07 ATEX E 017**
- (15) 15.1 Subject and type

Vibrating level switch type
VEGAWAVE WAVES61.E EJ***



15.2 Description

The Vibrating Level Switch type VEGAWAVE WAVES61.EEJ*T/R* is used for level monitoring, controlling and regulating in silos with dust generating material. The probe of the Vibrating Level Switch vibrates at its mechanical resonant frequency. In case the probe is covered with material, the vibration is damped and a switch signal is generated. The enclosure has a separate test report BVS PP 07.2003 EG. The reason for this supplement is a new material for the cover of the enclosure and the updating to the current standards.

15.3 Parameters

15.3.1 Electrical data

15.3.1.1 Type VEGAWAVE WAVES61.EEJ*R*
with electronics insert WE60R built in

supply voltage (terminals 1, 2) or	AC 20...253 V, 50/60 Hz
	DC 20...72 V
power consumption	1...8 VA, max. 1.6 W
relay circuit	
max. values:	253 V, 3 A, 500 VA
	253 V, 1 A, 41 W

15.3.1.2 Type VEGAWAVE WAVES61.EEJ*T*
with electronics insert WE60T built in

supply voltage (terminals 1, 4)	DC 10...55 V
power consumption	max. 0.5 W
load current	max. 400 mA

15.3.2	Thermal data	
15.3.2.1	Permitted process temperature at the probe (category 1D) types VEGAWAVE WAVES61.EEJ*R/T*	- 40 °C...+150 °C
15.3.2.2	Max. surface temperature T at the probe	process temperature + 3 K
15.3.2.3	Permitted ambient temperature at the electronics enclosure (category 3D)	- 30 °C...+ 60 °C
15.3.2.4	Maximum surface temperature at the electronics enclosure with thermo fuse limited to	98 °C
15.3.3	Degrees of protection according to EN 60529	IP66

(16) Test and Assessment Report

BVS PP 07.2011 EG as of 2014-04-24

(17) Special conditions for safe use

None

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH
44809 Bochum, 2014-04-24
BVS-Hk/Ma A20120191



Certification body



Special services unit



Translation

(1) **EC-Type Examination Certificate**

- (2) **- Directive 94/9/EC -**
Equipment and protective systems intended for use
in potentially explosive atmospheres

(3) **BVS 07 ATEX E 017**

(4) **Equipment:** **Vibrations-Grenz-Schalter type VEGAWAVE WAVES61.EEJ*T/R***

(5) **Manufacturer:** **VEGA Grieshaber KG**

(6) **Address:** **77757 Schiltach, Germany**

(7) The design and construction of this equipment and any acceptable variation thereto are specified in the schedule to this type examination certificate.

(8) The certification body of EXAM BBG Prüf- und Zertifizier GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
The examination and test results are recorded in the test and assessment report BVS PP 07.2011 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:

IEC 61241-0:2004 General requirements
EN 61241-1:2004 Protection by enclosure 'tD'

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.
Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate

(12) The marking of the equipment shall include the following:

 **II 1/3 D Ex tD A20/22 IP66 T** see 15.3.2

EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 12. February 2007

Signed: Dr. Jockers

Certification body

Signed: Dr. Eickhoff

Special services unit

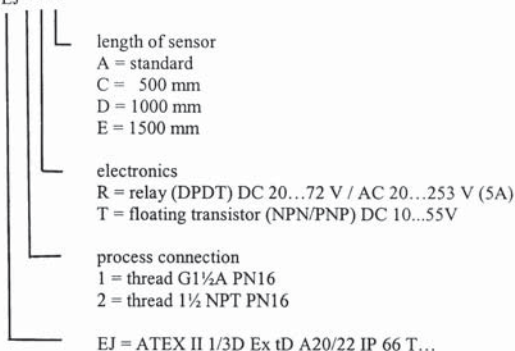
(13) Appendix to

(14) **EC-Type Examination Certificate**

BVS 07 ATEX E 017

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supply voltage	AC 20... 253 V (50/60 Hz)
or	DC 20...72 V
power consumption	1...8 VA, max. 1,6 W
relay circuit	
max. values:	253 V, 3 A, 500 VA
	253 V, 1 A, 41 W

15.3.1.3 Type VEGAWAVE WAVES61.EEJ*T* with electronics insert WE60T built in

supply voltage	DC 10...55 V
power consumption	max. 0,5 W
load current	max.. 400 mA

15.3.2	Thermal data	
15.3.2.1	Permitted process temperature at the probe (category 1D) types VEGAWAVE WAVES61.EEJ*R/T*	- 40 °C... +150 °C
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15.3.2.4	Maximum surface temperature at the electronics enclosure with thermo fuse limited to	98 °C
15.3.3	Degrees of protection according to EN 60529	IP66

(16) Test and assessment report
BVS PP 07.2011 EG as of 12.02.2007

(17) Special conditions for safe use
none

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 12.02.2007
BVS-Hk/Mi A 20060702

EXAM BBG Prüf- und Zertifizier GmbH



Certification body



Special services unit

