IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx BVS 05.0008X **Issue No.:6**	Certificate history: Issue No. 6 (2018-3-14) Issue No. 5 (2015-5-6) Issue No. 4 (2014-11-12) Issue No. 3 (2010-11-22) Issue No. 2 (2010-1-12) Issue No. 1 (2007-11-2) Issue No. 0 (2005-11-15)
Status:	**Current**	
Date of Issue:	**2018-03-14** Page 1 of 4	
Applicant:	**VEGA Grieshaber KG** Am Hohenstein 113 77761 Schiltach **Germany**	
Equipment: *Optional accessory:*	**Radar sensor type VEGAPULS PS6*(*).**********	
Type of Protection:	**Equipment dust ignition protection by enclosure "t"**	
Marking:	Ex ta IIIC T* Da Ex ta/tb IIIC T* Da/Db Ex ta/tc IIIC T* Da/Dc Ex tb IIIC T* Db IP66 *see manual	
Approved for issue on behalf of the IECEx Certification Body:	Jörg Koch	
Position:	Head of Certification Body	
Signature: *(for printed version)*		
Date:	14.3.18	

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 05.0008X

Date of Issue: **2018-03-14** Issue No.: **6**

Manufacturer: **VEGA Grieshaber KG**
Am Hohenstein 113
77761 Schiltach
Germany

Additional Manufacturing location(s):
VEGA Americas, Inc
4241 Allendorf Drive
Cincinnati, Ohio 45209
United States of America

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:
The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:
DE/BVS/ExTR06.0026/06

Quality Assessment Report:

DE/TUN/QAR06.0002/08

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 05.0008X

Date of Issue: **2018-03-14** Issue No.: **6**

Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

General product information

See Annex

Model/Type designation

See Annex

Parameters

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Variants of the radar sensor type VEGAPULS PS6*.CK/GK******* for which aluminium is used shall be installed in such a way that sparking as a result of impact or friction between aluminium and steel (with the exception of stainless steel if the presence of rust particles can be excluded) is excluded.
2. The radar sensor type VEGAPULS PS6*.CK/GK******* shall be installed in such a way that contact between the measuring sensor and the tank wall will be excluded with sufficient safety considering the tank installations and the flow conditions inside the tank. This applies, in particular, to the measuring sensors which are more than 3 m long.

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 05.0008X

Date of Issue: **2018-03-14** Issue No.: **6**

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

- Update to IEC 60079-0 Ed. 6
- Resumption of formerly certified device versions
- PLICSCOM3 added
- VEGAPULS PS69 removed from certificate

Annex: BVS_05_0008X_VEGA_issue6_2.pdf

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 05.0008X issue No.:6**
Annex

General product information:

Radar sensor type (Hardware-Version ≥ 2.00; Software-Version ≥ 4.00)
VEGAPULS PS 62(*). * * * * * * * *

adjustment / indication module
X = without
A = mounted
F = without PLICSCOM, cover with window
B = laterally mounted
K = mounted, with Bluetooth and magnet pin
U = mounted, with Bluetooth and magnet pin (battery)
L = laterally mounted, with Bluetooth and magnet pin
S = laterally mounted, with Bluetooth and magnet pin (battery)

cable entry
M = M20x1.5; N = 1/2"NPT

enclosure
A = aluminium enclosure IP66
H = aluminium enclosure IP66 in special colour
D = aluminium double chamber enclosure IP66
S = aluminium double chamber enclosure IP66 in special colour
V = stainless steel enclosure IP66
W = stainless steel double chamber enclosure IP66

electronics
H = 4...20 mA + HART
P = Profibus PA
F = Foundation Fieldbus
B,I = 4 wire electronics
D = 2 wire electronics 4...20 mA + HART, sensitive version
K = Profibus PA, sensitive version
L = Foundation Fieldbus, sensitive version
G,M = 4 wire electronics, sensitive version

sealing rings/process temperature

2 = FKM+ PTFE	-40 °C...+130 °C
3 = Kalrez 6375 + PTFE	-20 °C...+130 °C
4 = FKM (SHS FPM 70C3GLT) + PTFE not with stream	-40 °C...+200 °C
5 = FKM (Kalrez6375) + PTFE	-20 °C...+200 °C
7 = FFKM (Kalrez 6230) + PTFE (FDA)	-15 °C...+130 °C
9 = FFKM (Kalrez 6230) + PTFE	-40 °C...+200 °C
B = FKM (SHS FPM 70C3GLT) + PP max 3 bar	-40 °C... +80 °C
D = FKM (Kalrez6375) + PP max 3 bar	-20 °C... +80 °C

process connection see manual

version / material
* = with horn antenna or with parabolic antenna / 316L (1.4435) or Alloy C22 (2.4602)

certificate
RX = Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db
DK = Ex d ia IIC T6 [1]
Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db
CK = Ex ia IIC T6... Ga, Ga/Gb, Gb [1]
Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db

optional version differentiation,
without relevance for explosion protection

[1] The assessment for use in explosive gas atmospheres is **not** part of this test report.

Radar sensor type (Hardware-Version ≥ 2.00; Software-Version ≥ 4.00)
VEGAPULS PS 63(*). * * ** * * * *

adjustment / indication module
X = without
A = mounted
F = without PLICSCOM, cover with window
B = laterally mounted
K = mounted, with Bluetooth and magnet pin
U = mounted, with Bluetooth and magnet pin (battery)
L = laterally mounted, with Bluetooth and magnet pin
S = laterally mounted, with Bluetooth and magnet pin (battery)

cable entry
M = M20x1.5; N = 1/2"NPT

enclosure
A = aluminium enclosure IP66
H = aluminium enclosure IP66 in special colour
D = aluminium double chamber enclosure IP66
S = aluminium double chamber enclosure IP66 in special colour
V = stainless steel enclosure IP66
W = stainless steel double chamber enclosure IP66

electronics
H = 4...20 mA + HART
P = Profibus PA
F = Foundation Fieldbus
B,I = 4 wire electronics
D = 2 wire electronics 4...20 mA + HART, sensitive version
K = Profibus PA, sensitive version
L = Foundation Fieldbus, sensitive version
G,M = 4 wire electronics, sensitive version

process connection see manual

version / material
* = with hygienically encapsulated horn antenna

certificate
RX = Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db
DK = Ex d ia IIC T6 [1]
Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db
CK = Ex ia IIC T6... Ga, Ga/Gb, Gb [1]
Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db

optional version differentiation,
without relevance for explosion protection

[1] The assessment for use in explosive gas atmospheres is **not** part of this test report.

Radar sensor type (Hardware-Version ≥ 2.00; Software-Version ≥ 4.00)
VEGAPULS PS 66(*). * * * * * * * *

adjustment / indication module
X = without
A = mounted
F = without PLICSCOM, cover with window
B = laterally mounted
K = mounted, with Bluetooth and magnet pin
U = mounted, with Bluetooth and magnet pin (battery)
L = laterally mounted, with Bluetooth and magnet pin
S = laterally mounted, with Bluetooth and magnet pin (battery)

cable entry
M = M20x1.5; N = 1/2"NPT

enclosure
A = aluminium enclosure IP66
H = aluminium enclosure IP66 in special colour
D = aluminium double chamber enclosure IP66
S = aluminium double chamber enclosure IP66 in special colour
V = stainless steel enclosure IP66
W = stainless steel double chamber enclosure IP66

electronics
H = 4...20 mA + HART
P = Profibus PA
F = Foundation Fieldbus
B,I = 4 wire electronics

sealing rings/process temperature

5 =	EPDM /	-40 °C...+150 °C
2 =	FKM /	-40 °C...+150 °C
3 =	Kalrez 6375 /	-20 °C...+150 °C
G =	graphite and ceramics / with temperature adapter	-60 °C...+250 °C
H =	graphite and ceramics / with temperature adapter	-60 °C...+400 °C

process connection see manual

version / material
* = with horn antenna or parabolic antenna / 316L (1.4435) or Alloy C22 (2.4602)

certificate

RX =	Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db
DK =	Ex d ia IIC T6 [1] Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db
CK =	Ex ia IIC T6... Ga, Ga/Gb, Gb [1] Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db

optional version differentiation,
without relevance for explosion protection

[1] The assessment for use in explosive gas atmospheres is **not** part of this test report.

Radar sensor type (Hardware-Version ≥ 2.00; Software-Version ≥ 4.00)
VEGAPULS PS 67(*). * B ** * * * *

adjustment / indication module
X = without
A = mounted
F = without PLICSCOM, cover with window
B = laterally mounted
K = mounted, with Bluetooth and magnet pin
U = mounted, with Bluetooth and magnet pin (battery)
L = laterally mounted, with Bluetooth and magnet pin
S = laterally mounted, with Bluetooth and magnet pin (battery)

cable entry
M = M20x1.5; N = 1/2"NPT

enclosure
A = aluminium enclosure IP66
H = aluminium enclosure IP66 in special colour
D = aluminium double chamber enclosure IP66
S = aluminium double chamber enclosure IP66 in special colour
V = stainless steel enclosure IP66
W = stainless steel double chamber enclosure IP66

electronics
H = 4...20 mA + HART
P = Profibus PA
F = Foundation Fieldbus
B,I = 4 wire electronics

process connection / material see manual

version / material / process temperature
B = with plastic horn antenna ∅ 80 mm / PP / -40 °C ...+80 °C

certificate
RX = Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db

optional version differentiation,
without relevance for explosion protection

[1] The assessment for use in explosive gas atmospheres is **not** part of this test report.

Radar sensor type (Hardware-Version ≥ 2.00; Software-Version ≥ 4.00)
VEGAPULS PSSR 68(*). * * * * * * * * *
VEGAPULS PS 68(*). * * * * * * * * *

adjustment / indication module
X = without
A = mounted
F = without PLICSCOM, cover with window
B = laterally mounted
K = mounted, with Bluetooth and magnet pin
U = mounted, with Bluetooth and magnet pin (battery)
L = laterally mounted, with Bluetooth and magnet pin
S = laterally mounted, with Bluetooth and magnet pin (battery)

cable entry
M = M20x1,5; N = 1/2"NPT

enclosure
A = aluminium enclosure IP66
H = aluminium enclosure IP66 in special colour
D = aluminium double chamber enclosure IP66
S = aluminium double chamber enclosure IP66 in special colour
V = stainless steel enclosure IP66
W = stainless steel double chamber enclosure IP66

electronics
H = 4...20 mA + HART
P = Profibus PA
F = Foundation Fieldbus
B,I = 4 wire electronics

sealing rings/process temperature

2 = FKM+ PTFE	-40 °C...+130 °C
3 = Kalrez 6375 + PTFE	-20 °C...+130 °C
4 = FKM (SHS FPM 70C3GLT) + PTFE not with steam	-40 °C...+200 °C
5 = FKM (Kalrez6375) + PTFE	-20 °C...+200 °C
7 = FFKM (Kalrez 6230) + PTFE (FDA)	-15 °C...+130 °C
9 = FFKM (Kalrez 6230) + PTFE	-40 °C...+200 °C

process connection see manual

version / material
* = with horn antenna or parabolic antenna / 316L (1.4435) or Alloy C22 (2.4602)

certificate
RX = Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db
DK = Ex d ia IIC T6 [1]
Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db
CK = Ex ia IIC T6... Ga, Ga/Gb, Gb [1]
Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db

optional version differentiation,
without relevance for explosion protection

[1] The assessment for use in explosive gas atmospheres is **not** part of this test report.

Radar sensor type (Hardware-Version ≤ 1.10; Software-Version ≤ 3.90)
VEGAPULS PS 62(*) ********

adjustment / indication module
X = without
A = mounted
F = without PLICSCOM, cover with window
B = laterally mounted
K = mounted, with Bluetooth and magnet pin
U = mounted, with Bluetooth and magnet pin (battery)
L = laterally mounted, with Bluetooth and magnet pin
S = laterally mounted, with Bluetooth and magnet pin (battery)

cable entry
A = M20x1,5; B = 1/2"NPT

enclosure
A = aluminium enclosure IP66
H = aluminium enclosure IP66 in special colour
D = aluminium double chamber enclosure IP66
S = aluminium double chamber enclosure IP66 in special colour
V = stainless steel enclosure IP66
W = stainless steel double chamber enclosure IP66

electronics
H = 2 wire electronics 4...20 mA + HART
D = 2 wire electronics 4...20 mA + HART, sensitive version
V = 4 wire electronics 4...20 mA + HART
E = 4 wire electronics 4...20 mA + HART, sensitive version

sealing rings/process temperature

2 = FKM+ PTFE	-40 °C...+130 °C
3 = Kalrez 6375 + PTFE	-20 °C...+130 °C
4 = FKM (SHS FPM 70C3GLT) + PTFE not with steam	-40 °C...+200 °C
5 = FKM (Kalrez6375) + PTFE	-20 °C...+200 °C
7 = FFKM (Kalrez 6230) + PTFE (FDA)	-15 °C...+130 °C
9 = FFKM (Kalrez 6230) + PTFE	-40 °C...+200 °C
B = FKM (SHS FPM 70C3GLT) + PP max 3 bar	-40 °C... +80 °C
D = FKM (Kalrez6375) + PP max 3 bar	-20 °C... +80 °C

°C

process connection see manual

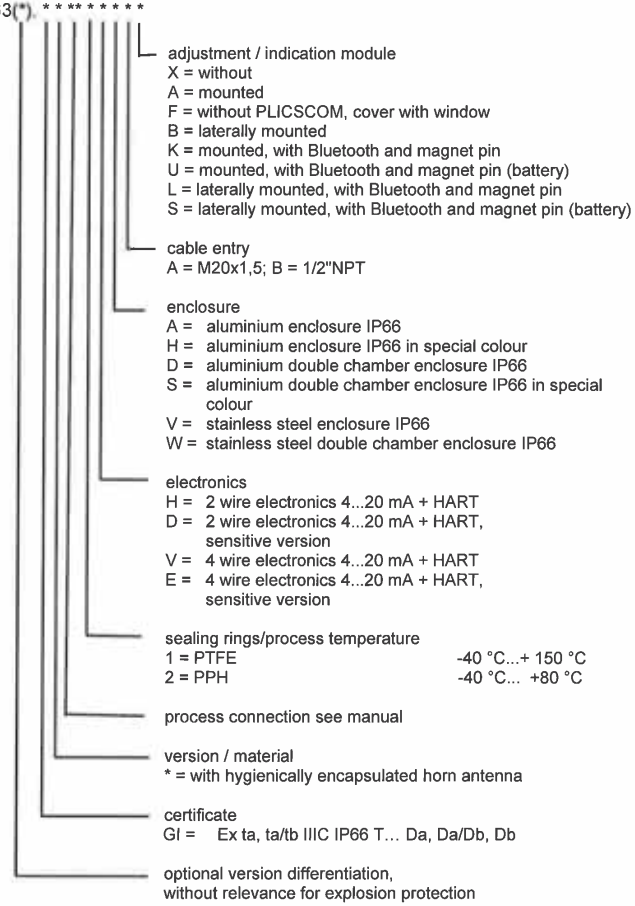
version / material
* = with horn antenna or parabolic antenna / 316L (1.4435) or Alloy C22 (2.4602)

certificate
GI = Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db

optional version differentiation,
without relevance for explosion protection

[1] The assessment for use in explosive gas atmospheres is **not** part of this test report.

Radar sensor type (Hardware-Version ≤ 1.10; Software-Version ≤ 3.90)
VEGAPULS PS 63(*). * * ** * * * * *



adjustment / indication module
X = without
A = mounted
F = without PLICSCOM, cover with window
B = laterally mounted
K = mounted, with Bluetooth and magnet pin
U = mounted, with Bluetooth and magnet pin (battery)
L = laterally mounted, with Bluetooth and magnet pin
S = laterally mounted, with Bluetooth and magnet pin (battery)

cable entry
A = M20x1,5; B = 1/2"NPT

enclosure
A = aluminium enclosure IP66
H = aluminium enclosure IP66 in special colour
D = aluminium double chamber enclosure IP66
S = aluminium double chamber enclosure IP66 in special colour
V = stainless steel enclosure IP66
W = stainless steel double chamber enclosure IP66

electronics
H = 2 wire electronics 4...20 mA + HART
D = 2 wire electronics 4...20 mA + HART, sensitive version
V = 4 wire electronics 4...20 mA + HART
E = 4 wire electronics 4...20 mA + HART, sensitive version

sealing rings/process temperature
1 = PTFE -40 °C...+ 150 °C
2 = PPH -40 °C... +80 °C

process connection see manual

version / material
* = with hygienically encapsulated horn antenna

certificate
GI = Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db

optional version differentiation,
without relevance for explosion protection

[1] The assessment for use in explosive gas atmospheres is **not** part of this test report.

Radar sensor type (Hardware-Version ≤ 1.10; Software-Version ≤ 3.90)
VEGAPULS PS 66(*). * * * * * * * *

adjustment / indication module
X = without
A = mounted
F = without PLICSCOM, cover with window
B = laterally mounted
K = mounted, with Bluetooth and magnet pin
U = mounted, with Bluetooth and magnet pin (battery)
L = laterally mounted, with Bluetooth and magnet pin
S = laterally mounted, with Bluetooth and magnet pin (battery)

cable entry
A = M20x1,5; B = 1/2"NPT

enclosure
A = aluminium enclosure IP66
H = aluminium enclosure IP66 in special colour
D = aluminium double chamber enclosure IP66
S = aluminium double chamber enclosure IP66 in special colour
V = stainless steel enclosure IP66
W = stainless steel double chamber enclosure IP66

electronics
H = 2 wire electronics 4...20 mA + HART
D = 2 wire electronics 4...20 mA + HART, sensitive version
V = 4 wire electronics 4...20 mA + HART
E = 4 wire electronics 4...20 mA + HART, sensitive version

sealing rings/process temperature

5 = EPDM /	-40 °C...+150 °C
2 = FKM /	-40 °C...+150 °C
3 = Kalrez 6375 /	-20 °C...+150 °C
G = graphite and ceramics /	-60 °C...+250 °C
H = graphite and ceramics /	-60 °C...+400 °C

process connection see manual

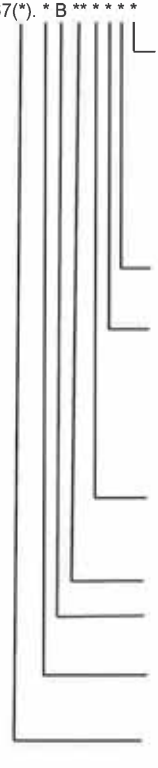
version / material
* = with horn antenna or parabolic antenna / 316L (1.4435) or Alloy C22 (2.4602)

certificate
GI = Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db

optional version differentiation,
without relevance for explosion protection

[1] The assessment for use in explosive gas atmospheres is **not** part of this test report.

Radar sensor type (Hardware-Version ≤ 1.10; Software-Version ≤ 3.90)
VEGAPULS PS 67(*). * B ** * * * *



adjustment / indication module
X = without
A = mounted
F = without PLICSCOM, cover with window
B = laterally mounted
K = mounted, with Bluetooth and magnet pin
U = mounted, with Bluetooth and magnet pin (battery)
L = laterally mounted, with Bluetooth and magnet pin
S = laterally mounted, with Bluetooth and magnet pin (battery)

cable entry
M = M20x1,5; N = 1/2"NPT

enclosure
A = aluminium enclosure IP66
H = aluminium enclosure IP66 in special colour
D = aluminium double chamber enclosure IP66
S = aluminium double chamber enclosure IP66 in special colour
V = stainless steel enclosure IP66
W = stainless steel double chamber enclosure IP66

electronics
H = 2 wire electronics 4...20 mA + HART
V = 4 wire electronics 4...20 mA + HART

process connection / material see manual

version / material / process temperature
B = with plastic horn antenna ∅ 80 mm / PP / -40 °C…+80 °C

certificate
GI = Ex ta, ta/tb IIIC IP66 T… Da, Da/Db, Db

optional version differentiation,
without relevance for explosion protection

[1] The assessment for use in explosive gas atmospheres is **not** part of this test report.

Radar sensor type (Hardware-Version ≤ 1.10; Software-Version ≤ 3.90)
VEGAPULS PS 68(*). * * * * * * * *

adjustment / indication module
X = without
A = mounted
F = without PLICSCOM, cover with window
B = laterally mounted
K = mounted, with Bluetooth and magnet pin
U = mounted, with Bluetooth and magnet pin (battery)
L = laterally mounted, with Bluetooth and magnet pin
S = laterally mounted, with Bluetooth and magnet pin (battery)

cable entry
A = M20x1,5; B = 1/2"NPT

enclosure
A = aluminium enclosure IP66
H = aluminium enclosure IP66 in special colour
D = aluminium double chamber enclosure IP66
S = aluminium double chamber enclosure IP66 in special colour
V = stainless steel enclosure IP66
W = stainless steel double chamber enclosure IP66

electronics
H = 2 wire electronics 4...20 mA + HART
D = 2 wire electronics 4...20 mA + HART, sensitive version
V = 4 wire electronics 4...20 mA + HART
E = 4 wire electronics 4...20 mA + HART, sensitive version

sealing rings/process temperature

2 = FKM+ PTFE	-40 °C...+130 °C
3 = Kalrez 6375 + PTFE	-20 °C...+130 °C
4 = FKM (SHS FPM 70C3GLT) + PTFE not with steam	-40 °C...+200 °C
5 = FKM (Kalrez6375) + PTFE	-20 °C...+200 °C
7 = FFKM (Kalrez 6230) + PTFE (FDA)	-15 °C...+130 °C
9 = FFKM (Kalrez 6230) + PTFE	-40 °C...+200 °C

process connection see manual

version / material
* = with horn antenna or parabolic antenna / 316L (1.4435) or Alloy C22 (2.4602)

certificate
GI = Ex ta, ta/tb IIIC IP66 T... Da, Da/Db, Db

optional version differentiation,
without relevance for explosion protection

[1] The assessment for use in explosive gas atmospheres is **not** part of this test report.

Parameters

4.1 Hardware-Version ≥ 2.00; Software-Version ≥ 4.00

4.1.1 Electrical data

VEGAPULS PS62/63(*).RX***D/H/K/L/P/F*** VEGAPULS PS67(*).RX**H/P/F*** VEGAPULS PS66/68(*).RX***H/P/F*** VEGAPULS PSSR68(*).RX***H/P/F*** Supply terminals 1 [+], 2 [-] in the electronics compartment or in the terminal compartment regarding the two cell enclosure version	U = 9.6 .... 30 V DC U_m = 30 V DC
VEGAPULS PS62/63(*).RX ***B/G*** VEGAPULS PS66/68(*).RX***B*** VEGAPULS PSSR68(*).RX***B*** VEGAPULS PS67(*).RX**B*** supply (terminals 1, 2 in the terminal compartment) output	AC 90...253 V, 50/60 Hz U_m = 253 V AC 4...20 mA with superposed HART-signal
(terminals 5[+], 7[-] in the terminal compartment) passive signal current, input	4...20 mA with superposed HART-signal
(terminals 6[+], 7[-] in the terminal compartment)	
VEGAPULS PS62/63(*).RX***I/M*** VEGAPULS PS66/68(*).RX***I*** VEGAPULS PSSR68(*).RX***I*** VEGAPULS PS67(*).RX**I*** supply (terminals 1, 2 in the terminal compartment)	AC 20...42 V, 50/60 Hz or DC 9,6...48 V U_m = 253 V AC
output (terminals 5[+], 7[-] in the terminal compartment)	4...20 mA with superposed HART-signal
passive signal current, input (terminals 6[+], 7[-] in the terminal compartment)	4...20 mA with superposed HART-signal

VEGAPULS PS62/63(*).RX***D/H/K/L/P/F***
VEGAPULS PS66/68(*).RX***H/P/F***
VEGAPULS PSSR68(*).RX***H/P/F***
VEGAPULS PS67(*).RX**H/P/F***

adjustment and indication circuit	in type of protection Intrinsic Safety Ex ia IIC
(terminals 5, 6, 7, 8 in the electronics	only for connection to the intrinsically safe circuit of the compartment) associated VEGA adjustment and indication unit VEGADIS61 according to PTB 02 ATEX 2136X and BVS 05 ATEX E 023
	$L_{Kabel - cable} \leq$ 310 µH
	$C_{Kabel - cable} \leq$ 2,0 µF
adjustment and indication circuit	in type of protection Intrinsic Safety Ex ia IIC
(spring contacts in the electronics compartment)	only for connection to the intrinsically safe VEGA adjustment and indication unit (PLICSCOM) or VEGACONNECT4 (PTB 07 ATEX 2013X).

VEGAPULS PS62/63(*).RX***G/M/B/I***
VEGAPULS PS66/68(*).RX***B/I***
VEGAPULS PSSR68(*).RX***B/I***
VEGAPULS PS67(*).RX**B/I***

adjustment and indication circuit	in type of protection Intrinsic Safety Ex ia IIC
(spring contacts in the electronics compartment)	only for connection to the intrinsically safe VEGA adjustment and indication unit (PLICSCOM) or VEGACONNECT4 (PTB 07 ATEX 2013X).

4.1.2 Thermal data

4.1.2.1 Permitted process temperature at the probe

VEGAPULS PS62(*).***X****

X:	2 = FKM(SHS FPM 70C3 GLT) + PTFE /	-40 °C...+130 °C
	3 = Kalrez 6375 + PTFE /	
	6 = Kalrez 2035 + PTFE /	-15 °C...+130 °C
	7 = Kalrez 6230 + PTFE /	-15 °C...+130 °C
	A = FKM(SHS FPM 70C3 GLT)+PEEK /	-40 °C...+200 °C
	C = Kalrez 2035 + PEEK /	-15 °C...+210 °C
	E = Kalrez 6230 + PEEK /	-15 °C...+250 °C
	F = Kalrez 6375 + PEEK /	-20 °C...+250 °C
	H =Grafit und Keramik /	-196 °C...+450 °C

VEGAPULS PS63(*).*X*****

X:	N = PTFE /	-40 °C...+200 °C
	J = PTFE	-196 °C...+200 °C
	R = PTFE (8mm)	-40 °C...+200 °C
	L = PFA	-40 °C...+200 °C
	M = PFA (8mm)	-40 °C...+200 °C
	V = PTFE + FKM	-20 °C...+130 °C
	E = PTFE + EPDM	-40 °C...+130 °C
	U = PTFE (8mm)	-196 °C...+200 °C

VEGAPULS PS66(*).****X****		
X:	2 = FKM (A+P GLT FPM 70.16-06) /	-40 °C...+150 °C
	3 = Kalrez 6375 /	-20 °C...+150 °C
	5 = EPDM /	-40 °C...+150 °C
	G = graphite and ceramics / with temperature adapter	-60 °C...+250 °C
	H = graphite and ceramics / with temperature adapter	-60 °C...+400 °C
VEGAPULS PS67(*).*X*****		
X:	B = PP /	-40 °C...+80 °C
VEGAPULS PS68.***X****		
X:	2 = FKM (SHS FPM 70C3 GLT) + PTFE /	-40 °C...+130 °C
VEGAPULS PSSR68(*).***X****		
X:	3 = Kalrez 6375 + PTFE /	-20 °C...+130 °C
	7 = Kalrez 6230 + PTFE /	-15 °C...+130 °C
	A = FKM (SHS FPM 70C3 GLT) + PEEK /	-40 °C...+200 °C
	C = Kalrez 2035 + PEEK /	-15 °C...+210 °C
	E = Kalrez 6230 + PEEK /	-20 °C...+250 °C
	F = Kalrez 6375 + PEEK /	-20 °C...+250 °C
	H = graphite and ceramics /	-196 °C...+450 °C

4.1.2.2 Permitted ambient temperature at the electronics enclosure -40 °C...+ 60 °C

4.1.2.3 Maximum surface temperature
The max. surface temperature is the higher one of the following:

Maximum surface temperature at the probe

process temperature + 2 K

Maximum surface temperature at the electronics enclosure for installation in Zone 20

VEGAPULS PS62/63(*).RX ***D/K/L***	ambient temperature + 86 K
VEGAPULS PS62/63/66(*).RX ***H/P/F***	ambient temperature + 86 K
VEGAPULS PS/PSSR68(*).RX ***H/P/F***	ambient temperature + 86 K
VEGAPULS PS67(*).RX**H/P/F***	ambient temperature + 86 K
VEGAPULS PS62/63(*).RX***G/M***	with thermo fuse limited to 102 °C
VEGAPULS PS62/63/66(*).RX***B/I***	with thermo fuse limited to 102 °C
VEGAPULS PS/PSSR68(*).RX***B/I***	with thermo fuse limited to 102 °C
VEGAPULS PS67(*).RX**B/I***	with thermo fuse limited to 102 °C

Maximum surface temperature at the electronics enclosure for installation in Zone 20 / 21, 20 / 22, 21

VEGAPULS PS62/63(*).RX ***D/K/L***	ambient temperature + 36 K
VEGAPULS PS62/63/66(*).RX ***H/P/F***	ambient temperature + 36 K
VEGAPULS PS/PSSR68(*).RX ***H/P/F***	ambient temperature + 36 K
VEGAPULS PS67(*).RX**H/P/F***	ambient temperature + 36 K
VEGAPULS PS62/63(*).RX***G/M***	with thermo fuse limited to 102 °C
VEGAPULS PS62/63/66(*).RX***B/I***	with thermo fuse limited to 102 °C
VEGAPULS PS/PSSR68(*).RX***B/I***	with thermo fuse limited to 102 °C
VEGAPULS PS67(*).RX**B/I***	with thermo fuse limited to 102 °C

4.1.3 Degrees of protection according to EN 60529 IP66

4.2 Hardware-Version ≤ 1.10; Software-Version ≤ 3.90

4.2.1 Electrical data

4.2.1.1 VEGAPULS PS66/68.GI ***V***
VEGAPULS PS62/63.GI ***E/V***
VEGAPULS PS67.GI**V***

supply (terminals 1, 2 in the terminal compartment)	AC 20...253 V, 50/60 Hz or DC 20...253 V P_{max} ≤ 1W
output (terminals 3, 4 in the terminal compartment)	4...20 mA with superposed HART-signal

4.2.1.2 VEGAPULS PS66/68(*).GI***H***
VEGAPULS PS62/63(*).GI***D/H***

Supply and signal circuit terminals 1 [+], 2 [-] in the electronics circuit compartment or in the terminal compartment regarding the two cell enclosure version	in type of protection Intrinsic Safety Ex ia IIC only for connection to a certified intrinsically safe with the following maximum values: U_i = 30 V I_i = 131 mA P_i = 983 mW linear characteristics L_i ≅ 5 µH C_i negligible

4.2.2 Thermal data

4.2.2.1 Permitted process temperature at the probe

VEGAPULS PS62.***X****	X:	2 = Viton	-30 °C...+130 °C
VEGAPULS PS62(*).***X****		3 = Kalrez 6375	-20 °C...+150 °C
		4 = Viton with temperature adapter	-40 °C...+200 °C
		5 = Kalrez 6375 with temperature adapter	-20 °C...+200 °C
		7 = Kalrez 6230 + PTFE (FDA)	-15 °C...+130 °C
		9 = Kalrez 6230 + PTFE with temperature adapter	-15 °C...+200 °C
		B = FKM(SHS FPM 70C3 GLT)+PP max. 3 bar	-40 °C... +80 °C
		D = Kalrez 6375 + PP max. 3 bar	-40 °C... +80 °C
VEGAPULS PS63.***X****	X:	N = PTFE /	-40 °C...+200 °C
VEGAPULS PS63(*).***X****		J = PTFE	-196 °C...+200 °C
		R = PTFE (8mm)	-40 °C...+200 °C
		U = PTFE (8mm)	-196 °C...+200 °C
		A = TFM-PTFE(8mm)	-40 °C...+150 °C
		P = TFM-PTFE	-40 °C...+150 °C
		G = Alloy 400 (2.4360), TFM-PTFE(8mm)	-10 °C...+150 °C
		W = PCTFE(8mm)	-40 °C...+200 °C
		* other horn atennas	

VEGAPULS PS67.*X***** VEGAPULS PS67(*).*X*****	X:	B = PP * other horn atennas	-40 °C…+80 °C
VEGAPULS PS66.****X**** VEGAPULS PS66(*).****X****	X:	2 = Viton 3 = Kalrez 6375 5 = EPDM (A+P 75.5/KW75F) G = graphite and ceramics with temperature adapter H = graphite and ceramics with temperature adapter	-30 °C…+130 °C -20 °C…+150 °C -40 °C…+150 °C -60 °C…+250 °C -60 °C…+400 °C
VEGAPULS PS68.***X**** VEGAPULS PS68(*).***X****	X:	2 = Viton 3 = Kalrez 6375 4 = Viton with temperature adapter 5 = Kalrez 6375 with temperature adapter 7 = Kalrez 6230 + PTFE (FDA) 9 = Kalrez 6230 + PTFE with temperature adapter	-40 °C…+130 °C -20 °C…+150 °C -40 °C…+200 °C -20 °C…+200 °C -15 °C...+130 °C -15 °C...+200 °C

4.2.2.2 The max. surface temperature is the higher one of the following:

Permitted process temperature at the probe
process temperature +2 K

Permitted ambient temperature at the electronics enclosure

VEGAPULS PS62/63/66/67/68.GI ****H****	ambient temperature + 43 K
VEGAPULS PS62/63.GI ****D****	ambient temperature + 43 K
VEGAPULS PS62/63/66/67/68.GI****V****	with thermo fuse limited to 98 °C
VEGAPULS PS62/63.GI****E****	with thermo fuse limited to 98 °C

4.2.3 Degrees of protection according to EN 60529 IP66