



WRAS PRODUCT APPROVAL CERTIFICATE

Approval Number
240902039

Field of application	Products complying with the Water Supply (Water Fittings) Regulations 1999 (England & Wales), the Water Supply (Water Fittings) (Scotland) Byelaws 2014 and the Water Supply (Water Fittings) Regulations (Northern Ireland) 2009.
Approval holder	VEGA Grieshaber KG
WRAS directory section	1530
Product type	Miscellaneous Fittings
Model	VEGAPULS C21, VEGAPULS C22, VEGAPULS C23, VEGAPULS 21 & VEGAPULS 31 RADAR SENSORS
Basis of compliance	Regulator Specifications (TCS) / BS Standard
Valid from	September 2024
Date of expiry	September 2029
Authorised by	 Ian Hughes, WRAS Approvals Manager



The certificate by itself is not evidence of a valid WRAS Approval. Confirmation of the current status of an approval must be obtained from the WRAS Approvals Directory



ate issued: 11th September 2024



4th September 2024

VEGA Grieshaber KG
Am Hohenstein 113
77761 Schiltach
Germany

Water Regulations Approval Scheme
Ltd.
Unit 13, Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

Approval Number 240902039

Dear Sir/Madam

Production samples of the products described in the **Approval Information** section below ("Products"), have been subjected to the relevant mechanical and water quality tests as defined in Regulation 4 (2) and Schedule 2 to demonstrate a product is of an **appropriate quality or standard** for the purposes of a WRAS Approval application.

1. After considering the test reports and examining the Product/s, The Water Regulations Approval Scheme Ltd. ("WRAS Ltd" / "WRAS") finds that:

The product is of an appropriate quality and standard as defined in The Water Supply (Water Fittings) Regulations 1999, The Water Supply (Water Fittings) (Scotland) Byelaws 2014, The Water Supply (Water Fittings) Regulations (Northern Ireland) 2009 and all other applicable WRAS requirements,

The non-metallic materials of construction, in contact with the water, are suitable for contact with wholesome water intended for domestic purposes having met the requirements of BS 6920-1: 2014 'Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water'.

2. WRAS Approvals are granted subject to, and in accordance with, the Standard Terms and Conditions of WRAS Approvals Schemes (WRAS.Cust-401) as amended from time to time ("Standard Terms of Approval").

You have confirmed your acceptance of the Standard Terms of Approval by submitting your application for WRAS Approval. A copy of the current Standard Terms of Approval are available from the [WRAS website](#).

Terms defined in the Standard Terms of Approval shall have the same meaning in this letter unless the context otherwise requires.

3. Installation Requirements & Notes (IRNs) are set out in Appendix A. A Product only qualifies for Approval if WRAS is satisfied that the relevant Product complies with Regulation 4(1)(a) and the requirements of the Scheme when installed in accordance with the manufacturer's instructions and any applicable Approval Scheme Installation Requirements and Notes.

Since the incorrect installation of Products will not be within the scope of an approval and may result in contravention of the Regulations or Byelaws requirements, **the attention of your customers should be drawn to any IRNs applied.**

4. Please note that the use of the Products described in any particular area of supply is at the discretion of the Water Company (water undertaker) in that area.
5. Approval Holders may quote in their sales literature that their product is WRAS approved. A WRAS product approval demonstrates that a water fitting is of a suitable quality and standard, provided that it meets the requirements of the Scheme when installed in accordance with the manufacturer's instructions and any applicable Approval Scheme Installation Requirements and Notes
6. The "WRAS Approved Product" logos are certification marks registered under the Trade Marks Act 1994 ("Certification Marks"). Approval Holders may use the Certification Marks in accordance with the Standard Terms of Approval.
7. Please verify the details of your Product as set out in the approval information and advise us of any discrepancies by no later than **4th October 2024**.

Yours Faithfully

Ian Hughes
WRAS Approvals Manager

APPROVAL INFORMATION

Validity dates: This approval is valid for fittings (as listed below in model) manufactured AND installed between September 2024 & September 2029

Section Number: **1530**

Section title: **MISCELLANEOUS FITTINGS**

Installation requirement notes: **R001**
(IRN's are set out in Appendix A)

Product description: Range of VEGAPULS radar sensors for level measurement with plastic bodies.

Cold water use only.
Open outlet use only.

Size: See model key

Identification Marking: VEGA logo date of manufacturer (YYYY), serial number and other technical data on body

Manufacturer: VEGA Grieshaber KG

Model: PSC21.ab-c-d-N-f-g-h-I VEGAPULS C 21
PSC22.ab-c-d- N -f-g-h-I VEGAPULS C 22
PSC23.ab-c-d- N -f-g-h-I VEGAPULS C 23
PS21.ab-c-d- N -f-g-h-I VEGAPULS 21
PS31.ab-c-d- N -f-g-h-I VEGAPULS 31

KEY FOR VEGAPULS C 21

ab = explosion protection, which can be displayed as;

XX without, for Ex-free area (CE, UKCA, RCM, EAC)

VH ATEX/UKEX/IEC/c-FM-us/c-CSA-us; Gas, intrinsic safety, Zone 0, 0/1, 1, 2 (Class I Division 1, 2) + Dust, intrinsic safety, Zone 20, 20/21, 21, 22 (Class II, III Division 1, 2)

VB ATEX/UKEX/IEC; Gas, Encapsulation, Zone 1, 2 + Dust, Protection by enclosure, Zone 20, 21/22, 21, 22

SH EAC/SEPRO; Gas, intrinsic safety; Zone 0, 0/1, 1, 2 + Dust, intrinsic safety Zone 20, 20/21, 21, 22

SB EAC/SEPRO; Gas, encapsulation, Zone 1, 2 + Dust, encapsulation Zone 21, 22

TH CCOE/NEPSI/KTL/TIIS; Gas, Intrinsic safety, Zone 0, 0/1, 1, 2 + Dust, Intrinsic safety, Zone 20, 20/21, 21, 22 (not CCOE)

TB CCOE, NEPSI, KTL, TIIS; Gas, encapsulation, Zone 1, 2 + Dust, protection by enclosure, Zone 20, 21/22, 21, 22 (not CCOE)

WH INMETRO/IA; Gas, intrinsic safety, Zone 0, 0/1, 1, 2 + Dust, intrinsic safety, Zone 20, 20/21, 21, 22

WB INMETRO/IA; Gas, encapsulation, Zone 1, 2 + Dust, protection by enclosure, Zone 20, 21/22, 21, 22

FB c-FM-us/c-CSA-us; Gas, encapsulation, Zone 1, 2 (Class I Division 2) + Dust, protection by enclosure, Zone 20, 20/21, 21, 22 (Class II, III Division 1)

FR c-FM-us/c-CSA-us; Gas, non-incendive, Class I Division 2 + Dust-ignitionproof, Class II, III Division 1

c = Approved as overflow protection, which can be displayed as;

X without

W with (WHG, VLAREM)

d = Ship approval, which can be displayed as;

X without

S with (CCS, RINA, NK, ABS, DNV GL, LR, BV)

N = Foodstuff / Pharmaceutical certificate, which can be displayed as;

X without

N with (NSF/ANSI/CAN 61)

P with (NIH)

F with (FDA, EG1935/2004)

f = Thread process side / Cable side, which can be displayed as;

G Thread G1½ / G1

N Thread 1½NPT / 1NPT

R Thread R1½ / R1

g = Cable material / Length, which can be displayed as;

A PUR / 5m (approx. 16ft)

B PUR / 10m (approx. 32ft)

H PUR / 15m (appr. 48ft)
J PUR / 20m (appr. 64ft)
C PUR / 25m (approx. 82ft)
D PUR / individually selectable (acc. to CE, RCM, EAC)
D PUR / individually selectable (acc. to c-FM-us, c-CSA-us)

h = Electronics, which can be displayed as;

H Two-wire 4 ... 20 mA/HART
W Four-wire Modbus
S Three-wire SDI12

i = Sensor setting via smartphone and VEGA Tools app, which can be displayed as;

X without
B with
KEY FOR VEGAPULS C 22

ab = Explosion protection, which can be displayed as;
XX without, for Ex-free area (CE, UKCA, c-FM-us, c-CSA-us, RCM, EAC)

VH ATEX/UKEX/IEC/c-FM-us/c-CSA-us; Gas, intrinsic safety, Zone 0, 0/1, 1, 2 (Class I Division 1, 2) + Dust, intrinsic safety, Zone 20, 20/21, 21, 22 (Class II, III Division 1, 2)
VB ATEX/UKEX/IEC; Gas, Encapsulation, Zone 1, 2 + Dust, Protection by enclosure, Zone 20, 21/22, 21, 22
SH EAC/SEPRO; Gas, intrinsic safety; Zone 0, 0/1, 1, 2 + Dust, intrinsic safety Zone 20, 20/21, 21, 22
SB EAC/SEPRO; Gas, encapsulation, Zone 1, 2 + Dust, encapsulation Zone 21, 22
TH CCOE/NEPSI/KTL/TIIS; Gas, Intrinsic safety, Zone 0, 0/1, 1, 2 + Dust, Intrinsic safety, Zone 20, 20/21, 21, 22 (not CCOE)
TB CCOE, NEPSI, KTL, TIIS; Gas, encapsulation, Zone 1, 2 + Dust, protection by enclosure, Zone 20, 21/22, 21, 22 (not CCOE)
WH INMETRO/IA; Gas, intrinsic safety, Zone 0, 0/1, 1, 2 + Dust, intrinsic safety, Zone 20, 20/21, 21, 22
WB INMETRO/IA; Gas, encapsulation, Zone 1, 2 + Dust, protection by enclosure, Zone 20, 21/22, 21, 22
FB c-FM-us/c-CSA-us; Gas, encapsulation, Zone 1, 2 (Class I Division 2) + Dust, protection by enclosure, Zone 20, 20/21, 21, 22 (Class II, III Division 1)
FR c-FM-us/c-CSA-us; Gas, non-incendive, Class I Division 2 + Dust-ignition proof, Class II, III Division 1

c = Approved as overfill protection, which can be displayed as;

X without
W with (WHG, VLAREM)

d = Ship approval, which can be displayed as;

X without
S with (CCS, RINA, NK, ABS, DNV GL, LR, BV)

N = Foodstuff / Pharmaceutical certificate, which can be displayed as:

X without
N with (NSF/ANSI/CAN 61)
P with (NIH)
F with (FDA, EG1935/2004)

f = Process fitting, which can be displayed as;

G Thread G1½
N Thread 1½NPT
R Thread R1½

g = Cable material / length, which can be displayed as;

A PUR / 5m (approx. 16ft)

B PUR / 10m (approx. 32ft)
 H PUR / 15m (appr. 48ft)
 J PUR / 20m (appr. 64ft)
 C PUR / 25m (approx. 82ft)
 D PUR / individually selectable (acc. to CE, RCM, EAC)
 D PUR / individually selectable (acc. to c-FM-us, c-CSA-us)

h = Electronics, which can be displayed as;

H Two-wire 4 ... 20 mA/HART
 W Four-wire Modbus
 S Three-wire SDI12

i = Sensor setting via smartphone and VEGA Tools app, which can be displayed as;

X without
 B with

KEY FOR VEGAPULS C 23

ab = explosion protection, which can be displayed as;

XX without, for Ex-free area (CE, UKCA, RCM, EAC)
 VH ATEX/UKEX/IEC/c-FM-us/c-CSA-us; Gas, intrinsic safety, Zone 0, 0/1, 1, 2 (Class I Division 1, 2) + Dust, intrinsic safety, Zone 20, 20/21, 21, 22 (Class II, III Division 1, 2)
 VB ATEX/UKEX/IEC; Gas, Encapsulation, Zone 1, 2 + Dust, Protection by enclosure, Zone 20, 21/22, 21, 22
 SH EAC/SEPRO; Gas, intrinsic safety; Zone 0, 0/1, 1, 2 + Dust, intrinsic safety Zone 20, 20/21, 21, 22
 SB EAC/SEPRO; Gas, encapsulation, Zone 1, 2 + Dust, encapsulation Zone 21, 22
 TH CCOE/NEPSI/KTL/TIIS; Gas, Intrinsic safety, Zone 0, 0/1, 1, 2 + Dust, Intrinsic safety, Zone 20, 20/21, 21, 22 (not CCOE)
 TB CCOE, NEPSI, KTL, TIIS; Gas, encapsulation, Zone 1, 2 + Dust, protection by enclosure, Zone 20, 21/22, 21, 22 (not CCOE)
 WH INMETRO/IA; Gas, intrinsic safety, Zone 0, 0/1, 1, 2 + Dust, intrinsic safety, Zone 20, 20/21, 21, 22
 WB INMETRO/IA; Gas, encapsulation, Zone 1, 2 + Dust, protection by enclosure, Zone 20, 21/22, 21, 22
 FB c-FM-us/c-CSA-us; Gas, encapsulation, Zone 1, 2 (Class I Division 2) + Dust, protection by enclosure, Zone 20, 20/21, 21, 22 (Class II, III Division 1)
 FR c-FM-us/c-CSA-us; Gas, non-incendive, Class I Division 2 + Dust-ignitionproof, Class II, III Division 1
 c = Approved as overfill protection, which can be displayed as;

X without
 W with (WHG, VLAREM)

d = Ship approval, which can be displayed as;

X without
 S with (CCS, RINA, NK, ABS, DNV GL, LR, BV)

N = Foodstuff / Pharmaceutical certificate, which can be displayed as;

X without
 N with (NSF/ANSI/CAN 61)
 P with (NIH)
 F with (FDA, EG1935/2004)

f = Thread process side / Cable side, which can be displayed as;

F Thread G1
 M Thread 1NPT
 Q Thread R1

g = Cable material / length, which can be displayed as;

A PUR / 5m (approx. 16ft)
 B PUR / 10m (approx. 32ft)
 H PUR / 15m (appr. 48ft)

J PUR / 20m (appr. 64ft)
C PUR / 25m (approx. 82ft)
D PUR / individually selectable (acc. to CE, RCM, EAC)
D PUR / individually selectable (acc. to c-FM-us, c-CSA-us)

h = Electronics, which can be displayed as;

H Two-wire 4 ... 20 mA/HART
W Four-wire Modbus
S Three-wire SDI12

i = Sensor setting via smartphone and VEGA Tools app, which can be displayed as;

X without
B with

KEY FOR VEGAPULS 21 / 31

ab = explosion protection, which can be displayed as;

XX without, for Ex-free area (CE, UKCA, c-FM-us, c-CSA-us, RCM, EAC)
AX without, for Ex-free area (CE, UKCA, RCM)
VC ATEX/UKEX/IEC/c-FM-us/c-CSA-us; Gas, intrinsic safety, Zone 0, 0/1, 1, 2 (Class I Division 1, 2)
SC EAC/SEPRO; Gas, intrinsic safety; Zone 0, 0/1, 1, 2
TC CCOE/NEPSI/KTL/TIIS; Gas, Intrinsic safety, Zone 0, 0/1, 1, 2
WC INMETRO/IA; Gas, intrinsic safety, Zone 0, 0/1, 1, 2

c = Approved as overfill protection, which can be displayed as;

X Without
W With (WHG, VLAREM)

d = Ship approval, which can be displayed as;

X Without
S With (CCS, RINA, NK, ABS, DNV GL, LR, BV)

N = Foodstuff/Pharmaceutical certificate, which can be displayed as

X Without
N With (NSF/ANSI/CAN 61)
P With (NIH)
F With (FDA, EG1935/2004)

f = Process fitting, which can be displayed as;

G Thread G1½
N Thread 1½NPT
R Thread R1½

g = Cable entry / connection, which can be displayed as;

M M20x1.5 / Cable gland PA black (ø5-9mm), standard

h = Electronics, which can be displayed as;

H Two-wire 4 ... 20 mA/HART

i = Sensor setting via smartphone and VEGA Tools app

X Without
B With

