

Попниколова, Петранка А.

From: Богоева, Юлия К.
Sent: 17 ноември 2023 г. 10:16
To: Попниколова, Петранка А.
Сс: Александров, Пламен Г.; Лазарова, Милена Т.
Subject: FW: offer V-23881 RE:Пазарна консултация №52617 с предмет - Доставка на радарни нивомери за измерване на ниво
Attachments: V-23881 АЕЦ КОЗЛОДУЙ VEGA.pdf; 66182-EN-Data-sheet-VEGAPULS-6X-Standard-applications.pdf; PS6X.2SWFBFXAWKMKHAXXXXXXX_2023-50-12-10-50-18.pdf; PS6X.2SWFBFXAWAMKHAXXXXXXX_2023-51-12-10-51-57.pdf; 66081-EN-Operating-Instructions-VEGACONNECT-Wired-interface-adapter-with-connection-box-USB-HART-I²C.pdf; Опис документи.pdf; Letter of Authorization-2024.pdf

ВХ-Е-6928/17.11.2023

From: Hristo Medarov <vega@global-test.eu>
Sent: Friday, November 17, 2023 9:37 AM
To: commercial <commercial@npp.bg>
Сс: Попниколова, Петранка А. <paropnikolova@npp.bg>
Subject: offer V-23881 RE:Пазарна консултация №52617 с предмет - Доставка на радарни нивомери за измерване на ниво

Поздрави,

Дипл. инж. Христо Медаров
Мениджър VEGA, KOBOLD

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ГЛОБАЛ-ТЕСТ ЕООД е сертифицирана по ISO 9001:2015



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Посетете ни и на адрес : www.facebook.com//globaltesteu/

АЕЦ КОЗЛОДУЙ ЕАД

На вниманието на г-жа Петранка Попниколова

Експерт Маркетинг

Пазарна консултация №52617 с предмет "Доставка на радарни датчици за измерване на ниво"
3321 Козлодуй

ОФЕРТА

№: V-23881 Дата: 12-11-2023

№	Кат.№/Вид	Стока	Гаранция	Кол.	Ед.цена	Отст. %	Общо в лева
1	PS6X.2SWF BFXAWKMK HAXXXXXX XX	Радарен нивомер VEGAPULS 6X (Пълен аналог на FMR 62) Комп. радарен сензор с аналогов токов изход за постоянен контрол на ниво на химически агресивни материали 4.....20 mA /HART Захранване - по двупроводна схема: 12 ... 35 V DC Присъединяване:фланец DN50 PN40 Form B1 EN1092-1/316L Антенa - капсулована с покритие от PTFE Точност - 1 mm Измервателен обхват - 0... 30m,80 GHz технология Работна температура: -60....+150°C/PTFE/PTFE Модул за настройка и индикация PLICSCOM с Bluetooth Пластмасов корпус IP66/67	24 мес.	106 р.	6 924.00	10%	62 316.00
2	PS6X.2SWF BFXAWAM KHXXXXXX XXX	Радарен нивомер VEGAPULS 6X (Пълен аналог на FMR 62) Комп. радарен сензор с аналогов токов изход за постоянен контрол на ниво на химически агресивни материали 4.....20 mA /HART Захранване - по двупроводна схема: 12 ... 35 V DC Присъединяване:фланец DN50 PN40 Form B1 EN1092-1/316L Антенa - капсулована с покритие от PTFE Точност - 1 mm Измервателен обхват - 0... 30m,80 GHz технология Работна температура: -60....+150°C/PTFE/PTFE	24 мес.	5бр.	6 957.00	10%	31 306.50

	Модул за настройка и индикация PLICSCOM с Bluetooth Алуминиев корпус IP66/68						
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3	CONNECT. CX44	АДАПТЕР VEGACONNECT 4 HART комуникатор за комуникация и настройка на полеви астройства с инсталиран софтуер	24 мес.	1бр.	1 155.00	10%	1 039.50
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ДАНЪЧНА ОСНОВА:		94 662.00
ДДС 20%:		18 932.40
ОБЩА СТОЙНОСТ:		113 594.40
(словом): сто и тринадесет хиляди петстотин деветдесет и четири лева и 40 ст.		

Срок на доставка: 3-4 седмици
Условия на плащане: 30 дни след доставка
Доставка в рамките на страната: за наша сметка
Сервиз: ГЛОБАЛ-ТЕСТ ЕООД
Валидност: 30-09-2024

Забележка: Глобал-Тест ЕООД като официален дистрибутор на Testo SE & Co. KGaA, VEGA Grieshaber KG, KOBOLD Messring GmbH и Casella UK може да продава техните продукти само на територията на Република България!
С потвърждаването на тази оферта/проформа фактура крайният клиент декларира, че представляваната от него фирма, както и нейните управители и служители не попадат в списъци със санкционирани и забранени за търговски отношения лица и дружества, според изискванията на ЕС.

Град: София
Дата: 12-11-2023

Изготвил:
/инж.Христо Медаров/

VEGAPULS 6X

Radar sensor for continuous level measurement of liquids and bulk solids

- Standard applications



Application area

VEGAPULS 6X is a radar sensor for continuous level measurement of liquids and bulk solids.

The small process fittings offer particular advantages for liquids in small tanks or tight mounting spaces. The very good signal focusing ensures the use in vessels with many installations such as stirrers and heating spirals.

For bulk solids under most different process conditions, the device is ideal for level measurement in very high silos, large bunkers and segmented vessels. The VEGAPULS 6X is equipped with an encapsulated plastic antenna or a lens antenna integrated into the metal flange for this.

Applications - Standard

The VEGAPULS 6X - Standard is an allround radar measuring device in almost industrial areas, for e. g.

- Large tank stores
- Reaction vessel
- Storage vessels for chemicals
- Filling vessels
- Plastic tank (measurement through vessel ceiling)
- Gauge measurement in waters
- Pumping station/Pump shaft
- Crusher
- Heap (point measurement/profile detection)

Your benefit

- Maintenance-free operation thanks to non-contact measuring principle
- High plant availability, because wear and maintenance free
- Exact measuring results independent of process conditions

Function

The sensor emits a continuous radar signal through the antenna. The emitted signal is reflected by the medium and received as an echo by the antenna.

The frequency difference between the emitted and received signal is proportional to the distance and depends on the filling height. The determined filling height is converted into a respective output signal and output as measured value.

Technical data

Measuring range up to	120 m (393.7 ft)
Deviation	≤ 1 mm
Beam angle depending on 3° antenna	
Measuring frequency	W-band (80 GHz technology)
Process fitting	Mounting straps, compression flanges from DN 80, 3", thread from G ³ / ₄ , ¾ NPT, plastic plated flanges from DN 50, 2", flange with swivelling holder from DN 100, 4"
Process pressure	-1 ... 25 bar (-100 ... 2500 kPa/-14.5 ... 362.6 psig)
Process temperature	-196 ... +250 °C (-321 ... +482 °F)
Ambient, storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Bluetooth standard	Bluetooth 5.0
Effective range typ. depending on the local conditions	25 m (82 ft)
Operating voltage	12 ... 35 V DC
Output signal	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus, Modbus
Protection rating	IP66/IP67, IP66/IP68 (0.2 bar), IP68 (1 bar), IP69K according to IEC 60529, type 6X according to NEMA

Materials

The wetted parts of the instrument are made of 316L, PP, PTFE or PEEK. The process seal is made of FKM, FFKM, EPDM or PTFE.

You will find a complete overview of the available materials and seals in the "Configurator" at www.vega.com and "VEGA Tools".

Housing versions

The housings are available as single chamber or double chamber version in plastic, stainless steel or aluminium.

They are available with protection ratings up to IP68 (1 bar).

Electronics versions

The instruments are available in different electronics versions.

Apart from 4 ... 20 mA/HART in two and four-wire version, there are also digital versions with Profibus PA, Foundation Fieldbus and Modbus protocols. Another HART version is available with integrated accumulator.

Approvals

Worldwide approvals are available for VEGA instruments, e.g. for use in hazardous areas, on ships or in hygienic applications.

The technical data in the respective safety instructions are valid for approved instruments (e.g. with Ex approval). In some cases, these data can differ from the data listed herein.

You can find detailed information on the existing approvals with the appropriate product on our homepage.

Adjustment

Adjustment directly at the measuring point

The adjustment of the instrument is carried out via the optional display and adjustment module PLICSCOM or via a PC with the adjustment software PACTware and corresponding DTM.

Wireless adjustment via Bluetooth

The Bluetooth version of display and adjustment module enables a wireless connection to standard adjustment units. This can be smartphones/tablets with iOS or Android operating system or PCs with PACTware and Bluetooth USB adapter.



Wireless connection to standard operating devices

Adjustment is hence carried out via a free-of-charge app from the Apple App Store or the Google Play Store or the adjustment software PACTware and respective DTM.

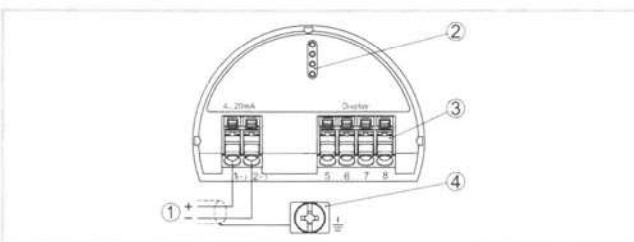


Adjustment via PACTware or app

Adjustment via remote systems

Further adjustment options are possible via a HART Communicator as well as manufacturer-specific programs such as AMS™ or PDM.

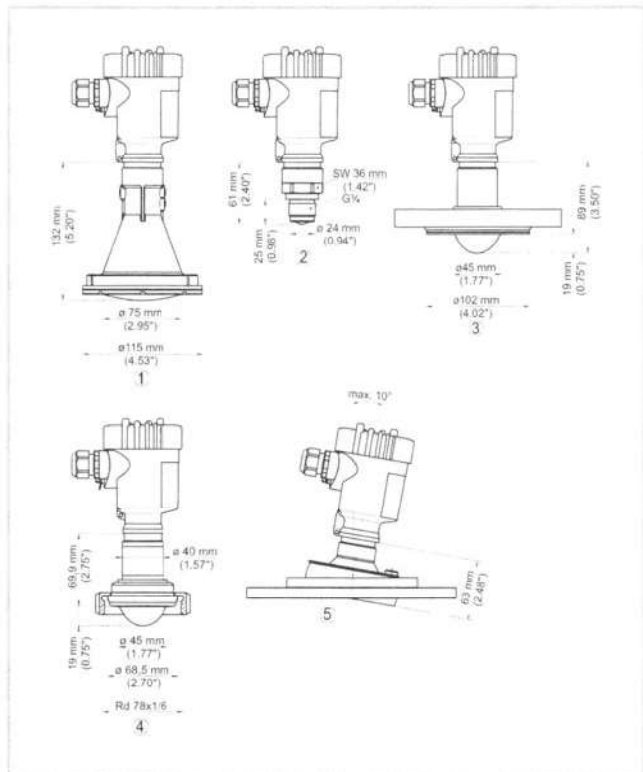
Electrical connection



Electronics and connection compartment, single chamber housing (example)

- 1 Voltage supply/Signal output
- 2 For display and adjustment module or interface adapter
- 3 For external display and adjustment unit
- 4 Ground terminal for connection of the cable screening

Dimensions



Dimensions und antenna versions VEGAPULS 6X

- 1 Plastic horn antenna
- 2 Thread with integrated antenna system
- 3 Flange with plastic plating
- 4 Hygienic fitting
- 5 Flange with lens antenna

Information

You can find further information on the VEGA product line on our homepage.

In the download section of our homepage you'll find operating instructions, product information, industry brochures and approval documents as well as device and adjustment software.

Instrument selection

On our homepage under "Products" you can select the suitable measuring principle and instrument for your application.

There you will also find detailed information on the available device versions.

Contact

You can find your personal contact person at VEGA on our homepage under "Contact".

Product name VEGAPULS 6X
 Model code PS6X.2SWFBFXAWKMKHAXXXXXXX
 Order number PS6X - 222 2XE

Quantity 1

Radar sensor for continuous level measurement of all media

Application area

VEGAPULS 6X is a universal sensor for continuous level measurement of liquids and bulk solids under all process conditions. Due to its application-oriented configuration and setup, VEGAPULS 6X offers a reliable and economical solution for all level applications. Due to its variable antenna systems, it ensures maintenance-free operation in all applications.

Your benefit

- Application-oriented configuration enables a simple device selection
- Maintenance-free operation through non-contact measuring principle
- Exact measuring results independent of process conditions

Measuring unit for lengths		Metre/Millimetre
Generation	2	Second generation
Application	S	Standard
Radar technology	W	80 GHz technology
Process fitting	FB	Flange EN1092-1, DN50 PN40, with raised face, Form B1 / 316/316L
Antenna version	F	Flange with encapsulated antenna system
Additional equipment	X	without
Material / Seal / Process temperature	AW	PTFE / PTFE / -60...+150°C
Housing / Protection	K	Plastic single chamber / IP66/IP67
Cable entry / Connection	M	M20x1.5 / Cable gland PA black (ø5-9mm), standard
Display, adjustment or radio module	K	Display/adjustment module PLICSCOM, with Bluetooth
Electronics	H	Two-wire 4 ... 20 mA/HART
Explosion protection	AX	for Ex-free area (CE, RCM, UKCA; in preparation: EAC)
Functional safety SIL (IEC 61508)	X	without
IT security (IEC 62443-4-2)	X	without
Overfill protection (WHG/VLAREM/KVU)	X	without
Foodstuff/Pharmaceutical certificate	X	without
Ship approval (BV, RINA, ABS, DNV, CCS, ClassNK, LR)	X	without
Second Line of Defense	X	without
Type label		of foil
Measurement loop identification label		without
Customer-specific settings		No
Test certificate		without
Additional cleaning procedure (incl. 3.1 Inspection certificate oil, grease, silicone-free)		without
Suitable for tropical regions (incl. 2.1 Factory certificate; all mounting parts of metal)		without
Inspection certificate for material		without
Inspection certificate for instrument with test data (incl. 3.1 Inspection certificate EN 10204)		without

11/12/2023

VEGA

Product name VEGAPULS 6X
Model code PS6X.2SWFBFXAWKMKHAXXXXXXX
Order number PS6X - 222 2XE

Quantity 1

Factory certificate for material (incl. 2.2 Factory certificate EN 10204)	without
Quality and test plan	without
Welding documentation	without
Dye penetration test (incl. 3.1 Inspection certificate)	without
Pressure test	without
Helium leak test	without
radiographic test	without
Roughness test (incl. 3.1 Inspection certificate)	without
PMI test (incl. 3.1 Inspection certificate)	without
Low temperature test at -60 °C (incl. 3.1 Inspection certificate)	without
Durability test more than 360 h (incl. 3.1 Inspection certificate)	without
Insulation resistance test (incl. 3.1 Inspection certificate)	without
Customer-specific production	without
Certification acc. to MCERTS	without
Max. measuring range	120 m
Operating instructions	EN - English
Number of operating instructions	1
Min. process pressure in bar	-1
Max. process pressure in bar	25
Customs tariff number (HS code)	90318080
Software version	Current version

Product name VEGAPULS 6X
 Model code PS6X.2SWFBFXAWAMKHAXXXXXXX
 Order number PS6X - 222 EDK

Quantity 1

Radar sensor for continuous level measurement of all media

Application area

VEGAPULS 6X is a universal sensor for continuous level measurement of liquids and bulk solids under all process conditions. Due to its application-oriented configuration and setup, VEGAPULS 6X offers a reliable and economical solution for all level applications. Due to its variable antenna systems, it ensures maintenance-free operation in all applications.

Your benefit

- Application-oriented configuration enables a simple device selection
- Maintenance-free operation through non-contact measuring principle
- Exact measuring results independent of process conditions

Measuring unit for lengths		Metre/Millimetre
Generation	2	Second generation
Application	S	Standard
Radar technology	W	80 GHz technology
Process fitting	FB	Flange EN1092-1, DN50 PN40, with raised face, Form B1 / 316/316L
Antenna version	F	Flange with encapsulated antenna system
Additional equipment	X	without
Material / Seal / Process temperature	AW	PTFE / PTFE / -60...+150°C
Housing / Protection	A	Aluminium single chamber / IP66/IP68 (0.2bar)
Cable entry / Connection	M	M20x1.5 / Cable gland PA black (ø5-9mm), standard
Display, adjustment or radio module	K	Display/adjustment module PLICSCOM, with Bluetooth
Electronics	H	Two-wire 4 ... 20 mA/HART
Explosion protection	AX	for Ex-free area (CE, RCM, UKCA; in preparation: EAC)
Functional safety SIL (IEC 61508)	X	without
IT security (IEC 62443-4-2)	X	without
Overfill protection (WHG/VLAREM/KVU)	X	without
Foodstuff/Pharmaceutical certificate	X	without
Ship approval (BV, RINA, ABS, DNV, CCS, ClassNK, LR)	X	without
Second Line of Defense	X	without
Type label		of foil
Measurement loop identification label		without
Customer-specific settings		No
Test certificate		without
Additional cleaning procedure (incl. 3.1 Inspection certificate oil, grease, silicone-free)		without
Suitable for tropical regions (incl. 2.1 Factory certificate; all mounting parts of metal)		without
Inspection certificate for material		without
Inspection certificate for instrument with test data (incl. 3.1 Inspection certificate EN 10204)		without

11/12/2023

VEGA

Product name VEGAPULS 6X
Model code PS6X.2SWFBFXAWAMKHAXXXXXXX
Order number PS6X - 222 EDK

Quantity 1

Factory certificate for material (incl. 2.2 Factory certificate EN 10204)	without
Quality and test plan	without
Welding documentation	without
Dye penetration test (incl. 3.1 Inspection certificate)	without
Pressure test	without
Helium leak test	without
radiographic test	without
Roughness test (incl. 3.1 Inspection certificate)	without
PMI test (incl. 3.1 Inspection certificate)	without
Low temperature test at -60 °C (incl. 3.1 Inspection certificate)	without
Durability test more than 360 h (incl. 3.1 Inspection certificate)	without
Insulation resistance test (incl. 3.1 Inspection certificate)	without
Customer-specific production	without
Certification acc. to MCERTS	without
Max. measuring range	120 m
Operating instructions	EN - English
Number of operating instructions	1
Min. process pressure in bar	-1
Max. process pressure in bar	25
Customs tariff number (HS code)	90318080
Software version	Current version

Operating Instructions

Interface adapter between PC and
communication-capable VEGA
instruments

VEGACONNECT

Wired interface adapter with connection box
USB - HART/I²C



Document ID: 66081



VEGA

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1 About this document

1.1 Function

This instruction provides all the information you need for mounting, connection and setup as well as important instructions for maintenance, fault rectification, the exchange of parts and the safety of the user. Please read this information before putting the instrument into operation and keep this manual accessible in the immediate vicinity of the device.

1.2 Target group

This operating instructions manual is directed to trained personnel. The contents of this manual must be made available to the qualified personnel and implemented.

1.3 Symbols used



Document ID

This symbol on the front page of this instruction refers to the Document ID. By entering the Document ID on www.vega.com you will reach the document download.



Information, note, tip: This symbol indicates helpful additional information and tips for successful work.



Note: This symbol indicates notes to prevent failures, malfunctions, damage to devices or plants.



Caution: Non-observance of the information marked with this symbol may result in personal injury.



Warning: Non-observance of the information marked with this symbol may result in serious or fatal personal injury.



Danger: Non-observance of the information marked with this symbol results in serious or fatal personal injury.



Ex applications

This symbol indicates special instructions for Ex applications.



List

The dot set in front indicates a list with no implied sequence.



Sequence of actions

Numbers set in front indicate successive steps in a procedure.



Disposal

This symbol indicates special instructions for disposal.

2 For your safety

2.1 Authorised personnel

All operations described in this documentation must be carried out only by trained, qualified personnel authorised by the plant operator.

During work on and with the device, the required personal protective equipment must always be worn.

2.2 Appropriate use

The instrument is an interface adapter for connecting a Windows PC to communication-capable sensors.

You can find detailed information about the area of application in chapter " *Product description*".

Operational reliability is ensured only if the instrument is properly used according to the specifications in the operating instructions manual as well as possible supplementary instructions.

For safety and warranty reasons, any invasive work on the device beyond that described in the operating instructions manual may be carried out only by personnel authorised by the manufacturer. Arbitrary conversions or modifications are explicitly forbidden.

2.3 Warning about incorrect use

Inappropriate or incorrect use of this product can give rise to application-specific hazards, e.g. vessel overfill through incorrect mounting or adjustment. Damage to property and persons or environmental contamination can result. Also, the protective characteristics of the instrument can be impaired.

2.4 General safety instructions

This is a state-of-the-art instrument complying with all prevailing regulations and directives. The instrument must only be operated in a technically flawless and reliable condition. The operator is responsible for the trouble-free operation of the instrument. When measuring aggressive or corrosive media that can cause a dangerous situation if the instrument malfunctions, the operator has to implement suitable measures to make sure the instrument is functioning properly.

During the entire duration of use, the user is obliged to determine the compliance of the necessary occupational safety measures with the current valid rules and regulations and also take note of new regulations.

The safety instructions in this operating instructions manual, the national installation standards as well as the valid safety regulations and accident prevention rules must be observed by the user.

For safety and warranty reasons, any invasive work on the device beyond that described in the operating instructions manual may be carried out only by personnel authorised by the manufacturer. Arbitrary conversions or modifications are explicitly forbidden. For safety

reasons, only the accessory specified by the manufacturer must be used.

To avoid any danger, the safety approval markings and safety tips on the device must also be observed.

2.5 Safety instructions for Ex areas

For applications in explosion-proof areas (Ex), only devices with corresponding Ex approval may be used. Observe the Ex-specific safety instructions. These are an integral part of the operating instructions and are enclosed with every device with Ex approval.

3 Product description

3.1 Configuration

Scope of delivery

The scope of delivery encompasses:

- Interface adapter VEGACONNECT 4
- Connection box with two connection cables
- USB cable type A to type C
- HART resistance
- 2 x suspension catch
- Magnetic pen
- Bluetooth USB adapter
- Documentation
 - This operating instructions manual
 - Ex-specific " *Safety instructions*" (with Ex versions)
 - If necessary, further certificates

Constituent parts

VEGACONNECT consists of the following components:

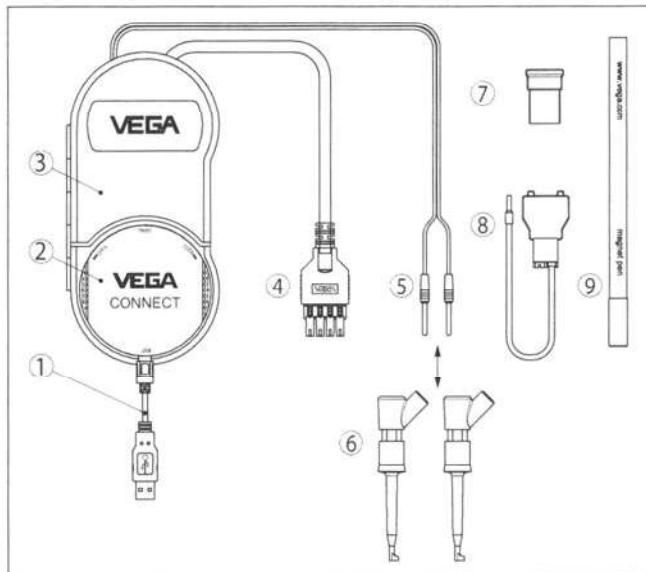


Fig. 1: Configuration VEGACONNECT

- 1 USB cable type A to type C
- 2 VEGACONNECT 4
- 3 Connection box with storage space
- 4 I²C bus cable
- 5 HART cable with 2 mm pins
- 6 2 x suspension catch for cable with 2 mm pins
- 7 Bluetooth USB adapter
- 8 HART resistance
- 9 Magnetic pen

On the back of the connection box there is a fold-out hook to hang the device on a pipe, for example, if there is no place to put it. In addition,

two magnets are embedded in the housing to attach the connection box to ferromagnetic objects.

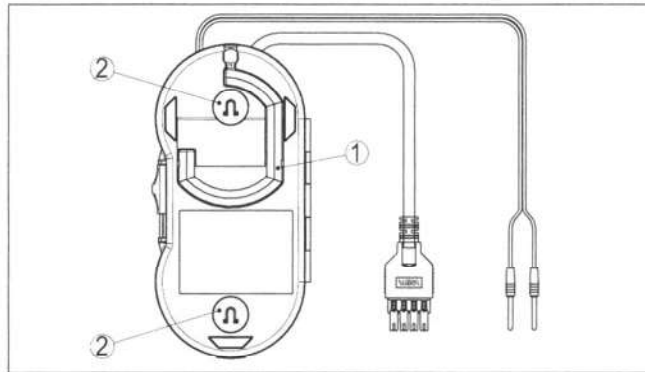


Fig. 2: Configuration VEGACONNECT

- 1 Fold out hook for hanging the VEGACONNECT
2 Magnets for attaching to metallic objects

Type label

The type label contains the most important data for identification and use of the instrument:

- Instrument type
- Information about approvals
- Technical data
- Serial number of the instrument
- QR code for device documentation
- Manufacturer information

Documents and software

Move to "www.vega.com" and enter in the search field the serial number of your instrument.

There you can find the following information about the instrument:

- Order data
- Documentation
- Software

Alternatively, you can find all via your smartphone:

- Scan the QR-code on the type label of the device or
- Enter serial number manually in the VEGA Tools app (available free of charge in the respective stores)

3.2 Principle of operation

Application area

VEGACONNECT is a wired interface adapter for connection of communication-capable VEGA instruments to the USB interface of a PC with Windows operating system. It can also be used as a universal HART modem for HART sensors from other manufacturers. An adjustment software such as PACTware with VEGA DTMs is required for parameter adjustment of these instruments.

	<p>The VEGACONNECT can be connected to all communication-capable VEGA instruments with respective interface. All currently available electronics versions are supported.</p> <p>Connection cable, adapter and terminals for connection to the different instrument series are attached to all VEGACONNECT. These adapters can be kept in the storage space of the connection box.</p>
Bluetooth USB adapter	<p>The Bluetooth USB adapter enables the wireless adjustment of VEGA sensors with a Windows PC. For this, a PLICSCOM with Bluetooth option integrated in the sensor or an instrument with integrated Bluetooth function are required. In this case, the VEGACONNECT is not used, here the connection box is only a preserving possibility for the Bluetooth USB adapter. You can find further information of this application in the operating instruction of PLICSCOM or the instrument with integrated Bluetooth function.</p>
Magnetic pen	<p>The magnet pen enables the adjustment of the buttons of a Bluetooth-PLICSCOM with closed housing lid with inspection window. In this case, the VEGACONNECT is not used, here the connection box is only a preserving possibility for the magnet pen. You can find further information of this application in the operating instruction of PLICSCOM.</p>
Functional principle	<p>The interface adapter is connected via the USB interface to a PC. It converts signals and protocols of the USB interface into the appropriate signal/protocol of the connected instrument.</p>
Voltage supply	<p>The voltage supply is provided via the USB interface of the PC.</p>
	<p>3.3 Adjustment</p> <p>The adjustment is carried out via a Windows PC with a parameter adjustment software such as PACTware with respective DTM. There are no adjustment elements on the instrument itself.</p>
	<p>3.4 Packaging, transport and storage</p>
Packaging	<p>Your instrument was protected by packaging during transport. Its capacity to handle normal loads during transport is assured by a test based on ISO 4180.</p> <p>The packaging consists of environment-friendly, recyclable cardboard. For special versions, PE foam or PE foil is also used. Dispose of the packaging material via specialised recycling companies.</p>
Transport	<p>Transport must be carried out in due consideration of the notes on the transport packaging. Nonobservance of these instructions can cause damage to the device.</p>
Transport inspection	<p>The delivery must be checked for completeness and possible transit damage immediately at receipt. Ascertained transit damage or concealed defects must be appropriately dealt with.</p>

Storage

Up to the time of installation, the packages must be left closed and stored according to the orientation and storage markings on the outside.

Unless otherwise indicated, the packages must be stored only under the following conditions:

- Not in the open
- Dry and dust free
- Not exposed to corrosive media
- Protected against solar radiation
- Avoiding mechanical shock and vibration

Storage and transport temperature

- Storage and transport temperature see chapter " *Supplement - Technical data - Ambient conditions* "
- Relative moisture 20 ... 85 %

4 Connection

4.1 Connection to the PC

Connection



Note:

First install the software package "DTM Collection" before connecting the VEGACONNECT to the PC.

An USB interface (1.1/2.0/3.0) is compulsory for connection of VEGACONNECT to a Windows PC. The connection is provided with the supplied USB cable. Voltage supply of VEGACONNECT is provided via the USB interface.

DTM Collection

To operate the VEGACONNECT, a suitable Windows driver is required, which is included in our software package "DTM Collection". This software package can be downloaded free of charge from our homepage. To ensure the support of all device functions, you should always use the latest version.

When installing the driver package "VEGA-DTM for Communication", the suitable instrument driver is installed automatically. When connecting VEGACONNECT, the driver installation is finished automatically and is ready for operation without a restart.

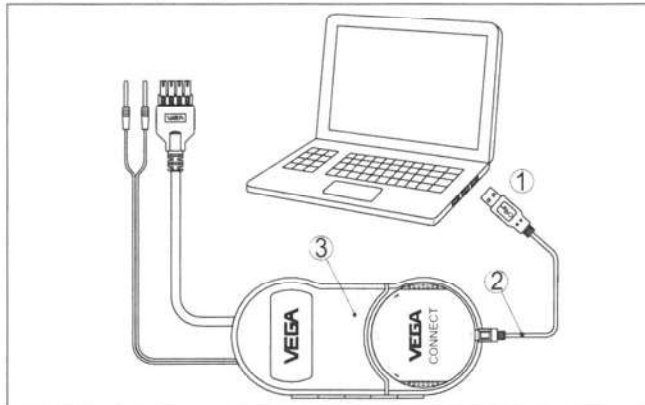


Fig. 3: Electrical connection

- 1 USB connection of the PC
- 2 USB cable type A to type C
- 3 Connection box with VEGACONNECT 4

4.2 Connection of the sensor/controller

The VEGACONNECT can be connected to almost any communication-capable VEGA instrument via different ways.

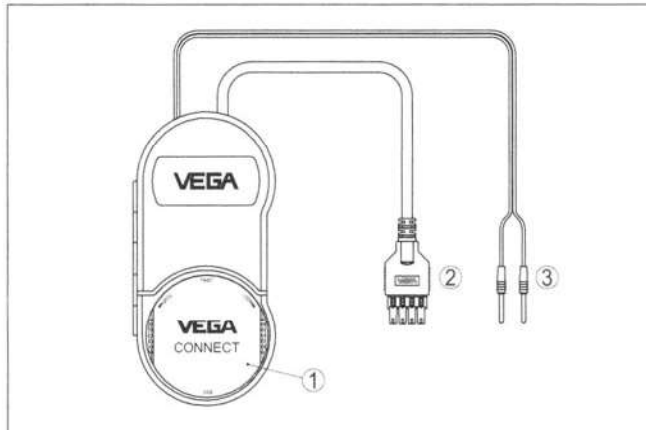


Fig. 4: Connection possibilities

- 1 Connection by insertion into a plics[®] sensor
- 2 Connection to 600 series controllers (I²C interface)
- 3 Connection to the 4 ... 20 mA cable (HART protocol)

Connection by insertion into the sensor

The VEGACONNECT can be inserted directly into all instruments of the plics[®] series. In this case, the VEGACONNECT is removed from the connection box and inserted into the plics[®] instrument instead of the display and adjustment module.

Connection via HART

The connection via the sensor cable can be made with any HART device. Depending on the power supply/processing system, an additional HART resistor is required. The supplied HART resistor can be used for this purpose (for details see "Connection examples - Connection via HART interface").

Connection via I²C bus

The VEGACONNECT can be connected to the I²C bus interface of all series 600 controllers (for details see "Connection examples - Connection via I²C interface").

5 Connection examples

5.1 Connection by insertion into the device

plics® sensor

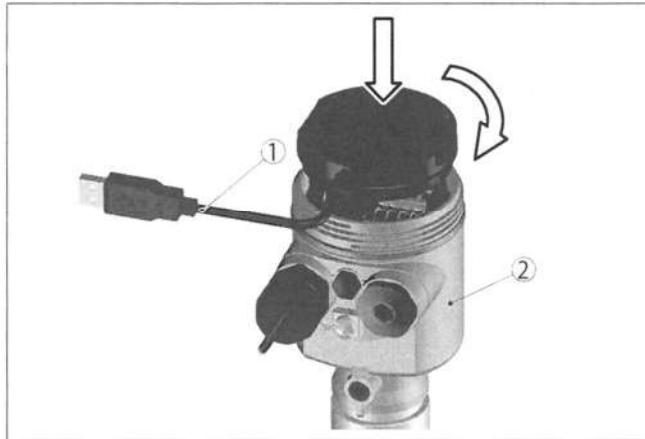


Fig. 5: Insertion into a plics® sensor
1 USB cable for connection to the PC
2 plics® device

HART sensor with
VEGADIS 81

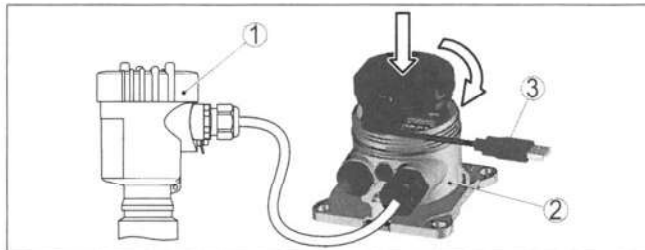


Fig. 6: Insertion into VEGADIS 81
1 HART sensor
2 VEGADIS 81
3 USB cable for connection to the PC

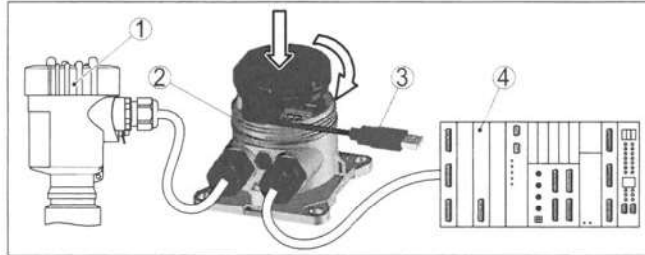
HART sensor with VEGADIS 82

Fig. 7: Insertion into VEGADIS 82

- 1 HART sensor
- 2 VEGADIS 82
- 3 USB cable for connection to the PC
- 4 Processing system/PLC/Voltage supply

5.2 Connection via HART interface**HART communication**

If the resistance of the connected processing system is less than 230Ω , the digital adjustment signal is extremely damped or short-circuited. Digital communication with the PC is then no longer possible. With low impedance processing systems, a resistance of at least 230Ω must be integrated into the 4 ... 20 mA connection cable. The connection of VEGACONNECT can be either carried out in parallel to the sensor or via the resistor.

**Note:**

A HART resistor is already integrated in some controllers. These devices have additional connection sockets for direct connection of the 2 mm pins.

When using VEGAMET 624/625, VEGASCAN 693 controllers, the connection cannot be carried out via the sensor cable. The parameter adjustment of the controller as well as of the sensor can be carried out via the I²C connection sockets.

HART sensor on a PLC

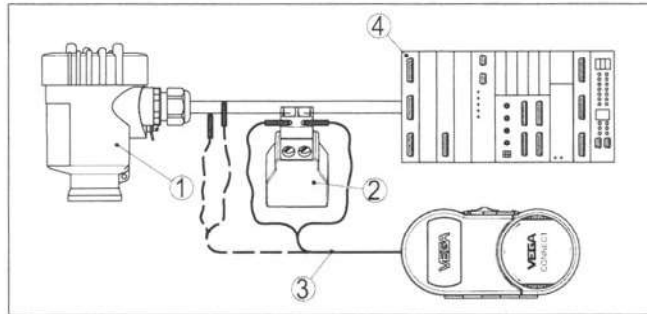


Fig. 8: Connection plics® series via HART

- 1 HART sensor
- 2 HART resistance 270 Ω (optional depending on processing)
- 3 Connection cable with 2 mm pins and terminals
- 4 Processing system/PLC/Voltage supply

**Information:**

The VEGACONNECT is connected directly via the 2 mm sockets of the supplied HART resistor. Alternatively, the VEGACONNECT can also be connected in parallel to the sensor (dashed line).

HART sensor with VEGATRENN

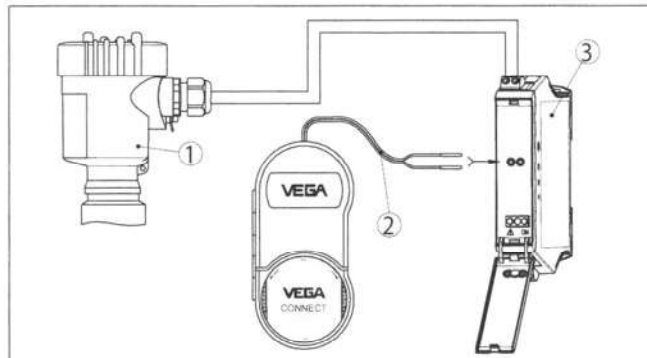


Fig. 9: Connection plics® series via HART to a VEGATRENN

- 1 HART sensor
- 2 Connection cable with 2 mm pins
- 3 VEGATRENN 141, 142, 151, 152

HART sensor with VEGAMET

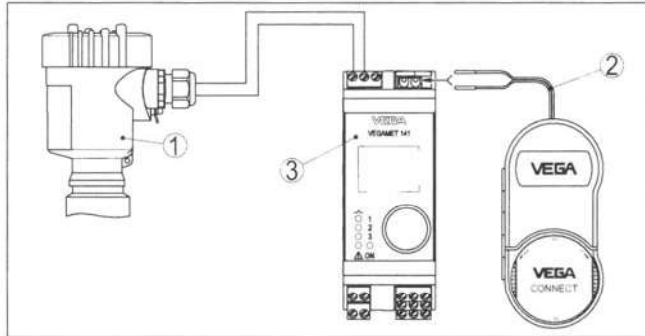


Fig. 10: Connection plics® series to a VEGAMET

- 1 HART sensor
- 2 Connection cable with 2 mm pins
- 3 VEGAMET

5.3 Connection via I²C interface

Controllers 600 series

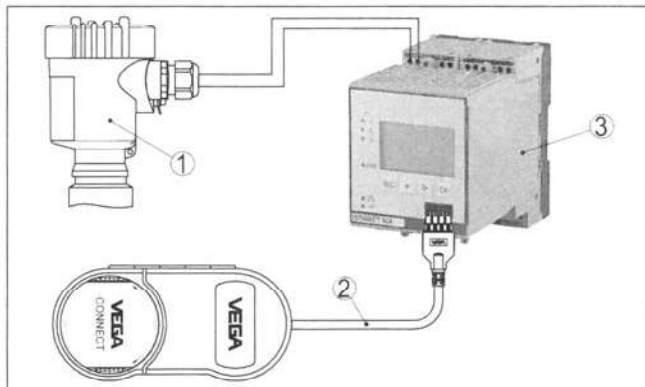


Fig. 11: Connection 600 series controllers via I²C interface

- 1 Sensor
- 2 I²C connection cable
- 3 VEGAMET/VEGASCAN 600 series



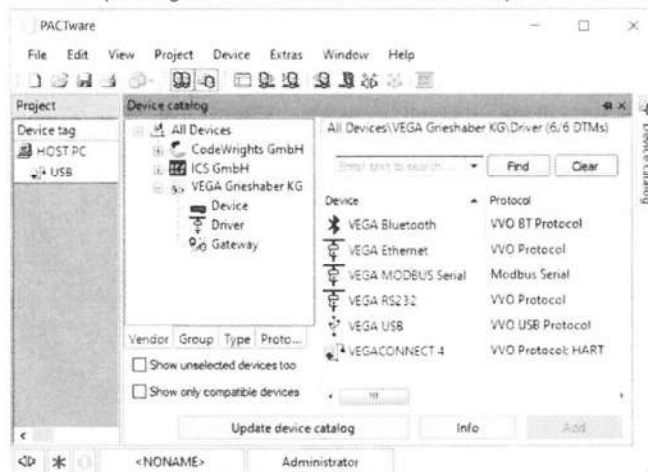
Note:

Communication with the sensor is carried out also via the front I²C interface of the controller. The connection of VEGACONNECT directly to the 4 ... 20 mA sensor cable is not possible.

6 Setup

6.1 Adjustment

The use and operation are described in the operating instructions of the corresponding sensor/controller and its online help.



Information:

You find the VEGACONNECT DTM in the device catalogue under the group "Driver". When adding a HART sensors, the window "Channel selection" appears in addition in which you have to select the connection (connection via HART or I²C).

7 Diagnostics and servicing

Maintenance

7.1 Maintenance

If the device is used properly, no special maintenance is required in normal operation.

Cleaning

The cleaning helps that the type label and markings on the instrument are visible.

Take note of the following:

- Use only cleaning agents which do not corrode the housings, type label and seals
- Use only cleaning methods corresponding to the housing protection rating

7.2 Software update

An update of the device software is possible via the USB interface.

The following components are required:

- PC/Notebook with PACTware/DTM
- Current instrument software as file

You can find the current instrument software as well as detailed information on the procedure in the download area of our homepage.



Caution:

Instruments with approvals can be bound to certain software versions. Therefore make sure that the approval is still effective after a software update is carried out.

You can find detailed information in the download area on our homepage.

7.3 How to proceed if a repair is necessary

You can find an instrument return form as well as detailed information about the procedure in the download area of our homepage. By doing this you help us carry out the repair quickly and without having to call back for needed information.

Proceed as follows in case of repair:

- Print and fill out one form per instrument
- Clean the instrument and pack it damage-proof
- Attach the completed form and, if need be, also a safety data sheet outside on the packaging
- Ask the agency serving you to get the address for the return shipment. You can find the agency on our homepage.

8 Recycling and disposal

8.1 Disposal



Pass the instrument on to a specialised recycling company and do not use the municipal collecting points.

Remove any batteries in advance, if they can be removed from the device, and dispose of them separately.

If personal data is stored on the old device to be disposed of, delete it before disposal.

If you have no way to dispose of the old instrument properly, please contact us concerning return and disposal.

9 Certificates and approvals

9.1 Approvals for Ex areas

Approved versions for use in hazardous areas are available or in preparation for the device or the device series.

You can find the relevant documents on our homepage.

9.2 Conformity

The device complies with the legal requirements of the applicable country-specific directives or technical regulations. We confirm conformity with the corresponding labelling.

The corresponding conformity declarations can be found on our homepage.

9.3 Environment management system

Protection of the environment is one of our most important duties. That is why we have introduced an environment management system with the goal of continuously improving company environmental protection. The environment management system is certified according to DIN EN ISO 14001.

Help us to meet these requirements and observe the environmental instructions in the chapters "*Packaging, transport and storage*", "*Disposal*" of this operating instructions.

10 Supplement

10.1 Technical data

Note for approved instruments

The technical data in the respective safety instructions are valid for approved instruments (e.g. with Ex approval). In some cases, these data can differ from the data listed herein.

All approval documents can be downloaded from our homepage.

Materials and weights

Materials

- Housing connection box	PBT/PC Blend
- VEGACONNECT 4	PPE
Weight incl. cables/accessory	333 g (0.74 lbs)

Electrical data

Voltage supply from USB interface	5 V
Max. power consumption	500 mW
Galvanic separation between	- HART - USB - I ² C bus - USB

Ambient conditions

Permissible ambient temperature	-20 ... +60 °C (-4 ... +140 °F)
Storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)

Electrical protective measures

Protection rating

- Junction box	IP20, NEMA TYPE 1
- VEGACONNECT 4	IP40, NEMA TYPE 1

Connection cable

USB cable

- Connection to	USB interface of the PC
- Cable length	200 cm (78 in)
- Plug connection	Plug USB-A - Plug USB-C
- Cable insulation	min. 0.65 mm (0.256 in)

I²C bus cable

- Connection to	I ² C bus interface
- Cable length	30 cm (11,8 in)
- Plug connection	I ² C bus plug

Cable with 2 mm pins

- Connection to	CONNECT sockets, HART resistor/cable
- Cable length	150 cm (59 in)
- Plug connection	2 x 2 mm male connector

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HART resistance

Resistor	270 Ω
Tolerance	5 %
Power	1 W

Bluetooth USB adapter

Technical data see attached instruction manual

10.2 Dimensions

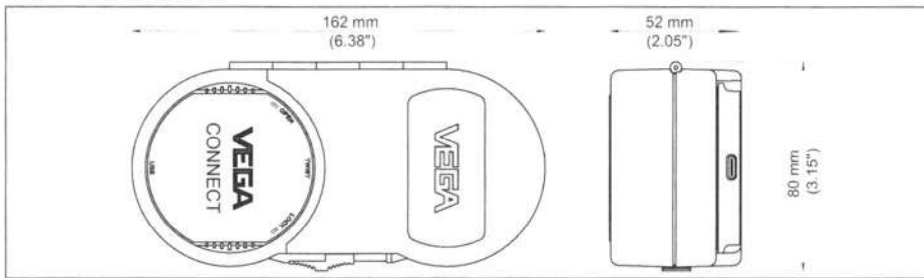


Fig. 12: Dimensions VEGACONNECT

10.3 Industrial property rights

VEGA product lines are global protected by industrial property rights. Further information see www.vega.com.

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进一步信息请参见网站 < www.vega.com。

10.4 Licensing information for open source software

Open source software components are also used in this device. A documentation of these components with the respective license type, the associated license texts, copyright notes and disclaimers can be found on our homepage.

10.5 Trademark

All the brands as well as trade and company names used are property of their lawful proprietor/originator.

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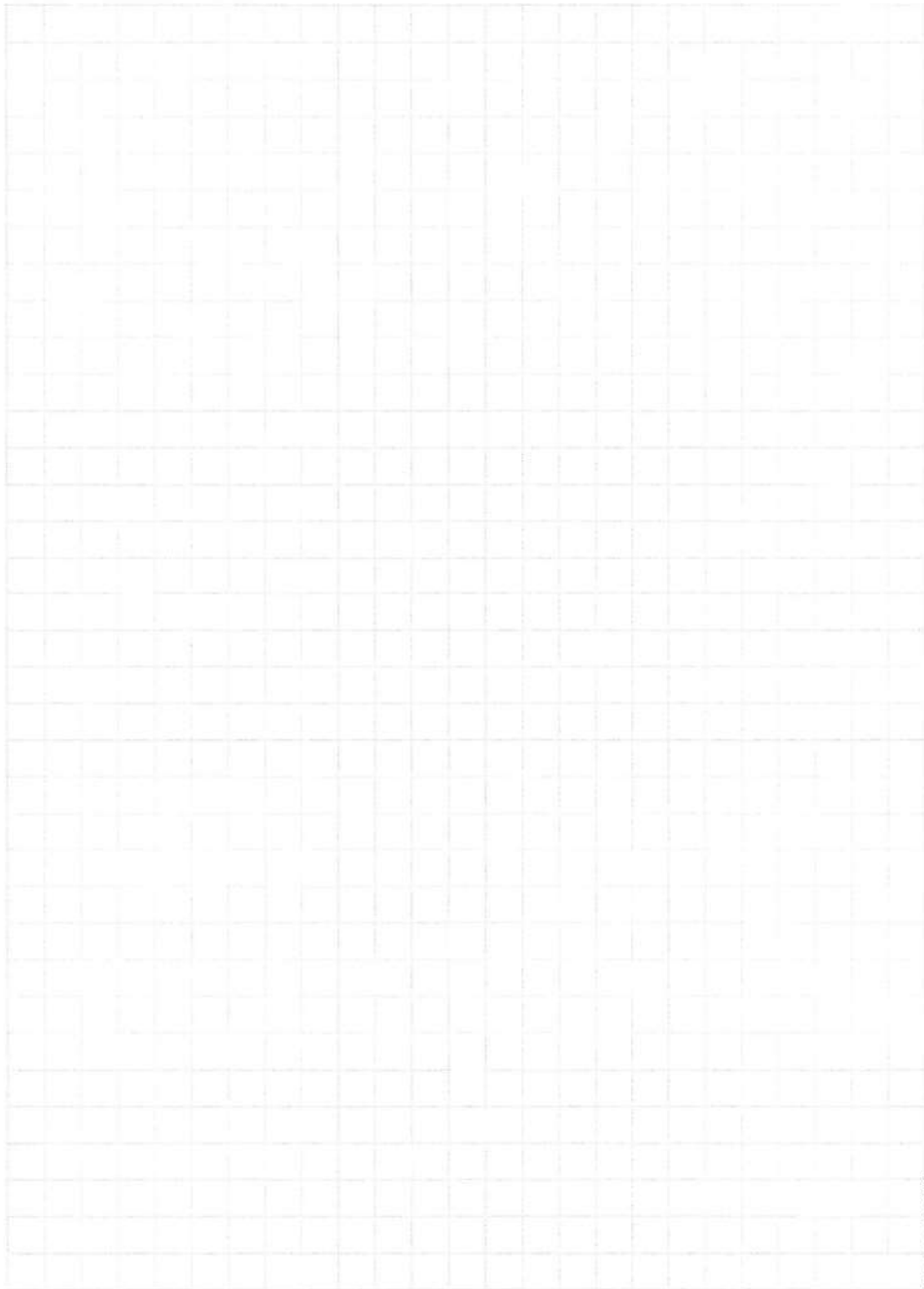
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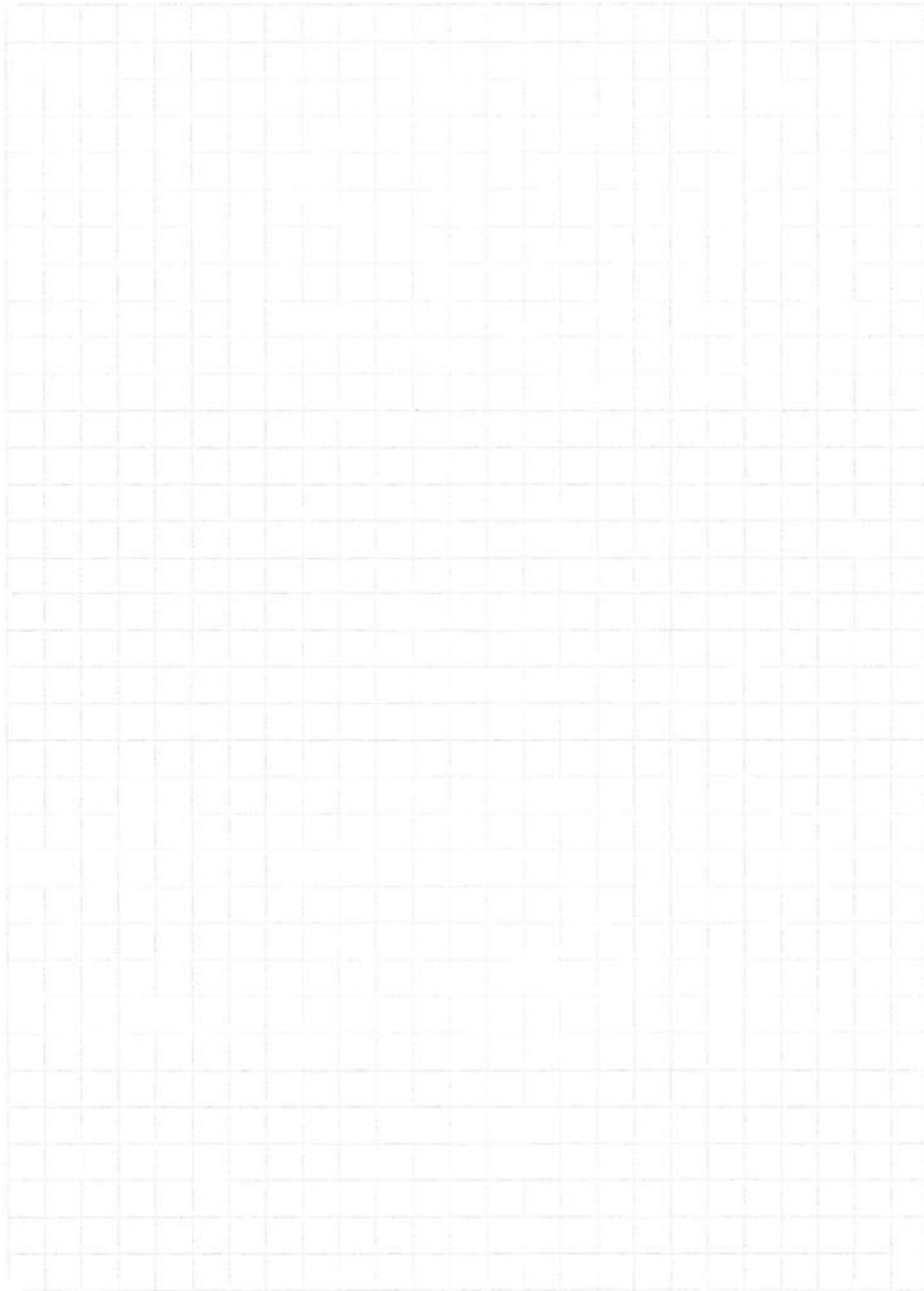
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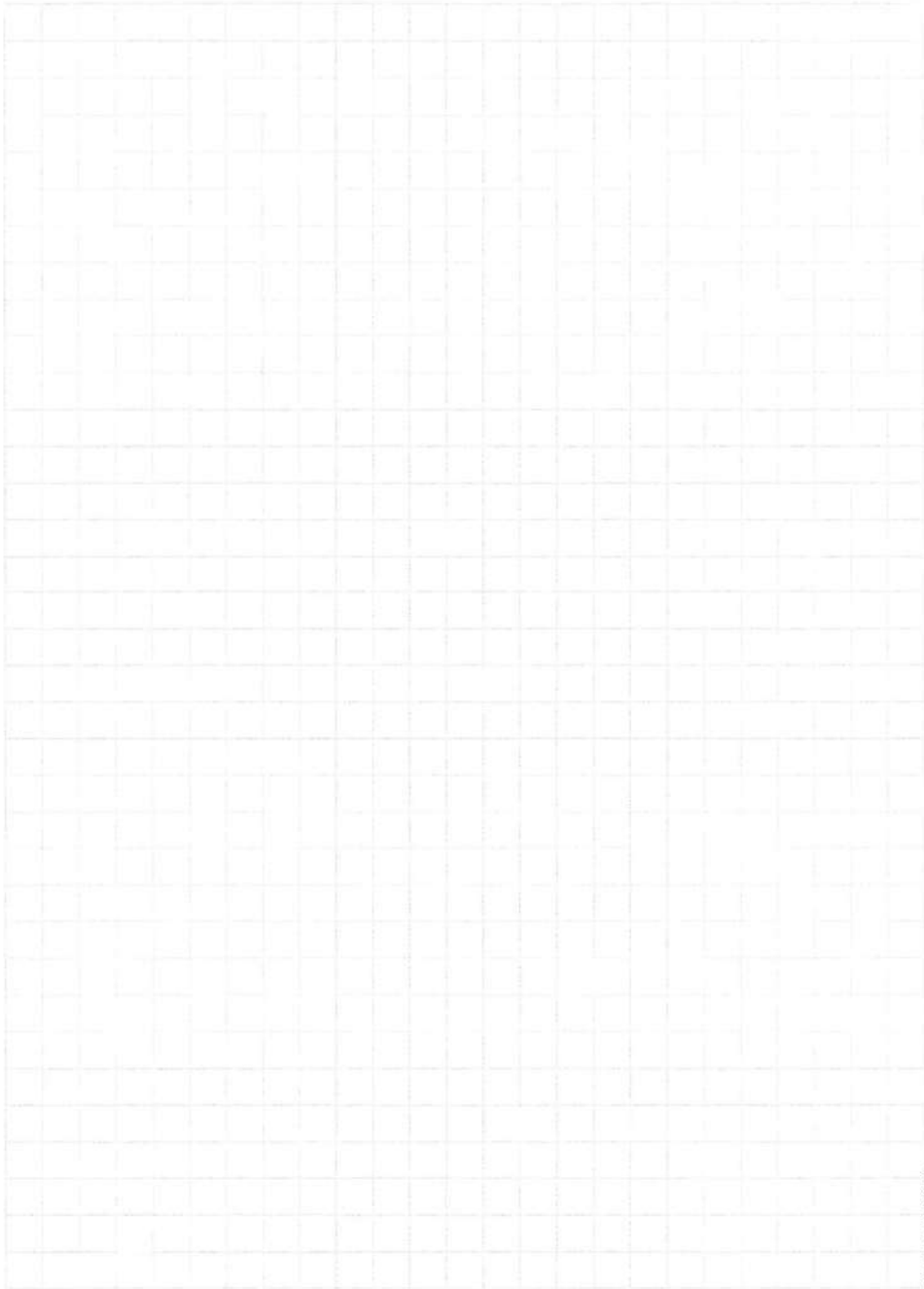
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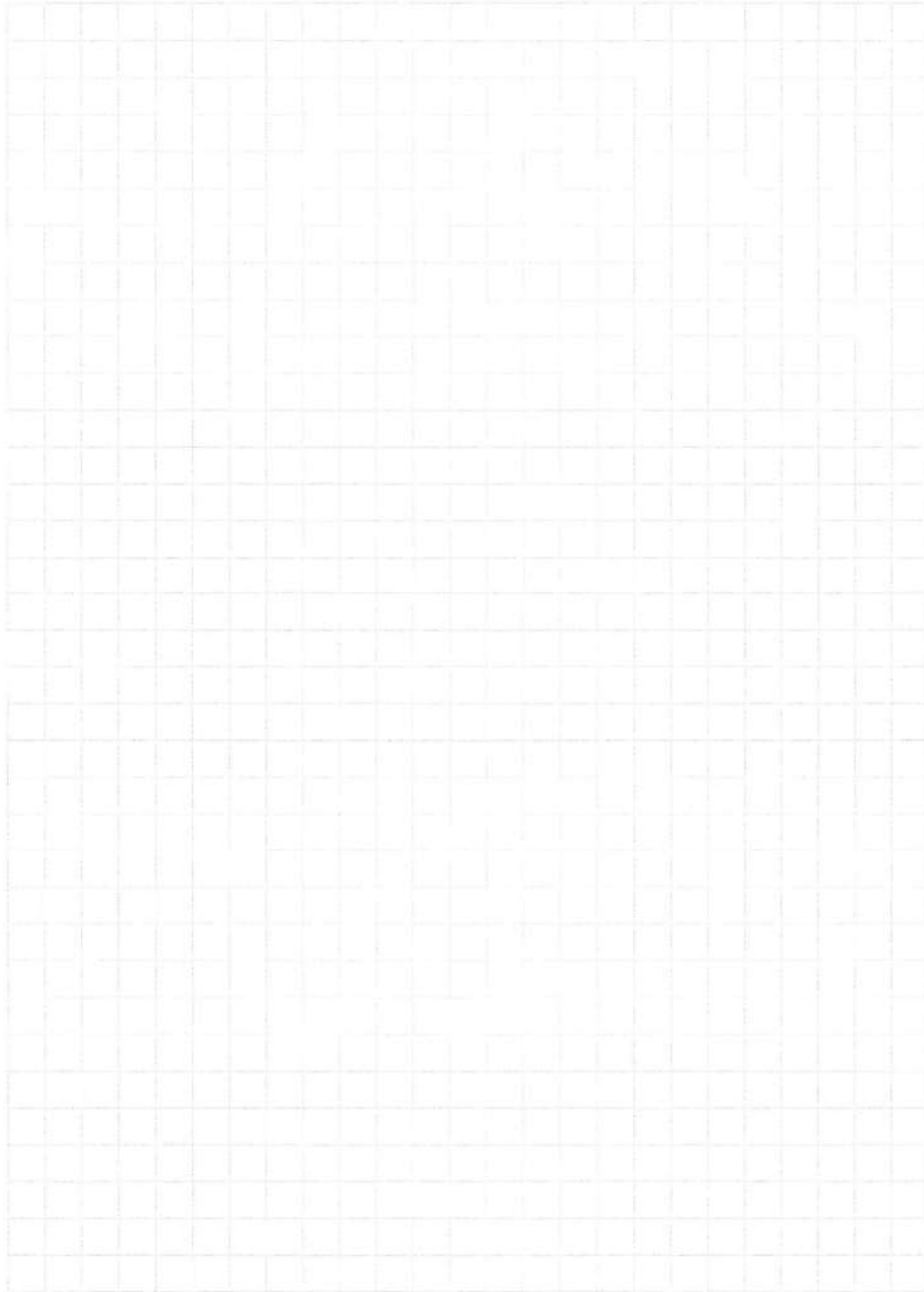
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Printing date:

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.

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Относно: Пазарна консултация № 52617 с предмет "Доставка на радарни датчици за измерване на ниво"

1. Декларация за произход
 2. Декларация за съответствие
 3. Технически паспорт
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 5. Инструкция за съхранение
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-

LETTER OF AUTHORIZATION

To whom it may concern

This is to certify that the company:

GLOBAL-TEST EOOD

Boila business center, 2L, Samokovsko shose str, floor 2, office 10
1138 Sofia
Bulgaria

is an authorized sales representative of

VEGA Grieshaber KG
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77761 Schiltach
Germany

for the territory of Bulgaria.

This authorization is limited to the territory of Bulgaria and is valid till December 31th, 2024.

Schiltach, November 13th, 2023

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Ali Kaya, Area Sales Manager CIS

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