



Safety instructions VEGADIS 176 Ex (DIS176.ACSI)

PTB 14 ATEX 2028 X

II 2G Ex ib IIC T6 Gb



CE 0044



Document ID: 48012



VEGA

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Please note:

These safety instructions are part of the documentation:

- 47916 - VEGADIS 176
- 48013 - EC type approval certificate PTB 14 ATEX 2028 X

DE	Sicherheitshinweise für den Einsatz in explosionsgefährdeten Bereichen, verfügbar in den Sprachen deutsch, englisch, französisch und spanisch.
EN	Safety instructions for the use in hazardous areas are available in German, English, French and Spanish language.
FR	Consignes de sécurité pour l'utilisation en atmosphère explosible, disponibles dans les langues allemande, anglaise, française et espagnole.
ES	Instrucciones de seguridad para el empleo en áreas con riesgo de explosión, disponible en los siguientes idiomas alemán, inglés, francés y español.
CZ	Pokud nastanou potíže při čtení bezpečnostních upozornění v otištěných jazycích, poskytneme. Vám na základě žádosti k dispozici kopii v jazyce Vaší země.
DA	Hvis De har svært ved at forstå sikkerhedsforskrifterne på de trykte sprog, kan De få en kopi på Deres sprog, hvis De ønsker det.
EL	Εάν δυσκολεύεστε να διαβάσετε τις υποδείξεις ασφαλείας στις γλώσσες που ήδη έχουν τυπωθεί, τότε σε περίπτωση ζήτησης μπορούμε να θέσουμε στη διάθεσή σας ένα αντίγραφο αυτών στη γλώσσα της χώρας σας.
ET	Kui teil on raskusi trükitud keeltes ohutusnõuete lugemisega, siis saadame me teie järelpärimise peale nende koopia teie riigi keeles.
FI	Laitteen mukana on erikielisiä turvallisuusohjeita. Voit tilata meiltä äidinkielistet turvallisuusohjeet, jos et selviä mukana olevilla kielillä.
HU	Ha a biztonságai előírásokat a kinyomtatott nyelveken nem tudja megfelelően elolvasni, akkor lépjen velünk kapcsolatba: azonnal a rendelkezésére bocsátunk egy példányt az Ön országában használt nyelven.
IT	Se le Normative di sicurezza sono stampate in una lingua di difficile comprensione, potete richiederne una copia nella lingua del vostro paese.
LT	Jeį Jums sunku suprasti saugos nuorodų tekstą pateiktomis kalbomis, kreipkitės į mus ir mes Jums duosime kopiją Jūsų šalies kalba.
LV	Ja Jums ir problēmas drošības noteikumus lasīt nodrukātajās valodās, tad mēs Jums sniegsim pēc pieprasījuma kopiju Jūsu valsts valodā.
MT	F'kaz li jkollok xi diffikulta' biex tifhem listruzzjonijiet ta' sigurta' kif ipprovduti, infurmana u ahna nibghatulek kopja billingwa tieghek.
NL	Als u moeite heeft met het lezen van de veiligheidsinstructies in de afgedrukte talen, sturen wij u op aanvraag graag een kopie toe in uw eigen taal.
PL	W przypadku trudności odczytania przepisów bezpieczeństwa pracy w wydrukowanych językach, chętnie udostępnimy Państwu kopię w języku obowiązującym w danym kraju.
PT	Caso tenha dificuldade de ler as instruções de segurança no idioma, no elas foram impressas, poderá solicitar junto a nós uma cópia em seu idioma.
SK	Pokiaľ nastanú problémy pri čítaní bezpečnostných pokynov vo vydaných jazykoch, poskytneme Vám na základe žiadosti k dispozícii kópiu v jazyku Vašej krajiny.
SL	Kadar se pojavijo težave pri branju varnostnih navodil v izdanih jeziki, vam bomo na osnovi zahtevka dali na razpolago kopijo v jeziku vaše države.
SV	Om du har problem att läsa säkerhetsanvisningarna på de här tryckta språken, ställer vi gärna på begäran en kopia på ditt språk till förfogande.

1 Area of applicability

These safety instructions apply to VEGADIS 176 Ex (DIS176.ACSI) according to EC type approval certificate PTB 14 ATEX 2028 X (certificate number on the type label) and for all instruments with the number of the safety instruction (48012) on the type label.

2 General information

The VEGADIS 176 Ex (DIS176.ACSI) is an intrinsically safe, scalable, digital indicating instrument without external energy for installation in hazardous areas of zone 1. It is looped into intrinsically safe 4 ... 20 mA circuits. The voltage supply for power supply of the electronics is taken from the 4 ... 20 mA circuit.

The VEGADIS 176 Ex (DIS176.ACSI) is suitable for use in hazardous atmospheres of all combustible materials of explosion group IIA, IIB and IIC for applications requiring instruments of category 2G.

If the VEGADIS 176 Ex (DIS176.ACSI) are installed and operated in hazardous areas, the general Ex installation regulations EN 60079-14 as well as these safety instructions must be observed.

The operating instructions as well as the installation regulations or standards that apply for explosion protection of electrical systems must generally be observed.

The installation of explosion-endangered systems must always be carried out by qualified personnel.

Category 2G instrument (EPL-Gb)

The VEGADIS 176 Ex (DIS176.ACSI) is installed in hazardous areas requiring instruments of category 2G. The VEGADIS 176 Ex (DIS176.ACSI) can be looped into an intrinsically safe circuit of instruments of category 1G.

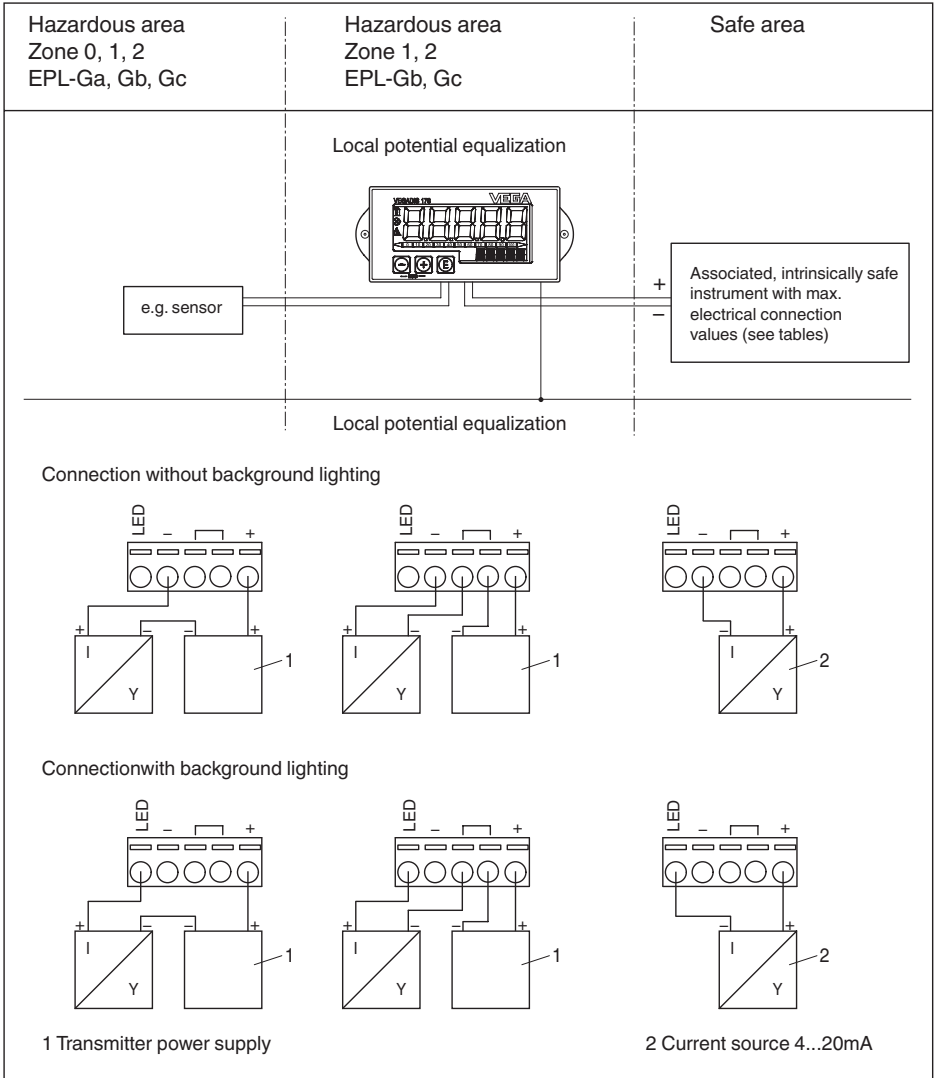
3 Technical data

Electrical connection values

VEGADIS 176 Ex (DIS176.ACSI)

Voltage supply: (terminals + and - or + and LED or + and auxiliary terminal П)	$U_i \leq 30 \text{ V DC}$
	$I_i \leq 200 \text{ mA}$
	$P_i \leq 900 \text{ mW}$
	$L_i = 35.1 \text{ } \mu\text{H}$
	$C_i = \text{negligibly small}$

Temperature class	Ambient temperature
T6	-40 ... +60 °C



4 Installation/construction

No potential equalisation on the complete circuit between VEGADIS 176 Ex (DIS176.ACSI) and the sensor(s), associated instrument required.

The required isolation voltage is > 500 V AC.

For applications requiring instruments of category 2G, the intrinsically safe power supply and signal circuit can correspond to protection class ia or ib. For connection to a circuit with protection class ib, the ignition protection type identification is Ex ib IIC T6.

For applications requiring instruments of category 1G, the intrinsically safe power supply and signal

circuit must be in conformity with protection class ia.

The permitted category of the intrinsically safe circuit for the sensor depends on the flame proofing of the associated instrument used.

5 Grounding/Potential equalization

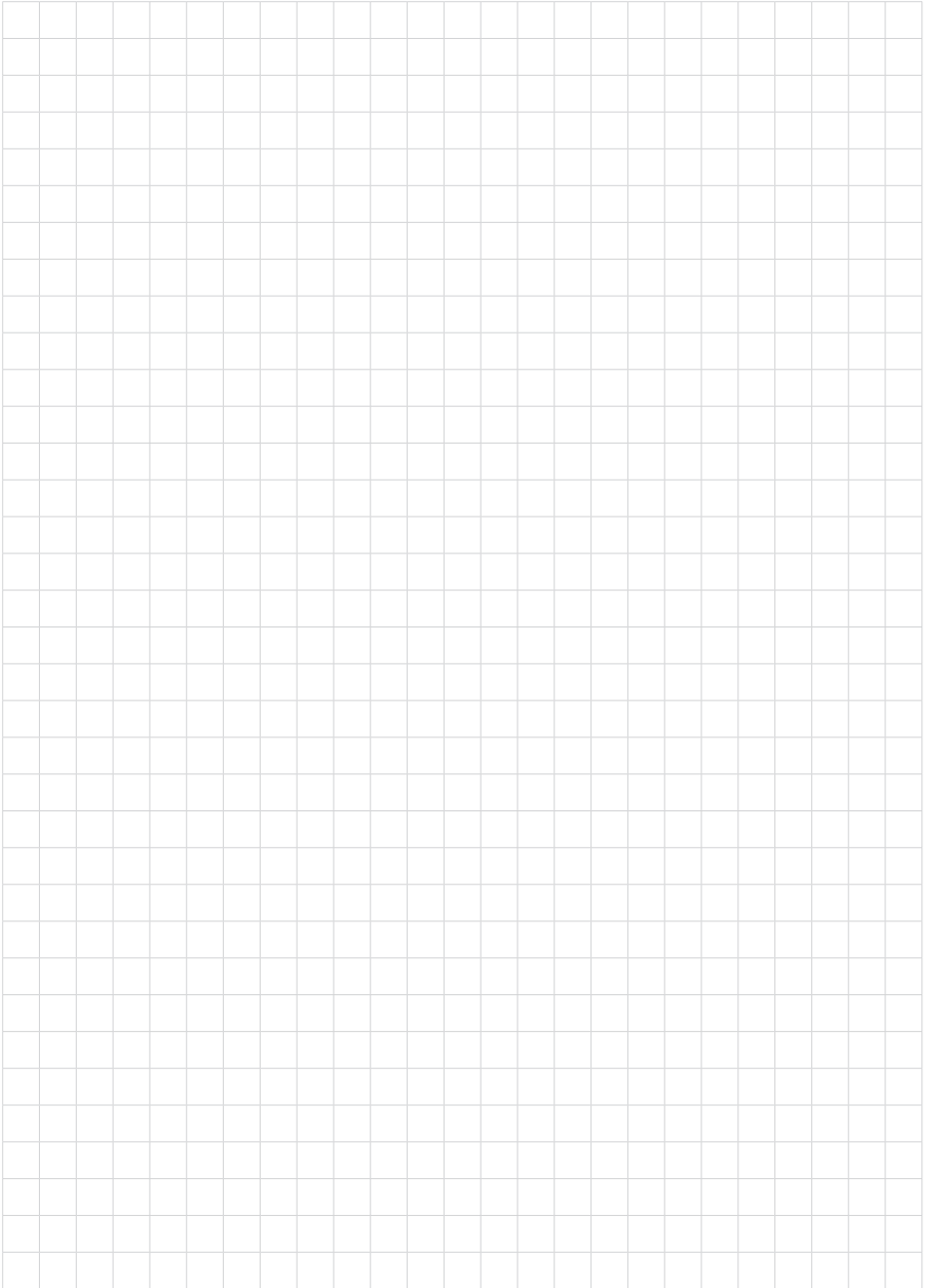
In order to avoid the danger of electrostatic charging of the housing, the VEGADIS 176 Ex (DIS176.ACSI), used as category 2G instrument, must be electrostatically connected to the local potential equalisation (transfer resistance $\leq 1 \text{ M}\Omega$), e.g. via the ground terminal.

6 Material resistance

The VEGADIS 176 Ex (DIS176.ACSI) must only be used in media against which the materials of the wetted parts are sufficiently resistant.

7 Impact and friction sparks

The VEGADIS 176 Ex (DIS176.ACSI) in light metal versions (e.g. aluminium/titanium/zircon) must be mounted in such a way that sparks from impact and friction between light metals and steel (except stainless steel, if the presence of rust particles can be excluded) cannot occur.



Printing date:

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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.

Subject to change without prior notice

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