

Safety instructions

VEGADIS 176 Ex

(DIS176.ACSI)



CE 0044



Document ID: 48012



VEGA

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Please note:

These safety instructions are part of the documentation:

- Operating Instructions VEGADIS 176
- EU type approval certificate PTB 14 ATEX 2028 X (Document ID: 48013)

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DE	Sicherheitshinweise für den Einsatz in explosionsgefährdeten Bereichen
EN	Safety instructions for the use in hazardous areas
FR	Consignes de sécurité pour une application en atmosphères explosibles
IT	Normative di sicurezza per l'impiego in luoghi con pericolo di esplosione
ES	Instrucciones de seguridad para el empleo en áreas con riesgo de explosión
PT	Normas de segurança para utilização em zonas sujeitas a explosão
NL	Veiligheidsaanwijzingen voor gebruik op plaatsen waar ontploffingsgevaar kan heersen
SV	Säkerhetsanvisningar för användning i explosionsfarliga områden
DA	Sikkerhedsforskrifter til anvendelse i explosionsfarlig atmosfære
FI	Turvallisuusohjeet räjähdyksvaarallisissa tiloissa käytettä varten
EL	Υποδείξεις ασφαλείας για τη χρησιμοποίηση σε περιοχές που υπάρχει κίνδυνος έκρηξης

DE	Die vorliegenden Sicherheitshinweise sind im Download unter www.vega.com standardmäßig in den Sprachen deutsch, englisch, französisch und spanisch verfügbar. Weitere EU-Landessprachen stellt VEGA nach Anforderungen zur Verfügung.
EN	These safety instructions are available as a standard feature in the download area under www.vega.com in the languages German, English, French and Spanish. Further EU languages will be made available by VEGA upon request.
FR	Les présentes consignes de sécurité sont disponibles au téléchargement sous www.vega.com en standard en allemand, en anglais, en français et en espagnol. VEGA met à disposition d'autres langues de l'Union Européenne selon les exigences.
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1 Area of applicability

These safety instructions apply to VEGADIS 176 according to EU 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.

Type of protection marking:

- II 2G Ex ib IIC T6 Gb

Approved standards:

- EN IEC 60079-0: 2018
- EN 60079-11: 2012

2 General information

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

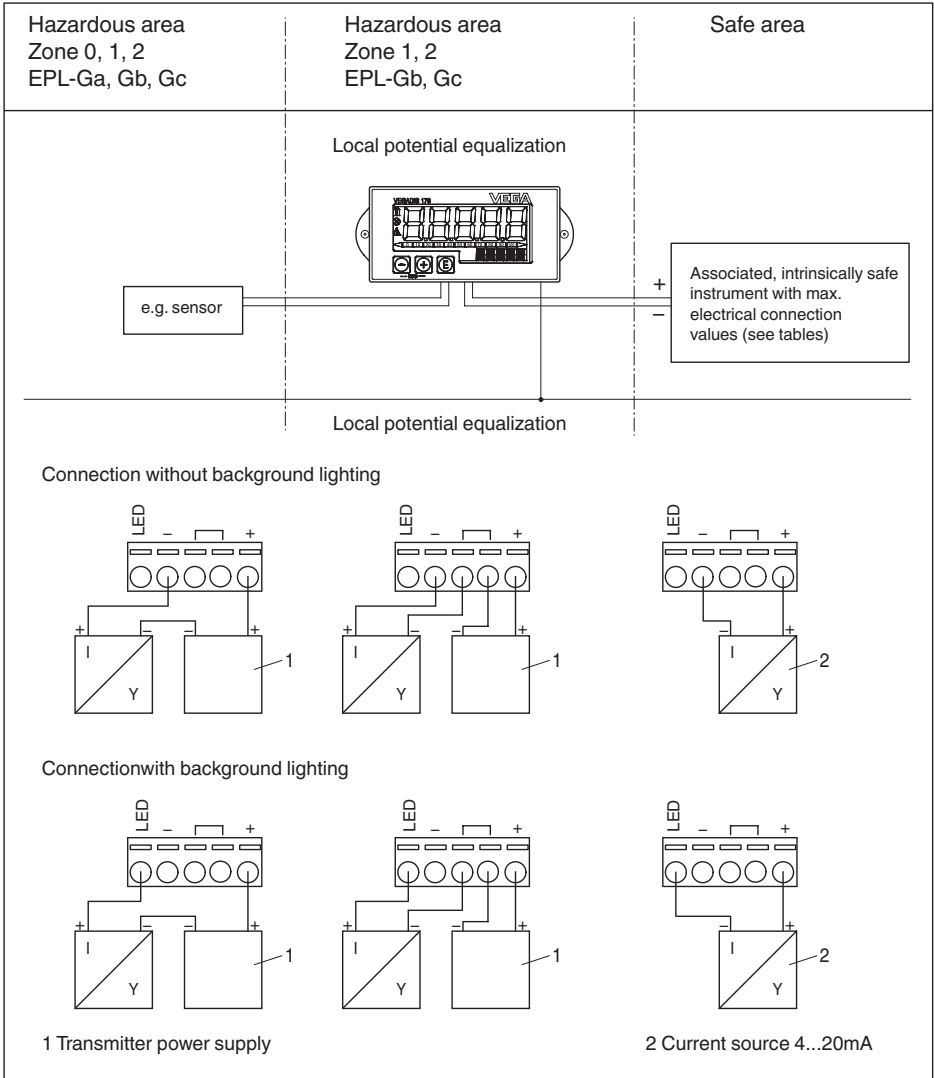
3 Technical data

Electrical connection values

VEGADIS 176

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 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 ignition protection type of the associated instrument used.

5 Grounding/Potential equalization

In order to avoid the danger of electrostatic charging of the housing, the VEGADIS 176, 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 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 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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