



## Safety instructions VEGASWING 61, 63

Transistor

II 3G Ex nA IIC T5...T1 Gc X



Document ID: 51341



# VEGA

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Supplementary documentation:

- Operating Instructions VEGASWING 61, 63

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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 biztonságos elõírásokat 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 the sensors of type series VEGASWING SWING6\*.EZ\*\*\*\*T/V(\*). If the VEGASWING SWING6\*.EZ\*\*\*\*T/V(\*) sensors are installed and operated in hazardous areas, the general Ex mounting instructions and these safety instructions must be observed.

## 2 General information

VEGASWING SWING6\*.EZ\*\*\*\*T/V(\*) are suitable for use in hazardous atmospheres for applications requiring instruments of category 3G.

If the sensors VEGASWING SWING6\*.EZ\*\*\*\*T/V(\*) are installed and operated in hazardous areas, the general Ex mounting instructions and these safety instructions must be observed.

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

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

## 3 Technical data

### Electrical data

#### Version VEGASWING SWING6\*.EZ\*\*\*\*T/V(\*)

Power supply and signal circuit: (terminals 1[+], 2[-]) U = 10 ... 55 V DC, max. 0.5 W

## 4 Application conditions

The max. permissible ambient temperatures depending on the temperature class and the process temperature can be found in the following tables.

### 4.1

#### Process and ambient temperatures

##### VEGASWING SWING61.EZ\*\*\*X/G\*T/V\*

Temperature class	Max. permissible process temperature	Max. permissible ambient temperature
T5	+100 °C	+24 °C
T4	+135 °C	+59 °C
T3, T2, T1	+150 °C	+80 °C

##### VEGASWING SWING61.EZ\*\*\*H\*T/V\*

Temperature class	Max. permissible process temperature	Max. permissible ambient temperature
T5	+100 °C	+24 °C
T4	+135 °C	+59 °C
T3, T2, T1	+150 °C	+80 °C

## VEGASWING SWING61.EZ\*\*\*T/D\*T/V\*

Temperature class	Max. permissible process temperature	Max. permissible ambient temperature
T5	+100 °C	+24 °C
T4	+135 °C	+59 °C
T3	+200 °C	+80 °C
T2, T1	+250 °C	+80 °C

## VEGASWING SWING63.EZ\*\*\*X/G\*T/V

Temperature class	Max. permissible process temperature	Max. permissible ambient temperature
T5	+100 °C	+24 °C
T4	+135 °C	+59 °C
T3, T2, T1	+150 °C	+80 °C

## VEGASWING SWING63.EZ\*\*\*H\*T/V

Temperature class	Max. permissible process temperature	Max. permissible ambient temperature
T5	+100 °C	+24 °C
T4	+135 °C	+59 °C
T3, T2, T1	+200 °C	+80 °C

## VEGASWING SWING63.EZ\*\*\*T/D\*T/V

Temperature class	Max. permissible process temperature	Max. permissible ambient temperature
T5	+100 °C	+24 °C
T4	+135 °C	+59 °C
T3	+200 °C	+80 °C
T2, T1	+250 °C	+80 °C

The permissible operating pressures are specified in the operating instructions manual.

When using a display and adjustment module, the max. ambient temperature is limited to +70 °C.

## 5 Opening the housing

The electronics compartment may be opened to adjust the measuring range.

If the instrument is operated with opened cover and the switch for sensitivity adjustment or mode adjustment is activated, please make sure that there is no hazardous atmosphere present.

The cover has to be screwed tightly after connection and setting.

## 6 Impact and friction sparks

The VEGASWING SWING6\*.EZ\*\*\*\*T/V(\*) in aluminium and titan version must be mounted in such a way that sparks from impact and friction between aluminium and titanium and steel (except stain-

less steel, if the presence of rust particles can be excluded) cannot occur.

## 7 Material resistance

For applications requiring instruments of category 3G the VEGASWING SWING6\*.EZ\*\*\*\*T/V(\*) should only be used in media against which the wetted materials are sufficiently resistant.

## 8 Grounding

The VEGASWING SWING6\*.EZ\*\*\*\*T/V(\*) have to be grounded electrostatically e.g. via the ground terminal.

## 9 Protection against static electricity (X-identification)



The VEGASWING SWING6\*.EZ\*\*\*\*T/V(\*) in the version with chargeable plastic parts, such as e.g. metal housing with inspection window, are provided with a caution label on the housing referring to the safety measures that must be taken in case electrostatic charging occurs during operation.

Caution: Plastic parts! Danger of electrostatic charging!

- Avoid friction
- No dry cleaning
- Do not mount in pneumatic filling stream

## 10 Cable entries

The cable entry used should fulfil at least protection rating IP54.

The outer diameter of the connection cables must correspond to the permissible cable diameter of the cable gland.

When using the supplied cable entry, make sure you are using the cable diameter specified in the operating instructions.

Unused openings for cable and line entries have to be sealed tightly.

## 11 Important information for mounting

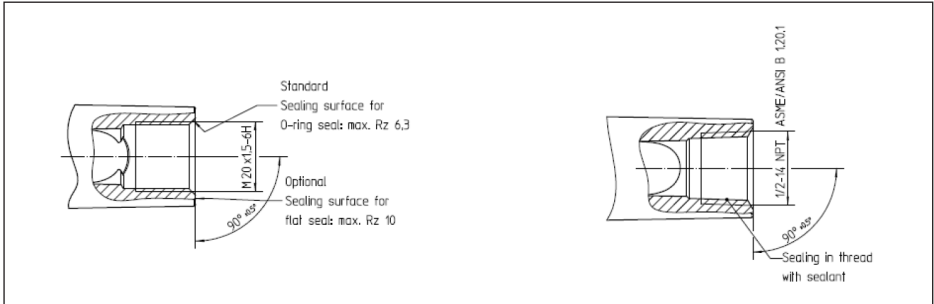
### Cable glands, threaded openings

Type	Thread	Cable diameter [mm]	Torques [Nm]
Hummel EXIOS A2F 1.608.2003.50	M20 x 1.5	6 ... 12 mm	8
Hummel EXIOS A2F 1.608.1203.70	½ NPT	6 ... 12 mm	8
Hummel EXIOS MZ 1.6Z5.2000.51	M20 x 1.5	9 ... 13 mm	8
Hummel EXIOS MZ 1.6Z5.1200.70	½ NPT	9 ... 13 mm	8

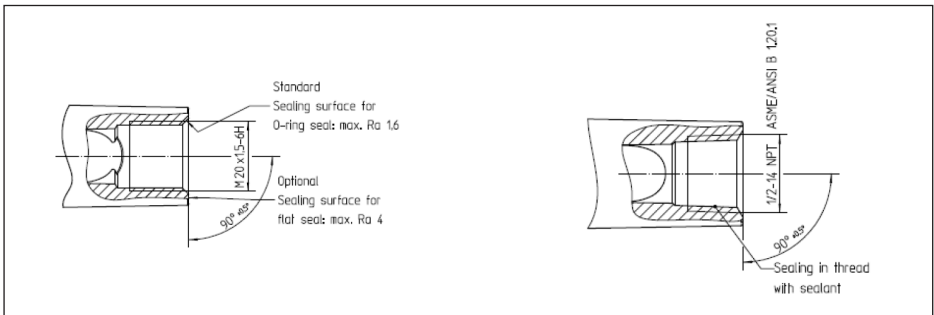
The specified torques are test torques and can only be regarded as reference values. The manufacturer's mounting instructions provided must be observed.

If suitable cable glands or cable insertion possibilities not included in the scope of supply are used, these must be compatible with the threaded openings.

## Aluminium housing with M20 x 1.5 thread, ½ NPT thread



## Stainless-steel housing (fine cast) with M20 x 1.5 thread, ½ NPT thread



## 12 Selection of the cables and wires (X-identification)

In nominal operation, temperatures exceeding 70 °C may occur at the cable entry. Please make sure that the cables and wires used are suitable for these temperatures.

## 13 Special features (X identification)

Option:

- Cover with inspection glass corresponds to the "low" mechanical strain level.
- The instrument must be installed and operated in a way that ensures there is no danger of ignition from electrostatic charging.
- The seal between lower part of the housing and cover must be correctly in place and in faultless condition. The cover must be screwed down tight.
- Free openings for cable and line entries must be closed at least according to the specified IP protection rating.
- Mount VEGASWING in a way that adequately ensures that the sensor will not touch the vessel wall due to the movements of other vessel installations and flow conditions in the vessel.

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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VEGA Grieshaber KG  
Am Hohenstein 113  
77761 Schiltach  
Germany

Phone +49 7836 50-0  
E-mail: [info.de@vega.com](mailto:info.de@vega.com)  
[www.vega.com](http://www.vega.com)