

## Safety instructions

### Screw plugs

**M20 x 1.5; M16 x 1.5**

**1/2 NPT; 3/8 NPT**

IECEX BVS 16.0006 X

Flameproof enclosures

Dust ignition protection by enclosure



Document ID: 50826



**VEGA**

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Supplementary documentation:

- Certificate of Conformity IECEx BVS 16.0006 X, Issue No.: 01 (Document ID: 50827)

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## 1 Area of applicability

These safety instructions apply to the "Ex d, Ex t" closing screws M20 x 1.5; M16 x 1.5; ½ NPT and ¾ NPT according to Certificate of Conformity IECEx BVS 16.0006 X, Issue No. 01.

## 2 General information

The operating instruments "Ex d, Ex t" closing screws M20 x 1.5; M16 x 1.5; ½ NPT and ¾ NPT according to the Certificate of Conformity IECEx BVS 16.0006 X are optionally made of stainless steel or brass nickle-plated. They are particularly used for closing free thread openings on respectively certified operating instruments of Messrs. VEGA.

The closing screws are suitable for applications in hazardous atmospheres of all combustible materials of explosion group IIA, IIB and IIC, for applications requiring instruments of category EPL-Ga/ Gb or EPL-Gb and for the use in hazardous areas (due to combustible dust) of instrument group III, requiring instruments of category EPL-Da or EPL-Db.

The following must be taken into consideration when the closing screws are mounted and operated in the thread openings of instrument group II and II:

- For mounting, setup and maintenance of the operating instrument, the staff must be
  - respectively qualified for this tasks
  - trained in explosion protection
  - familiar with the respectively valid regulations, e.g. planning and mounting acc. to IEC 60079-14
- The operating instruments have to be mounted according to the manufacturer specifications and the valid regulations and standards
- Modifications on operating instruments can influence the explosion protection and hence the safety
- Modifications must only be carried out by employees authorized by VEGA

### Ignition protection label:

Ex db IIC Gb

Ex ta IIIC Da

## 3 Type list

Article number	Type of thread	Material	Material, seal	Recommended torque
2.35000	M20 x 1.5	Stainless steel	NBR	8 Nm
2.27370	M20 x 1.5	Brass, nickel-plated	NBR	8 Nm
2.45535	M16 x 1.5	Stainless steel	NBR	8 Nm
2.45536	M16 x 1.5	Brass, nickel-plated	NBR	8 Nm
2.30690	½ NPT	Stainless steel	--	50 Nm
2.22084	½ NPT	Brass, nickel-plated	--	50 Nm
2.45537	¾ NPT	Stainless steel	--	25 Nm
2.45538	¾ NPT	Brass, nickel-plated	--	25 Nm

## 4 Application conditions

The maximum service temperature for Ex equipment blanking element type \*.\*\*\*\*\* in Ignition protection type Ex ta with seal:

- NBR P 584, RF: -40 ... +100 °C

- NBR 70: -40 ... +80 °C

## 5 Special instructions for connection/mounting

- Before connecting the closing screw, first check the thread and the thread opening on the instrument on mechanical damages
- When connecting the closing screw mechanical damages on the screw and the instrument must be avoided
- Make sure that the thread and the thread size corresponds to the opening. Take note of the label near the thread including the information, see example



- 1 Label: Type and size of the thread  
½-14 NPT or M20 x 1.5
- 2 Label: Type and size of the thread  
½-14 NPT or M20 x 1.5
- 3 Screw plug

- Only use the closing screws if they are suitable according to ignition protection type and the application. Take note of the selection criteria acc. to IEC 60079-14
- Mount the closing screws properly, to ensure the IP protection rating specified on the type label
  - If necessary note the attached mounting instructions, also for seals
  - If necessary, take note of the instruction for the torque
- Use closing screws only in applications against which wetted materials are sufficiently resistant
- Connection/mounting of the closing screws must only be carried out on metal housings
- In Ex-d applications, a screw-in depth  $\geq 8$  mm must be ensured in the version with metrical thread taking the undercut into account

## 6 Seals, only versions M20 x 1.5, M16 x 1.5

In the metrical version, an O-ring is placed into the "Undercut" on the thread.

Materiale: NBR

The materials are suitable for the specified temperature range of the closing screw.

## 7 Torque

The torque for connecting the closing screw is stated in the table under chapter "Type list"







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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.

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