



EXME-Hollow Shaft



EXME - Shaft



## Installation guide

This Installation Guide is valid only for encoder types EXME.



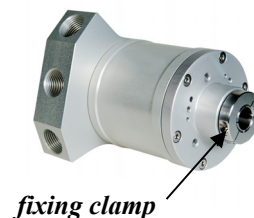
**For your safety please read this guide carefully.**

Failure to follow the instructions in this guide will render **ALL** certifications **INVALID**.

### 1. Installation

Installation of the encoder must be completed by a skilled technician or engineer. Failure to comply with the instructions below will render all certifications **INVALID**. **The encoder may not be modified by the customer.**

1. Insure that power is off.
2. Connect to earth prior to proceeding. Observe precautions for handling **ESD (ElectroStatic Discharge)** sensitive devices
3. When installing the Hollow Shaft encoder, check that the encoder fixing clamp is loose. Then slide the encoder hollow bore over the motor shaft (or other device).
4. Align encoder spring coupling or torque arm mounting hole(s) with motor face plate hole(s). Insert screws into mounting holes and tighten.
5. Tighten fixing clamp M3 screw (maximum 1.5 Nm (1.12 lbft) torque).
6. Remove the protective plastic insert(s) from the cable gland outlet(s). This must be done prior to final installation.
7. Use **only** EX d certified cable glands (or blind plug, if no cable is attached) which meet EN/IEC 60079-1 requirements for attaching cable to the encoder. Cable entry threads are M20 x 1,5, M25 x 1,5.
8. Use **only shielded cable**. Be aware of National Wiring Standards for ATEX environments. For ambient temperatures below -10° C and above +60° C use field wiring suitable for minimum and maximum ambient temperatures.
9. Connect encoder Circuit Ground (GND).



10. Connect remaining Output wires to PLC. Then apply power (**insure the Supply Voltage is correct!**).
11. If used, safety screws in the Removable End Cap shall have a minimum yield stress of 450 MPa, class A2-70 or A4-70.
12. Precautions must be taken to avoid dust from forming layers on the encoder.
13. It is strongly recommended that the original packaging be used for any additional shipping or transport.

### Caution

- **DO NOT connect encoder when power is on.**
- **DO NOT connect output wires to supply voltage.**
- **DO NOT open when a flammable atmosphere may be present.**
- **DO NOT strike encoder with hammer or any other heavy object.**
- **If encoder is mounted to electrical machinery with high current or high voltage on the shaft, precautions must be taken for galvanic separation.**
- **Maintenance is not necessary. Any required maintenance or repair is to be done only by the manufacturer.**
- **To minimize the risk from electrostatic discharge - clean only with a damp cloth.**
- **WARNING: Open circuit before removing cover. Keep cover tight while circuits are alive**
- **WARNING: seal required within 50mm of enclosure.**
- **WARNING: Do not tighten the Ex-proof cable gland while the encoder is attached to the shaft. Excessive torque may result in damage to the encoder ball bearings.**

### 2. Marking:



I M2 Ex db I Mb  
II 2 G Ex db IIC T5 Gb  
II 2 D Ex tb IIIC T100°C Db IP 64/65/66/67  
Ambient temperatures are – 40°C to 70°C



<sup>1)</sup> It is place for the specific number for the QAN issuer.

### 3. Certification numbers:

#### EXME:

ITS10ATEX16925X  
IECEX ITS 10.0009X

See certifications at [www.scancon.dk](http://www.scancon.dk)

**4. The encoder complies with the following standards:**

IEC 60079-0: 2011 Ed. 6 EN 60079-0 :2012+A11: 2013	Explosive atmospheres - Part 0: Equipment – General requirements
IEC 60079-1 :2014 Ed. 7 EN 60079-1 :2014	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 :2013 Ed. 2 EN 60079-31 :2014	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t".

*NOTE: Adding other data (on other CB request) or changing layout to this Installation Manual does not conflict with the actual data in this document and ATEX/IECEx certification. Adding the new data to this document cause change of revision number and the change not need to be notified by Certification Body.*