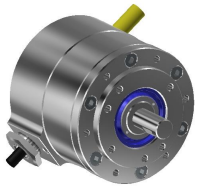
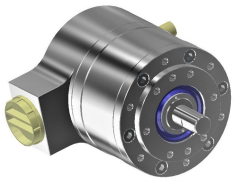
# Type REXM
# Installation Guide



**REXM-H – Hollow Shaft** **REXM-A - Shaft**

## Installation

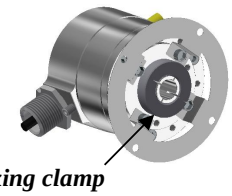
**This Installation Guide is valid only for encoder types REXM.**

**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 <u>not</u> be modified by the customer.**




1.1. Ensure that power is off.

1.2. Connect to earth prior to proceeding. Observe precautions for handling **ESD** (**E**lectro**S**tatic **D**ischarge) sensitive devices

1.3. 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).

1.4. Align encoder spring coupling or torque arm mounting hole(s) with motor face plate hole(s). Insert screws into mounting holes and tighten.

1.5. Tighten fixing clamp M3 screw (maximum 1.5 Nm (1.12 lbft) torque).

**Points 1.6 to 1.14 concerns the encoder with Removeable End Cap (<u>without fixed cable</u>)!**

1.6. **Use <u>only</u> shielded cable**. Temperatures at the cable entry can reach 70°C -80 °C. Selection of cable must be appropriate for the ambient temperature range in which the product is used.

1.7. Use **only** suitably certified cable glands (or blind plug, if no cable is attached) minimum rated for these applications or superior (see marking below). Cable entry threads are M20 x 1,5; M25 x 1,5; ½" NPT; ¾" NPT.

An entry shall have no more than one thread adapter when an adaptor is used. A blanking element shall not be used with an adapter.

1.8. Assemble cable through Ex-Proof Cable Gland be sure approx. 3 inches (76 mm) of wire extend completely through gland.

1.9. Remove the protective plastic insert(s) from the cable gland outlet(s). This must be done prior to final installation.

1.10. Remove End Cap from encoder.

1.11. Push wires through Cable Gland and the exterior End Cap hole.

1.12. Screw Cable Gland into the End Cap and tighten.
Estimate required wire length needed for insertion into Terminal Blocks. **NOTE** – *wire lengths will vary depending on which terminal they will be inserted into.*

- **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.**

1.13. Cut wires to proper lengths and insert into terminals.

1.14. Attach End Cap to encoder and tighten screws; M4 – 3,5 Nm +/- 0,1 Nm.

1.15. Connect encoder Circuit Ground (GND).

1.16. Connect remaining Output wires to PLC. Then apply power (**ensure the Supply Voltage is correct!**).

1.17. It is strongly recommended that the original packaging be used for any additional shipping or transport.

**Caution /Warning:**

- **DO NOT connect encoder when power is on.**
- **DO NOT connect output wires to supply voltage.**
- **WARNING: Do not open when an explosive atmosphere is present!**
- **DO NOT strike encoder with hammer or any other heavy object.**
- **WARNING: Potential electrostatic charging hazard - see instruction!**
  **To minimize the risk from electrostatic discharge - clean only with a damp cloth.**
- **WARNING : Temperatures at the branching point can reach 70-80°C. Selection of cable must be appropriate for the ambient tempearture range in which the product is used !**
- **When installed the enclosure must be protected from high risk impacts.**
- **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.**
- **The fasteners used to secure enclosure body to end shields shall have a minimum yield stress of 450 Mpa.**
- **For models without integral cable glands use only suitably certified Ex db I Mb cable glands, thread adaptors and blanking elements.**
- **It is a condition of certification that the flamepaths have to comply with the manufacturers drawings and can only be repaired by the manufacturer.**
- **It is a condition of certification that precautions must be taken to avoid dust from forming layers on the encoder**

**2. Marking:**

CE xxxx* UKCA xxxx** Ex I M2 Ex db I Mb

Ambient temperature range is – 40°C to 70°C

IECEx ATEX

*) It is place for the specific number for the QAN issuer.
**) It is place for the specific number for the UK QAN issuer.

**3. Electrical parameters**:

4.5 to 30VDC or 5 to 30 VDC, max. 100 mA

**4. Certification numbers:**

**REXM:**
ITS09ATEX16846X
ITS21UKEX0408X
IECEx ITS 10.0014X
IECEx TSA 22.0006X

See certifications at www.scancon.dk

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

| | |
|---|---|
| IEC 60079-0: 2017 Ed.7/<br>EN 60079-0: 2018 | Explosive atmospheres - Part 0: Equipment – General requirements |
| IEC 60079-1: 2014-06 Ed.7/<br>EN 60079-1: 2014 | Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" |

*NOTE: Adding/removing data or changing the layout of this document, which does not conflict with the actual data and ATEX/IECEx certification, does not need to be notified by Certification Body, as well as the new revision number following the changes.*