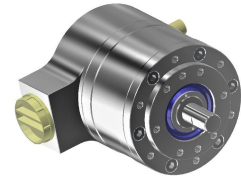




2REX-H – Hollow Shaft



2REX-A - Shaft



Installation

This Installation Guide is valid only for encoder types 2REX.



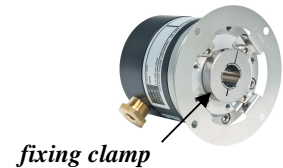
For your safety please read this guide carefully.

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.**

- 1.1. Ensure that power is off.
- 1.2. Connect to earth prior to proceeding. Observe precautions for handling **ESD (ElectroStatic Discharge)** 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 (without fixed cable)!**
- 1.6. Use **only 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.

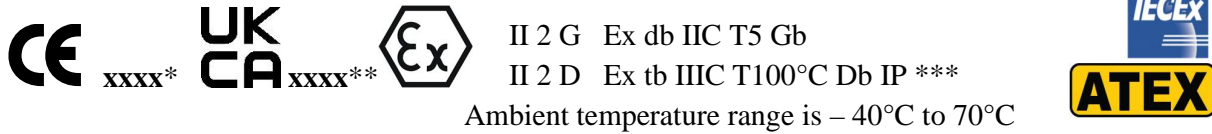
An entry shall have no more than one thread adapter when an adaptor is used. A blanking element shall not be used with an adapter.

- 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. The fasteners used to secure Removeable End Cap shields shall have a minimum yield stress of 450 MPa.
- 1.18. Precautions must be taken to avoid dust from forming layers on the encoder.
- 1.19. 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 temperature range in which the product is used !**
- **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.**
- **Use only fasteners with a minimum yield stress of 450 Mpa.**
- **Only suitably certified cable glands, fittings, and/or blind plugs may be used.**

2. Marking:



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

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

****) Additionally, the encoders meet IP64/65/66/67/68 (1hour/1 meter) in accordance with IEC 60529.

3. Certification numbers:

2REX:

ITS09ATEX16847X

ITS21UKEX0407X

IECEX ITS 10.0015X

See certifications at www.scancon.dk

4. The encoder complies with the following standards:

IEC 60079-0: 2017 Ed.7/ EN 60079-0: 2018	Explosive atmospheres - Part 0: Equipment – General requirements
IEC 60079-1: 2014-06 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	Electrical apparatus for use in the presence of combustible dust - Part 0: General Requirement

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.