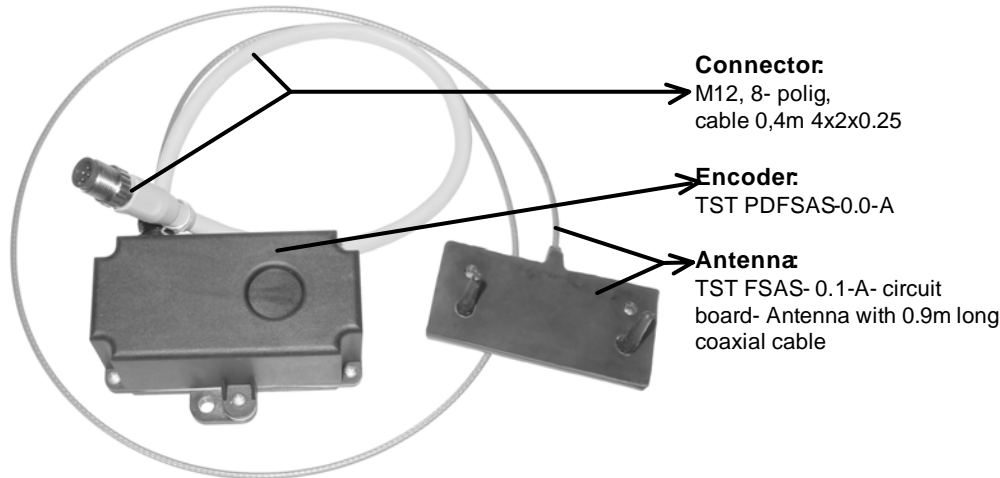


## TST PD\_FSAS

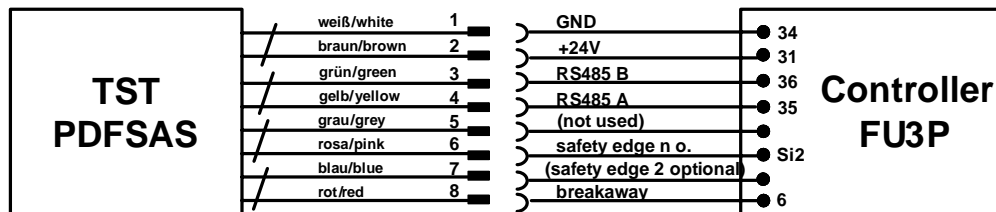
Multiturn Absolute Encoder w/ integrated  
Wireless Safety System for industrial doors  
- Stationary Unit  
Mounting and Startup manual

### ⚠ ATTENTION

The content of the door controller manual and particularly the safety instructions must get note!



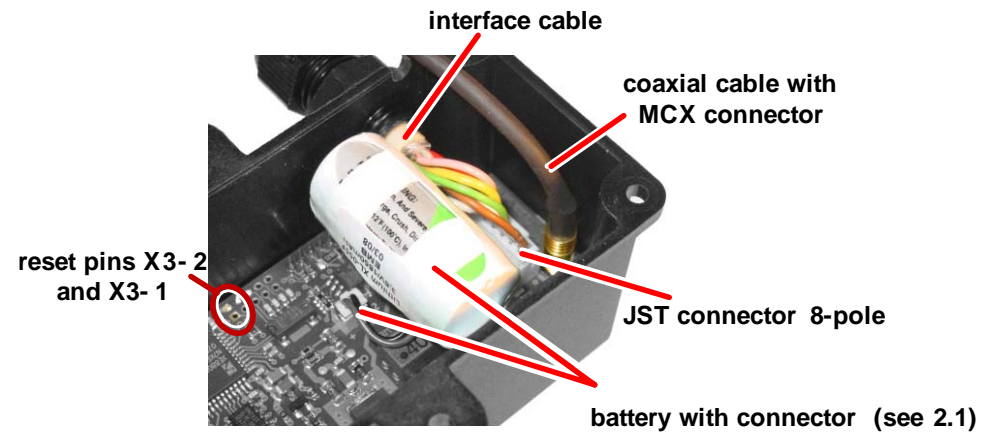
### 1. Pin connections:



#### Remarks:

- For connection shielded cables with M12 A-encoded plug are recommended. The shield has to be connected to earth ground only on the controller side.
- The housing of the plug is not allowed to be connected to earth ground.
- Not used wires must be isolated inside of FU3P

### 2. Connection image inside with:



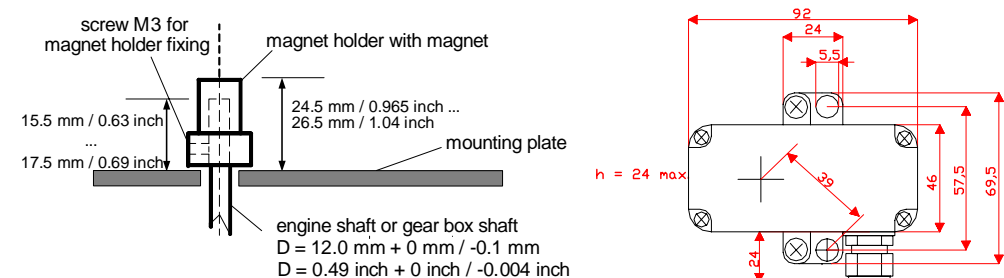
#### 2.1 battery change:

### ⚠ Attention

Disconnecting the battery effects clearing of position values from the encoder! After reconnecting the battery a RESET must be done. Do not short or charge the battery. Do not store or operate the system above the specified temperature range. Connecting the encoder with switched on supply voltage is not allowed.

☞ To do an Reset you must make an short cut between the Reset pins X3-2 and X3-1 for a short moment

### 3. Mounting of encoder:



- The assembling tolerance from shaft center to sensor center is maximum +/- 1 mm (+/- 0.039 inch).
- Torque for M3 screw / magnet holder fixing : maximum 0.4 Nm



#### 4. Mounting of the stationary Antenna:

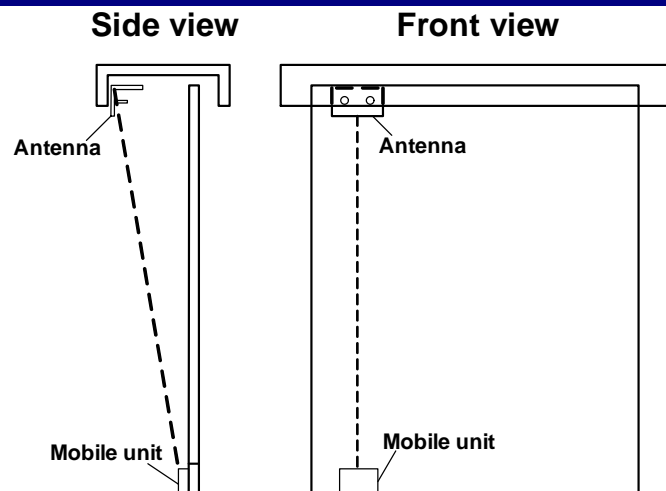


Figure: Mounting of Antenna on door

#### 5. Stationary Antenna + aluminum mounting bracket:

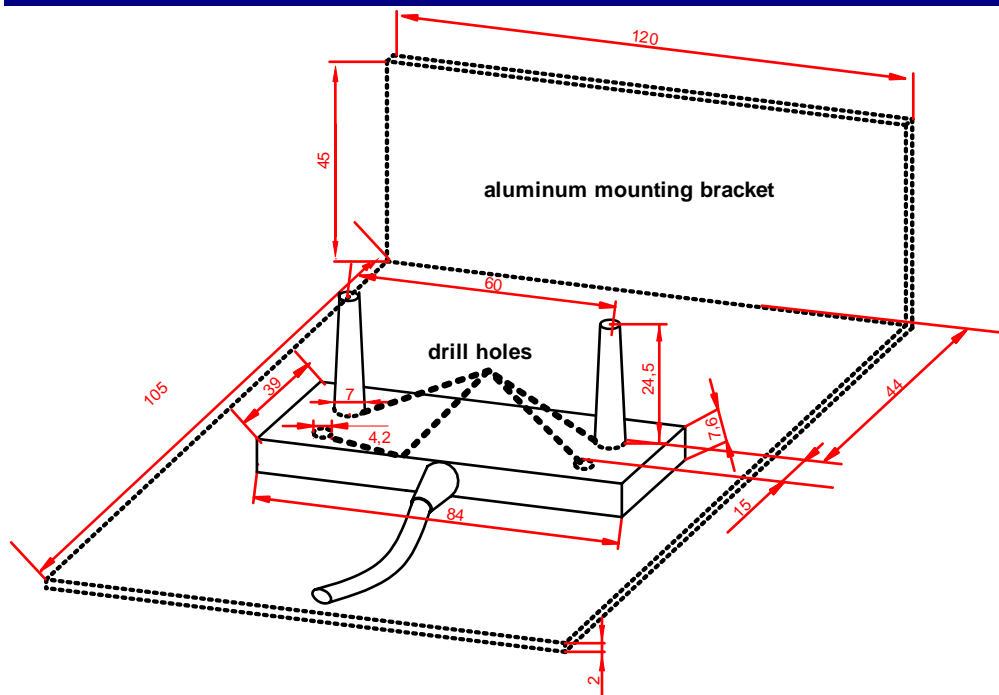


Figure: Stationary Antenna + aluminum mounting bracket

#### 6. Technical Data:

Connection data:	Supply voltage +24 V +/-10%, typical 50 mA. Serial bidirectional Interface RS485 / 19,2k Baud
Digital outputs:	Three configurable outputs with the following standard setting: - Output 1 and 2: Safety output (N.O.) with 8.2kΩ terminal resistor and testing of terminal resistor. - Output 3: Breakaway output (N.C. contact at 24V with 560Ω limiting resistor)
	Connecting to A-encoded M12 plug with 35cm long cable. The max. allowed Length of the customer mounted cable is 50m
Radio :	Operating range 2400 to 2483.5MHz 40 channels, Rated output power 0dBm
Temperature range:	Operating range -40 to +70 °C, Storage range -40 to +70 °C (recommended +20 °C)
Protection class:	IP65
Max. tolerable speed:	6000 U/min
Resolution:	13 Bit / turn (8192 Increments / turn)
Counter of turns:	15 Bit
Weight:	Without cable but with magnet holder 220g
Lifetime of battery:	typical 10 years
Dimensions (L x B x H):	Encoder 92 x 69.5 x 24mm Antenna board 84 x 39 x 7.6mm (Antenna height 26mm)

#### 7. FCC Statements:

Notice: This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Notice: Changes or modifications made to this equipment not expressly approved by FEIG ELECTRONIC may void the FCC authorization to operate this equipment.

Notice: This product has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio / TV technician for help

