

GENERAL INFORMATIONS



ARF S 58 series SinCos rotary encoders measure with magnetic and optical principle. They offer 2048 pulse resolution per revolution.

They are particularly suitable for applications in the field of elevator and drive technology.

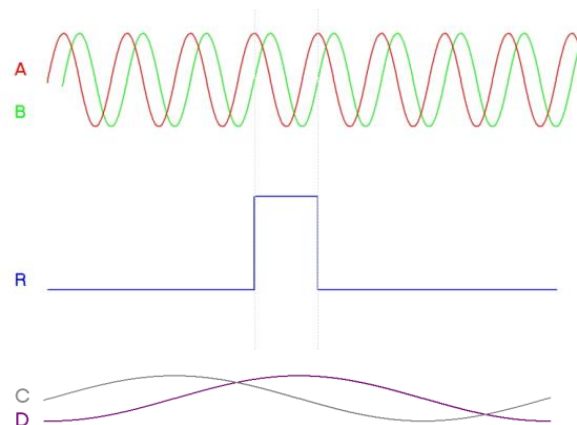
Thanks to their high signal quality, they work stably without being affected by noise.

WARNINGS

- The installation of the product is carried out by the customer who purchases the product, according to the wiring diagrams, installation information, etc. in this manual.
- Maintenance and repair should be done by the technicians authorized by the manufacturer firm.
- There must be minimum distance between the sensor and control unit. Avoid additions except the suitable connector unless it needs.
- Keep away the sensor cable from as high power energy cables, contactor, motor, switched power supplies, inductive and capacitive noisy supplies.
- Shielding edge of the sensor cable must be ground connected.
- Not to damage the sensor supply directions and voltage must be paid attention (For TTL sensor max. 5V; PP, HTL, HPL sensor max. 30V). Don't energize before all connections completed.
- Transport and storage should be at their original packaging and an ambient temperature of -40°C / +100°C in such a way that they will not be exposed to dust, humidity, impact, vibration, falling or water.
- Chemicals such as alcohol, thinner etc. should not be used for cleaning the product. The product should be wiped with a damp cloth.
- The product may be damaged and may become unusable if used outside of the specifications in the user manual.
- The product will be out of warranty if used outside of the specifications in the user manual and opened or repaired other than authorized services.

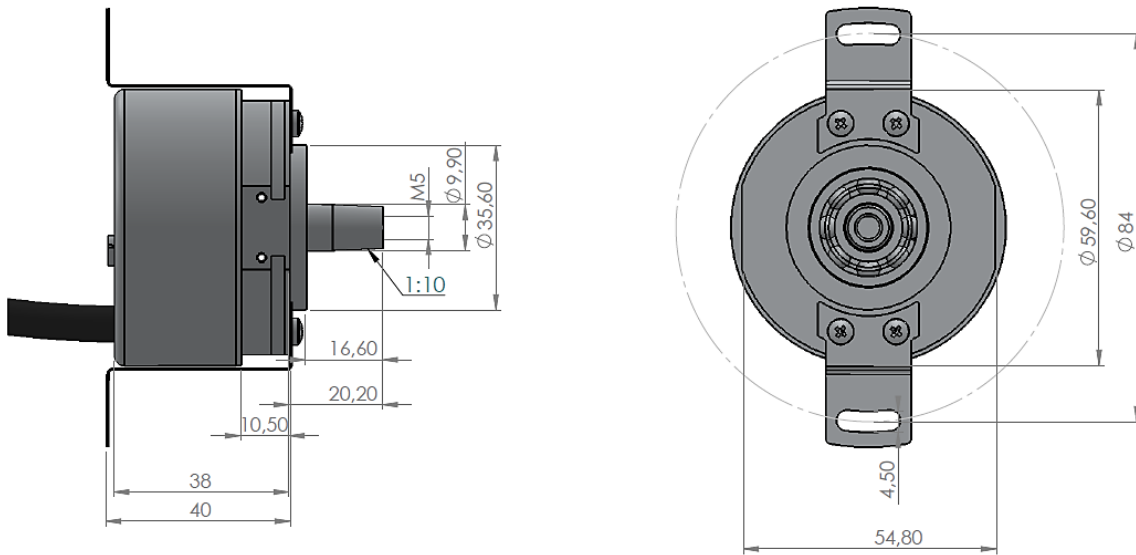
ELECTRICAL CONNECTIONS

| SIGNAL | CABLE COLOR |
|--------|-------------|
| A(+) | Yellow |
| A(-) | Blue |
| B(+) | Green |
| B(-) | White |
| C(+) | Orange |
| C(-) | Purple |
| D(+) | Light Blue |
| D(-) | Brown |
| R(+) | Pink |
| R(-) | Grey |
| +V | Red |
| 0V | Black |



A and B signals are incremental signals, 2048 units are produced in one turn. R (reference) signal is generated 1 unit in 1 round. C and D signals are absolute signals. They are generated 1 unit in 1 round.

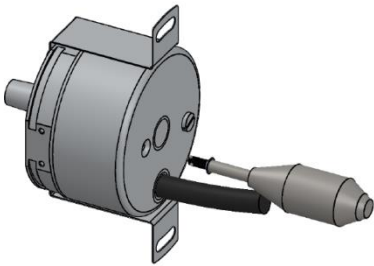
MECHANICAL DIMENSIONS



MOUNTING TO THE MOTOR SHAFT

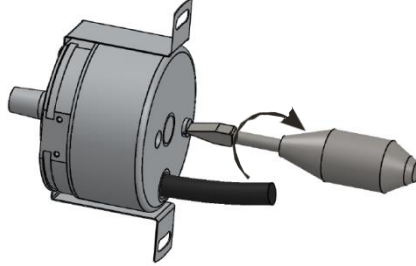
The cross-head screw on the back of the product is removed.

1



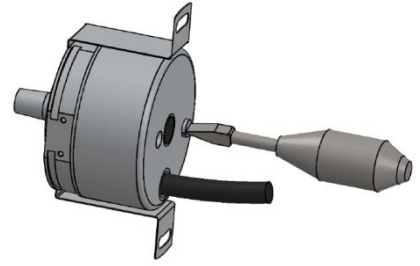
The flat-head screw is turned clockwise until the hole in the middle is opened.

2



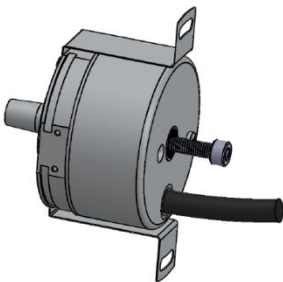
When the hole in the middle is opened, turning process is stopped.

3



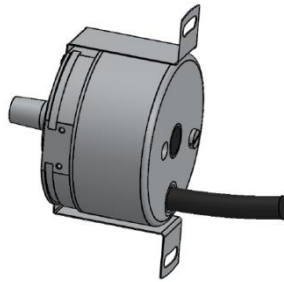
M5 screws are connected to the motor shaft from the middle of the product.

4



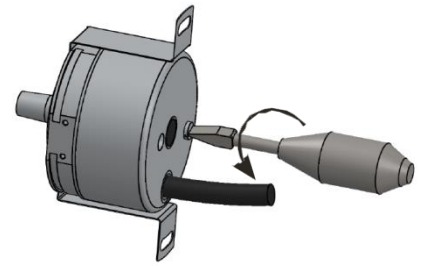
The M5 screw is tightened to the motor shaft.

5



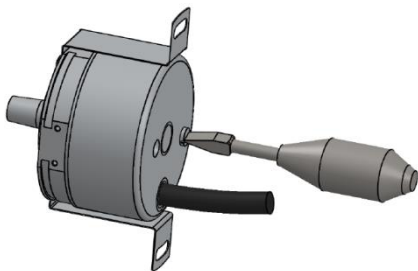
The flat-head screw is turned anticlockwise until the hole in the middle is closed.

6



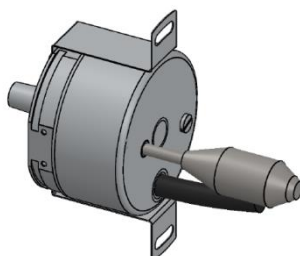
When the hole in the middle is closed, turning process is stopped.

7



The cross-head screw on the back of the product is fixed and mounting is completed.

8



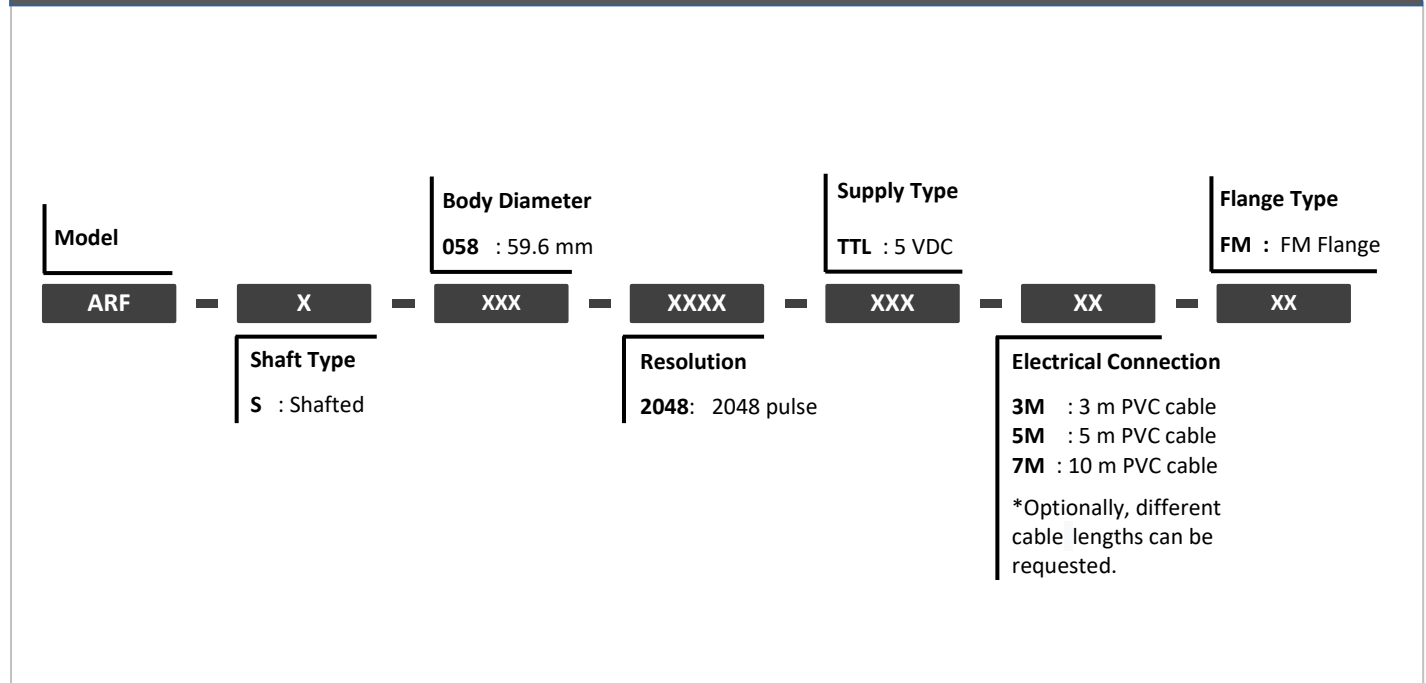
TEHNIICAL SPECIFICATIONS

| Mechanical Specifications | |
|--|--|
| Max. Operating Speed | 3000 RPM |
| Body Diameter | 59.6 mm |
| Shaft Diameter | 10 mm tapered |
| Operating Temperature | -25°C...+85°C |
| Storage Temperature | -40°C...+100°C |
| IP Protection Class | IP54 |
| Weight | ~250 gr |
| Material | Body: Aluminum |
| | Shaft: Stainless Steel |
| Electrical Specifications | |
| Measuring Principle | Magnetic and optic |
| Supply Voltage | 5 VDC |
| Current Consumption | ≤100 mA |
| Reverse Polarity Protection of the power supply | Yes |
| Electrical Connection | 4x0,14 mm ² + 4x2x0,14 mm ² shielded PVC cable |
| Sin/Cos Interface | |
| Frequency | ≤180 kHz |
| Signal Level | 1 Vpp (±10 %) |
| Short Circuit Protection | Yes |
| Pulse Rate | 2048 ppr |

BOX CONTENTS

| Product | Description |
|--|---|
| ARS S 58 | SinCos Rotary Encoder |
| User Manual | 1 pcs |
| Mounting and Dismounting Screws | 1 pcs M5 mounting screw, 1 pcs M6 dismounting screw |

PRODUCT CODE





Manufacturer Firm's Title, Address Details

Manufacturer Firm: ATEK ELEKTRONİK SENSÖR TEKNOLOJİLERİ SANAYİ VE TİCARET A.Ş.

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Disposal of E-Waste: This device is in conformity with WEEE Directive and consists of recyclable materials. This product should not be disposed with general waste for preventing negative effects on environment and human health. This product should be disposed to collecting points of authorized recycling facilities. Further information can be reached from authorized unit.