

# EGON-RS

## Absolute encoder RS



Digital absolute encoder featuring magnetic technology and suitable for reading and transmitting the shaft position to an external system via the RS-485 differential Half-Duplex output. It is used in a variety of industrial sectors, from automation to industrial handling machines and intralogistics.

### FEATURES

- Egon-RS is a magnetic multiturn encoder, suitable for counting the shaft revolutions, working even without power supply through a battery backup, active when the encoder reads a shaft revolution.
- Compact and flexible, it is designed for easy assembly and wiring together with standard sets of cams.
- Very low power consumption guarantees highest efficiency.
- Single turn measuring resolution guaranteed by 1024 points per revolution (10 bit version) or by 4096 points per revolution (12 bit version).
- IP protection degree: EGON-RS is classified IP65, IP67 and IP69K (pending).
- Extreme temperature resistance: from -25°C to +80°C.
- Featuring technopolymer housing and stainless steel AISI303 shaft.
- High quality materials and components guarantee long mechanical life, precision and repeat accuracy even in extreme conditions.

### OPTIONS

- Suitable for installation on Fox, Oscar and Top rotary limit switches to control multi-revolutions rotors.
- Available in configurations with shaft or with contactless magnet and bush.
- Featuring sturdy RS-485 differential Half-Duplex output suitable for transmitting through native protocol.
- Featuring protection against input over-current and against over-voltage and reverse polarity.
- Available with clamping flange, interface female connector and adapter coupling (Ø 6-6, Ø 6-8, Ø 6-10).

### CERTIFICATIONS

- CE marking.

## CERTIFICATIONS

Conformity to Community Directives	2014/35/UE Low Voltage Directive (LVD)
	2006/42/CE Machinery Directive
	EN 60204-1 Safety of machinery - Electrical equipment of machines
Conformity to CE Standards	EN 60947-1 Low-voltage switchgear and controlgear
	EN 60947-5-1 Low-voltage switchgear and controlgear - Control circuit devices and switching elements - Electromechanical control circuit devices
	EN 60529 Degrees of protection provided by enclosures
Markings and homologations	CE

## GENERAL TECHNICAL SPECIFICATIONS

Ambient temperature	Storage -25°C/+80°C
	Operational -25°C/+80°C
IP protection degree	IP65, IP67, IP69K (pending)
Rated rotation speed	800 rev./min
Maximum rotation speed	1500 rev./min
Mechanical life	Egon-RS with shaft > 30x10 <sup>6</sup> revolutions
	Egon-RS contactless ∞
Shaft diameter	6 mm
Connections	Male connector M8 4 PIN
	Cable
	Cable with male connector M12 5 PIN

## ELECTRICAL SPECIFICATIONS

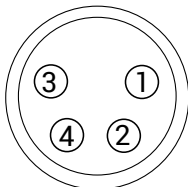
Power supply	9 - 36 Vdc
Output	Differential Half-Duplex RS-485 suitable for transmission through native protocol
Consumption	~20mA
Single-turn resolution	10 bit (1024 points per revolution)
	12 bit (4096 points per revolution)
Multi-turn resolution	14 bit (16384 points per revolution)
	16 bit (65535 points per revolution)
Back-up time	~3 months non-stop
Protection against input over-current	Yes
Protection against over-voltage and reverse polarity	Yes
Accuracy	+/- 0,35°

## MALE CONNECTOR SPECIFICATIONS

Number of PINs	4
Insulation resistance	≥100 MΩ
Maximum voltage	500 V
Wires	30 - 26 AWG
Contacts	CuZn
Mating	M8 4 PIN female connectors (Amphenol 8P-04AFFM-SL7A01)

## MALE CONNECTOR ASSIGNMENT

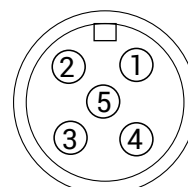
### 4 PIN connector



Male connector  
(front view)

PIN	Signal
1	12 - 30 Vdc
2	RS-485 B
3	RS-485 A
4	GND

### Cable connector 5 PIN

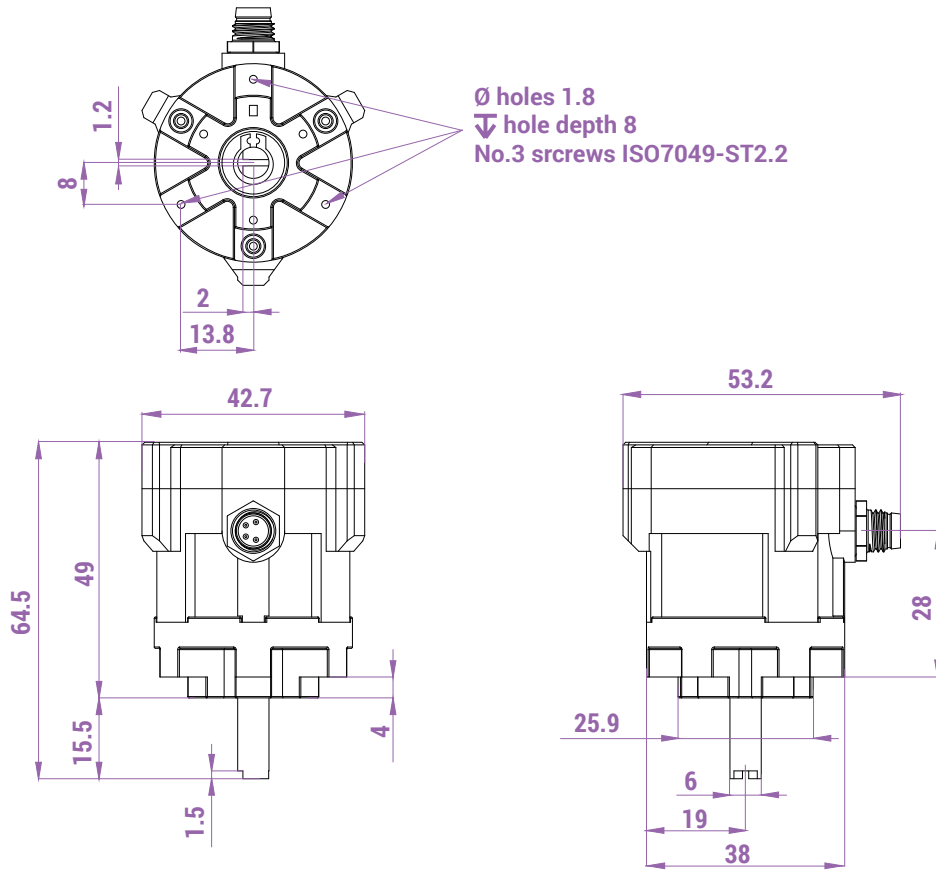


Male connector  
(front view)

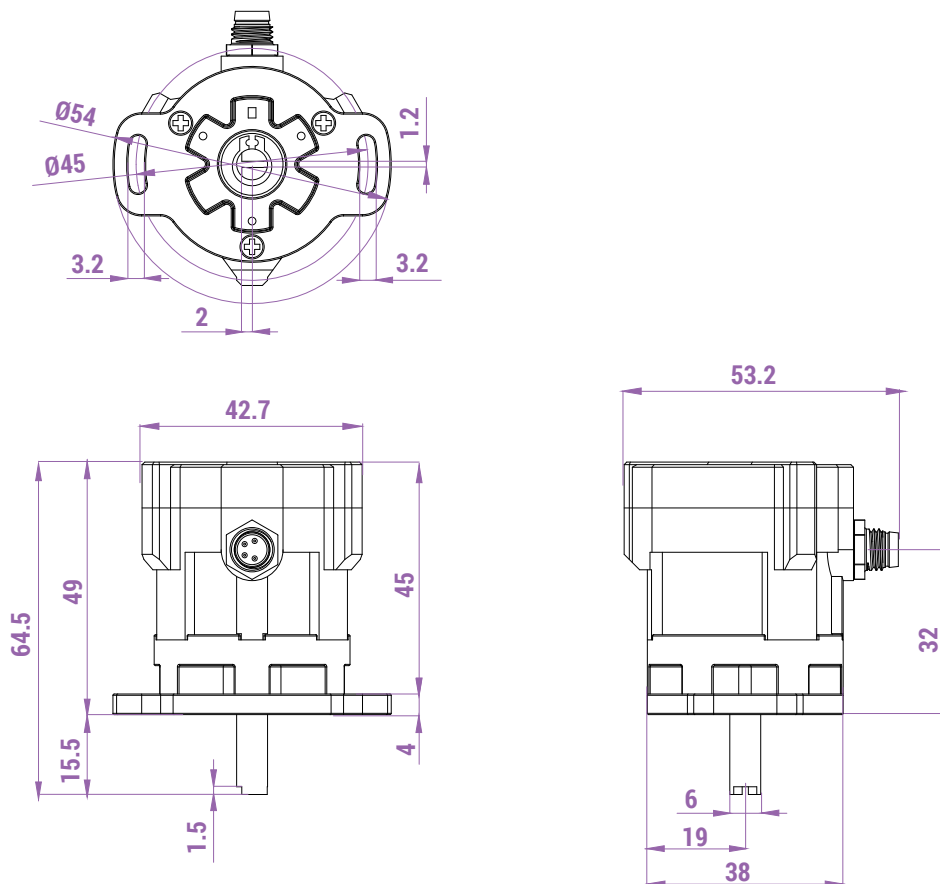
PIN	Signal
1	12 - 30 Vdc
2	RS-485 B
3	RS-485 A
4	GND
5	/

## OVERALL DIMENSIONS (mm)

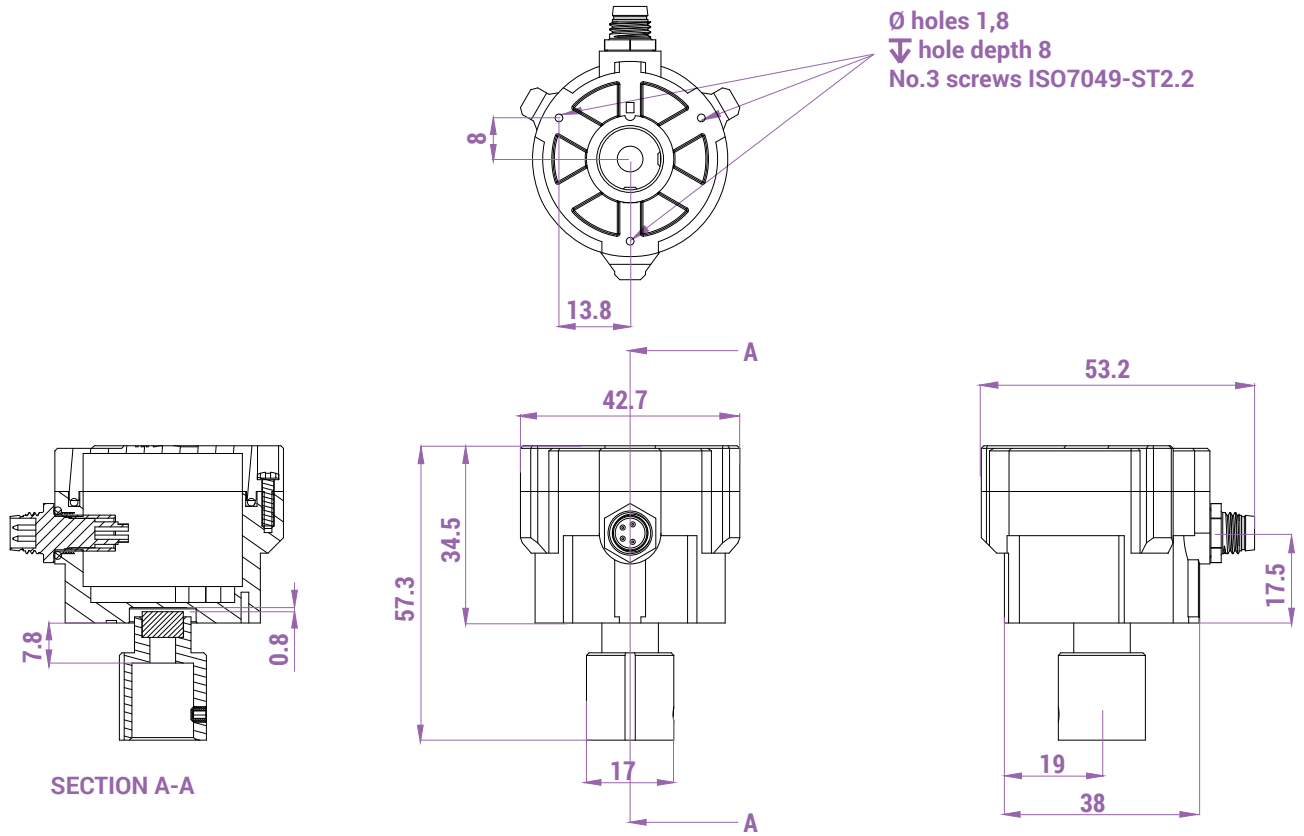
With shaft



With shaft and flange



Contactless version



Contactless version with flange

