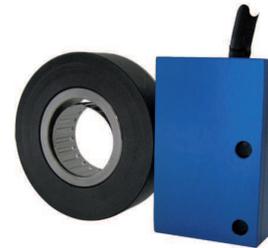


MAIN FEATURES

Contactless encoder with through hollow shaft up to 28 mm. The compact size (only 11 mm thickness), the high IP grade and resistance to vibrations make this product an excellent solutions for heavy duty applications.

- 2 channel encoder (A / B) up to 4096 ppr
- Power supply up to +28 V DC with several electrical interfaces available
- Up to 350 kHz output frequency
- Cable output, connector available on cable end
- Through hollow shaft diameter up to 28 mm
- Shaft mounting with star-ring
- Wide operating temperature -20° ... +85°C (-4° ... +185°F)


ORDERING CODE
ETM R 4096 S 5 L 9 S 8 PR .XXX

SERIES
magnetic incremental encoder series **ETM**

MODEL
through hollow ring **R**

RESOLUTION
ppr from **64** to **4096**
see table for pulses availability

ZERO PULSE
without zero pulse **S**

POWER SUPPLY
(with L electrical interface) 5 V DC **5**
5 ... 28 V DC **5/28**

ELECTRICAL INTERFACE
push-pull **P**
line driver **L**
power supply 5/28 V - output RS-422 **RS**

BORE DIAMETER
mm **9**
(3/8") mm **9,52**
mm **10**
mm **11**
mm **14**
mm **19**
mm **24**
mm **28**

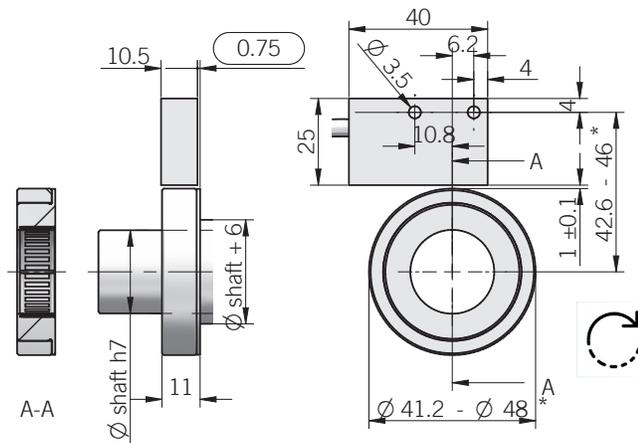
ENCLOSURE RATING
IP **67 S**

MAX ROTATION SPEED
8000 rpm **8**

OUTPUT TYPE
cable (standard length 1,5 m) **PR**
preferred cable lengths 2 / 3 / 5 / 10 m, to be added after OUTPUT TYPE (eg. PR5)

VARIANT
custom version **XXX**

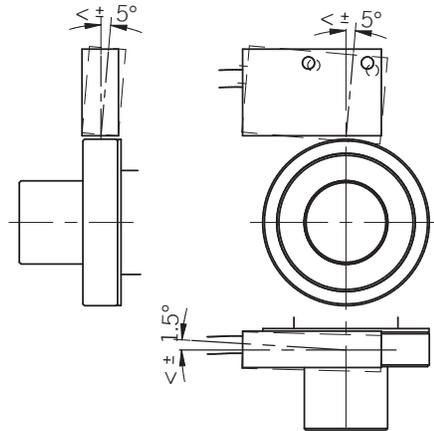
ETMR



* 42,6 / 41,2 for shaft up to Ø 19 mm
46 / 48 for shaft from Ø 24 / 28 mm

dimensions in mm

Mounting tolerances



for mounting instruction please refer to product installation notes

ELECTRICAL SPECIFICATIONS

Resolution	from 64 to 4096 ppr (powers of 2)
Power supply	5 = 4,5 ... 5,5 V DC 5/28 = 4,5 ... 30 V DC (reverse polarity protection)
Power draw without load	800 mW max
Max load current	20 mA / channel
Output type*	push-pull / line driver HTL (AEIC-7272) line driver RS-422 (AELT-5000 or equivalent)
Max output frequency	350 kHz
Counting direction	A leads B clockwise
Accuracy	± 0,35° typical / ± 0,50° max
Electromagnetic compatibility	according to 2014/30/EU directive
RoHS	according to 2011/65/EU directive
UL / CSA	certificate n. E212495

* for further details please see OUTPUT LEVELS under TECHNICAL BASICS section

CONNECTIONS

Function	Cable P	Cable L / RS
+V DC	red	red
0 V	black	black
Ch. A	green	green
Ch. A-	/	brown
Ch. B	yellow	yellow
Ch. B-	/	orange
⊥	shield	shield

MECHANICAL SPECIFICATIONS

Bore diameter	Ø 9 / 9,52 (3/8") / 10 / 11 / 14 / 19 / 24 / 28 mm
Enclosure rating	IP 67 (IEC 60529)
Max rotation speed	8000 rpm
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	20 G, 10 ... 2000 Hz (IEC 60068-2-6)
Moment of inertia	115 x 10 ⁻⁶ kgm ² (27,29 x 10 ⁻⁴ lbft ²)
Sensor body material	anodized aluminum
Magnet-actuator material	1.4305 / AISI 303 stainless steel
Operating temperature	-20° ... +85°C (-4° ... +185°F)
Storage temperature	-20° ... +85°C (-4° ... +185°F)
Weight	100 g (3,53 oz)
Magnet-actuator mounting tolerances	± 1 mm (axial) ± 0.1 mm (radial)

RESOLUTIONS

64* - 128 - 256 - 512 - 1024 - 2048 - 4096

* available with shaft Ø 24 / 28 mm; please directly contact our offices for other pulses