

MAIN FEATURES

∅ 88 mm through hollow shaft encoder designed for middle size asynchronous motors.

- 3 channel encoder (A / B / Z) up to 2500 ppr
- Power supply up to +28 V DC with several electrical interfaces available
- Up to 105 kHz output frequency
- Cable output, connector available on cable end
- Sturdy mechanic
- 25 or 30 mm bore diameter, others on request
- Shaft fixing with grub screws



ORDERING CODE

EH 88P 1024 S 5/28 P 30 S 3 PR .XXX

SERIES
 incremental encoder series **EH**
 incremental encoder series **EL**

MODEL
 through hollow shaft with spring **88P**

RESOLUTION
 (mod. EH) max ppr **2500**
 (mod. EL) max ppr **2048**
 see table for pulses availability

ZERO PULSE
 without zero pulse **S**
 with zero pulse **Z**

POWER SUPPLY
 (with L electrical interface) 5 V DC **5**
 (with L electrical interface) 8 ... 24 V DC **8/24**
 5 ... 28 V DC **5/28**

ELECTRICAL INTERFACE
 NPN open collector **C**
 push-pull **P**
 line driver **L**
 (mod. EH) power supply 5/28V - output RS-422 **RS**

SHAFT DIAMETER
 mm **25**
 mm **30**
 please directly contact our offices for other diameters

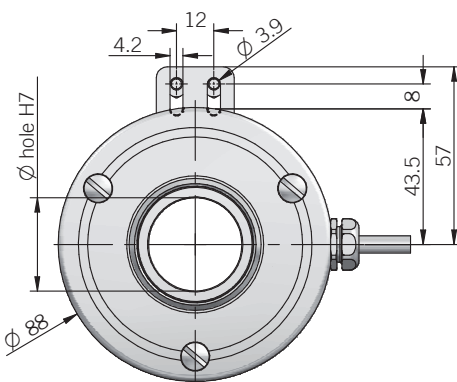
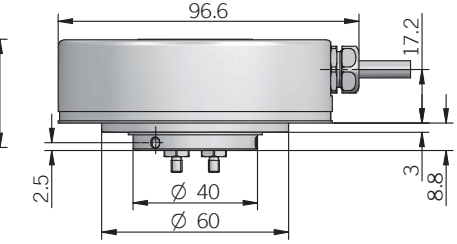
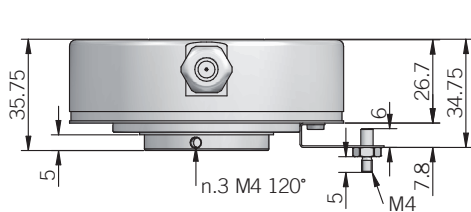
ENCLOSURE RATING
 IP 65 **S**

MAX ROTATION SPEED
 3000 rpm **3**

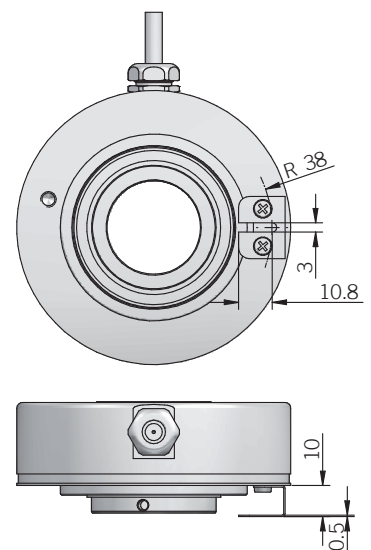
OUTPUT TYPE
 radial cable (standard length 0,5 m) **PR**
 preferred cable lengths 1,5 / 2 / 3 / 5 / 10 m, to be added after OUTPUT TYPE (eg. PR5)

VARIANT
 custom version **XXX**

88 P



OPTIONAL TORQUE STOP



for torque stop please refer to Accessories section

dimensions in mm

n.2 torque pins included

ELECTRICAL SPECIFICATIONS

Resolution	from 250 to 2500 ppr (EH series) from 2 to 2048 ppr (EL series)
Power supply	5 = 4,5 ... 5,5 V DC 5/28 = 4,75 ... 29,4 V DC 8/24 = 7,6 ... 25,2 (reverse polarity protection)
Current consumption without load	100 mA max
Max load current	C / P = 50 mA / channel L / RS = 20 mA / channel
Output type*	NPN open collector (pullup max +30V DC) push-pull / line driver HTL (AEIC-7272) line driver RS-422 (AELT-5000 or equivalent)
Max output frequency	105 kHz
Counting direction	A leads B clockwise (shaft view)
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 C / 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
Ch. Z	blue	blue
Ch. Z-	/	white
⊕	shield	shield

MECHANICAL SPECIFICATIONS

Shaft diameter	ø 25 / 30 mm
Enclosure rating	IP 65 (IEC 60529)
Max rotation speed	3000 rpm
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	20 G, 10 ... 2000 Hz (IEC 60068-2-6)
Moment of inertia	45 x 10 ⁻⁶ kgm ² (10,68 x 10 ⁻⁴ lbf ²)
Starting torque (at +20°C / +68°F)	< 0,1 Nm (14,16 Ozin)
Bearing stage material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	EN-AW 2011 aluminum
Bearings	2 ball bearings
Bearings life	10 ⁹ revolutions
Operating temperature	-10° ... +70°C (+14° ... +158°F)
Storage temperature	-25° ... +85°C (-13° ... +185°F)
Fixing torque for grub screws	max 0,75 Nm (106 Ozin)
Weight	350 g (12,35 oz)

EH SERIES RESOLUTIONS

250 - 256 - 500 - **512** - 700 - 720 - **1000** - **1024** - 1440 - 2500

EL SERIES RESOLUTIONS

2 - 5 - 90 - 100 - 200 - **360** - 400 - 600 - 900 - **2000** - 2048

please directly contact our offices for other pulses, preferred resolutions in bold

