

MAIN FEATURES

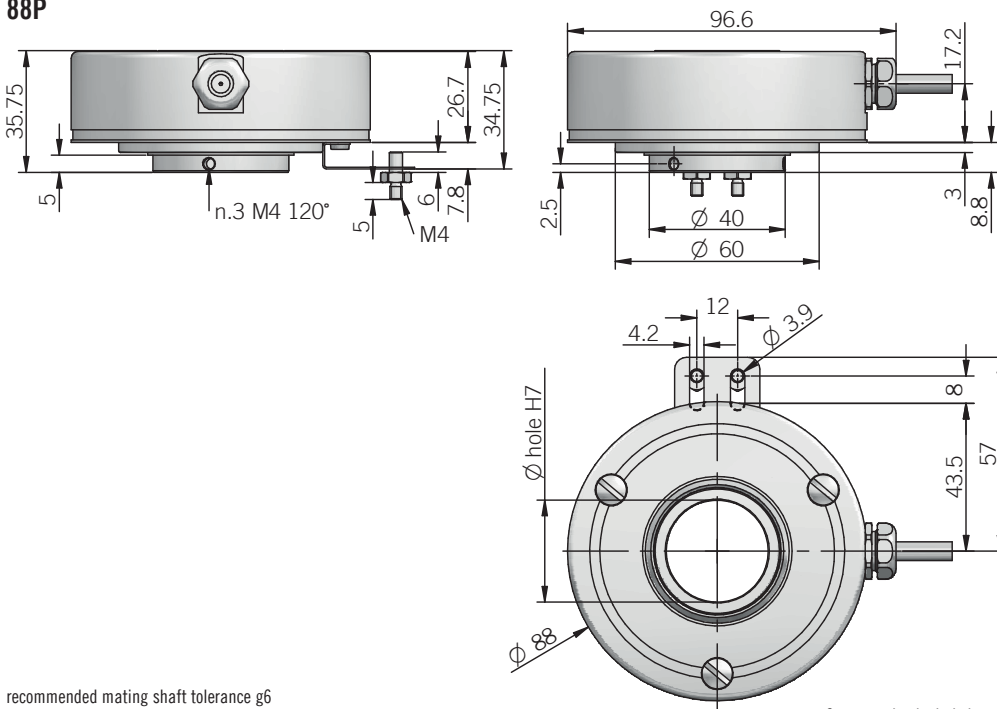
∅ 88 mm through hollow shaft encoder designed for middle size asynchronous motors.

- 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, connectors available on cable end
- Sturdy mechanic
- 25 or 30 mm bore diameter, others on request
- Shaft fixing with grub screws

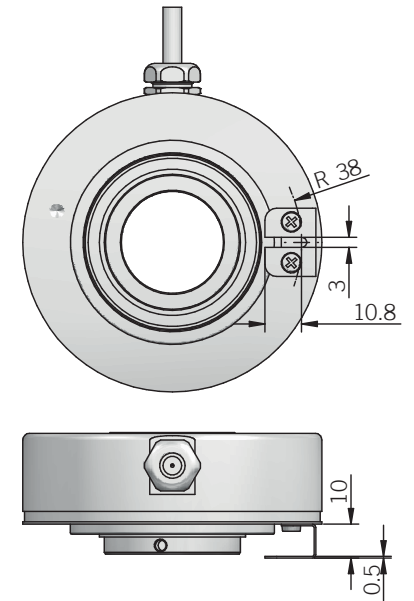


ORDERING CODE	EH	88P	1024	S	5/28	P	30	S	3	PR	.XXX
SERIES incremental encoder series EH incremental encoder series EL											
MODEL through hollow shaft with torque stop slot 88P											
RESOLUTION (mod. EH) max ppr 2500 (mod. EL) max ppr 2048 refer to the available pulses list											
ZERO PULSE without zero pulse S with zero pulse Z											
POWER SUPPLY (with L electrical interface) 5 V DC 5 5 ... 28 V DC 5/28											
ELECTRICAL INTERFACE NPN open collector C push-pull P line driver L power supply 5/28 V DC - 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											

88P



OPTIONAL TORQUE STOP SLOT



recommended mating shaft tolerance g6
dimensions in mm

n.2 torque pins included

for torque stop slot and torque pin please refer to Accessories

ELECTRICAL SPECIFICATIONS	
Resolution	from 250 to 2500 ppr EH series from 2 to 2048 ppr EL series
Power supply¹	5 = 4,5 ... 5,5 V DC 5/28 = 4,5 ... 30 V DC (reverse polarity protection)
Current consumption without load	100 mA max
Max load current	C / P = 50 mA / channel L / RS = 20 mA / channel
Electrical interface²	NPN open collector (AEIC-7273, pull-up max +30 V DC) push-pull / line driver HTL (AEIC-7272 or similar) line driver RS-422 (AELT-5000 or similar)
Max output frequency	105 kHz
Index signal	90°e (gated A&B) EH series 180°e (gated A) EL series
Counting direction	A leads B clockwise (shaft view)
Mean time to dangerous failure (MTTF)_d³ according to EN ISO 13849-1	220 years EH series 331 years EL series
Mission time (Tm)³	20 years
Diagnostic coverage (DC)³	0%
Cable type	shielded - fixed installation conductors section 0,22 mm ² / AWG 24 bending radius min 60 mm
Electromagnetic compatibility	according to 2014/30/EU directive
RoHS	according to 2011/65/EU directive
UL / CSA	file n. E212495

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) EL series 70 G, 11 ms (IEC 60068-2-27) EH series
Vibration	20 G, 10 ... 2000 Hz (IEC 60068-2-6) EL series 30 G, 10 ... 2000 Hz (IEC 60068-2-6) EH series
Moment of inertia	45 x 10 ⁻⁶ kgm ² (10,68 x 10 ⁻⁴ lbfm ²)
Starting torque (at +20°C / +68°F)	< 0,1 Nm (14,16 Ozin)
Bearing stage material	aluminum
Shaft material	stainless steel
Housing material	aluminum
Bearings	n.2 ball bearings
Bearings life	10 ⁹ revolutions
Operating temperature^{4,5}	-10° ... +70°C (+14° ... +158°F)
Storage temperature⁵	-25° ... +85°C (-13° ... +185°F)
Weight	350 g (12,35 oz)

¹ as measured at the transducer without cable influences

² for further details refer to OUTPUT LEVELS on TECHNICAL BASICS section

³ this product is not a safety component, for further details refer to TECHNICAL BASICS section

⁴ measured on the transducer flange

⁵ condensation not allowed

EH SERIES RESOLUTIONS

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

EL SERIES RESOLUTIONS

2 - 5 - 100 - 200 - **360** - 400 - **2000** - 2048

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

CONNECTIONS

Function	Cable C / P	Cable L / RS
+V DC	red	red
0 V	black	black
A+	green	green
A-	/	brown or grey
B+	yellow	yellow
B-	/	orange
Z+	blue	blue
Z-	/	white
⊖	shield	shield