

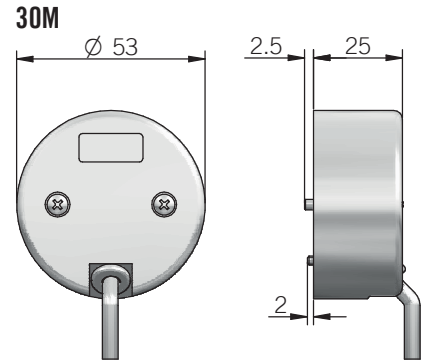
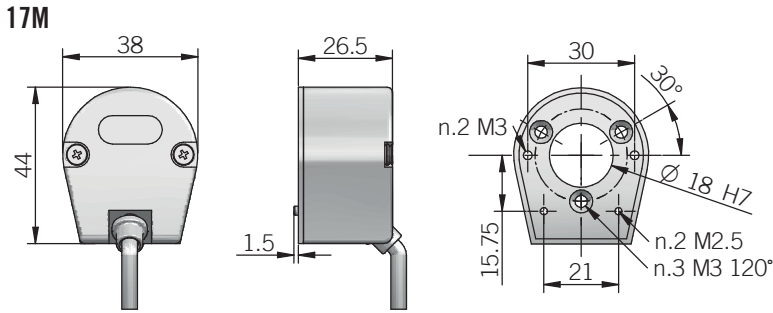
MAIN FEATURES

Series of miniaturized encoders for integration on small size AC/DC motors, stepper motors or for limited size applications.

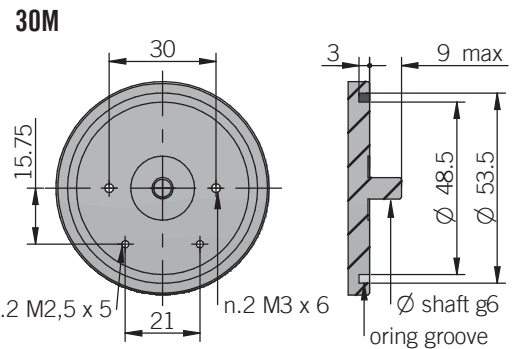
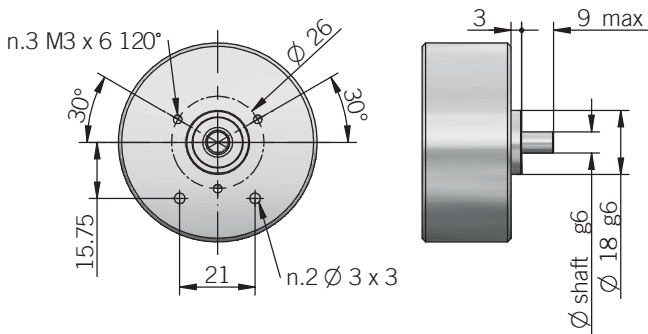
- 3 channel encoder (A / B / Z) up to 1024 ppr
- Power supply up to +30 V DC with several electrical interfaces available
- Up to 105 kHz output frequency
- No wear due to absence of bearings
- Easy assembly
- Compact size



ORDERING CODE	EH	30M	500	S	5/30	P	6	X	6	PR	.XXX
SERIES incremental encoder series EH											
MODEL kit encoder with flange 17M kit encoder 30M											
RESOLUTION ppr from 50 to 1024 refer to the available pulses list											
ZERO PULSE without zero pulse S with zero pulse Z											
POWER SUPPLY 5 V DC 5 5 ... 30 V DC 5/30											
ELECTRICAL INTERFACE NPN open collector C push-pull P line driver L power supply 5/30 V DC - output RS-422 RS											
BORE DIAMETER mm 6 (1/4") mm 6,35											
ENCLOSURE RATING (mod. 17M) IP40 - (mod. 30M) IP 54 X											
MAX ROTATION SPEED 6000 rpm 6											
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											



RECOMMENDED INTERFACE FLANGE DESIGN
17M



dimensions in mm

ELECTRICAL SPECIFICATIONS	
Resolution	from 50 to 1024 ppr
Power supply¹	5 = 4,5 ... 5,5 V DC 5/30 = 4,5 ... 30 V DC (reverse polarity protection)
Current consumption without load	100 mA max
Max load current	C / P = 50 mA / channel L = 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
Counting direction	A leads B clockwise (shaft view)
Index signal	90°e (gated A&B)
Mean time to dangerous failure (MTTF)³ according to EN ISO 13849-1	244 years
Mission time (T_m)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

RESOLUTIONS
50* - 100 - 200 - 250 - 256 - 360 - 400 - 500 - 512 - 1000 - 1024

*available only without zero pulse

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

MECHANICAL SPECIFICATIONS	
Bore diameter	Ø 6 / 6,35 (1/4") mm
Enclosure rating IEC 60529	mod. 17 IP 40 mod. 30 IP 40 or 54*
Max rotation speed	6000 rpm limited by output frequency
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Moment of inertia	0,5 x 10 ⁻⁶ kgm ² (12 x 10 ⁻⁶ lbf ²)
Flange material (mod. 17)	aluminium
Hub material	aluminium
Cover material	PA66 / PA6 glass fiber reinforced
Shaft radial play allowed	± 0,04 mm
Shaft axial play allowed	± 0,1 mm
Operating temperature^{4,5}	-20° ... +85°C (-4° ... +185°F)
Storage temperature⁵	-25° ... +85°C (-13° ... +185°F)
Weight	50 g (1,76 oz)

*when properly installed with ring kit (not supplied, please refer to Accessories)

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

CONNECTIONS		
Function	Cable 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