



EH 17 - 30 M

INCREMENTAL KIT ENCODER

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

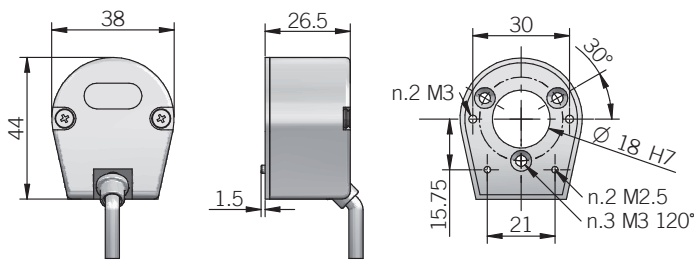


ORDERING CODE

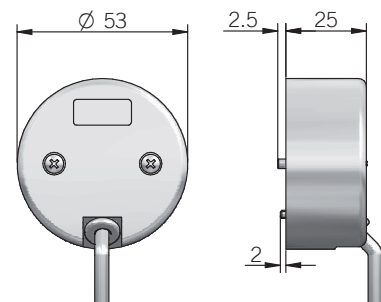
EH	30M	500	S	5/30	P	6	X	6	PR	.XXX
SERIES										
incremental encoder series EH										
MODEL										
kit encoder with flange 17M										
kit encoder 30M										
RESOLUTION										
ppr from 50 to 1024										
refer to the available pulses list										
ZERO PULSE										
without zero 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 5/30V - 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										

OPTICAL HOLLOW SHAFT INCREMENTAL ENCODERS | EH 17 - 30 M

17 M

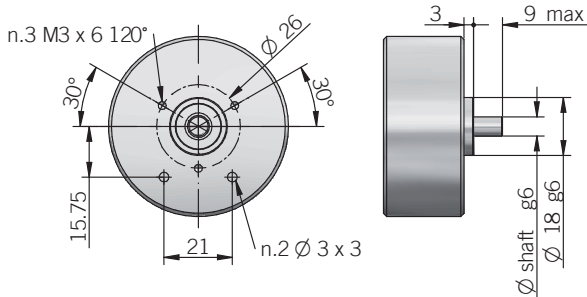


30 M

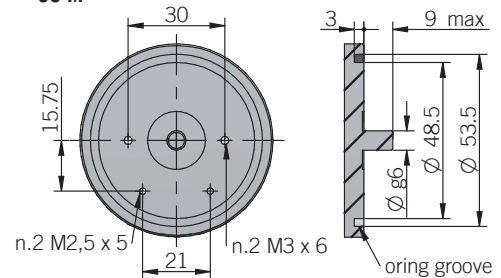


RECOMMENDED INTERFACE FLANGE DESIGN

17 M



30 M



dimensions in mm

ELECTRICAL SPECIFICATIONS

Resolution	from 50 to 1024 ppr
Power supply ¹	5 = 4,5 ... 5,5 V DC 5/30 = 4,5 ... 30 V DC (reverse polarity protection)
Current consumption without load	50 mA (2 channels A / B) 100 mA (3 channels A / B / Z)
Max load current	C / P = 50 mA / channel L = 20 mA / channel
Electrical interface ²	NPN open collector (AEIC-7273, pull-up max +30 V 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 2015/863/EU directive
UL / CSA	certificate n. E212495

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

MECHANICAL SPECIFICATIONS

Bore diameter	ø 6 / 6,35 (1/4") mm
Enclosure rating	mod. 17 IP 40 (IEC 60529) mod. 30 IP 54 (IEC 60529) when properly installed with oring kit (not supplied, please refer to the Accessories)
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 lbfm ²)
Flange material (mod. 17)	aluminium
Hub material	EN-AW 2011 aluminium
Cover material	PA66 glass fiber reinforced
Shaft radial play allowed	± 0,04 mm
Shaft axial play allowed	± 0,1 mm
Operating temperature ^{3,4}	-20° ... +60°C (-4° ... +140°F)
Storage temperature ⁴	-25° ... +70°C (-13° ... +158°F)
Weight	50 g (1,76 oz)

¹ as measured at the transducer without cable influences² for further details refer to OUTPUT LEVELS on TECHNICAL BASICS section³ measured on the transducer flange⁴ condensation not allowed

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



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