

**MAIN FEATURES**

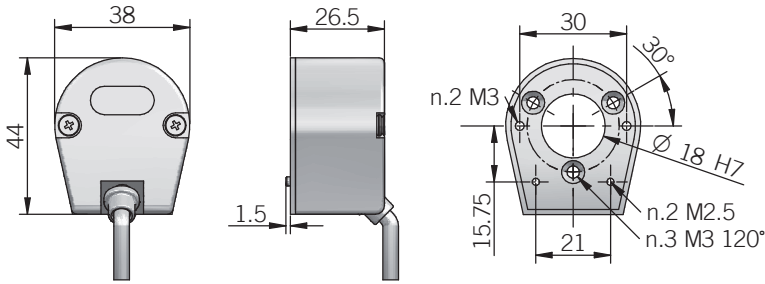
Series of miniaturized encoders with high resolution for integration on small size AC/DC motors, stepper motors or for limited size applications.

- 3 channel encoder (A / B / Z) up to 5000 ppr
- Power supply up to +30 V DC with several electrical interfaces available
- Up to 500 kHz output frequency
- No wear due to absence of bearings
- Easy assembly
- Compact size

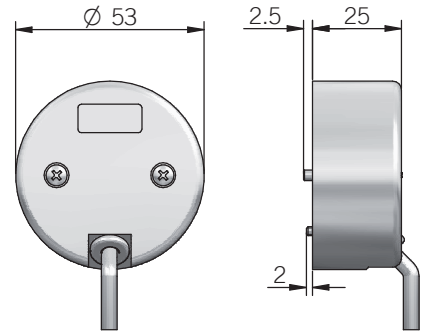


ORDERING CODE	EH	30MH	2000	S	5/30	P	6	X	X	PR	.XXX
<b>SERIES</b> incremental encoder series <b>EH</b>											
<b>TYPE</b> high resolution kit encoder with flange <b>17MH</b> high resolution kit encoder <b>30MH</b>											
<b>RESOLUTION</b> ppr <b>2000 / 2048 / 2500 / 4096 / 5000</b>											
<b>ZERO PULSE</b> without zero pulse <b>S</b> with zero pulse <b>Z</b>											
<b>POWER SUPPLY</b> 5 ...30 V DC <b>5/30</b>											
<b>ELECTRICAL INTERFACE</b> push-pull <b>P</b> line driver <b>L</b> power supply 5/30V - output RS-422 <b>RS</b>											
<b>BORE DIAMETER</b> mm <b>6</b> (1/4") mm <b>6,35</b>											
<b>ENCLOSURE RATING</b> (mod. 17MH) IP40 - (mod. 30MH) IP 54 <b>X</b>											
<b>OPTION</b> to be reported <b>X</b>											
<b>OUTPUT TYPE</b> radial cable (standard length 0,5 m) <b>PR</b> preferred cable lengths 1,5 / 2 / 3 / 5 / 10 m, to be added after OUTPUT TYPE (eg. PR5)											
<b>VARIANT</b> custom version <b>XXX</b>											

17 MH

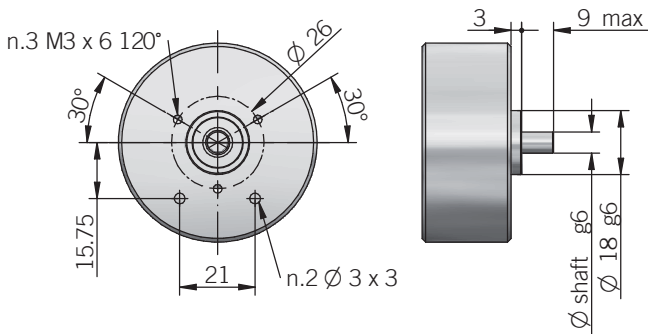


30 MH

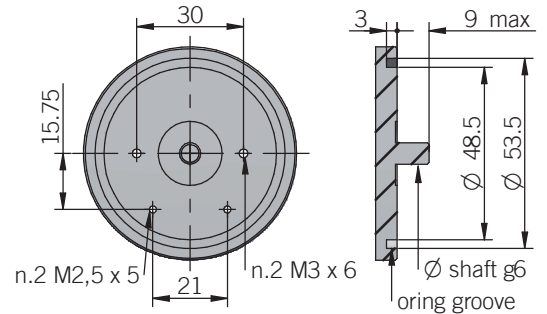


RECOMMENDED INTERFACE FLANGE DESIGN

17 MH



30 MH



dimensions in mm

ELECTRICAL SPECIFICATIONS	
<b>Resolution</b>	2000 - 2048 - 2500 - 4096 - 5000 ppr
<b>Power supply<sup>1</sup></b>	4,5 ... 30 V DC (reverse polarity protection)
<b>Current consumption without load</b>	60 mA max
<b>Max load current</b>	20 mA / channel
<b>Electrical interface<sup>2</sup></b>	push-pull / line driver HTL (AEIC-7272) line driver RS-422 (AELT-5000 or similar)
<b>Max output frequency</b>	500 kHz
<b>Counting direction</b>	A leads B clockwise (shaft view)
<b>Electromagnetic compatibility</b>	according to 2014/30/EU directive
<b>RoHS</b>	according to 2011/65/EU directive
<b>UL / CSA</b>	certificate n. E212495

MECHANICAL SPECIFICATIONS	
<b>Bore diameter</b>	Ø 6 / 6,35 (1/4") mm
<b>Enclosure rating IEC 60529</b>	mod. 17 IP 40 mod. 30 IP 54 when properly installed with oring kit (not supplied, please refer to the Accessories)
<b>Max rotation speed</b>	6000 rpm (limited by output frequency)
<b>Shock</b>	50 G, 11 ms (IEC 60068-2-27)
<b>Vibration</b>	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
<b>Moment of inertia</b>	0,5 x 10 <sup>-6</sup> kgm <sup>2</sup> (12 x 10 <sup>-6</sup> lbft <sup>2</sup> )
<b>Flange material (mod. 17)</b>	aluminium
<b>Hub material</b>	EN-AW 2011 aluminium
<b>Cover material</b>	PA66 glass fiber reinforced
<b>Shaft radial play allowed</b>	± 0,04 mm
<b>Shaft axial play allowed</b>	± 0,1 mm
<b>Operating temperature<sup>3,4</sup></b>	-20° ... +85°C (-4° ... +185°F)
<b>Storage temperature<sup>4</sup></b>	-20° ... +85°C (-4° ... +185°F)
<b>Weight</b>	50 g (1,76 oz)

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

<sup>1</sup> as measured at the transducer without cable influences  
<sup>2</sup> for further details refer to OUTPUT LEVELS on TECHNICAL BASICS section  
<sup>3</sup> measured on the transducer flange  
<sup>4</sup> condensation not allowed