

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 VDC with several electronic 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

SERIES
incremental encoder series **EH**

TYPE
high resolution kit encoder **17MH**
high resolution kit encoder **30MH**

RESOLUTION
ppr **2000 / 2048 / 2500 / 4096 / 5000**

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

POWER SUPPLY
5 ...30 V DC **5/30**

ELECTRONIC INTERFACE
push-pull **P**
line driver **L**
power supply 5/30V - output RS-422 **RS**

BORE DIAMETER
mm **6**
(1/4") mm **6,35**

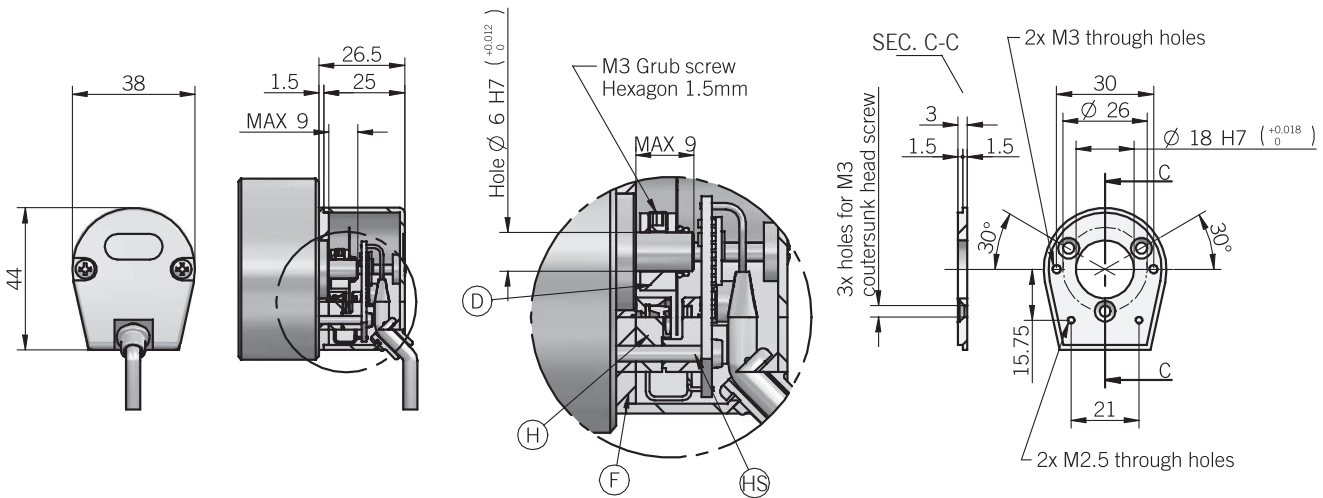
ENCLOSURE RATING
IP40 mod. 17 / IP 54 mod. 30 **X**

OPTION
to be reported **X**

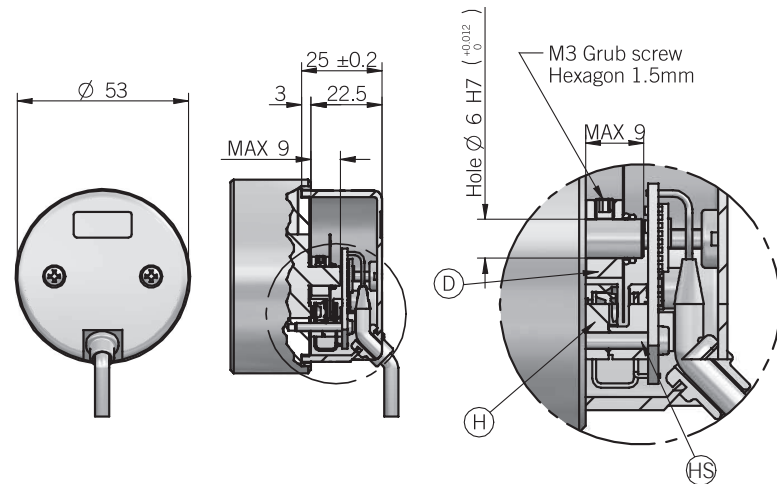
OUTPUT TYPE
radial cable (standard length 0,5 m) **PR**

VARIANT
custom version **XXX**

EH 17 MH



EH 30 MH



dimensions in mm

CONNECTIONS

Function	Cable output Push-pull	Cable output Line driver
+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

ELECTRICAL SPECIFICATIONS

Resolution	from 2000 to 5000 ppr
Power supply	5/30 = 4,5 ... 30 V DC (reverse polarity protection)
Current consumption without load	60 mA max
Max load current	20 mA / channel
Output type*	push-pull / line driver
Max output frequency	500 kHz
Counting direction	A leads B clockwise (shaft view)
Electromagnetic compatibility	IEC 61000-6-1 IEC 61000-6-4

*output levels according to power supply, for further details please see under Technical basics section

MECHANICAL SPECIFICATIONS

Bore diameter	∅ 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 (not supplied)
Max rotation speed	6000 prm
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
Flange material (mod. 17)	aluminium
Hub material	EN-AW 2011 aluminium
Cover material	PA66 glass fiber reinforced
Operating temperature	-20° ... +85°C (-4° ... +185°F)
Storage temperature	-20° ... +85°C (-4° ... +185°F)
Shaft axial play	± 0,1 mm
Shaft eccentricity (plus radial play)	± 0,04 mm
Fixing torque for grub screws	40 cNm max
Weight	50 g (1,76 oz)