



EL 63 FB / GB / PB / PBF / PC / PCF

BLIND / THROUGH HOLLOW SHAFT INCREMENTAL ENCODER

MAIN FEATURES

Hollow shaft encoder series for small AC motors, thanks to compact size (only 35mm height).

- 3 channel encoder (A / B / Z) up to 2500 ppr
- Power supply up to +28 VDC with several electronic interfaces available
- Up to 300 kHz output frequency
- Cable output, connector available on cable end
- Through or blind hollow shaft diameter up to 15 mm
- Shaft fixing by collar clamping



ORDERING CODE

EL 63GB 500 S 5/28 N 8 X 3 P .XXX

ORDERING CODE	EL 63GB	500	S	5/28	N	8	X	3	P	.XXX
SERIES incremental encoder	EL									
MODEL blind hollow shaft with spring blind hollow shaft with antirotation pin through hollow shaft with antirotation pin through hollow shaft with spring rear fixing shaft with antirotation pin rear fixing shaft with spring	63FB 63GB 63PB 63PBF 63PC 63PCF									
RESOLUTION ppr from see table for pulses availability	1 to 2500									
ZERO PULSE without zero pulse with zero pulse	S Z									
POWER SUPPLY (with L electronic interface) (with L or PC electronic interface)	5 V DC 8 ... 24 V DC 5 ... 28 V DC									
ELECTRONIC INTERFACE NPN NPN open collector push-pull (AEIC-7272) protected push-pull line driver power supply 5/28V - output RS-422	N C P PC L RS									
BORE DIAMETER mm	8 10 12 14 15									
ENCLOSURE RATING IP	54 X									
MAX ROTATION SPEED rpm	3000 3									
OUTPUT TYPE radial cable (standard length 1,5 m)	PR									
VARIANT custom version	XXX									



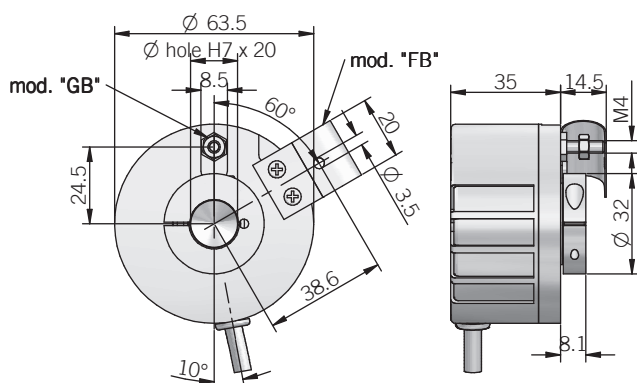
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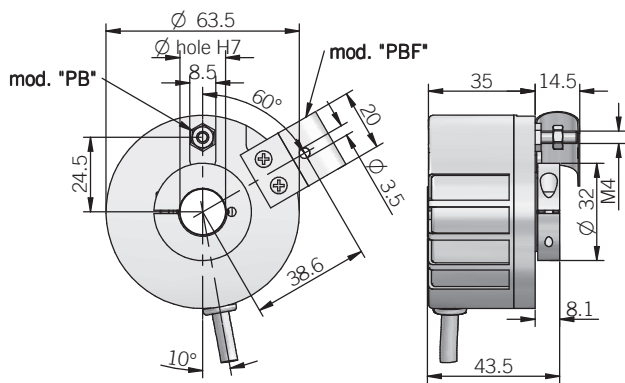
1985 - 2015
eltra@eltra.it | www.eltra.it

OPTICAL HOLLOW SHAFT INCREMENTAL ENCODERS | EL 63 GB / FB / PB / PBF / PC / PCF

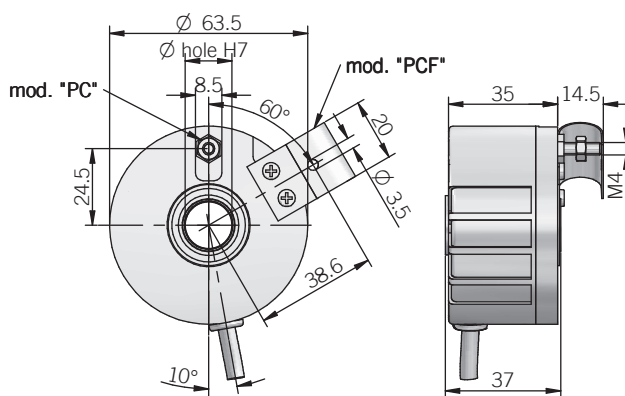
EL 63 FB / GB



EL 63 PB / PBF



EL 63 PC / PCF



anti-rotation pin is included in model GB / PB / PC, for mounting instruction please refer to product installation notes
dimensions in mm

ELECTRICAL SPECIFICATIONS

Resolution	from 1 to 2500 ppr
Power supply	5 = 4,5 ... 5,5 V DC 5/28 = 4,75 ... 29,4 V DC 8/24 = 7,6 ... 25,2 V DC (reverse polarity protection)
Power draw without load	800 mW
Max load current	N / C / P / PC = 50 mA / channel L / RS = 20 mA / channel
Output type*	NPN / NPN open collector / push-pull / line driver
Max output frequency	300 kHz
Counting direction	A leads B clockwise (shaft view)
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-4

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

MECHANICAL SPECIFICATIONS

Bore diameter	Ø 8 / 10 / 12 / 14 / 15 mm
Enclosure rating	IP 54 (IEC 60529)
Max rotation speed	3000 rpm
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Moment of inertia	4 x 10 ⁻⁶ kgm ²
Starting torque (at +20°C / +68°F)	< 0,04 Nm
Body material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	PA 66 glass fiber reinforced
Bearings	2 ball bearings
Bearings life	10 ⁹ revolutions
Operating temperature	-10° ... +60 °C (+14° ... +140°F)
Storage temperature	-25° ... +70 °C (-13° ... +158°F)
Fixing torque for collar clamping	1,5 Nm recommended
Weight	350 g (12,35 oz)

CONNECTIONS

Function	Cable output N / C / P / PC	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

RESOLUTIONS

1 - 2 - 5 - **20** - 25 - **32** - 50 - 60 - 100 - 128 - **200** - 250 - 256 - **360** - 400 - 500 - 512 - 600 - 720 - 1000 - **1024** - 1440 - 1800 - **2000** - 2048 - 2500
please directly contact our offices for other pulses, preferred resolutions in bold



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