

SINGLETURN ABSOLUTE ENCODER

ABSOLUTE SINGLETURN ICO ENCODER DESCRIPTION

The only encoder available on the market featuring an absolute output with the simplicity of the incremental one and adding an easy wiring system. Thanks to the integration of a micro-controller, it provides all the advantages of an absolute encoder transmitting the data as an incremental one (A, B) with a transmission frequency between 0 and 10 KHz. As for Parallel and SSI series, a broad selection of mechanical configuration is available in order to assure an easy mounting according to customer requirements.



SINGLETURN ABSOLUTE ENCODERS

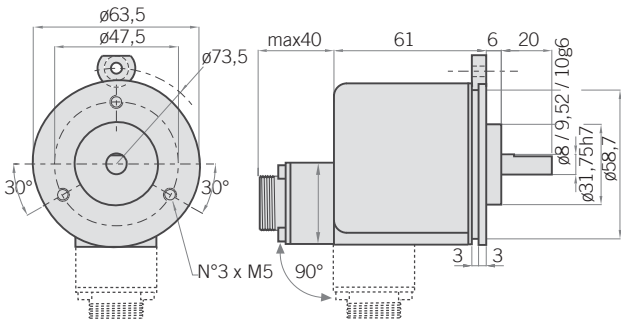
ICO ENCODER ORDERING CODE

EA 63 A 512 I 8/28 P X A 10 X 6 MA R . XXX

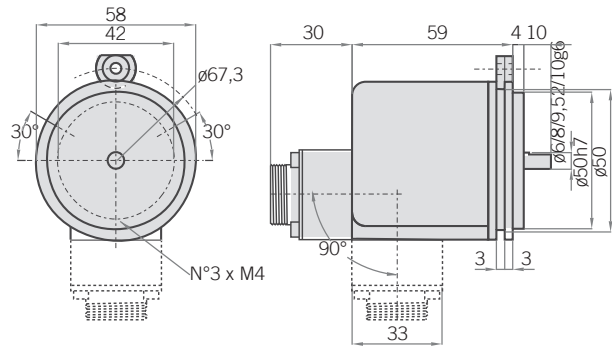
SERIES absolute encoder singleturn EA	SIZE mm 58 mm 63	TYPE OF FLANGE mod. EA63 A mod. EA58 B mod. EA58 C mod. EA63 D mod. EA63 E mod. EA58 / EA63 F mod. EA63 G	RESOLUTION ppr 360 / 500 / 512 / 720 / 1000 / 1024 <i>please directly contact our offices for pulses availability</i>	CODE TYPE Incremental output code I	POWER SUPPLY 5 V DC 5 8 ... 28 V DC 8/28	ELECTRONIC INTERFACE LINE DRIVER L PUSH PULL with short circuit protection P	VARIANT XXX custom version	OUTPUT DIRECTION A axial R radial	OUTPUT TYPE PC cable output 12 poles (standard length 1.5m) MA 19 poles MS type connection	MAX ROTATION SPEED 3 3000 rpm with IP 66 6 6000 rpm	ENCLOSURE RATING X IP 54 S optional IP 66 with the exception of EA58 F and EA63 F/G	SHAFT DIAMETER 6 mm - 58B 8 mm - 58B - 63A/D/E 9 mm (9.52 mm 3/8") - 63A/D/E 10 mm - 58B/C - 63A/D/E	BORE DIAMETER ONLY FOR MOD. 58F - 63F/G 8 mm 9 mm (9.52 mm 3/8") 10 mm 12 mm 14 mm 15 mm	OPTIONS A 10 KHz (standard) B 1 KHz	LOGIC X to be reported if not used
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EA ICO

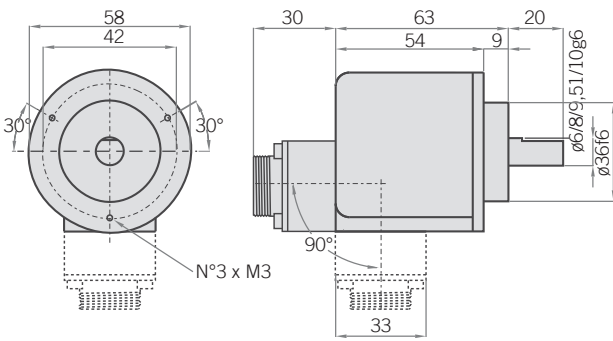
EA 63 A



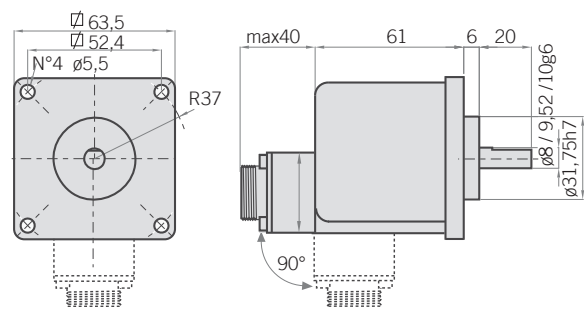
EA 58 B



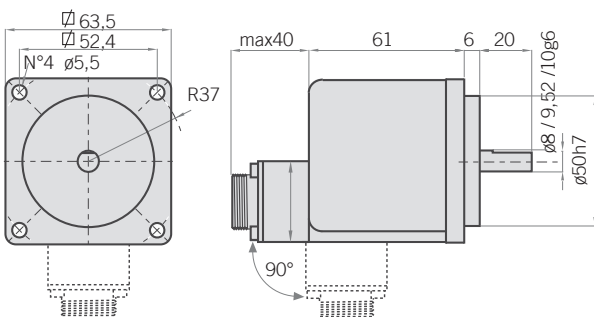
EA 58 C



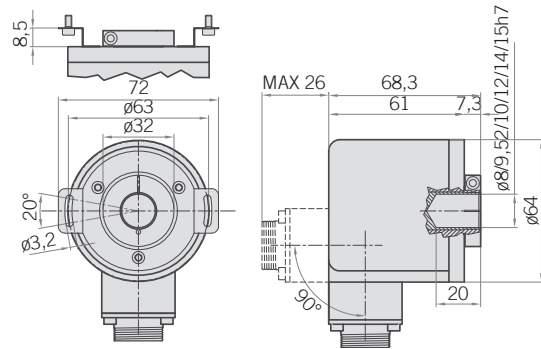
EA 63 D



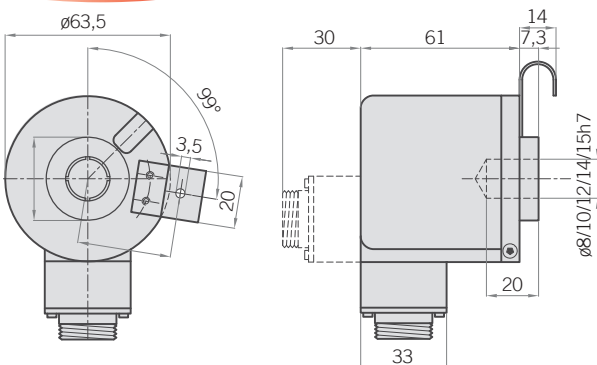
EA 63 E



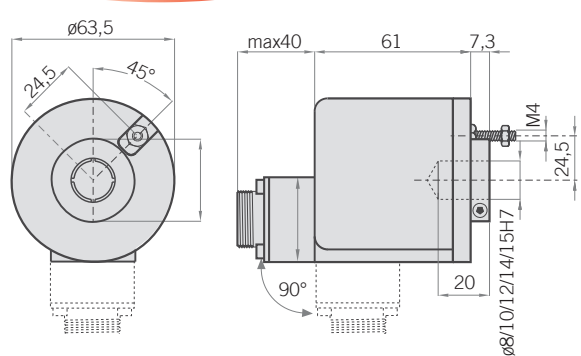
EA 58 F



EA 63 F



EA 63 G





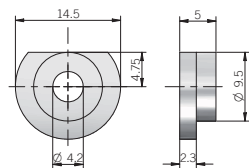
HOW TO MOUNT THE EA63G

- 1) Fix the antirotation pin on motor flange.
- 2) Couple the encoder shaft with the motor shaft, ensuring that the pin is inserted on the cave on the frontal part of the encoder (maintaining a minimum distance of 0,5 mm).
- 3) Fix the encoder shaft by the metal ring.

Mechanical specifications

Shaft diameter (mm)	6 (58B) / 8 (58B - 63A/D/E) / 9.52 (63A/D/E) / 10 (58B/C - 63A/D/E)
Bore diameter (only for mod.58F - 63F/G)	8 / 9 / 10 / 12 / 14 / 15 mm
Max rotation speed	6000 rpm continuous 3000 rpm continuous for 63G 3000 rpm with IP66
Max shaft load	10 N (1 Kp) axial with $\phi 6$ shaft 20 N (2 Kp) radial with $\phi 6$ shaft 100 N (10 Kp) axial 100 N (10 Kp) radial
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibrations	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Bearings life	10 ⁹ revolutions
Bearings	n° 2 ball bearings
Shaft material	stainless steel UNI X10CrNiS1809
Body material	aluminium UNI 5076
Housing material	PA 66 reinforced with fiber glass
Enclosure rating	IP 54 IP 66 optional - 58B/C - 63A/D/E
Operating temperature	-0° ... +60 °C
Storage temperature	-15° ... +70 °C
Weight	350 g set N° 3 fastners for models -63A/B/C Ord. Cod.: 94080001

Accessories



ICO electrical specifications

Resolution	360 / 500 / 512 / 720 / 1000 / 1024 ppr
Power supply	5 V DC - 8 ... 28 V DC
Current consumption without load	200 mA
Max load current	40 mA for channel with PUSH PULL 20 mA for channel with LINE DRIVER
Electronic interface	LINE DRIVER / PUSH PULL
Max output frequency	100 kHz output code
Transmission frequency	100 kHz - 1 MHz

Output connections for ICO encoder

Function	12 wire cable colours	Pin "M19MP"
+ Vdc	red	V
0 Volt	black	T
U / D	red-blue	U
Ready	gray	G
Restart	violet	H
A	green	A
A-	brown	D
B	yellow	B
B-	pink	E
Z	blue	C
Z-	white	F