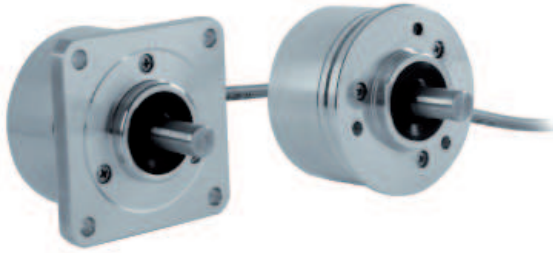




EMI 63 A / D

MAGNETIC INCREMENTAL SOLID SHAFT ENCODER



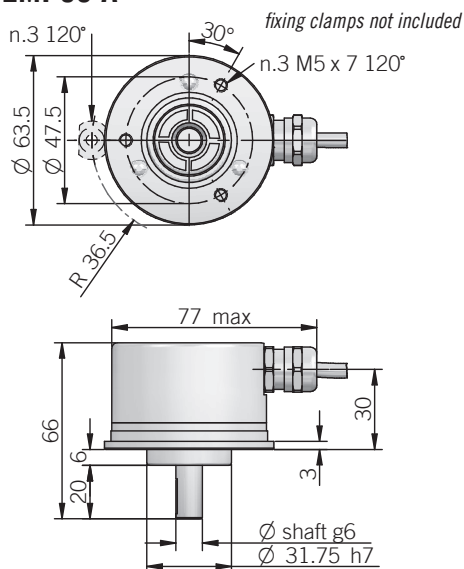
Specifications

Thanks to the magnetic technology, the EMI 63 series is suitable for harsh environment applications such as marble and glass working machines, washing systems, metal working machines and all the applications where high temperature resistance is required.

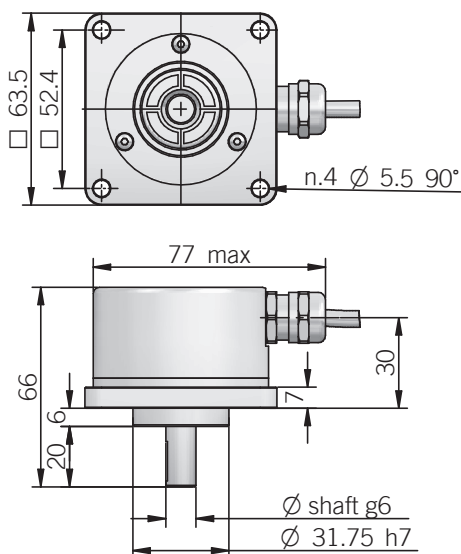
- 3 channel encoder (A / B / Z) up to 2048 ppr
- Power supply up to +28 VDC with several electronic interfaces available
- Up to 300 kHz output frequency
- Cable or M12 connector output, other connectors available on cable end
- Solid shaft diameter up to 10 mm
- Mounting by synchronous or centering 2,5" square flange
- Sturdy construction due to separated chambers design
- Wide operating temperature -25° ... +100°C (-13° ... +212°F)

ORDERING CODE	EMI	63A	1024	Z	5	L	10	X	6	P	R	.XXX
SERIES magnetic incremental encoder series EMI												
MODEL synchronous flange ø 31,75 mm 63A centering square flange ø 31,75 mm 63D												
RESOLUTION ppr from 2 to 2048 <i>see table for pulses availability</i>												
ZERO PULSE without zero pulse S with zero pulse Z												
POWER SUPPLY (with L electronic interface) 5 V DC 5 (with L or PC electronic interface) 8 ... 24 V DC 8/24 5 ... 28 V DC 5/28												
ELECTRONIC INTERFACE push-pull P push-pull protected (AEIC-7272) PC line driver L power supply 5/28 V - output RS-422 RS												
SHAFT DIAMETER 9,52 (3/8") mm 9 mm 10												
ENCLOSURE RATING IP 64 X IP 66 S												
MAX ROTATION SPEED (IP 66) 3000 rpm 3 (IP 64) 6000 rpm 6												
OUTPUT TYPE cable (standard length 0,5 m) P M12 connector M12 <i>female connector included, without female please add 162 as variant code</i>												
DIRECTION TYPE axial A radial R												
VARIANT custom version XXX												

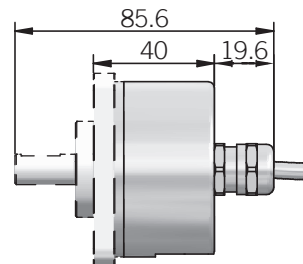
EMI 63 A



EMI 63 D



Dimensions with axial output



dimensions in mm

ELECTRICAL SPECIFICATIONS

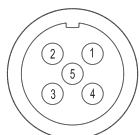
Resolution	from 2 to 2048 ppr
Power supply	5 = 4,5 ... 5,5 V DC 5/28 = 4,75 ... 29,4 V DC 8/24 = 7,6 ... 25,2 V DC (reverse polarity protection)
Power draw without load	800 mW max
Max load current	15 mA / channel
Output type*	push-pull / line driver
Max output frequency	205 kHz
Counting direction	A leads B clockwise (shaft view)
Accuracy	± 0,35° typical / ± 0,50° max
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

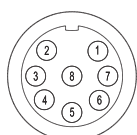
CONNECTIONS

Function	Cable output	5 pin M12 output Push-pull	8 pin M12 output Line Driver
0 Volt	black	4	1
+V DC	red	2	7
Ch. A	green	3	6
Ch. B	yellow	1	4
Ch. Z	blue	5	2
Ch. A-	brown	/	5
Ch. B-	orange	/	3
Ch. Z-	white	/	8
⊥	shield	housing	housing

M12 connector (5 pin)
M12 A coded
solder side view FV



M12 connector (8 pin)
M12 A coded
solder side view FV



MECHANICAL SPECIFICATIONS

Shaft diameter	Ø 9,52 (3/8") / 10 mm
Enclosure rating	X = IP 64 (IEC 60529) S = IP 66 (IEC 60529)
Max rotation speed	3000 rpm (IP 66) 6000 rpm (IP 64)
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
Starting torque (at +20°C / +68°F)	< 0,01 Nm (IP 64) < 0,08 Nm (IP 66)
Body material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	EN-AW 2011 aluminum
Bearings	2 ball bearings
Bearing lifetime	10 ⁹ revolutions
Operating temperature	-25° ... +100°C (-13° ... +212°F)
Storage temperature	-25° ... +85°C (-13° ... +185°F)
Weight	350 g (12,35 oz)

RESOLUTIONS

2 - 4 - 8 - 10 - 16 - 20 - 32 - 40 - 64 - 80 - 100 - 125 - 128 - 200 - 250 - 256 - 400 - 500 - 512 - 1024 - 2048

please directly contact our offices for other pulses

ACCESSORIES

set n.3 fixing clamps for model 63 A
P/N 94080001

