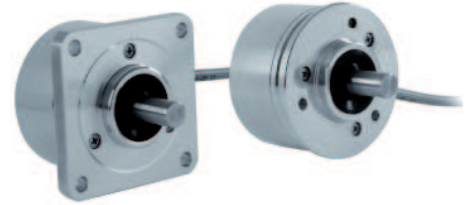


MAIN FEATURES

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
see table for pulses availability

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

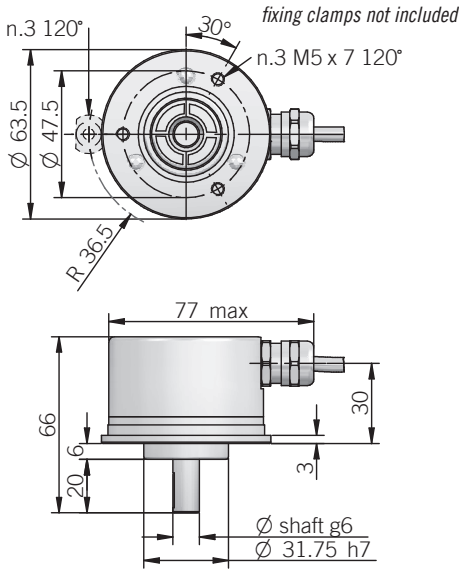
OUTPUT TYPE
cable (standard length 0,5 m) P
M12 connector M12

female connector included, without female please add 162 as variant code

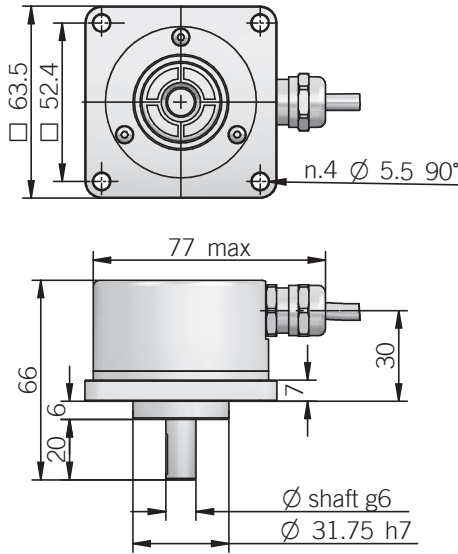
DIRECTION TYPE
axial A
radial R

VARIANT
custom version XXX

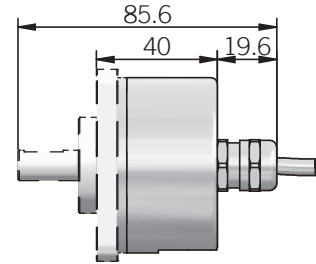
EMI 63 A



EMI 63 D



Dimensions with axial output



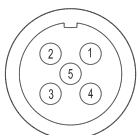
dimensions in mm

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

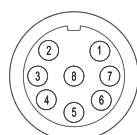
*output levels according to power supply, for further details please see under Technical basics section

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

