

Bearingless encoders

Resolution 1...65536 pulses for Incremental Version



FNC MAR13590 Series, Incremental Axial

Features

- Off - Axis Incremental rotary encoder
- Robust mechanical and electrical construction
- Corrosion resistant magnetic ring
- Outer diameter 135 mm
- Inner diameter 90 mm
- Up to 65.536 PPR max. for incremental rotary encoder
- <300 kHz frequency
- Magnetic system

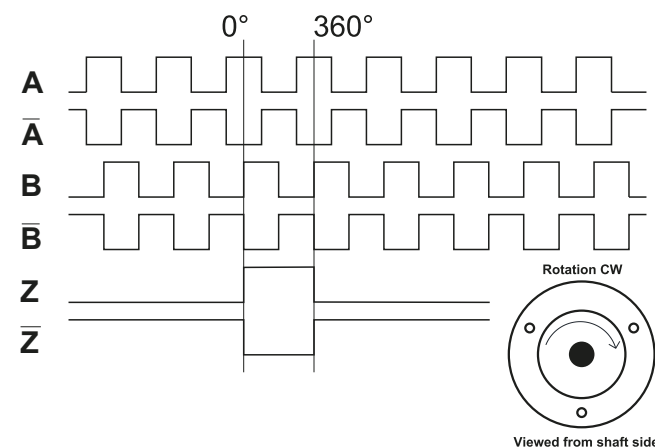
Technical data - electrical ratings

Voltage supply	4.75VDC to 5.5VDC
Protection:	Output short circuit protection. Reverse polarity protection
Consumption w/o load	≤60 mA
Output circuit	Linedriver/RS422 Push-pull short-circuit proof
EMC Standars	EN 61000-6-2 / EN 61000-6-4
Approval	CE

Technical data - mechanical design

Dimensions (ring)	ø135 mm
Protection DIN EN 60529	IP54, IP65
Operating speed	≤10000 rpm
Matetials	Ring: Aluminum
Operating / Storage temperature	-20...+85 °C / -30°C ...+90°C
Weight approx.	200 g

Pulse Diagram for Incremental Version



Cable Wiring

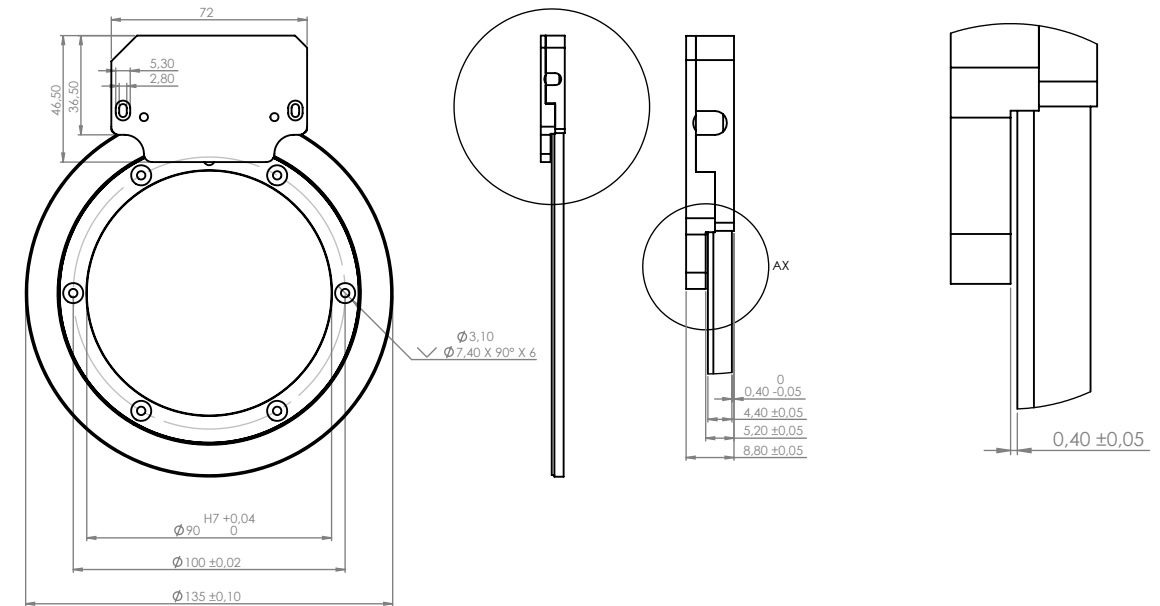
Function	Color
+VB	Brown
GND	White
A	Green
A'	Red
B	Yellow
B'	Pink
Z	Gray
Z'	Blue

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Mechanical Dimensions
Cable/Connector Wiring, Part Number

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Mechanical Dimensions



Ring Dimensions

P.S. When the magnet and pcb are positioned correctly, the green led lights up constantly. The red led indicates errors received (distance, wrong positioned magnet etc.)

Encoder Part Number

FNC MAR P 135 6 5V 1024 - R02

MAR : Magnetic Axial Ring

P : PCB
C : Cover

Housing:
135 : 90 mm

Output Channels
1 : A 4 : AB+A' B'
2 : AB 6 : ABZ+A' B' Z'
3 : ABZ

Electrical Connections:

R02 : radial 20 cm, shield not connected (standart)
M : Molex 501568-1107 connector *(mating with Molex 501330-1100)

PPR Options :

up to 65.536 any ppr

Supply Voltage and output circuit :

5V : 5V in / out
245V : 6-30V in 5V out
30V : 6-30V in / out

Magnetic Ring Part Number

FNC MAR 1 32 15