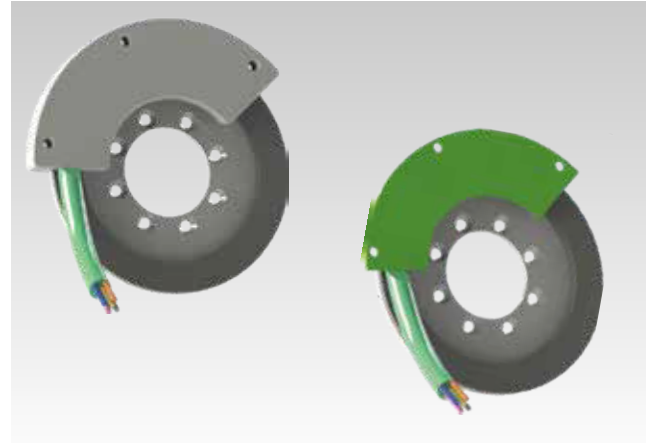


Bearingless encoders

Resolution 1...65536 pulses for Incremental Version



FNC MAR5535 Series, Incremental Axial



Features

- Off - Axis Incremental rotary encoder
- Robust mechanical and electrical construction
- Corrosion resistant magnetic ring
- Outer diameter 55 mm
- Inner diameter 35 mm
- Up to 65.536 PPR max. for incremental rotary encoder
- <300 kHz frequency
- Magnetic system

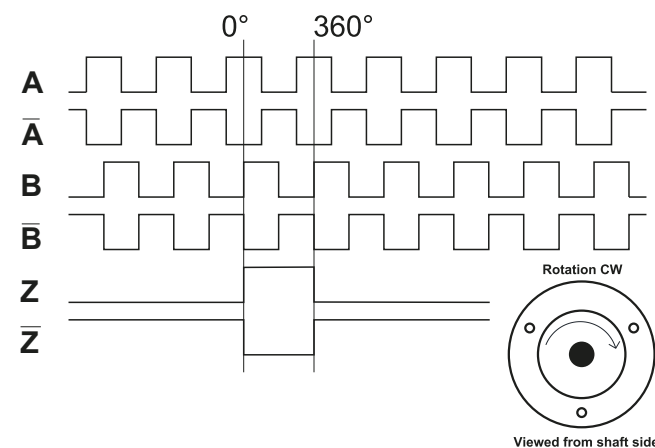
Technical data - electrical ratings

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)	ø55 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

Bearingless encoders

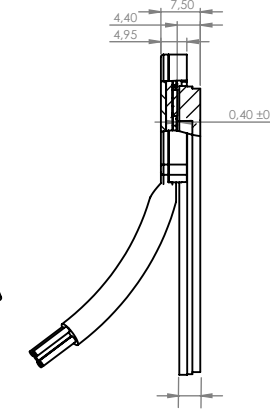
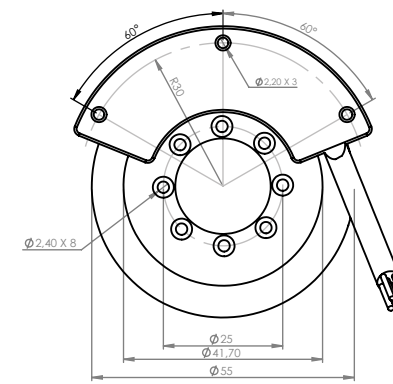
Mechanical Dimensions
Cable/Connector Wiring, Part Number



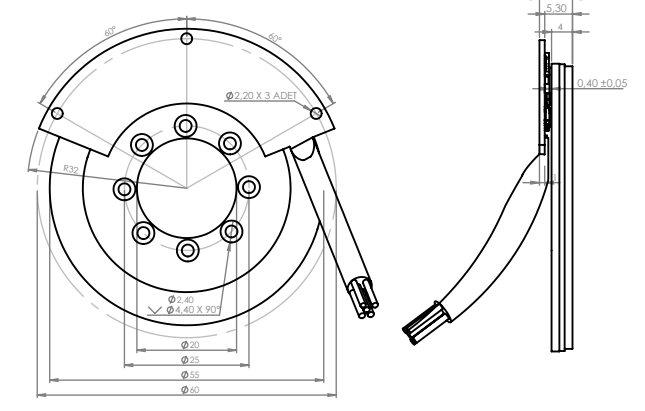
FNC MAR5535 Series, Incremental Axial

Mechanical Dimensions

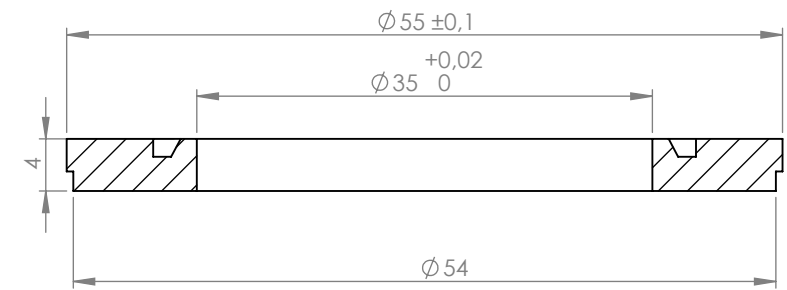
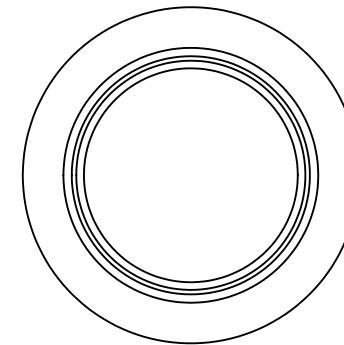
Cover Type



PCB Type



Ring Dimensions



Magnetic Ring Part Number : **FNC MAR16435**

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 55 35 6 5V 1024 - R02

- MAR** : Magnetic Axial Ring
- P** : PCB
- C** : Cover
- Housing**: 55 : 55 mm
- Inner Diameter** : 35 mm standard others on request
- 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 64 35

- Pole pitch**:
 - 1 : 1.28 mm pole pitch
 - 1.5 : 1.5 mm pole pitch
 - 2 : 2 mm pole pitch
- Inner Diameter**: 35 : 35 mm
- Poles**: 64 : 64 poles