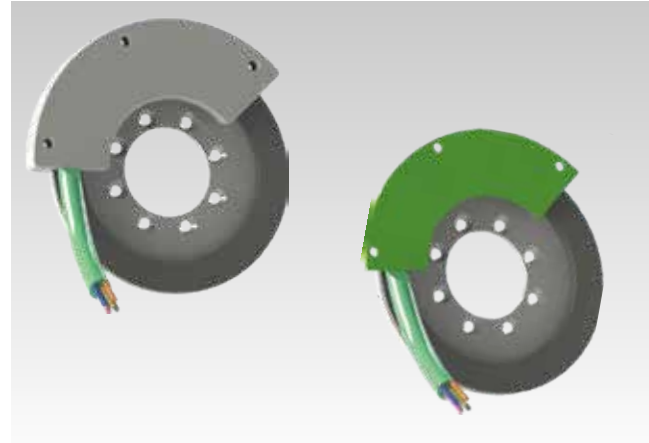


# Bearingless encoders

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

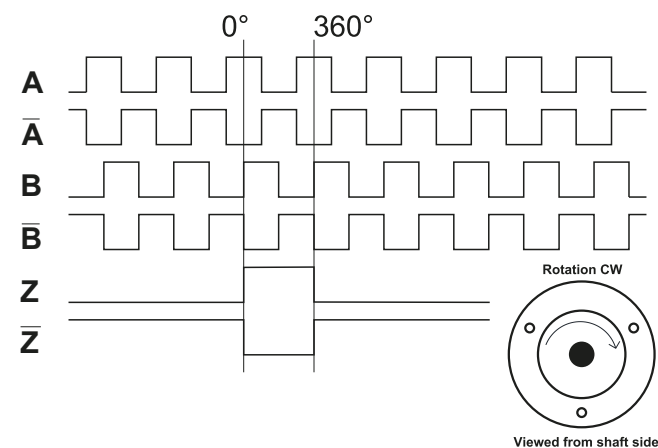
### Technical data - electrical ratings

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

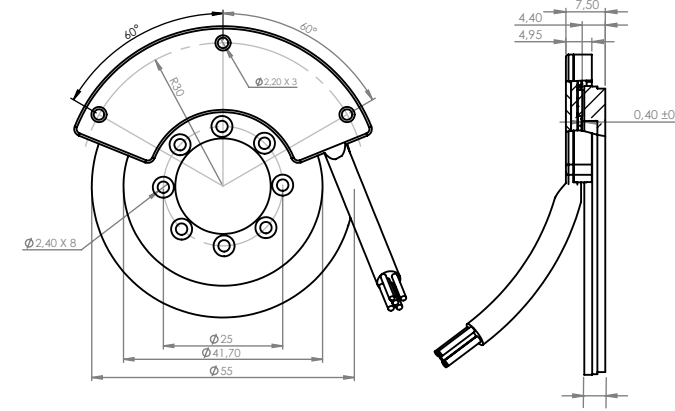
Mechanical Dimensions  
Cable/Connector Wiring, Part Number



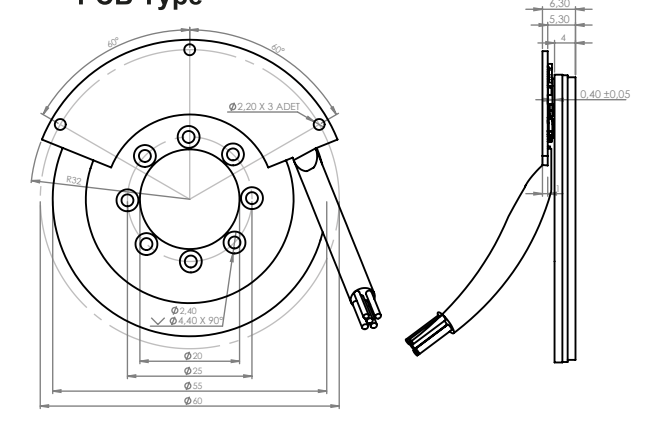
## FNC MAR5535 Series, Incremental Axial

### Mechanical Dimensions

#### Cover Type



#### PCB Type



### Ring Dimensions

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** **6** **5V** **1024** - **R02**

- MAR** : Magnetic Axial Ring
- P** : PCB
- C** : Cover
- Housing**: 55 : 55 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**