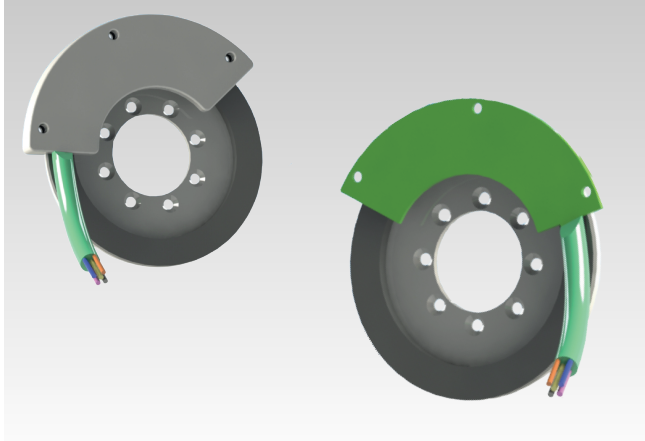


Bearingless encoders

Resolution 8 to 18 bit for Absolute Version
SSI / BISS Interface



FNC MAR5535 Series, Absolute Axial



Features

- Off - Axis absolute rotary encoder
- Robust mechanical and electrical construction
- Corrosion resistant magnetic ring
- Outer diameter 55 mm
- Inner diameter 35 mm
- Up to 18 bit for absolute 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
EMC Standars	EN 61000-6-2 / EN 61000-6-4
Approval	CE

Technical data - mechanical design

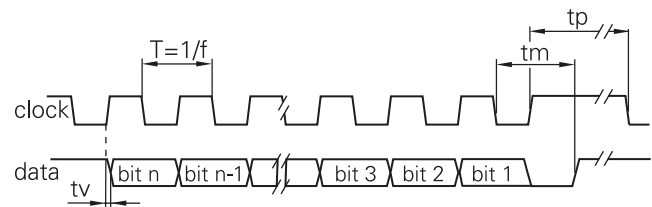
Dimensions (ring)	ø55 mm
Protection DIN EN 60529	IP54, IP65
Operating speed	≤10000 rpm
Matetials	Ring: Aluminum
Operating / Storage temperature	-20...+85 °C / -30°C ...+90°C
Weight approx.	200 g

Cable Wiring

Function Color

+VB		Brown
GND		White
Clock+		Blue
Clock-		Blue-black
Data+		Orange
Data-		Orange-black

Pulse Diagram for Absolute Version

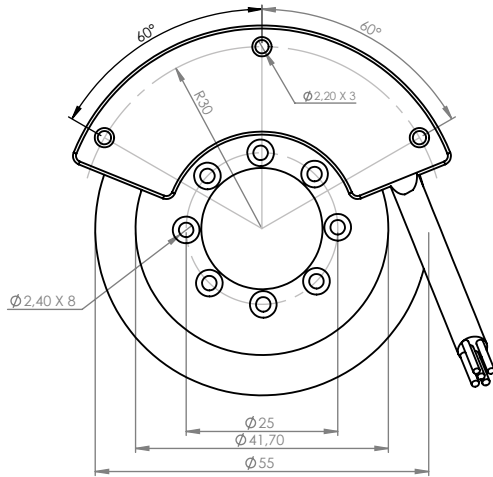


Clock frequency, f	50...2000 kHz for SSI up to 10MHz for BISS
Code	Binary or gray
Status and parity bit	On request
Monoflop time tm	>15µs
Clock timeout	Programmable at factory

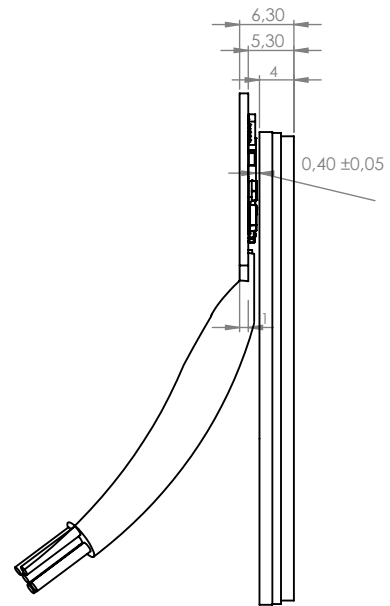
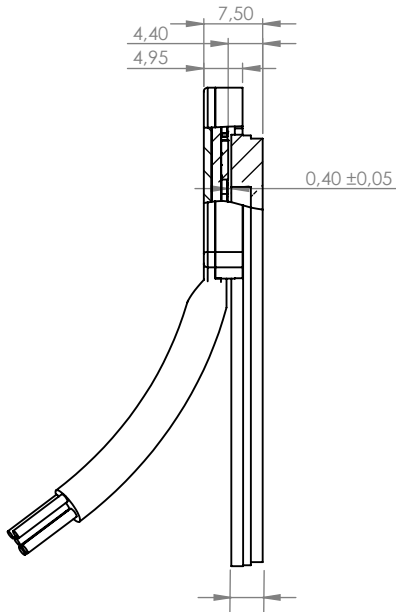
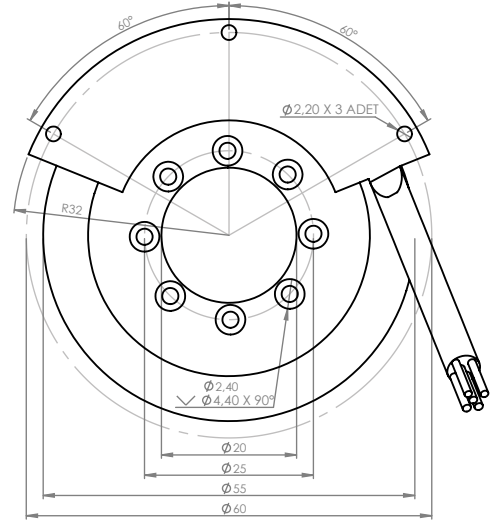
FNC MAR5535 Series, Absolute Axial

Mechanical dimension

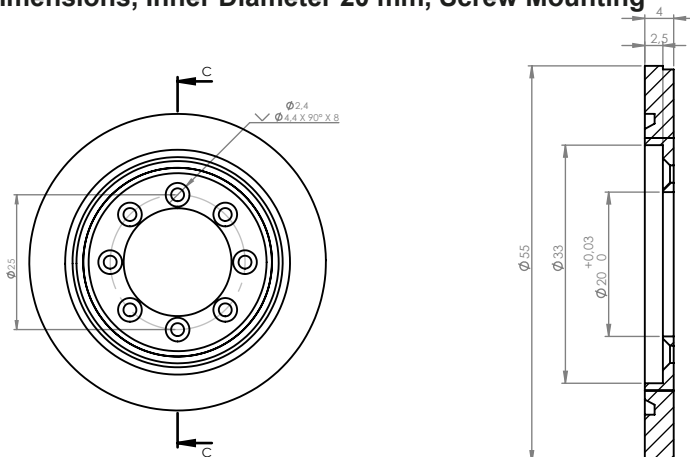
Cover Type, Inner Diameter 20 mm, Screw Mounting



PCB Type, Inner Diameter 20 mm, Screw Mounting



Ring Dimensions, Inner Diameter 20 mm, Screw Mounting



Magnetic Ring Part Number : **FNC MAR16420SM**

Bearingless encoders

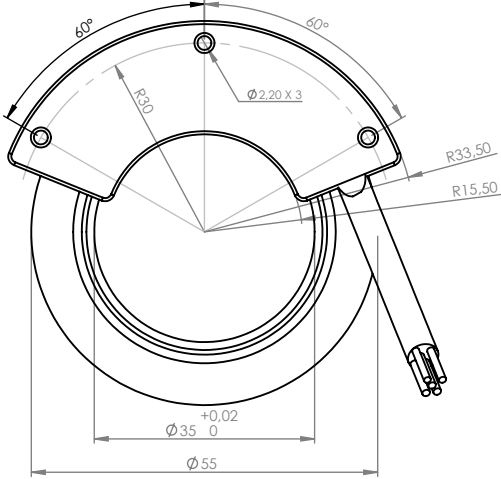
Resolution 8 to 18 bit for Absolute Version
SSI / BISS Interface



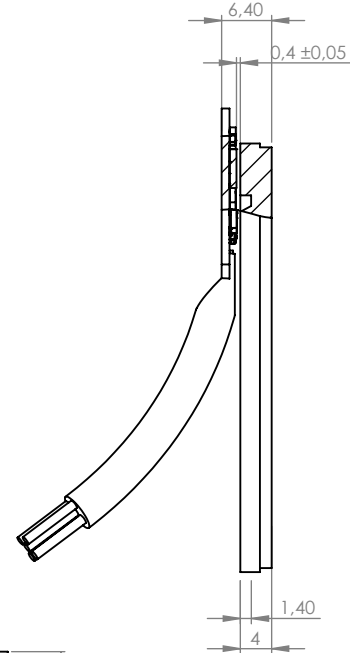
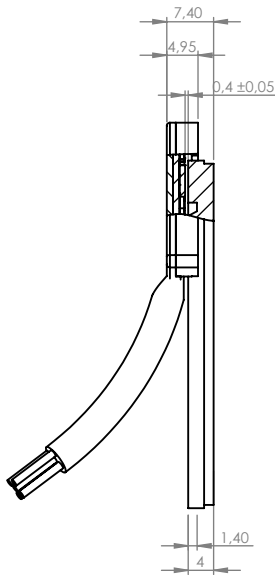
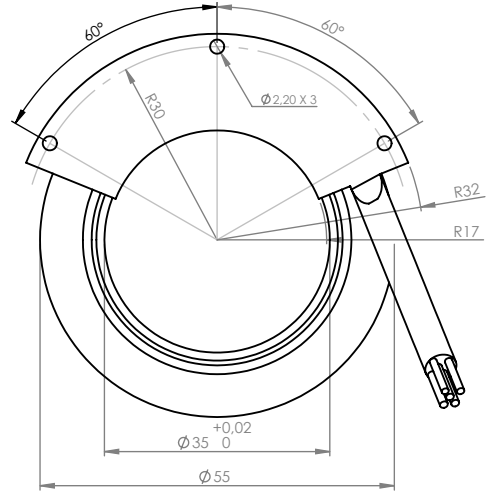
FNC MAR5535 Series, Absolute Axial

Mechanical dimension

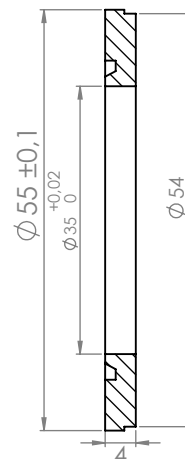
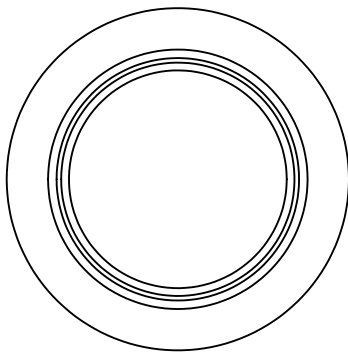
Cover Type, Inner Diameter 35 mm



PCB Type, Inner Diameter 35 mm



Ring Dimensions, Inner Diameter 35 mm

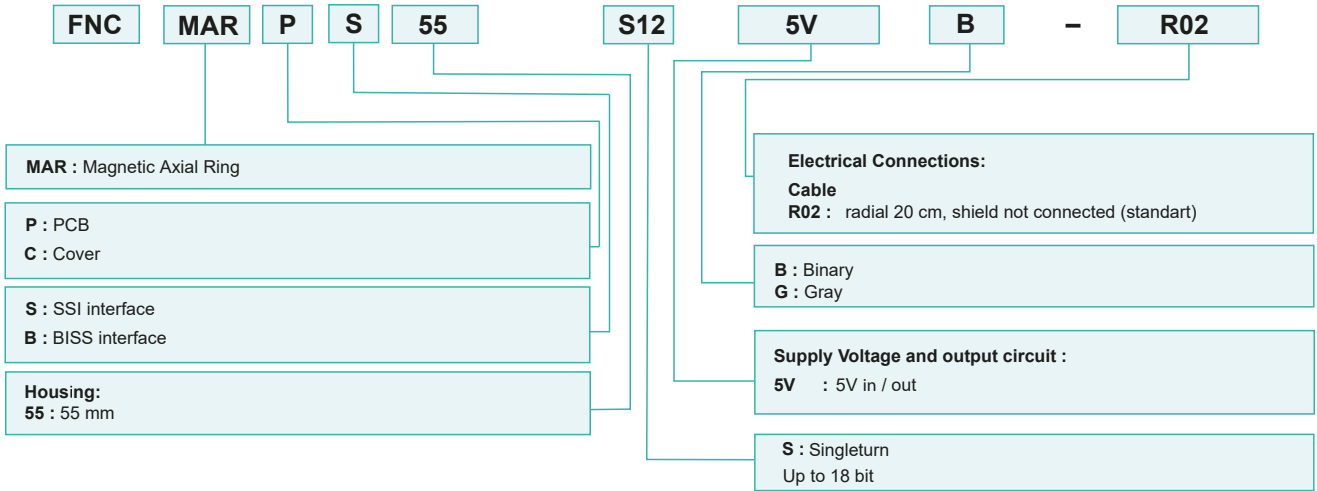


Magnetic Ring Part Number : **FNC MAR16435**

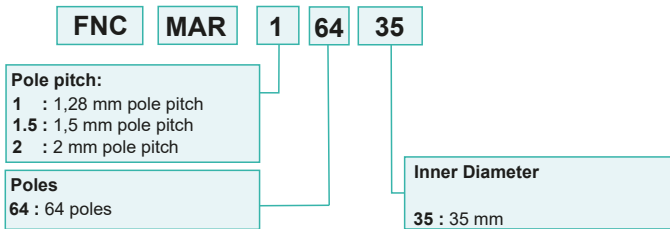
P.S. When the magnet and pcb are positioned correctly, the green led lights up constantly. The red led indicates errors received (distance, wrong positioned magnet etc.)

FNC MAR5535 Series, Absolute Axial

Encoder Part Number for Absolute Version



Magnetic Ring Part Number, Inner Diameter 35 mm



Magnetic Ring Part Number, Inner Diameter 20 mm with Screw Mounting

