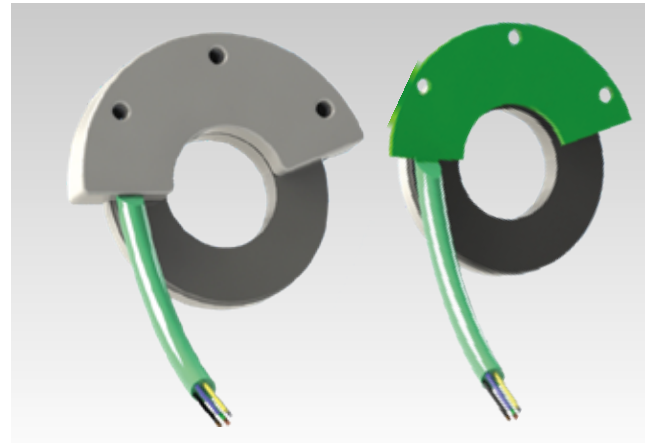


# Bearingless encoders

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



## FNC MAR3015 Series, Absolute Axial



### Features

- Off - Axis absolute rotary encoder
- Robust mechanical and electrical construction
- Corrosion resistant magnetic ring
- Outer diameter 30 mm
- Inner diameter 15mm
- 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

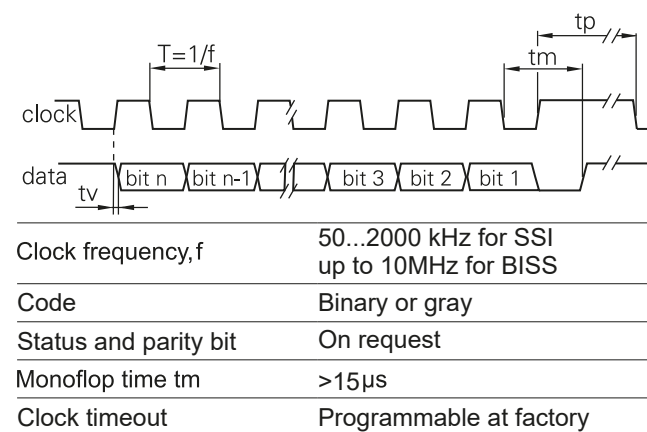
Dimensions (ring)	ø30 mm
Protection DIN EN 60529	IP54, IP65
Operating speed	≤10000 rpm
Matetials	Ring: Aluminum
Operating / Storage temperature	-20...+85 °C / -30°C ...+90°C
Weight approx.	200 g

### Cable Wiring

#### Function Color

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

### Pulse Diagram for Absolute Version



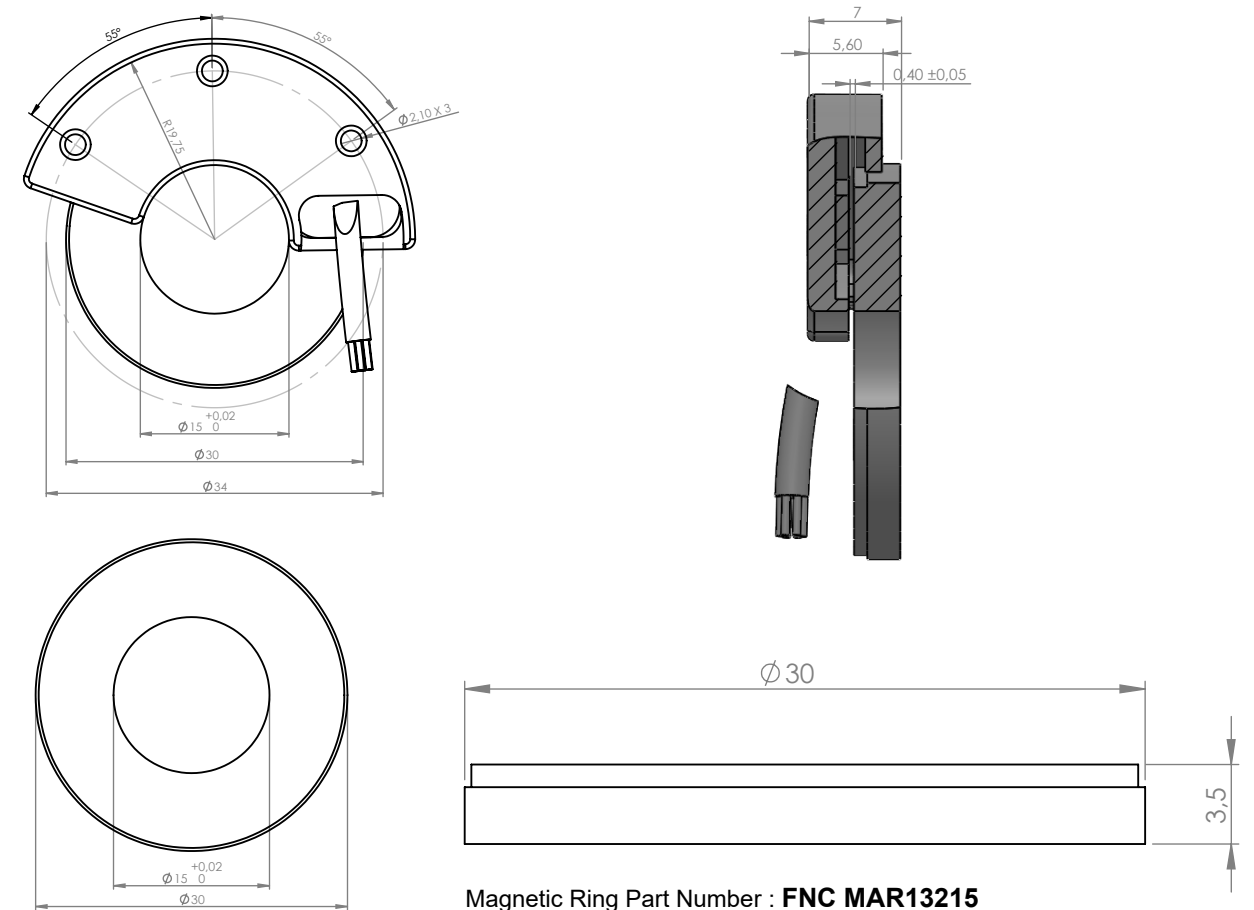
# Bearingless encoders

Mechanical Dimensions  
Cable/Connector Wiring, Part Number



## FNC MAR3015 Series, Absolute Axial

### Mechanical Dimensions



### Encoder Part Number for Absolute Version

**FNC** **MAR** **P** **S** **30** **15** **S12** **5V** **B** - **R02**

**MAR** : Magnetic Axial Ring

**P** : PCB  
**C** : Cover

**S** : SSI interface  
**B** : BISS interface

**Housing:**  
**30** : 30 mm

**Inner Diameter : 15 mm standard**  
**others on request**

#### Electrical Connections:

**Cable**  
**R02** : radial 20 cm, shield not connected (standart)

**B** : Binary

#### Supply Voltage and output circuit :

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

**S** : Singleturn  
Up to 18 bit

### Magnetic Ring Part Number

**FNC** **MAR** **1** **32** **15**

#### Pole pitch:

**1** : 1,28 mm pole pitch  
**1.5** : 1,5 mm pole pitch  
**2** : 2 mm pole pitch

**Inner Diameter**  
**15** : 15 mm

**Poles**  
**32** : 32 poles