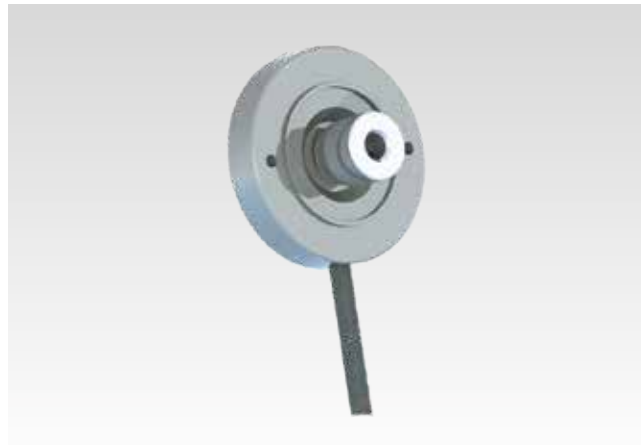


FNC MBI50 Incremental Series



Features

- On-Axis incremental rotary encoder
- Robust mechanical and electrical construction
- Corrosion resistant magnetic ring
- Outer diameter 50 mm
- Up to 4096 ppr
- <300 kHz frequency
- Magnetic system

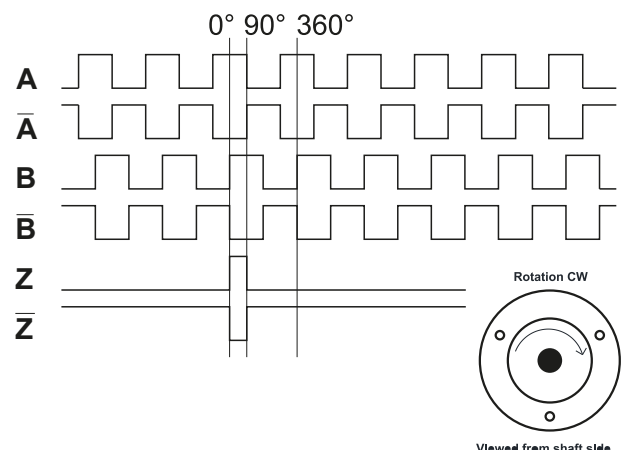
Technical data - electrical ratings

Voltage supply	4.75VDC to 30VDC 4.75VDC to 5.5VDC
Protection:	Output short circuit protection. Reverse polarity protection (except 5V version)
Consumption w/o load	≤60 mA (24 VDC)
Resolution (steps/turn)	1... up to 4096
Reference signal	Zero pulse, width 90° 180°, 360° optional
Output frequency	>200 kHz
Output signals	90° shifted A and B, Z + inverted
Output circuit	Linedriver/RS422 Push-pull short-circuit proof NPN Open Collector
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4

Technical data - mechanical design

Dimensions (ring)	ø50 mm
Protection DIN EN 60529	IP54, IP65
Operating speed	≤120 rpm
Materials	Ring: Aluminium
Shaft diameter:	6, 8, 10, M6, M7 mm (other diameters on request)
Operating temperature	-40...+85 °C
Storage temperature	-30 °C up to +90 °C
Service life	No limitation
Weight approx.	53 g

Pulse Diagram

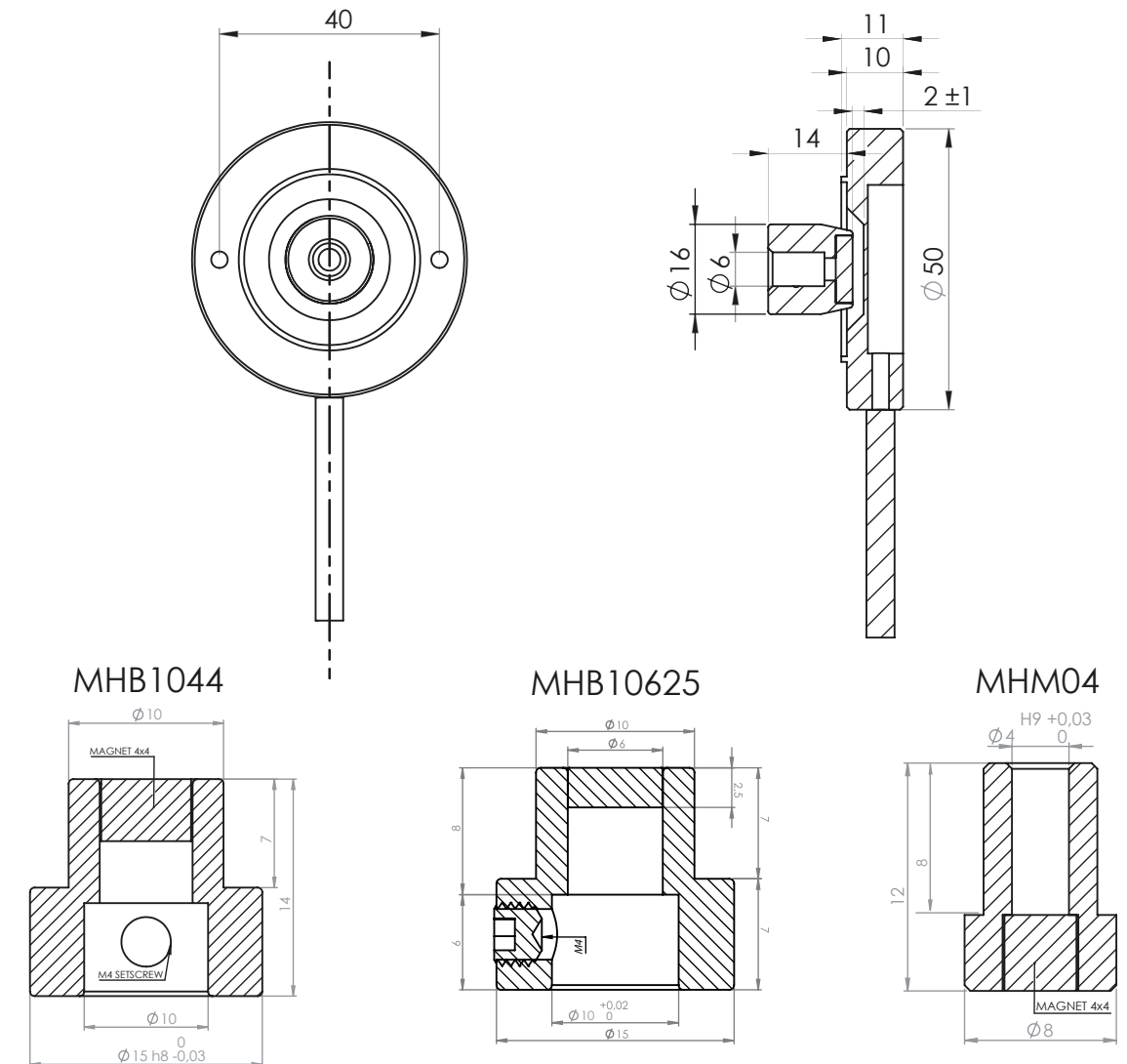


Cable Wiring

Function	Color	Renk	Explanation
+VB	Red	Kırmızı	Supply Voltage
GND	Black	Siyah	Ground
A	Yellow	Sarı	A Channel
A'	Yellow-White	Sarı-Beyaz	A Inverted Channel
B	Blue	Mavi	B Channel
B'	Blue-White	Mavi-Beyaz	B Inverted Channel
Z	Orange	Turuncu	Z Channel
Z'	Orange-White	Turuncu-Beyaz	Z Inverted Channel
Shield			Shield

FNC MBI50 Incremental Series

Mechanical Dimensions



Encoder Part Number

FNC MBI 50 **6** **30V** **1024** - **R2**

Housing:
58 : 58mm flange

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

Supply Voltage and output circuit :
5V : 5V in / out 30V : 5-30V in / out
245V : 5-30V in 5V out

Electrical Connections:
Cable
R2 : radial2m, shield not connected (standart)

PPR Options :
64 - 128 - 256 - 512 - 1024 - 2048 - 4096

Magnet Holder Part Number

- MHM04** : Magnet Holder Medium Version
- MHB1044** : Magnet Holder for M6x2,5 magnet
- MHB10625** : Magnet Holder Big Version