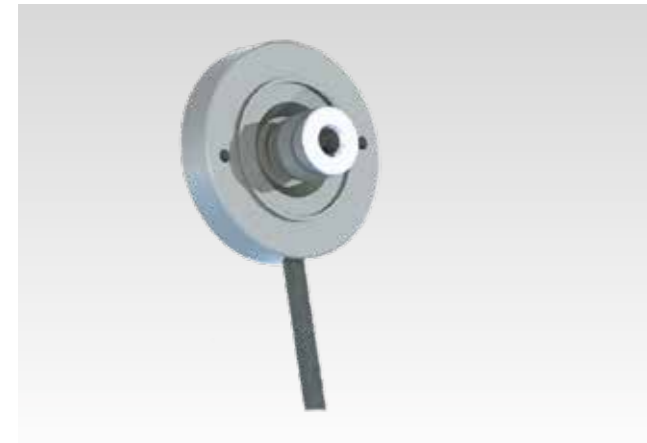


FNC MBA44 Series



Features

- On-axis absolute SSI/BiSS encoder
- Robust mechanical and electrical construction
- Corrosion resistant magnetic ring
- Up to 12 bit resolution
- <300 kHz frequency
- Magnetic system

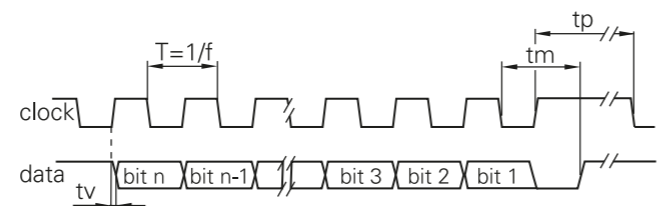
Technical data - electrical ratings

Voltage supply	5.5VDC to 30VDC 4.75VDC to 5.5VDC
Protection:	Output short circuit protection. Reverse polarity protection (except 5V version)
Consumption w/o load	≤50 mA (24 VDC)
Interface	SSI
Resolution (steps/turn)	12 bit
Absolute accuracy	Magnetic: ±0,1°
Optoelectronic life time	100.000 (min)
Code	binary
Inputs	SSI differential clock Electronic zero setting
Output frequency	up to 2MHz (SSI)
Output circuit	SSI data linedriver RS485
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	CE

Technical data - mechanical design

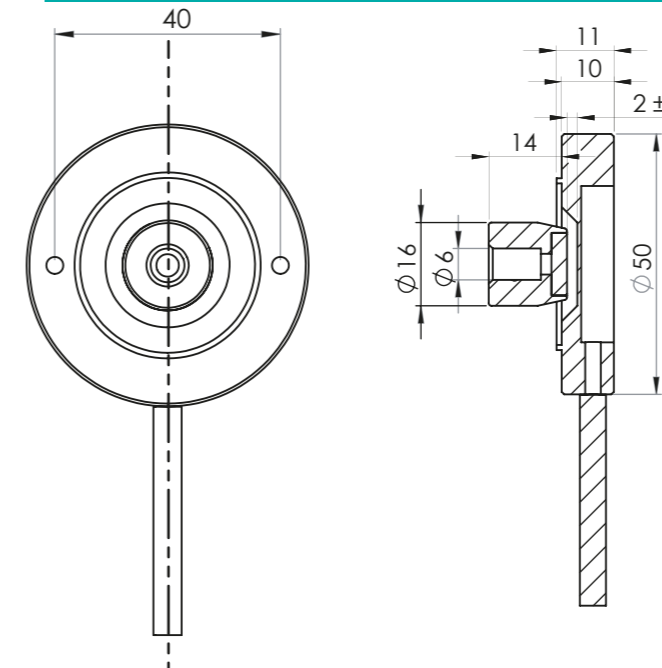
Dimensions (flange)	Ø50 mm
Shaft loading	≤140 N axial ≤240 N radial
Protection DIN EN 60529	IP
Operating speed	≤10000 rpm
Starting torque	≤0.025 Nm (IP 67)
Materials	Housing, Flange : Aluminium
Bearings lifetime:	2x10 ⁹ rev. at 100% of full rated shaft load (minimum)
Operating temperature	-40...+110 °C -40 °C up to +120 °C (Storage)
Weight approx.	250 g

Pulse Diagram



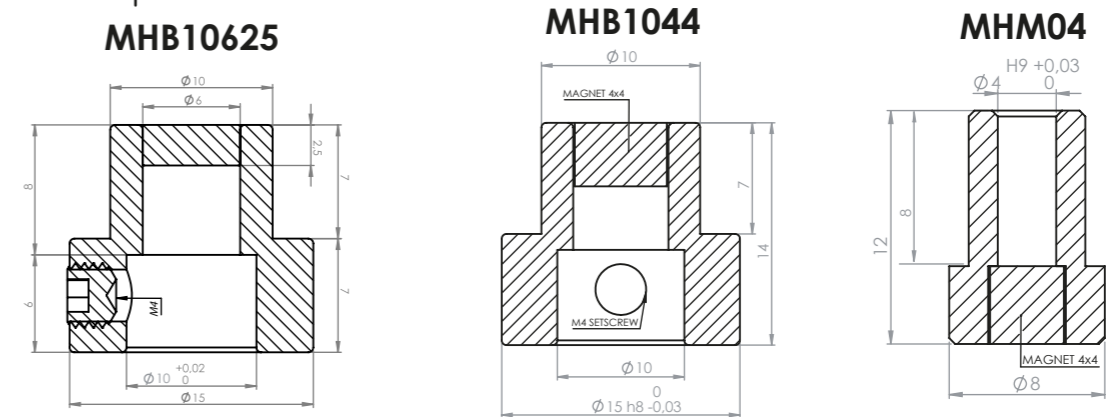
Clock frequency, f	50...2000 kHz for SSI
Code	Binary or gray
Status and parity bit	On request
Monoflop time tm	>15µs
Clock time out	Programmable at factory

Mechanical Dimensions

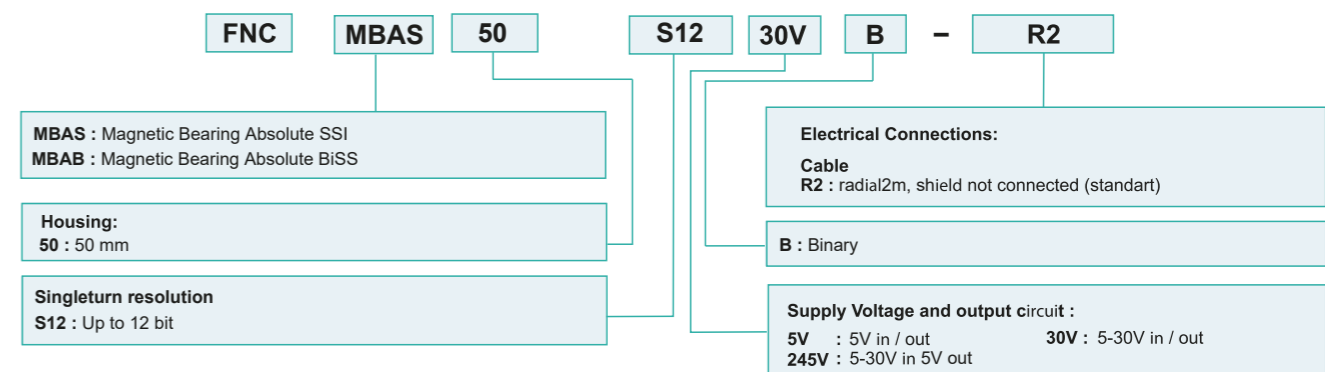


Pulse Diagram

Function	Connector	Color	Renk
+VB	pin 11	Brown	Kahve
GND	pin 12	White	Beyaz
Data+	pin 3	Orange	Turuncu
Data-	pin 4	Orange-Black	Turuncu-Siyah
Clock+	pin 2	Blue	Mavi
Clock-	pin 1	Blue-Black	Mavi-Siyah
Direction	pin 8		
Preset	pin 9	Red	Kırmızı
A	pin 5	Green	Yeşil
A'	pin 6	Green-Black	Yeşil-Siyah
B	pin 7	Yellow	Sarı
B'	pin 10	Yellow-Black	Sarı-Siyah
Shield	Connected to housing		



Encoder Part Number



Magnet Holder Part Number

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