

Incremental encoders

Resolution 1...524,288 pulses



FNC MRS40 Incremental Series



Features

- Bearingless encoders
- Robust mechanical and electrical construction
- Protection to IP65
- Up to 524,288 ppr resolution

Technical data-electrical ratings

Voltage supply	4.75VDC to 5.5VDC
Protection	Output short circuit protection
Consumption w/o load	≤60 mA
Resolution (steps/turn)	up to 524,288 ppr
Reference signal	Zero pulse width 90°, 180°, 360° optional
Output signals	90° shifted A, B, Z & inverted
Output circuit	Linedriver / RS422 Push-pull short-circuit proof
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	CE

Technical data-mechanical ratings

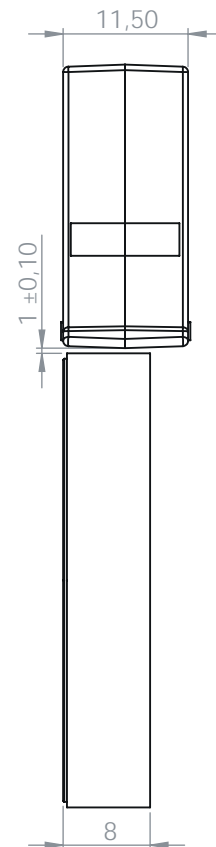
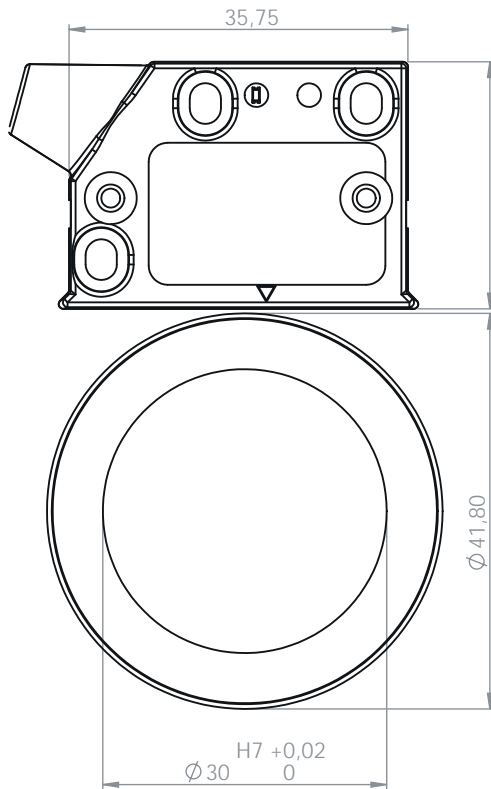
Diameter	Inner diameter : Ø30 mm Outer diameter : Ø41,8 mm
Travel speed	≤10,000 rpm
Materials	Ring : stainless steel
System accuracy	0.05°
Operating temperature	-40...+85°C (+125°C on request)
Storage temperature	-45... +85°C (+125°C on request)
Weight approx.	250 g

Incremental encoders

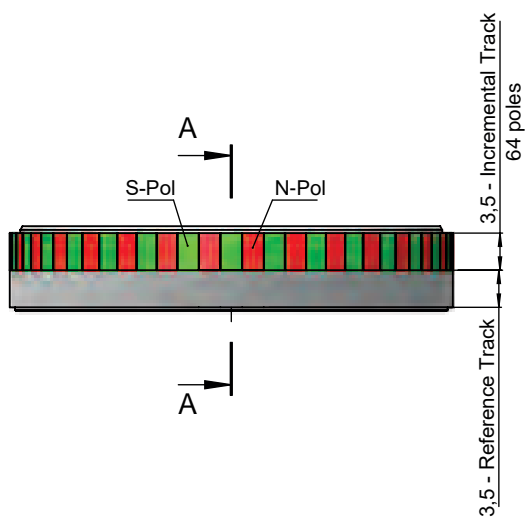
Mechanical Dimensions

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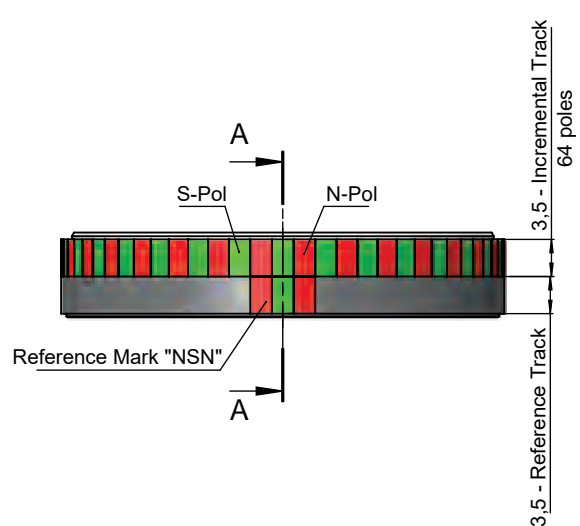
Mechanical Dimensions



2 channel ring magnet AB



3 channel ring magnet ABZ








Incremental encoders

Cable / Connector Wiring, Part Number

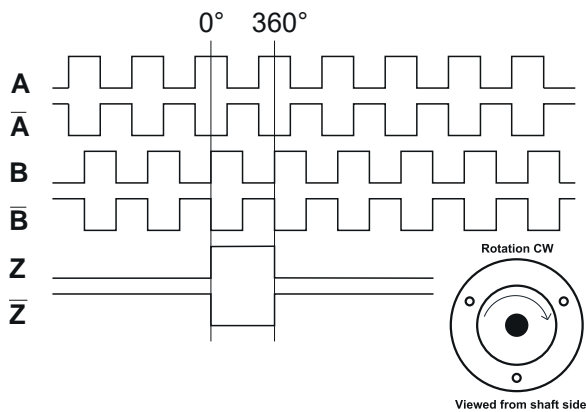


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Cable Connection

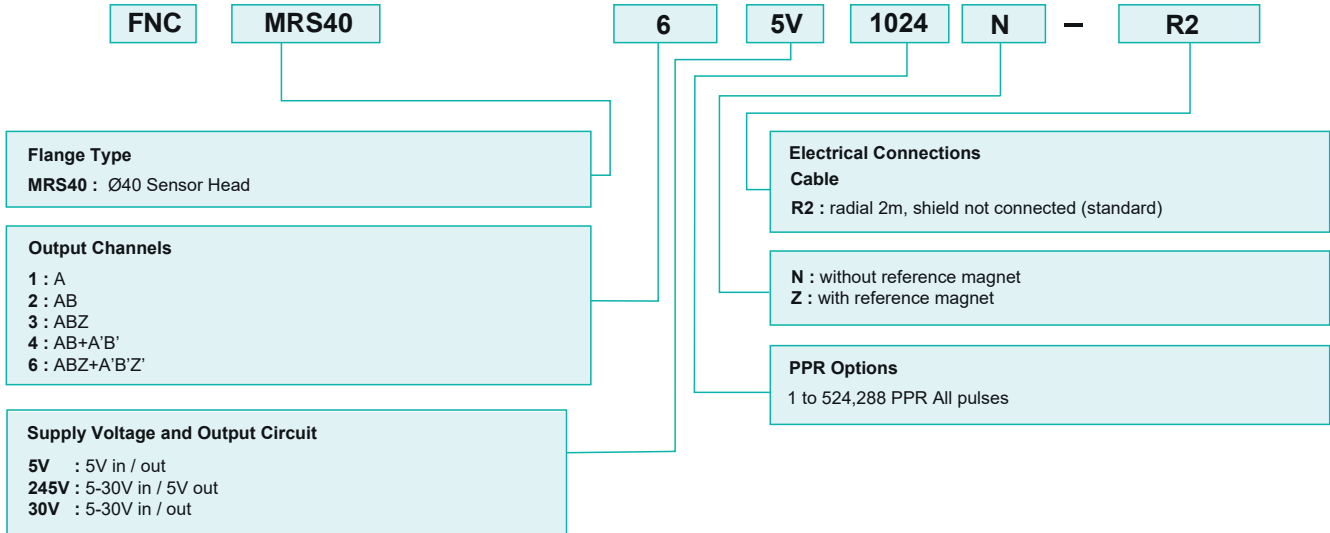
Function	Color	Renk	Farbe	Цвет	颜色
+VB	 Brown	Kahve	Braun	Коричневый	棕色的
GND	 White	Beyaz	Weiß	Белый	白色的
A	 Green	Yeşil	Grün	Зеленый	绿
A'	 Red	Kırmızı	Rot	Красный	红色的
B	 Yellow	Sarı	Gelb	Желтый	黄色的
B'	 Pink	Pembe	Rosa	Розовый	粉色的
Z	 Gray	Gri	Grau	Серый	灰色的
Z'	 Blue	Mavi	Blau	Синий	蓝色的
Shield	Black	Siyah	Schwarz	Чернить	黑色的

Pulse Diagram



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Encoder Part Number for Sensor Head



Encoder Part Number for Magnetic Ring

