

Incremental encoders

Resolution 1... 4096 pulses

FNC 40S Series



Features

- Industry 40 mm standart size,
- Clamping flange
- Robust mechanical and electrical construction
- Protection up to IP67
- Up to 65.536 PPR max.
- ≤2 MHz frequency

PPR Options :

1 to 1024 ALL PPR - 2048 - 4096

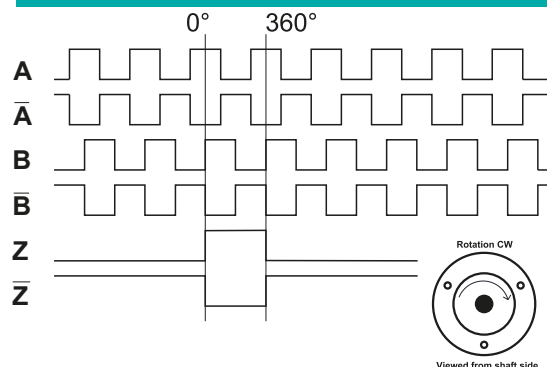
Technical data - electrical ratings

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)
Reference signal	Programmable length, 90° 180°, 270°, 360°
Optoelectronic life time	100.000 (min)
Output frequency	≤2 MHz
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
Approval	CE

Technical data - mechanical design

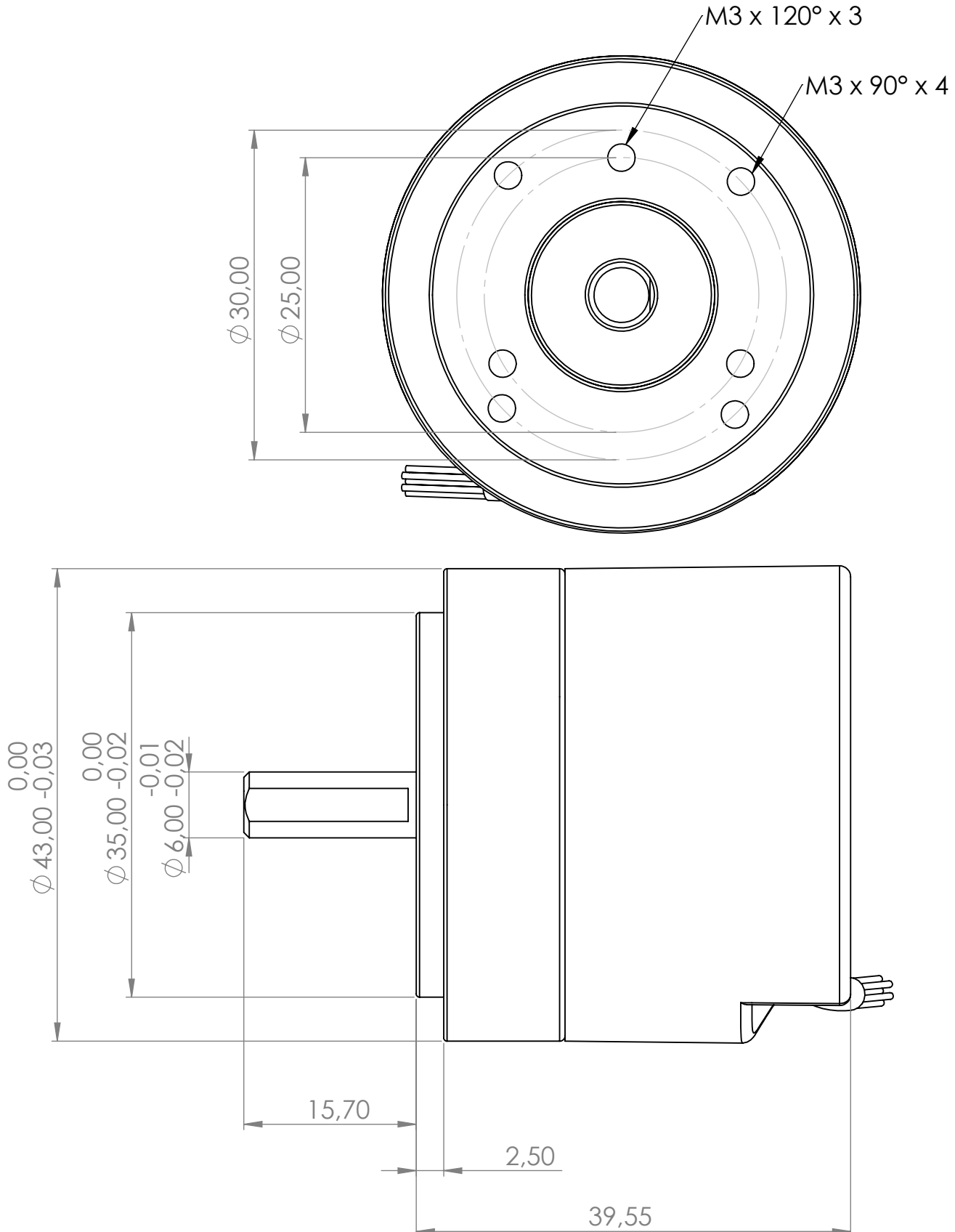
Dimensions (flange)	ø40 mm
Shaft loading	≤60 N axial ≤80 N radial
Protection DIN EN 60529	IP54, IP65
Operating speed	≤10000 rpm
Starting torque	≤0.020 Nm (IP67)
Materials	Housing: Aluminum Flange: Aluminum Shaft : Stainless steel
Shaft diameter	4, 5, 6, 8, 10 mm (other diameters on request)
Bearings lifetime	2x10 ⁹ rev. at 100% of full rated shaft load (minimum)
Operating temperature	-20...+85 °C
Storage temperature	-30 °C up to +90 °C
Weight approx	80 g

Pulse Diagram



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Mechanical Dimensions



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Cable/Connector Wiring, Part Number

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Cable Wiring

Function	Color	Renk	Farbe	Цвет	颜色	M2312 Connector
+VB	Brown	Kahve	Braun	коричневый	棕色	pin 2
GND	White	Beyaz	Weiß	Белый	白色	pin 10
A	Green	Yeşil	Grün	Зеленый	綠色	pin 5
A'	Red	Kırmızı	Rot	Красный	紅色	pin 6
B	Yellow	Sarı	Gelb	Желтый	黃色	pin 8
B'	Pink	Pembe	Rosa	Розовый	粉紅色	pin 1
Z	Gray	Gri	Grau	Серый	灰色	pin 3
Z'	Blue	Mavi	Blau	Голубой	藍色	pin 4
Shield	Black	Siyah	Schwarz	Черный	黑色	pin 11

Encoder Part Number

