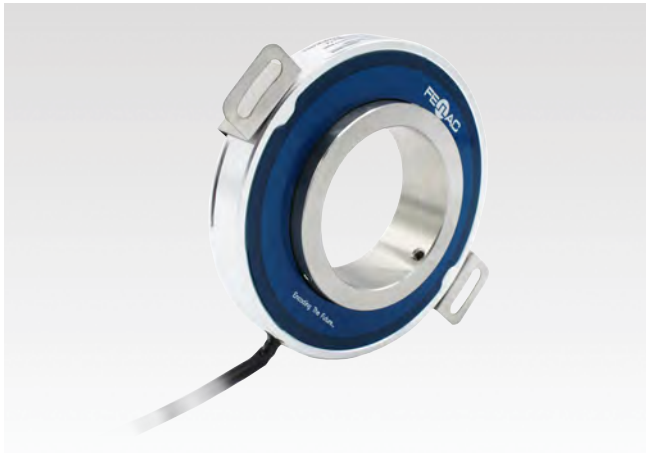


FNC TI 90 Series



Features

- Industry 90 mm standart size, through hollow shaft
- Robust Mechanical and Electrical Construction
- Protection to IP40
- <300 kHz frequency

PPR Options :

up to 65.536

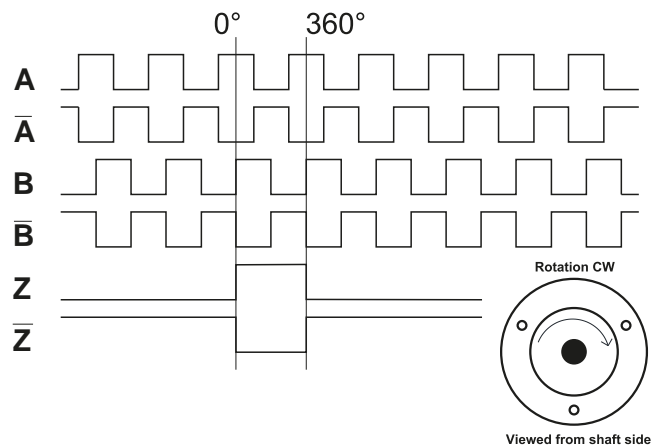
Technical data - electrical ratings

Voltage supply	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)	up to 65536
Reference signal	Zero pulse, width 90° 180°, 360° optional
Optoelectronic life time	100.000 (min)
Output frequency	<300 kHz
Output signals	90° shifted A and 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 design

Dimensions (flange)	ø90 mm
Shaft loading	≤80 N axial ≤100 N radial
Protection DIN EN 60529	IP40
Operating speed	≤10000 rpm
Starting torque	≤0.025 Nm (IP 67)
Materials	Housing: Aluminum Flange: Aluminum Shaft : Stainless steel
Shaft diameter:	50 mm (other diameters on request)
Bearings lifetime:	2x10 ⁹ rev. at 100% of full rated shaft load (minimum)
Operating temperature	-40...+85°C
Storage temperature	-40 °C up to +90 °C
Weight approx.	150 g

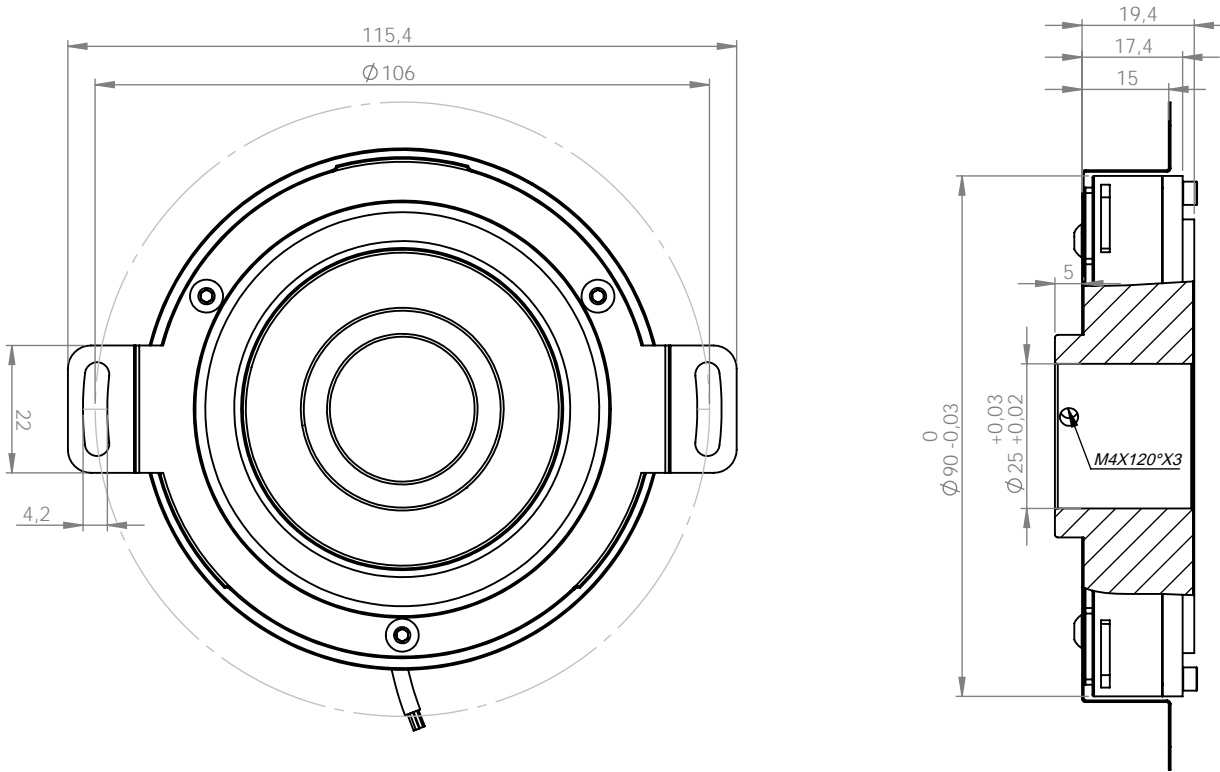
Pulse Diagram



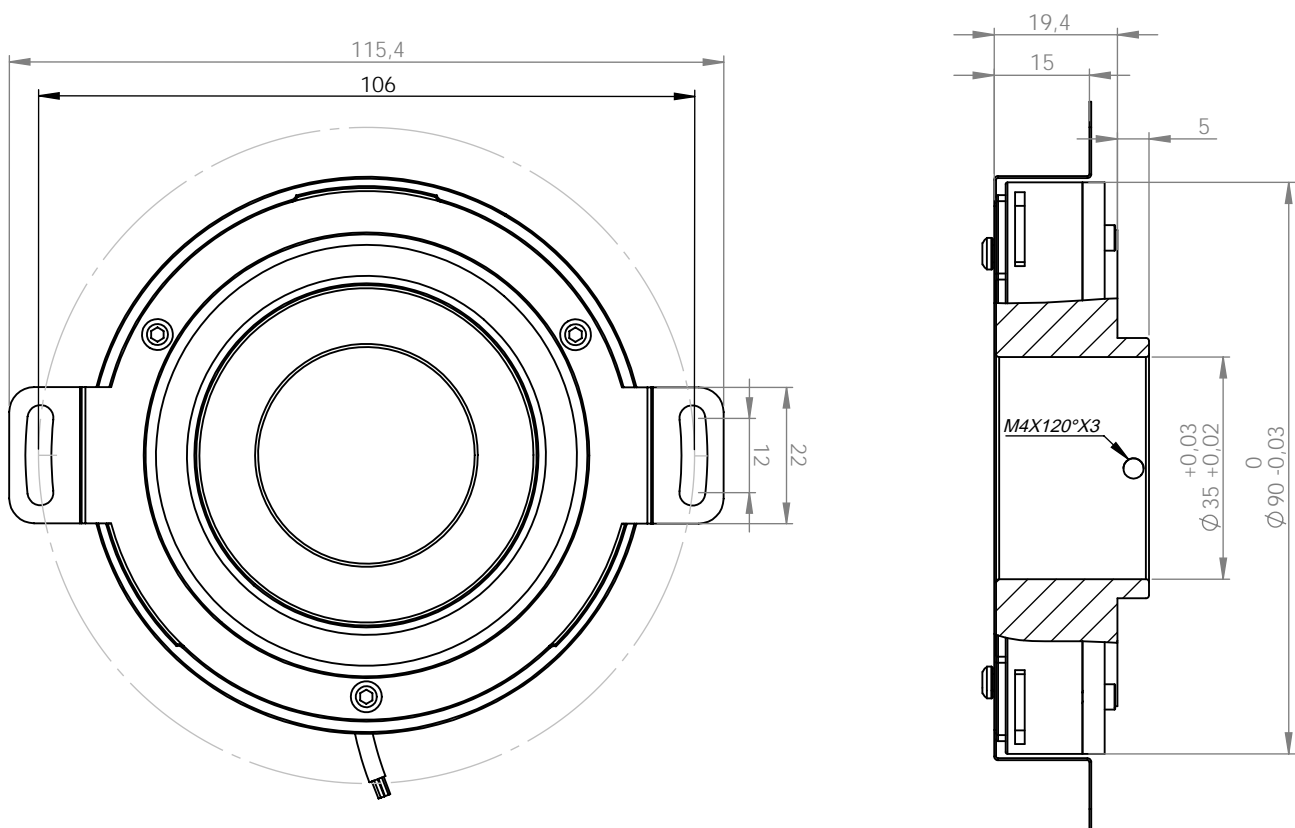
FNC TI 90 Series

Mechanical Dimensions

Spring (SP) fixing from housing - Bearing Side Setscrew (BS) Fixing with Seal & Cover



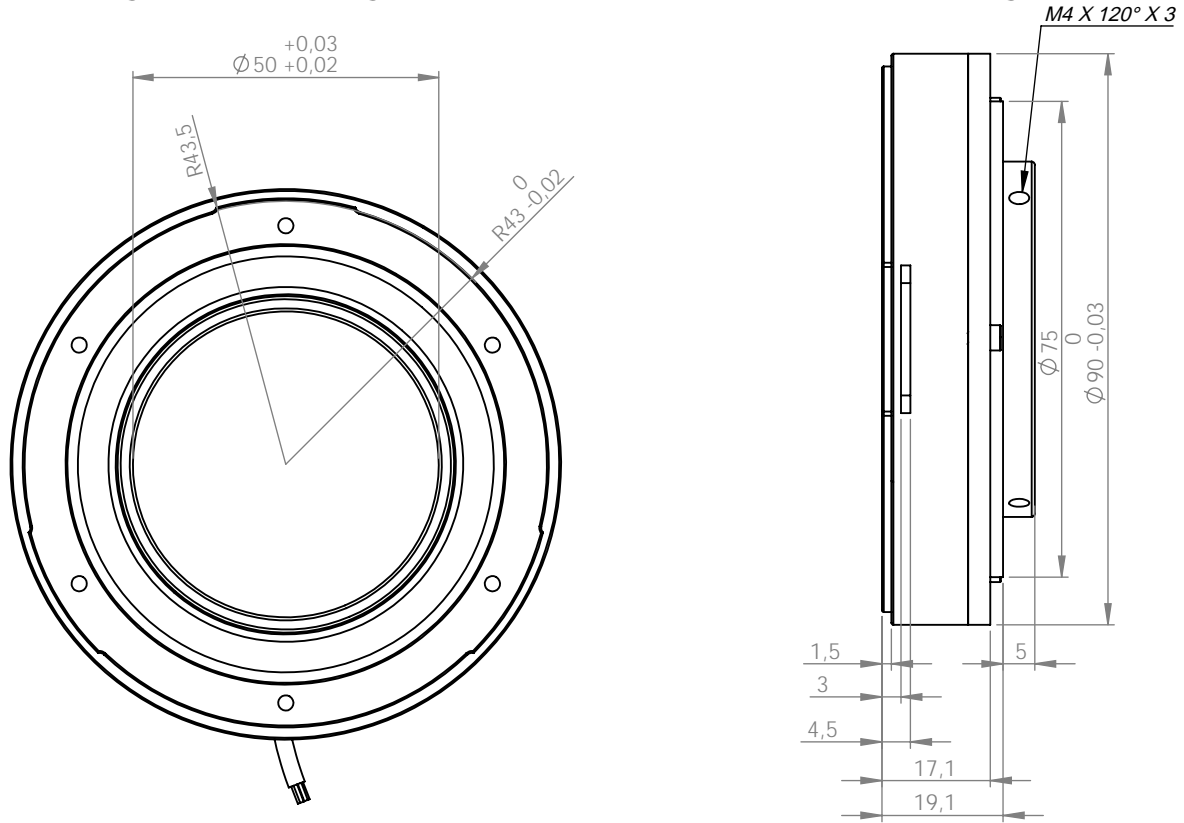
Spring (SP) fixing from housing - Cover Side Setscrew (CS) Fixing with Seal & Cover



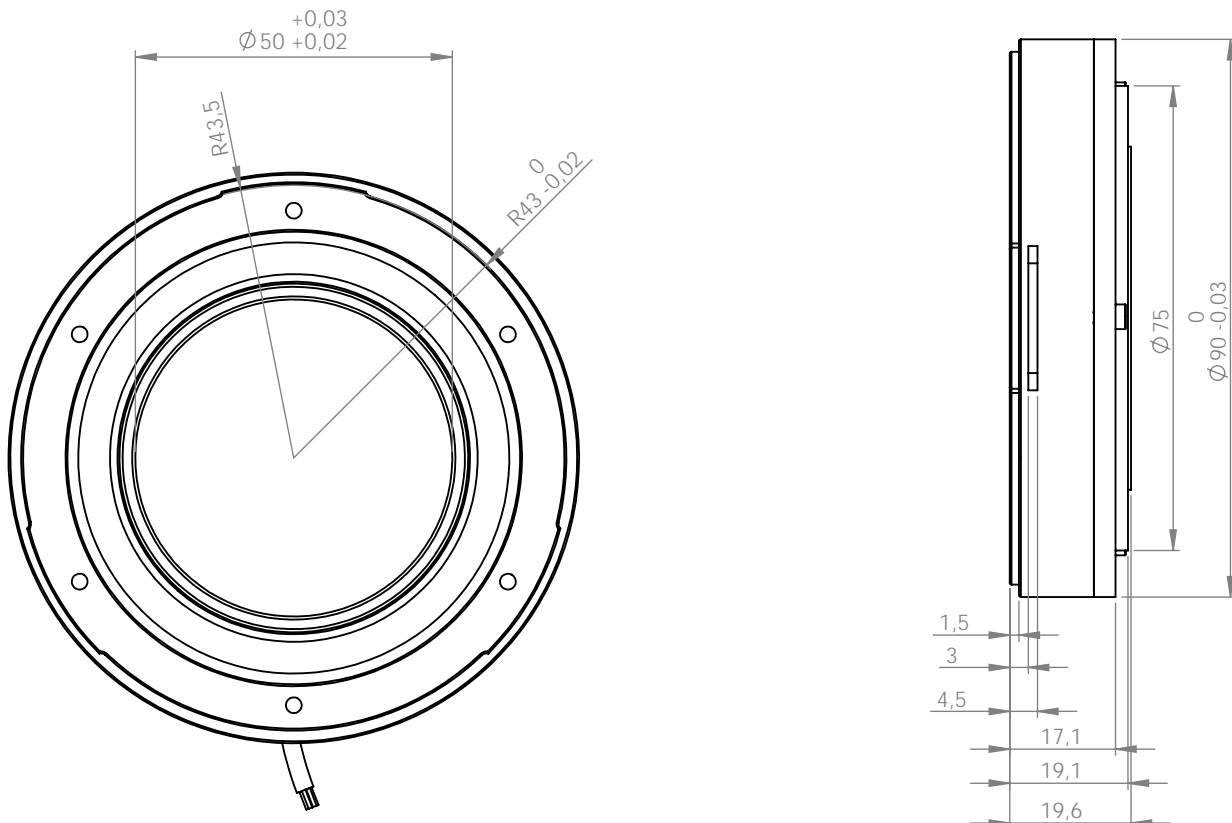
FNC TI 90 Series

Mechanical Dimensions

Side Fixing from housing (SF) - Cover Side Setscrew (CS) Fixing with Seal & Cover



Side Fixing from housing (SF) - Rove (R) Fixing from shaft version



Cable Connection

Function	Color	Renk	Farbe	
+VB		Brown	Kahve	Braun
GND		White	Beyaz	Weiß
A		Green	Yeşil	Grün
A'		Red	Kırmızı	Rot
B		Yellow	Sarı	Gelb
B'		Pink	Pembe	Rosa
Z		Gray	Gri	Grau
Z'		Blue	Mavi	Blau
Shield		Black	Siyah	Schwarz



Ensure operation in a moisture-free and dust-free environment.

Encoder Part Number

