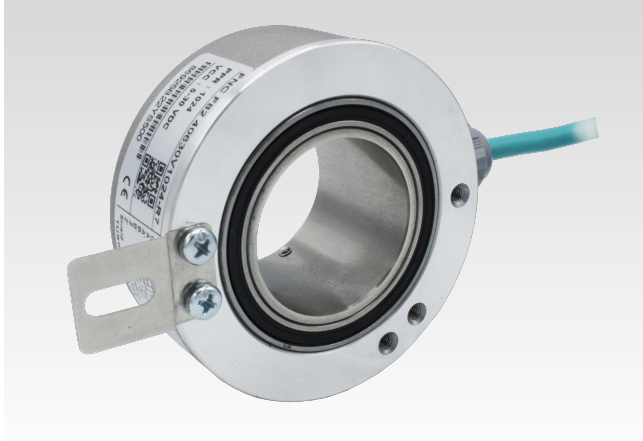


Incremental encoders

Resolution 1024...8192 pulses



FNC F82P Series



Features

- Special 80 mm design, through hollow shaft
- Robust mechanical and electrical construction
- Protection up to IP65
- Up to 8192 PPR max.
- <300 kHz frequency

PPR Options :

1024 - 2000 - 2048 - 4000 - 4096 - 8000 - 8192

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)	1024...8192
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 NPN Open Collector
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	CE

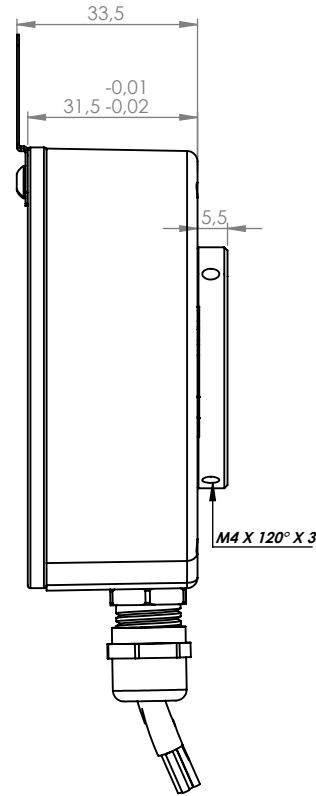
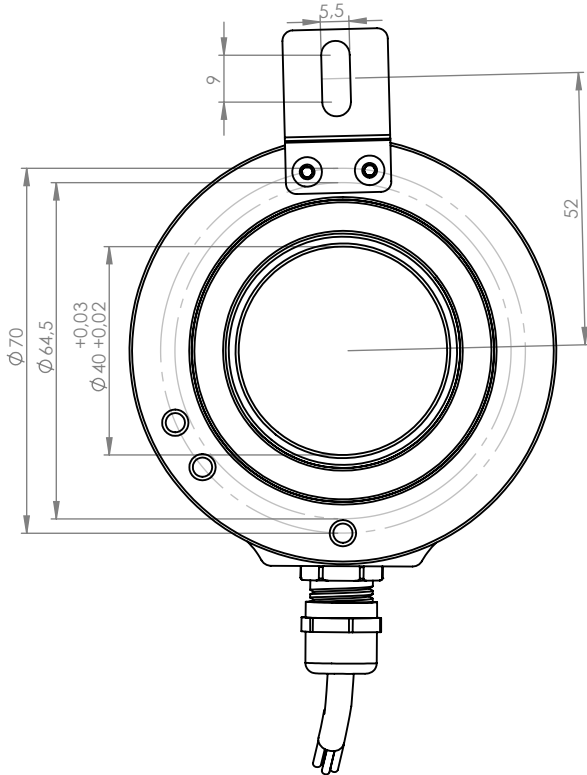
Technical data - mechanical design

Dimensions (flange)	ø80 mm
Shaft loading	≤140 N axial ≤240 N radial
Protection DIN EN 60529	IP54, IP65
Operating speed	≤10000 rpm
Starting torque	≤0.025 Nm
Materials	Housing: Stainless steel Flange: Stainless steel Shaft : Stainless steel
Shaft diameter:	38, 40, 42, 44 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.	300 g

FNC F82P Series

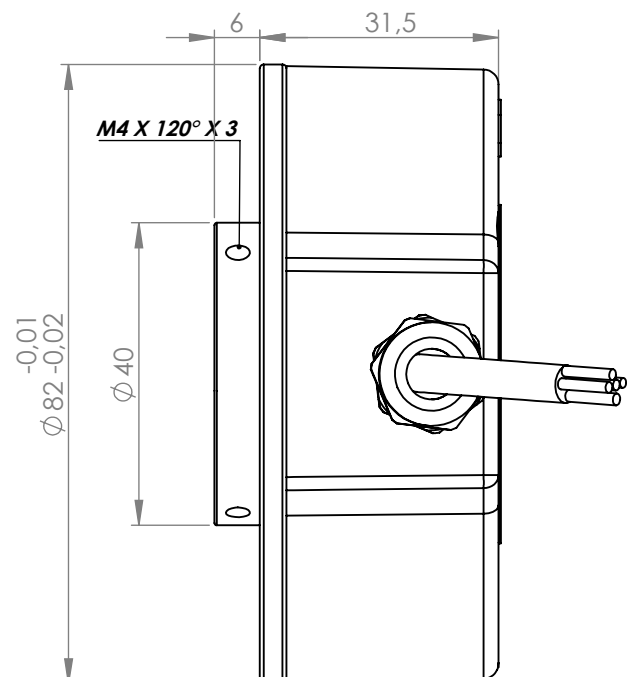
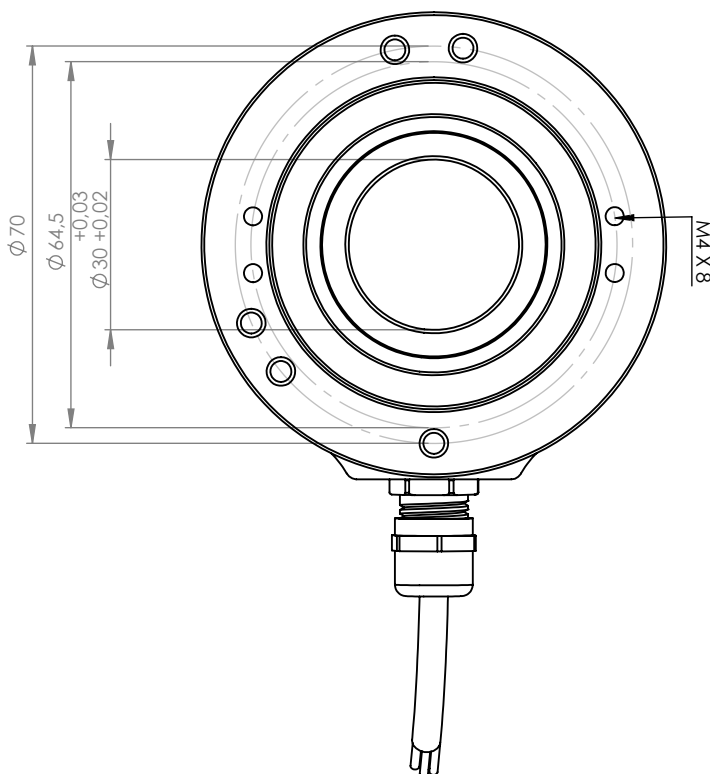
Mechanical Dimensions

Standard Version



00 / 16.06.22

BS Verison (Screw from Bearing Side)



00/ 16.06.2022

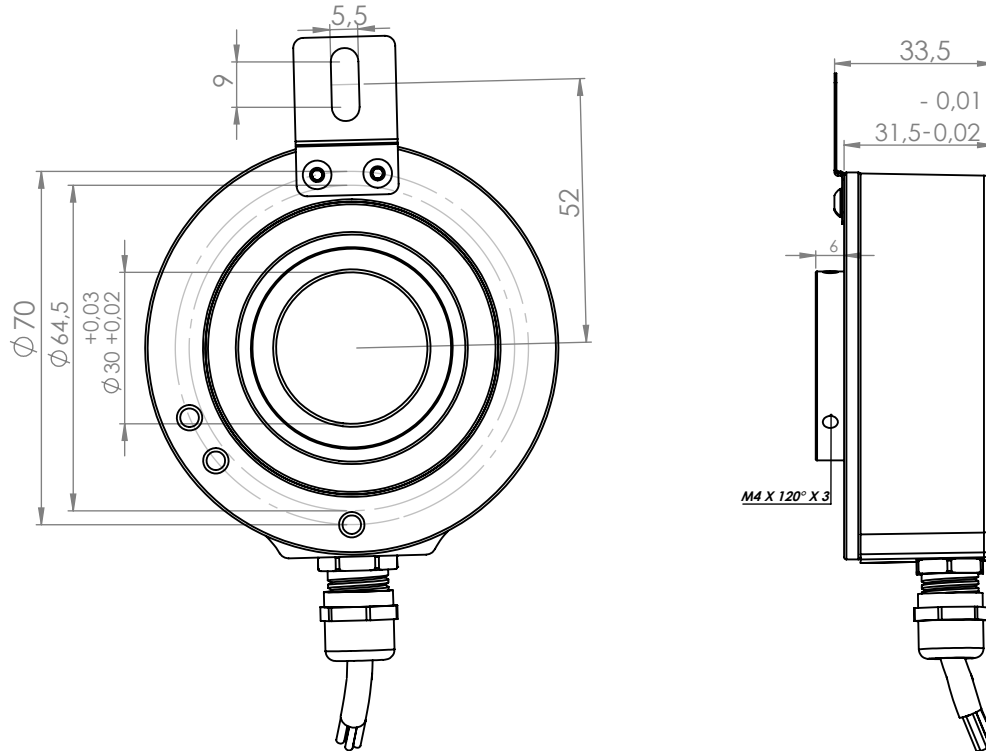
Incremental encoders

Resolution 1024...8192 pulses

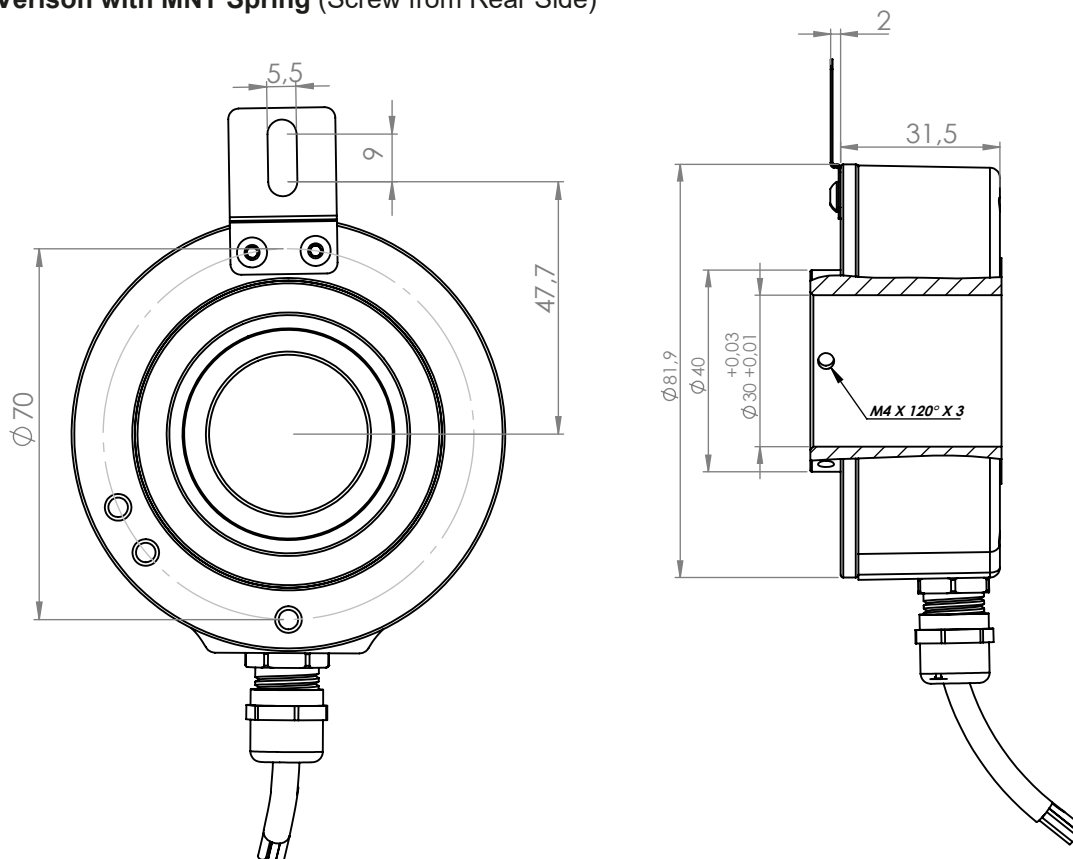
FNC F82P Series

Mechanical Dimensions

BS Version with MNT Spring (Screw from Bearing Side)



RS Version with MNT Spring (Screw from Rear Side)



Incremental encoders

Resolution 1024...8192 pulses

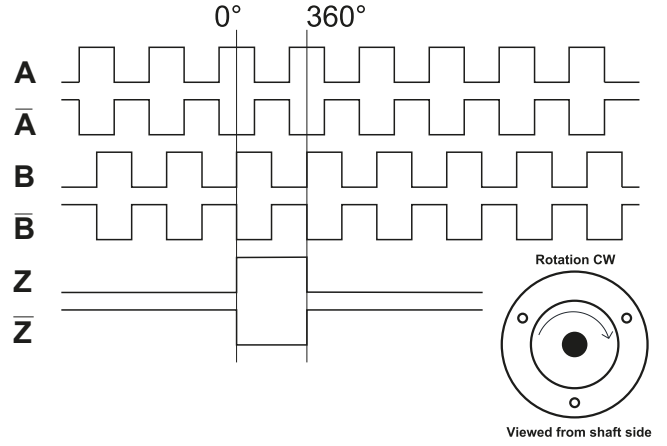


FNC F82P Series

Cable Wiring

Function	Color	Renk	Explanation
+VB	Brown	Kahve	Supply Voltage
GND	White	Beyaz	Ground
A	Green	Yeşil	A Channel
A'	Red	Kırmızı	A Inverted Channel
B	Yellow	Sarı	B Channel
B'	Pink	Pembe	B Inverted Channel
Z	Gray	Gri	Z Channel
Z'	Blue	Mavi	Z Inverted Channel
Shield	Black	Siyah	Shield

Pulse Diagram



Encoder Part Number

FNC F82P 44 6 30V 1024 — R7

F82P : Standard Model
F82 : Standard Model Shaft Screw from Seal Side
F82BS : Shaft Screw from Bearing Side
F82HBB : Shaft Screw from Rear Side

Shaft diameter : 25, 28, 30, 32, 34, 35, 38, 40, 42, 44 mm
Other dimensions on request

Output Channels

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

Electrical Connections:

Cable
R7 : radial 7m, shield not connected (standart)

Connector:
R1204, R1205, R1608, R2312R, R2312L

PPR Options :

1024 - 2000 - 2048 - 4000 - 4096 - 8000 - 8192

Supply Voltage and output circuit :

5V : 5V in / out
245V : 5-30V in 5V out
30V : 5-30V in / out