

Incremental encoders

Optical and Magnetic Programming Options

Programmable Resolution 1...65.536 pulses



FNC 58 Series Programmable



Features

- Industry 58 mm standart size,
- Clamping- servo- end hollow shaft flange versions
- Robust mechanical and electrical construction
- Protection up to IP67
- Up to 65.536 PPR max.
- ≤2 MHz frequency
- Programming vi FNC PT - PC Programming tool
- FNC PT - PS easy programming software

PPR Options :

1 to 65.536 programmable PPR

Technical data - electrical ratings

Voltage supply	4.75VDC to 30VDC 4.75VDC to 5.5VDC
Protection	Output short circuit protection. Reverse polarity protection Over voltage protection (except 5V version)
Consumption w/o load	≤60 mA (5 VDC) ≤35 mA (12 VDC) ≤26 mA (24 VDC) ≤27 mA (30 VDC)
Resolution (steps/turn)	1...65.536
Reference signal	Programmable length, 90° 180°, 270 , 360°
Output frequency	≤2 MHz
Output signals	90° shifted A and B, Z + all channels can be set indepently 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)	ø58 mm
Shaft loading	≤140 N axial ≤240 N radial
Protection DIN EN 60529	IP54, IP65
Operating speed	≤12000 rpm
Starting torque	≤0.025 Nm (IP 67)
Materials	Housing: Aluminum Flange: Aluminum Shaft : Stainless steel
Shaft diameter	6, 8, 10, 12 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	250 g



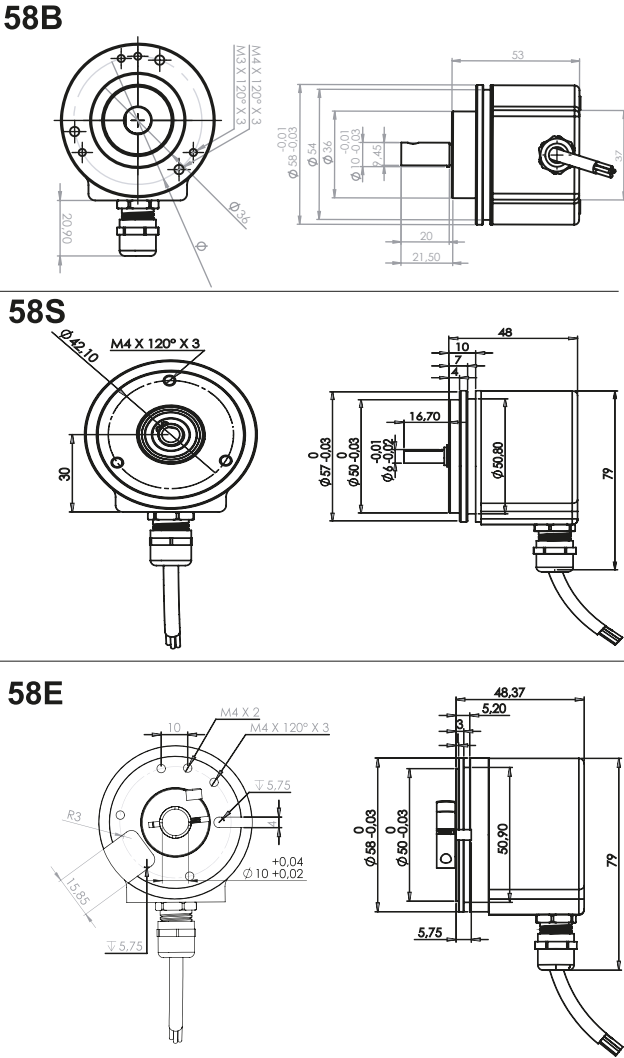
Incremental encoders

Mechanical Dimensions

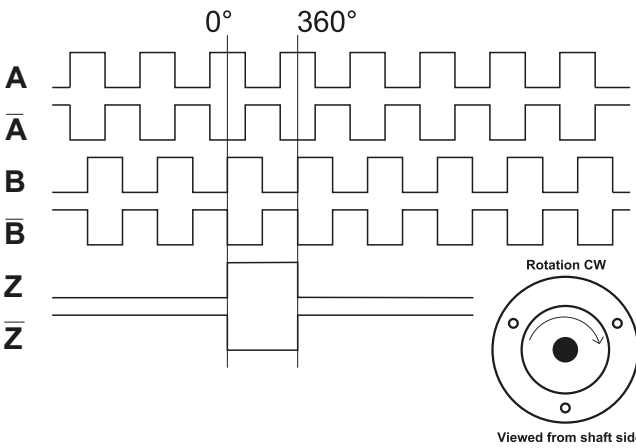
Cable/Connector Wiring, Part Number

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Mechanical Dimensions



Pulse Diagram



Cable Wiring

Function	Color	Renk	Explanation
+VB	Brown-Green	Kahve-Yeşil	Vcc
GND	White-Green	Beyaz-Yeşil	GND
A	Green	Yeşil	A
A'	Green-Black	Yeşil-Siyah	A Inverse
B	Yellow	Sarı	B
B'	Yellow-Black	Sarı- Siyah	B Inverse
Z	Gray	Gri	Z
Z'	Gray-Black	Gri-Siyah	Z Inverse
C	Blue	Mavi	Clock
D	Orange	Turuncu	Data
Shield	Black	Siyah	Shield

Encoder Part Number

FNCP 58 B O 10 6 30V X - R2

Housing:
58 : 58mm

Flange Type:
S : Servo flange
B : Clamping flange
E : End hollow shaft
H : Hollow shaft

O : Optical programmable M : Magnetic programmable

Shaft diameter : 4, 6, 8, 10, 12, 14
Other dimensions on request

Output Channels
3 : ABZ
4 : AB+A' B'
6 : ABZ+A' B' Z'

Electrical Connections:
Cable
R2 : radial 2m, shield not connected (standart)
A2 : axial 2m, shield not connected (standart)

Connector:
R1204 R1607 R1208 R2312R
R1205 R1614 R1212 R2312L

PPR Options :
1 to 65.536 Programmable

Supply Voltage and output circuit :
5V : 5V in / out
245V : 5-30V in 5V out
30V : 5-30V in / out