

Incremental encoders up to IP69K

Resolution 1...65.536 pulses

FNC 58BSS Stainless Steel



Stainless Steel



Features

- Industry 58 mm standard size, clamping flange
- Stainless Steel
- Robust mechanical and electrical construction
- Protection up to IP69K
- Up to 65.536 PPR max.
- <300 kHz frequency
- Optical or magnetic system

PPR Options :

1 to 65.536 PPR Any PPR option

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)	1...65.536
Reference signal	Zero pulse, width 90° 180°, 360° optional
Optoelectronic life time	100.000 (min)
Output frequency	>200 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)	ø58 mm
Shaft loading	≤140 N axial ≤240 N radial
Protection DIN EN 60529	IP54, IP65
Operating speed	≤10000 rpm
Starting torque	≤0.025 Nm (IP 67)
Materials	Housing: Stainless steel Flange: Stainless steel 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.	500 g

Accessories

Connectors and cables
CRM2312 M23 12 poles female connector or see page 206

Mounting coupling
PF481010 plastic or see page 204

Mounting accessories
SF58B square flange or see page 202-203

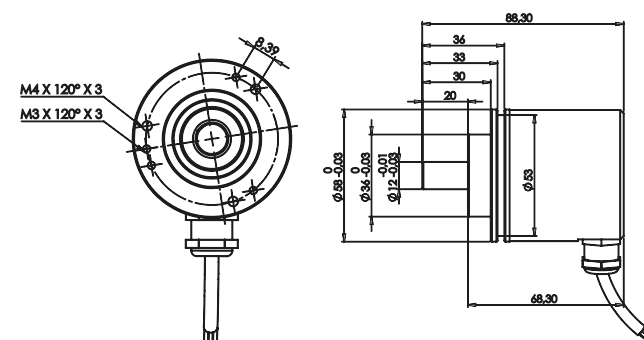
Incremental encoders

Mechanical Dimensions
Cable/Connector Wiring, Part Number

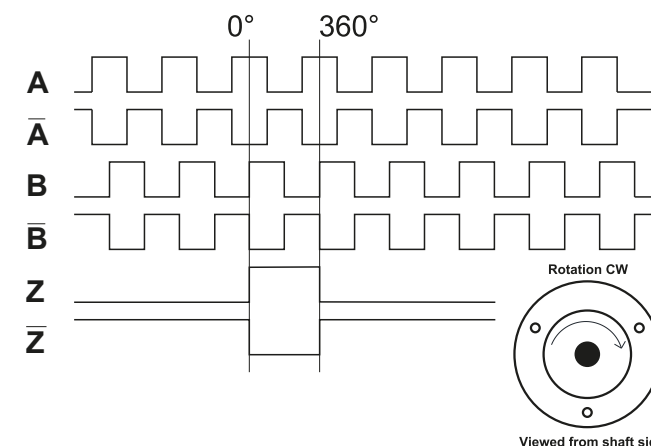
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Mechanical Dimensions



Pulse Diagram



Connector Wiring

Connector Type	+Vcc	GND	A	A'	B	B'	Z	Z'	Shield
CRM1204	1	2	3		4				o.r.
CRM1205	1	2	3		4		5		o.r.
CRM1208	1	2	3	6	4	7	5	8	o.r.
CRM1212	1	2	3	6	4	7	5	8	o.r.
CRM1607	1	2	3		4		5		o.r.
CRM1614	Customer Specific								o.r.
CRM2312R	2-12	10-11	5	6	8	1	3	4	o.r.
CRM2312L	2-12	10-11	5	6	8	1	3	4	o.r.

For further information please see page 206

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

Encoder Part Number

FNC 58 B SS 8 6 30V 1024 - R2

Housing:
58 : 58mm

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

SS : Stainless Steel

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

Output Channels
1 : A
2 : AB
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
R1205 R1614
R1208 R2312R
R1212 R2312L

PPR Options :
1 to 128 - 25 - 50 - 100 - 200 - 250 - 300 - 360 - 400 - 500 -
512 - 600 - 720 - 800 - 900 - 1000 - 1024 - 1250 - 1440 -
2000 - 2048 - 2500 - 3000 - 3600 - 4000 - 4096 - 5000 -
6000 - 8192 - 10000 - 12500 - 16384 - 20000 - 25000

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