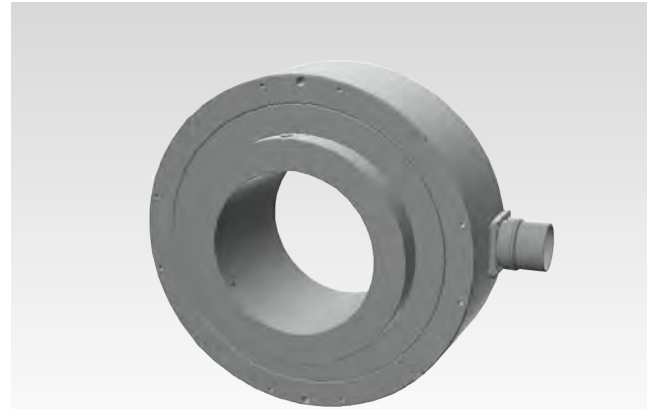


Incremental encoders

Resolution 100 ...10.000 pulses

FNC 150H Series



Features

- Industry 150 mm design, through hollow shaft
- Robust mechanical and electrical construction
- Protection up to IP65
- Up to 10.000 ppr max.
- <300 kHz frequency

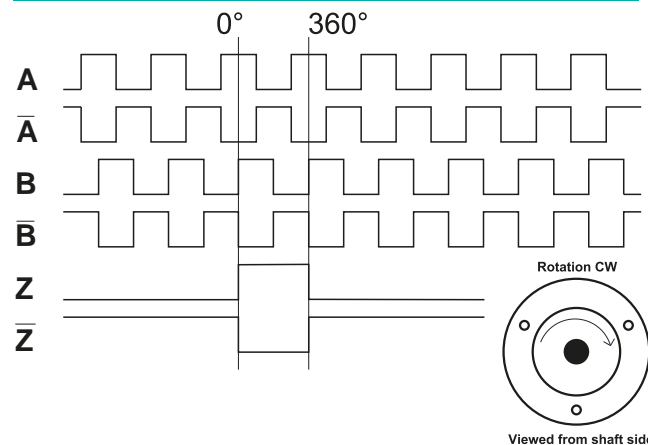
Technical data - electrical ratings

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...10.000
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)	∅150 mm
Shaft loading	≤140 N axial ≤240 N radial
Protection DIN EN 60529	IP54, IP65
Operating speed	≤10.000 rpm
Starting torque	≤0.025 Nm (IP 67)
Materials	Housing: aluminium Flange: aluminium Shaft : stainless steel
Shaft diameter:	72 to 90 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.	700 g

Pulse Diagram

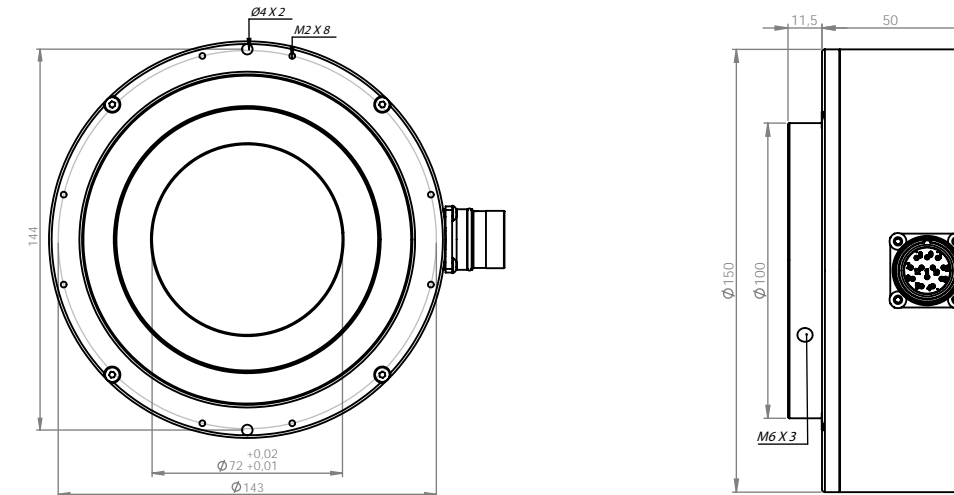


Incremental encoders

Mechanical Dimensions
Cable/Connector Wiring, Part Number

FNC 150H Series

Mechanical Dimensions



Connector Wiring

Connector Type	+Vcc	GND	A	A'	B	B'	Z	Z'	Shield
R1205	1	2	3		4		5		o.r.
R1208	1	2	3	6	4	7	5	8	o.r.
R1607	1	2	3		4		5		o.r.
R1614	Customer Specific								o.r.
R2312R	2-12	10-11	5	6	8	1	3	4	o.r.
R2312L	2-12	10-11	5	6	8	1	3	4	o.r.

Cable Wiring

Function	Color	Renk	Farbe	Цвет	颜色
+VB	Brown	Kahve	Braun	Коричневый	棕色的
GND	White	Beyaz	Weiß	Белый	白色的
A	Green	Yeşil	Grün	Зеленый	绿色的
A'	Red	Kırmızı	Rot	Красный	红色的
B	Yellow	Sarı	Gelb	Желтый	黄色的
B'	Pink	Pembe	Rosa	Розовый	粉色的
Z	Gray	Gri	Grau	Серый	灰色的
Z'	Blue	Mavi	Blau	Синий	蓝色的
Shield	Black	Siyah	Schwarz	Черный	黑色的

Encoder Part Number

FNC 150 H 72 6 30V 1024 - R2

Housing:
150: 150 mm

Flange Type:
H : Through hollow shaft

Shaft diameter : 72 to 90 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
R2 : radial 2m, shield not connected (standart)

Connector:
R1204 R1607
R1205 R1614
R1208 R2312R
R1212 R2312L

PPR Options :
100 - 360 - 500 - 1000 - 1024 - 2000 - 2048 - 2500 - 4000 - 4096
5000 - 8000 - 8192 - 10000
*Other PPRs are on request

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