

Incremental encoders

Resolution 1 to 1.000.000 pulses

Up to 95mm
hollow shaft



FNC 150H Series



Features

- Industry 150 mm design, through hollow shaft
- Robust mechanical and electrical construction
- Protection up to IP65
- Up to 1.000.000 ppr max.
- Up to 95mm hollow shaft

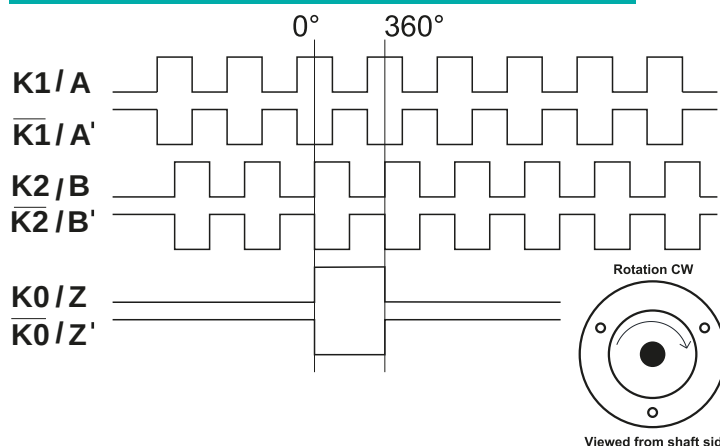
Technical data - electrical ratings

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	≤100 mA (24 VDC)
Resolution (steps/turn)	1 to 1.000.000 PPR
Reference signal	Zero pulse, width 90° 180°, 360° optional
Optoelectronic life time	100.000 (min)
Output frequency	<6 Mhz
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

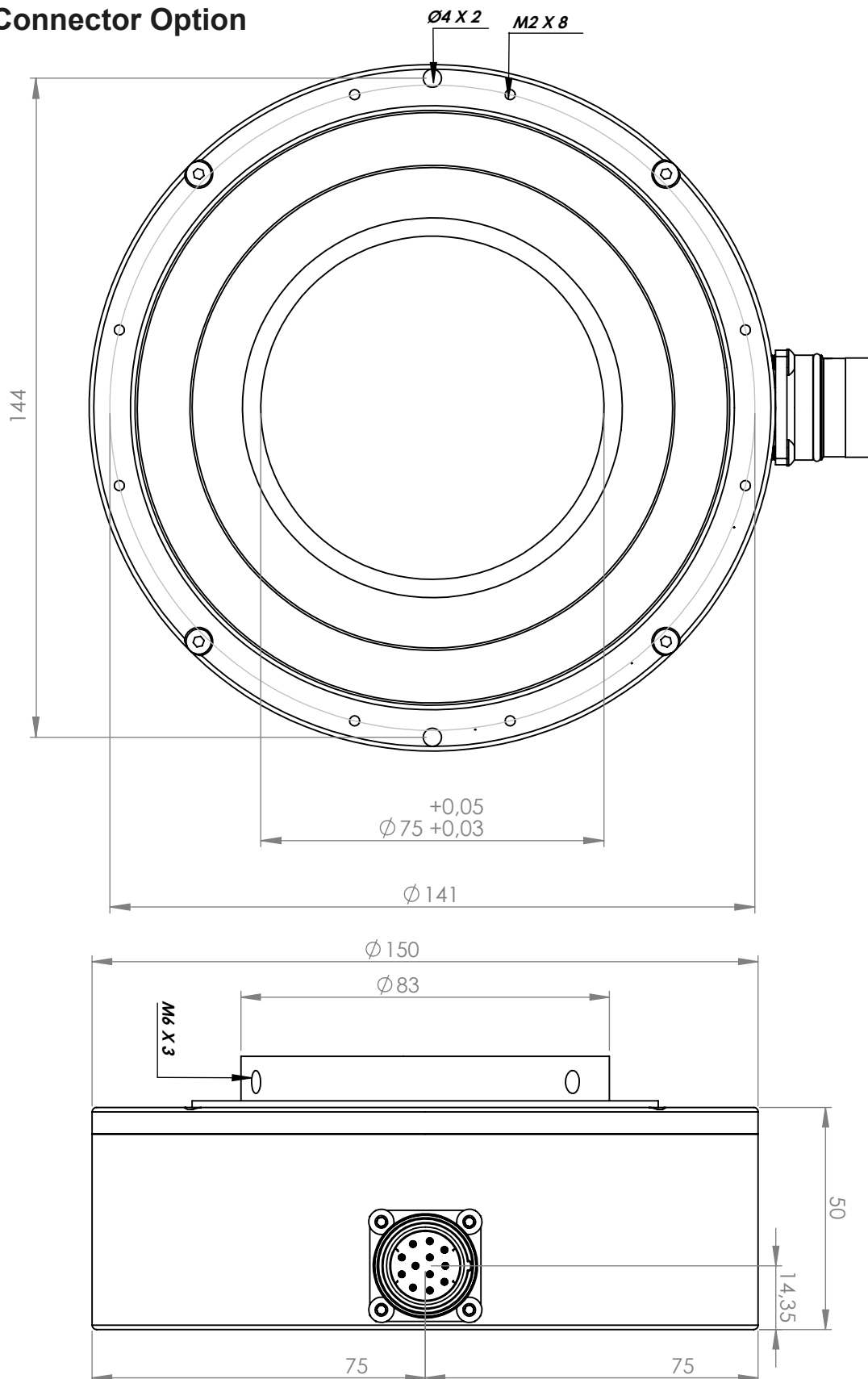
Dimensions (flange)	ø150 mm
Shaft loading	≤140 N axial ≤240 N radial
Protection DIN EN 60529	IP54, IP65
Operating speed	≤10.000 rpm
Starting torque	≤0.025 Nm (IP 67)
Materials	Housing: aluminium Flange: aluminium Shaft : aluminium
Shaft diameter:	72 to 95 mm (other diameters on request)
Bearings lifetime:	2x10 ⁹ rev. at 100% of full rated shaft load (minimum)
Operating temperature	-40 °C to +85 °C
Storage temperature	-40 °C to +90 °C
Weight approx.	700 g

Pulse Diagram



Mechanical Dimensions

M23 Connector Option



Incremental encoders

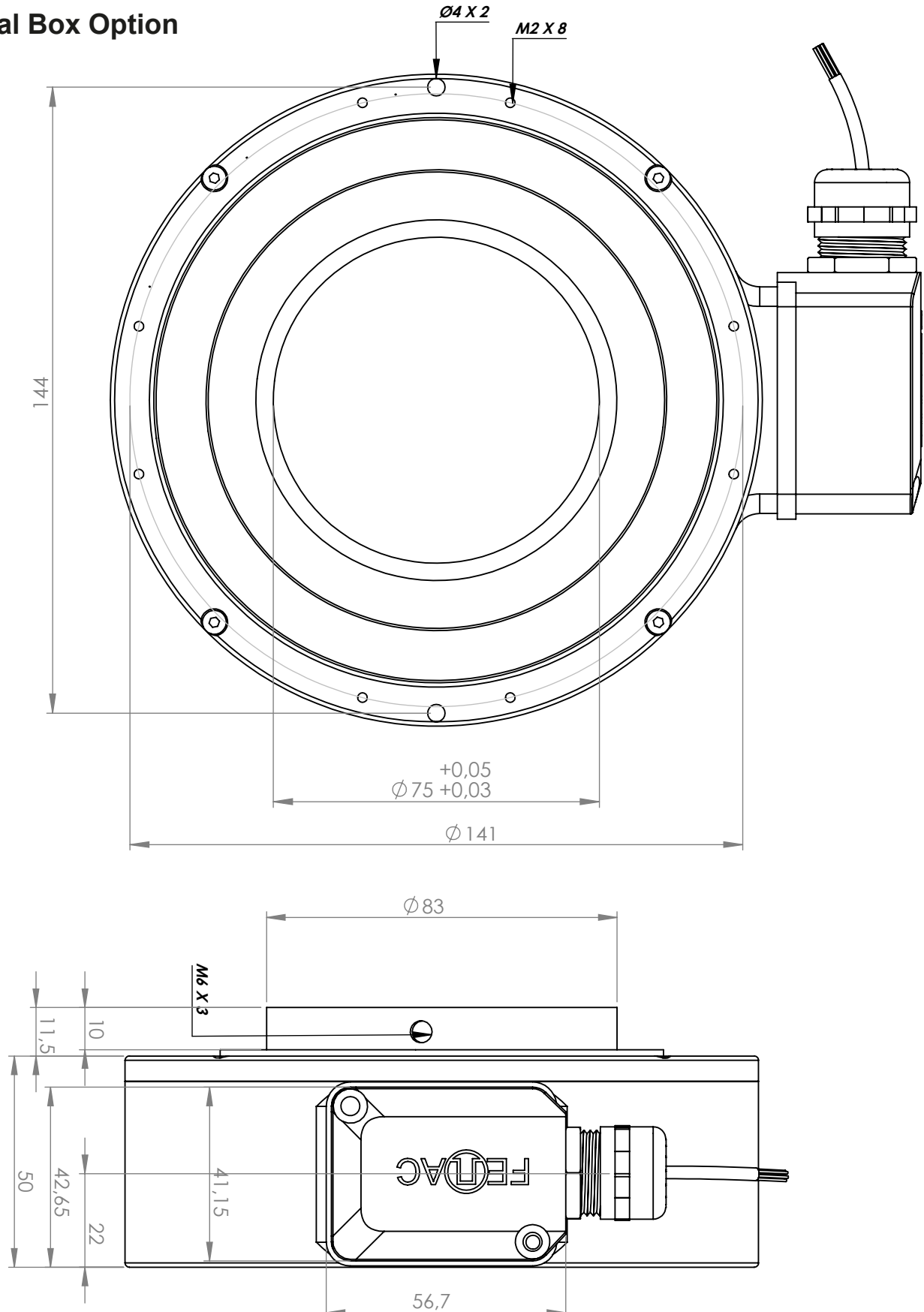
Mechanical Dimensions



FNC 150H Series

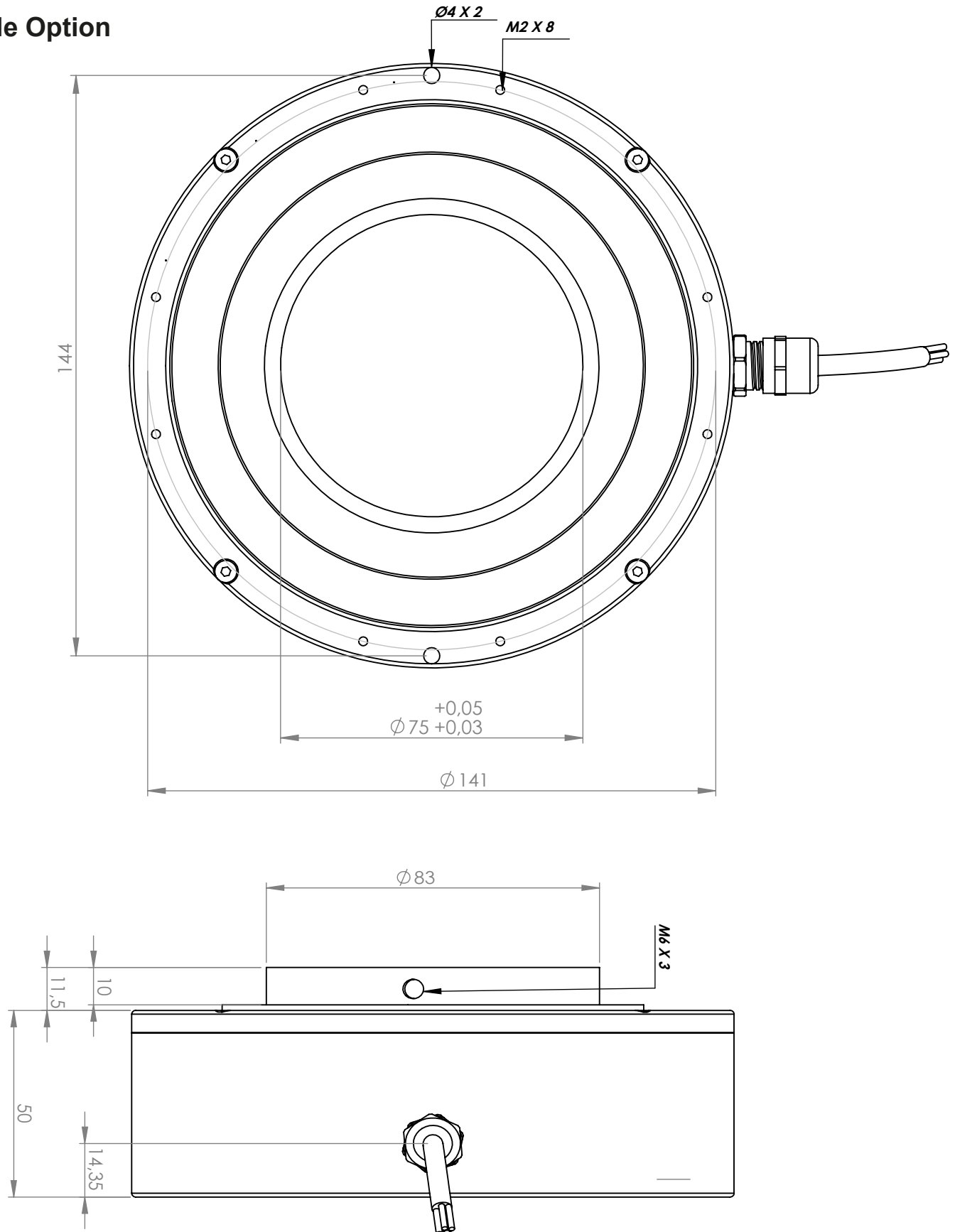
Mechanical Dimensions

Terminal Box Option



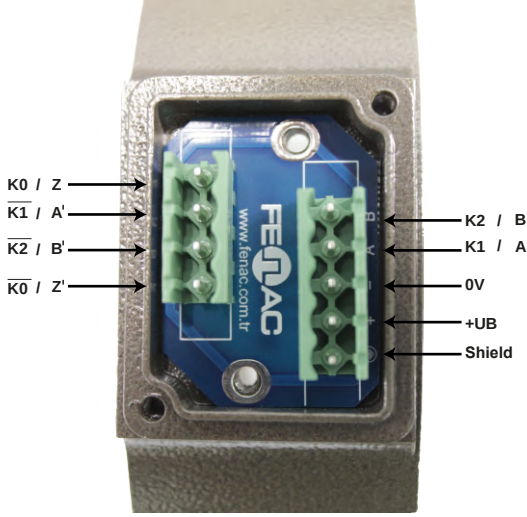
Mechanical Dimensions

Cable Option

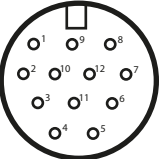


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Terminal Box Connection



M2312 Pin Connection

Function	R2312R	Connector
+VB	pin 2-12	 Pin Design 
GND	pin 10-11	
A	pin 5	
A'	pin 6	
B	pin 8	
B'	pin 1	
Z	pin 3	
Z'	pin 4	

Cable Wiring

Function	Color	Renk
+UB	Brown	Kahve
0V	White	Beyaz
K1 / A	Green	Yeşil
K1 / A'	Red	Kırmızı
K2 / B	Yellow	Sarı
K2 / B'	Pink	Pembe
K0 / Z	Gray	Gri
K0 / Z'	Blue	Mavi
Shield	Black	Siyah

Encoder Part Number

