

Absolute encoders

Singleturn 9...22 bit
Multiturn 0...32 bit



FNC AS36B Series

Battery Version



Gear Version



Features

- Encoder single or multiturn SSI/BiSS
- Magnetic or optical sensing
- Optical singleturn resolution up to 19 bit
- Multiturn 0...32 bit
- Clamping flange
- Permanent check of code continuity
- Extreme resistance to shock and vibration
- Encoder with electronic reset

Technical data-electrical ratings

Voltage supply	8VDC to 30VDC
Protection	Output short circuit protection. Reverse polarity protection
Consumption w/o load	≤80 mA (24 VDC)
Interface	SSI or BiSS
Resolution (steps/turn)	Magnetic : 13 bit Optic : 19 bit
Absolute accuracy	Magnetic: ± 0,1° Optic : ± 0,01°
Optoelectronic life time	100,000 (min)
Code	Gray or Binary
Inputs	SSI differential clock Electronic zero setting
Output frequency	up to 2 MHz (SSI) up to 10 MHz (BiSS)
Output circuit	SSI data linedriver RS485
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	CE

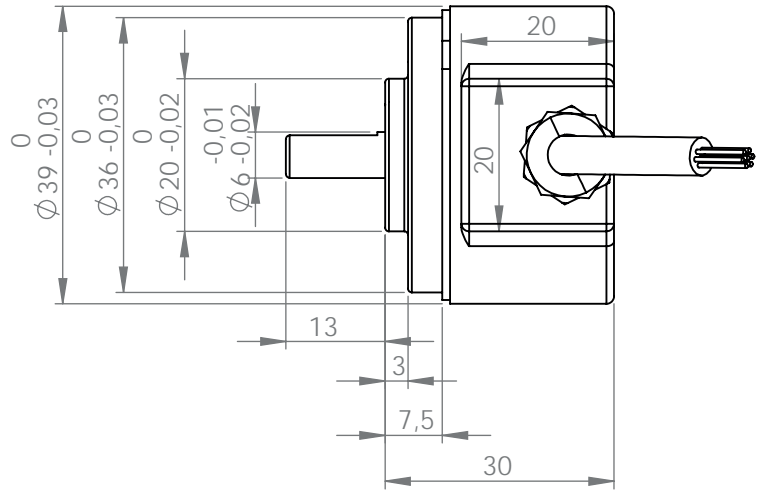
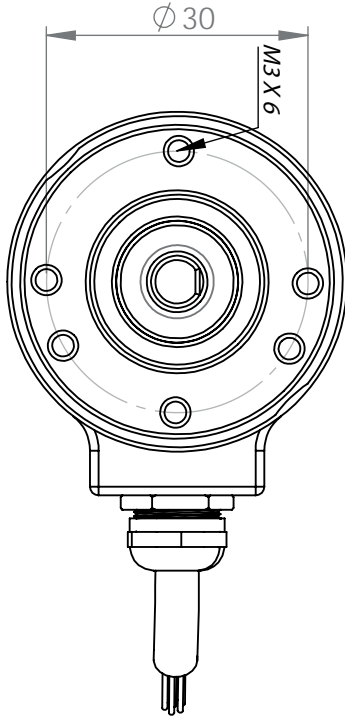
Technical data-mechanical ratings

Dimensions (flange)	Ø40 mm
Shaft loading	≤20 N axial ≤40 N radial
Protection DIN EN 60529	IP54, IP65
Operating speed	≤10,000 rpm
Starting torque	≤0.001 Nm (IP67)
Materials	Housing: aluminum Shaft: stainless steel
Shaft diameter	6, 8, 10 mm (other diameters on request)
Bearings lifetime	2x10 ⁹ rev. at 100% of full rated shaft load (minimum)
Operating temperature	-40...+110°C
Storage temperature	-40°C up to +120°C
Weight approx.	250 g

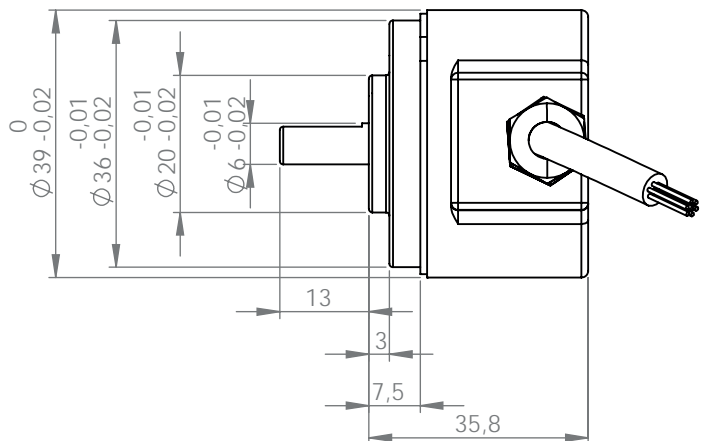
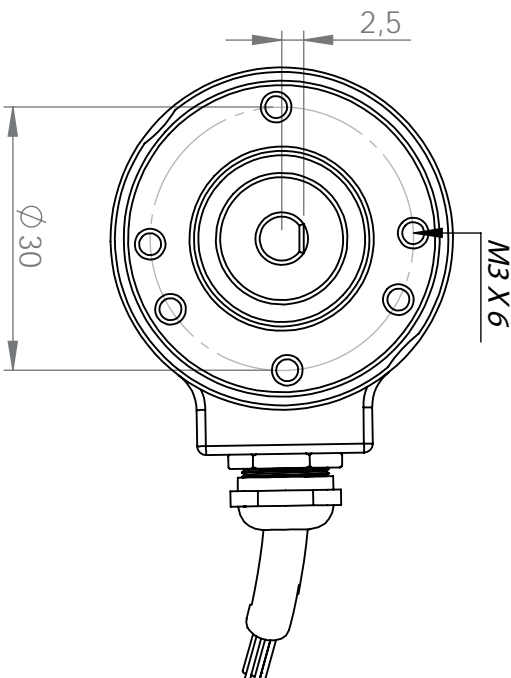
FNC AS36B Series

Mechanical Dimensions

Gear Version



Battery Version










Absolute encoders

Cable / Connector Wiring, Part Number





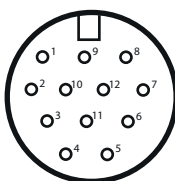
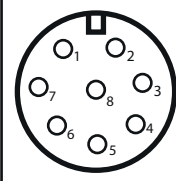
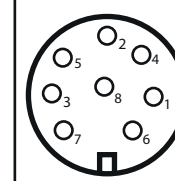
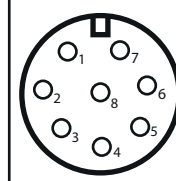


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Cable Connection

Function	Color	Renk	Farbe	Цвет
+VB	 Brown	Kahve	Braun	Коричневый
GND	 White	Beyaz	Wei	Белый
DATA+	 Orange	Turuncu	Orange	Оранжевый
DATA-	 Orange-Black	Turuncu-Siyah	Orange-Schwarz	Оранжево-черный
CLOCK-	 Blue	Mavi	Gelb	синий
CLOCK+	 Blue-Black	Mavi-Siyah	Gelb-Schwarz	сине-черный
PRESET	 Gray	Gri	Grau	Серый
Shield	Black	Siyah	Schwarz	Чернить

Connector Connection

Function	R2312R	R1208	R1508	R1608
+VB	pin 12	pin 5	pin 5	pin 5
GND	pin 11	pin 6	pin 6	pin 6
DATA+	pin 3	pin 3	pin 3	pin 3
DATA-	pin 4	pin 4	pin 4	pin 4
CLOCK+	pin 1	pin 2	pin 2	pin 2
CLOCK-	pin 2	pin 1	pin 1	pin 1
DIRECTION	pin 10	pin 8	pin 8	pin 8
PRESET	pin 5	pin 7	pin 7	pin 7
Connector				
Pin Design				

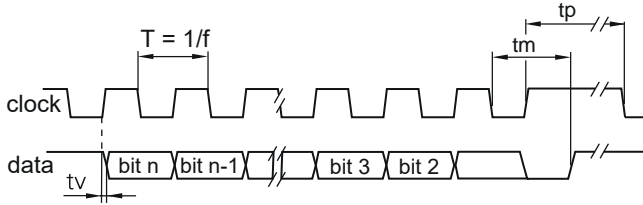
** for other connector options visit www.fenac.com.tr

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Pulse Diagram, Part Number

FNC AS36B Series

Pulse Diagram



Clock frequency, f	50...2000 kHz for SSI up to 10 MHz for BiSS
Code	Binary or Gray
Status and parity bit	On request
Monoflop time t_m	>15 μ s
Clock time out	Programmable at factory

Terminal Significance

+Vs	Encoder supply voltage
0 V	Encoder ground connection relating to +Vs
Data+	Positive data output.
Data-	Negative data output.
Clock+	Positive SSI clock output.
Clock-	Negative SSI clock output.
Zero	Input for setting a zero point anywhere within the encoder resolution. The zero setting operation is triggered with Vs.

Encoder Part Number

