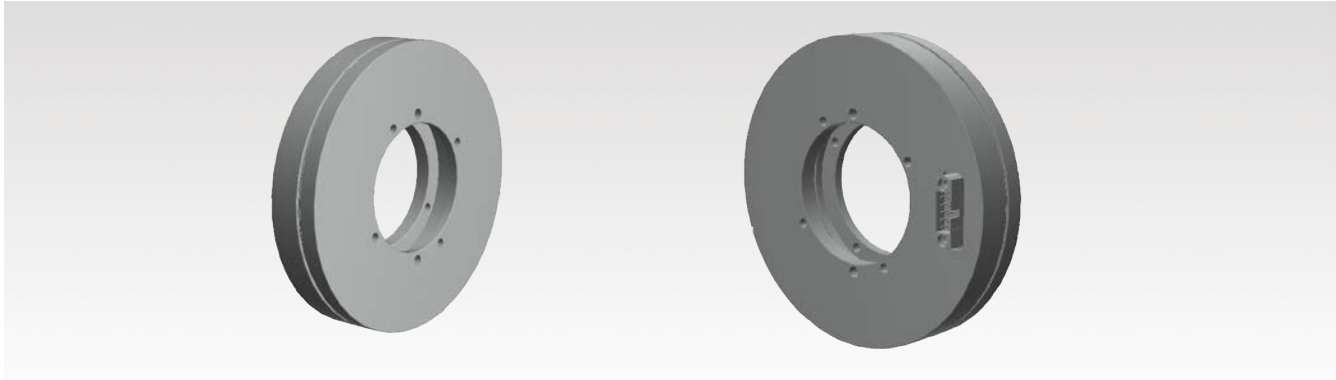


Fenac Inductive Contactless Encoders



FNC ASI 90 Series



Technical data - Electrical Ratings

Supply Voltage	5V or 6 - 36 VDC \pm 5%
Interface	SSI or BISS
Protection	Overvoltage protection Short-circuit protection
Resolution (steps/turn)	up to 21 bit
Output frequency	up to 2 MHz for SSI up to 10 MHz for BISS
Code	Binary
Output circuit	SSI data linedriver RS485
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	CE

Features

- Non contact inductive technology
- High accuracy
- For high reliability in extreme environments
- Robust mechanical design
- Thin design

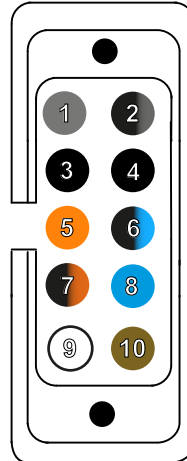
Technical data - Mechanical Ratings

Dimensions	Outer Diameter : 90 mm Inner Diameter : 40 mm
Mounting Type	Clamping or Screw
Mounting Gap	1 mm \pm 0,35
Materials	Anodized Aluminium
Protection DIN EN 60529	IP 67
Operating temperature	-40 ... +85°C
Weight	Rotor : 30 g Stator : 100 g

FNC ASI 90 Series

Cable Wiring

Function	Connector	Color
+VB	pin 10	Brown
GND	pin 9	White
CLK+	pin 8	Blue
CLK-	pin 6	Blue-Black
DATA+	pin 5	Orange
DATA-	pin 7	Orange-Black
ZERO*	pin 1	Gray
FACTORY ZERO**	pin 2	Gray-Black



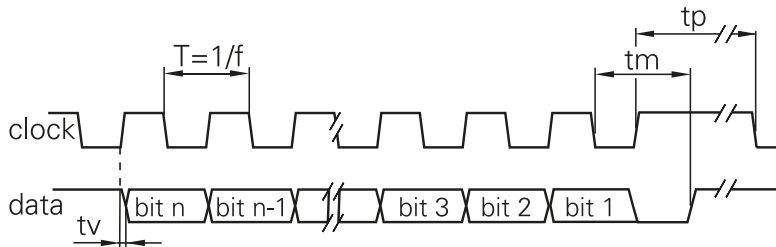
During operation;

* : To set the Zero position, apply GND to Zero pin for more than 100msec.

** : To set the Factory Zero position to factory default, apply GND to Factory Zero pin for less then 1 second.

*** : If these pins are not used, please connect to 5V with a pull-up resistor.

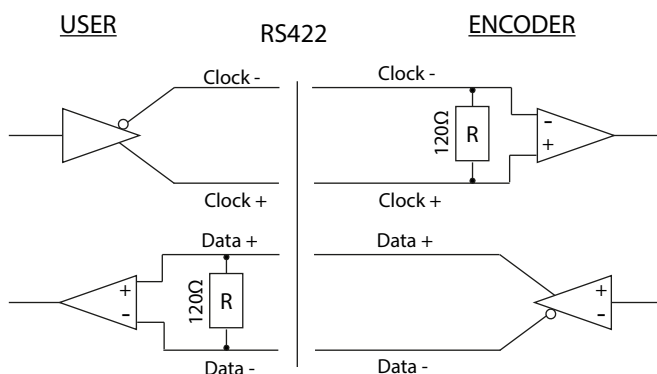
Communication Interface



Clock frequency, f	100 ... 2000 kHz for SSI 100 ... 10.000 kHz for BISS
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Code	Binary
Status and parity bit	On request
Monoflop time t_m	20 μs
Delay time t_v	<150 ns

Communication Hardware



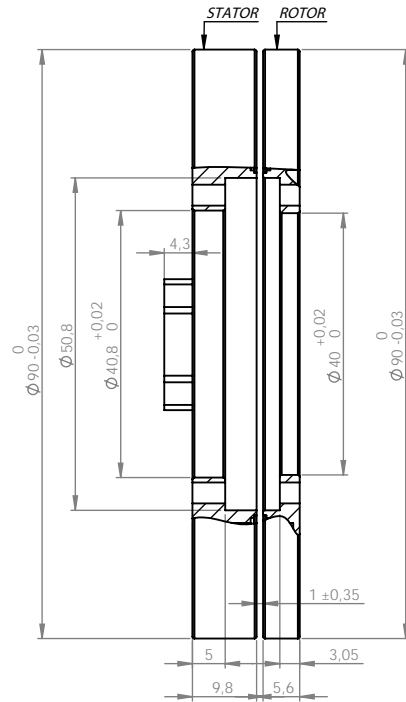
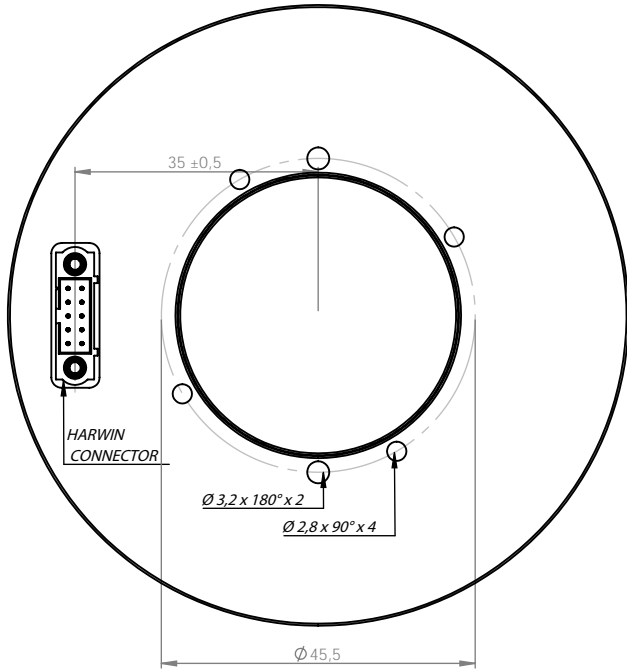
Fenac Inductive Contactless Encoders



FNC ASI 90 Series

Mechanical Dimensions

Screw Mounting Stator - Screw Mounting Rotor Version



Encoder Part Number

FNC AS I 90 SM SM 1 18 5V B - A6 A

Interface

AS : Absolute SSI
AB : Absolute BISS

Sensing Technology

I : Inductive

Outer Diameter

37 : 37 mm **135** : 135 mm
58 : 58 mm **150** : 150 mm
75 : 75 mm **200** : 200 mm
90 : 90 mm **225** : 225 mm
100 : 100 mm **250** : 250 mm
125 : 125 mm

Stator Mounting

SM : Screw Mounting Stator
SC : Servo Clamp Stator
DS : Duplex Stator
EM : External Mount Stator

Rotor Mounting

SM : Screw Mounting Rotor
SS : Setscrew Mounting Rotor
PR : Plain Rotor
DR : Duplex Rotor

Surface finish

A : Anodized
S : Standard
N : Nickel coated

Electrical Connections

A6 : 0.6 meter cable
C10 : 10 Pin Connector (Consult the factory)

B : Binary

Supply Voltage

5V : 5 VDC
3V : 6 - 36 VDC

Resolution

up to 21 bit

SSI Interface Type

1 : SS1
7 : SS7

(other options on request)