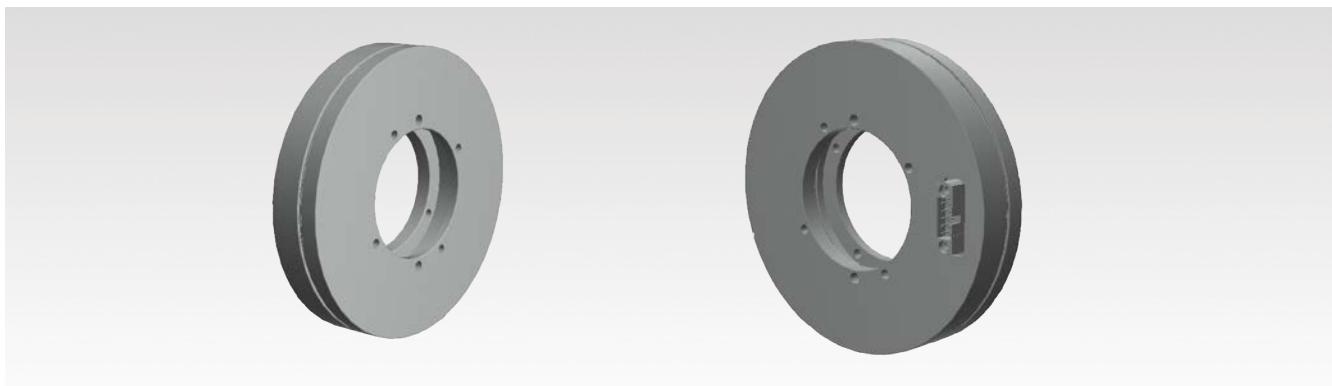


Fenac Inductive Contactless Encoders



FNC ASI 90 Series



Technical data - Electrical Ratings

Supply Voltage	5V or 6 - 36 VDC ±%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 ±0,35
Materials	Anodized Aluminium
Protection DIN EN 60529	IP 67
Operating temperature	-40 ... +85°C
Weight	Rotor : 30 g Stator : 100 g

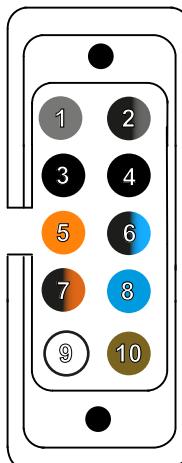
Fenac Inductive Contactless Encoders



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



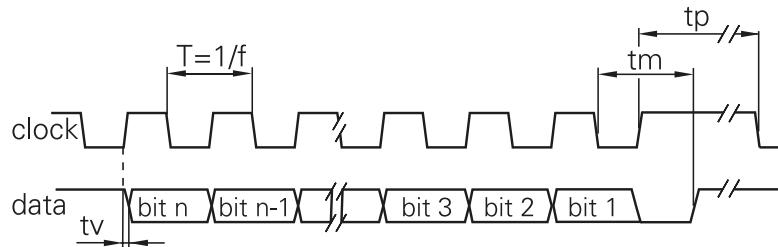
During operation:

* : 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 than 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

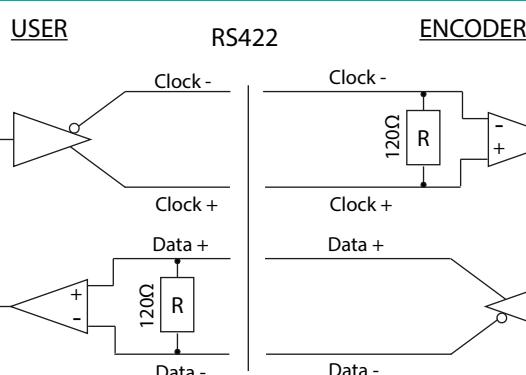
Code Binary

Status and parity bit On request

Monoflop time tm 20 µs

Delay time tv <150 ns

Communication Hardware



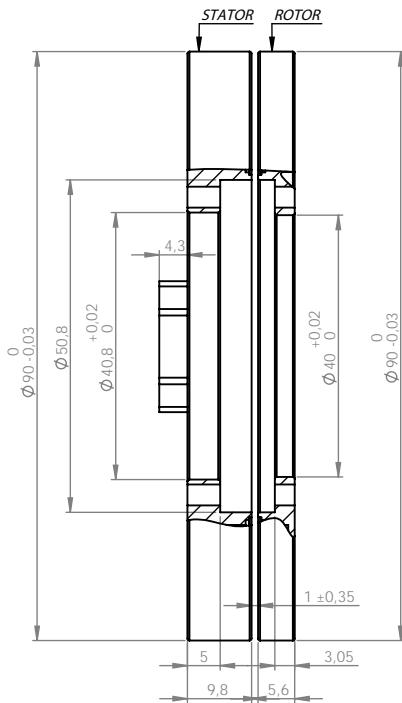
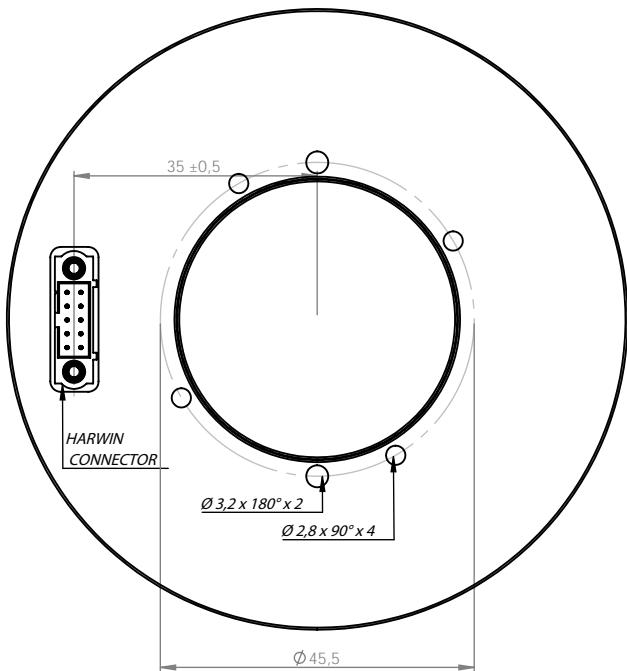
Fenac Inductive Contactless Encoders



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 :SSI1

7 :SSI7

(other options on request)