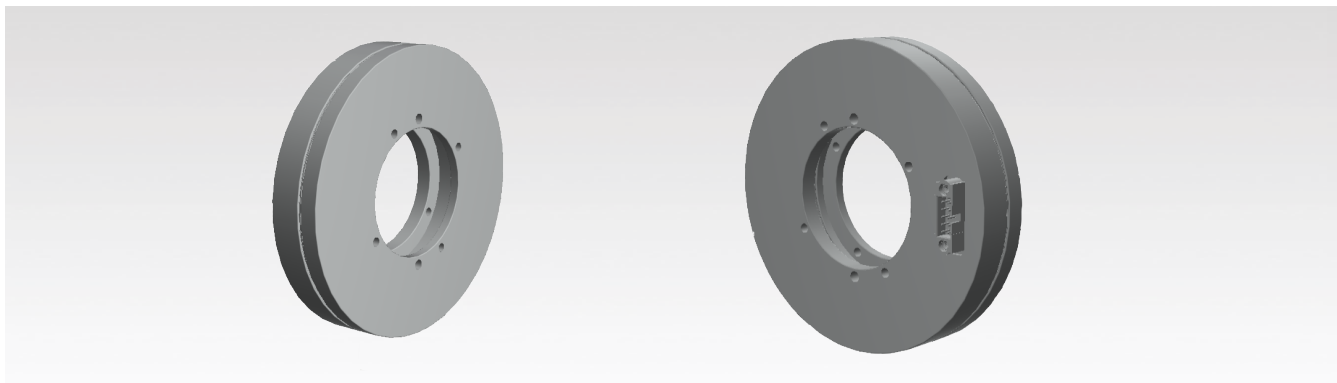


# Fenac Inductive Contactless Encoders



## FNC ASI 90 Series



### Technical data - Electrical Ratings

Supply Voltage	5V - 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	Gray or binary
Output circuit	SSI data linedriver RS485
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	CE

### Features

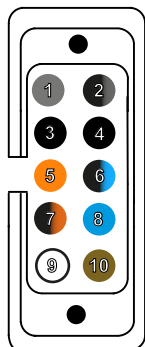
- Non contact inductive technology
- High accuracy
- For high reliability in extreme environments
- Robust mechanical design
- Thin design

### Technical data - Mechanical Ratings

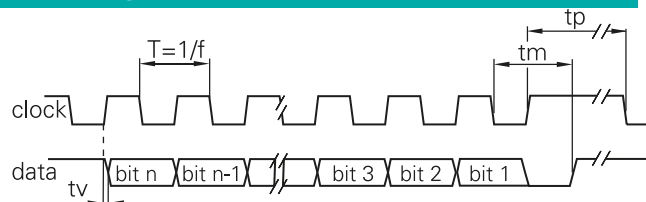
Dimensions	Outer Diameter : 90 mm Inner Diameter : 40 mm
Mounting Type	Clamping or Screw
Materials	Anodized Aluminium
Protection DIN EN 60529	IP 67
Operating temperature	-40 ... +85°C

### Cable / Connector 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



### Pulse Diagram



Clock frequency, f	50 ... 2000 kHz for SSI 50 ... 10.000 kHz for BISS
Code	Binary
Status and parity bit	On request
Monoflop time tm	20 $\mu$ s
Delay time td	<150 ns

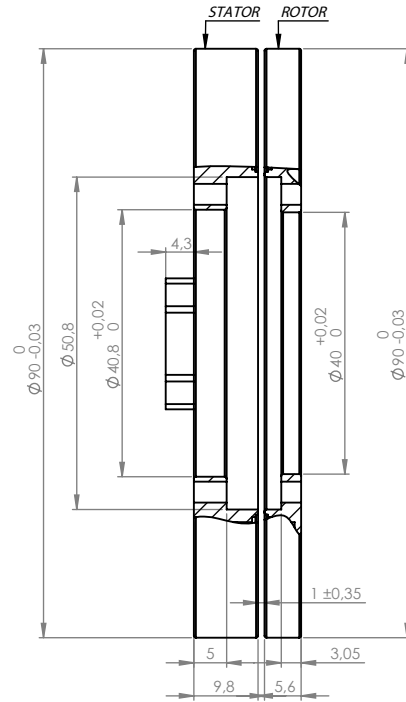
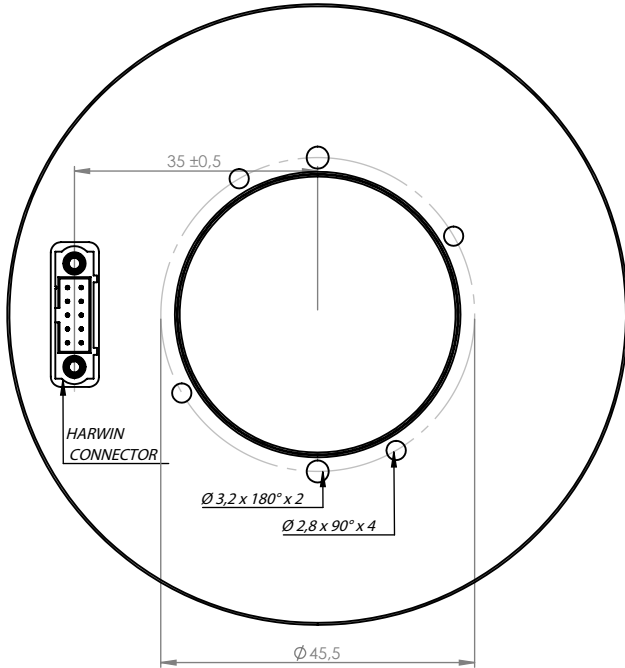
# Fenac Inductive Contactless Encoders



## 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 G - 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)

**G** : Gray

#### Supply Voltage

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

**Resolution**  
up to 21 bit

#### SSI Interface Type

**1** : SS11  
**7** : SS17  
(other options on request)