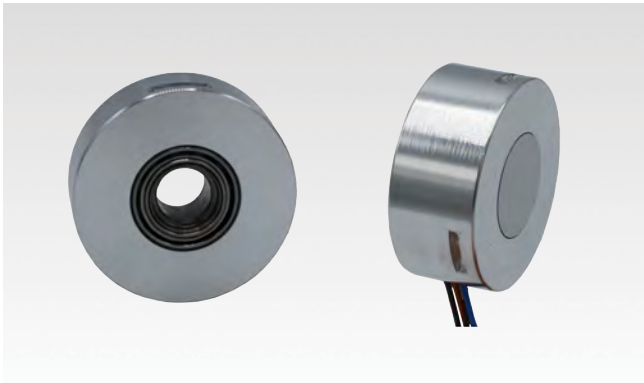


# Hollow Shaft Optical Absolute Encoders

## FNC TASO 2506 Series



### Features

- SSI or BISS interface
- Optical sensing
- Resolution up to 21 bit
- 25 mm diameter body
- 6 mm diameter hollow shaft
- Hollow shaft production
- Very low weight

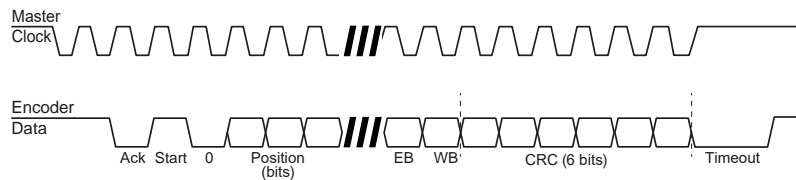
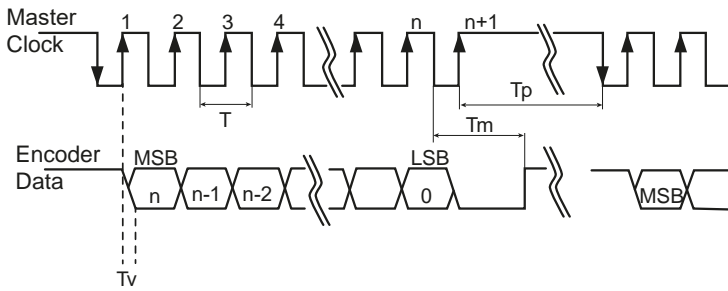
### Technical data - Mechanical Ratings

Dimensions	25 mm
Shaft Diameter	6 mm
Materials	Housing : Aluminium Shaft : Stainless Steel
Weight	~11 g
Operating Tem.	-40 to +85 °C

### Technical data - Electrical Ratings

Supply Voltage	5VDC ±%5
Interface	SSI or BISS
Protection	Reverse voltage protection Over voltage protection
Resolution (steps/turn)	up to 21 bit
Absolute accuracy	≤ ±0.025°

### Pulse Diagram SSI / BISS



### Symbol Description

Symbol	Description
n	Total number of data bits
T	Clock Period
$f = 1/T$	Clock frequency
Tv	Bit update time
Tp	Pause time
Tm	Monoflop time
ACK	Absolute position one clock cycle
Start	Encoder signal for "start" data transmit
"0"	Start with follower
AP	Absolute position data
EB	Error bit
WB	Warning bit
CRC	Cyclic redundancy check
Timeout	Elapse between the sequential "start" request cycle's

SSI DESCRIPTION

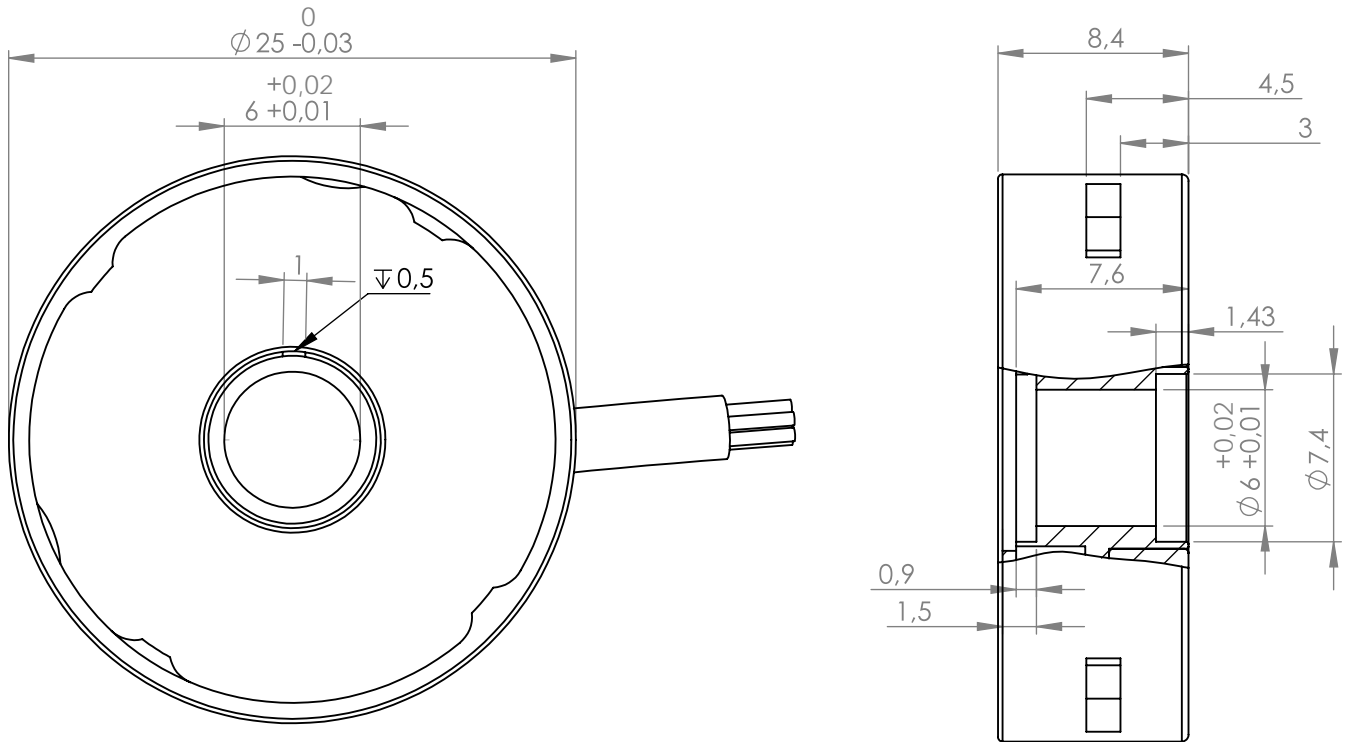
BISS DESCRIPTION

### Cable Wiring

Function	Color	Renk
+5V	Brown	Kahverengi
GND	White	Beyaz
Clock+	Blue	Mavi
Clock-	Gray	Gri
Data+	Orange	Turuncu
Data-	Pink	Pembe

## FNC TASO 2506 Series

### Mechanical Dimensions



	Accuracy
Without Calibration	110 arcsec
After Calibration	~70-80 arcsec

### Part Number

**FNC TASO 25 06 S18 5V B - R02**

**TASO** : Thin Absolute SSI Optical  
**TABO** : Thin Absolute BISS Optical

**Housing** : 25 mm

**Shaft diameter** : 6 mm  
 Other dimensions on request

**S** : Single Turn  
 up to 21 bit

#### Electrical Connections:

**Cable**  
**R02** : 20 cm cable length

**B**: Binary **G**: Gray

**Supply Voltage:**  
**5V**