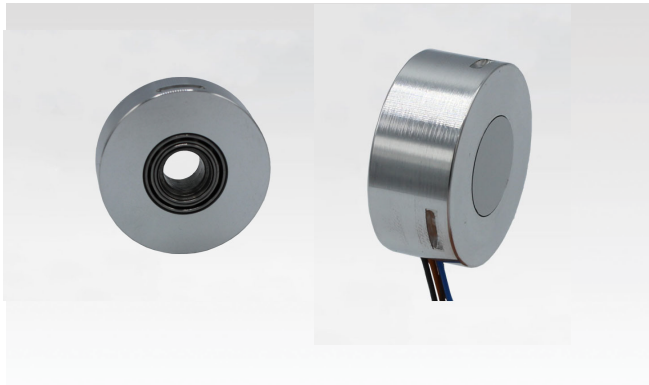


Hollow Shaft Optical Absolute Encoders

FNC TASO 2506 Series



Features

- SSI or BISS interface
- Optical sensing
- Resolution up to 21 bit
- 25 mm diameter body
- 4, 5, 6 mm diameter hollow shaft
- Hollow shaft production
- Very low weight

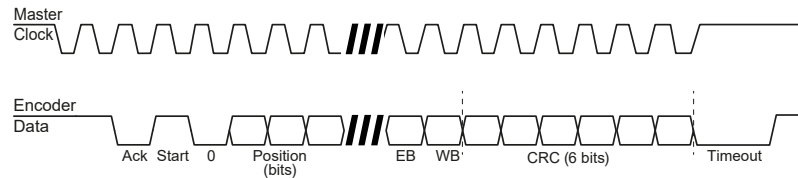
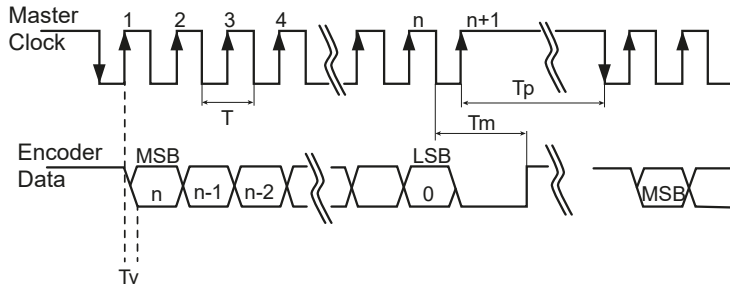
Technical data - Mechanical Ratings

Dimensions	25 mm
Shaft Diameter	4, 5, 6 mm
Materials	Housing : Aluminium Shaft : Stainless Steel
Weight	~11 g
Operating Tem.	-40 to +85 °C

Technical data - Electrical Ratings

Supply Voltage	5VDC $\pm 5\%$
Interface	SSI or BISS
Protection	Reverse voltage protection Over voltage protection
Resolution (steps/turn)	up to 21 bit
Absolute accuracy	$\leq \pm 0.025^\circ$

Pulse Diagram SSI / BISS



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

SSI DESCRIPTION

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

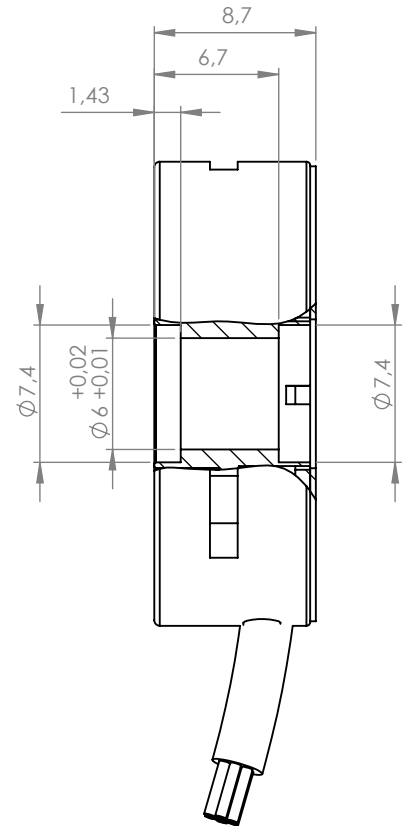
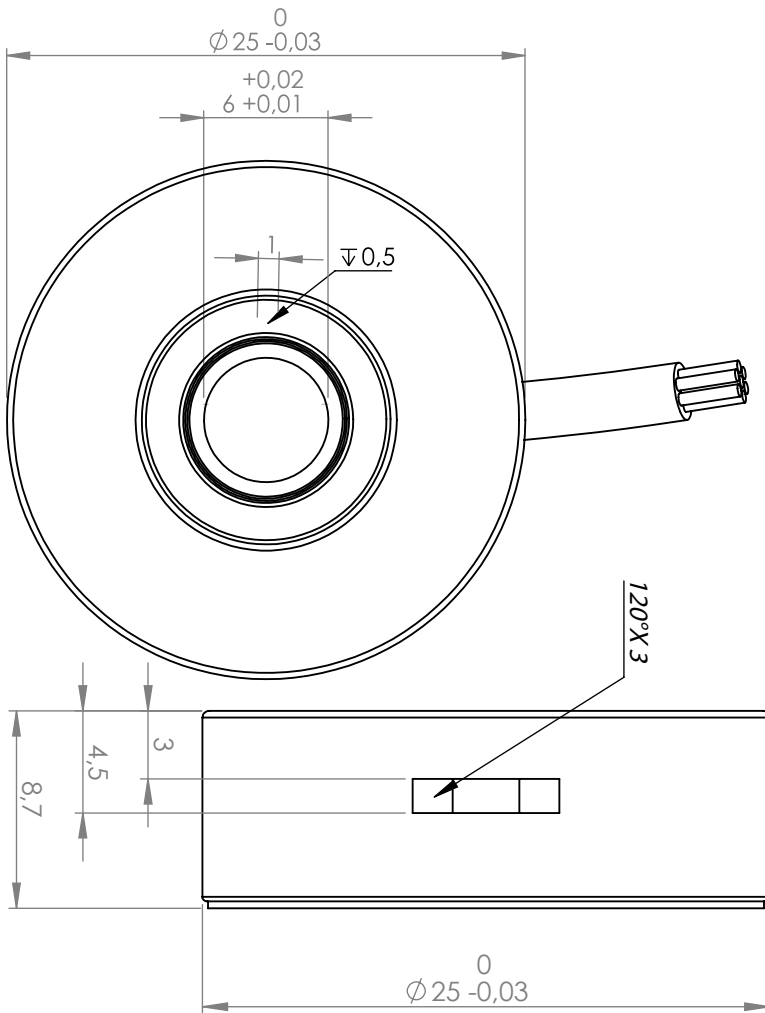
BISS DESCRIPTION

Cable Wiring

Function	Color	Renk
+5V	Brown	Kahverengi
GND	White	Beyaz
Clock+	Blue	Mavi
Clock-	Blue-Black	Mavi-Siyah
Data+	Orange	Turuncu
Data-	Orange-Black	Turuncu-Siyah

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 : 4, 5, 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