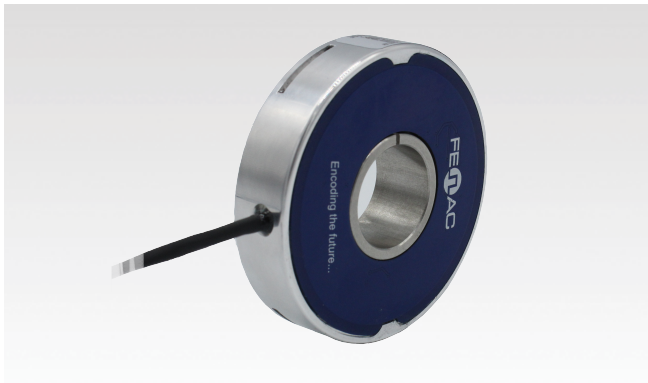


## FNC TASO 58 Series



### Features

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

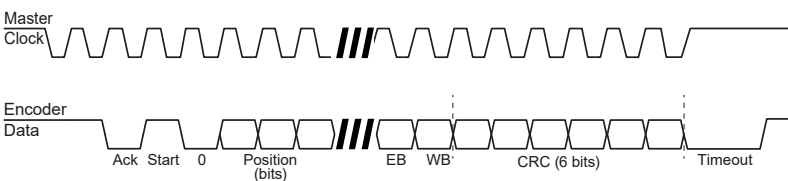
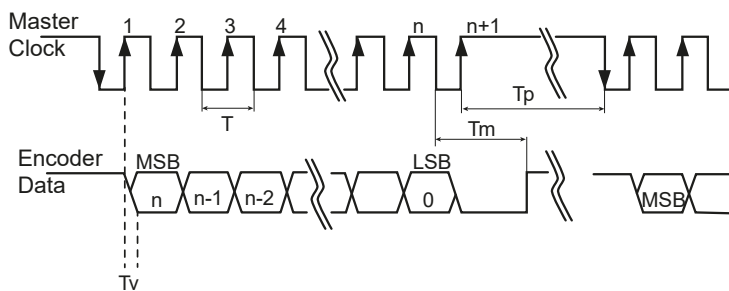
### Technical data - Mechanical Ratings

Dimensions	58 mm
Shaft Diameter	20 mm
Materials	Housing : Aluminium Shaft : Stainless Steel
Weight	See page 4
Operating Tem.	-40 to +85 °C

### Technical data - Electrical Ratings

Supply Voltage	5V
Interface	SSI or BISS
Protection	Reverse voltage protection Over voltage protection
Resolution (steps/turn)	up to 21 bit
Absolute accuracy	$\leq \pm 0.02^\circ$ after fine calibration

### Pulse Diagram SSI / BISS



### Symbol Description

Symbol	Description
n	Total number of data bits
T	Clock Period
$f = 1/T$	Clock frequency
$T_v$	Bit update time
$T_p$	Pause time
$T_m$	Monoflop time

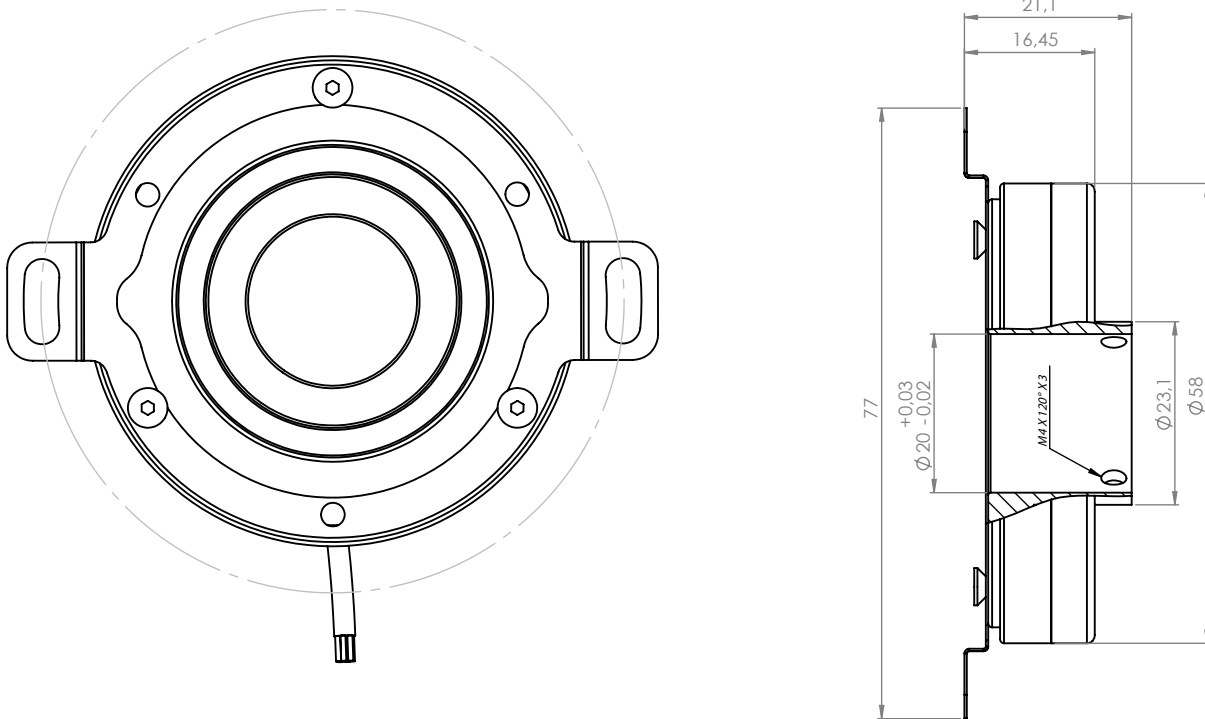
SSI DESCRIPTION

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

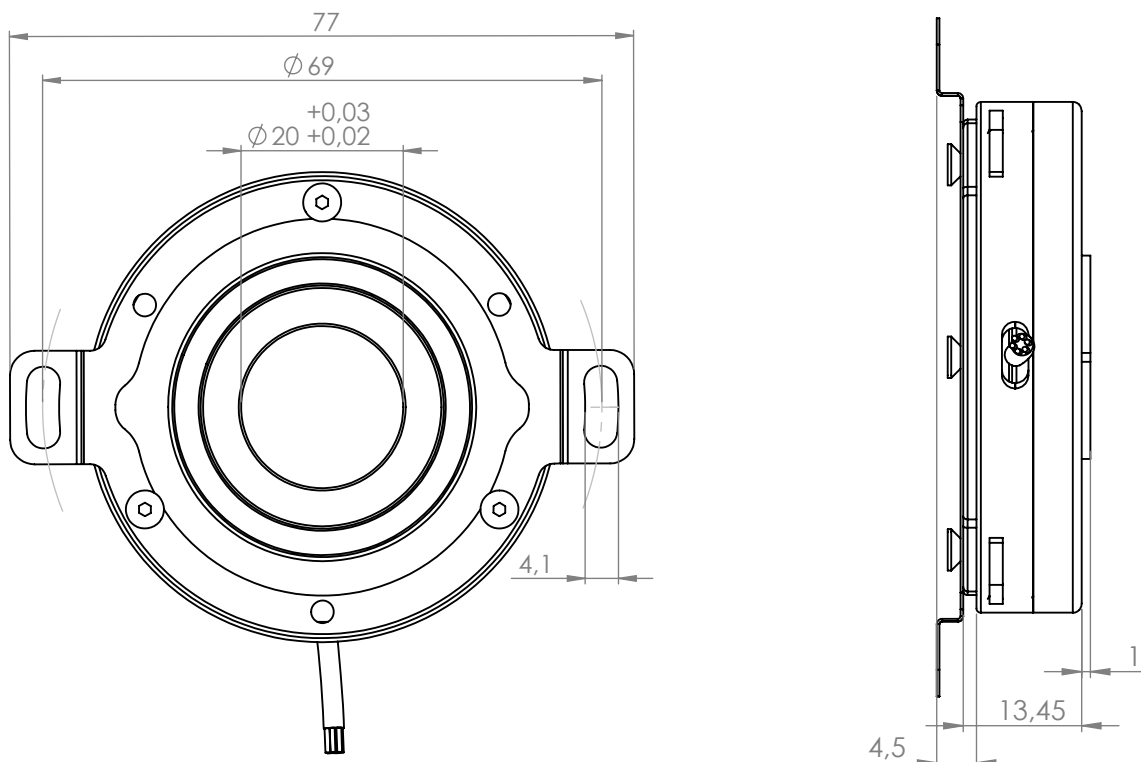
BISS DESCRIPTION

### Mechanical Dimensions - Single Bearing

#### Spring (SP) fixing from housing - PCB Side Setscrew (PS) - with Seal & Cover



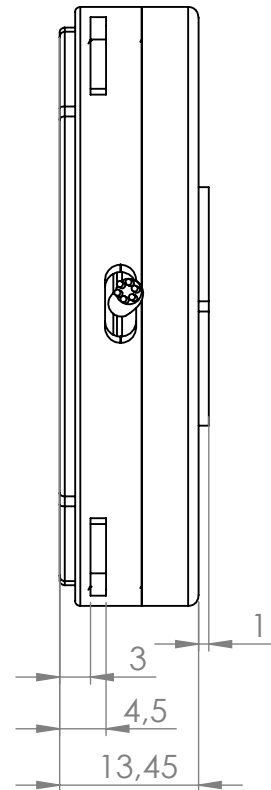
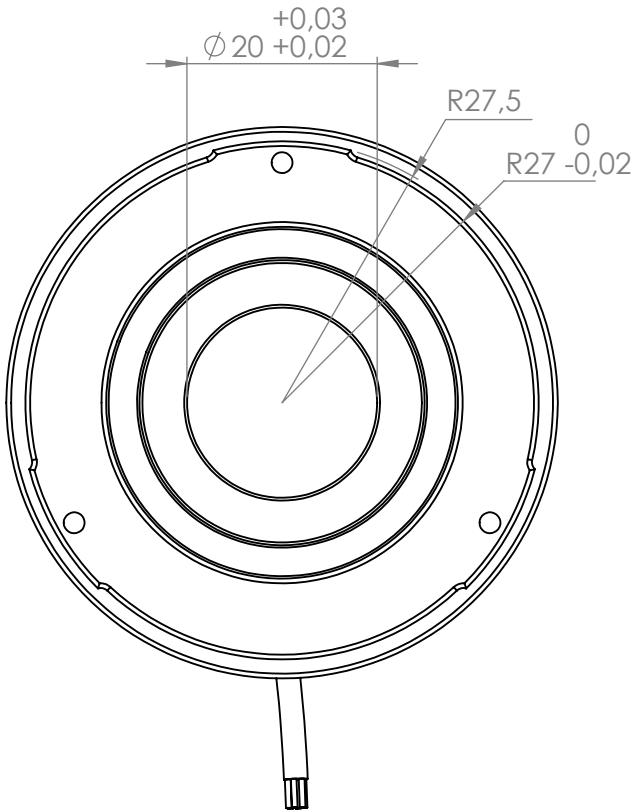
#### Spring (SP) fixing from housing - Rove (R) fixing from shaft - with Seal & Cover



## FNC TASO 58 Series







### Mechanical Dimensions - Single Bearing

Side Fixing from housing (SF) - Rove (R) Fixing from shaft version- with Seal & Cover



## FNC TASO 58 Series

### 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

### Part Number

FNC TASO SF R 58 15 S18 5V B - R02

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

#### Montage Options - Housing Side

**SF** : Side Fixing  
**SP** : Spring Option

#### Montage Options - Shaft Side

**R** : Rove  
**PS** : PCB Side Setscrew

#### Housing

**58** : 58 mm  
**58K** : 58 mm cover & seal version

#### Electrical Connections:

**R02** : radial 20 cm, shield not connected (standart)

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

#### Supply Voltage and output circuit :

**5V** : 5V in / out

#### Output Channels

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

#### Shaft diameter

12,7 (0,5"), 14, 15, 16, 20 mm (others on request)