

# FNC Programmable MT Analog Output

Current / voltage output



## FNC 50S MT Programmable Analog Output

Ø50 Flange



### Features

- Programmable measuring range
- Industry 50 mm end hollow shaft version
- Robust mechanical and electrical construction
- Protection up to IP67
- 0-10V voltage / 4-20mA current output

### Output Options :

Programmable;

- 0-10VDC Voltage
- 0-5VDC Voltage
- 4-20mA current

### Technical data - electrical ratings

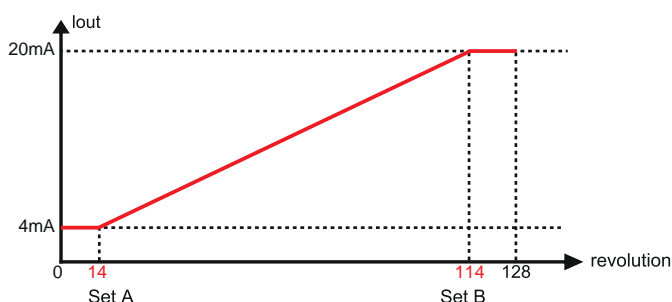
Voltage supply	10-30VDC
Protection:	Output short circuit protection. Reverse polarity protection
Consumption w/o load	≤60 mA (24 VDC)
Output signals	0-10VDC Voltage output 0-5VDC Voltage output 4-20mA current output
Measuring range	Total DAC resolution (ST + MT) : 16 bit Up to 65.536 programmable If MT selected 4 bit, ST resolution : 12 bit If MT selected 6 bit, ST resolution : 10 bit
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	CE

### Technical data - mechanical design

Dimensions (flange)	ø50 mm
Shaft loading	≤140 N axial ≤240 N radial
Protection DIN EN 60529	IP54, IP65
Operating speed	≤10000 rpm
Starting torque	≤0.025 Nm (IP 65)
Materials	Housing: Aluminium Flange: Aluminium Shaft : Stainless steel
Shaft/Hollow shaft diameter:	6, 8, 10, 12 mm ( other diameters on request )
Bearings lifetime:	2x10 <sup>9</sup> rev. at 100% of full rated shaft load (minimum)
Operating temperature	-20...+85 °C
Storage temperature	-30 °C up to +90 °C
Weight approx.	250 g

### Pulse Diagram

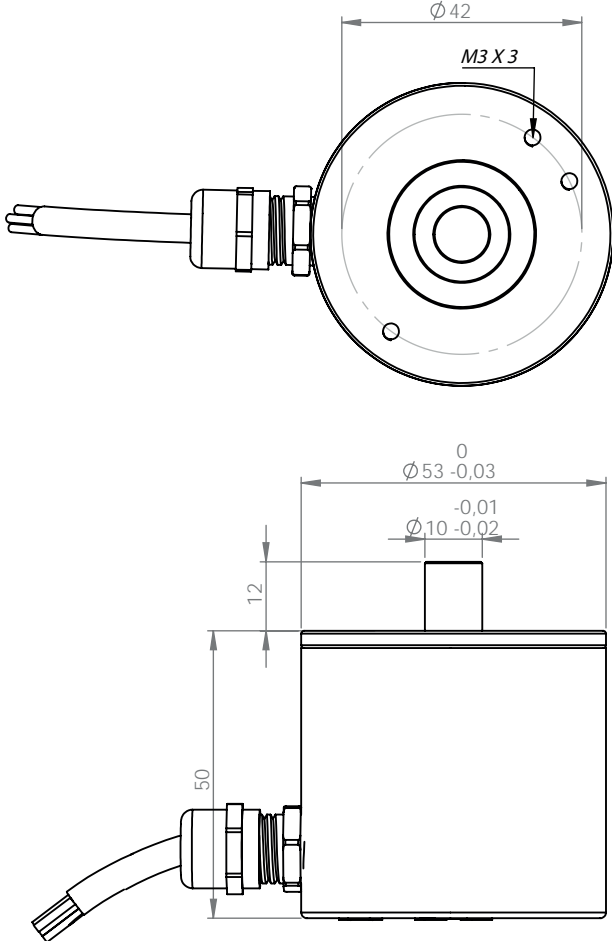
Example: 128 revolution current output.



## Ø50 Flange

## FNC 50S MT Programmable Analog Output

### Mechanical Dimensions



### Cable Wiring

Function	Color	Renk	Explanation
+VB	Brown	Kahve	Supply voltage
GND	White	Beyaz	Ground
V	Green	Yeşil	Voltage output
A	Red	Kırmızı	Current output

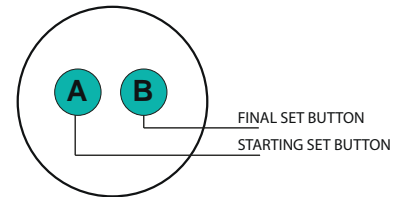
### Connector Wiring

Connector Type	Analog Output	+VDC	GND	SET1	SET2
CRM1205	1	2	3	4	5

### Teach Procedure

Teach Procedure 1:  
Press A and B button for 10 sec.  
Leds will flash.  
At start point press A button

Teach Procedure 2:  
Turn shaft CW to final point.  
Press B button at final point.  
Teach procedure is done.



For fabrication settings press A and B button for 30 sec.

### Encoder Part Number

FNC **P** **A** **A** **50** **S** **12** **M4** **V1** **30V** - **R2**

**Programmable**

**Absolute**

**Analog**

**Housing : 50mm**

**Flange Type:**  
S : Servo flange

**Shaft diameter : 4, 6, 8, 10, 12, 14**  
Other dimensions on request

**Electrical Connections:**  
Cable  
R2 : radial 2m, shield not connected (standart)  
A2 : axial 2m, shield not connected (standart)  
R1205 : M12 5pin connector

**Supply Voltage:**  
5 : 5V in/out 30 : 5 - 30V in/out

**Output type :**  
C1 : 4-20mA  
V1 : 0-10V  
V2 : 1-5V

**Multiturn**  
4, 5, 6, 7, ... up to 16 bit  
e.g.  
M4 : up to 16 turn programmable  
M5 : up to 32 turn programmable  
M10 : up to 1024 turn programmable  
M12 : up to 4096 turn programmable