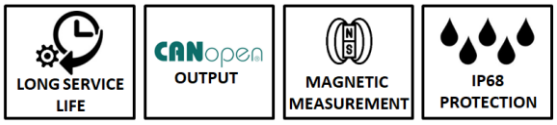
IP68 MULTI-TURN ROTARY ENCODER

"Magnetic Measurement, 58 mm Body Diameter, Semi Hollow Shaft"

MAH B 58
CANopen Output

GENERAL FEATURES

- Absolute measurement with magnetic prinsiple
- 58 mm body diameter
- 6, 8, 10, 12, 14 or 15 mm semi hollow shaft options
- CANopen output signal
- 0.02 ° accuracy in multiple turns of the desired number
- High sensitivity
- IP68 protection class



The MAH B 58 series encoders operate absolute. In other words, unlike the incremental systems, they do not lose their positions in power outages and continue to measure from where they left off.
They are with semi hollow shaft and they have 58 mm body diameter. The MAH series multi-turn absolute rotary encoders offer highly flexible solutions in use, with CANopen output signal, different hollow diameters and flange types. With its IP68 protection class, it is resistant to harsh environmental conditions and vibrations.
The MAH multi-turn absolute rotary encoder with integrated reference provides high quality feedback.

APPLICATION FIELDS

Speed and position accuracy in one application; If it is more important than fault tolerance and system simplicity, absolute encoders should be used. Absolute encoders provide precise operation in applications.

- Identifying multi-axis orientation in CNC machines used in component manufacturing
- Automatically determine the height of the scissor bearings used in hospitals
- Correct placement of multiple stabilizers for large vehicles such as cranes or air lifts
- Automatic doors or slots to move without limiting key
- Continue robotic movement even after a power failure

TECHNICAL SPECIFICATIONS

Electrical Specifications	
Working Principle	Hall Effect
Measuring Range	2…2^{17} turns
Supply Voltage	15 … 30 VDC
Current Consumption	60 mA
Reverse Polarity Protection	Yes, there is
Accuracy	±0,5°
Repeatability	0,1°
Resolution	1…14 bits can be selected in singleturn. 1…31 bit can be selected in multiturn. singleturn + multiturn <= 31 bits.
Response Frequency	500 Hz
Electrical Interface	CANopen
***Electrical Connection**	M12 5 pin male and M12 5 pin female socket

Mechanical Specifications	
Maximum Speed	3000 rpm
Body Diameter	58 mm
Hollow Diameter	6 mm, 8 mm, 10 mm, 12 mm, 14 mm, 15 mm
Weight	≈ 400 gr
Protection Class	IP68
Operating Temp.	-45°C … +85°C
Relative Humudity	%10 … %90
Material	Shaft: Stainless Steel
	Body: Aluminium

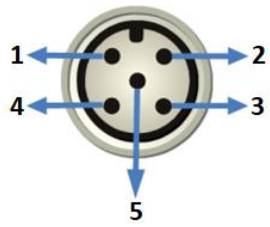
Note: The product is mechanically non-stop.

CANopen Specifications	
Communication Profile	CiA 301
Device Type	CANopen, CiA DS406
ID (Node ID)	It can be set from 1 to 127 with LSS or SDO.
Baud Rate	10 kBit/s, 20 kBit/s, 50 kBit/s, 100 kBit/s, 125 kBit/s, 250 kBit/s, 500 kBit/s, 800 kBit/s, 1 Mbit/s
PDO Data Rate	100 ms
Error Control	Heartbeat, Emergency Message
PDO	3 Tx PDO
PDO Modes	Event/Time triggered, Synch/Asynch
SDO	1 server
Position Information	Object Dictionary 0x6020
Termination Resistance	Optional

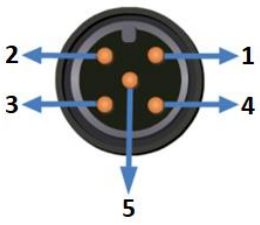
ELECTRICAL CONNECTIONS

Signal	M12 Socket	Cable
CAN_SHIELD	Pin 1	Braid
V+ (15...30VDC)	Pin 2	Red
GND (0V)	Pin 3	Black
CAN_H	Pin 4	Yellow
CAN_L	Pin 5	Green

M12 5 PIN FEMALE SOCKET

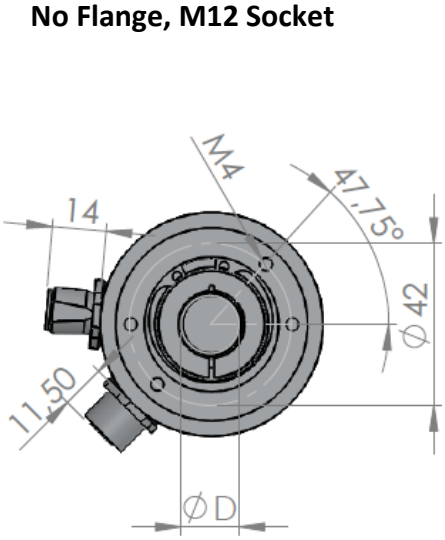


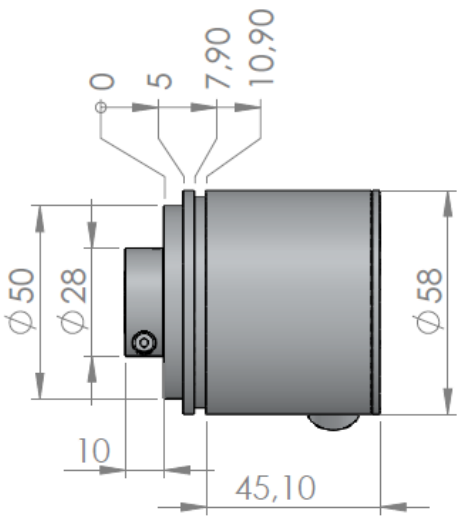
M12 5 PIN MALE SOCKET



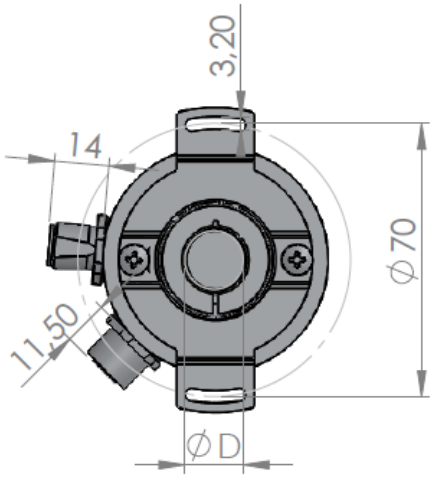
MECHANICAL DIMENSIONS (mm)

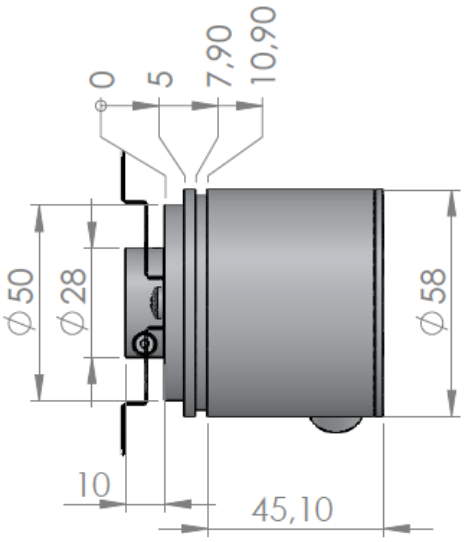
No Flange, M12 Socket





FC Flange, M12 Socket





D	6	8	10	12	14	15

PRODUCT CODE

Model		Body Diameter		Supply Voltage	Signal Increasing Direction	Soket Yönü		Flange Type
		058 : 58 mm		PP : 15...30 VDC	CW : Clockwise CCW : Counter clockwise	Y : Yandan		FC: Circular
MAH	X	XXX	XX	XXX	XXX	X	XXX	XXX	X	X
	Shaft Type		Turn Number		Output Signal		Electrical Connection		Hollow Diameter	
	B : Semi hollow shaft		14 / 17 *14: 1 bit number of turn 17: Number of turn (2^{17})		C : CANopen		S13FM : M12 5 pin male + M12 5 pin female socket		6 : 6 mm 8 : 8 mm 10: 10 mm 12: 12 mm 14: 14 mm 15: 15 mm	

*** Please contact us for your non-standard (special production) product requests.**

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