EtherCAT Absolute Multiturn Encoder EAM58-ECOM

Description:

EtherCAT absolute multiturn encoder, which has good performance against mechanical damage, and can withstand higher axial and radial load. Various flanges could meet different requirements, conforming to EtherCAT protocol to ensure the max. resolution of 8192 and max. revolution of 4096, which can be adjusted according to customer's field requirements. Its high speed communication and good anti-interference ability make the operation of customer's equipment more stable.

Features:

- 4 status indicators, for a fast and accurate understanding of the product status
- 3xM12 connectors, implement a fast connection
- Industrial Ethercat interface with an intelligent diagnosis and high speed data transimission function
- Software configures the application of various parameters - convenient maintenance
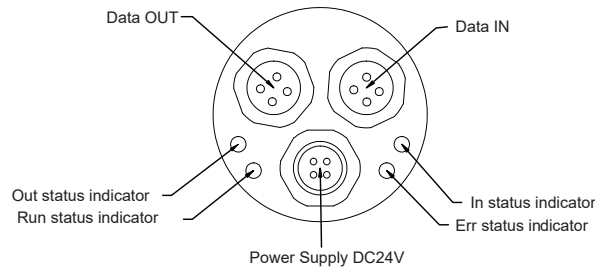- Faster interface cycle time

Mechanical Parameters

Shaft diameter	Φ6g6 mm	-58B	Φ10g6 mm	-58C
Hollow shaft diameter	Φ10H7 mm	-58W		
Protection class	IP65			
Max. speed (r/m)	6000			
Shaft load(axial)	40 N			
Shaft load(radial)	80 N			
Shock resistance	50G/11 ms			
Vibration resistance	10G 10...2000 Hz			
Bearing life	10^9 revolution			
Moment of inertia	Approx. 1.8×10^{-6} kgm^2			
Starting torque	<0.05 Nm			
Housing material	Al-alloy UNI 9002/5 -(D11S)			
Cover material	Al-alloy 6060			
Flange material	Al-alloy UNI 9002/5 -(D11S)			
Operating temperature	-40...+80 ℃			
Storage temperature	-45...+85 ℃			
Weight	~600 g			

Electrical Parameters

Interface	EtherCAT
Profile	CoE (CANopen over EtherCAT, DS-301 + DS-406)
Programming Functions	Resolution, preset, counting direction
Supply voltage	10...30 VDC
Current consumption (without load)	200 mA
Power Consumption	≤ 2.5 W
Max. bus rate	100 Mbits/s
Interface cycle time	≥ 62.5 µs
Code	Binary
Max. number of laps	4096 (12 bits)
Max. resolution	8192 (13 bits)

Data OUT — Data IN

Out status indicator
Run status indicator

In status indicator
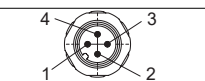Err status indicator

Power Supply DC24V
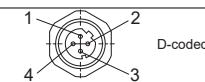
LED indicator

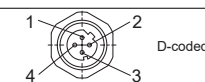| Power indicator	Green light on is normal, red light on is power failure, light off is no power
Communication indicator	Green light on is normal connection, orange light blinking is data transmission in progress, light off is not connected
MOD status indicator	Green light on is working normally and the light off is abnormal

Data port 1

Signal	T×D+	R×D+	T×D-	R×D-	
Pin No.	1	2	3	4	D-coded

Power interface

Signal	+V	—	-V	—	
Pin No.	1	—	3	—	

Data port 2

Signal	T×D+	R×D+	T×D-	R×D-	
Pin No.	1	2	3	4	D-coded

Dimensions (mm)

EAM58B Axial

6-M4, depth 6mm, uniform distribution
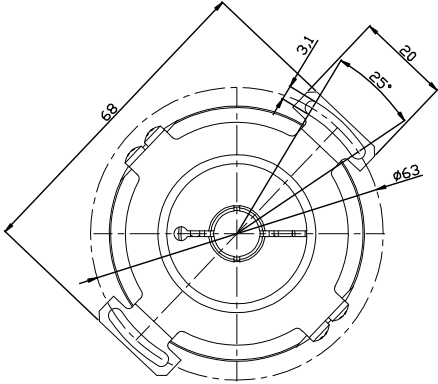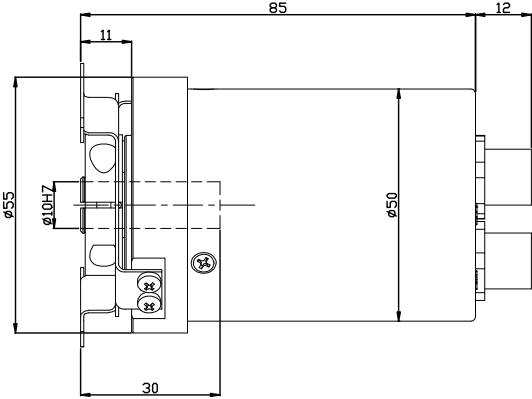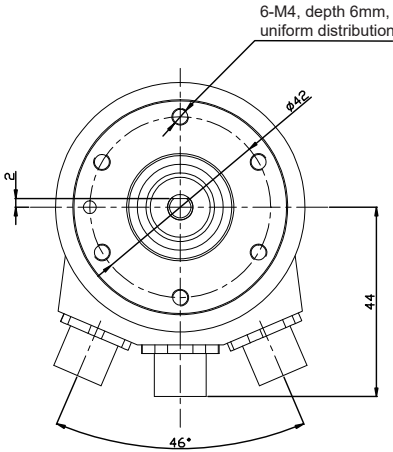
EAM58C Axial

3-M3, depth 6mm, uniform distribution
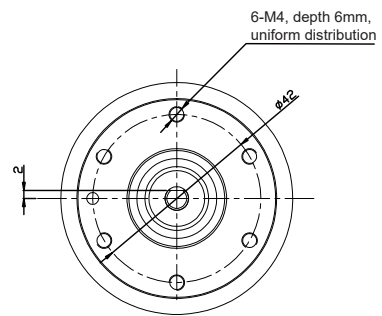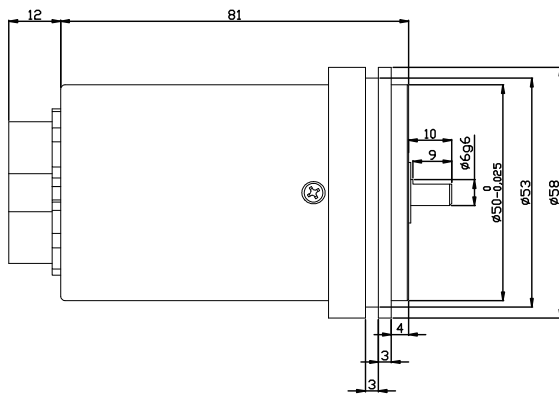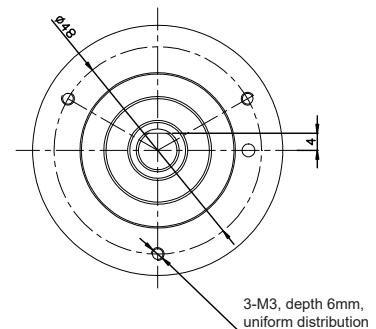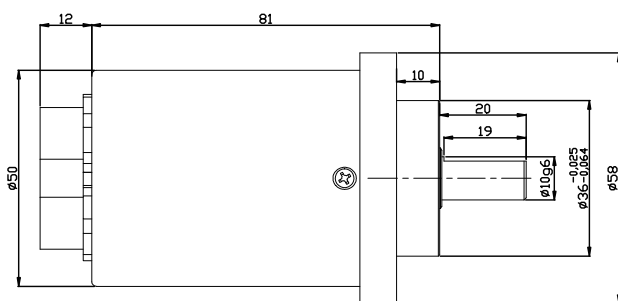
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Dimensions (mm)

EAM58W Axial

EAM58B Radial

6-M4, depth 6mm, uniform distribution
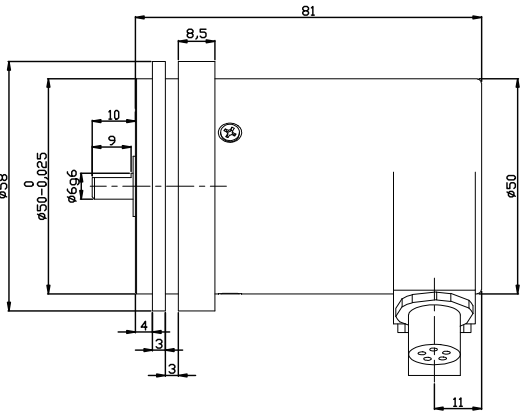

EAM58C Radial

3-M3, depth 6mm, uniform distribution

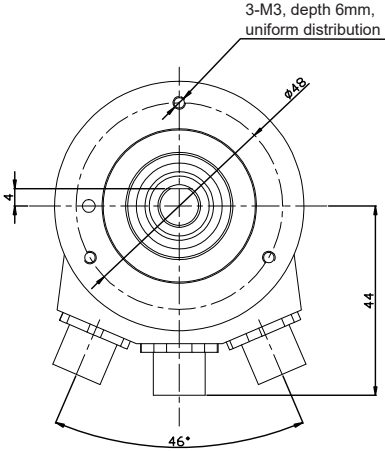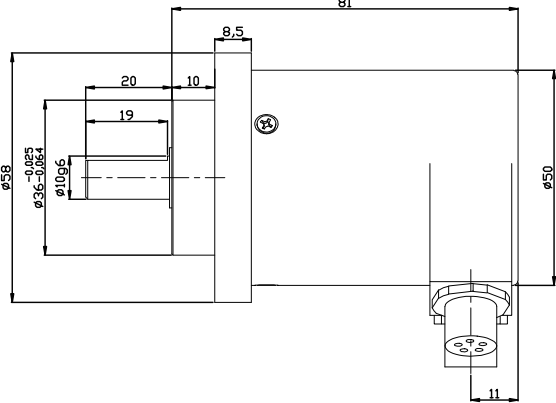# EtherCAT Absolute Multiturn Encoder EAM58-ECOM

Dimensions (mm)

EAM58W Radial
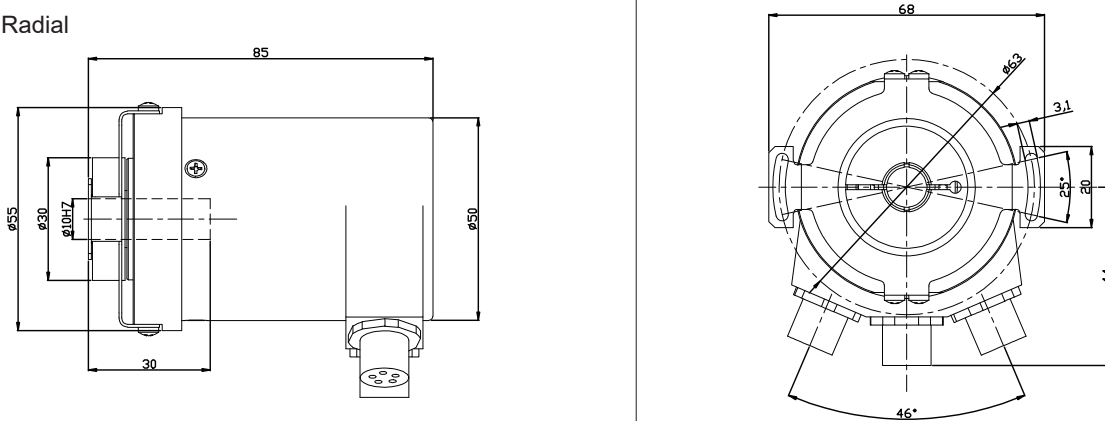
Order Code:

| EAM | 58 | C | 10 | – | B | F6 | X | T | R | – | 4096/8192ECOM | . | XXXX |

XXXX=Special code

Resolution
Standard 4096/8192(25Bits)

Outlets direction
R= Radial
A= Axial

Types of connection
T= Integrated bus coupler terminal with 3 of M12 socket

Output logic
X=No definition

Output and Supply voltage
F6=EtherCAT   10...30Vdc

Output code
B=Binary

Shaft/hollow shaft diameter
6=Φ10g6mm
—58B
10=Φ10g6mm
—58C
10=Φ10H7mm
—58W

Flange type
B = Synchronous flange, shaft length:10mm
C = Φ36 Clamping flange, shaft length:20mm
W = Blind hole hollow shaft flange, double wing spring plate installation

Housing dimension
58 =Φ58

Series
EAM＝EtherCAT absolute multiturn encoder

Matching connector code:
Power terminal connector: TMSP 12F-F4
Bus input connector: TMSP 12FD-M4
Bus output connector: TMSP 12FD-M4