

Profinet Protocol Absolute Multi-turn Encoder EAM58



Description

Profinet protocol absolute multi-turn encoder EAM58 series has good performance against mechanical damage and can withstand higher axial and radial load. Various flanges could meet different requirements. The product adopts high precision and high stability chip to ensure the maximum single-turn resolution 18 bit, which can meet the accuracy control requirement of field.

Features

- Various flanges available
- Waterproof seal improves IP level
- 3*M12 connector output, convenient for installation and maintenance
- Protection class IP65
- Metal housing for shock resistance
- Conforming to industrial Profinet RT & IRT protocol and programmable

Mechanical parameters

Shaft diameter	Φ6g6/Φ8g6/Φ10g6 mm
Hollow shaft diameter	Φ8H7/Φ10H7/Φ12H7/Φ15H7 mm
Protection class	IP65
Speed (r/m)	6000
Max.load capacity of shaft	
Axial	80 N
Radial	160 N
Shock resistance	50G/11 ms
Vibration resistance	10G 10~2000 Hz
Service life of bearing	10 ⁹ revolution
Rotor moment of inertia	1.8×10 ⁻⁶ kgm ²
Starting torque	<0.01Nm
Body material	AL-alloy
Housing material	Zn Al-alloy
Operating temperature	-40...+80 °C
Storage temperature	-45...+85 °C
Relative humidity/condensation	90%, Condensation not permitted
Weight	360...750 g

Electrical parameters

Interface	Profinet
Programming function	Resolution, speed value, counting direction, preset value
Transmission speed	10/100 Mbit
Interface period time	>1ms
No. of turns	4096 (12 bits)
Single-turn resolution	8192 (13 bits, MAX.18bits)
Supply voltage	10~30 Vdc
Current consumption	≤230 mA-10V DC, ≤100 mA-24V DC
Total power	≤2.5 W
Start time	<250 ms
Precision (INL)	±0.0439°

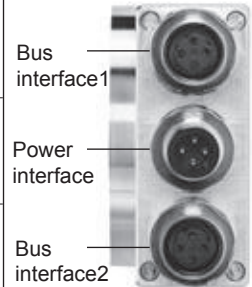
Electrical connection

Connection direction	Radial
Bus interface 1	M12, female, 4-pin, D-coded
Power interface	M12, male, 5-pin, A-coded
Bus interface 2	M12, female, 4-pin, D-coded

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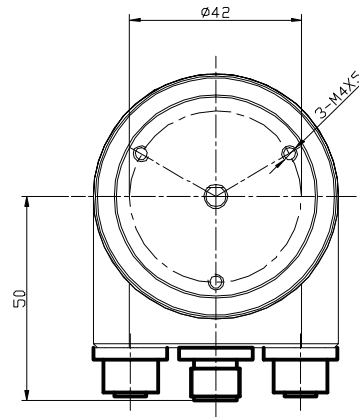
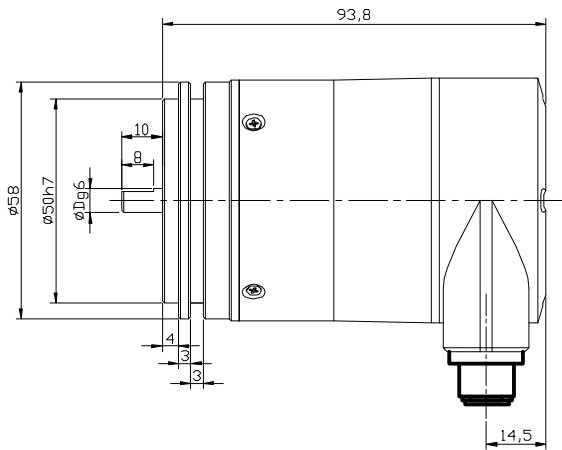
Terminal Configuration

Function	M12 connector					
Bus interface1	Signal	Data sending+	Data receiving+	Data sending -	Data receiving -	
	Abbreviation	TxD+	RxD+	TxD-	RxD-	
	Pin	1	2	3	4	
Power interface	Signal	Voltage +	-	Voltage -	-	
	Abbreviation	+ V	-	0 V	-	
	Pin	1	2	3	4	
Bus interface2	Signal	Data sending+	Data receiving+	Data sending -	Data receiving -	
	Abbreviation	TxD+	RxD+	TxD-	RxD-	
	Pin	1	2	3	4	

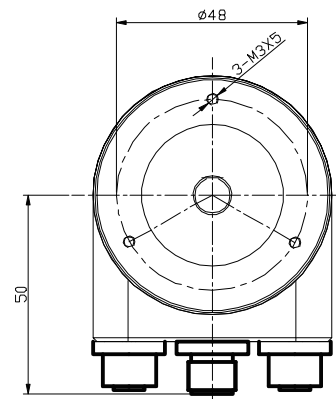
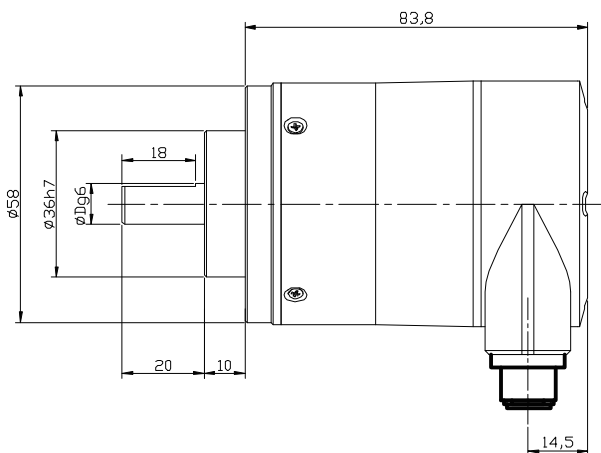


Dimensions (mm)

EAM58B



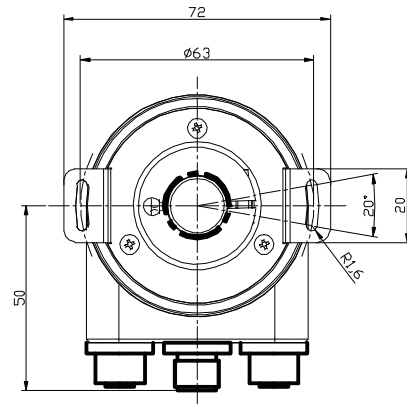
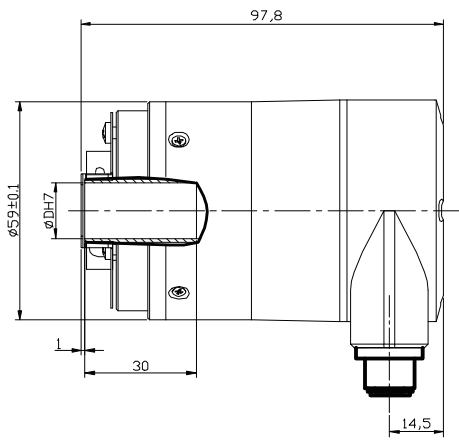
EAM58C



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Dimensions (mm)

EAM58W



Order Code

EAM 58 C 10 - B F6 X T R - 4096/8192 PN

PN: Profinet RT
PNMC: Profinet RT & IRT

Resolution

Standard 4096/8192(25Bits)
Optional 4096/262144(30Bits)

Outlets direction

R= Radial

Types of connection

T= Integrated bus coupler terminal with 3 of M12 socket

Output logic

X= No definition

Interface & Supply voltage

F6= General industrial Ethernet interface 10-30V DC

Output code

B=Binary

Matching connectors code

Power supply connector TMSP 12F-F4
Bus input connector TMSP12FD-M4
Bus output connector TMSP12FD-M4

Shaft diameter

6=Φ6g6mm
58B optional
8=Φ8g6mm
10=Φ10g6mm

8 =Φ8H7mm
10=Φ10H7mm
12=Φ12Hmm
15=Φ15H7mm

Flange type

B=Synchronous flange
C=Clamping flange
W=Hollow shaft flange, double-wing spring mounting

Housing dimension

58=Φ58 Flange

Series

EAM=Profinet protocol absolute multi-turn encoder