

CANopen Interface Absolute Multiturn Encoder EAM58



Description

CANopen interface absolute multiturn encoder EAM58 series is used in industry environments of special requirements. It delivers good performance in withstanding mechanical damages, and is also capable of withstanding higher axial and radial loads. Various types of flanges can be used to meet the different requirements. It complies with CANopen protocol and has a max resolution up to 8192 and max revolution up to 4096. The resolution and revolution can be programmed according to customer requirements. Its high speed communication and anti-interference features ensure steady performance during operation.

Features

- Clamping flange
- Waterproof seal provides higher IP level
- Pre-screwed holes for the convenience of customers
- Durable stainless steel shaft $\Phi 6/\Phi 10$
- Convenient for installation and maintenance open cable output
- Protection class IP65
- Metal housing for better shock resistance
- Conforming to CANopen protocol

Mechanical Characteristics

Shaft diameter (mm)	$\Phi 6g6$	-58B	Resolution
	$\Phi 8g6$	-58A/B/D/E	4096(revolution) \times 8192(resolution)
	$\Phi 9.52(3/8)g6$	-58A/D/E	4096(revolution) \times 4096(resolution)
	$\Phi 10g6$	-58C	Revolution and resolution can be programmed in PLC
Hollow shaft diameter (mm)	$\Phi 8H7/\Phi 9.52H7/\Phi 10H7$	-58/W	(see operation manual for programming steps)
	$\Phi 12H7/\Phi 14H7/\Phi 15H7$	-58/W	
Protection acc. to EN 60529	IP65		
Speed	6000, continuous		
Axial load capacity	80N		
Radial load capacity	160N		
Shock resistance	50G/11ms		
Vibration resistance	10G 10~2000Hz		
Bearing life	10^9 revolution		
Rotor moment of inertia	approx. 1.8×10^{-6} kgm ²		
Starting torque	<0.05Nm		
Body material	ALUNI 9002/5 -(D11S)		
Housing material	AL6060		
Flange material	ALUNI 9002/5 -(D11S)		
Operating temperature	-40°C...+80°C		
Storage temperature	-45°C...+85°C		
Weight	800g -58B/C, 63A/D		

Electrical Characteristics

Supply voltage (U_b)	10 ... 30V
Power consumption	Max. 0.29A
Linearity	$\pm 1/2$ LSB (12 bit) : ± 1 LSB (13 bit)
Code type	Binary
Interface	CAN HIGH-Speed to ISO/DIS 11898, Basic and Full-CAN; CAN specification 2.0 B
Protocols	CANopen Profile DSP 406 with additional function
Baud rate	Programmable via DIP switches 10 ... 1000 Kbits/s
	CAN DNET 125/250/500 kBit/s
Basic identifier/node number	Programmable via DIP switches
Conforms to	CE acc. to EN 61000-6-1, EN 61000-6-4, EN 61000-6-3 and EN 61000-4-8

Conforms to the international Electromagnetic Standards EN 61000-4,5 CANopen also conforms to additional properties as described in DSP406

Electrical Characteristics

The CANopen Equipment Specifications describe the functionality of the communication and of that part of the CANopen fieldbus system specific to the manufacturer.

In addition, using devices of CANopen interface offers the advantage of future-ready expandability, which includes the following functions:

Including the following functions:	Programmable parameters:
CAN-LED for Bus status	Polling mode or auto mode, direction
CAN-LED for operating mode	resolution per revolution, preset value and offset

Additional Event Mode

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Terminal Assignment

D1-D2: Address Setting switch

D1 Ten's place Address NO. 0...9

D2 Unit's place Address NO. 0...9

Example: D1=1, D2=1, the address of the encoder is 11.

Address setting



Terminal setting

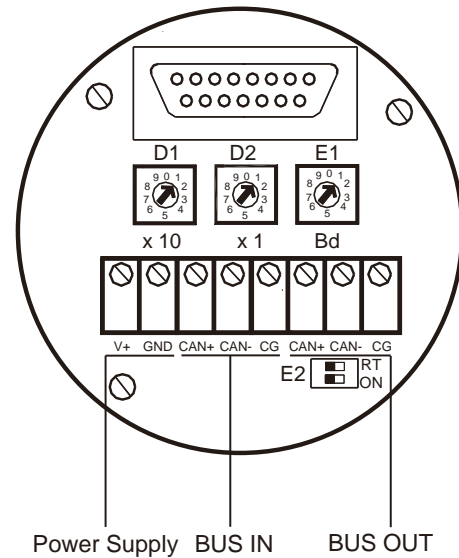


E2: Line close switch

The bus is closed when setting the two switches ON, 120Ω.

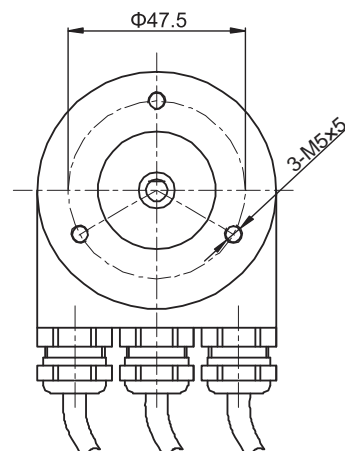
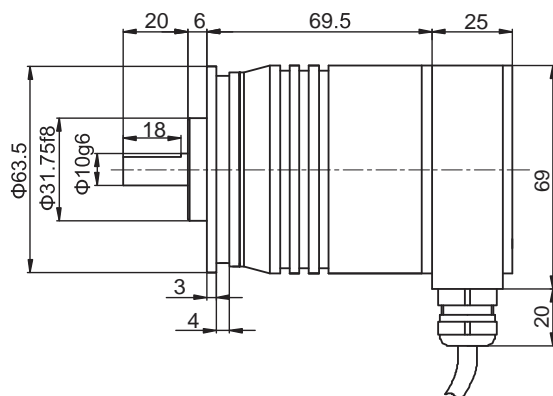
E1: Baud setting switch

DIP	Baud
0	1M
1	800K
2	500K
3	250K
4	125K
5	100K
6	50K
7	20K



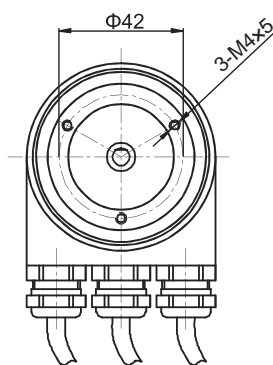
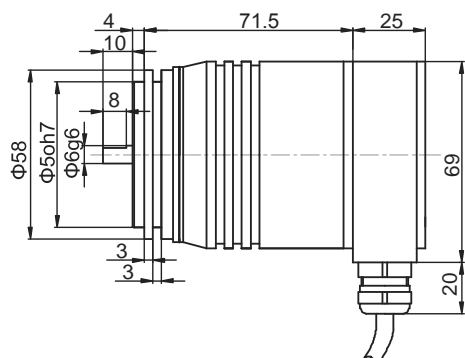
Dimension (mm)

EAM58A

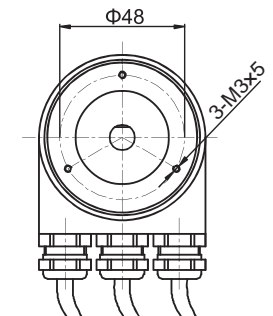
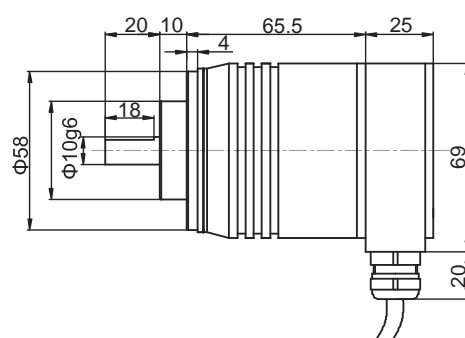


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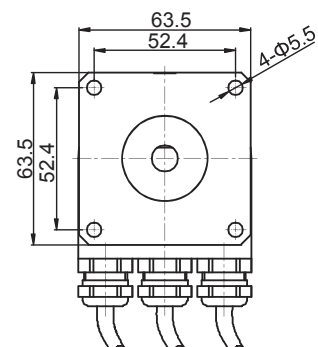
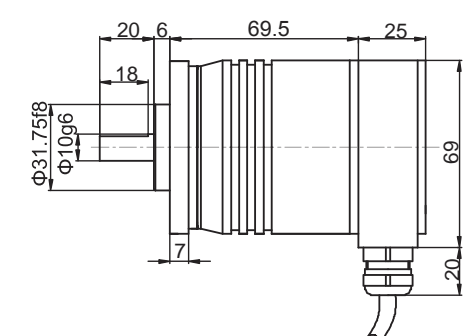
EAM58B



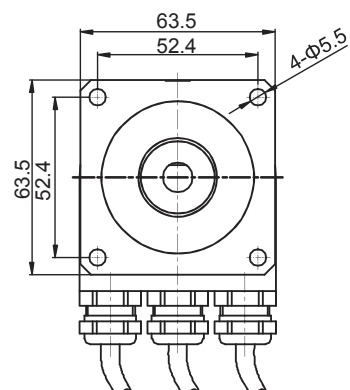
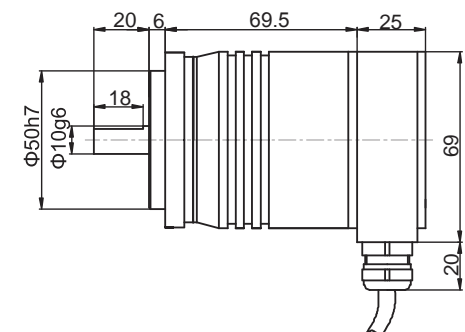
EAM58C



EAM58D

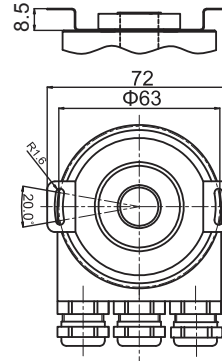
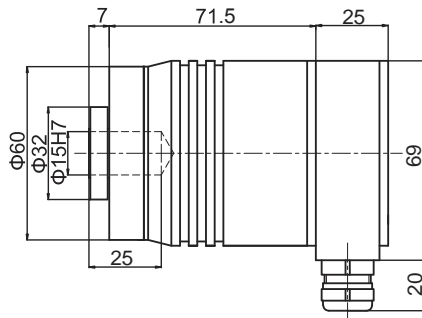


EAM58E



CANopen Interface Absolute Multiturn Encoder EAM58

EAM58W



Order Code:

EAM 58 C 10 – B F6 X X R – 4096/8192 CA

CANopen Interface Absolute Encoder

Resolution

revolution/resolution
(see previous pages for reference)
standard: 4096/8192 (25 bits)

Outlet direction

R=radial

Type of connection

X=integrated coupler terminal box with
3 PG7 threaded connectors
T=integrated coupler terminal box with
3 M12 plugs

Output logic

X=nonsense

Output & Supply voltage

F6=CANopen interface 10...30Vdc

Code type

B=Binary

Flange types

A=round flange
B=synchro flange, shaft length 10mm
C=Φ36clamping flange, shaft length 20mm
D=Φ63.5square flange, Φ31.75, shaft length 20mm
E=Φ63.5square flange, Φ50h7, shaft length 20mm
W=shaft length, double-winged spring leaf installation

Housing diameter

58mm=58flange

Series

EAM=CANopen interface multiturn

Including

EDS – please see enclosed CD for
documentations and operation manual

Connect BUS-IN and BUSOUT to the
encoder using a suitable terminal wiring box.