

4...20mA Analog Output Absolute Multiturn Encoder EAM58



Description

4...20mA Analog output absolute multiturn encoder EAM58 series, designed with compact structure is capable to withstand higher axial and radial loads. European standard flanges provide great convenience in installation. The encoder can provide 16 bits and 4...20mA analog and data outputs to meet the specific interface needs of PC. Multiple configurations of resolution and number of turns are available to meet different application requirements.

Features

- European standard flange
- Waterproof seal provides greater IP level
- Pre-screwed holes for convenience purpose
- Durable stainless steel shaft
- Metal housing for better shock resistance
- Protection class IP65
- Output cables or connectors are available for easy installation and maintenance
- 4...20mA Analog output

Mechanical parameters

Shaft diameter	Φ6g6/Φ8g6/Φ10g6 mm
Hollow shaft diameter	Φ8H7/Φ10H7/Φ12H7/Φ15H7 mm
Protection class	IP65
Speed	6000 r/m
Max load capacity of the shaft	
Axial load capacity	80 N
Radial load capacity	160 N
Shock resistance	50G/11 ms
Vibration resistance	10G 10~2000 Hz
Bearing life	10 ⁹ revolution
Rotor moment of inertia	1.8×10 ⁻⁶ kgm ²
Starting torque	<0.01 Nm
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

Output circuit	4...20 mA	0...10 V
Supply voltage(U _b)	10...30 VDC/5 VDC	10...30 VDC
Power consumption typ.	70 mA	70 mA
No load Max.	84 mA	84 mA
Word change frequency	Max 15.000/s	Max. 15.000/s
Current loop supply voltage	10...30 VDC	10...30 VDC
Analogue signal	4... 20 mA	0...10 V
Max. input resistance	200 Ω	200 Ω
Measuring range	Based on actual resolution	Based on actual resolution
Max. sensitivity (25°C)	0.2°	0.2°
Resolution	16 Bit	16 Bit
Building up time	Max. 2 ms	Max. 2 ms
Temperature coefficient	0.1° /10 K	0.1° /10 K
Power consumption (no load)	≤3.5 mA	≤3.5 mA
Sensors must be electrically insulated from current loop.		

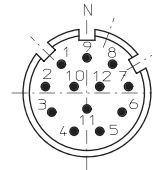
Conforms to CE requirements: EN 61000-6-1, EN 61000-6-4 and EN 61000-6-3

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Terminal Configuration

Voltage signal	0V	+U _b	VOUT+	VOUT-	VIN+	VIN-	STZ	VR	STT	—	—	—	⏏
Current Signal	0V	+U _b	—	—	+I	-I	STZ	VR	STT	—	—	—	⏏
Color	WH	BN	GN	YE	GY	PK	BU	RD	BK	VT	GY/PK	RD/BU	
Gray	1	2	3	4	5	6	7	8	9	10	11	12	PH

Top view of the connecting end on needle connector block 12-pin plug



+I: Input of current loop

0V/+U_b and **VIN+/VIN-**: can be powered together or separately

I-: Output of current loop

VOUT+/VOUT-: voltage output

VIN-/VOUT-: connected in circuit

STZ: SET input (signal level remains high for 2 sec), the output current is set to 4 mA

VR: Up/down input, as the input is activated, decreasing current values are transmitted when shaft turning clockwise

STT input: SET input (signal level remains high for 2 sec), the output current is set to 20 mA

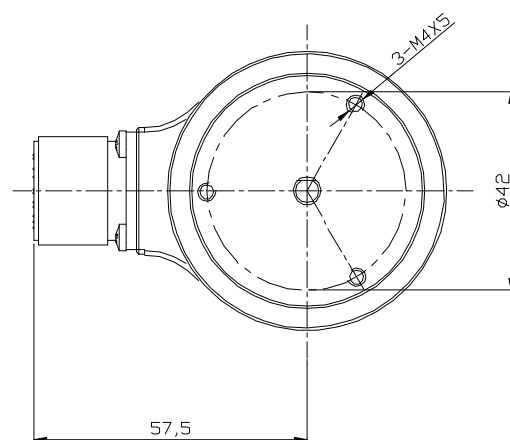
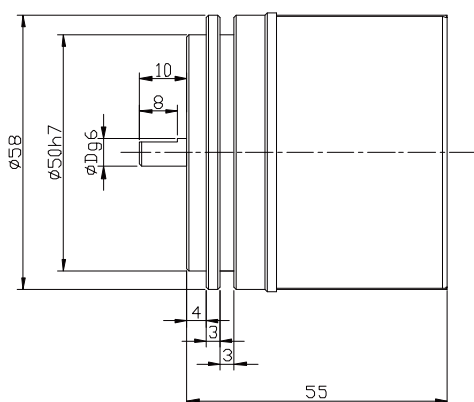
PH: Plug housing

Attention: 1. Before initial start-up, unused outputs must be insulated..

2. Shaft remains static, and at the same time set STZ & STT signal at high level; singleturn resumes to 4...20 mA, and the present position output is at 4 mA.

Dimensions (mm)

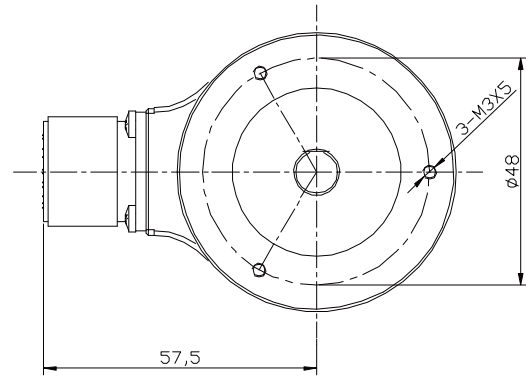
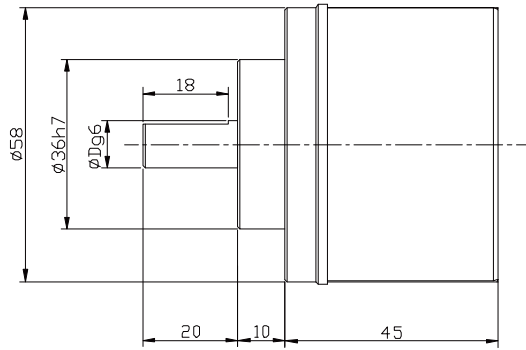
EAM58B



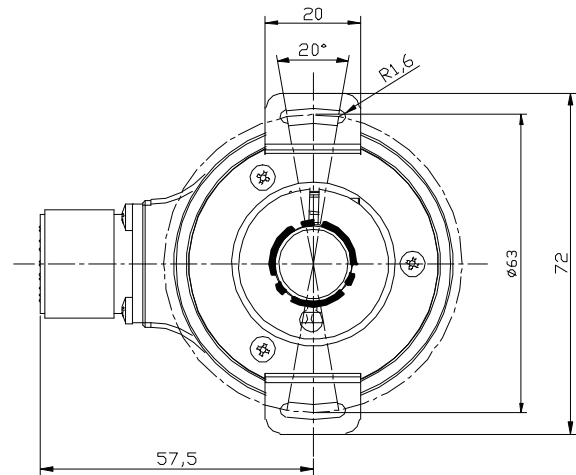
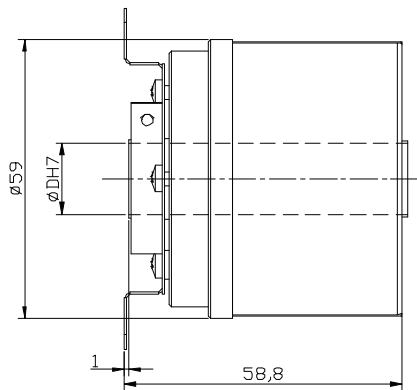
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Dimensions (mm)

EAM58C



EAM58W



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Order Code

EAM **58** **C** **10** **_** **G** **S6** **X** **PC** **R** **_** **16/4096** **EAND** . **XXXX**

