4-20mA Analog Output Absolute Multiturn Encoder EAM58

Description:

4-20mA Analog output absolute multiturn encoder EAM58 series, designed with compact structure is capable of withstanding 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 higher 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 Characteristics

Shaft diameter (mm)	Φ6g6/Φ8g6/Φ9g6/Φ10g6
Protection acc. to EN 60529	IP65
Speed (r/m)	6000
Max load capacity of the shaft	
Axial load capacity	80N
Radial load capacity	160N
Shock resistance	50G/11ms
Vibration resistance	10G 10...2000Hz
Bearing life	10^9revolution
Rotor moment of inertia	$1.8\times10^{-6}kgm^2$
Starting torque	<0.01Nm
Body material	AL-alloy
Housing material	AL-alloy
Operating temperature	-40℃...+80℃
Storage temperature	-45℃...+85℃
Weight	360g...750g

Resolution 256 512 1024 2048 4096 8192

others on request

Electrical Characteristics

Output circuit	4...20mA	0...10V
Supply voltage (Ub)	10...30Vdc / 5Vdc	10...30Vdc
Power consumption type	70mA	70mA
No load Max.	84mA	84mA
Word change frequency	Max. 15.000/s	Max. 15.000/s
Current loop supply voltage	10...30Vdc	10...30Vdc
Analogue signal	4...20mA	0...10V
Max. input resistance	200Ω	200Ω
Measuring range	Determined based on on actual resolution	Determined based on on actual resolution
Max. sensitivity (25℃)	0.2°	0.2°
Resolution	16 Bit	16 Bit
Building up time	Max. 2 ms	Max. 2 ms
Temperature coefficient	0.1° /10K	0.1° /10K
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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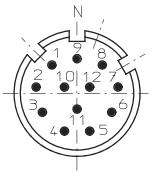
Terminal Configuration

Voltage signal	0V	+Ub	VOUT+	VOUT-	VIN+	VIN-	STZ	VR	STT	-----	-----	-----	⏚
Current Signal	0V	+Ub	----	-----	+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	1	12	PH

Top view of the connecting end on needle connector block

12-pin plug



+I: Input of current loop 0V/+Ub and VIN+/VIN-: can be powered together or seperately

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 4mA

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 20mA

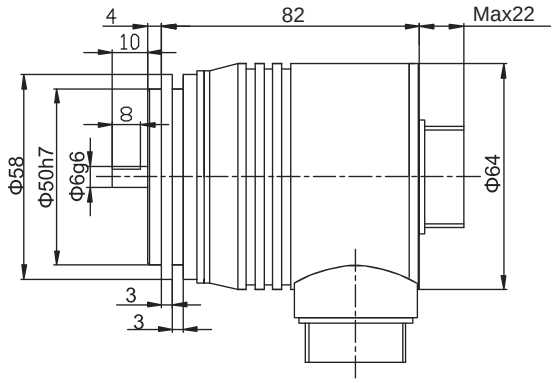
PH: Plug housing

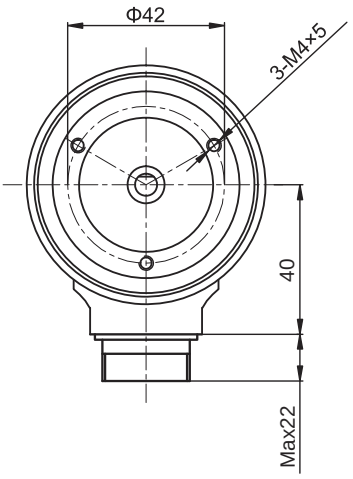
Attention: 1, Before initial start-up, unused outputs must be insulated.

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

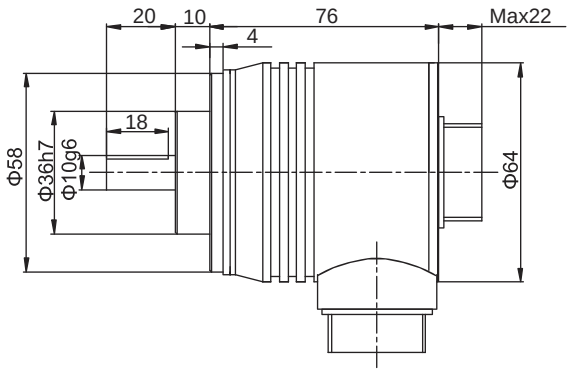
Dimension (mm)

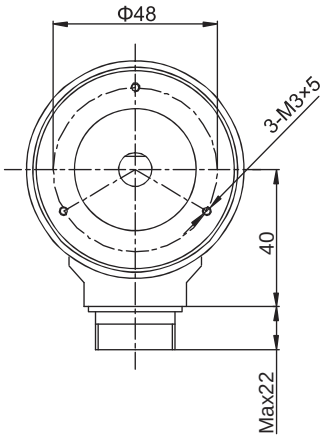
EAM58B





EAM58C





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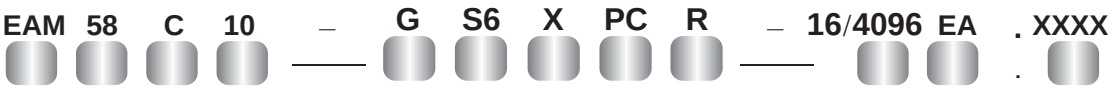
Order Code



Shaft diameter
6=Φ6mm
EAS58B
10=Φ10mm

XXXX=Special code
Customized cable length
CN00XX=cable length
e.g. CN0010=1m
CN0020=2m

Outlet direction
R=radial
A=axial

EA=4~20mA
EV=0~10V

Flange type
B=synchro flange, shaftΦ6 length10mm
C=Φ36clamping flange, shaft length 20mm

Resolution
Singleturn resolution Max. 8192 (13bits)
Multiturn resolution Max. 65536 (16bits)
Note : Add "D" for including resolution cable box.

Type of connection
PC=12-core cable (1.5m)
T=M23, 12-pin plug

Housing diameter
58mm=housing diameter

Supply voltage
S6 = 10...30Vdc
S5 = 5Vdc

Series
EAM=4--20mA analogue interface