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 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 Characteristics

Shaft diameter（mm）	Φ6g6/Φ8g6/Φ10g6
Hollow shaft diameter（mm）	Φ8H7/Φ10H7/Φ12H7/Φ15H7
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	ZnAL-alloy
Operating temperature	-40°C~~+80°C
Storage temperature	-45°C~~+85°C
Weight	360g--750g

Electrical Characteristics

Output circuit	4--20mA
Supply voltage(U_b)	10--30VDC
Power consumption typ.	70mA
No load Max.	84mA
Word change frequency	Max15.000/s
Current loop supply voltage	10 ... 30VDC
Analogue signal	4 ... 20mA
Max. input resistance	200Ω
Measuring range	Determined based on on actual resolution
Max. sensitivity（25℃）	0.2°
Resolution	16 Bit
Building up time	Max. 2 ms
Temperature coefficient	0.1° /10K
Power consumption (no load)	≤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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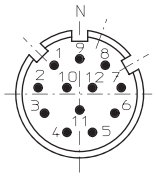
Terminal Configuration

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	1	12	PH

Top view of the connecting end on needle connector block

12-pin plug



0V/+U_b : can be powered together or seperately

+I: Input of current loop

I-: Output of current loop

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

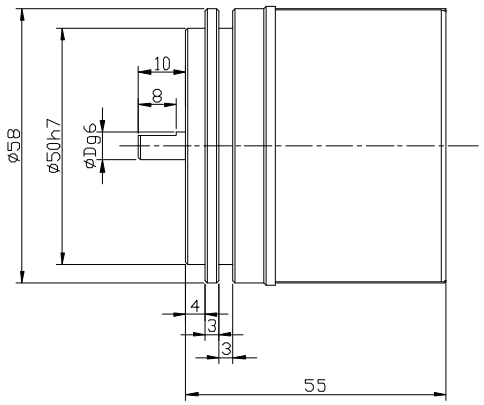
PH: Plug housing

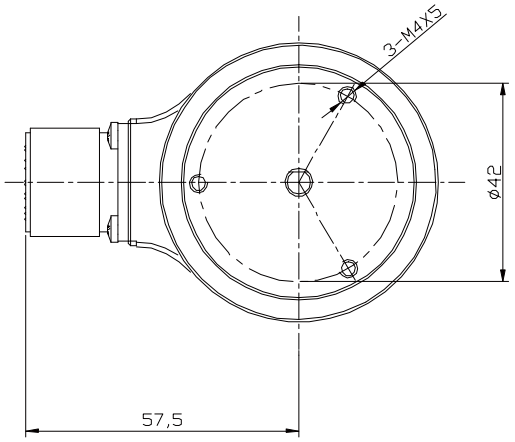
Attention: 1, Before initial start-up, unused outputs must be insulated..

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.

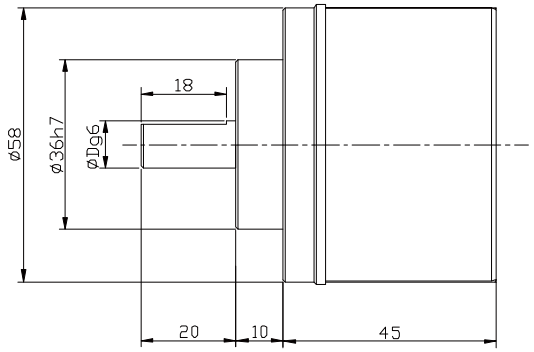
Dimensions

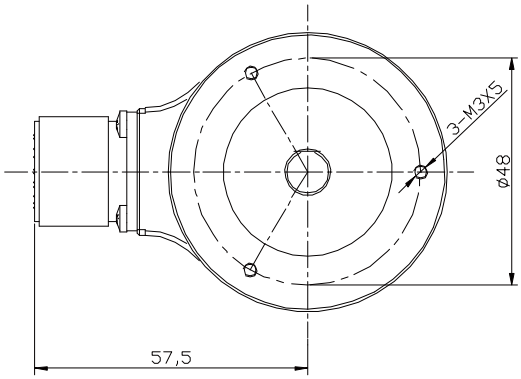
EAM58B





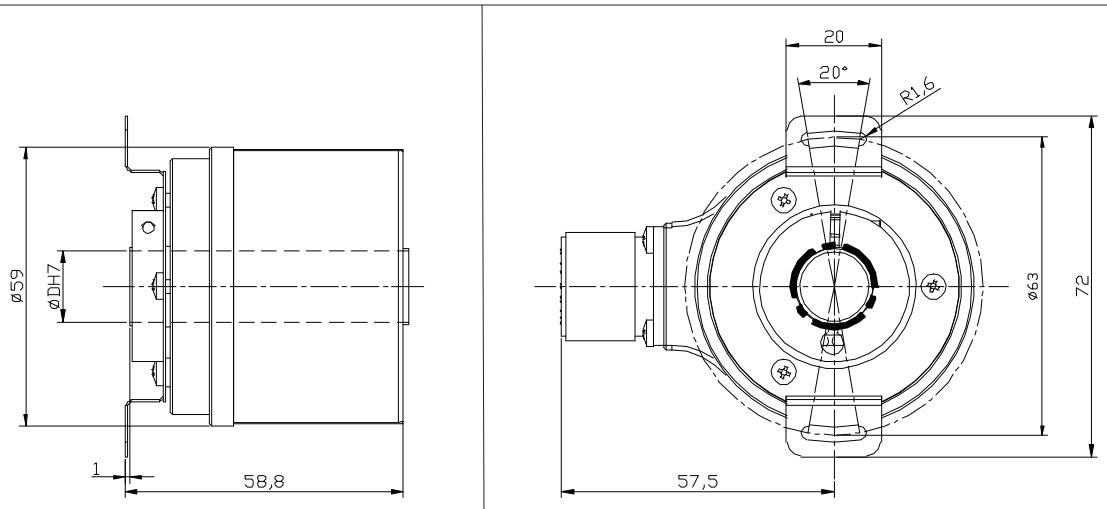
EAM58C





4-20mA Analog Output Absolute Multiturn Encoder EAM58

EAM58W



Order Code

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

Shaft diameter

Only for flange type 58B、58C
6=Φ6g6mm
8=Φ8g6mm
10=Φ10g6mm

Only for flange type 58W
8=Φ8H7mm
10=Φ10H7mm
12=Φ12H7mm
15=Φ15H7mm

Supply voltage

S6 = 10~30Vdc

Type of connection

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

Outlets direction

R=radial

Resolution

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

EA=4~20mA

XXXX=Special code

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

Flange type

B=synchro flange,shaft length 10mm
C=Φ36clamping flange,shaft length 20mm
W=blind hollow shaft flange,double-winged spring leaf installation

Housing diameter

58=housing diameter

Series

EAM=4--20mA analogue interface