Large Hollow Shaft Absolute Multiturn Encoder EAM90L

Description

Large hollow shaft absolute multiturn encoder EAM90L series delivers good performance in withstanding mechanical damages and higher axial and radial loads. Its unique hollow shaft structure, various types of shafts diameters are available for different applications. It is equipped with resolution up to 16384(14 bit) and the RESET function.

Features

- Gray or Binary available
- Space-saver hollow shaft design, “C” ring lock
- Durable stainless steel shaft Φ12~Φ28mm
- Waterproof seal provides greater IP level
- Metal housing can withstand higher axial and radial loads.
- Resolution up to 16384
- Protection class IP65

  Equipped with short-circuit and reverse connection protection
- Output cables or connectors are available for easy maintenance

Mechanical Characteristics

Shaft diameter (mm)	Φ12H7/Φ15H7/Φ20H7/Φ24H7/Φ28H7/ Φ(5/8)"H7/Φ1"H7/Φ12g6X30
Protection acc. to EN 60529	IP65
Speed (r/m)	6000
Max load capacity of the shaft	
axial	40N
radial	80N
Shock resistance	50G/11ms
Vibration resistance	10G 10~2000Hz
Bearing life	10^9revolution
Moment of inertia	$1.8\times10^{-6}kgm^2$
Starting torque	<0.1Nm max
Body material	AL-alloy
Housing material	AL-alloy
Operating temperature	-20°C~~+80°C
Storage temperature	-25°C~~+85°C
Weigh	600g

Available conventional resolution:

Resolution per turn:

1024，2048，4096，8192，16384

Number of turns:

1024，2048，4096，8192

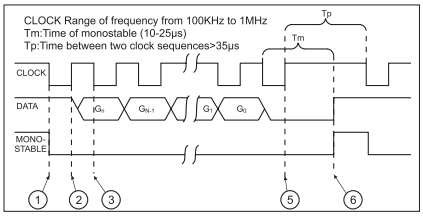
Electrical Characteristics

Output circuit	SSI
Output driver	RS422
Resolution	14 Bits
Supply voltage (Vdc)	10-30V
Power consumption (no load)	≤200mA
Permissible load (channel)	±20mA
Pulse of frequency	Max. 1MHz
Signal level high	Typ. 3.8V
Signal level low	Max. 0.5V
Rise timeTr	Max 100ns
Fall timeTf	Max 100ns

Terminal Configuration

SSI Wiring Guide

Signal	0V	+Ub	+C	-C	+D	-D	ST*	VR*	⏚
Color	WH	BN	GN	YE	GY	PK	BU	RD	
12-pin	1	2	3	4	5	6	7	8	PH



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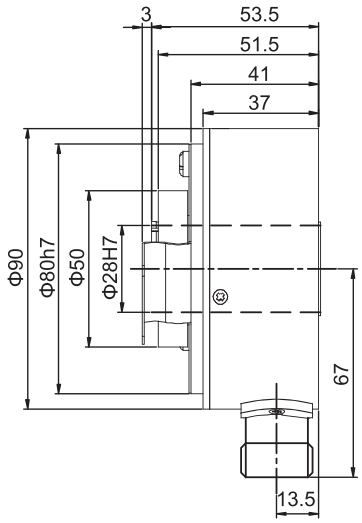
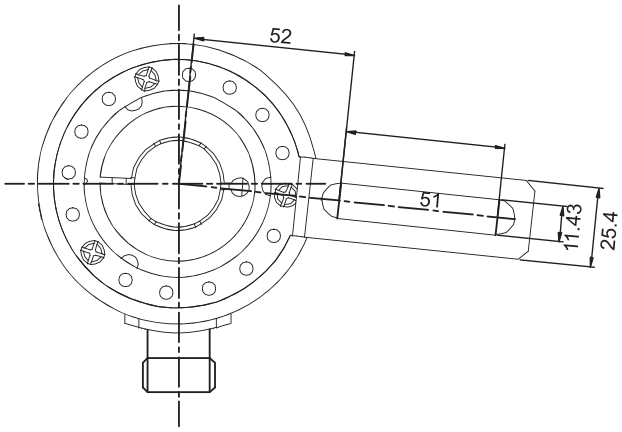
Dimensions

EAM90L
Accessories
E41350087





Order Code

EAM 90 P 20 – G S4 X PC R – 4096/8192 SS . XXXX

Series
EAM=standard absolute multiturn

Housing diameter
90= housing dimension

Flange type
L=long tether arm

Shaft/ Hollow shaft diameter
12 = Φ12mmmmhollow shaft
15 = Φ15mmmmhollow shaft
20 = Φ20mmmmhollow shaft
24 = Φ24mmmmhollow shaft
28 = Φ28mmmmhollow shaft
15.9 = Φ5/8"mmmmhollow shaft

Code type
G=Gray
B=Binary

Interface and Power Supply
S4=SSI(synchro serial interface) 5~30Vdc

Output logic
X= N/A (SSI)

Types of connection
PC=12-core cable (SSI)
standard length 1.5m
T=M23, 12-pin connector (SSI)

Outlets direction
R=radial

Resolution
resolution max. 16384 (14 bits)
revolution 4096 (12 bits)

Large Hollow Shaft Absolute Encoder

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

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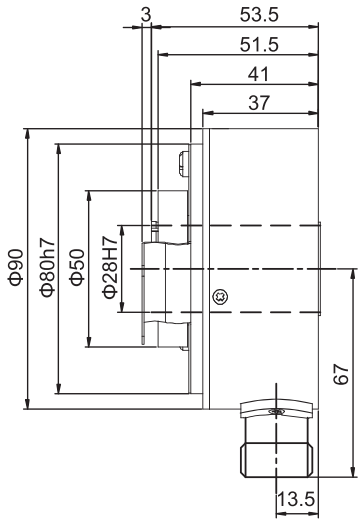

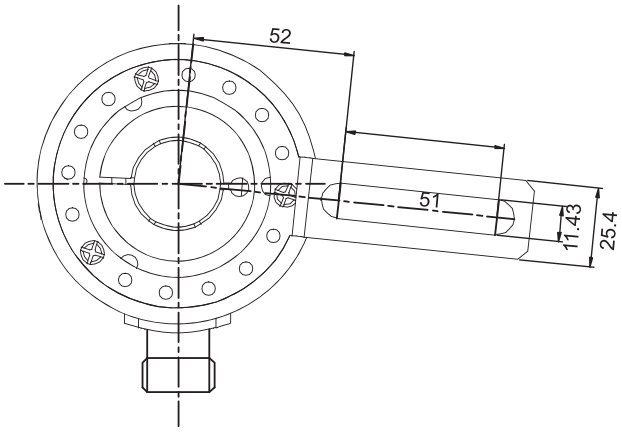

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