

# EtherNet/IP Interface Absolute Multiturn Encoder EAM58



# Description

EtherNet/IP interface absolute multiturn encoder EAM58 series has good performance against mechanical damage and can withstand higher axial and radial load. Various flanges could meet different requirements. It complies with common industrial protocol, max resolution 8192, max revolution 4096. The resolution and revolution can be set in accordance with customer requirements. High speed communication and anti-interference ensure stable operation.

### **Features**

- · Various flanges available
- · Waterproof seal improves IP level
- · Connector output, convenient for installation and maintenance
- Protection class IP65
- Metal housing for shock resistance
- Conforming to Common Industrial Protocol, programming functions

# Mechanical parameters

Shaft diameter       Φ6/Φ8/Φ10g6 mm (Solid Shaft)         Hollow Shaft diameter       Φ8/Φ10/Φ12/Φ15H7 mm         Protection class       IP65         Max. Permissible Mechanical Speed       6000 r/min         Max. Shaft load       Axial 40 N, Radial 110 N         Shock resistance       ≤100 g (half sine 6ms, EN60068-2-27)         Vibration resistance       ≤10g (10Hz - 1000Hz, EN60068-2-6)         Bearing life       10³ revolution         Rotor moment of inertia       ≤30 gcm²         Starting torque       ≤3 Ncm         Body material       Aluminum         Housing material       Steel with cathodic corrosion protection         Flange material       Aluminum         Operating temperature       -40+85 C         Storage temperature       -45+85 C         Relative humidity/condensation       90%, Condensation not permitted         Weight       ~400 g				
Protection class         IP65           Max. Permissible Mechanical Speed         6000 r/min           Max. Shaft load         Axial 40 N, Radial 110 N           Shock resistance         ≤100 g (half sine 6ms, EN60068-2-27)           Vibration resistance         ≤10g (10Hz - 1000Hz, EN60068-2-6)           Bearing life         10° revolution           Rotor moment of inertia         ≤30 gcm²           Starting torque         ≤3 Ncm           Body material         Aluminum           Housing material         Steel with cathodic corrosion protection           Flange material         Aluminum           Operating temperature         -40+85 °C           Storage temperature         -45+85 °C           Relative humidity/condensation         90%, Condensation not permitted	Shaft diameter	Φ6/Φ8/Φ10g6 mm (Solid Shaft)		
Max. Permissible Mechanical Speed       6000 r/min         Max. Shaft load       Axial 40 N, Radial 110 N         Shock resistance       ≤100 g (half sine 6ms, EN60068-2-27)         Vibration resistance       ≤10g (10Hz - 1000Hz, EN60068-2-6)         Bearing life       109 revolution         Rotor moment of inertia       ≤30 gcm²         Starting torque       ≤3 Ncm         Body material       Aluminum         Housing material       Steel with cathodic corrosion protection         Flange material       Aluminum         Operating temperature       -40+85 °C         Storage temperature       -45+85 °C         Relative humidity/condensation       90%, Condensation not permitted	Hollow Shaft diameter	Φ8/Φ10/Φ12/Φ15H7 mm		
Max. Shaft load       Axial 40 N, Radial 110 N         Shock resistance       ≤100 g (half sine 6ms, EN60068-2-27)         Vibration resistance       ≤10g (10Hz - 1000Hz, EN60068-2-6)         Bearing life       10° revolution         Rotor moment of inertia       ≤30 gcm²         Starting torque       ≤3 Ncm         Body material       Aluminum         Housing material       Steel with cathodic corrosion protection         Flange material       Aluminum         Operating temperature       -40+85 °C         Storage temperature       -45+85 °C         Relative humidity/condensation       90%, Condensation not permitted	Protection class	IP65		
Shock resistance       ≤100 g (half sine 6ms, EN60068-2-27)         Vibration resistance       ≤10g (10Hz - 1000Hz, EN60068-2-6)         Bearing life       10° revolution         Rotor moment of inertia       ≤30 gcm²         Starting torque       ≤3 Ncm         Body material       Aluminum         Housing material       Steel with cathodic corrosion protection         Flange material       Aluminum         Operating temperature       -40+85 °C         Storage temperature       -45+85 °C         Relative humidity/condensation       90%, Condensation not permitted	Max. Permissible Mechanical Speed	6000 r/min		
Vibration resistance       ≤10g (10Hz - 1000Hz, EN60068-2-6)         Bearing life       10° revolution         Rotor moment of inertia       ≤30 gcm²         Starting torque       ≤3 Ncm         Body material       Aluminum         Housing material       Steel with cathodic corrosion protection         Flange material       Aluminum         Operating temperature       -40+85 °C         Storage temperature       -45+85 °C         Relative humidity/condensation       90%, Condensation not permitted	Max. Shaft load	Axial 40 N, Radial 110 N		
Bearing life       10° revolution         Rotor moment of inertia       ≤30 gcm²         Starting torque       ≤3 Ncm         Body material       Aluminum         Housing material       Steel with cathodic corrosion protection         Flange material       Aluminum         Operating temperature       -40+85 °C         Storage temperature       -45+85 °C         Relative humidity/condensation       90%, Condensation not permitted	Shock resistance	≤100 g (half sine 6ms, EN60068-2-27)		
Rotor moment of inertia       ≤30 gcm²         Starting torque       ≤3 Ncm         Body material       Aluminum         Housing material       Steel with cathodic corrosion protection         Flange material       Aluminum         Operating temperature       -40+85 °C         Storage temperature       -45+85 °C         Relative humidity/condensation       90%, Condensation not permitted	Vibration resistance	≤10g (10Hz - 1000Hz, EN60068-2-6)		
Starting torque ≤3 Ncm  Body material Aluminum  Housing material Steel with cathodic corrosion protection  Flange material Aluminum  Operating temperature -40+85 °C  Storage temperature -45+85 °C  Relative humidity/condensation 90%, Condensation not permitted	Bearing life	10 <sup>9</sup> revolution		
Body material  Housing material  Steel with cathodic corrosion protection  Flange material  Operating temperature  Aluminum  Operating temperature  -40+85 °C  Storage temperature  -45+85 °C  Relative humidity/condensation  90%, Condensation not permitted	Rotor moment of inertia	≤30 gcm²		
Housing material  Flange material  Operating temperature  Steel with cathodic corrosion protection  Aluminum  -40+85 °C  Storage temperature  -45+85 °C  Relative humidity/condensation  90%, Condensation not permitted	Starting torque	≤3 Ncm		
Flange material  Operating temperature  -40+85 °C  Storage temperature  -45+85 °C  Relative humidity/condensation  90%, Condensation not permitted	Body material	Aluminum		
Operating temperature  Storage temperature  -40+85 °C  Relative humidity/condensation  90%, Condensation not permitted	Housing material	Steel with cathodic corrosion protection		
Storage temperature -45+85 °C Relative humidity/condensation 90%, Condensation not permitted	Flange material	Aluminum		
Relative humidity/condensation 90%, Condensation not permitted	Operating temperature	-40+85 °C		
·	Storage temperature	-45+85 °C		
Weight ~400 g	Relative humidity/condensation	90%, Condensation not permitted		
	Weight	~400 g		

# Electrical parameters

Interface	EtherNet/IP
Programming Functions	Resolution, time base and filter for velocity, preset, counting direction, IP-Adress
Transmission Rate	10/100 Mbit
Interface Cycle Time	>1 ms
Revolution	4096 (12 bits)
Resolution/revolution	8192 (13 bits)
Supply voltage	1030 VDC
Current Consumption	≤230 mA-10 VDC, ≤100 mA-24 VDC
Power Consumption	≤2.5 W
Start-Up Time	<250 ms
Accuracy (INL)	±0.0439°

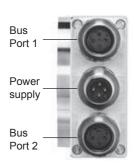
### **Electrical Connection**

Connection Orientation	Radial
Bus Port 1	M12,Female-4 pin,D-coded
Power Supply	M12,Male-4 pin,A-coded
Bus Port 2	M12,Female-4 pin,D-coded

# EtherNet/IP Interface Absolute Multiturn Encoder EAM58

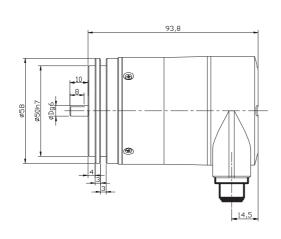
# **Terminal Assignment**

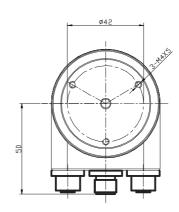
Function						
	Signal:	Transmit data+	Receive data+	Transmit data-	Receive data-	12
Bus Port 1	Abbreviation:	TxD+	RxD+	TxD-	RxD-	D coded
	Pin Number:	1	2	3	4	4 3
Davisa	Signal:	Voltage +	_	Voltage –	_	4 3
Power	Abbreviation	+ V	_	0 V	_	A coded
Supply	Pin Number:	1	2	3	4	1 2
	Signal:	Transmit data+	Receive data+	Transmit data-	Receive data-	12
Bus Port 2	Abbreviation	TxD+	RxD+	TxD-	RxD-	D coded
	Pin Number:	1	2	3	4	4 3



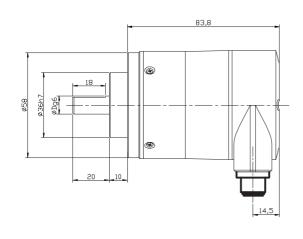
# Dimensions (mm)

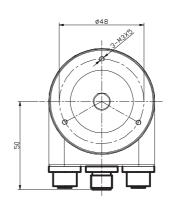
# EAM58B





# EAM58C



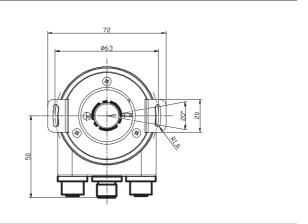




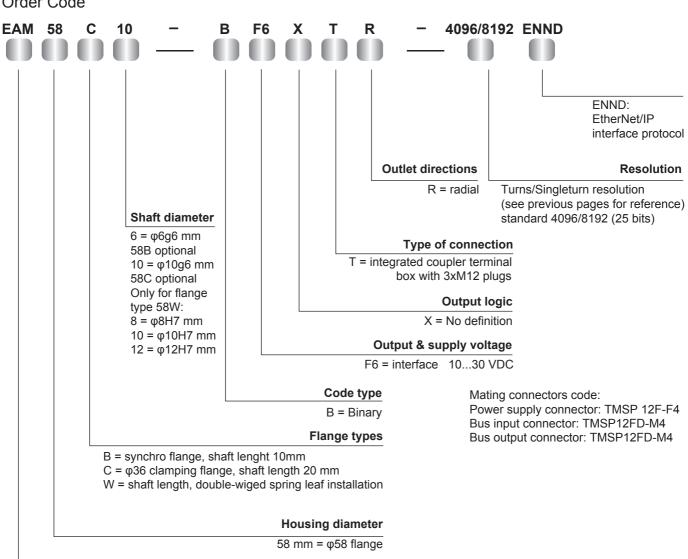
# EtherNet/IP Interface Absolute Multiturn Encoder EAM58

# Dimensions (mm)

# EAM58W 97,8



### Order Code



**Series** 

EAM = EtherNet/IP interface multiturn