ELCO
INDUSTRIAL AUTOMATION

Absolute Encoder
New product recommendations

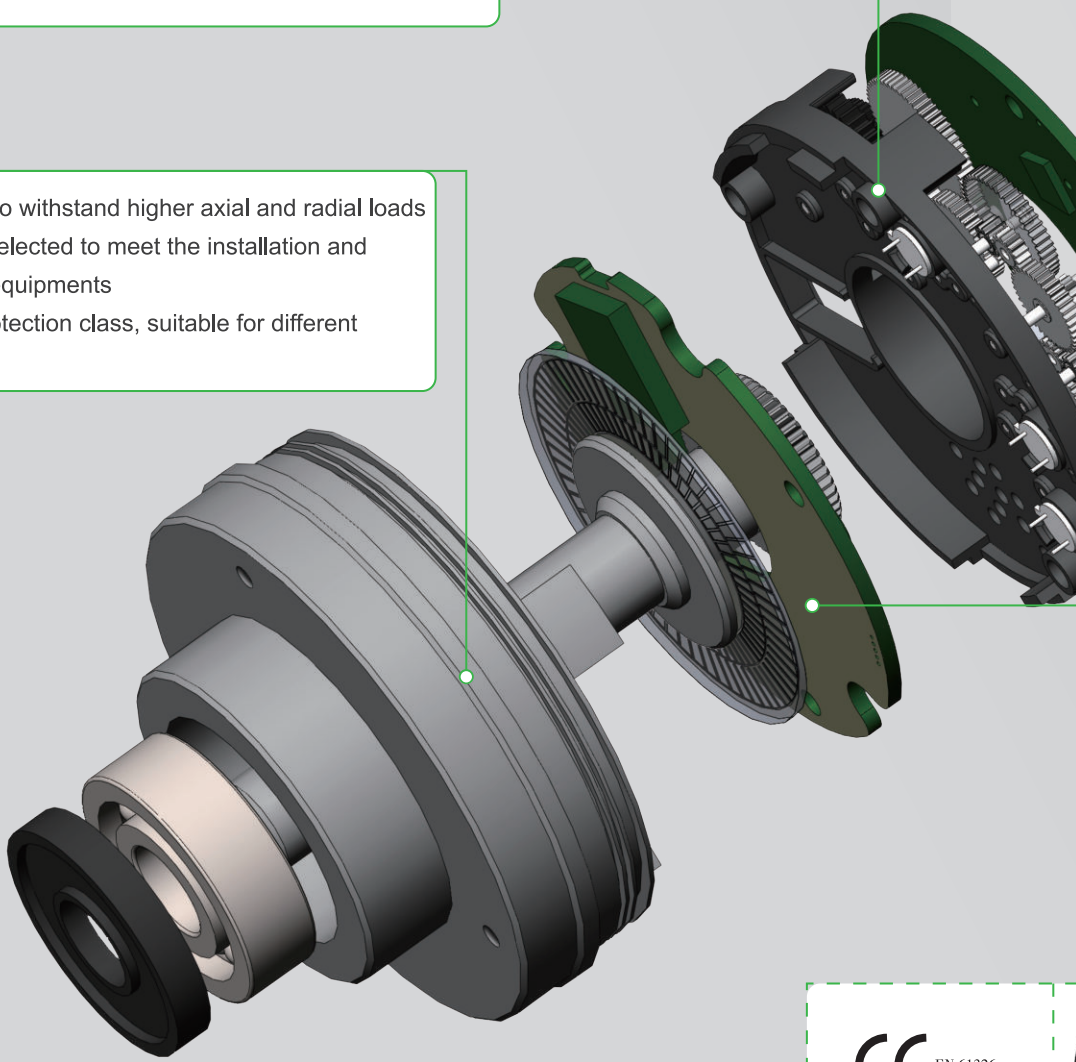
Elco (Tianjin) Electronics Co., Ltd. is a leading enterprise in China's industrial automation. It was established in Tianjin in 2003, and its sales and service network covers the whole country. As a provider of local industrial automation products and a supplier of intelligent manufacturing solutions in China, Elco has occupied a leading position in automobiles, auto parts, construction machinery, robots, food and pharmaceutical, printing and packaging, textile machinery, logistics equipment, electronics manufacturing and many other fields.

Multiturn Design

>> Mechanical gear revolution detection to provide reliable and stable data output
>> Modular gear set design, tough gear material, gear module optimization
>> Photoelectric principle technology, accurate and fast data processing, providing high-speed system response

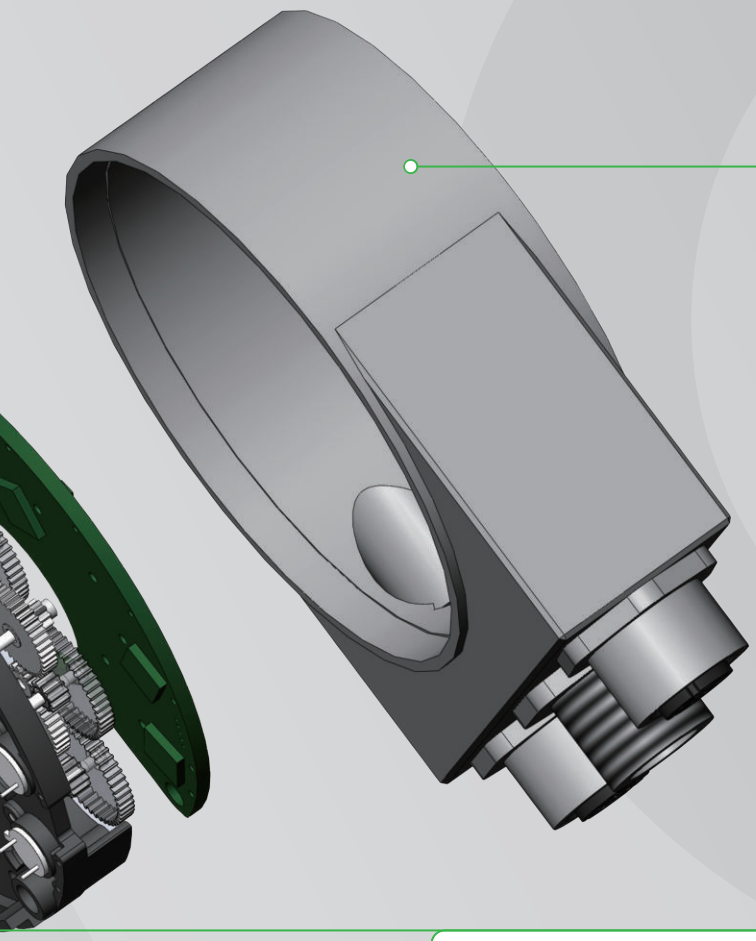
Mechanical Design

>> Double bearing structure design to withstand higher axial and radial loads
>> A variety of flange types can be selected to meet the installation and design requirements of different equipments
>> Sealed structure design, IP65 protection class, suitable for different working conditions



CE EN 61326

- 20° + 85°



Signal Interface

>> Ethernet bus: Profinet/IO EtherNet/IP EtherCAT
>> Fieldbus: Profibus-DP DeviceNET CANopen
>> Other interfaces: SSI analog (4-20mA), customized

Singleturn Design

>> Accurate photoelectric collection technology and advanced integrated processing chip for high-precision angle detection
>> 0.3μm high-precision code disc to ensure the accuracy and repeatability of the angle signal
>> High-energy LED combined with advanced photoelectric sensing technology to ensure long-term stability and reliability of signals

Ethernet protocol absolute photoelectric multiturn encoder

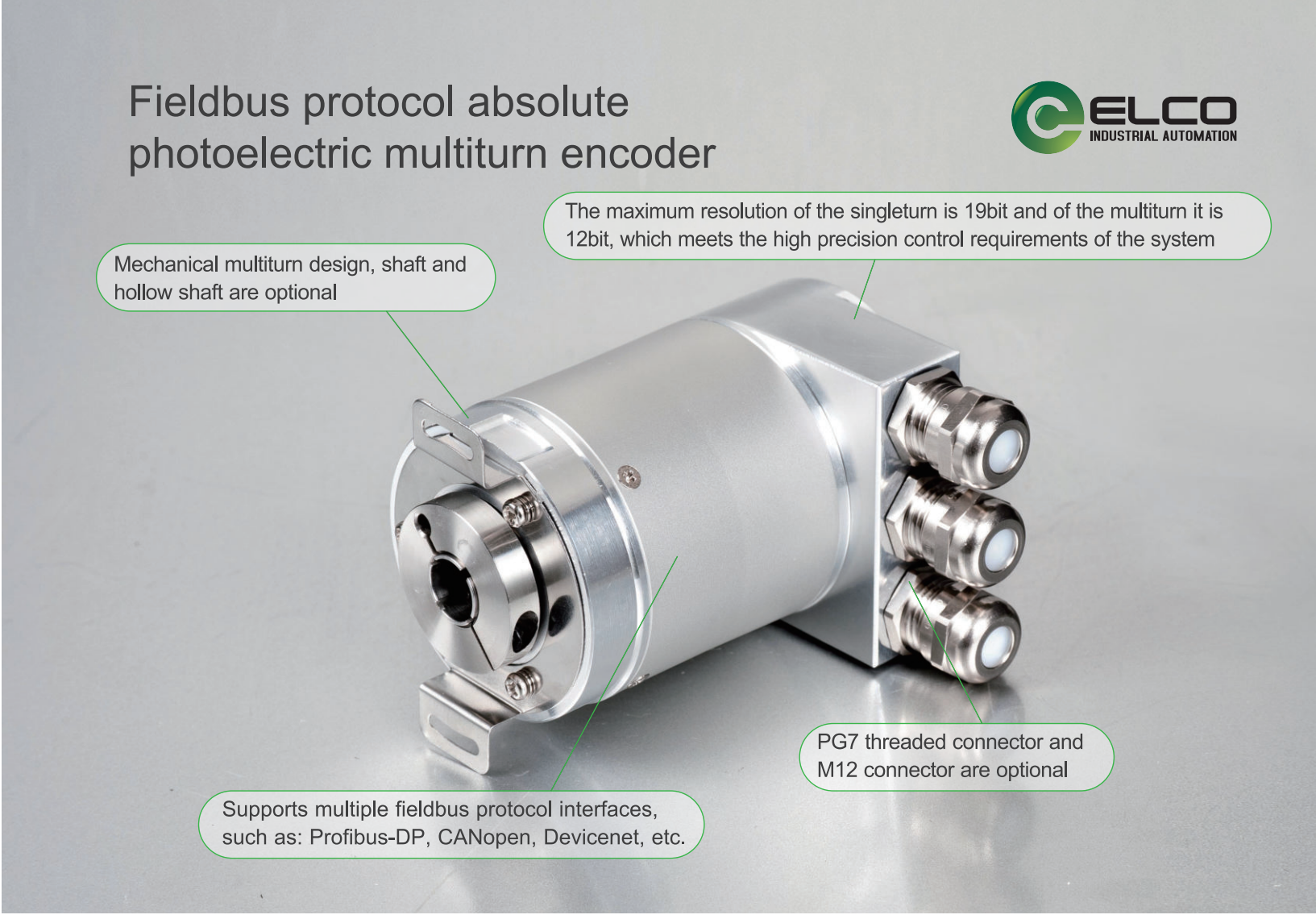
Mechanical parameters:

Shaft diameter Φmm	Φ6/Φ10g6 (shaft type)	Φ8/Φ10/Φ12/Φ15H7 (hollow shaft type)
Dimensions mm	Φ58	
Maximum mechanical speed (rpm)	6000	
Shaft load (radial/axial) [N]	160/80	
Operating temperature (°C)	-40...+80	
Protection class	IP65	
Connection options	M12 connector	
Maximum resolution	Singleturn 19bit	Multiturn 12bit

Electrical parameters:

Supply voltage	10...30 VDC	
Maximum output frequency	100 Mbits/s	
Output mode	PROFINET IO/RT	EtherNet/IP EtherNet/CAT
Features	Standard industrial Ethernet protocol, metal housing, high resolution,	
	high protection class, M12 connector for fast connection	

Fieldbus protocol absolute photoelectric multiturn encoder



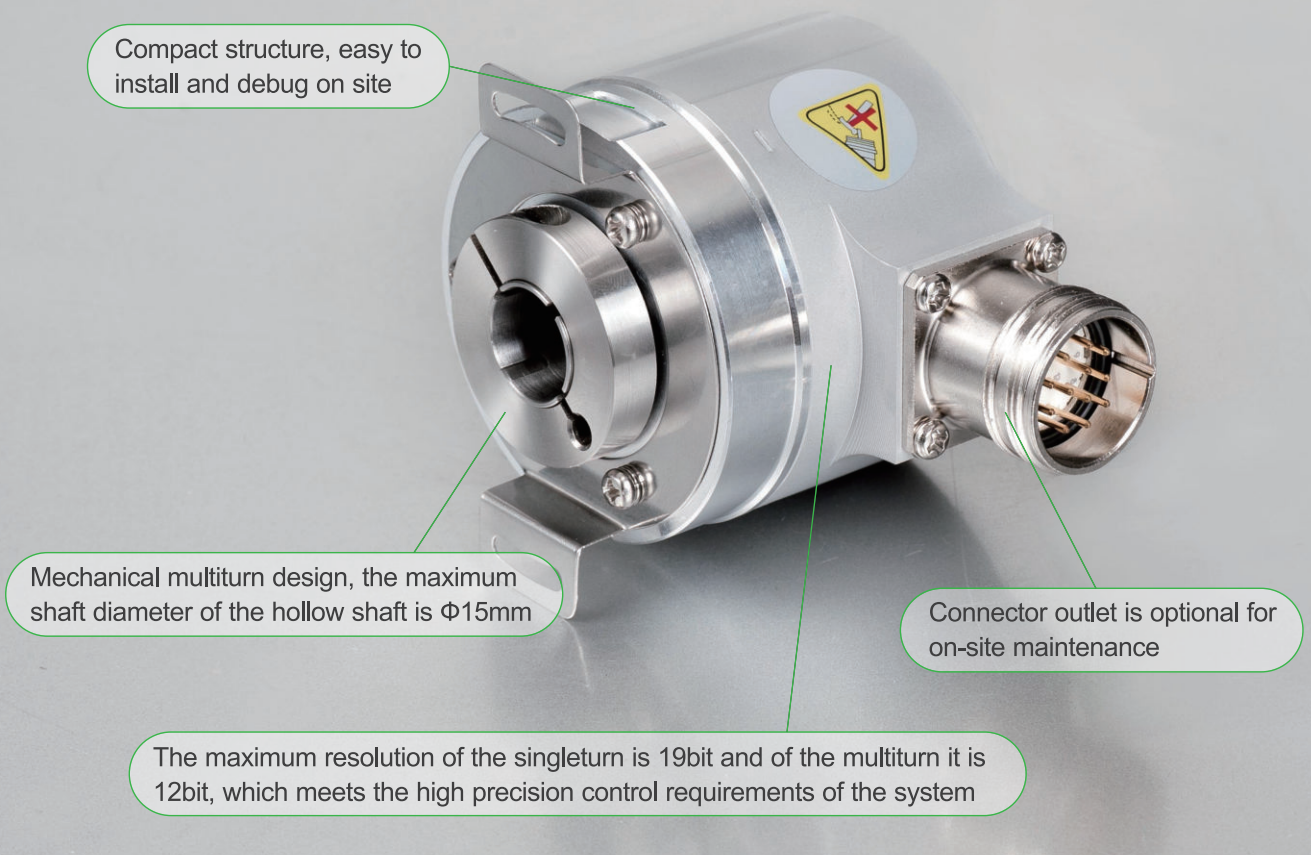
Mechanical parameters:

Shaft diameter Φmm	Φ6/Φ8/Φ10g6(shaft type) Φ8/Φ10/Φ12/Φ15H7(hollow shaft type)
Dimensions mm	Φ58
Maximum mechanical speed (rpm)	6000
Shaft load (radial/axial) [N]	160/80
Operating temperature (°C)	-40...+80
Protection class	IP65
Connection options	PG7 threaded connector / connector
Maximum resolution	Singleturn 19bit Mutliturn 12bit

Electrical parameters:

Supply voltage	10...30 VDC
Maximum output frequency	10MHz
Output mode	Profibus-DP CANopen DeviceNet
Features	Multiple standard installation flange are optional, metal housing,
	high resolution, high protection class

SSI protocol absolute photoelectric multiturn encoder



Mechanical parameters:

Shaft diameter Φmm	Φ8/Φ10/Φ12/Φ15H7
Dimensions mm	Φ58
Maximum mechanical speed (rpm)	6000
Shaft load (radial/axial) [N]	160/80
Operating temperature (°C)	-40...+80
Protection class	IP65
Connection options	Connector/pre-wired cable
Maximum resolution	Singleturn 19bit Multiturn 12bit

Electrical parameters:

Supply voltage	5/10...30 VDC
Maximum output frequency	1MHz
Output mode	SSI
Features	Through-hole hollow shaft design, maximum hole diameter is Φ15mm, metal housing, high resolution, high protection class

Profinet protocol absolute magnetoelectric multiturn encoder

Mechanical parameters:

Shaft diameter Φmm	Φ6/Φ10g6(shaft type)	Φ8/Φ10/Φ12H7(hollow shaft type)
Dimensions mm	Φ58	
Maximum mechanical speed (rpm)	6000	
Shaft load (radial/axial) [N]	80/40	
Operating temperature (°C)	-40...+80	
Protection class	IP65	
Connection options	M12 connector	
Maximum resolution	Singleturn 16bit	Multiturn 40bit

Electrical parameters:

Supply voltage	10...30 VDC
Maximum output frequency	100 Mbits/s
Output mode	PROFINET IO/RT
Features	Magnetoelectric multiturn technology, metal housing, high resolution,
	high protection class, M12 connector for fast connection

BISS-C protocol absolute singleturn encoder

Mechanical parameters:

Shaft diameter Φmm	Φ 13.4 --1:10 cone
Dimensions mm	Φ50
Maximum mechanical speed (rpm)	12000
Shaft load (radial/axial) [N]	80/40
Operating temperature (°C)	-40...+80
Protection class	IP65
Connection options	Pre-wired cable
Maximum resolution	Singleturn 23bit

Electrical parameters:

Supply voltage	5/10...30 VDC
Maximum output frequency	10MHz
Output mode	BiSS-C
Features	Open high-speed serial protocol, high resolution, high protection class,
	excellent mechanical structure performance

CANOPEN absolute encoder

Mechanical parameters:

Shaft diameter Φmm	Φ6/Φ8/Φ10g6(shaft type)	Φ8/Φ10/Φ12/Φ15H7(hollow shaft type)
Dimensions mm	Φ58	
Maximum mechanical speed (rpm)	3000	
Shaft load (radial/axial) [N]	160/80	
Operating temperature (°C)	-40...+80	
Protection class	IP65	
Connection options	Pre-wired cable/connector	
Maximum resolution	Singleturn 19bit	Multiturn 12bit

Electrical parameters:

Supply voltage	10...30 VDC
Maximum output frequency	10MHz
Output mode	CANopen
Features	Multiple standard installation flange are optional, metal housing,
	high resolution, high protection class

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