

842E EtherNet/IP™ Absolute Encoders



Dual Port Ethernet with Embedded Switch and DLR

Features

- EtherNet/IP Interface
- Embedded switch
- Hardware/software IP address setting
- Resolution up to 30 bits
- Protection class up to IP67
- Easy-to-install
- Device Level Ring (DLR)
- Revolution divisor
- Solid and blind hollow shaft options
- M12 Connectors
- Status indication LEDs
- RSLogix 5000 Add-On-Profile
- Endless shaft
- Flash upgradable

Typical Applications

- Packing machines
- Robotics
- Printing machines
- Rotary table positioning

Configurable Parameters

- Counting direction
- Counts per revolution
- Preset value
- Velocity unit
- IP address
- Counts of revolution



Allen-Bradley® encoders are a high-quality complement to Rockwell Automation® PLC-based motion control. Our encoders provide absolute feedback for position control and high resolution incremental feedback for speed control. They also offer preferred compatibility with other Allen-Bradley servo positioning controls to deliver a complete application solution.

Dual Port EtherNet/IP Encoder

The latest addition to the Allen-Bradley offering is the 842E with industry-standard Ethernet/IP interface. This new encoder comes standard with dual port Ethernet and M12 connectors thus providing customers with an easy, money-saving installation. It also includes an embedded Ethernet/IP switch to connect additional E/IP capable product in series and/or support a Device Level Ring (DLR) for Ethernet media redundancy.

Targeted for high performance and reliability in harsh industrial environments, the 842E EtherNet/IP encoder provides high resolution absolute positioning. Available in single-turn 18 bit resolution and multi-turn 30 bit resolution, this new high-resolution absolute encoder is ideal for automotive, material handling, general factory automation applications.

LISTEN.
THINK.
SOLVE.™

Product Selection

842E – $\frac{S}{a}$ $\frac{IP}{b}$ $\frac{10}{c}$ $\frac{B}{d}$ $\frac{A}{d}$

Number of Turns	
Code	Description
S	Single-turn (1 turn)
M	Multi-turn (4096 turns)

Mechanical Interface	
Code	Description
1	Solid shaft 3/8 in.
2	Solid shaft 3/8 in. with flat
3	Solid shaft 10 mm
4	Solid shaft 10 mm with flat
5	Hollow shaft 1/4 in.
6	Hollow shaft 8 mm
7	Hollow shaft 3/8 in.
8	Hollow shaft 10 mm
9	Hollow shaft 12 mm
10	Hollow shaft 1/2 in.
11	Hollow shaft 14 mm
12	Hollow shaft 15 mm

Connector	
Code	Description
B	M12 connector

Resolution	
Code	Description
A	262,144 (18 bit) steps per revolution

Accessories

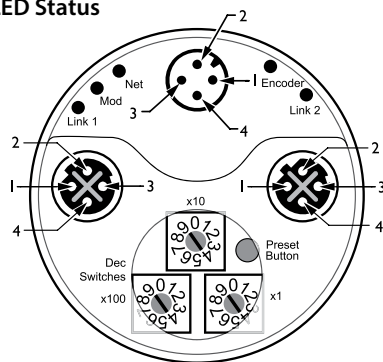
Description	Page No.
Flexible couplings	6-47
Mounting plates	6-52...6-54
Ethernet media	9-4
Cordsets & patchcords	8-16...8-17

Examples

Description	Cat. No.
4-wire cable spool, robotic TPE, 100 m	1585-C4TB-S100
M12 D-code patchcord, male/male, 1 m	1585D-M4TBJM-2
DC micro QD cordset, 4-pin, 2 m	889D-F4AC-2
DC micro style QD patchcord, 4-pin, 2 m	889D-F4ACDM-2

Network Status LED	Short Description
OFF	No power/IP address
Green flashing	No connection
Green	Connected
Red flashing	Minor fault
Red	Major fault
Green/red flashing	Self-test
Encoder Status LED	Short Description
OFF	No power
Green flashing	Wrong parameter
Green	Device operational
Red flashing	Minor fault
Red	Major fault
Green/red flashing	Self-test

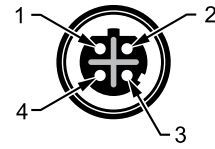
LED Status



Module Status LED	Short Description
OFF	No power
Green	Device operational
Green flashing	Standby
Red flashing	Minor fault
Red	Major fault
Green/red flashing	Self-test

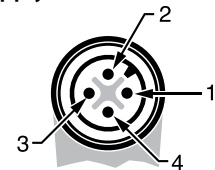
Pinout & Color Code

EtherNet/IP Pinout



Pin	Signal Name	Color Code	Pair Assignment
1	TXD+	White Orange	Pair 1
2	TXD-	Orange	
3	RXD+	White Green	Pair 2
4	RXD-	Green	

Power Supply Pinout



Pin	Signal	Color Code	Pair Assignment
1	V _s	Brown	Supply voltage 10...32V DC
2	—	White	Do not use
3	GND	Blue	0V DC (ground)
4	—	Black	Do not use

Link 1 Status LED	Short Description
OFF	No link/power off
Green solid	LINK
Amber solid	Port disabled
Green flashing	Port activity
Amber flashing	Collision
Link 2 Status LED	Short Description
OFF	No link/power off
Green solid	LINK
Amber solid	Port disabled
Green flashing	Port activity
Amber flashing	Collision

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