BANNER R50C Motor Driven Roller Controller Instruction Manual

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FAQ

Q: What is the maximum speed supported by the R50C Motor Driven Roller Controller?

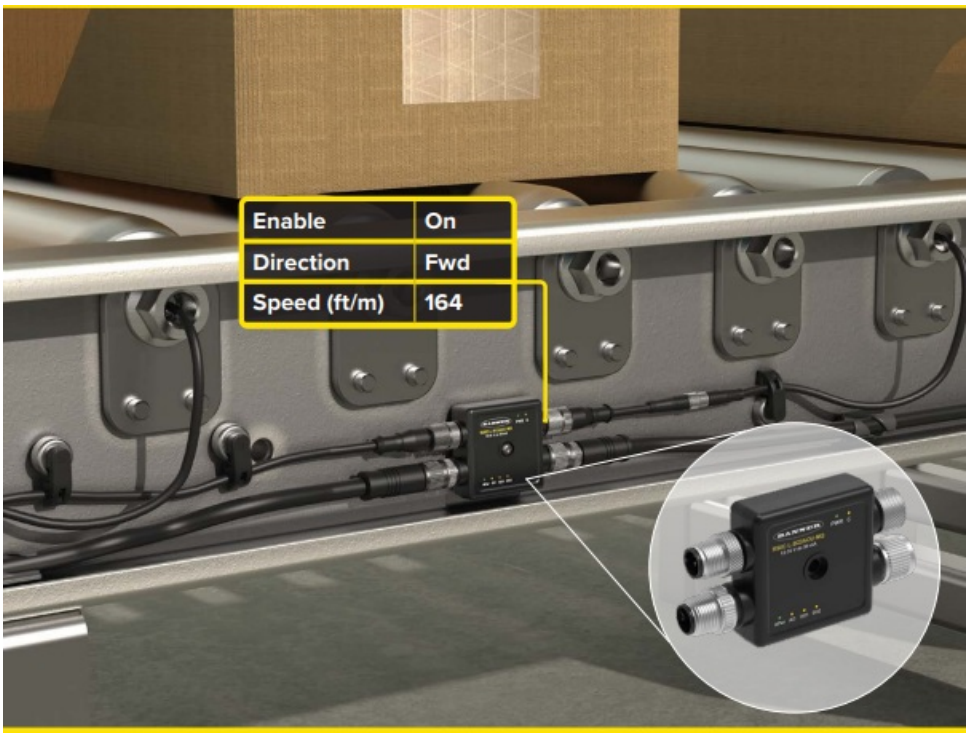
A: The controller supports a maximum speed of 164 feet per minute (ft/m).

Q: Can I use the R50C with other non-integrated rollers?

A: The R50C is designed for use with compatible integrated control rollers. For other rollers, additional adapters or configurations may be required.

Product Information

The R50C Motor Driven Roller Controller is a compact plug-and-play control unit designed for motor-driven roller systems. It offers precise control with 2 discrete outputs and 1 analog 0-18 V output. The controller is Modbus compatible and features a variety of connectors for easy installation and setup.



Compact Plug-and-Play Motor Driven Roller Control

- Easily control motor driven rollers from a PLC using Modbus® communication
- Simplify installation of multiple R50C's on a conveyor using standard A-coded M12 connectors for signals and L-coded M12 connectors for daisy chaining up to 16 amps of motor power
- Can be used in refrigerated, wet, and other challenging environments with IP67-rated fully sealed housing and -40° to 70° C operating range without an additional protective enclosure
- Monitor status and troubleshoot with ease via LED indicators

Function	Control	Connectors	Model
2 discrete outputs and 1 analog 0-18 V output	Modbus	1 Pair: 5-pin M12 A-Code male quick-disconnect connector (power/comms) 5-pin M12 A-Code female quick-disconnect connector (MDR control) and 1 Pair: 5-pin M12 L-Code male quick-disconnect connector (motor power) 5-pin M12 L-Code female quick-disconnect connector (motor power)	**R50C-L-B22AOU-MQ**

Specifications

- **Supply Voltage**
  - A-Code: 12 to 30 V DC at 400 mA maximum
  - L-Code: 24 V DC +/- 10% at 16 A maximum
- **Construction**
  - Coupling Material: Nickel-plated brass
  - Connector Body: PVC translucent black
- **Operating Conditions** –40 to +70 °C
- **Environmental Rating**

  IP65, IP67, IP68
- **Certifications**

Compatible Integrated Control Rollers

- Itoh Denki PM – XC
- Itoh Denki PM – XE, XP
- Interroll EC310
- Interroll EC5000
- Lenze MDR o450
- PulseRoller Senergy IDC
- Rulmeca BL3

Accessories

4-Pin M12 Double-Ended
Straight connector models for power and communications

BC-M12F4-M12M4-22-2
2 m (6.5')
BC-M12F4-M12M4-22-5
5 m (16.4')
BC-M12F4-M12M4-22-10
10 m (32.8')

5-Pin M12 To M8 Double-Ended
Straight connector models for connection between R50C and motor driven roller

BC-M8F5B-M12M5-24-0.5
0.5 m (1.6')
BC-M8F5B-M12M5-24-1
1 m (3.2')
BC-M8F5B-M12M5-24-2
2 m (6.5')

4-Pin D-Code M12 to RJ45
Double-ended connector models for ethernet connection on DXMR90-X1

STP-M12D-403
0.9 m (2.9')
STP-M12D-406
1.83 m (6')
STP-M12D-415
4.57 m (15')
STP-M12D-430
9.14 m (30')

5-Pin M12 L-Code Double-Ended
M12 L-Code supply powers the outputs

BCP-M12LF5-M12LM5-14-1
1 m (3.2')
BCP-M12LF5-M12LM5-14-10
10 m (32.8')
BCP-M12LF5-M12LM5-14-15
15 m (49.2')

Industrial Controller

- Allows PLC communication with MDR controller via common industrial protocols Modbus TCP, Ethernet I/P and ProfiNet
- Four dedicated Modbus client ports allow communication with multiple motor driver roller controllers

DXMR90-X1

Installation

1. Ensure power is disconnected before installation.
2. Connect the appropriate connectors based on the system requirements using the provided quick-disconnect connectors.
3. Mount the controller in a suitable location near the motor-driven rollers.

Configuration

1. Refer to the user manual for detailed configuration instructions.
2. Set the desired speed and direction using the control interface on the controller.
3. Test the system to ensure proper functionality.

Maintenance

1. Regularly inspect the controller for any signs of damage or wear.

2. Clean the connectors and surrounding area to prevent dust accumulation.
3. Follow recommended maintenance schedules provided in the user manual.

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Documents / Resources

	BANNER R50C Motor Driven Roller Controller [pdf] Instruction Manual R50C Motor Driven Roller Controller, R50C, Motor Driven Roller Controller, Driven Roller Controller, Roller Controller, Controller

References

- Banner Engineering | Smarter Automation. Better Solutions.
- User Manual