

Permanent Magnet DC Motor 8114247 (8213-10)

FESTO

LabVolt Series

Datasheet



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General Description

The Permanent Magnet DC Motor is a high-speed, brushed dc motor mounted in a full-size EMS module. The magnetic field required for motor operation is produced by powerful permanent magnets mounted on the motor stator. Connections to the motor are made through color-coded safety banana jacks located on the front panel on the module. Power to the motor must be fed by an external dc power source. A toggle switch mounted on the front panel can be used to switch dc power to the motor on and off when the motor is connected to a battery pack. When driven by a prime mover, the Permanent Magnet DC Motor operates as a dc generator.

The front panel of the Permanent Magnet DC Motor module can be opened to install a Timing Belt on the pulley of the motor shaft. This permits mechanical coupling of this motor to the Four-Quadrant Dynamometer/Power Supply. The diameter of the Permanent Magnet DC Motor pulley is smaller (12 teeth) than that of the pulleys of the Four-Quadrant Dynamometer/Power Supply (24 teeth). This difference of pulley ratio (12 to 24) permits adapting the speed (0 4000 r/min) of the Permanent Magnet DC Motor to the speed of the Four-Quadrant Dynamometer/Power Supply (between 0 2000 r/min).

Specifications

Parameter	Value
Rating	
Power	220 W
Voltage	48 V
Current	5.5 A
Speed	3600 rpm
Maximum voltage	60 V
Maximum speed	4712 rpm
Pulley	
Number of teeth	12
Physical Characteristics	
Dimensions (H x W x D)	308 x 291 x 440 mm (2.1 x 11.5 x 17.3 in)
Net Weight	7.6 kg (16.8 lb)

Reflecting the commitment of Festo Didactic to high quality standards in product, design, development, production, installation, and service, our manufacturing and distribution facility has received the ISO 9001 certification.

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