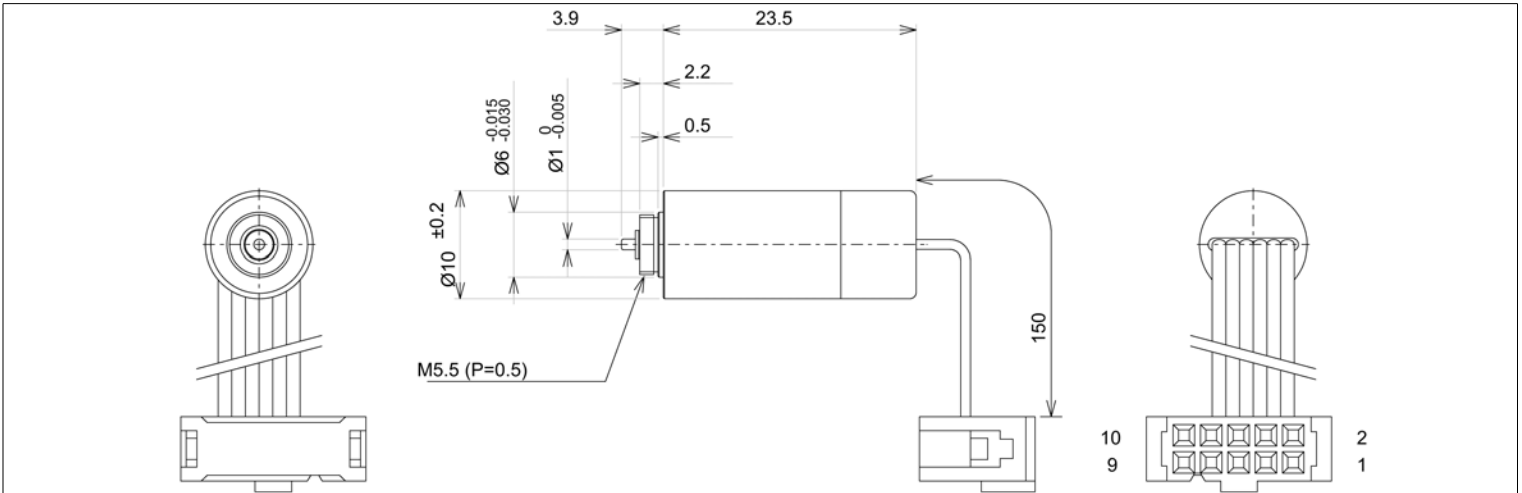


10 mm Ø Encoder - 2 Channel

Series EM10 Integrated 3 to 24 Volts ≤ 10 mA



Not to Scale - Dimensions in millimeters (mm)

Encoder Output Signals
 2 Channels
 10 mm Ø
 Integrated
 Hall Effect Encoder

Channel A

Channel B

Supply Voltage - Max	24.00 Volt
Supply Voltage - Min	3.00 Volt
Supply Current - Max	≤ 10 mAmp
Output Current - Max	≤ 10 mAmp
Max Temp - Operating	60°C
Min Temp - Operating	-10°C
Relative Humidity - Operating	20% to 85%

Above Drawing is for encoder mounted to 10 mm diameter x 17 mm long Coreless dc motor.
 Encoder is compatible with 10 mm diameter x 17 mm and x 25 mm long Coreless dc motors.
 Length increase for integrated encoder is less than 6.5 mm.

Counts per Track per Rev.
 12

Maximum Frequency Response
 20 kHz

Pinout Details

Connector Pin Number	Function
1	Motor +
2	Vcc
3	Channel A
4	Channel B
5	Ground
6	Motor -

Connector Details

Manufacturer: 3M
 Socket: 3448-7910LP
 Flat Band Cable: 28 AWG

This Encoder Is Only Available Mounted To A Global Motion Products Coreless DC Motor. It Is Not Sold Separately.

This low current, low Voltage encoder utilized a Hall effect Integrated Circuit. It can be attached to a range of 10 mm diameter coreless dc micromotors with optional planetary gearboxes.

Magneto-resistive 3 channel encoders are available for 13, 16, and 17 mm diameter coreless dc motors. They feature complementary outputs, line drivers, and resolutions up to 512 lines per channel. 2 channel integrated optical encoders are also available for 16 mm to 24 mm diameter coreless dc motors.

Characteristics and Specifications at 22°C