

# Brushless DC Motors

## Electrical Connections

### Wiring Harness for 24 Volt Motors and Gearmotors

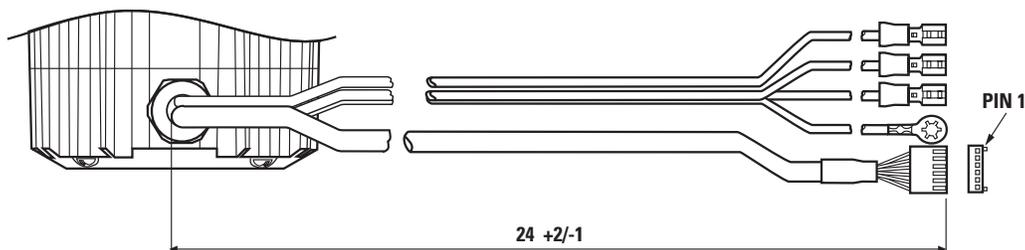
Bodine 24 Volt motors and gearmotors have four 18 AWG wires and a five-conductor shielded cable for connection to a Bodine 24 Volt control. The three motor phase connections are made with .250" quick connect

receptacles. The ground lead is terminated with a ring terminal and the 24 AWG commutation leads inside the 5-conductor shielded cable are terminated in a 6-pin in-line connector with 0.1" center distances.

The harness is a nominal 24" long from the motor housing to the end of the connections.

Pin Location	Wire Color & Size	Pin Part No.	Connector Part No.	Function
-	Red, 18 AWG	-	AMP 640902-1	Phase B
-	Brown, 18 AWG	-	AMP 640902-1	Phase A
-	Orange, 18 AWG	-	AMP 640902-1	Phase C
-	Green/Yellow, 18 AWG	-	AMP 640204-1	Earth /Ground Shield Drain
1	Drain Wire	MOLEX 08-50-0113	MOLEX 22-01-3067	Sensor Common
2	Black, 24 AWG	MOLEX 08-50-0113		Hall C
3	Green, 24 AWG	MOLEX 08-50-0113		Hall B
4	White, 24 AWG	MOLEX 08-50-0113		Hall A
5	Brown, 24 AWG	MOLEX 08-50-0113		Sensor Power
6	Red, 24 AWG	MOLEX 08-50-0113		

### Wiring Harness for 24 Volt Motors and Gearmotors (34B shown)



### Wiring Harness for 130 Volt Motors and Gearmotors

Bodine 130 Volt motors and gearmotors have a single 14-pin plug & twist connector at the end of a nominal 12" long harness. This provides a quick and easy means of connecting the motor or gearmotor to a Bodine 115 VAC control. An interface cable is

needed between the motor and the control. This cable may be supplied by the customer or it can be purchased from Bodine Electric. Model 3983 is a 6' long cable that can be used to connect 130 Volt motors and gearmotors to Bodine control models

3910, 3911, and 3921. Model 3982 is a 6' long cable that can be used to connect 130 Volt motors and gearmotors to Bodine control model 3912. It can also be used as an extension cable for use with any of the above mentioned controls. Encased model 3912 includes a 6' cable.

Pin Location	Wire Color & Size	Pin Part No.	Connector Part No.	Function
2	Red, 18 AWG	AMP 66098-7	AMP 206044-1	Phase B
1	Brown, 18 AWG	AMP 66098-7		Phase A
3	Orange, 18 AWG	AMP 66098-7		Phase C
4	Green/Yellow, 18 AWG	AMP 66098-7		Earth Ground Shield Drain
11	Drain Wire	AMP 66102-7		Sensor Common
10	Black, 24 AWG	AMP 66102-7		Hall C
14	Green, 24 AWG	AMP 66102-7		Hall B
13	White, 24 AWG	AMP 66102-7		Hall A
12	Brown, 24 AWG	AMP 66102-7		Sensor Power
9	Red, 24 AWG	AMP 66102-7		

### Wiring Harness for 130 Volt Motors and Gearmotors (34B shown)

