



Type 34B/FV *INTEGR*Amotor™

The type 34B/FV *INTEGR*Amotor™ combines a PWM speed control, a brushless DC motor and an optical encoder into one innovative drive solution. Gearmotor options are also available. The brushless DC *INTEGR*Amotor is designed to be a lower cost alternative for applications that typically require stepper or high-end servo systems. It is an excellent choice for replacing traditional brush-type DC motors in applications that operate continuously, eliminating downtime for brush maintenance. The 34B/FV *INTEGR*Amotor and gearmotors are rated IP-44.

- 1/4 hp (187 watts) and up to 100 oz-in. (0.706 Nm) continuous torque; twice as powerful as the smaller 22B/FV products.
- Operates from a regulated 24VDC power supply.
- Available with a digital PWM (pulse width modulation) interface.
- On-board PWM control that accepts inputs from an external motion controller or Programmable Logic Controller (PLC).
- Features amplifier enable, direction input and dynamic braking.
- Supplied with an enclosed 1024 PPR, 2 channel, optical encoder.
- Available with parallel shaft, right angle and hollow shaft integral gearheads, with output speeds ranging from 14-500 RPM, and rated torque of up to 350 lb-in. (40 Nm).



TYPICAL APPLICATIONS

Ideal for applications that require zero maintenance such as solar power tracking systems, pumps, medical and industrial equipment.

Motor Output		Torque Constant (oz-in./A)	Voltage Constant (V/krpm)	Winding		Rotor Inertia (oz-in.-sec. ²)	HP	Control Input		Product Type	Model Number
Speed Range (rpm)	Torque (lb-in.)			Res.(Ohms)	Inductance (mH)			Volts (VDC)	Continuous Amps		
60-2500	100	9.6	7.1	0.18	0.43	0.0154	1/4	24	12	34B4FEBL/FV	3708

Visit www.bodine-electric.com for 34B/FV *INTEGR*Amotor gearmotors.



34B4FEBL/FV-F PARALLEL SHAFT GEARMOTOR

Speed: 14-500 RPM

Rated Torque: 28-341 lb-in.



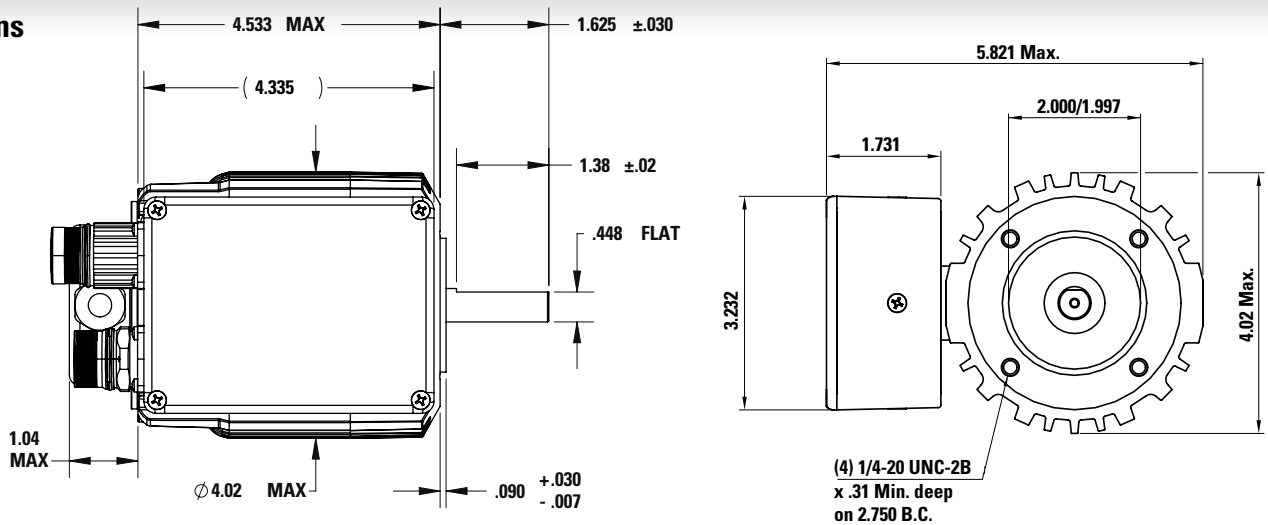
34B4FEBL/FV-5N RIGHT ANGLE GEARMOTOR

Speed: 63-500 RPM

Rated Torque: 24-109 lb-in.



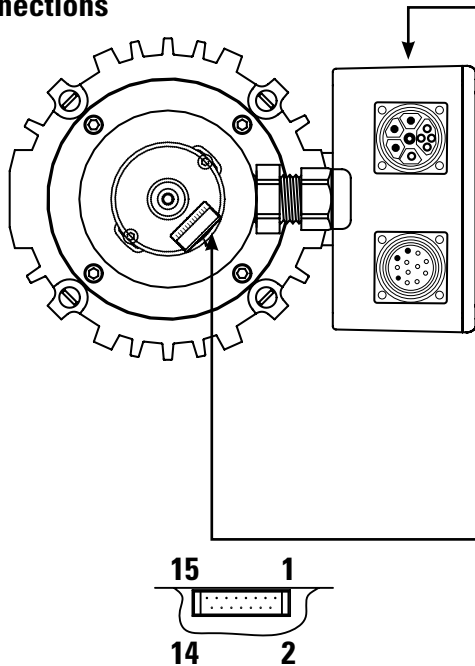
Dimensions



Type	Weight (lbs.)
34B4FEBL/FV	7.2

Ambient Rating: 25°C. Enclosure: IP-44

Connections



SIGNAL CONNECTOR PIN ASSIGNMENTS

Pin	Function
S1	Tach Output (12 PPR—motor shaft)
S2	Forward/Reverse Input (direction)
S3	PWM Input (voltage control, duty)
S4	Enable (on/off)
S5	Common
S6	+5VDC Input (required)
S7	Fault Output (indicates various fault conditions)
S8	Brake Input (dynamic braking)

POWER CONNECTOR PIN ASSIGNMENTS

Pin	Function
PA	No Connection
PB	+24V
PC	Common
PD	Ground
PE	No Connection
PF	No Connection
PG	No Connection
PH	No Connection
PL	No Connection

ENCODER CONNECTOR ASSIGNMENTS

Pin	Function	Pin	Function
E1	Channel A	E8	Channel U-
E2	Channel A-	E9	Channel V
E3	Channel B	E10	Channel V-
E4	Channel B-	E11	Channel W
E5	Channel Z	E12	Channel W-
E6	Channel Z-	E13	VCC
E7	Channel U	E14	Ground
		E15	No Connection

Three connections must be made. Two cables are required for the control box. The user also must provide and install a third cable for the optical encoder.

Cable Kit

Model 3981 Cable Kit includes three cables for power, logic and encoder (length: six feet).

