

Bodine Electric's new **INTEGRAmotor™** Brushless DC products combine three Bodine strengths into one powerful package that reduces wiring, panel space, assembly time, and system cost.

Bodine has been manufacturing small motors for nearly 100 years and has long been acknowledged as the leader in manufacturing high quality, long-lasting small gearmotors. And Bodine has the engineering capability and the state-of-the-art automated assembly equipment for manufacturing modern electronic controls that are small and economical.

INTEGRAmotors™

INTEGRAMotor™ Direct Drive Motors

1/16 - 1/8 HP



22B



Bodine Electric's new **INTEGRAMotor™** Brushless DC products integrate three motion control components into one compact package. The perfect match of motor, speed control, and gearhead provide simplified wiring, reduced panel space, faster assembly times, and lower system costs.

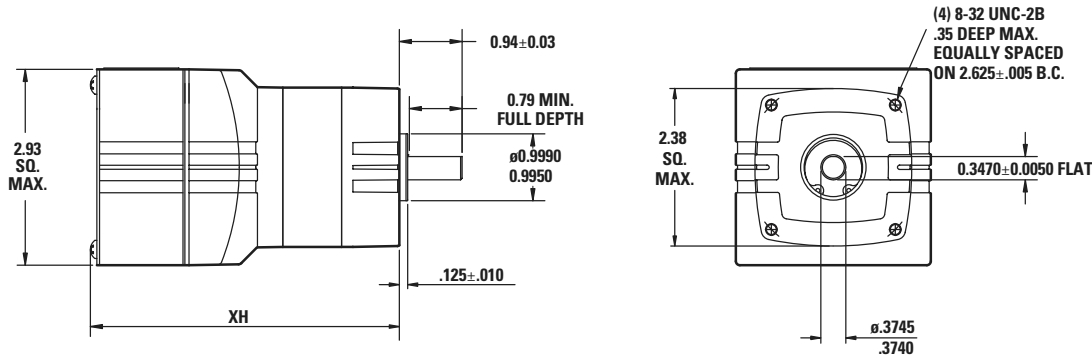
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Features

- Integral control simplifies installation, minimizes EMI & reduces wiring cost
- Totally enclosed motor construction
- Single plug-in connector for power & logic
- Inputs for run, brake, speed, & direction
- 12 pulse/revolution tach output
- Dynamic braking for quick stops
- Current limit protects motor from overload
- Small size takes up minimal space
- cURus (UL recognized for USA and Canada), CE
- For our complete line of brushless products see page 103

Motor Output		Control Input			Length XH (inch)	Weight (lbs.)	Product Type	Model Number
Speed Range (rpm)	Torque (oz-in.)	HP	Volts (VDC)	Continuous Amps				
200-2500	25	1/16	24	4.0	4.7	2.5	22B2BEBL/SR	3802
200-2500	50	1/8	24	6.0	5.7	3.5	22B4BEBL/SR	3804

22B INTEGRAMotor™



Note: all direct drive INTEGRAMotors have the same mounting hole dimensions.

INTEGRAmotor™ Parallel Shaft Gearmotors

Up to 100 lb-in. Continuous



22B-D and 22B-Z

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Same Features as 22B, PLUS:

- Integral gear reducer increases torque and reduces speed
- Helical & spur gearing for high efficiency
- Oil lubrication for long life
- Unvented gearhousing for universal, horizontal mounting
- High-strength thermoplastic input gear for quiet operation
- Output torque ratings chosen for long, reliable life
- For our complete line of brushless products see page 103

Optional Accessories

- "L" bracket kit model 5968, see page 122



INTEGRAmotor™

e-TORQ™

Custom

Pacesetter™ Inverter Duty

AC Induction

Permanent Magnet DC

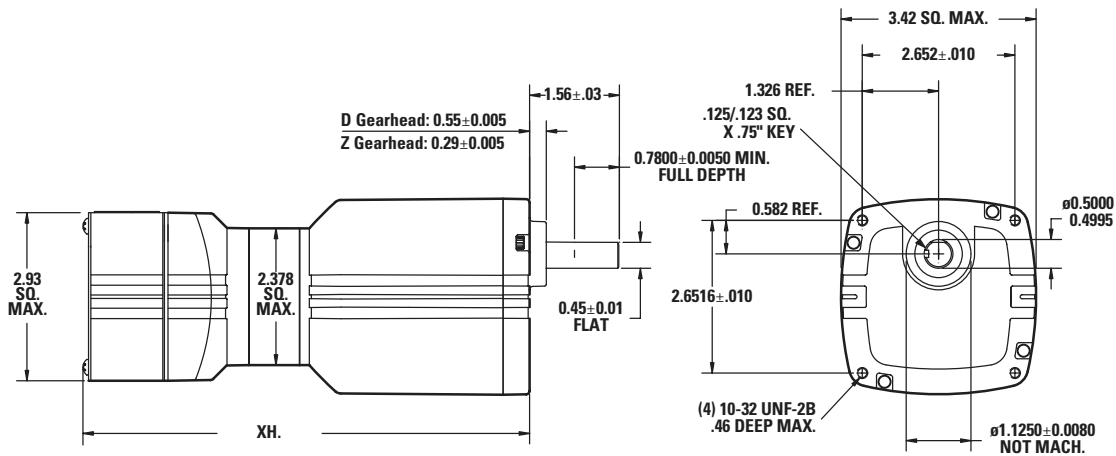
Brushless DC

Index

Motor Output			Control Input			Length XH (inch)	Weight (lbs.)	Product Type	Model Number ¹
Speed Range (rpm)	Torque (lb-in.)	Gear Ratio	HP	Volts (VDC)	Continuous Amps				
1-14	100	180:1	1/16	24	4.0	7.9	4.8	22B2BEBL/SR-Z4	3863
1-14	40	180:1	1/16	24	4.0	6.7	3.8	22B2BEBL/SR-D4	3836
2-28	97	90:1	1/16	24	4.0	7.9	4.8	22B2BEBL/SR-Z4	N3862
2-28	40	90:1	1/16	24	4.0	6.7	3.8	22B2BEBL/SR-D4	N3835
3-42	95	60:1	1/11	24	5.0	8.4	5.3	22B3BEBL/SR-Z3	N3861
3-42	40	60:1	1/16	24	4.0	6.7	3.8	22B2BEBL/SR-D3	N3834
7-83	52	30:1	1/11	24	5.0	8.4	5.3	22B3BEBL/SR-Z3	3860
7-83	29	30:1	1/16	24	4.0	6.7	3.8	22B2BEBL/SR-D3	3829
11-139	31	18:1	1/11	24	5.0	7.4	5.3	22B3BEBL/SR-Z2	N3859
11-139	17	18:1	1/16	24	4.0	6.7	3.8	22B2BEBL/SR-D3	N3828
17-208	20	12:1	1/11	24	5.0	7.4	5.3	22B3BEBL/SR-Z2	N3858
17-208	12	12:1	1/16	24	4.0	6.7	3.8	22B2BEBL/SR-D3	3827
33-417	10	6:1	1/11	24	5.0	7.4	5.3	22B3BEBL/SR-Z2	3857
33-417	5.8	6:1	1/16	24	4.0	6.7	3.8	22B2BEBL/SR-D3	3826

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

22B-D and 22B-Z INTEGRAmotor™



Note: all parallel shaft INTEGRAmotors have the same mounting hole dimensions.



22B-3N



INTEGRAmotor™ Right Angle Gearmotors

Up to 37 Lb-In. continuous

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Same Features as 22B, PLUS:

- Integral gear reducer increases torque and reduces speed
- Worm gearing for high strength & quiet operation
- Higher gear ratios provide self-locking to hold load in place
- Grease lubrication for long life & flexible mounting positions
- Unvented gearhousing
- Output torque ratings chosen for long, reliable life
- For our complete line of brushless products see page 103

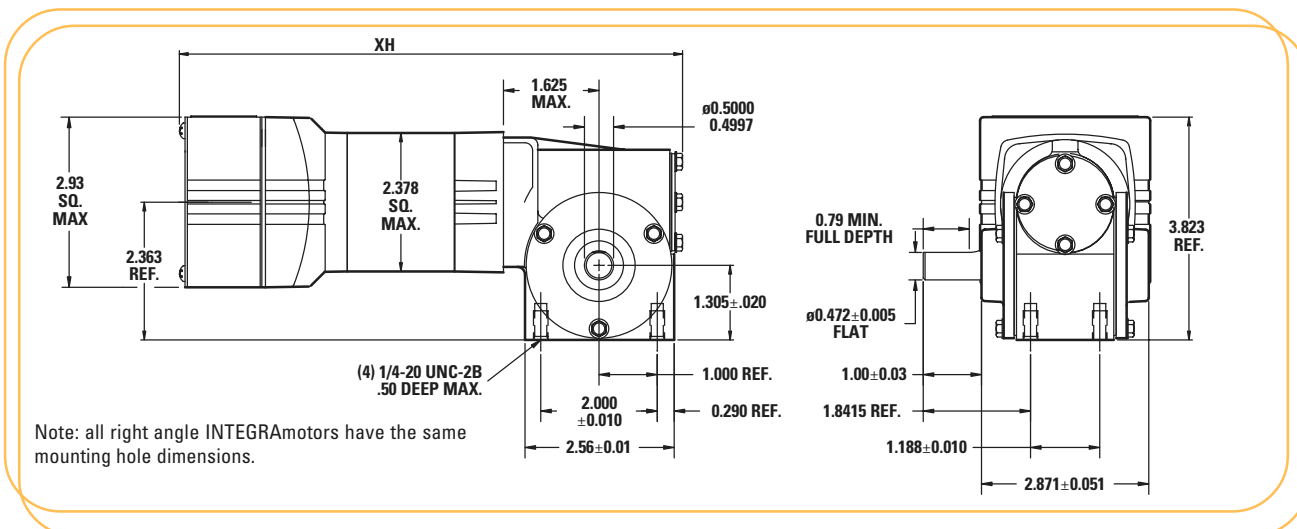
Optional Accesories

- Baseplate kit model 0967, see page 122

Motor Output			Control Input			Length XH (inch)	Weight (lbs.)	Product Type	Model Number ¹
Speed Range (rpm)	Torque (lb-in.)	Gear Ratio	HP	Volts (VDC)	Continuous Amps				
3-42	37	60:1	1/8	24	6.0	8.79	5.4	22B4BEBL/SR-3N	N3865
5-62	37	40:1	1/8	24	6.0	8.79	5.4	22B4BEBL/SR-3N	3866
10-125	35	20:1	1/8	24	6.0	8.79	5.4	22B4BEBL/SR-3N	N3867
20-250	22	10:1	1/8	24	6.0	8.79	5.4	22B4BEBL/SR-3N	3868
40-500	11	5:1	1/8	24	6.0	8.79	5.4	22B4BEBL/SR-3N	N3869

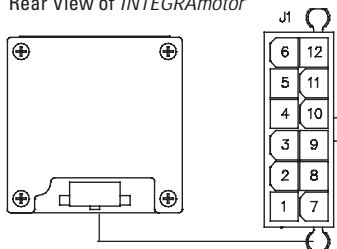
¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

22B-3N IntegrAmotor™



ELECTRICAL CONNECTIONS FOR ALL INTEGRAmotors:

Rear View of *INTEGRAmotor*



Mating Connector Housing is Molex P/N 39-01-2125

Power Pin No.	Description
1	24V Return (Common)
7	+24V

Mating Receptacle is Molex P/N 39-00-0039 (loose piece) for 18 – 24 AWG wire

Logic Pin No.	Description	Logic Pin No.	Description
2	Direction	8	Tach (12 PPR)
3	Enable (Active low)	9	Voltage Input (Speed)
4	Fault (Active low)	10	+5V (Use for speed pot only)
5	New: Direction Output	11	Brake (Active low)
6	Common	12	Common

Mating Receptacle is Molex P/N 39-00-0047 (loose piece) for 22 – 28 AWG wire

NOTE: Use Molex Hand Tool P/N 57026-5000 to crimp the receptacles to the wires.



MADE IN U.S.A.