

Permanent Magnet DC Gearmotors

Speed (rpm)	Rated Torque (lb-in.)	Rated Current (Amps)		Peak Torque (lb-in.)	Motor HP	FF	Gear Ratio	Radial Load (lbs.)	Product Type <sup>2</sup>	Accy Shaft	No Accy Shaft	Accy Shaft	No Accy Shaft
		12/24V								90/130V			
<b>42A-FX Gearmotor</b>													
<b>90/130V Class F Temperature Rating</b>													
6 / 8	350 / 350			500	3/16 / 3/8	1.4 / 1.0	300	200	42A5BEPM-FX4	—	—	5059	5049
10 / 14	350 / 350			500			180	200	42A5BEPM-FX4	—	—	5058	5048
14 / 21	350 / 350			500			120	200	42A5BEPM-FX4	—	—	5057	5047
29 / 42	350 / 350			450			60	200	42A5BEPM-FX3	—	—	5056	5046
43 / 63	239 / 265	2.1 / 2.8		320			40	300	42A5BEPM-FX3	—	—	5055	5045
58 / 83	179 / 248			400			30	300	42A5BEPM-FX3	—	—	5054	5044
86 / 125	119 / 165			270			20	300	42A5BEPM-FX3	—	—	5053	5043
115 / 167	89 / 124			290			15	300	42A5BEPM-FX2	—	—	5052	5042
173 / 250	60 / 83			195			10	300	42A5BEPM-FX2	—	—	5051	5041
345 / 500	31 / 43			72			5	60	42A5BEPM-FX1	—	—	5050	5040



Type 42A5-FX

<b>12/24V Class F Temperature Rating</b>													
3 / 8	350			500	1/7 / 3/8	1.0	300	200	42A5BEPM-FX4	5079	5069	—	—
6 / 14	350			500			180	200	42A5BEPM-FX4	5078	5068	—	—
8 / 21	350			500			120	200	42A5BEPM-FX4	5077	5067	—	—
17 / 42	350			450			60	200	42A5BEPM-FX3	5076	5066	—	—
25 / 63	265	14		320			40	300	42A5BEPM-FX3	5075	5065	—	—
33 / 83	248			400			30	300	42A5BEPM-FX3	5074	5064	—	—
50 / 125	165			270			20	300	42A5BEPM-FX3	5073	5063	—	—
67 / 167	124			290			15	300	42A5BEPM-FX2	5072	5062	—	—
100 / 250	83			195			10	300	42A5BEPM-FX2	5071	5061	—	—
200 / 500	43			72			5	60	42A5BEPM-FX1	5070	5060	—	—

Brushless DC Gearmotors

Speed (rpm)	Rated Torque (lb-in.)	Rated Current (Amps)		Peak Torque (lb-in.)	Motor HP	Gear Ratio	Radial Load (lbs.)	Product Type <sup>2,3</sup>	Accy Shaft	No Accy Shaft	Accy Shaft	No Accy Shaft
		24V	130V						24V		130V	
8.3	310	9.6	1.6	475	1/5	300	220	34B3BEBL-E4	—	N3575	—	N3375
14	341	9.6	1.6	475	1/5	180	200	34B3BEBL-E4	—	N3574	—	3374
21	350	9.6	1.6	475	1/5	120	195	34B3BEBL-E4	—	N3573	—	3373
42	270	12	2.0	421	1/4	60	240	34B4BEBL-E3	N3685	3585	N3485	3385
83	245	—	2.6	475	3/8	30	250	34B6BEBL-F3	—	—	—	N3372
83	135	12	2.0	318	1/4	30	300	34B4BEBL-E3	N3683	N3583	3483	3383
125	163	—	2.6	333	3/8	20	290	34B6BEBL-F3	—	—	—	N3371
125	90	12	2.0	220	1/4	20	300	34B4BEBL-E3	N3682	N3582	3482	3382
250	82	—	2.6	166	3/8	10	300	34B6BEBL-F2	—	—	N3470	N3370
250	45	12	2.0	106	1/4	10	300	34B4BEBL-E2	N3680	N3580	N3480	3380
500	42	—	2.6	66	3/8	5	60	34B6BEBL-F1	—	—	—	3369
500	25	12	2.0	55	1/4	5	60	34B4BEBL-E1	—	N3579	—	3379



Type 34B-E/F

INTEGRAmotor BLDC Gearmotors

Speed (rpm)	Rated Torque (lb-in.)	24V Rated Current (Amps)	Peak Torque (lb-in.)	Motor HP	Gear Ratio	Radial Load (lbs.)	Product Type	Model Number <sup>4</sup>
14	341	12	475	1/4	180	200	34B4FEBL/FV-F4	N3771
42	327		421		60	240	34B4FEBL/FV-F3	N3773
63	218		350		40	240	34B4FEBL/FV-F3	3774
83	163		318		30	300	34B4FEBL/FV-F3	N3775
125	109		220		20	300	34B4FEBL/FV-F3	N3776
250	54		106		10	300	34B4FEBL/FV-F2	N3778
500	28		55		5	60	34B4FEBL/FV-F1	N3779



Type 34B/FV-F INTEGRAmotor

<sup>1</sup> SOA: Contact the factory for detailed speed/torque information (Safe Operating Area). See page 19.

<sup>2</sup> The fifth character of the product type changes from "B" to "F" for accessory ready models.

<sup>3</sup> E-type only: selectively hardened all steel helical gears for long life.

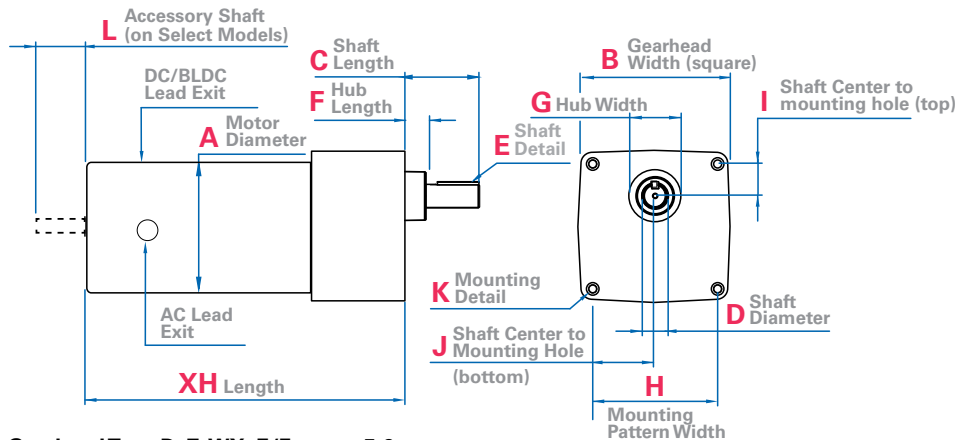
<sup>4</sup> Type FV INTEGRAmotors require a PWM signal from a motion controller or PLC to operate.

**"N" model numbers require lead time and minimum quantities.** Most FX models ship within 2-5 business days.

# Reference Drawings and Dimensions

## Parallel Shaft Gearmotor Dimensions

Dimensions (in inches) are for reference only. For CAD drawings and up-to-date specifications, please visit [www.bodine-electric.com](http://www.bodine-electric.com).



**Gearhead Type D, Z, WX, E/F, pages 5-9**

	Product Type	Wt. (lbs.)	XH Length	A Diameter (Height)	B Width (square)	C Shaft Length	D Shaft Diameter	E Shaft Detail	F Hub Length	G Hub Width	H Mounting Pattern Width	I Shaft Center to Mounting Hole (top)	J Shaft Center to Mounting Hole (bottom)	K Mounting Detail	L Acc'y Shaft	Cord/Lead Length (in.)
<b>Type D Gearmotor</b>																
24A-D	24A2-D	4.0	5.887	2.42	3.42	1.56	.500	Flat	.554	1.125	2.652	.582	1.326	[4]10-32 UNF-2B x .38 deep on a 3.75 B.C.	Yes	24
	24A4-D	4.5	6.637												Yes	24
22B-D	22B2-D	3.75	5.522	2.378											Yes	12 or 24
22B-D INTEGRA	22B2-D	5.4	6.631	2.93											No	None
<b>Type Z Gearmotor</b>																
34R-Z	34R4-Z4/3	9.3	8.328	4.02	3.40	1.56	.500	Flat/Key	.29	1.125	2.652	.582	1.326	[4]10-32 UNF-2B x .38 deep on a 3.75 B.C.	No	12
	34R6-Z4/3		8.345													
	34R4-Z2		7.428													
	34R6-Z2		7.445													
24A-Z	24A4-Z2	5.0	6.890	2.42	Yes	24										
24A4-Z3/Z4	7.790															
33A-Z	33A3-Z2	5.8	6.895	3.39	3.42	1.56	.500	Flat/Key	.29	1.125	2.652	.582	1.326	[4]10-32 UNF-2B x .46 deep on a 3.75 B.C.	Yes	12 or 24
	33A3-Z3		7.795													
22B-Z	22B3-Z2	5.25	6.326	2.378											Yes	12 or 24
	22B2-Z4	4.75	6.746													
	22B3-Z4	5.25	7.226													
22B-Z INTEGRA	22B3-Z2	5.3	7.435	2.93	No	None										
	22B3-Z3	5.3	8.335													
	22B2-Z4	4.8	7.885													
<b>Type WX Gearmotor</b>																
34R-WX	34R6-WX	12.0	8.956	4.02	4.06	2.0	.625	Key	.56	1.31	3.375	.863	1.688	[4]1/4 -28 UNF-2B x .50 deep on a 4.78 B.C.	No	12
33A-WX	33A5-WX	9.7	8.665	3.385											Yes	24
34B-WX	34B3-WX	4.8	6.473	4.02											Yes	12 or 24
<b>Type E/F &amp; FX Gearmotor</b>																
34R-FX	34R4-FX	11.0	8.112	4.02	4.64	2.0	.750	Key	.37	1.536	3.625	.913	1.813	[4]1/4 -28 UNF-2B x .50 deep on a 5.13 B.C.	No	12
42R-FX	42R5-FX	14.5	9.128	4.73												
	42R6-FX	16.5	9.565													
48R-FX	48R6-FX	26.0	10.487	5.90											Yes	24
42A-FX	42A5-FX	14.9	9.323	4.26												
34B-E/F	34B3-E	11.0	6.629	4.02											Yes	12 or 24
	34B4-E/F	12.0	7.129													
	34B6-F	14.0	8.129		Yes											

Only the first four characters of the product type are relevant to dimensions.