

- FX and F-type: hardened helical gearing for quietness and high output to size ratio
- Unvented gearhousing for universal horizontal mounting
- Models with accessory shafts are ideal for mounting encoders or brakes
- Page 36: capacitors and accessories
- Page 39: reference dimensions

Variable Speed—Pacesetter Inverter Duty AC Gearmotors

Fixed Speed Rating						Variable Speed (SOA) Ratings ¹						Product Type	230V Model No.	230/460V Model No.	
Speed (rpm)	Torque (lb-in.)	HP	(230V) Amps	(230/460V) Amps	Gear Ratio	Speed Range (rpm)	Frequency Range (Hz)	Torque Type	Torque @ 10 Hz (lb-in.)	Torque @ 60 Hz (lb-in.)	Torque @ 90 Hz (lb-in.)				
34R-FX Pacesetter Gearmotor															
Three-Phase, Inverter Duty, Non-synchronous (TEFC)															
5.7	350	1/6	1.0	1.0/0.5	300	0.4-7.3	10-90	constant	350	350	350	34R4BFPP-FX4	2256	2856	
9.4	350					180		0.7-12	constant	350	350	350	34R4BFPP-FX4	2250	2850
19	350					90		1.3-24	constant	350	350	350	34R4BFPP-FX4	2251	2851
28	321					60		2.0-36	variable	256	350	350	34R4BFPP-FX3	2252	2852
57	160					30		4.0-73	variable	128	255	221	34R4BFPP-FX3	2253	2853
170	53					10		12-218	variable	43	85	74	34R4BFPP-FX2	2254	2854
340	28					5		24-436	variable	22	44	38	34R4BFPP-FX1	2255	2855
42R-FX Pacesetter Gearmotor															
Three-Phase, Inverter Duty, Non-synchronous (TEFC)															
57	270	3/8	1.9	1.9/0.95	30	5.9-77	10-90	constant	270	270	270	42R6BFPP-FX3	2260	2860	
85	240					20		8.8-115	variable	187	240	240	42R6BFPP-FX3	2261	2861
113	184					15		12-153	variable	140	186	186	42R6BFPP-FX2	2264	2864
170	123					10		18-229	variable	93	124	124	42R6BFPP-FX2	2262	2862
340	58					5		35-459	variable	48	58	58	42R6BFPP-FX1	2263	2863



Type 34R-FX Inverter Duty



Type 42R-FX Inverter Duty

Fixed Speed—AC Gearmotors

Speed (rpm)	Rated Torque (lb-in.)	Motor HP	V	Hz	Ph	Amps	Gear Ratio	Radial Load (lbs.)	Capacitor (µF/VAC)	Product Type	Model Number
42R-FX Fixed Speed AC Gearmotors											
Permanent Split Capacitor, Three-Wire Reversible, Non-Synchronous CAPACITOR IS REQUIRED											
5.7	350	1/4	115	60	1	2.9	300	200	45.0/250	42R6BFCSI-FX4	5671
9.4	350						180	200		42R6BFCSI-FX4	5669
14	350						120	200		42R6BFCSI-FX4	5668
28	350						60	200		42R6BFCSI-FX3	5685
57	243						30	300		42R6BFCSI-FX3	5683
85	162						20	300		42R6BFCSI-FX3	5681
115	122						15	300		42R6BFCSI-FX2	5682
170	81	10	300	42R6BFCSI-FX2	5680						
340	42	5	60	42R6BFCSI-FX1	5679						
48R-FX Fixed Speed AC Gearmotor											
Permanent Split Capacitor, Non-synchronous CAPACITOR IS REQUIRED											
57	270	1/3	115/230	60	1	4.0/2.0	30	300	115V=20.0/370 230V=12.5/370	48R6BFCSI-FX3	5694
85	218						20	300		48R6BFCSI-FX3	5693
113	164						15	300		48R6BFCSI-FX2	5695
170	109						10	300		48R6BFCSI-FX2	5692
340	56						5	60		48R6BFCSI-FX1	5691
48R-FX Fixed Speed AC Gearmotor											
Split Phase (with centrifugal switch), Non-synchronous											
57	270	1/3	115/230	60	1	4.8/2.4	30	300	—	48R6BFCSI-FX3	0664
85	218						20	300		48R6BFCSI-FX3	0663
170	109						10	300		48R6BFCSI-FX2	0662
340	56						5	60		48R6BFCSI-FX1	0661



Type 42R-FX



Type 48R-FX

¹ SOA: Contact the factory for detailed speed/torque information (Safe Operating Area). See page 21; ² The fifth character of the product type changes from "B" to "F" for accessory ready models; ³ Type FV INTEGRAmotors require a PWM signal from a motion controller or PLC to operate; ** INTEGRAmotor can be ordered with either analog (/SR) or digital (/FV) interface option

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 ²	Accy Shaft	No Accy Shaft	Accy Shaft	No Accy Shaft
										12/24V	90/130V		
42A-FX Gearmotor													
90/130V Class F Temperature Rating													
6 / 8	350 / 350	2.1 / 2.8		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			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
12/24V Class F Temperature Rating													
3 / 8	350	14		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			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	—	—



Type 42A5-FX

SCR Rated – Permanent Magnet DC Gearmotors

Speed (rpm) ¹	Rated Torque (lb-in.)	Rated Current (Amps)		Form Factor		Motor HP		Gear Ratio	Peak Torque (lb-in.)	Radial Load (lbs.)	Product Type	Model Number	
		90V	180V	90V	180V	90V	180V					90V	180V
8.3	350	2.2	1.2	1.5	1.6	1/4	1/4	300	500	214	42A5BEPM-FX4	1510	5149
14	350							180	500	214	42A5BEPM-FX4	1509	5148
21	350							120	500	214	42A5BEPM-FX4	1508	5147
42	290							60	470	233	42A5BEPM-FX3	1507	5146
63	194							40	335	254	42A5BEPM-FX3	1506	5145
83	145							30	400	281	42A5BEPM-FX3	1505	5144
125	97							20	280	292	42A5BEPM-FX3	1504	5143
167	73							15	290	300	42A5BEPM-FX2	1503	5142
250	48							10	195	300	42A5BEPM-FX2	1502	5141
500	25							5	72	48	42A5BEPM-FX1	1501	5140



Type 42A5-FX / SCR Rated

90V and 180VDC gearmotors with a maximum rated armature speed of 2500 rpm.

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 ^{2,3}	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	—	3575	—	3375
14	350	9.6	1.6	475	1/5	180	200	34B3BEBL-FX4	—	3574	—	3374
21	350	9.6	1.6	475	1/5	120	195	34B3BEBL-E4	—	3573	—	3373
42	270	12	2.0	421	1/4	60	240	34B4BEBL-E3	3685	3585	3485	3385
83	245	—	2.6	475	3/8	30	250	34B6BEBL-F3	—	—	—	3372
83	135	12	2.0	318	1/4	30	300	34B4BEBL-E3	3683	3583	3483	3383
125	163	—	2.6	333	3/8	20	290	34B6BEBL-F3	—	—	—	3371
125	90	12	2.0	220	1/4	20	300	34B4BEBL-E3	3682	3582	3482	3382
250	82	—	2.6	166	3/8	10	300	34B6BEBL-F2	—	—	3470	3370
250	45	12	2.0	106	1/4	10	300	34B4BEBL-E2	3680	3580	3480	3380
500	42	—	2.6	66	3/8	5	60	34B6BEBL-F1	—	—	—	3369
500	28	12	2.0	55	1/4	5	60	34B4BEBL-FX1	—	3579	—	3379



Type 34B-E/F

INTEGRAmotor BLDC Gearmotors

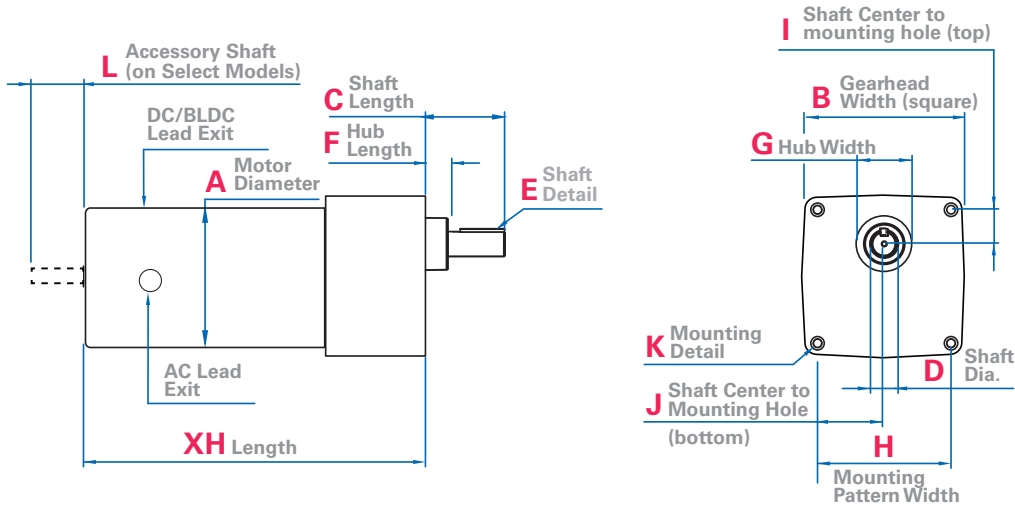
Speed (rpm)	Rated Torque (lb-in.)	24V Rated Current (Amps)	Peak Torque (lb-in.)	Motor HP	Gear Ratio	Radial Load (lbs.)	Product Type	Model Number ⁴
14	341	12	475	1/4	180	200	34B4FEBL/FV-F4	3771
42	327		421		60	240	34B4FEBL/FV-F3	3773
63	218		350		40	240	34B4FEBL/FV-F3	3774
83	163		318		30	300	34B4FEBL/FV-F3	3775
125	109		220		20	300	34B4FEBL/FV-F3	3776
250	54		106		10	300	34B4FEBL/FV-F2	3778
500	28		55		5	60	34B4FEBL/FV-F1	3779



Type 34B/FV-F INTEGRAmotor

¹ SOA: Contact the factory for detailed speed/torque information (Safe Operating Area). See page 21; ² The fifth character of the product type changes from "B" to "F" for accessory ready models; ³ E-type only: selectively hardened all steel helical gears for long life; ⁴ Type FV INTEGRAmotors require a PWM signal from a motion controller or PLC to operate; Most FX models ship within 2-5 business days.

Blue Model Numbers: These items were upgraded to "FX" gear train and ratings. Visit our website for detailed specifications.



Gearhead Type Z, WX, FX pages 6-10

	Product Type	Wt. (lbs.)	XH Length	A Diameter (Height)	B Width	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.)										
Type Z Gearmotor																										
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	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.	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	5.8	7.795																							
	33A5-Z2	6.8	7.960																							
	33A5-Z3	6.8	8.860																							
22B-Z	22B3-Z2	5.25	6.326	2.378	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										
	22B2-Z4	4.75	6.746																							
	22B3-Z4	5.25	7.226																							
22B-Z INTEGRA	22B3-Z2	5.3	7.435	2.93	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.	No	None										
	22B3-Z3	5.3	8.335																							
	22B2-Z4	4.8	7.885																							
Type WX Gearmotor																										
34R-WX	34R4-WX	10.0	7.956	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										
	34R6-WX	12.0	8.956														4.02									
33A-WX	33A5-WX	9.7	8.665	3.385	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.	Yes	24										
34B-WX	34B3-WX	4.8	6.473	4.02																						
Type E/F & FX Gearmotor																										
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	4.73																						
48R-FX	48R6-FX	26.0	10.487	5.90													4.64	2.0	.750	Key	.37	1.536	3.625	.913	[4]1/4 -28 UNF-2B x .50 deep on a 5.13 B.C.	No
42A-FX	42A5-FX	14.9	9.323	4.26																						
34B-E/F	34B3-E	11.0	6.629	4.02	4.64	2.0	.750	Key	.37	1.536	3.625	.913	[4]1/4 -28 UNF-2B x .50 deep on a 5.13 B.C.	No	24											
	34B4-E/F	12.0	7.129													4.02										
	34B6-F	14.0	8.129	4.02	4.64	2.0	.750	Key	.37	1.536	3.625	.913	[4]1/4 -28 UNF-2B x .50 deep on a 5.13 B.C.	Yes	12 or 24											
	34B6-F	14.0	8.129	4.02																						