

- Unvented gearhousing for universal horizontal mounting
- Hardened helical output gearing
- Bronze worm gear for high shock load capability
- Hardened and ground worm hobbled on the motor shaft for high strength and long life
- Models with accessory shafts are ideal for mounting encoders or brakes
- See page 34 for capacitors and terminal boxes
- See pages 39 and 40 for reference dimensions

Variable Speed—Pacesetter Inverter Duty AC Gearmotors

Fixed Speed Rating					Variable Speed (SOA) Ratings ¹							Product Type	230V Model Number
Speed (rpm)	Torque (lb-in.)	Motor HP	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.)			
Three-Phase, Inverter Duty, Non-synchronous (TEFC)													
6	380	3/8	1.9	280	0.6-8.2	10-90	constant	380	380	380	42R6BFPP-GB	N2236	
14	290			120	1.5-19			290	290	290		2237	
28	230			60	3.0-38			230	230	230		N2238	
Hollow Shaft													
6	380	3/8	1.9	280	0.6-8.2	10-90	constant	380	380	380	42R6BFPP-GB/H	2336	
14	290			120	1.5-19			290	290	290		N2337	
28	230			60	3.0-38			230	230	230		N2338	



Type 42R-GB and 42R-GB/H Hollow Shaft (Pacesetter)

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
Permanent Split Capacitor, Non-synchronous											
5.9	380	1/6	115	60	1	2.0	280	200	25.0/370	42R5BFCL-GB	5266
8.9	375										N5264
14	290										5262
21	278										N5261
28	209										5260
Three-phase, Non-synchronous											
5.9	380	1/4	230/460	60	3	1.2/0.6	280	200	—	42R5BFPP-GB	N5276
8.9	375										N5274
14	290										N5272
21	307										N5271
28	230										N5270
Permanent Split Capacitor, Non-synchronous Hollow Shaft											
5.9	380	1/6	115	60	1	2.0	280	200	25.0/370	42R5BFCL-GB/H	N8266
8.9	375										N8264
14	290										N8262



Type 42R-GB and 42R-GB/H Hollow Shaft

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	
		24V	90/130V							24V	90/130V		
33A-GB 90/130V Models With Class F Temperature Rating													
6.2 / 8.9	380 / 380	—	1.4 / 1.8	600	1/8 / 1/4	1.4 / 1.0	280	200	33A5BEPM-GB	—	—	—	6066
9.1 / 13	358 / 375			600									6064
14 / 21	251 / 290			464									6062
29 / 42	151 / 200			368									6060
90/130V Hollow Shaft													
6.2 / 8.9	380 / 380	—	1.4 / 1.8	600	1/8 / 1/4	1.4 / 1.0	280	200	33A5BEPM-GB/H	—	—	—	7066
9.1 / 13	358 / 375			600									7064
14 / 21	251 / 290			464									7062
29 / 42	151 / 200			368									7060
42A-GB 130 V Models With Class B Temperature Rating													
8.9	380	8.8	1.8	600	1/4	1.0	280	200	42A5BEPM-GB	24V		130V Only	
13	375									N4866	N4766	N4466	4066
21	290									N4864	N4764	N4464	4064
42	213									N4862	N4762	N4462	4062
				368			60			N4860	N4760	N4460	4060



Type 33A-GB



Type 33A-GB/H Hollow Shaft

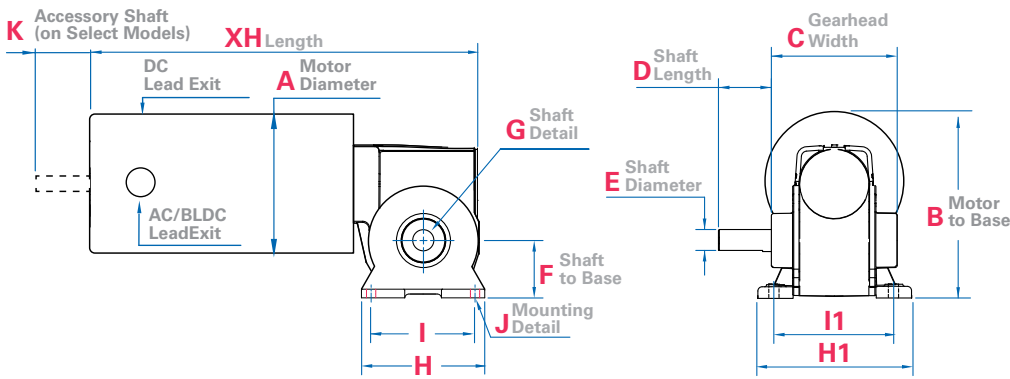


Type 42A-GB

¹ SOA: Contact the factory for detailed speed/torque information (Safe Operating Area). See page 19.
² The fifth character of the product type changes from "B" to "F" for accessory ready models.
 "N" model numbers require lead time and minimum quantities.

Save Time, Space and Money with Hollow Shaft Gearmotors

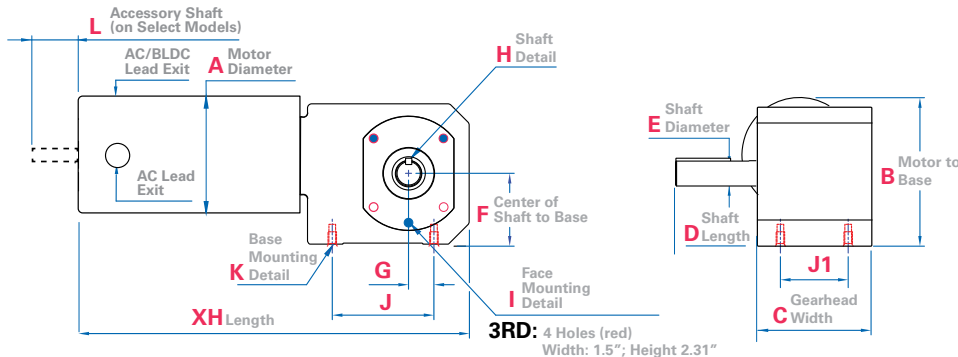
Hollow shaft gearmotors connect directly to the driven load, reducing the overall space required by the gearmotor and eliminating expensive shaft couplings, mounting hardware, chains and sprockets. Hollow shaft flange mounting can also eliminate the need for a support bearing one side of a conveyor roller.



Gearmotor Type 5N, 5F, 5H, pages 14-16 (Mounts from Gearhead with Feet)

	Product Type	Wt. (lbs.)	XH Length	A Dia-meter	B Motor to Base	C Gearhead Width	D Shaft Length	E Shaft Diameter	F Shaft to Base	G Shaft Detail	H Base Length	H1 Base Width	I Mounting Hole Length	I1 Mounting Hole Width	J Mounting Detail	K Acc'y Shaft	Cord/Lead Length (in.)										
Type 5N Gearmotor																											
42R-5N	42R5-5N	15.5	10.103	4.73	5.64	3.568	1.50	.625	1.67	Key/Flat	3.56	3.81	3.00	3.25	[4]ø .271/.266 Holes	No	12										
	42R6-5N	17.5	10.540													Yes	24										
42A-5N	42A5-5N	14.3	10.198	4.62	5.40											4.723	2.38	.750	3.000	Key	5.62	6.263	3.875	5.373	[4]ø.41/.44 Holes	No	12
	34B3-5N	9.0	7.723	4.02	5.26																					Yes	12 or 24
	34B4-5N	10.0	8.223																							No	
34B6-5N	12.0	9.233			Yes											24											
Type 5F Gearmotor																											
34R-5F	34R6-5F	12.0	10.206	4.02	5.28	4.723	2.38	.750	3.000	Key/Flat	3.56	3.81	3.00	3.25	[4] ø.271/.266 Holes	No	12										
33A-5F	33A5B-5F	9.9	9.711	3.39	4.96											Yes	24										
	33A5F-5F	9.9	9.701													No											
Type 5H Gearmotor																											
48R-5H	48R6-5H	40.0	12.928	5.90	8.07	4.723	2.38	.750	3.000	Key	5.62	6.263	3.875	5.373	[4]ø.41/.44 Holes	No	12										
42A-5H	42A7-5H	24.4	12.947	4.26	7.25											Yes	24										

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



Gearhead Type 3RD, GB, pages 16-17

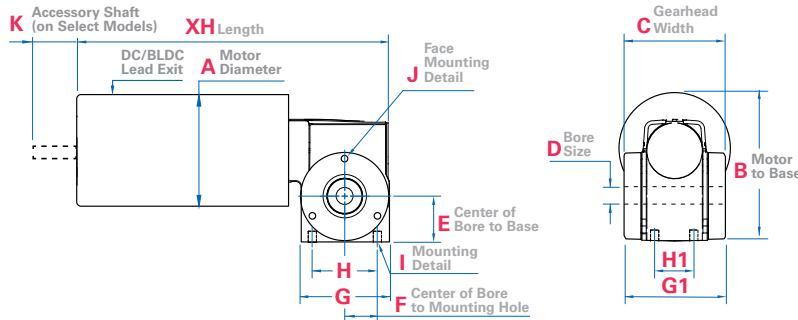
3RD: 4 Holes (red)
Width: 1.5"; Height 2.31"
GB: 3 Holes (blue)

	Product Type	Wt. (lbs.)	XH Length	A Dia-meter	B Motor to Base	C Gear-head Width	D Shaft Length	E Shaft Diameter	F Shaft to Base	G Shaft to Mounting Hole Center	H Shaft Detail	I Face Mounting Detail	J Mounting Hole Length	J1 Mounting Hole Width	K Base Mounting Detail	L Acc'y Shaft	Cord/Lead Length (in.)										
Type 3RD Gearmotor																											
30R-3RD	30R2	9.0	8.140	3.36	4.812	3.60	1.50	.500	1.562	.625	Flat	[4]10-32 UNF-2B x .31 Deep Min.	2.000	2.50	[4]1/4 -20 UNF-2B .31 deep	No	12										
	30R4	10.5	8.640													Yes	24										
24A-3RD	24A2	9.0	8.07	2.42	4.147											4.723	2.38	.750	2.150	.75	Key	[3]5/16 -18 UNF-2B x .50 Deep Max. on 2.913 B.C.	3.00	2.00	[4]1/4 -20 UNF-2B .40 Deep Min.	Yes	12
	24A4	10.5	8.82																							No	24
22B-3RD	22B2	6.5	8.085	2.378	4.377																					2.362	.748
	22B4	6.5	9.045													Yes	24										
Type GB Gearmotor																											
42R-GB	42R5	17.5	11.458	4.73	5.06	3.335	2.38	.750	2.150	.75	Key	[3]5/16 -18 UNF-2B x .50 Deep Max. on 2.913 B.C.	3.00	2.00	[4]1/4 -20 UNF-2B .40 Deep Min.	No	12										
	42R6	19.5	11.893													Yes	12										
33A-GB	33A5	13.6	11.067	3.39	4.38											4.723	2.38	.750	2.150	.750	Key	[3]5/16 -18 UNF-2B x .50 Deep Max. on 2.913 B.C.	3.00	2.00	[4]1/4 -20 UNF-2B .45 Deep Min.	Yes	12
	33A7	14.9	12.268																							No	24
42A-GB	42A5	18.0	11.554	4.26	4.82																					2.38	.750

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

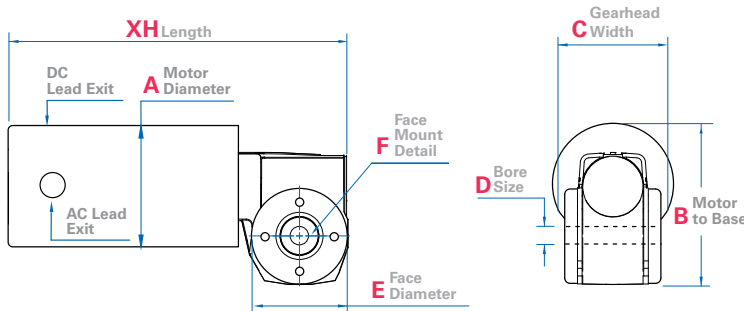
Hollow Shaft Gearmotor Dimensions

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



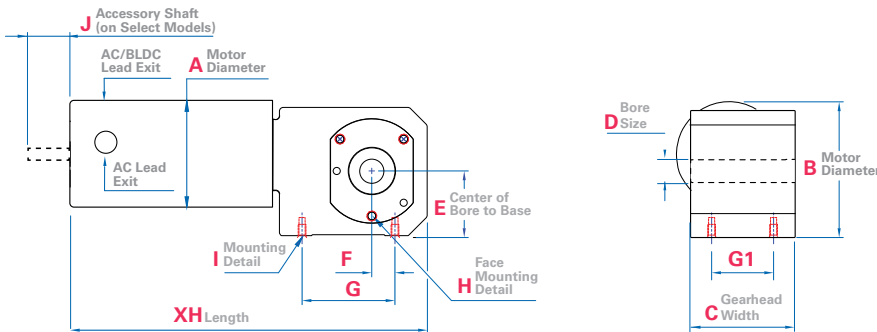
Gearhead Type 3F/H, pages 12-13 (Mounts from Gearhead)

	Wt. (lbs.)	XH Length	A Diameter	B Motor to Base	C Gearhead Width	D Bore Size	E Bore to Base	F Bore to Mtg. Hole	G Base Length	G1 Base Width	H Mounting Hole Length	H1 Mounting Hole Width	I Mounting Detail	J Face Mount Detail	K Acc'y Shaft	Cord/Lead Length (in.)
24A4-3F/H	5.3	7.422	2.42	3.57	3.085	.502	1.280	1.000	2.56	3.085	2.00	1.188	[4] 1/4 -20 UNF-2B .35 Min. Deep Max.	[3] 10-32 UNF-2B .35 Min. Deep on 2.125 B.C.	Yes	24
22B4-3F/H	5.4	7.677	2.378	3.80											No	12 or 24
22B4-3F/H INTEGRA	5.4	8.79	2.93	3.823											No	None



Gearhead Type 5L/H, page 14 (Face Mount)

	Product Type	Weight (lbs.)	XH Length	A Diameter	B Motor to Base	C Gearhead Width	D Bore Size	E Face Diameter	F Face Mount Detail	Lead/Cord Length (in.)
33A-5L/H	33A5		9.711	3.39	5.04	2.740	.627	3.50	[4] 1/4-20 UNF-2B x .44 Min. Deep on 2.375 B.C.	24
42R-5L/H	42R6		10.540	4.73	5.71					None



Type GB/H, page 17 (Face Mount)

	Product Type	Wt. (lbs.)	XH Length	A Diameter	B Motor to Base	C Gearhead Width	D Bore Size	E Bore to Base	F Bore to Base	G Mounting Hole Length	G1 Mounting Hole Width	H Face Mounting Detail	I Mounting Detail	J Acc'y Shaft	Lead/Cord Length (in.)
42R-GB/H	42R5	17.5	11.456	4.73	5.06	3.335	.752	2.150	.75	3.00	2.00	[3] 5/16-18 UNF-2B x .44 Max. Deep on 2.913 B.C.	[4] 1/4-20 UNF-2B x .40 Min. Deep	No	12
	42R6	19.5	11.893											No	24
33A-GB/H	33A5	13.6	11.067	3.39	4.38									No	24
42A-GB/H	42A5	19.5	11.554	4.26	4.82									Yes	24

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