

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class B insulation system operated within Class A limits to prolong winding and lubricant life
- Locked bearing design minimizes shaft endplay
- Locked bearing design on 30R, 34R, 42R, and 48R minimizes shaft endplay
- See page 34 for capacitors and accessories
- See pages 41 and 42 for reference dimensions

Fixed Speed—Type K-2 1/1600-1/200 HP



Type K-2

Speed (rpm)	Rated Torque (oz-in.)	HP	V	Hz	Ph	Amps	Radial Load (lbs.)	Capacitor (μF/VAC)	Product Type	Model Number
Permanent Split Capacitor, Non-synchronous CAPACITOR IS INCLUDED										
1550	1.4	1/450	115	60		0.08		1.0/250	KCI-23	0705
1550	2.2	1/300	115	60	1	0.104	5.7	1.3/250	KCI-24	0712
1550	3.2	1/200	115	60		0.124		1.6/250	KCI-26	0713
Permanent Split Capacitor, High Slip, Non-synchronous CAPACITOR IS INCLUDED										
1200	1.1	1/800	115	60	1	0.082	5.7	1.0/250	KCI-23	0707
	1.8	1/450				0.098		1.2/250	KCI-24	0714
Permanent Split Capacitor, Synchronous CAPACITOR IS INCLUDED										
1800	0.35	1/1600				0.077		1.0/250	KYC-23	0701
1800	0.62	1/900	115	60	1	0.091	5.7	1.3/250	KYC-24	0709
3600	0.31	1/900				0.102		1.6/250	KYC-24	0710

Fixed Speed—Type 30R 1/40-1/30 HP



Type 30R

Speed (rpm)	Rated Torque (oz-in.)	HP	V	Hz	Ph	Amps	Radial Load (lbs.)	Capacitor (μF/VAC)	Product Type	Model Number
Permanent Split Capacitor, Non-synchronous CAPACITOR IS REQUIRED										
1700	20					0.45	18	5.0/250		5240
3400	10	1/30	115	60	1	0.47			30R2BECI	5219
Permanent Split Capacitor, High Slip, Synchronous CAPACITOR IS REQUIRED										
1800	14	1/40	115	60	1	0.52	18	5.0/250	30R2BEYC	5246

Fixed Speed—Type 34R 1/15-1/5 HP



Type 34R

Speed (rpm)	Rated Torque (oz-in.)	HP	V	Hz	Ph	Amps	Radial Load (lbs.)	Capacitor (μF/VAC)	Product Type	Model Number
Permanent Split Capacitor, Three-Wire Reversible, Non-Synchronous CAPACITOR IS REQUIRED										
1700	85	1/7	115	60	1	1.7		27.5/250		0294
1400/1700	74	1/8	230	50/60	1	0.8/0.7	50	6.0/450	34R6BFCI	0296
Permanent Split Capacitor, Non-synchronous CAPACITOR IS REQUIRED										
1700	39	1/15				1		10.0/250	34R4BFCI	0290
1700	65	1/9	115	60	1	1.4	50	12.5/250	34R6BFCI	0291
3400	42	1/7				1.75		15.0/250	34R6BFCI	0293
Permanent Split Capacitor, Synchronous CAPACITOR IS REQUIRED										
1800	38	1/15	115	60	1	1.5	50	15.0/250	34R6BFYC	N0297
Three-phase, Non-synchronous										
1700	119	1/5	230	60	3	1.2	50	—	34R6BFPP	0295
Three-phase, Synchronous										
1800	70	1/8	230	60	3	1.4	50	—	34R6BFYP	0299

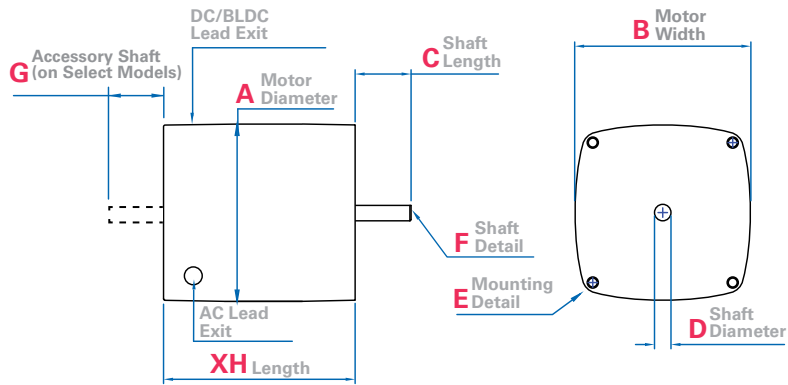
Common Abbreviations

BLDC	Brushless DC
FF	Form Factor—A measurement which indicates to what degree rectified current departs from pure DC. A higher form factor increases the heating effect of the motor and reduces brush life. ¹
IP-44	Ingress Protection Rating—Protection against sprays from all directions—limited ingress permitted. ²
NEMA-12	Enclosures (without knockouts) for indoor use. Provides a degree of protection to personnel against access to hazardous parts and to the equipment inside against ingress of solid objects, and lightly splashed liquids. ³
NEMA-4	Enclosures constructed for either indoor or outdoor use. Protects personnel against access to hazardous parts. Protects equipment inside the enclosure against ingress of solid objects and rain, sleet, snow, splashing water, and hose-directed water. ³
PMDC	Permanent magnet DC
TEFC	Totally enclosed, fan cooled
TENV	Totally enclosed, non-ventilated

1. Bodine Handbook, fifth edition. Chicago, 1993; 2. American National Standards Institute ANSI/IEC 60529-2004; 3. NEMA.org, NEMA 250-2003

Motor Dimensions

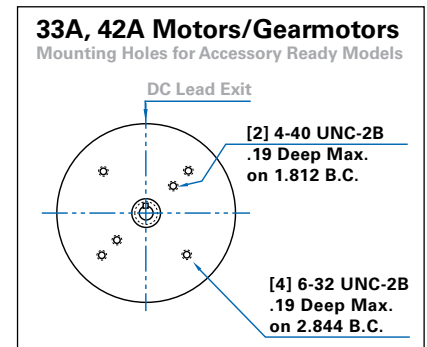
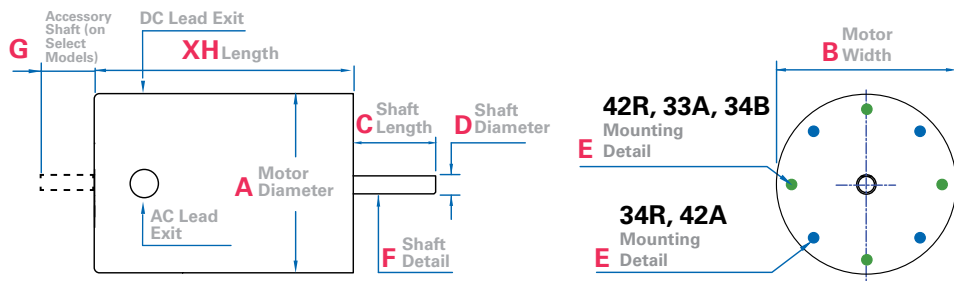
Dimensions (in inches) are for reference only. For CAD drawings and up-to-date specifications, please visit www.bodine-electric.com.



Motor Type K-2, 30R, 22B, pages 18-19, 23

	Product Type	Weight (lbs.)	XH Length	A Diameter Square	B Width	C Shaft Length	D Shaft Diameter	E Mounting Detail	F Shaft Detail	G Acc'y Shaft	Lead/Cord Length (in.)
K-2	K2-23	1.6	1.827	2.38	2.38	.62	.188	[4] 8-32 UNC-2B x .18 Deep Max. on 2.687 B.C.	Flat	No	12
	K2-24	1.9	2.20								
	K2-26	2.2	2.50								
K-2 Torque Motor	Model 0621	2.2	2.484								
30R	30R2	4.75	3.665	3.34	3.34	1.06	.313	[4]10-32 UNF-2B x .32 deep Max. on 3.75 B.C.	Flat	Yes	12
	30R4										
30R Torque Motor	Model 5625										
22B	22B2	2.5	3.610	2.378	2.378	.94	.375	[4] 8-32 UNC-2B x .35 Deep Max. on 2.625 B.C.	Flat	Yes	12 or 24
	22B4	3.5	4.570							No	None
22B INTEGRA	22B2	2.5	4.719	2.93	2.93						
	22B4	3.5	5.679								

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



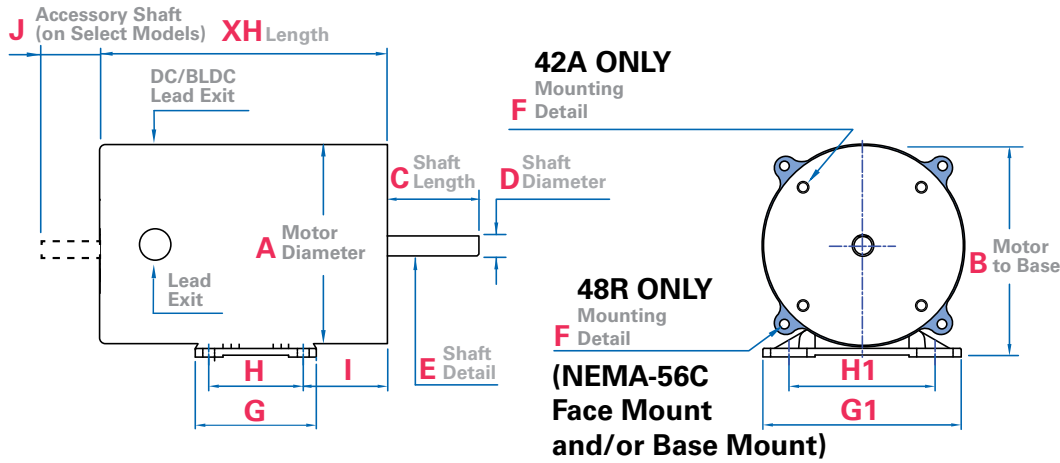
Motor Type 34R, 42R, 33A, 42A, 34B, pages 19-23 (Face Mount)

	Product Type	Weight	XH Length	A Diameter	B Width (PMDC)	C Shaft Length	D Shaft Diameter	E Mounting Detail	F Shaft Detail	G Acc'y Shaft	Lead/Cord Length (in.)
34R	34R4	9.0	5.526	4.02	—	1.25	.375	[4] 1/4-20 UNC-2B x .31 Min. Deep on 2.75 B.C.	Flat	No	12
	34R6		6.526								
42R	42R3	7.75	5.616	4.73	—	1.38	.375	[4] 1/4-20 UNC-2B x .31 Min. Deep on 3.75 B.C.	Flat	No	12
	42R5	11.0	6.679								
	42R6	13.0	7.116								
33A	33A3	5.1	5.140	3.39	3.75	1.48	.375	[4] 10-32 UNF-2B x .25 Min. Deep on 2.75 B.C.	Flat	Yes	24
	33A5	6.28	6.200	3.39	3.75	1.48	.500				
	33A7	7.45	7.401								
42A NEMA 42C	42A5	11.3	6.656	4.26	4.25	1.62	.500	[4] 1/4-20 UNC-2B x .31 Min. Deep on 3.75 B.C.	Flat	Yes	24
	42A7	14.5	7.781			1.31			Flat/Key		
42A NEMA 42CZ	42A5	11.3	6.656								
	42A7	14.5	7.781								
34B	34B3	6.0	4.043	4.02	—	1.625	.500	[4] 1/4-20 UNC-2B x .31 Min. Deep on 2.75 B.C.	Flat	Yes	12 or 24
	34B4	7.0	4.543								
	34B6	9.0	5.543								

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

Motor Dimensions

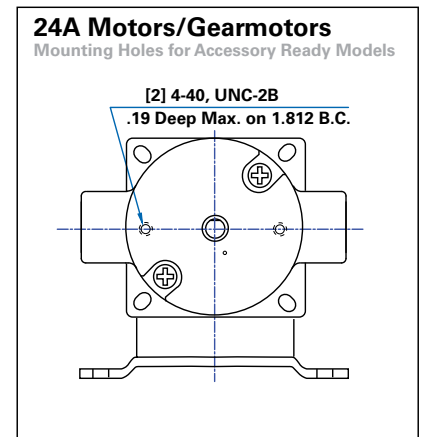
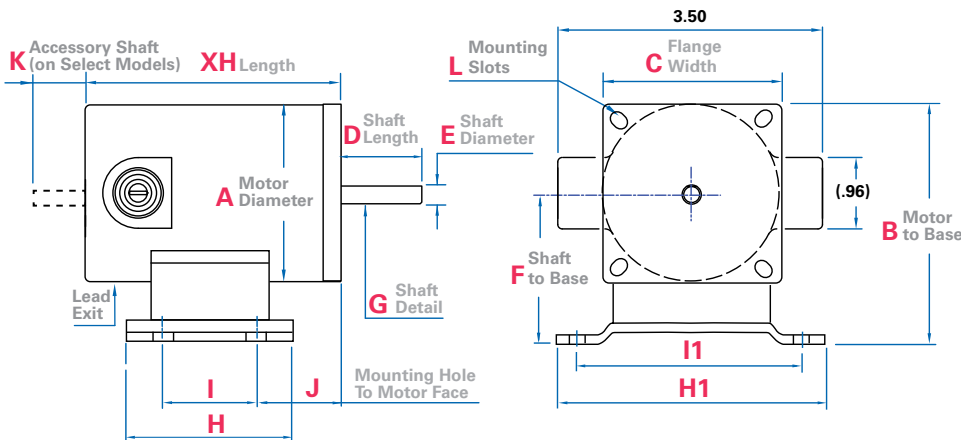
Dimensions (in inches) are for reference only. For CAD drawings and up-to-date specifications, please visit www.bodine-electric.com.



Motor Type 42R, 48R, 42A, pages 18-22 (Base Mount)

	Product Type	Weight (lbs.)	XH Length	A Diameter	B Motor to Base	C Shaft Length	D Shaft Diameter	E Shaft Detail	F Face Mount Detail	G Base Length	G1 Base Width	H Mtg. Hole Length	H1 Mtg. Hole Width	I Base Mtg. to Face	J Acc'y Shaft	Lead/Cord Length (in.)
42R	42R3	7.8	5.616	4.73	4.999	1.38	.375	Flat	Base mount 42R motors have no face mounting holes	2.88	4.75	2.25	3.50	1.572	None	12
	42R5	11	6.679													
	42R6	13	7.116													
42R Torque Motor	Model 2628	12.5	6.201	4.62	4.93	1.31	.375	Flat	[4] 1/4-20 UNC-2B x .31 Max. Deep on 3.75 B.C.	2.88	4.75	2.25	3.50	1.569	1.56	12
48R	48R5	17.0	7.329	5.90	5.85	2.06	.625	Key	[4] 3/8-16 UNC-2B x .50 Max. Deep on 5.875 B.C.	3.50	5.75	2.75	4.25	1.446	None	12
	48R6	20.0	7.797													
48R Torque Motor	Model 0632	20.5	6.676	5.73	5.85	2.06	.625	Key	[4] 3/8-16 UNC-2B x .50 Max. Deep on 5.875 B.C.	3.50	5.75	2.75	4.25	1.446	2.00	12
42A	42A5	11.3	6.656	4.26	4.77	1.62	.500	Flat	[4] 1/4-20 UNC-2B x .31 Max. Deep on 3.75 B.C.	2.88	4.75	2.25	3.50	1.471	1.28	24
	42A7	14.5	7.781													

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



Motor Type 24A, page 22 (Base/Flange Mount)

	Product Type	Wt. (lbs.)	XH Length	A Diameter	B Motor to Base	C Flange Width	D Shaft Length	E Shaft Diameter	F Shaft to Base	G Shaft Detail	H Base Length	H1 Base Width	I Base Mounting Hole Length	I1 Base Mounting Hole Width	J	K Acc'y Shaft	L Mounting Slots	Lead/Cord Length (in.)
24A	24A0	2.0	3.240	2.42	3.185	2.41	.94	0.312	1.98	Flat	2.25	3.62	1.25	3.00	.625	Yes	0.181W x 0.257L on 2.764 B.C.	24
	24A2	2.5	3.870												1.62			
	24A4	3.0	4.620												1.81			

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