

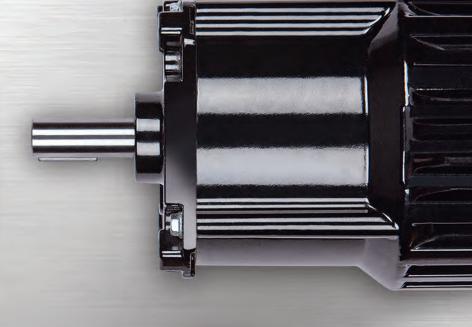




# STANDARD PRODUCTS

AC PMDC BLDC **METRIC GEARMOTORS AND MOTORS** 



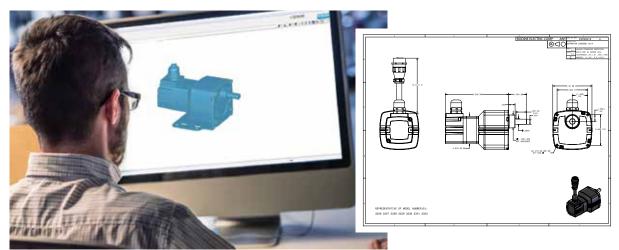






### For 2D/3D CAD drawings and distributor locations, go to www.bodine-electric.com

Our website features the latest product specifications, technical documents, connection diagrams and instruction manuals. Dimension drawings and 3D models can be imported from the website directly into most CAD software programs. You will also find information about Bodine's newest products, our distributor locator, and helpful Tech Tools designed to answer the most commonly asked motion control questions.



### **UL/CSA Safety Compliance**

Products are marked cURus or UR/CSA, and most products meet CE. All products are also



RoHS compliant.

conform to UL standard 1004 and CSA standard C22.2 No. 100. They are documented in UL file number E47177 and Motors and gearmotors CSA file number LR2797.

Electronic controls conform to UL standard 508 and CSA standard C22.2 No. 14. They are documented in UL file number E44529 and CSA file number LR26397.

### **Motor Options**

For the comparative advantages of AC motors and gearmotors, see page 21.

#### Variable speed

#### **Pacesetter AC motors**

 Voltage ratings are 230 VAC, 60 Hz (3-phase) or 230/460 VAC, 60 Hz (3-phase)

#### **Fixed-speed AC motors**

- Voltage ratings are 115 VAC, 60 Hz (single-phase) or 230 VAC, 60 Hz (3-phase)
- Metric voltage ratings are 230 VAC, 50 Hz (1- or 3-phase)

#### **Permanent Magnet DC motors**

- Voltage ratings are 12/24 VDC, 24 VDC, 90/130 VDC or 130 VDC
- Metric voltage rating is 180 VDC
- Compatible with 90 V controls (90/130 VDC and 130 VDC only)

#### **Brushless DC (ECM) motors**

• Voltage ratings are 24 or 130 VDC

	Variabl In	e Speed verter D				Fixed-Speed AC					Permanent Magnet DC			Brushless DC		GRA OC
	30R	34R	42R	48R	K-2	K-2 30R 34R			48R	24A	33A	42A	22B	34B	22B	34B
Power (HP)	1/25-1/17	1/8-1/4	3/8	1/3-3/4	1/1600- 1/200	1/40-1/30	1/15-1/5	1/12-1/4	1/5-1/2	1/50-1/7	1/16-1/3	1/4-1/2	1/16-1/5	1/5-3/8	1/16-1/8	1/4
Torque (oz-in.)	24-35	70-148	222	185-445	0.35-3.2	10-20	38-119	48-148	112-296	8-24	34-134	101-180	20-50	33-151	25-50	100
Rated Speed (rpm)	1700	1700, 1800	1700	1700, 1800	1200, 1550, 1800, 3600	1700, 1800, 3400	1, 1800, 1700, 1800, 1 400 3400 3		1700, 1800	2500, 11,500	2500	2500	2500, 10,000	2500, 10,000	2500	2500

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CATALOG S **Bodine Electric Company** 

### **Table of Contents**

#### **Gearmotors**

Godiniotors				
TORQUE	GEARHEAD	SPECIFICATIONS	<b>DIMENSIONS</b>	
Inline and Parallel Shaft				
up to <b>226 lb-in.</b>	Type <b>60P</b>	4	36	- 1
up to <b>40 lb-in.</b>	Type <b>D</b>		36	- 4
up to <b>120 lb-in.</b>				9
up to <b>210 lb-in.</b>				
up to <b>350 lb-in.</b>				
up to <b>350 lb-in.</b>				
up to <b>1,000 lb-in.</b>				4
up to <b>1,000 lb-in.</b>				棴
up to <b>120 oz-in.</b>				1
•	,, , ,			
District Associa				
Right Angle				
up to <b>37 lb-in.</b>	Type 3N/3F		38	
up to <b>77 lb-in.</b>	Type <b>5R/5L</b>	13	38	
up to <b>121 lb-in.</b>				-
up to <b>121 lb-in.</b>				2
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#### **Motors Without Gearing**

MOTOR TYPE	POWER	SPECIFICATIONS	DIMENSIONS
Torque Motors	. from <b>3.5 to 68 oz-in.</b>	18	42
Variable Speed—AC Pacesetter			
Inverter Duty	. from 1/25 to 3/4 HP	19	42 🥤
Fixed Speed—AC Induction	. up to 1/2 HP	20	42
Permanent Magnet DC	. up to 1/2 HP	22	42
Brushless DC	. up to 1/2 HP	23	42
Direct Drive Brushless DC e-TORQ	. up to <b>3.5 HP</b>	23	43

 up to 148 lb-in.
 Type 3RD
 16
 39

 up to 296 lb-in.
 Type 5H
 16
 39

 up to 380 lb-in.
 Type GB
 17
 39

Hollow Shaft......40



#### **Motor Speed Controls**

Pacesetter AC Inverters (for 230VAC Motors)	24	43
DC Motor Speed Controls (for 12/24 and 90/130V Motors)	25	43
Brushless DC Controls (for 12/24V and 130V Motors)	28	43



Purchase a Bodine gearmotor and



Accessories 34

### Reference Drawings and Dimensions 36-43 speed control together and get our extended 2-year system warranty.

Metric Motors and Gearmotors

013
Type <b>60P</b> 4
. Type <b>A/T (K-2)</b>
. Type <b>D</b>
Type <b>Z</b>
Type <b>W</b>
Type <b>E/F</b> 31
Type <b>3F</b>
Type <b>5N/5F</b>
. Type <b>5H</b>
Type <b>GB</b>
. Fixed Speed—AC Induction 33
Permanent Magnet DC33



### Reference

Safe Operating Torque
and Speed Area19
Common Abbreviations20
Comparative Advantages of AC Motors and Gearmotors21
Speed Regulation of

Hollow Shaft Gearmotor Benefits . . . 17





### **Metric Motors** and Gearmotors

Our metric gearmotors and motors feature metric shafts and mounting configurations. AC metric motors are rated at 230 VAC / 50 Hz. Permanent magnet DC motors are available with voltage ratings of 180 VDC. Custom windings can be provided to match almost any international rating. We also offer a complete line of both AC and DC metric right angle and parallel shaft gearmotors.

#### Parallel Shaft Gearmotors – Metric

up to 0.67 Nm | Parallel Shaft Gearmotors-Metric

- · Metric mounting threads and shaft dimensions
- Three-wire winding simplifies reversing
- Impedance protected to prevent current overload (gearmotor should not be stalled when powered up)
- See page 34 for capacitors

Fixed Speed—AC Gearmotors Model **Product Type** Number CAPACITOR IS REQUIRED



Current **Rated Torque** Power Rated Freq. Radial Speed Gear Capacitor Ph (µF/VAC) (Amps) Ratio (rpm) oz-in. Nm ΗP Watts Voltage (Hz) Load (oz.) 95 0.67 180 KCI-26T4 N1757 42 75 0.53 30 KCI-26A2 N1754 1/300 2.8 230 50 1 0.06 20 0.4/440 69 45 0.31 18 KCI-26A2 N1753 210 15 0.11 6 KCI-26A2 N1752

up to 4.5 Nm | Parallel Shaft Gearmotors - Metric

D

- Metric mounting threads and shaft dimensions
- · Unvented gearhousing for universal horizontal mounting
- Helical primary gear for quietness and hardened steel spur gearing on subsequent stages for high output torque and long life
- See pages 34 and 35 for capacitors and accessories

#### Fixed Speed - AC Gearmotors

Speed	Rated	Torque			Rated Fred		Ph	Current	Gear	Radial	Capacitor	Product Type	Model
(rpm)	lb-in.	Nm	HP	Watts	Voltage	(Hz)	FII	(Amps)	Ratio	Load (lbs.)	(µF/VAC)	Froduct Type	Number
											CA	PACITOR IS R	<b>EQUIRED</b>
7.8	40	4.5	1/48	15				0.17	180			30R1BECI-D4	N1562
23	40	4.5	1/41	18			50 1	0.21	60		1.3/440	30R2BECI-D3	N1574
47	24	2.7	1/41	18	230	50		0.21	30	65		30R2BECI-D3	N1573
78	14	1.6	1/41	18				0.21	18			30R2BECI-D3	N1572
117	9.7	1.1	1/41	18				0.21	12			30R2BECI-D3	N1571



Type 30R-D

lagnet DC Gearmotors

									l l	Permanent Ma
Speed	Rated	Torque	Power HP Watts 1/49 15	Datad Valtaga	Current	Gear	Radial	Draduat Tuna	Model	
(rpm)	lb-in.	Nm	HP	Watts	Rated Voltage	(Amps)	Ratio	Load (lbs.)	Product Type	Number
5.8	40	4.5	1/49	15		0.13	300		24A2BEPM-D5	N1398
9.6	40	4.5	1/49	15		0.13	180		24A2BEPM-D4	N1397
29	40	4.1	1/32	23	180	0.18	60	65	24A4BEPM-D3	N1395
58	18	2.0	1/32	23		0.18	30		24A4BEPM-D3	N1394
1///	72	ΛQ	1/22	23		0.18	12		24V4BEDM-D3	N1302



"N" model numbers require lead time and minimum quantities.

#### Visit www.bodine-electric.com for 2D/3D CAD drawings

#### Metric-Parallel Shaft Gearmotors | up to 11.3 Nm

- Metric mounting threads and shaft dimensions
- Aluminum center ring and endshields
- Unvented gearhousing
- Industrial lip type seals on motor and output shafts
- Needle bearings on output shaft
- Permanently lubricated with high-performance lubricant
- Helical pinion accurately cut on motor shaft for maximum strength and minimum noise
- 34R-Z: die cast terminal box with terminal block included
- See page 34 for capacitors

#### Fixed Speed—AC Gearmotors



Speed	Rated	Torque	Po	wer	Rated	Freq.	Ph	Current	Gear	Radial	Capacitor	Product Type	Model
(rpm)	lb-in.	Nm	HP	Watts	Voltage	Itage   (Hz)		(Amps)	Ratio	Load (lbs.)	(μF/VAC)	1 Toduct Type	Number
Permanent Split Capacitor, Non-synchronous (TEFC) CAPACITOR IS REQUIRED										QUIRED			
7.8	100	11.3						0.48	180	125		34R4BFCI-Z4	N1449
23	100	11.3	1/15	50	220	50	1	0.5	60	125	E 0/270	34R4BFCI-Z3	N1455
70	40	4.5	1/15	50	230	50	ļ !	0.5	20	100	5.0/370	34R4BFCI-Z2	N1453
233	15	1.7						0.5	6	100		34R4BFCI-Z2	N1451

#### **Permanent Magnet DC Gearmotors**



Type 24A-Z
Type 33A-Z

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o dea	111101013									
Spee	d Rated	Torque	Po	wer	Rated Voltage	Current	Gear	Radial	Product Type	Model
(rpm	) lb-in.	Nm	HP	Watts	hated voitage	(Amps)	Ratio	Load (lbs.)	Product Type	Number
24A-2	24A-Z PMDC Gearmotor									
9.6	100	11.3					180	125	24A4BEPM-Z4	N1163
29	36	4.1	1/32	22	180	0.18	60	125	24A4BEPM-Z3	N1161
58	18	2.0	1/32	23	100	0.16	30	125	24A4BEPM-Z3	N1160
288	4	0.44					6	100	24A4BEPM-Z2	N1157
33A-Z	PMDC Ge	earmotor								
29	69	7.8					60	125	33A3BEPM-Z3	N6269
58	35	3.9	1/23 32		180	0.33	30	125	33A3BEPM-Z3	N6268
144	15	1.7					12	100	33A3BEPM-Z2	N6266

### W

#### Metric—Parallel Shaft Gearmotors | up to 19.8 Nm

- Metric mounting threads and shaft dimensions
- Lubricated for life
- Synthetic lubricant improves performance, and allows these gearmotors to operate in a wide temperature range
- Models with accessory shafts are ideal for mounting encoders or brakes
- 34R-W: Die cast terminal box with terminal block included
- Adaptor plate, model 0995, allows for 3-hole mounting configuration. See page 34.

#### Fixed Speed – AC Gearmotors



_														
	Speed	Rated	Torque	Pov	wer	Rated	1	Ph	Current	Gear	Radial	Capacitor	Draduat Tuna	Model
	(rpm)	lb-in.	Nm	HP	Watts	Voltage	(Hz)	PII	(Amps)	Ratio	Load (lbs.)	(µF/VAC)	Product Type	Number
	Permane	ent Split	Capacito	r, Non-s	ynchrono	ous						CAP	ACITOR IS RE	2UIRED
	4.5	175	19.8							312.4	130		34R6BFCI-W4	N1477
	21	146	16.5	1/10	75	230	50	1	0.6	65.5	130	7.5/370	34R6BFCI-W3	N1484
	69	53	6	1/10	/5	230	50		0.0	20.4	65	7.5/370	34R6BFCI-W2	N1481
	255	14	1.6							5.5	65		34R6BFCI-W2	N1478

#### **Permanent Magnet DC Gearmotors**



Type 33A-W

Speed	Rated	Torque	Po	wer	Datad Valtage	Current	Gear	Radial	Draduat Tuna	Model
(rpm)	lb-in.	Nm	HP	Watts	Rated Voltage	(Amps)	Ratio	Load (lbs.)	Product Type	Number
5.5	175	19.8	1/23	32		0.33	312.4	130	33A3BEPM-W4	N6247
18	151	17.0	1/14			0.41	97.5	130	33A5BEPM-W4	N6256
39	78	8.8	1/14		180	0.41	43.9	130	33A5BEPM-W3	N6254
85	39	4.4	1/14	54	100	0.41	20.4	65	33A5BEPM-W2	N6252
125	27	3.0	1/14			0.41	13.8	65	33A5BEPM-W2	N6251
315	11	1.2	1/14			0.41	5.48	65	33A5BEPM-W2	N6249

<sup>&</sup>quot;N" model numbers require lead time and minimum quantities.

Control models 1865 (see page 25) and 0865, 0866 (see page 27) are available for metric gearmotors and motors.

30 CATALOG S Bodine Electric Company

- Metric mounting threads and shaft dimensions
- Unvented gearhousing
- All steel gearing
- Industrial lip type seals on motor and output shafts
- Needle bearings throughout for increased radial load capacity and long life
- Permanently lubricated
- 42R-E: Die cast terminal box with terminal block included
- F-type only: Hardened helical gearing for quietness and high output to size ratio
- Dual voltage (230/460V) models are also available

Speed	Rated	Torque	Pov	wer	Rated	Freq.	Ph	Current	Gear	Radial	Capacitor	Product Type	Model
(rpm)	lb-in.	Nm	HP	Watts	Voltage	(Hz)	FII	(Amps)	Ratio	Load (lbs.)	(µF/VAC)	Froduct Type	Number
Three-pl	hase, No	n-synchi	ronous										
140	50	5.7	1/5	140	230	50	1	1.1/.61	10	300		42R5BFPP-E2	N1665
Permane	ent Split	Capacito	r, Non-s	ynchron	ous						CAF	ACITOR IS RE	QUIRED
4.7	310	35							300	200		42R5BFCI-E4	N1671
7.8	341	38.5							180	200		42R5BFCI-E4	N1669
23	297	33.6							60	200		42R5BFCI-E3	N1685
47	148	16.7	1/7.5	100	230	50	1	0.78	30	300	7.5/370	42R5BFCI-E3	N1683
70	99	11.2							20	300		42R5BFCI-E3	N1681
140	50	5.6							10	300		42R5BFCI-E2	N1680
280	26	2.9							5	300		42R5BFCI-E1	N1679
Split pha	se Non-	-synchror	nous (wi	th centrif	ugal switch	1)		-					
47	148	16.7	1/7.5	100	230	50	1	0.78	30	300		42R5BFSI-E3	N1653



#### **Permanent Magnet DC Gearmotors**

Speed	Rated	Torque	Po	wer	Datad Valtage	Current	Gear	Radial	Draduat Tuna	Model
(rpm)	lb-in.	Nm	HP	Watts	Rated Voltage	(Amps)	Ratio	Load (lbs.)	Product Type	Number
5.8	310	35				0.85	300	200	42A5BEPM-E4	N4275
29	310	35				1	60	200	42A7BEPM-E3	N4285
43	180	20				1	40	200	42A7BEPM-E3	N4284
85	120	13.6	1/5	153	180	1	20	300	42A7BEPM-E3	N4282
170	60	6.8				1	10	300	42A7BEPM-E2	N4280
170	68	7.7				1	10	300	42A7BEPM-F2	N4290
345	32	3.7				1	5	300	42A7BEPM-E1	N4279



up to 16.7 Nm | Right Angle Gearmotors-Metric

3F

- Metric mounting threads and shaft dimensions
- Industrial lip seals on motor and output shafts
- Needle bearings on output shaft for increased radial load capacity and long life
- Permanently lubricated with high-performance lubricant
- · Bronze gear for high shock load capability
- Hardened and ground worm for high strength and long life
- 34R-3F: Die cast terminal box with terminal block included

#### Fixed Speed – AC Gearmotors

Speed lacet lorque 1 well lacet lorque 1 well lacet lorque Product Typ	Number
(rpm)   Ib-in.   Nm   HP   Watts   Voltage   (Hz)   ' ''   (Amps)   Ratio   Load (Ibs.)   (μF/VAC)   1 Todact Tyl	Number
Permanent Split Capacitor, Non-synchronous CAPACITOR IS	EQUIRED
35 37 16.7 40 40	N1491
47 34 4.2 1/15 50 230 50 1 0.5 30 40 7.5/370 34R4BFCI-3	N1487
70 30 3.8 1/15 50 230 50 1 0.5 20 40 7.5/370 34R4BFCI-3	N1490
140 19 2.1	N1488



**Permanent Magnet DC Gearmotors** 

										1 6111	ilalicit ivid
ſ	Speed	Rated	Torque	Po	wer	Rated Voltage	Current	Gear	Radial	Product Type	Model
	(rpm)	lb-in.	Nm	HP	Watts	nateu voitage	(Amps)	Ratio	Load (lbs.)	Froduct Type	Number
Ī	43	16	1.8					40			N1098
	86	9.7	1.1	1/32	23	180	0.18	20	40	24A4BEPM-3F	N1096
	172	5.3	0.6					10			N1094



"N" model numbers require lead time and minimum quantities.

Type 24A-3F

#### Metric—Right Angle Gearmotors

#### 5N/5F

#### Metric-Right Angle Gearmotors | up to 12.8 Nm

- Metric mounting threads and shaft dimensions
- · Unvented gearhousing for universal horizontal mounting
- Bronze worm gear for high shock load capability
- Hardened and ground worm for strength and long life
- Models with accessory shafts are ideal for mounting encoders or brakes
- AC Gearmotors: Die cast terminal box with terminal block included
- See pages 34 and 35 for capacitors and terminal boxes

#### Fixed Speed—AC Gearmotors







Type 42R-5F and 42R-5N

caiii	101013	•												
	beed		Torque		wer	Rated	Freq.	Ph	Current	Gear	Radial	Capacitor	Product Type	Model
	(rpm)	lb-in.	Nm	HP	Watts	Voltage	(Hz)		(Amps)	Ratio	Load (lbs.)	(µF/VAC)	71	Number
3	34R-5F	Gearmot	tor											
P	ermane	ent Split	Capacito	r, Non-s	ynchron	ous						CAF	PACITOR IS RE	2UIRED
	23	72	8.1	1/15						60	50			N1469
	35	60	6.8	1/15	50	230	50	1	0.5	40	50	5.0/370	34R4BFCI-5F	N1468
	70	39	4.4	1/15	30	230	30	'	0.5	20	50	3.0/370	34N4DFUI-3F	N1466
	140	21	2.4	1/15						10	30			N1465
4	12R-5F	Gearmot	tor											
P	ermane	ent Split	Capacito	r, Non-s	ynchron	ous						CAF	PACITOR IS RE	<b>QUIRED</b>
	35	93	10.5	1/9						40	80			N1627
	70	60	6.8	1/9	83	230	50	1	0.63	20	80	7.5/370	42R4BFCI-5F	N1624
	140	32	3.6	1/9						10	10			N1623
4	12R-5N	Gearmo	tor											
T	hree-p	hase, No	on-synch	ronous										
	47	109	12.3	1/5	140	230/400	50	3	1/1/.61	30	180	_	42R5BFPP-5N	N1633
P	ermane	ent Split	Capacito	r, Non-s	ynchron	ous						CAF	ACITOR IS RE	2UIRED
	35	113	12.8	1/7.5	100	230	50	1	0.78	40	180	7.5/370	42R5BFCI-5N	N1678
	70	74	8.4	1/7.5	100	230	50		0.78	20	100	7.3/3/0	42N3DFUI-3N	N1677

#### **Permanent Magnet D**



Type 33A-5F

**5H** 



Type 42A-5N

DC	Gearm	otors										
	Speed	Rated	Torque	Po	wer	Peak	Rated	Current	Gear	Radial		Model
	(rpm)	lb-in.	Nm	НР	Watts	Torque (lb-in.)	Voltage	(Amps)	Ratio	Load (lbs.)	Product Type	Number
	33A-5F	Gearmo	tor									
	43	45	5.1			118			40			N6244
	86	29	3.3	1/14	54	100	180	0.41	20	80	33A5BEPM-5F	N6242
	173	17	1.9	1/14	34	54			10	00		N6241
	345	8.9	1			28			5			N6240
	42A-5N	Gearmo	tor									
	43	81	9.1						40			N4238
	85	55	6.2	1/6	121	177 1	180	0.85	20	120	42A5BEPM-5N	N4236
	172	31	3.5						10			N4235

#### Metric-Right Angle Gearmotors | up to 14.2 Nm

#### **Permanent Magnet DC Gearmotors**



Speed	Rated	Torque	Po	wer	Peak	Rated	Current	Gear	Radial		Model
(rpm)	lb-in.	Nm	НР	Watts	Torque (lb-in.)	Voltage	(Amps)	Ratio	Load (lbs.)	Product Type	Number
36	126	14.2	1 /E	141	340	180	1	48	150	42A7BEPM-5H	N4299
96	81	9.2	1/5	141	247	160	<u> </u>	18	150	42A7DEPIVI-3H	N4296

<sup>&</sup>quot;N" model numbers require lead time and minimum quantities.

Type 42A-5H

- Metric mounting threads and shaft dimensions
- Unvented gearhousing for universal horizontal mounting
- · Hardened helical output gearing
- Bronze worm gear for high shock load capability
- Hardened and ground worm hobbed on the motor shaft for high strength and long life
- Models with accessory shafts are ideal for mounting encoders or brakes
- See pages 34 and 35 for capacitors and terminal boxes
- 42R-GB: Die cast terminal box with terminal block included

#### Fixed Speed—AC Gearmotors

Speed	Rated	Torque	Po	wer	Rated	Freq.	Ph	Current	Gear	Radial	Capacitor	Product Type	Model
(rpm)	lb-in.	Nm	HP	Watts	Voltage	(Hz)	FII	(Amps)	Ratio	Load (lbs.)	(µF/VAC)	Froduct Type	Number
5	380	43							280				N1266
7.4	375	42	1/7.5	100	230	50	1	0.78	190	200	7.5/370	42R5BFCI-GB	N1264
12	290	33	1/7.5	100	230	30	'	0.76	120	200	7.3/370	42N3DFGI-UD	N1262
23	204	23							60				N1260



#### **Permanent Magnet DC Gearmotors**

Speed	Rated	Torque	Po	wer	Rated	Current	FF	Gear	Radial	Product Type	Model
(rpm)	lb-in.	Nm	HP	Watts	Voltage	(Amps)	ГГ	Ratio	Load (lbs.)	Froduct Type	Number
6.2	380	42.8						280			N1366
9	358	40.4	1/6	121 /	180	0.85 /	1.6 / 1.0	190	200	42A5BEPM-GB	N1364
14.4	250	28.3	1/0	129	100	0.87	1.0 / 1.0	120	200	4ZASBEFIVI-UB	N1362
28.8	150	17						60			N1360



Type 42A-GB

### **Metric Motors Without Gearing**

• Die cast terminal box with terminal block included with 34R and 42R motors • See page 34 for capacitors and terminal boxes

#### up to 140 Watts | Fixed Speed AC Induction Motors—Metric

AC

Speed (rpm)	Rated 7	(Nm)	Pov (HP)	wer (Watts)	Rated Voltage	Frequency (Hz)	Ph	Current (Amps)	Radial Load (lbs.)	Capacitor (µF/VAC)	Product Type	Model Number
KCI-26	(02 111.)	(14111)	(111 /	( V atto	voitago	(1.12)		(,pe,	2044 (1501)		OR IS REQUI	
1250	3	0.02	1/300	2.8	230	50	1	0.06	5.7	0.4/440	KCI-26	N1713
30R										CAPACIT	OR IS REQUI	RED
2850	9	0.06	1/39	19	230	50	1	0.38	18	1.3/440	30R2BECI	N1319
1400	18	0.13	1/41	18	230	50	'	0.21	10	1.3/440	JUNZBECI	N1340
34R												
1400	97	0.69	1/7.5	100	230/400	50	3	.78/.45	42	No Capacitor	34R6BFPP	N1295
1400	72	0.51	1/10	75	230	50	1	0.6	42	7.5/370	34R6BFCI	N1291
42R												
1400	135	0.95	1/5	140	230/400	50	3	1.1/0.61	50	No Capacitor	42R5BFPP	N1273
1400	97	0.68	1/7.5	100	230	JU	1	0.78	30	7.5/370	42R5BFCI	N1358



#### up to 200 Watts | Permanent Magnet DC Motors-Metric

DC

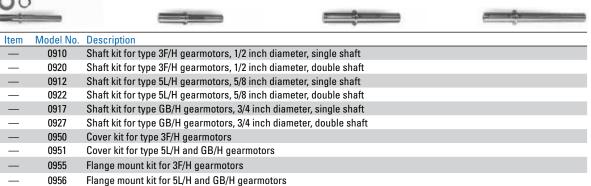
Speed	Rated	Torque	Po	wer	Rated	FF	Current	Radial	Product Type	Model
(rpm)	(oz-in.)	(Nm)	(HP)	(Watts)	Voltage		(Amps)	Load (lbs.)	1 Todact Type	Number
33A (Face Mount, Base Optional)										
1725	25	0.18	1/23	32			0.31		33A3BEPM	N6216
1725	55	0.39	1/11	70			0.62		33A5BEPM	N6227
1725	95	0.67	1/6	121	180	1.6 / 1.0	0.88	55	33A7BEPM	N6237
3000	55	0.39	1/6	122			0.89		33A5BEPM	N6230
3000	80	0.57	1/4	178			1.3		33A7BEPM	N6231
42A (Fac	42A (Face or Base Mount, Base Installed)									
1725	95	0.68	1/6	121	180	1.6 / 1.0	0.85	90	42A5BEPM	N4227
3000	70	0.49	1/5	155			1.17		42A5BEPM	N4230
1725	120	0.85	1/5	153			1		42A7BEPM	N4237
3000	90	0.63	1/4	200			1.5		42A7BEPM	N4231



<sup>&</sup>quot;N" model numbers require lead time and minimum quantities.

#### **Hollow Shaft Accessories**

#### Shaft kits for type 3F/H, 5L/H and GB/H gearmotors







Cover kits type 3F/H (left), types 5L/H and GB/H (right)





Flange mount kits type 3F/H (left), types 5L/H and GB/H (right)

#### **Control Accessories**

BLDC PMDC

le .							
Item	Model No.	Description					
_	0888	Analog Interface Board for use with model 0810, 0830, and 0850 controls. Allows control to accept a variable volt or current signal from user's host controller to automatically control motor speed. Inputs are optically isolated.					
_	0890	Electronic Direction and Braking Board, F-B-R Kit, for use with model 0810, 0830, and 0850 controls. Allows user to change motor direction and to dynamically brake motor to a quick stop. Inputs are not optically isolated. This kit includes one F-B-R board, one cable and connector, mounting hardware, and two additional braking resistors.					
_	0893	Local/Remote Switch for use with model 0810, 0830, and 0850 controls when used with accessory model 0888. Allows user to switch between automatic and manual operation.					
_	0895	Switch Sealing Kit upgrades NEMA-12 brushless DC and PMDC enclosed controls to IP-44 rating.					
Α	3981	Cable Kit for stock 34B/FV INTEGRAmotors. Length: six feet (3 cables: power, logic and encoder).					
В	3982	Extension Cable for model 3910, 3911, 3921 and 3912 controls. Extends the cable between the motor and control by six feet. Both ends are equipped with circular connections for easy connection between model 3983 cable assembly or encased control and the motor. Length: six feet.					
С	3983	Connection Cable Assembly for connecting model 3910, 3921 and 3911 chassis controls to stock 130 V motors. One end of the cable is equipped with a circular connector, the other end is equipped with quick disconnects for phase leads, and a molded connector for the commutation leads. Length: 6 feet.					
D	3984	Analog Interface And Isolation Module for model 3910, 3911,3921 and 3912 controls. Provides Analog interface and isolates controls from system controller input signals which may be at different potentials.					
_	43300260	<b>Speed Potentiometer Kit</b> for use with FPM controls. Contains 10k 0hm potentiometer, hardware, wire and connector for manually regulating motor speed.					
_	43300270	Fuse and Speed Potentiometer Kit for use with model 3910 control. Contains potentiometer for manually regulating motor speed and various fuses to cover the range of motors and gearmotors which can be used with the control.					









### **Metric Accessories**









#### Metric "L" Brackets

Item	Model No.	Description
Α	0990	Metric Kit for 24A
В	1968	Metric Kit for 33A motors, and type D and Z gearmotors
С	1970	Metric Kit for type W gearmotors
D	1969	Metric Kit for E, F and FX gearmotors (will not fit 48R-F or 48R-FX)
_	_	no "L" bracket kits are available for 34R and 34R-Z gearmotors





#### **Metric Motor and Gearmotor Kits**

Item	Model No.	Description			
Α	1982	Metric die cast terminal box kit for 30R motors and gearmotors			
Α	1984	Metric die cast terminal kit with terminal block for 33A, 34R, 42A and 42R motors and gearmotors. For 90/130, 130V and 180VDC models only.			
В	0991	0991 Metric die cast base kit for 42A motors and gearmotors			
	0992	Metric adaptor plate for 33A and 42A motors and gearmotors			

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### Standard products for demanding applications



## **Hollow Shaft Gearmotors** and Accessories

Hollow shaft gearmotors connect directly to the driven load, reducing the overall space required by the gearmotor. Get the flexibility of Bodine's hollow shaft gearmotors without expensive couplings and mounting hardware.

- Rated torques: 6.8 to 380 lb-in
- Gear ratios: 5:1 to 280:1
- Single- or double-output stainless steel shaft kits
- Face-mounting flanges
- 230VAC and 230/460VAC 3-phase models available



# **Speed Controls for Fractional Horsepower Gearmotors**

Bodine filtered and unfiltered speed controls provide optimized performance for a wide range of gearmotors and motors. Match a Bodine gearmotor and control and get an extended two-year system warranty. Chassis and enclosed models are available.

- PMDC, brushless DC, and AC motor speed controls
- Various input and output voltages (AC or DC)



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