



STANDARD PRODUCTS

GEARMOTORS • MOTORS • CONTROLS

AC
PMD
BLDC

BODINE
ELECTRIC
COMPANY

bodine-electric.com

Motors Fixed-Speed AC, Inverter Duty AC, Permanent Magnet DC, and Brushless DC



Fixed Speed Type 48R AC Motor



Variable Speed Pacesetter Type 34R AC Motor



Type 33A DC Motor



Type 34B BLDC Motor



Type 22B Integra BLDC

| | Variable Speed Pacesetter Inverter Duty AC | | | | | Fixed-Speed AC | | | | Permanent Magnet DC | | | Brushless DC | | INTEGRA BLDC | |
|--------------------------|--|------------|------|------------|------------------------|------------------|------------------|------------------|------------|---------------------|------------|---------|--------------|--------------|--------------|------|
| | 30R | 34R | 42R | 48R | K-2 | 30R | 34R | 42R | 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 | 1/5-1/2 | 1/16-1/5 | 1/5-3/8 | 1/16-1/8 | 1/4 |
| Torque (oz-in.) | 24 -35 | 70-148 | 222 | 185-445 | .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 | 1700, 1800, 3400 | 1700, 1800, 3450 | 1700, 1800 | 2500, 11,500 | 2500 | 2500 | 2500, 10,000 | 2500, 10,000 | 2500 | 2500 |

- AC motors are available with voltage ratings of 115 VAC, 60 Hz (single-phase), 230 VAC, 60 Hz (3-phase) and 230/460 VAC, 60 Hz (3-phase).
- Pacesetter™ AC motors may be used with inverters for variable speed operation.
- Bodine fixed-speed AC motors are available with three winding types: permanent split capacitor, split phase, or three-phase.
- Our metric/international AC motor and gearmotors are rated 230 VAC, 50 Hz (1- or 3-phase).
- PMDC motors are available with voltage ratings of 12/24 VDC, 24 VDC, 90/130 VDC, 130 VDC and 180 VDC (metric).
- Brushless DC motors are available with voltage ratings of 24 and 130 VDC. We also offer four frame sizes of AC torque motors for holding applications.

Gearmotors

Type A/T (K-2) Parallel Shaft Gearmotors | up to 120 oz-in.



| Motor Type | Fixed-Speed AC | | |
|-----------------|-----------------------------------|---------------------------------|------------------|
| | PSC, Normal Slip, Non-Synchronous | PSC, High Slip, Non-Synchronous | PSC, Synchronous |
| HP | 1/700-1/300 | 1/1000-1/450 | 1/2000-1/900 |
| Torque (oz-in.) | 12-120 | 8.9-120 | 8.9-120 |
| Speed (rpm) | 0.9-260 | 0.9-200 | 1-100 |

Type D Parallel Shaft Gearmotors | up to 40 lb-in.



| Motor Type | Pacesetter Inverter Duty AC | Fixed-Speed AC | PMDC | BLDC | INTEGRA BLDC | |
|-----------------|-----------------------------|----------------|-----------|--------|--------------|---------|
| | 30R | 30R | 24A | 22B | 22B/SR | 22B/FV |
| HP | 1/25-1/17 | 1/50-1/30 | 1/29-1/17 | 1/16 | 1/16 | 1/16 |
| Torque (lb-in.) | 19-40 | 5-40 | 3.3-40 | 5.8-40 | 5.8-40 | 5.8-40 |
| Speed (rpm) | 9-142 | 3.8-285 | 5.6-417 | 14-417 | 0.7-417 | 0.3-417 |

Type Z Parallel Shaft Gearmotors | up to 120 lb-in.



| Motor Type | Pacesetter Inverter Duty AC | Fixed-Speed AC | PMDC | | BLDC | INTEGRA BLDC | |
|-----------------|-----------------------------|----------------|--------|--------|-----------|--------------|-----------|
| | 34R | 34R | 24A | 33A | 22B | 22B/SR | 22B/FV |
| HP | 1/6 | 1/15 | 1/17 | 1/12 | 1/16-1/11 | 1/16-1/11 | 1/16-1/11 |
| Torque (lb-in.) | 21-120 | 12-100 | 7-100 | 10-95 | 10-100 | 10-100 | 10-100 |
| Speed (rpm) | 9-283 | 9.6-283 | 14-417 | 42-417 | 14-417 | 0.7-417 | 0.7-417 |

Type WX Parallel Shaft Gearmotors | up to 210 lb-in.



| Motor Type | Fixed-Speed AC | Permanent Magnet DC | | | Brushless DC | |
|-----------------|----------------|---------------------|---------------|-------|---------------|-------|
| | 34R (115V) | 33A (12/24V) | 33A (90/130V) | | 34B (24/130V) | |
| HP | 1/7 | 1/11 | 1/4 | 1/8 | 1/4 | 1/5 |
| Torque (lb-in.) | 9-210 | 9-205 | 9-205 | 9-205 | 9-205 | 9-205 |
| Speed (rpm) | 5-447 | 2.9-237 | 8-658 | 5-447 | 8-658 | 8-658 |

Type E or F and FX Parallel Shaft Gearmotors | up to 350 lb-in.



| Motor Type | Pacesetter Inverter Duty AC | | Fixed-Speed AC | | Permanent Magnet DC | | Brushless DC | INTEGRA BLD C |
|-----------------|-----------------------------|--------|----------------|---------|---------------------|---------|--------------|---------------|
| | 34R-E | 42R-F | 42R-E | 48R-F | 33A-E/F | 42A-E/F | 34B-E/F | 34B/FV-F |
| HP | 1/6 | 3/8 | 1/12-1/4 | 1/3-1/2 | 1/16-1/3 | 1/8-1/3 | 1/5-3/8 | 1/4 |
| Torque (lb-in.) | 25-341 | 58-250 | 25-341 | 56-250 | 19-341 | 25-341 | 25-350 | 28-341 |
| Speed (rpm) | 5.7-340 | 57-340 | 5.7-340 | 47-340 | 5.8-500 | 8.3-500 | 8.3-500 | 14-500 |

Type F gearmotors feature hardened gears for increased output torque in lower ratios.

Type HG Parallel Shaft Gearmotors | up to 1000 lb-in.



| Motor Type | Pacesetter Inverter Duty AC | | Fixed-Speed AC | Permanent Magnet DC | | |
|-----------------|-----------------------------|--|----------------|---------------------|--|---------------|
| | 42R | | 42R | 33A (24V) | | 33A (90/130V) |
| HP | 3/8 | | 1/5 | 1/3 | | 1/6 |
| Torque (lb-in.) | 289-1000 | | 150-599 | 170-680 | | 120-481 |
| Speed (rpm) | 16-63 | | 16-63 | 23-93 | | 16-64 |

Type CG Parallel Shaft Gearmotors | up to 1000 lb-in.



| Motor Type | Pacesetter Inverter Duty AC | | Permanent Magnet DC | |
|-----------------|-----------------------------|--|---------------------|------------|
| | 48R | | 42A (24V) | 42A (130V) |
| HP | 3/4 | | 7/16 | 7/16 |
| Torque (lb-in.) | 360-1000 | | 220-660 | 190-580 |
| Speed (rpm) | 28-85 | | 38-115 | 42-125 |

Type 3F and Type 3N Right Angle Gearmotors | up to 37 lb-in.



| Motor Type | Pacesetter Inverter Duty AC | Fixed-Speed AC | PM DC | Brushless DC | INTEGRA BLD C | INTEGRA BLD C |
|-----------------|-----------------------------|----------------|--------|--------------|---------------|---------------|
| | 30R-3N | 34R-3F | 24A-3N | 22B-3N | 22B/SR-3N | 22B/FV-3N |
| HP | 1/17 | 1/15 | 1/17 | 1/8 | 1/8 | 1/8 |
| Torque (lb-in.) | 8-37 | 16-37 | 5.2-22 | 11-37 | 11-37 | 11-37 |
| Speed (rpm) | 28-340 | 28-170 | 42-500 | 42-500 | 3-500 | 1.3-500 |

Type 5N and Type 5F Right Angle Gearmotors | up to 121 lb-in.



| Motor Type | Pacesetter Inverter Duty AC | Fixed-Speed AC | | | Permanent Magnet DC | | | | | | BLDC | INTEGRA BLD C | |
|-----------------|-----------------------------|------------------|--------|---------|---------------------|------------------|--------|-----------------|--------|------------------|--------|---------------|-----------|
| | 42R-5N | 34R-5F (50/60Hz) | | 42R-5N | 33A-5F (24V) | 33A-5F (90/130V) | | 42A-5N (12/24V) | | 42A-5N (90/130V) | | 34B-5N | 34B/FV-5N |
| HP | 3/8 | 1/9 | 1/9 | 1/6-1/4 | 1/8 | 1/8 | 1/4 | 3/16 | 7/16 | 3/16 | 1/4 | 1/5-3/8 | 1/4 |
| Torque (lb-in.) | 54-121 | 19-121 | 16-102 | 23-113 | 11-55 | 17-84 | 22-109 | 43-109 | 43-109 | 24-109 | 24-109 | 18.6-109 | 24-79 |
| Speed (rpm) | 23-340 | 19-280 | 23-340 | 38-340 | 62-500 | 43-345 | 62-500 | 25-200 | 62-500 | 45-360 | 62-500 | 62-500 | 63-500 |

Type 3RD Right Angle Gearmotors | up to 148 lb-in.



| Motor Type | Pacesetter Inverter Duty AC | | Fixed-Speed AC | Permanent Magnet DC | Brushless DC |
|-----------------|-----------------------------|--|----------------|---------------------|--------------|
| | 30R | | 30R | 24A | 22B |
| HP | 1/25-1/17 | | 1/30-1/27 | 1/29-1/17 | |
| Torque (lb-in.) | 95-148 | | 88-148 | 92-147 | |
| Speed (rpm) | 0.5-8.5 | | 0.4-7.8 | 0.7-12.5 | |

Type 5H Right Angle Gearmotors | up to 296 lb-in.



| Motor Type | Pacesetter Inverter Duty AC | | Permanent Magnet DC | | |
|-----------------|-----------------------------|--|---------------------|--|--------|
| | 48R | | 33A (90/130V) | | 42A |
| HP | 3/4 | | 1/6 | | 1/3 |
| Torque (lb-in.) | 178-296 | | 37-137 | | 52-192 |
| Speed (rpm) | 35-170 | | 36-173 | | 52-250 |

Type GB Right Angle Gearmotors | up to 380 lb-in.



| Motor Type | Pacesetter Inverter Duty AC | | Fixed-Speed AC | Permanent Magnet DC | | |
|-----------------|-----------------------------|--|----------------|---------------------|---------|---------|
| | 42R | | 42R | 33A (90/130V) | | 42A |
| HP | 3/8 | | 1/6-1/4 | 1/8 | 1/4 | 1/4 |
| Torque (lb-in.) | 230-380 | | 209-380 | 151-380 | 200-380 | 213-380 |
| Speed (rpm) | 6-28 | | 5.9-28 | 6.2-29 | 8.9-42 | 8.9-42 |

Most right angle gearmotors are available as hollow shaft models.

For controls and accessories, contact an authorized distributor. www.bodine-electric.com

Standard products for demanding applications



INTEGRAmotor™

24 VDC Brushless DC motor or gearmotor with built-in PWM speed control and feedback

The perfect match of motor, speed control, and gearhead provides simplified wiring, reduced panel space, faster assembly times, and lower system costs.

- 22B/SR models with analog input option
- 22B/FV and 34B/FV models with digital input
- 34B/FV-F and 34B/FV-5N gearmotors (1/4HP)
- Parallel shaft and right angle gearmotors
- cURus (UL recognized for U.S.A. and Canada)



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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Presented by:

