

Series M007 Multi-Vane Air Motors

Specifications



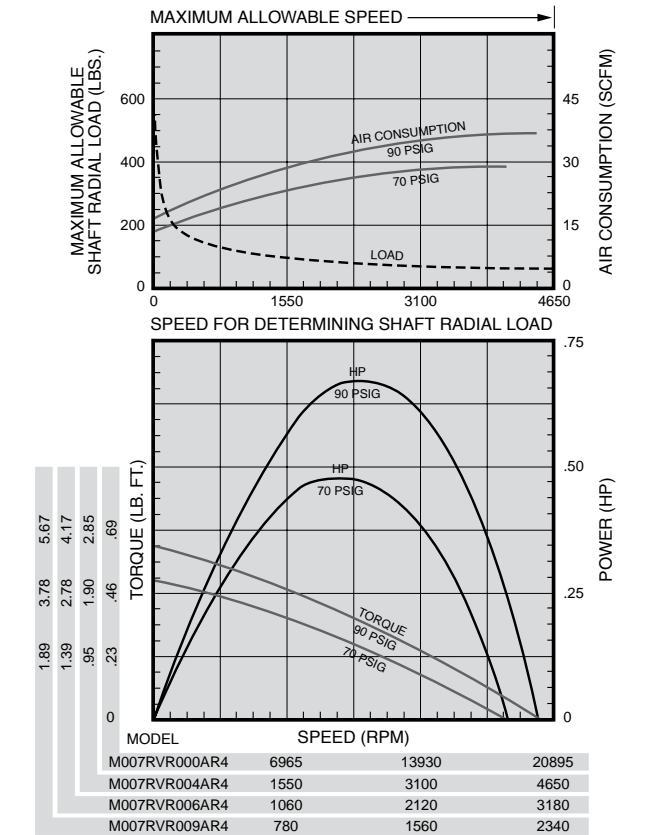
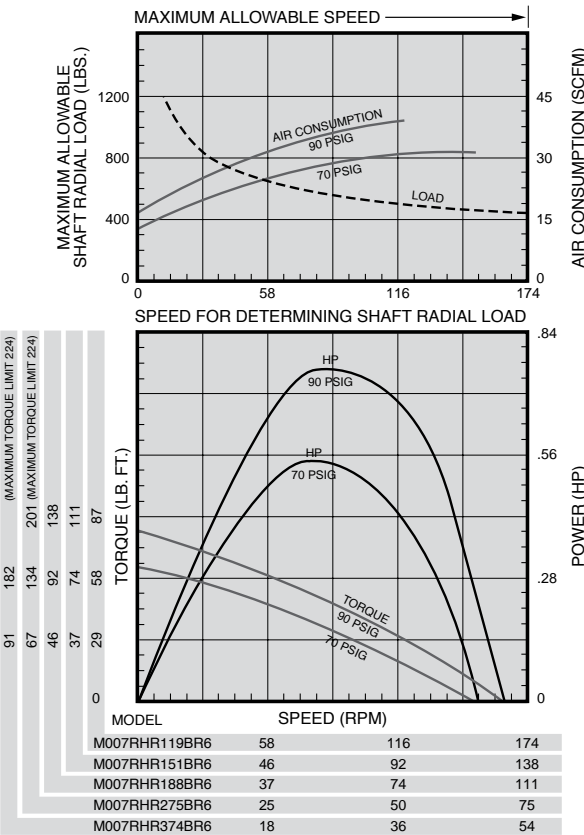
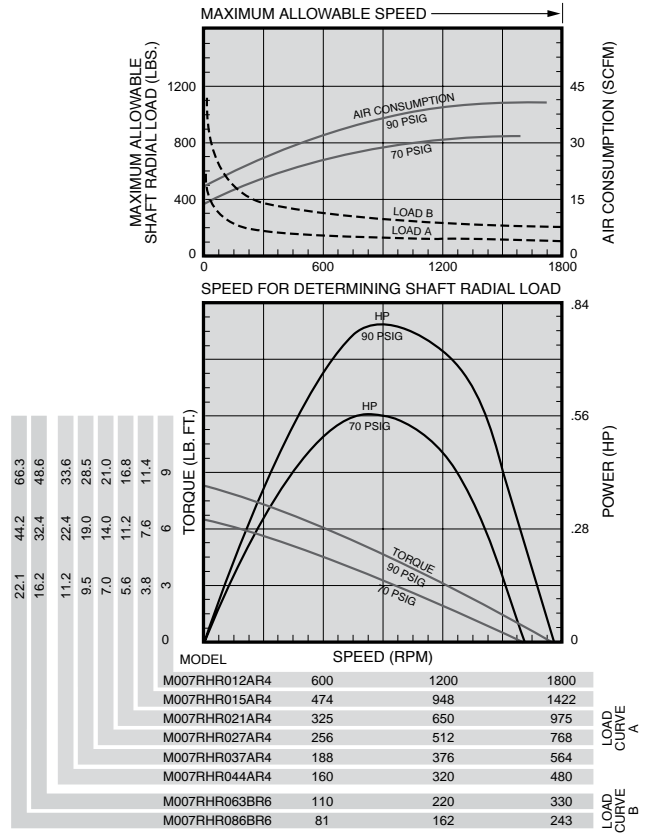
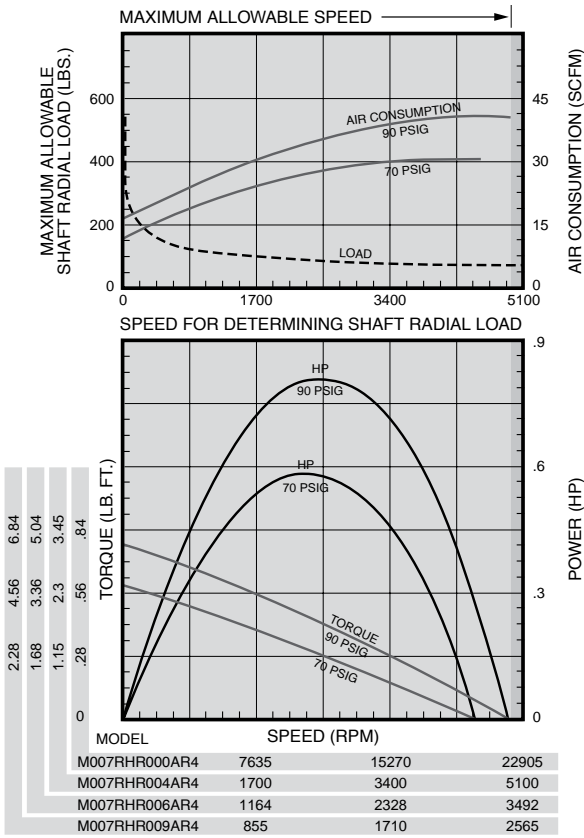
| Model | Max. Power | | Speed at Max. Power | Free Speed▲ | Starting Torque | | Stall Torque | | Air Consumption at Max. Power | | Weight | |
|--|------------|------|---------------------|-------------|-----------------|--------|--------------|--------|-------------------------------|-------------------|--------------------------------|-----|
| | hp | kw | rpm | rpm | lb.-ft. | Nm | lb.-ft. | Nm | scfm | m ³ /m | lb. | kg |
| Non-Reversible Direction of rotation is counterclockwise when facing the shaft. | | | | | | | | | | | | |
| M007RHR000AR4 | 0.85 | 0.63 | 11,000 | 22,000 | 0.58 | 0.79 | 0.77 | 1.04 | 36 | 1.02 | 3 ¹ / ₁₆ | 1.4 |
| M007RHR004AR4 | 0.82 | 0.61 | 2445 | 4890 | 2.39 | 3.24 | 3.19 | 4.33 | 36 | 1.02 | 3 ¹ / ₁₆ | 1.4 |
| M007RHR006AR4 | 0.82 | 0.61 | 1675 | 3350 | 3.50 | 4.75 | 4.66 | 6.32 | 36 | 1.02 | 3 ¹ / ₁₆ | 1.4 |
| M007RHR009AR4 | 0.82 | 0.61 | 1230 | 2460 | 4.76 | 6.45 | 6.34 | 8.60 | 36 | 1.02 | 3 ¹ / ₁₆ | 1.4 |
| M007RHR012AR4 | 0.79 | 0.59 | 870 | 1740 | 6.19 | 8.39 | 8.25 | 11.2 | 36 | 1.02 | 3 ¹ / ₂ | 1.6 |
| M007RHR015AR4 | 0.79 | 0.59 | 685 | 1370 | 7.80 | 10.6 | 10.4 | 14.1 | 36 | 1.02 | 3 ¹ / ₂ | 1.6 |
| M007RHR021AR4 | 0.79 | 0.59 | 470 | 940 | 11.5 | 15.6 | 15.3 | 20.7 | 36 | 1.02 | 3 ¹ / ₂ | 1.6 |
| M007RHR027AR4 | 0.79 | 0.59 | 370 | 740 | 14.5 | 19.7 | 19.3 | 26.2 | 36 | 1.02 | 3 ¹ / ₂ | 1.6 |
| M007RHR037AR4 | 0.79 | 0.59 | 270 | 540 | 19.7 | 26.7 | 26.3 | 35.7 | 36 | 1.02 | 3 ¹ / ₂ | 1.6 |
| M007RHR044AR4 | 0.79 | 0.59 | 232 | 465 | 23.2 | 31.5 | 30.9 | 41.9 | 36 | 1.02 | 3 ¹ / ₂ | 1.6 |
| M007RHR063BR6 | 0.79 | 0.59 | 161 | 321 | 33.5 | 45.4 | 44.7 | 60.6 | 36 | 1.02 | 7 ¹ / ₈ | 3.2 |
| M007RHR086BR6 | 0.79 | 0.59 | 118 | 236 | 45.7 | 62.0 | 60.9 | 82.6 | 36 | 1.02 | 7 ¹ / ₈ | 3.2 |
| M007RHR119BR6 | 0.76 | 0.57 | 82 | 163 | 60.5 | 82.0 | 80.7 | 109.0 | 36 | 1.02 | 7 ¹ / ₈ | 3.4 |
| M007RHR151BR6 | 0.76 | 0.57 | 65 | 129 | 76.5 | 104.0 | 102.0 | 138.0 | 36 | 1.02 | 7 ¹ / ₈ | 3.4 |
| M007RHR188BR6 | 0.76 | 0.57 | 52 | 103 | 96.0 | 130.0 | 128.0 | 174.0 | 36 | 1.02 | 7 ¹ / ₈ | 3.4 |
| M007RHR275BR6 | 0.76 | 0.57 | 35 | 70 | *140.0 | *190.0 | *187.0 | *254.0 | 36 | 1.02 | 7 ¹ / ₈ | 3.4 |
| M007RHR374BR6 | 0.76 | 0.57 | 26 | 52 | *191.0 | *259.0 | *254.0 | *344.0 | 36 | 1.02 | 7 ¹ / ₈ | 3.4 |
| Reversible | | | | | | | | | | | | |
| M007RVR000AR4 | 0.70 | 0.52 | 10,000 | 20,000 | 0.47 | 0.64 | 0.63 | 0.85 | 33 | 0.93 | 3 ¹ / ₁₆ | 1.4 |
| M007RVR004AR4 | 0.67 | 0.50 | 2225 | 4450 | 1.94 | 2.63 | 2.59 | 3.51 | 33 | 0.93 | 3 ¹ / ₁₆ | 1.4 |
| M007RVR006AR4 | 0.67 | 0.50 | 1520 | 3045 | 2.84 | 3.85 | 3.78 | 5.13 | 33 | 0.93 | 3 ¹ / ₁₆ | 1.4 |
| M007RVR009AR4 | 0.67 | 0.50 | 1120 | 2240 | 3.86 | 5.23 | 5.14 | 6.97 | 33 | 0.93 | 3 ¹ / ₁₆ | 1.4 |
| M007RVR012AR4 | 0.64 | 0.48 | 790 | 1580 | 4.97 | 6.74 | 6.63 | 8.99 | 33 | 0.93 | 3 ¹ / ₂ | 1.6 |
| M007RVR015AR4 | 0.64 | 0.48 | 625 | 1250 | 6.29 | 8.53 | 8.38 | 11.4 | 33 | 0.93 | 3 ¹ / ₂ | 1.6 |
| M007RVR021AR4 | 0.64 | 0.48 | 425 | 855 | 9.2 | 12.5 | 12.2 | 16.5 | 33 | 0.93 | 3 ¹ / ₂ | 1.6 |
| M007RVR027AR4 | 0.64 | 0.48 | 335 | 675 | 11.6 | 15.7 | 15.5 | 20.1 | 33 | 0.93 | 3 ¹ / ₂ | 1.6 |
| M007RVR037AR4 | 0.64 | 0.48 | 245 | 495 | 15.8 | 21.4 | 21.1 | 28.6 | 33 | 0.93 | 3 ¹ / ₂ | 1.6 |
| M007RVR044AR4 | 0.64 | 0.48 | 210 | 420 | 18.6 | 25.2 | 24.8 | 33.6 | 33 | 0.93 | 3 ¹ / ₂ | 1.6 |
| M007RVR063BR6 | 0.64 | 0.48 | 146 | 292 | 26.9 | 36.5 | 35.9 | 48.7 | 33 | 0.93 | 7 ¹ / ₈ | 3.2 |
| M007RVR086BR6 | 0.64 | 0.48 | 107 | 215 | 36.7 | 49.8 | 48.9 | 66.3 | 33 | 0.93 | 7 ¹ / ₈ | 3.2 |
| M007RVR119BR6 | 0.61 | 0.46 | 74 | 148 | 48.1 | 65.3 | 64.1 | 87.0 | 33 | 0.93 | 7 ¹ / ₈ | 3.4 |
| M007RVR151BR6 | 0.61 | 0.46 | 58 | 117 | 61.0 | 82.7 | 81.3 | 110.0 | 33 | 0.93 | 7 ¹ / ₈ | 3.4 |
| M007RVR188BR6 | 0.61 | 0.46 | 47 | 94 | 76.5 | 104.0 | 102.0 | 138.0 | 33 | 0.93 | 7 ¹ / ₈ | 3.4 |
| M007RVR275BR6 | 0.61 | 0.46 | 32 | 64 | *111.0 | *151.0 | *148.0 | *201.0 | 33 | 0.93 | 7 ¹ / ₈ | 3.4 |
| M007RVR374BR6 | 0.61 | 0.46 | 23 | 47 | *152.0 | *206.0 | *202.0 | *274.0 | 33 | 0.93 | 7 ¹ / ₈ | 3.4 |

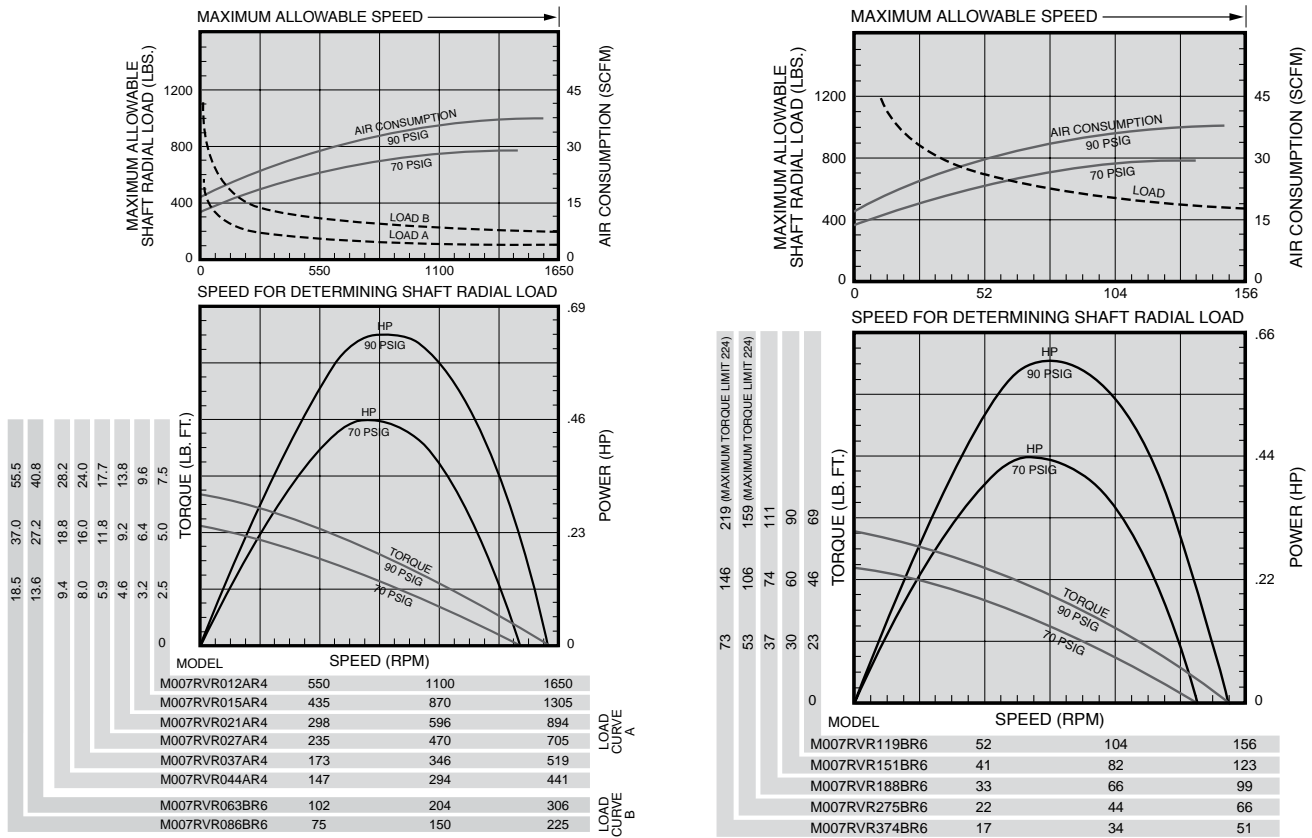
▲ ALL models must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

* Applications with these models must be limited to 224 lb.-ft. (304 Nm) torque.

Performance figures are at 90 psig (620 kPa) air pressure.

Note: On all Series M002, M004, and M007 Air Motors, performance is the same for both directions of rotation. On Non-Reversible models, direction of rotation may be easily changed without the need of additional parts by inverting cylinder. See Assembly Instruction form number listed in price sheet.



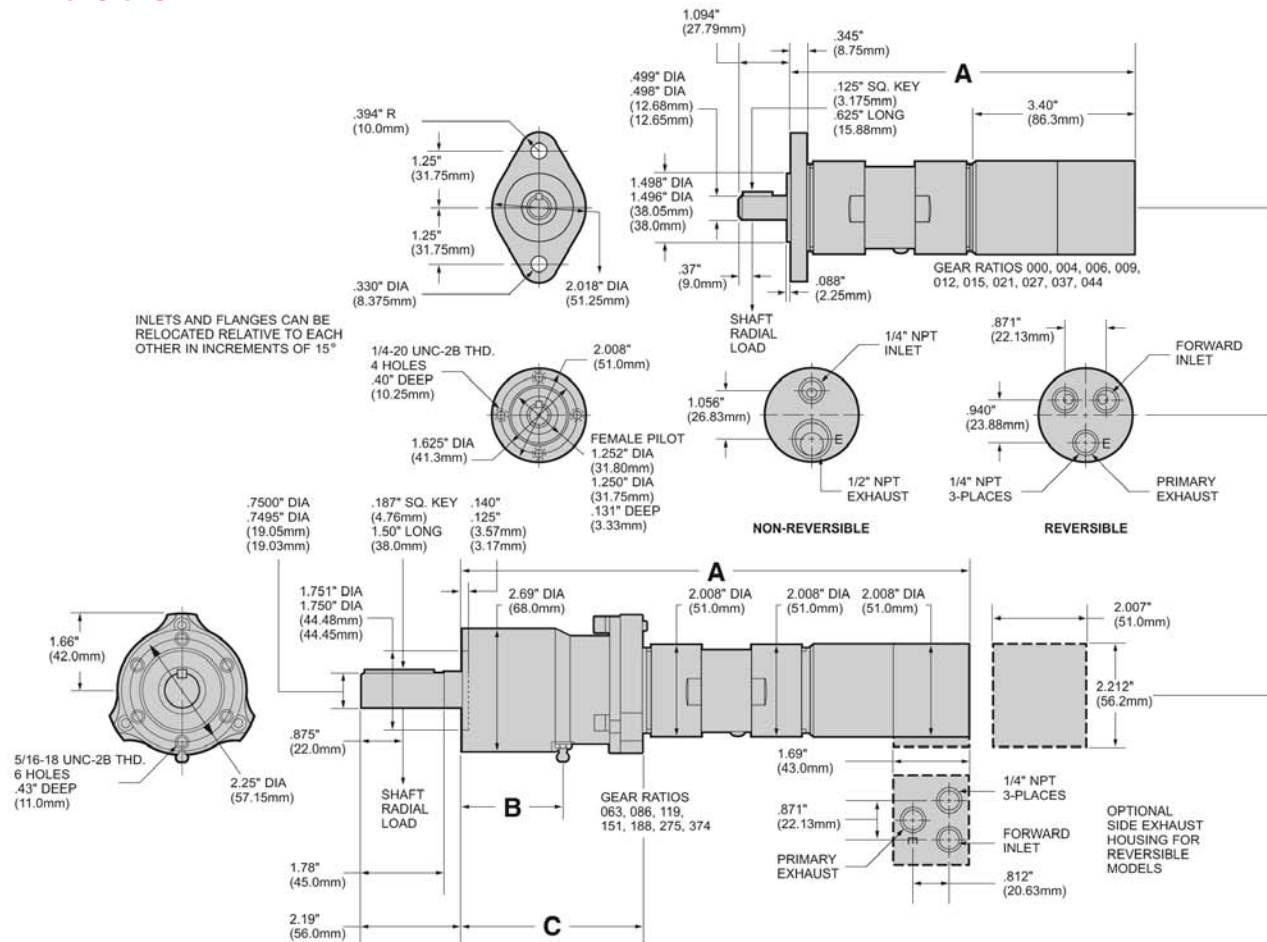


Equipment Options

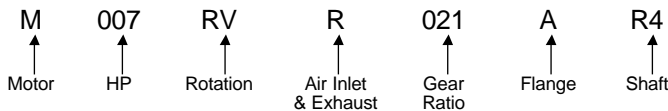
| Furnished with Cataloged Models | Standard Options | Extra Options |
|---|---|--|
| 2 Hole Flange Mounting on Gear Ratios: 000, 004, 006, 009, 012, 015, 021, 027, 037, 044 | 4 Hole Flange Mounting on Gear Ratios: 000, 004, 006, 009, 012, 015, 021, 027, 037, 044 | ½" Square Drive Shaft on Gear Ratios: 000, 004, 006, 009, 012, 015, 021, 027, 037, 044 |
| 6 Hole Face Mounting on Gear Ratios: 063, 086, 119, 151, 188, 275, 374 | Side Inlet and Exhaust Housing (for Reversible Models only) | ⅝" Square Drive Shaft on Gear Ratios: 063, 086, 119, 151, 188, 275, 374 |
| ½" Round Keyed Shaft on Gear Ratios: 000, 004, 006, 009, 012, 015, 021, 027, 037, 044 | ¾"—24 or ½"—20 Threaded Shaft on Gear Ratios: 000, 004, 006, 009, 012, 015, 021, 027, 037, 044 | |
| ¾" Round Keyed Shaft on Gear Ratios: 063, 086, 119, 151, 188, 275, 374 | | |

Series M007 Multi-Vane Air Motors

Dimensions



Series M007 Model Number Symbolization



HP = Approximate horsepower range (.61 to .85)

Rotation = RV Reversible

RH Non-Reversible, Right Hand from Rear of Motor (CCW facing shaft)

LH Non-Reversible, Left Hand from Rear of Motor (CW facing shaft)

Air Inlet & Exhaust = R Rear, S Side (Side Inlet and Exhaust available on Reversible Models only)

Gear Ratio = 021 is 1 to 21, 027 is 1 to 27, etc.

Flange = A 2 Hole Flange, B 4 Hole Face Mounting (on 000, 004, 006, 009, 012, 015, 021, 027, 037, 044 gear ratios),

B 6 Hole Face Mounting (on 063, 086, 119, 151, 188, 275, 374 gear ratios)

Shaft = R4 1/2" Round Keyed (on 000, 004, 006, 009, 012, 015, 021, 027, 037, 044 gear ratios)

R6 3/4" Round Keyed (on 063, 086, 119, 151, 188, 275, 374 gear ratios)

S4 1/2" Square Drive (on 000, 004, 006, 009, 012, 015, 021, 027, 037, 044 gear ratios) Shaft Extension 1.31" (33.27 mm)

S5 5/8" Square Drive (on 063, 086, 119, 151, 188, 275, 374 gear ratios) Shaft Extension 1.25" (31.75 mm)

T3 3/8"-24 UNF-2A Threaded (on 000, 004, 006, 009, 012, 015, 021, 027, 037, 044 gear ratios) Shaft Extension .512" (13 mm)

T4 1/2"-20 UNF-2A Threaded (on 000, 004, 006, 009, 012, 015, 021, 027, 037, 044 gear ratios) Shaft Extension .512" (13 mm)

Dimensions

| Gear Ratios (Refer to Model No.) | A | | B | | C | |
|-------------------------------------|--------|--------|------|----|-----|------|
| | in. | mm | in. | mm | in. | mm |
| 000, 004, 006, 009 | 7.362 | 187.0 | | | | |
| 012, 015, 021, 027, 037, 044 | 8.133 | 206.56 | | | | |
| 063, 086 | 9.343 | 237.3 | .41 | 10 | 2.3 | 58.4 |
| 119, 188, 275, 374, 151 | 10.937 | 277.8 | 2.19 | 56 | 3.9 | 99.0 |

