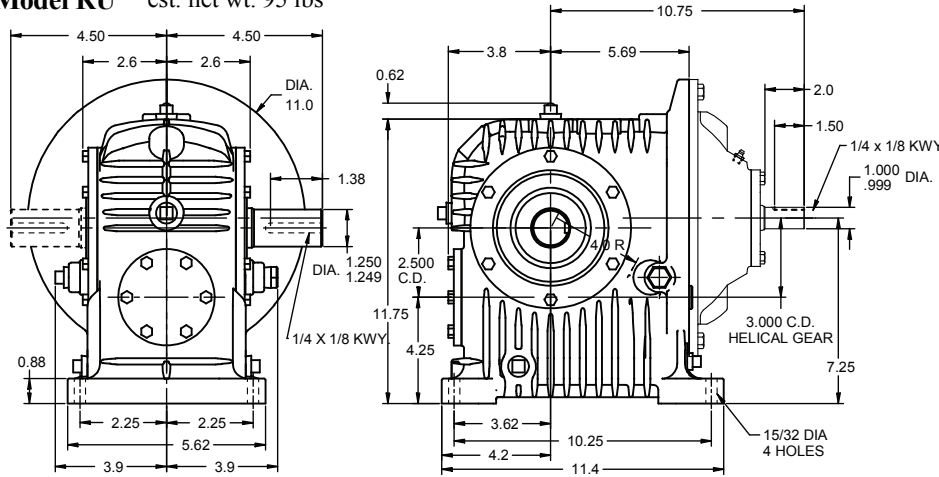
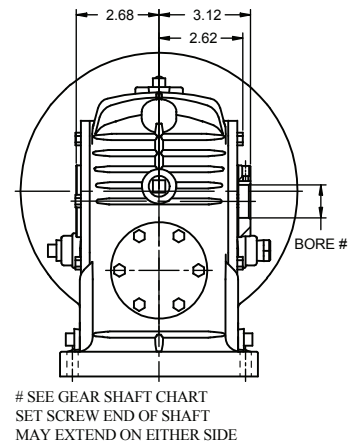


Cone Drive Helical/Worm Speed Reducer - 2.500" C.D. Size 25 Solid Shaft

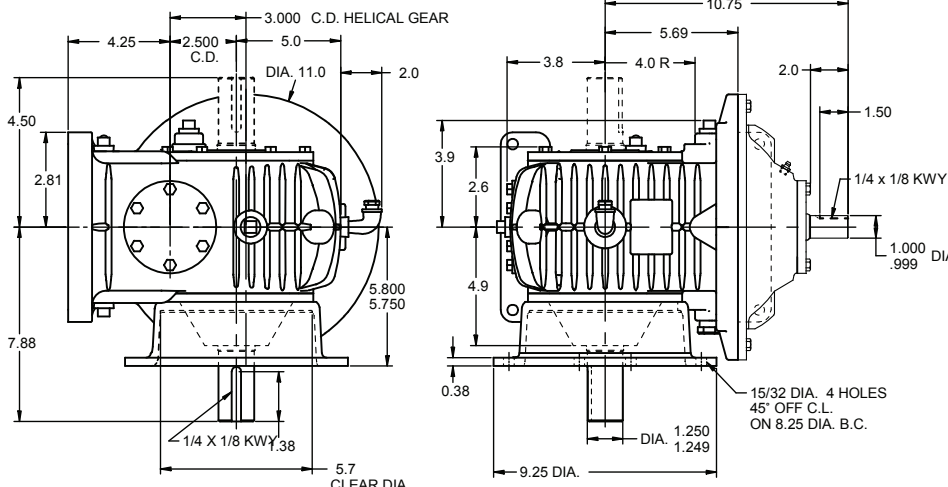
Model RU est. net wt. 95 lbs



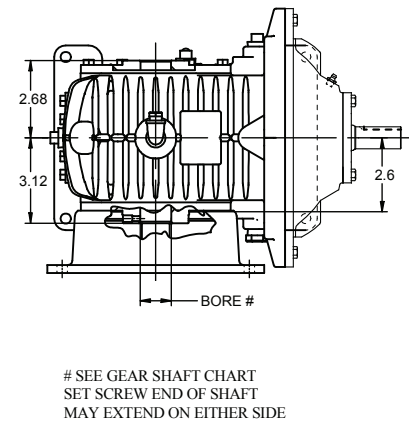
Hollow Shaft
SRU est. net wt. 95 lbs



Model RV est. net wt. 95 lbs

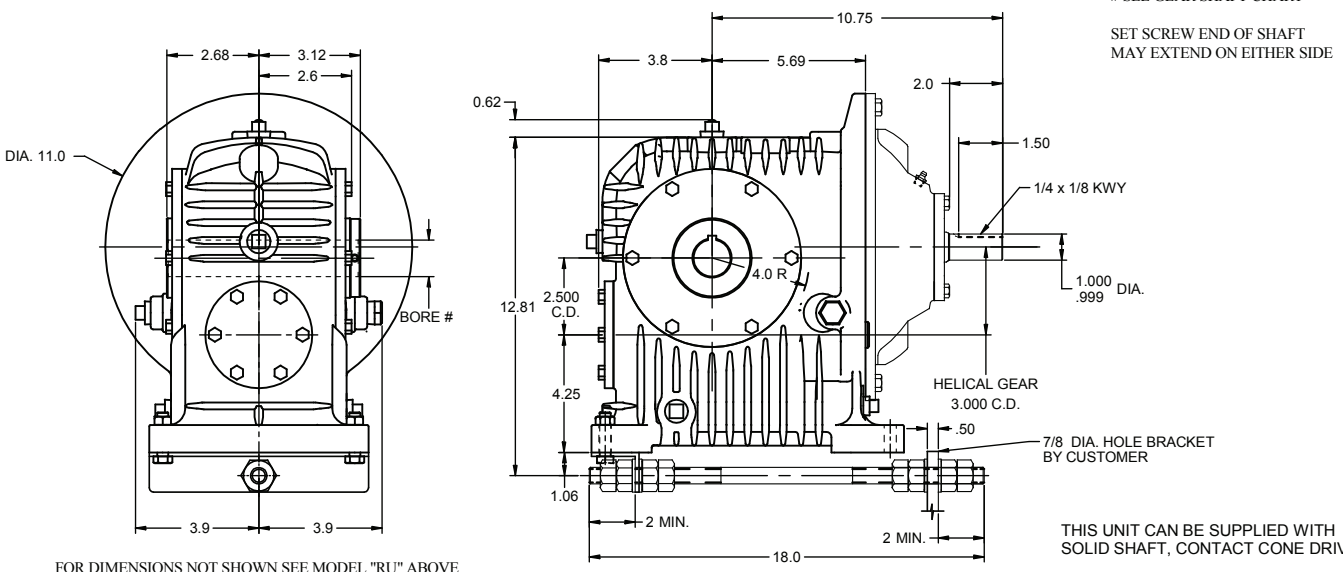


SRV est. net wt. 95 lbs



SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SR est. net wt. 95 lbs



FOR DIMENSIONS NOT SHOWN SEE MODEL "RU" ABOVE

Cone Drive Helical/Worm Speed Reducer

Size 25 3.000" C.D. HELICAL PRI./2.500" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|------|------|------|------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 0.80 | 3.63 | 4.82 | 5.65 | 7.08 |
| | Th.HP | 0.80 | 3.63 | 4.82 | 5.65 | 7.08 |
| | O.T. | 2180 | 1740 | 1550 | 1380 | 1140 |
| 7.5:1 1.5 x 5 | Me.HP | 0.54 | 2.62 | 3.63 | 4.44 | 5.69 |
| | Th.HP | 0.54 | 2.62 | 3.63 | 4.44 | 5.69 |
| | O.T. | 2180 | 1880 | 1740 | 1620 | 1370 |
| 9:1 1.8 x 5 | Me.HP | 0.46 | 2.24 | 3.15 | 3.91 | 5.14 |
| | Th.HP | 0.46 | 2.24 | 3.15 | 3.91 | 5.14 |
| | O.T. | 2180 | 1920 | 1810 | 1710 | 1480 |
| 10:1 1 x 10 | Me.HP | 0.51 | 2.33 | 3.14 | 3.73 | 4.68 |
| | Th.HP | 0.51 | 2.33 | 3.14 | 3.73 | 4.68 |
| | O.T. | 2580 | 2150 | 1960 | 1770 | 1480 |
| 12.5:1 2.5 x 5 | Me.HP | 0.33 | 1.68 | 2.40 | 3.02 | 4.17 |
| | Th.HP | 0.33 | 1.68 | 2.40 | 3.02 | 4.17 |
| | O.T. | 2180 | 2000 | 1910 | 1820 | 1660 |
| 15:1 1.5 x 10 | Me.HP | 0.35 | 1.67 | 2.33 | 2.88 | 3.76 |
| | Th.HP | 0.35 | 1.67 | 2.33 | 2.88 | 3.76 |
| | O.T. | 2580 | 2280 | 2150 | 2030 | 1760 |
| 18:1 1.8 x 10 | Me.HP | 0.29 | 1.42 | 2.01 | 2.52 | 3.39 |
| | Th.HP | 0.29 | 1.42 | 2.01 | 2.52 | 3.39 |
| | O.T. | 2580 | 2320 | 2210 | 2110 | 1890 |
| 20:1 4 x 5 | Me.HP | 0.21 | 1.12 | 1.59 | 2.03 | 2.90 |
| | Th.HP | 0.21 | 1.12 | 1.59 | 2.03 | 2.90 |
| | O.T. | 2180 | 2110 | 2010 | 1950 | 1840 |
| 22.5:1 1.5 x 15 | Me.HP | 0.24 | 1.17 | 1.64 | 2.04 | 2.67 |
| | Th.HP | 0.24 | 1.17 | 1.64 | 2.04 | 2.67 |
| | O.T. | 2590 | 2310 | 2210 | 2100 | 1840 |
| 25:1 2.5 x 10 | Me.HP | 0.21 | 1.07 | 1.52 | 1.93 | 2.70 |
| | Th.HP | 0.21 | 1.07 | 1.52 | 1.93 | 2.70 |
| | O.T. | 2580 | 2400 | 2300 | 2230 | 2070 |
| 27:1 1.8 x 15 | Me.HP | 0.20 | 1.00 | 1.42 | 1.77 | 2.39 |
| | Th.HP | 0.20 | 1.00 | 1.42 | 1.77 | 2.39 |
| | O.T. | 2590 | 2340 | 2260 | 2170 | 1970 |
| 30:1 1.5 x 20 | Me.HP | 0.19 | 0.90 | 1.26 | 1.56 | 2.05 |
| | Th.HP | 0.19 | 0.90 | 1.26 | 1.56 | 2.05 |
| | O.T. | 2510 | 2260 | 2190 | 2070 | 1800 |
| 36:1 1.8 x 20 | Me.HP | 0.16 | 0.77 | 1.09 | 1.36 | 1.84 |
| | Th.HP | 0.16 | 0.77 | 1.09 | 1.36 | 1.84 |
| | O.T. | 2510 | 2280 | 2230 | 2150 | 1930 |
| 37.5:1 2.5 x 15 | Me.HP | 0.15 | 0.75 | 1.07 | 1.36 | 1.90 |
| | Th.HP | 0.15 | 0.75 | 1.07 | 1.36 | 1.90 |
| | O.T. | 2590 | 2420 | 2330 | 2280 | 2140 |
| 40:1 4 x 10 | Me.HP | 0.14 | 0.71 | 1.01 | 1.29 | 1.85 |
| | Th.HP | 0.14 | 0.71 | 1.01 | 1.29 | 1.85 |
| | O.T. | 2580 | 2510 | 2410 | 2350 | 2250 |
| 45:1 1.8 x 25 | Me.HP | 0.13 | 0.62 | 0.88 | 1.09 | 1.48 |
| | Th.HP | 0.13 | 0.62 | 0.88 | 1.09 | 1.48 |
| | O.T. | 2410 | 2270 | 2200 | 2120 | 1930 |
| 50:1 2.5 x 20 | Me.HP | 0.11 | 0.57 | 0.82 | 1.04 | 1.46 |
| | Th.HP | 0.11 | 0.57 | 0.82 | 1.04 | 1.46 |
| | O.T. | 2510 | 2340 | 2270 | 2240 | 2110 |
| 54:1 1.8 x 30 | Me.HP | 0.11 | 0.52 | 0.73 | 0.92 | 1.24 |
| | Th.HP | 0.11 | 0.52 | 0.73 | 0.92 | 1.24 |
| | O.T. | 2300 | 2120 | 2060 | 2000 | 1860 |
| 60:1 4 x 15 | Me.HP | 0.09 | 0.50 | 0.71 | 0.91 | 1.30 |
| | Th.HP | 0.09 | 0.50 | 0.71 | 0.91 | 1.30 |
| | O.T. | 2590 | 2530 | 2430 | 2370 | 2290 |
| 62.5:1 2.5 x 25 | Me.HP | 0.09 | 0.46 | 0.66 | 0.84 | 1.18 |
| | Th.HP | 0.09 | 0.46 | 0.66 | 0.84 | 1.18 |
| | O.T. | 2410 | 2320 | 2260 | 2220 | 2090 |
| 72:1 1.8 x 40 | Me.HP | 0.08 | 0.39 | 0.55 | 0.69 | 0.93 |
| | Th.HP | 0.08 | 0.39 | 0.55 | 0.69 | 0.93 |
| | O.T. | 2070 | 2000 | 1970 | 1920 | 1770 |
| 75:1 2.5 x 30 | Me.HP | 0.08 | 0.39 | 0.55 | 0.70 | 0.98 |
| | Th.HP | 0.08 | 0.39 | 0.55 | 0.70 | 0.98 |
| | O.T. | 2300 | 2170 | 2110 | 2070 | 1980 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|------|------|------|------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 0.07 | 0.38 | 0.54 | 0.69 | 1.00 |
| | Th.HP | 0.07 | 0.38 | 0.54 | 0.69 | 1.00 |
| | O.T. | 2510 | 2450 | 2360 | 2290 | 2250 |
| 90:1 1.8 x 50 | Me.HP | 0.07 | 0.31 | 0.44 | 0.55 | 0.75 |
| | Th.HP | 0.07 | 0.31 | 0.44 | 0.55 | 0.75 |
| | O.T. | 1840 | 1910 | 1910 | 1870 | 1700 |
| 100:1 4 x 25 | Me.HP | 0.06 | 0.31 | 0.44 | 0.56 | 0.80 |
| | Th.HP | 0.06 | 0.31 | 0.44 | 0.56 | 0.80 |
| | O.T. | 2410 | 2370 | 2320 | 2290 | 2230 |
| 108:1 1.8 x 60 | Me.HP | 0.06 | 0.27 | 0.38 | 0.46 | 0.64 |
| | Th.HP | 0.06 | 0.27 | 0.38 | 0.46 | 0.64 |
| | O.T. | 1800 | 1835 | 1820 | 1785 | 1665 |
| 120:1 4 x 30 | Me.HP | 0.05 | 0.26 | 0.37 | 0.47 | 0.67 |
| | Th.HP | 0.05 | 0.26 | 0.37 | 0.47 | 0.67 |
| | O.T. | 2300 | 2250 | 2180 | 2140 | 2080 |
| 125:1 2.5 x 50 | Me.HP | 0.05 | 0.23 | 0.33 | 0.42 | 0.59 |
| | Th.HP | 0.05 | 0.23 | 0.33 | 0.42 | 0.59 |
| | O.T. | 1840 | 1900 | 1910 | 1920 | 1840 |
| 150:1 2.5 x 60 | Me.HP | 0.04 | 0.20 | 0.28 | 0.36 | 0.49 |
| | Th.HP | 0.04 | 0.20 | 0.28 | 0.36 | 0.49 |
| | O.T. | 1800 | 1880 | 1835 | 1820 | 1760 |
| 160:1 4 x 40 | Me.HP | 0.04 | 0.19 | 0.28 | 0.35 | 0.51 |
| | Th.HP | 0.04 | 0.19 | 0.28 | 0.35 | 0.51 |
| | O.T. | 2070 | 2030 | 1980 | 1990 | 1980 |
| 200:1 4 x 50 | Me.HP | 0.03 | 0.16 | 0.22 | 0.28 | 0.41 |
| | Th.HP | 0.03 | 0.16 | 0.22 | 0.28 | 0.41 |
| | O.T. | 1840 | 1880 | 1890 | 1900 | 1920 |
| 240:1 4 x 60 | Me.HP | 0.03 | 0.13 | 0.19 | 0.24 | 0.34 |
| | Th.HP | 0.03 | 0.13 | 0.19 | 0.24 | 0.34 |
| | O.T. | 1800 | 1845 | 1890 | 1850 | 1825 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:

All units can be motorized. VR & SVR units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section. All RV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified. Steeple bearing arrangements follow in this section. When specified each unit can be supplied with a worm shaft extension located opposite the input end. Set screw end of hollow shaft is considered the extension end. Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set. Reducers are designed for shaft rotation in either direction. For cap and carrier dimensions not shown see mounting section. For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio. Refer to page 26 for lubrication information, efficiency, and service factors. Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided. Hand of assembly and mounting position diagrams follow in this section.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|------------------|-------------|
| BORE INCHES | GEARSHAFT NUMBER | KEYWAY SIZE |
| 2.000* | 25-S60-200 | 1/4 X 1/8 |
| 1.9375* | 25-S60-115 | 1/4 X 1/8 |
| 1.6875* | 25-S60-111 | 3/8 X 3/16 |
| 1.4375* | 25-S60-107 | 3/8 X 3/16 |
| 1.250* | 25-S60-104 | 1/4 X 1/8 |
| 1.1875* | 25-S60-103 | 1/4 X 1/8 |

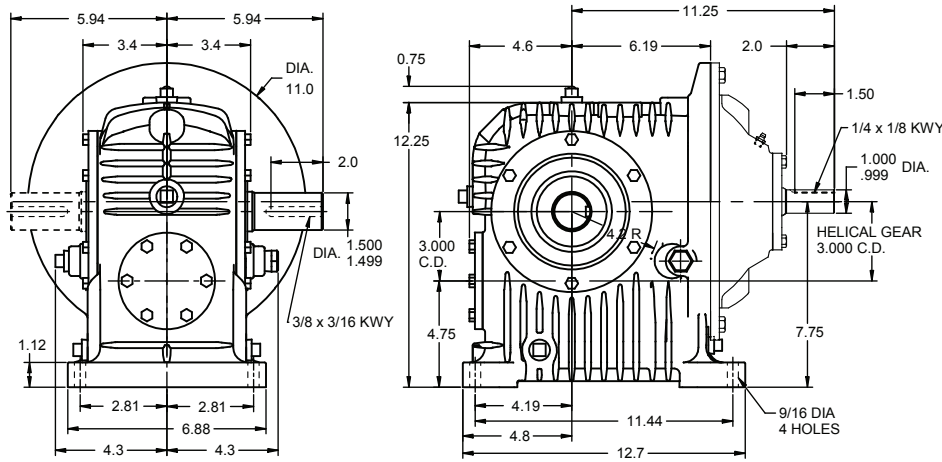
Special hollow gear shaft bore sizes are available at additional cost.

*AGMA Standard Bore Tolerance: +.002, -.000
 2 set screws at long end of shaft.

Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

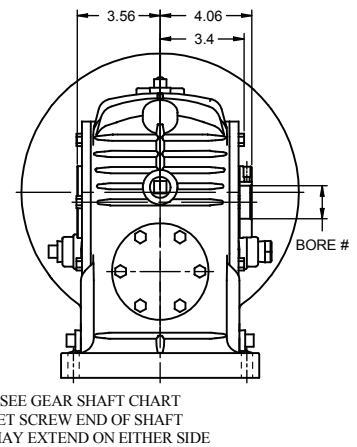
Cone Drive Helical/Worm Speed Reducer - 3.000" C.D. Size 30 Solid Shaft

Model RU est. net wt. 125 lbs.



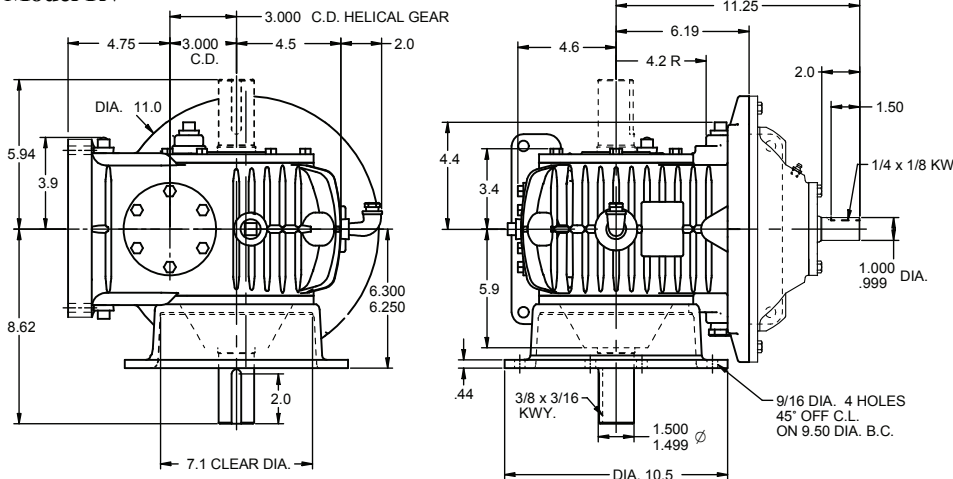
Hollow Shaft

SRU est. net wt. 125 lbs.

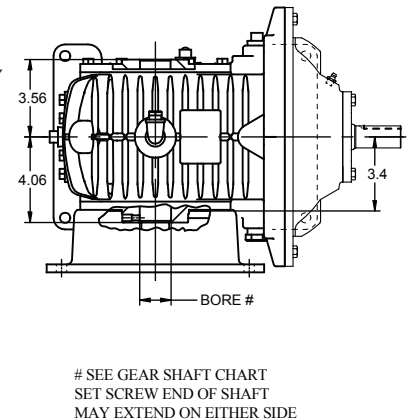


SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

Model RV est. net wt. 135 lbs.



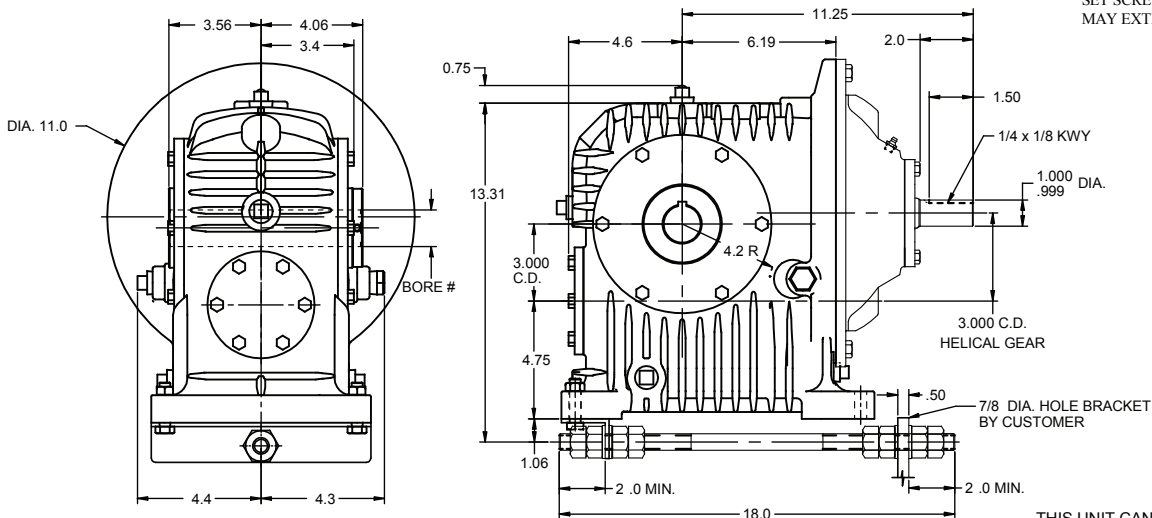
SRV est. net wt. 135 lbs.



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SR est. net wt. 130 lbs.



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

FOR DIMENSIONS NOT SHOWN SEE MODEL "RU" ABOVE

THIS UNIT CAN BE SUPPLIED WITH
 SOLID SHAFT, CONTACT CONE DRIVE

Cone Drive Helical/Worm Speed Reducer

Size 30 3.000" C.D. HELICAL PRI./3.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|------|------|------|------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 1.42 | 6.24 | 8.03 | 9.34 | 11.7 |
| | Th.HP | 1.42 | 6.24 | 8.03 | 9.34 | 9.20 |
| | O.T. | 3870 | 3000 | 2590 | 2280 | 1880 |
| 7.5:1 1.5 x 5 | Me.HP | 0.97 | 4.57 | 6.24 | 7.47 | 9.41 |
| | Th.HP | 0.97 | 4.57 | 6.24 | 7.47 | 9.20 |
| | O.T. | 3870 | 3280 | 3000 | 2730 | 2270 |
| 9:1 1.8 x 5 | Me.HP | 0.81 | 3.94 | 5.45 | 6.66 | 8.53 |
| | Th.HP | 0.81 | 3.94 | 5.45 | 6.66 | 8.53 |
| | O.T. | 3870 | 3380 | 3140 | 2910 | 2460 |
| 10:1 1 x 10 | Me.HP | 0.91 | 4.09 | 5.43 | 6.35 | 7.96 |
| | Th.HP | 0.91 | 4.09 | 5.43 | 6.35 | 7.96 |
| | O.T. | 4600 | 3770 | 3380 | 3010 | 2510 |
| 12.5:1 2.5 x 5 | Me.HP | 0.59 | 2.97 | 4.20 | 5.25 | 7.08 |
| | Th.HP | 0.59 | 2.97 | 4.20 | 5.25 | 7.08 |
| | O.T. | 3870 | 3520 | 3340 | 3170 | 2820 |
| 15:1 1.5 x 10 | Me.HP | 0.62 | 2.96 | 4.09 | 4.99 | 6.40 |
| | Th.HP | 0.62 | 2.96 | 4.09 | 4.99 | 6.40 |
| | O.T. | 4600 | 4040 | 3770 | 3510 | 3000 |
| 18:1 1.8 x 10 | Me.HP | 0.52 | 2.53 | 3.55 | 4.40 | 5.78 |
| | Th.HP | 0.52 | 2.53 | 3.55 | 4.40 | 5.78 |
| | O.T. | 4600 | 4130 | 3910 | 3700 | 3230 |
| 20:1 4 x 5 | Me.HP | 0.35 | 1.97 | 2.80 | 3.58 | 5.05 |
| | Th.HP | 0.35 | 1.97 | 2.80 | 3.58 | 5.05 |
| | O.T. | 3550 | 3720 | 3550 | 3430 | 3200 |
| 22.5:1 1.5 x 15 | Me.HP | 0.43 | 2.08 | 2.89 | 3.54 | 4.55 |
| | Th.HP | 0.43 | 2.08 | 2.89 | 3.54 | 4.55 |
| | O.T. | 4620 | 4100 | 3880 | 3660 | 3140 |
| 25:1 2.5 x 10 | Me.HP | 0.38 | 1.90 | 2.70 | 3.41 | 4.70 |
| | Th.HP | 0.38 | 1.90 | 2.70 | 3.41 | 4.70 |
| | O.T. | 4600 | 4260 | 4090 | 3930 | 3610 |
| 27:1 1.8 x 15 | Me.HP | 0.36 | 1.78 | 2.50 | 3.11 | 4.11 |
| | Th.HP | 0.36 | 1.78 | 2.50 | 3.11 | 4.11 |
| | O.T. | 4620 | 4170 | 3990 | 3820 | 3390 |
| 30:1 1.5 x 20 | Me.HP | 0.33 | 1.59 | 2.22 | 2.72 | 3.50 |
| | Th.HP | 0.33 | 1.59 | 2.22 | 2.72 | 3.50 |
| | O.T. | 4470 | 4020 | 3860 | 3600 | 3090 |
| 36:1 1.8 x 20 | Me.HP | 0.28 | 1.36 | 1.92 | 2.39 | 3.16 |
| | Th.HP | 0.28 | 1.36 | 1.92 | 2.39 | 3.16 |
| | O.T. | 4470 | 4060 | 3940 | 3780 | 3330 |
| 37.5:1 2.5 x 15 | Me.HP | 0.26 | 1.34 | 1.90 | 2.40 | 3.32 |
| | Th.HP | 0.26 | 1.34 | 1.90 | 2.40 | 3.32 |
| | O.T. | 4620 | 4300 | 4140 | 4020 | 3740 |
| 40:1 4 x 10 | Me.HP | 0.24 | 1.26 | 1.80 | 2.29 | 3.27 |
| | Th.HP | 0.24 | 1.26 | 1.80 | 2.29 | 3.27 |
| | O.T. | 4600 | 4460 | 4280 | 4170 | 3970 |
| 45:1 1.8 x 25 | Me.HP | 0.23 | 1.10 | 1.55 | 1.92 | 2.55 |
| | Th.HP | 0.23 | 1.10 | 1.55 | 1.92 | 2.55 |
| | O.T. | 4300 | 4050 | 3890 | 3730 | 3340 |
| 50:1 2.5 x 20 | Me.HP | 0.20 | 1.02 | 1.46 | 1.84 | 2.55 |
| | Th.HP | 0.20 | 1.02 | 1.46 | 1.84 | 2.55 |
| | O.T. | 4470 | 4160 | 4040 | 3960 | 3690 |
| 54:1 1.8 x 30 | Me.HP | 0.19 | 0.92 | 1.29 | 1.61 | 2.14 |
| | Th.HP | 0.19 | 0.92 | 1.29 | 1.61 | 2.14 |
| | O.T. | 4110 | 3780 | 3630 | 3510 | 3200 |
| 60:1 4 x 15 | Me.HP | 0.17 | 0.89 | 1.26 | 1.61 | 2.31 |
| | Th.HP | 0.17 | 0.89 | 1.26 | 1.61 | 2.31 |
| | O.T. | 4620 | 4500 | 4330 | 4220 | 4050 |
| 62.5:1 2.5 x 25 | Me.HP | 0.17 | 0.82 | 1.18 | 1.48 | 2.06 |
| | Th.HP | 0.17 | 0.82 | 1.18 | 1.48 | 2.06 |
| | O.T. | 4300 | 4120 | 4030 | 3920 | 3660 |
| 72:1 1.8 x 40 | Me.HP | 0.14 | 0.69 | 0.97 | 1.21 | 1.61 |
| | Th.HP | 0.14 | 0.69 | 0.97 | 1.21 | 1.61 |
| | O.T. | 3700 | 3560 | 3480 | 3370 | 3050 |
| 75:1 2.5 x 30 | Me.HP | 0.14 | 0.69 | 0.98 | 1.24 | 1.72 |
| | Th.HP | 0.14 | 0.69 | 0.98 | 1.24 | 1.72 |
| | O.T. | 4110 | 3870 | 3760 | 3650 | 3470 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|------|------|------|------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 0.13 | 0.68 | 0.97 | 1.23 | 1.77 |
| | Th.HP | 0.13 | 0.68 | 0.97 | 1.23 | 1.77 |
| | O.T. | 4470 | 4350 | 4190 | 4080 | 3980 |
| 90:1 1.8 x 50 | Me.HP | 0.12 | 0.56 | 0.78 | 0.97 | 1.29 |
| | Th.HP | 0.12 | 0.56 | 0.78 | 0.97 | 1.29 |
| | O.T. | 3280 | 3400 | 3380 | 3290 | 2940 |
| 100:1 4 x 25 | Me.HP | 0.11 | 0.55 | 0.78 | 0.99 | 1.43 |
| | Th.HP | 0.11 | 0.55 | 0.78 | 0.99 | 1.43 |
| | O.T. | 4300 | 4220 | 4130 | 4080 | 3940 |
| 108:1 1.8 x 60 | Me.HP | 0.10 | 0.46 | 0.65 | 0.81 | 1.08 |
| | Th.HP | 0.10 | 0.46 | 0.65 | 0.81 | 1.08 |
| | O.T. | 3230 | 3260 | 3200 | 3110 | 2830 |
| 120:1 4 x 30 | Me.HP | 0.09 | 0.46 | 0.65 | 0.83 | 1.19 |
| | Th.HP | 0.09 | 0.46 | 0.65 | 0.83 | 1.19 |
| | O.T. | 4110 | 4000 | 3880 | 3810 | 3680 |
| 125:1 2.5 x 50 | Me.HP | 0.09 | 0.42 | 0.59 | 0.75 | 1.04 |
| | Th.HP | 0.09 | 0.42 | 0.59 | 0.75 | 1.04 |
| | O.T. | 3280 | 3370 | 3400 | 3390 | 3230 |
| 150:1 2.5 x 60 | Me.HP | 0.07 | 0.35 | 0.50 | 0.63 | 0.87 |
| | Th.HP | 0.07 | 0.35 | 0.50 | 0.63 | 0.87 |
| | O.T. | 3230 | 3290 | 3260 | 3210 | 3070 |
| 160:1 4 x 40 | Me.HP | 0.07 | 0.35 | 0.49 | 0.63 | 0.90 |
| | Th.HP | 0.07 | 0.35 | 0.49 | 0.63 | 0.90 |
| | O.T. | 3700 | 3610 | 3520 | 3550 | 3510 |
| 200:1 4 x 50 | Me.HP | 0.06 | 0.28 | 0.39 | 0.50 | 0.72 |
| | Th.HP | 0.06 | 0.28 | 0.39 | 0.50 | 0.72 |
| | O.T. | 3280 | 3350 | 3370 | 3390 | 3400 |
| 240:1 4 x 60 | Me.HP | 0.05 | 0.23 | 0.33 | 0.42 | 0.60 |
| | Th.HP | 0.05 | 0.23 | 0.33 | 0.42 | 0.60 |
| | O.T. | 3230 | 3280 | 3300 | 3250 | 3230 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:
 All units can be motorized. VR & SVR units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section. All RV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified. Steeple bearing arrangements follow in this section. When specified each unit can be supplied with a worm shaft extension located opposite the input end. Set screw end of hollow shaft is considered the extension end. Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set. Reducers are designed for shaft rotation in either direction. For cap and carrier dimensions not shown see mounting section. For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio. Refer to page 26 for lubrication information, efficiency, and service factors. Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided. Hand of assembly and mounting position diagrams follow in this section.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|-------------------|-------------|
| BORE INCHES | GEAR SHAFT NUMBER | KEYWAY SIZE |
| 2.500* | 30-S60-208 | 3/8 x 3/16 |
| 2.4375* | 30-S60-207 | 3/8 x 3/16 |
| 2.1875* | 30-S60-203 | 1/2 x 1/4 |
| 1.9375* | 30-S60-115 | 1/2 x 1/4 |
| 1.6875* | 30-S60-111 | 3/8 x 3/16 |
| 1.500* | 30-S60-108 | 3/8 x 3/16 |

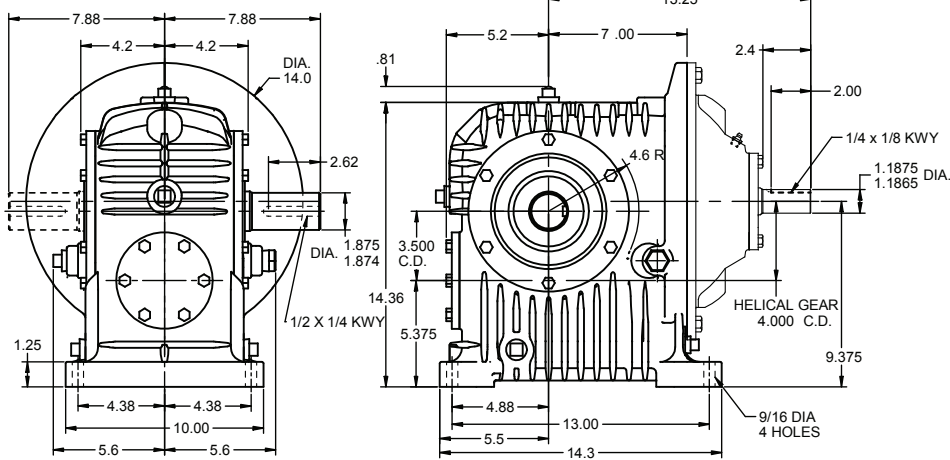
Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard
 Bore Tolerance: +.002, -.000
 2 set screws at long end of shaft.

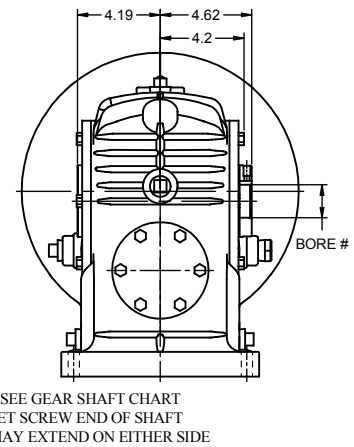
Cone Drive Helical/Worm Speed Reducer - 3.500" C.D. Size 35 Solid Shaft

Hollow Shaft

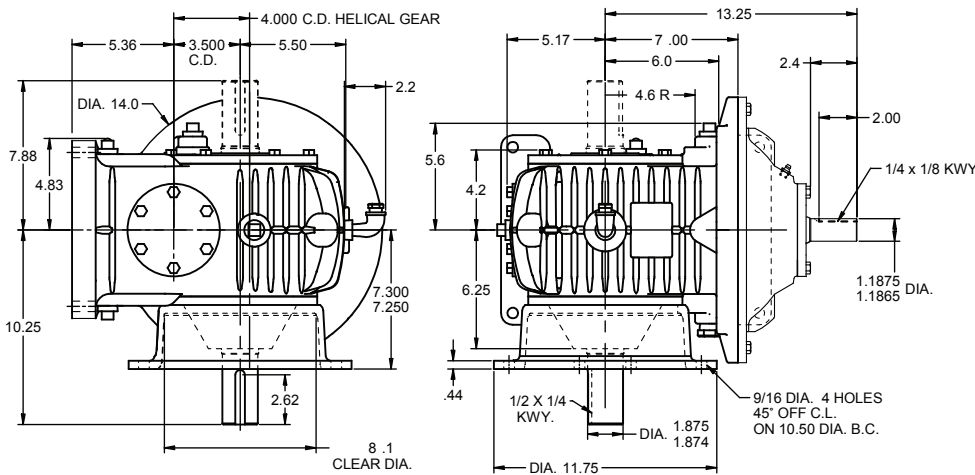
Model RU est. net wt. 220 lbs.



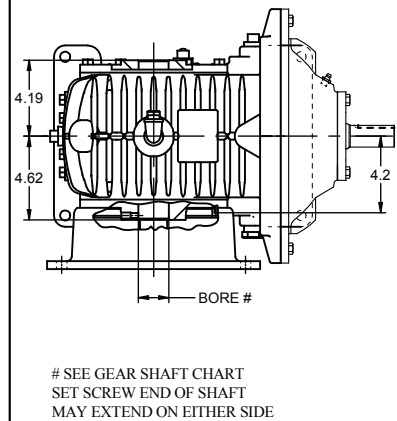
SRU est. net wt. 220 lbs.



Model RV est. net wt. 230 lbs.



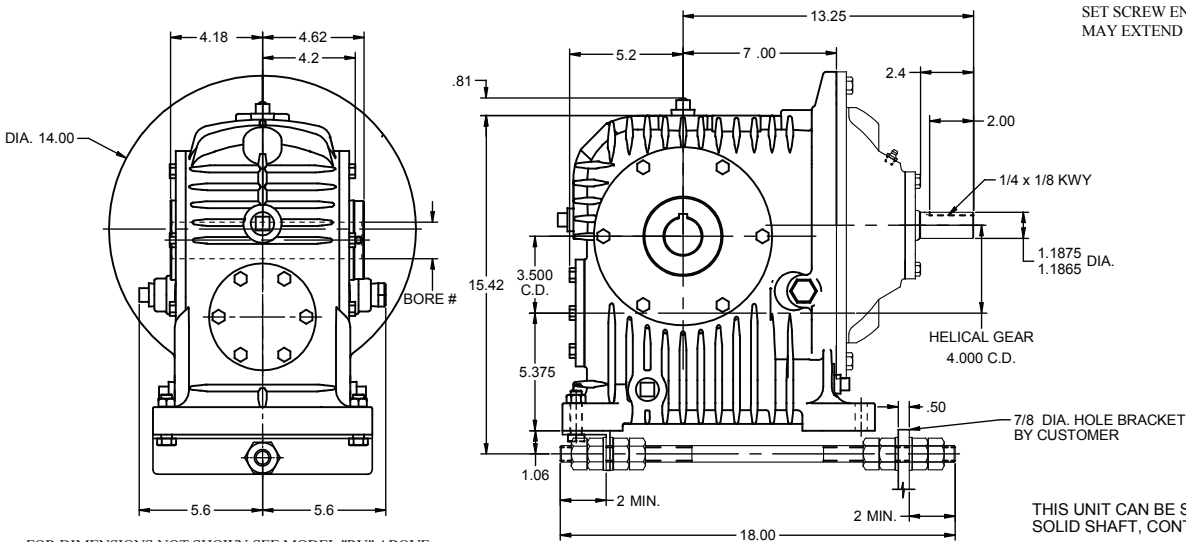
SRV est. net wt. 230 lbs.



SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SR est. net wt. 225 lbs.

SEE GEAR SHAFT CHART



SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

THIS UNIT CAN BE SUPPLIED WITH
 SOLID SHAFT, CONTACT CONE DRIVE

Cone Drive Helical/Worm Speed Reducer

Size 35 4.000" C.D. HELICAL PRI./3.500" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|------|------|------|------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 1.66 | 8.93 | 13.1 | 16.4 | 20.3 |
| | Th.HP | 1.66 | 8.93 | 11.7 | 11.9 | 12.2 |
| | O.T. | 4520 | 4290 | 4200 | 4000 | 3280 |
| 7.5:1 1.5 x 5 | Me.HP | 1.38 | 7.45 | 10.9 | 13.2 | 16.5 |
| | Th.HP | 1.38 | 7.45 | 10.1 | 10.7 | 12.2 |
| | O.T. | 5520 | 5340 | 5240 | 4800 | 3970 |
| 9:1 1.8 x 5 | Me.HP | 1.20 | 6.50 | 9.53 | 11.9 | 15.0 |
| | Th.HP | 1.20 | 6.50 | 9.53 | 10.2 | 12.2 |
| | O.T. | 5720 | 5580 | 5480 | 5180 | 4310 |
| 10:1 1 x 10 | Me.HP | 1.66 | 7.37 | 9.50 | 11.1 | 13.8 |
| | Th.HP | 1.66 | 7.37 | 9.30 | 10.2 | 10.3 |
| | O.T. | 8430 | 6790 | 5910 | 5250 | 4360 |
| 12.5:1 2.5 x 5 | Me.HP | 0.96 | 5.26 | 7.68 | 9.52 | 12.5 |
| | Th.HP | 0.96 | 5.26 | 7.68 | 9.20 | 10.4 |
| | O.T. | 6300 | 6240 | 6110 | 5750 | 4980 |
| 15:1 1.5 x 10 | Me.HP | 1.14 | 5.40 | 7.37 | 8.84 | 11.1 |
| | Th.HP | 1.14 | 5.40 | 7.37 | 8.84 | 10.2 |
| | O.T. | 8510 | 7370 | 6790 | 6220 | 5210 |
| 18:1 1.8 x 10 | Me.HP | 0.96 | 4.65 | 6.44 | 7.87 | 10.1 |
| | Th.HP | 0.96 | 4.65 | 6.44 | 7.87 | 10.1 |
| | O.T. | 8510 | 7580 | 7080 | 6600 | 5640 |
| 20:1 1 x 20 | Me.HP | 0.90 | 3.99 | 5.18 | 6.04 | 7.55 |
| | Th.HP | 0.90 | 3.99 | 5.18 | 6.04 | 7.55 |
| | O.T. | 8270 | 6950 | 6080 | 5390 | 4480 |
| 22.5:1 1.5 x 15 | Me.HP | 0.80 | 3.80 | 5.21 | 6.28 | 7.92 |
| | Th.HP | 0.80 | 3.80 | 5.21 | 6.28 | 7.92 |
| | O.T. | 8540 | 7490 | 7000 | 6480 | 5460 |
| 25:1 2.5 x 10 | Me.HP | 0.70 | 3.50 | 4.96 | 6.20 | 8.36 |
| | Th.HP | 0.70 | 3.50 | 4.96 | 6.20 | 8.36 |
| | O.T. | 8510 | 7840 | 7560 | 7150 | 6420 |
| 27:1 1.8 x 15 | Me.HP | 0.67 | 3.27 | 4.54 | 5.57 | 7.18 |
| | Th.HP | 0.67 | 3.27 | 4.54 | 5.57 | 7.18 |
| | O.T. | 8540 | 7650 | 7250 | 6830 | 5920 |
| 30:1 1.5 x 20 | Me.HP | 0.61 | 2.91 | 3.99 | 4.82 | 6.08 |
| | Th.HP | 0.61 | 2.91 | 3.99 | 4.82 | 6.08 |
| | O.T. | 8270 | 7340 | 6950 | 6390 | 5360 |
| 36:1 1.8 x 20 | Me.HP | 0.51 | 2.50 | 3.48 | 4.28 | 5.52 |
| | Th.HP | 0.51 | 2.50 | 3.48 | 4.28 | 5.52 |
| | O.T. | 8270 | 7450 | 7150 | 6770 | 5810 |
| 37.5:1 2.5 x 15 | Me.HP | 0.49 | 2.46 | 3.49 | 4.37 | 5.92 |
| | Th.HP | 0.49 | 2.46 | 3.49 | 4.37 | 5.92 |
| | O.T. | 8540 | 7920 | 7600 | 7310 | 6660 |
| 40:1 4 x 10 | Me.HP | 0.45 | 2.32 | 3.31 | 4.22 | 5.96 |
| | Th.HP | 0.45 | 2.32 | 3.31 | 4.22 | 5.96 |
| | O.T. | 8510 | 8210 | 7890 | 7680 | 7220 |
| 45:1 1.8 x 25 | Me.HP | 0.42 | 2.02 | 2.81 | 3.45 | 4.46 |
| | Th.HP | 0.42 | 2.02 | 2.81 | 3.45 | 4.46 |
| | O.T. | 7950 | 7440 | 7070 | 6690 | 5820 |
| 50:1 2.5 x 20 | Me.HP | 0.38 | 1.88 | 2.67 | 3.35 | 4.54 |
| | Th.HP | 0.38 | 1.88 | 2.67 | 3.35 | 4.54 |
| | O.T. | 8270 | 7660 | 7420 | 7200 | 6580 |
| 54:1 1.8 x 30 | Me.HP | 0.35 | 1.69 | 2.35 | 2.89 | 3.73 |
| | Th.HP | 0.35 | 1.69 | 2.35 | 2.89 | 3.73 |
| | O.T. | 7600 | 6950 | 6590 | 6300 | 5590 |
| 60:1 4 x 15 | Me.HP | 0.31 | 1.63 | 2.33 | 2.97 | 4.20 |
| | Th.HP | 0.31 | 1.63 | 2.33 | 2.97 | 4.20 |
| | O.T. | 8540 | 8270 | 7970 | 7780 | 7360 |
| 62.5:1 2.5 x 25 | Me.HP | 0.31 | 1.52 | 2.16 | 2.70 | 3.66 |
| | Th.HP | 0.31 | 1.52 | 2.16 | 2.70 | 3.66 |
| | O.T. | 7950 | 7580 | 7390 | 7120 | 6520 |
| 72:1 1.8 x 40 | Me.HP | 0.27 | 1.27 | 1.77 | 2.18 | 2.81 |
| | Th.HP | 0.27 | 1.27 | 1.77 | 2.18 | 2.81 |
| | O.T. | 6830 | 6540 | 6320 | 6050 | 5330 |
| 75:1 2.5 x 30 | Me.HP | 0.26 | 1.27 | 1.81 | 2.26 | 3.07 |
| | Th.HP | 0.26 | 1.27 | 1.81 | 2.26 | 3.07 |
| | O.T. | 7600 | 7120 | 6900 | 6640 | 6180 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|------|------|------|------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 0.24 | 1.25 | 1.78 | 2.27 | 3.22 |
| | Th.HP | 0.24 | 1.25 | 1.78 | 2.27 | 3.22 |
| | O.T. | 8270 | 8010 | 7710 | 7520 | 7250 |
| 90:1 1.8 x 50 | Me.HP | 0.22 | 1.02 | 1.42 | 1.75 | 2.26 |
| | Th.HP | 0.22 | 1.02 | 1.42 | 1.75 | 2.26 |
| | O.T. | 6070 | 6240 | 6140 | 5900 | 5130 |
| 100:1 4 x 25 | Me.HP | 0.20 | 1.01 | 1.43 | 1.83 | 2.60 |
| | Th.HP | 0.20 | 1.01 | 1.43 | 1.83 | 2.60 |
| | O.T. | 7950 | 7770 | 7610 | 7510 | 7180 |
| 108:1 1.8 x 60 | Me.HP | 0.18 | 0.85 | 1.19 | 1.46 | 1.88 |
| | Th.HP | 0.18 | 0.85 | 1.19 | 1.46 | 1.88 |
| | O.T. | 5970 | 5990 | 5810 | 5580 | 4940 |
| 120:1 4 x 30 | Me.HP | 0.17 | 0.84 | 1.20 | 1.53 | 2.17 |
| | Th.HP | 0.17 | 0.84 | 1.20 | 1.53 | 2.17 |
| | O.T. | 7600 | 7360 | 7150 | 7010 | 6690 |
| 125:1 2.5 x 50 | Me.HP | 0.16 | 0.77 | 1.09 | 1.37 | 1.85 |
| | Th.HP | 0.16 | 0.77 | 1.09 | 1.37 | 1.85 |
| | O.T. | 6070 | 6210 | 6240 | 6160 | 5740 |
| 150:1 2.5 x 60 | Me.HP | 0.14 | 0.64 | 0.91 | 1.14 | 1.55 |
| | Th.HP | 0.14 | 0.64 | 0.91 | 1.14 | 1.55 |
| | O.T. | 5970 | 6050 | 5980 | 5840 | 5460 |
| 160:1 4 x 40 | Me.HP | 0.13 | 0.64 | 0.90 | 1.15 | 1.64 |
| | Th.HP | 0.13 | 0.64 | 0.90 | 1.15 | 1.64 |
| | O.T. | 6830 | 6650 | 6480 | 6530 | 6390 |
| 200:1 4 x 50 | Me.HP | 0.10 | 0.51 | 0.73 | 0.93 | 1.31 |
| | Th.HP | 0.10 | 0.51 | 0.73 | 0.93 | 1.31 |
| | O.T. | 6070 | 6160 | 6200 | 6240 | 6180 |
| 240:1 4 x 60 | Me.HP | 0.09 | 0.43 | 0.61 | 0.77 | 1.10 |
| | Th.HP | 0.09 | 0.43 | 0.61 | 0.77 | 1.10 |
| | O.T. | 5970 | 6040 | 6070 | 5990 | 5870 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:
 All units can be motorized. VR & SVR units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section. All RV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified. Steeple bearing arrangements follow in this section. When specified each unit can be supplied with a worm shaft extension located opposite the input end. Set screw end of hollow shaft is considered the extension end. Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set. Reducers are designed for shaft rotation in either direction. For cap and carrier dimensions not shown see mounting section. For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio. Refer to page 26 for lubrication information, efficiency, and service factors. Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided. Hand of assembly and mounting position diagrams follow in this section.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|-------------------|-------------|
| BORE INCHES | GEAR SHAFT NUMBER | KEYWAY SIZE |
| 2.7500 | 35-S60-212 | 3/8 x 3/16 |
| 2.6875* | 35-S60-211 | 3/8 x 3/16 |
| 2.500 | 35-S60-208 | 1/2 x 1/4 |
| 2.4375* | 35-S60-207 | 1/2 x 1/4 |
| 2.1875* | 35-S60-203 | 3/8 x 3/16 |
| 1.9375* | 35-S60-115 | 3/8 x 3/16 |
| 1.6875* | 35-S60-111 | 3/8 x 3/16 |

Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard Bore Tolerance: +.002, -.000
 2 set screws at long end of shaft.

Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

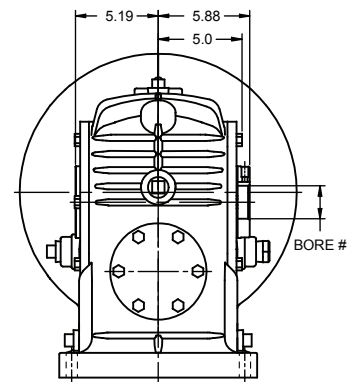
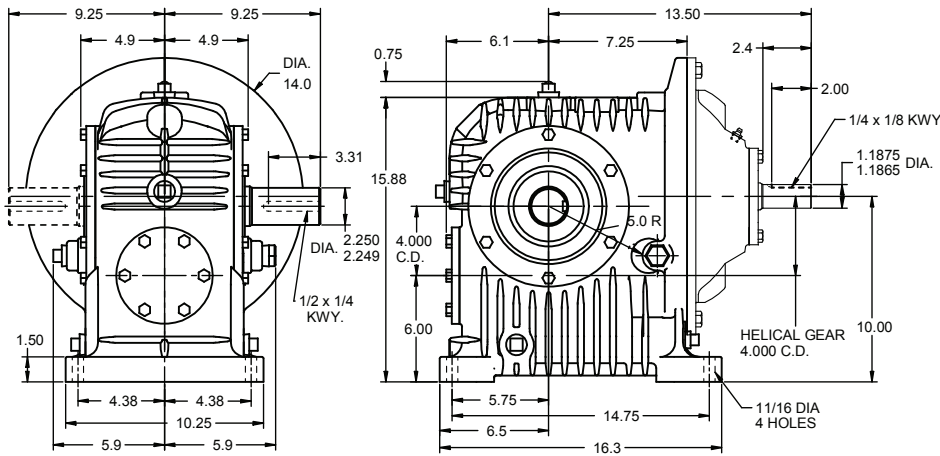
Cone Drive Helical/Worm Speed Reducers - 4.000" C.D.

Size 40 Solid Shaft

Hollow Shaft

Model RU est. net wt. 275 lbs.

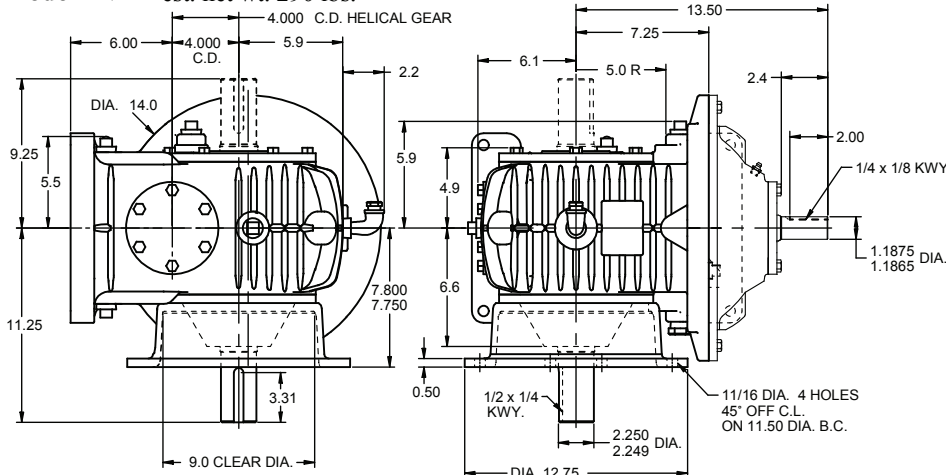
SRU est. net wt. 275 lbs.



SEE GEAR SHAFT CHART
SET SCREW END OF SHAFT
MAY EXTEND ON EITHER SIDE

Model RV est. net wt. 290 lbs.

SRV est. net wt. 290 lbs.

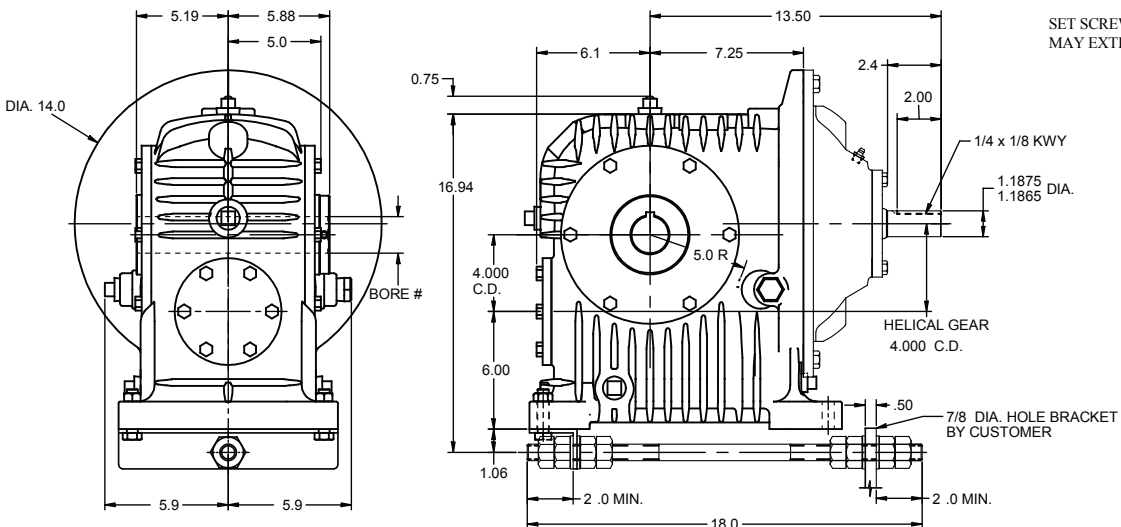


SEE GEAR SHAFT CHART
SET SCREW END OF SHAFT
MAY EXTEND ON EITHER SIDE

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SR est. net wt. 280 lbs.

SEE GEAR SHAFT CHART



SET SCREW END OF SHAFT
MAY EXTEND ON EITHER SIDE

FOR DIMENSIONS NOT SHOWN SEE MODEL "RU" ABOVE

THIS UNIT CAN BE SUPPLIED WITH
SOLID SHAFT, CONTACT CONE DRIVE

Cone Drive Helical/Worm Speed Reducer

Size 40 4.000" C.D. HELICAL PRI./4.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 1.66 | 8.93 | 13.1 | 16.9 | 24.9 |
| | Th.HP | 1.66 | 8.93 | 13.1 | 16.9 | 18.7 |
| | O.T. | 4670 | 4430 | 4340 | 4270 | 4140 |
| 7.5:1 1.5 x 5 | Me.HP | 1.38 | 7.45 | 10.9 | 14.2 | 20.9 |
| | Th.HP | 1.38 | 7.45 | 10.9 | 14.2 | 18.7 |
| | O.T. | 5710 | 5520 | 5410 | 5330 | 5190 |
| 9:1 1.8 x 5 | Me.HP | 1.2 | 6.5 | 9.53 | 12.4 | 18.3 |
| | Th.HP | 1.2 | 6.5 | 9.53 | 12.4 | 17.9 |
| | O.T. | 5920 | 5770 | 5660 | 5580 | 5440 |
| 10:1 1 x 10 | Me.HP | 1.66 | 8.93 | 13.1 | 15.3 | 19 |
| | Th.HP | 1.66 | 8.93 | 13.1 | 15.3 | 15.4 |
| | O.T. | 8730 | 8520 | 8400 | 7490 | 6190 |
| 12.5:1 2.5 x 5 | Me.HP | 0.96 | 5.26 | 7.72 | 10.0 | 14.8 |
| | Th.HP | 0.96 | 5.26 | 7.72 | 10.0 | 14.8 |
| | O.T. | 6520 | 6450 | 6350 | 6260 | 6110 |
| 15:1 1.5 x 10 | Me.HP | 1.38 | 7.45 | 10.3 | 12.3 | 15.4 |
| | Th.HP | 1.38 | 7.45 | 10.3 | 12.3 | 15.2 |
| | O.T. | 10700 | 10500 | 9860 | 8910 | 7440 |
| 18:1 1.8 x 10 | Me.HP | 1.20 | 6.50 | 9.13 | 11.0 | 13.9 |
| | Th.HP | 1.20 | 6.50 | 9.13 | 11.0 | 13.9 |
| | O.T. | 11100 | 11000 | 10400 | 9580 | 8050 |
| 20:1 1 x 20 | Me.HP | 1.30 | 5.62 | 7.17 | 8.34 | 10.4 |
| | Th.HP | 1.30 | 5.62 | 7.17 | 8.34 | 10.4 |
| | O.T. | 12400 | 10100 | 8720 | 7710 | 6380 |
| 22.5:1 1.5 x 15 | Me.HP | 1.15 | 5.43 | 7.33 | 8.70 | 10.9 |
| | Th.HP | 1.15 | 5.43 | 7.33 | 8.70 | 10.9 |
| | O.T. | 12800 | 11100 | 10200 | 9300 | 7790 |
| 25:1 2.5 x 10 | Me.HP | 0.96 | 5.04 | 7.07 | 8.80 | 11.6 |
| | Th.HP | 0.96 | 5.04 | 7.07 | 8.80 | 11.6 |
| | O.T. | 12200 | 11700 | 11100 | 10500 | 9240 |
| 27:1 1.8 x 15 | Me.HP | 0.97 | 4.69 | 6.45 | 7.82 | 9.91 |
| | Th.HP | 0.97 | 4.69 | 6.45 | 7.82 | 9.91 |
| | O.T. | 12800 | 11400 | 10700 | 9920 | 8460 |
| 30:1 1.5 x 20 | Me.HP | 0.88 | 4.16 | 5.62 | 6.68 | 8.40 |
| | Th.HP | 0.88 | 4.16 | 5.62 | 6.68 | 8.40 |
| | O.T. | 12400 | 10900 | 10100 | 9190 | 7670 |
| 36:1 1.8 x 20 | Me.HP | 0.74 | 3.59 | 4.94 | 5.99 | 7.62 |
| | Th.HP | 0.74 | 3.59 | 4.94 | 5.99 | 7.62 |
| | O.T. | 12400 | 11100 | 10500 | 9840 | 8300 |
| 37.5:1 2.5 x 15 | Me.HP | 0.70 | 3.54 | 4.99 | 6.21 | 8.26 |
| | Th.HP | 0.70 | 3.54 | 4.99 | 6.21 | 8.26 |
| | O.T. | 12800 | 11800 | 11200 | 10800 | 9620 |
| 40:1 4 x 10 | Me.HP | 0.61 | 3.18 | 4.60 | 5.91 | 8.47 |
| | Th.HP | 0.61 | 3.18 | 4.60 | 5.91 | 8.47 |
| | O.T. | 12100 | 11700 | 11400 | 11100 | 10600 |
| 45:1 1.8 x 25 | Me.HP | 0.60 | 2.89 | 3.99 | 4.84 | 6.15 |
| | Th.HP | 0.60 | 2.89 | 3.99 | 4.84 | 6.15 |
| | O.T. | 11900 | 11100 | 10400 | 9730 | 8330 |
| 50:1 2.5 x 20 | Me.HP | 0.54 | 2.71 | 3.82 | 4.76 | 6.35 |
| | Th.HP | 0.54 | 2.71 | 3.82 | 4.76 | 6.35 |
| | O.T. | 12400 | 11500 | 11000 | 10600 | 9530 |
| 54:1 1.8 x 30 | Me.HP | 0.50 | 2.42 | 3.34 | 4.06 | 5.16 |
| | Th.HP | 0.50 | 2.42 | 3.34 | 4.06 | 5.16 |
| | O.T. | 11400 | 10400 | 9740 | 9190 | 8010 |
| 60:1 4 x 15 | Me.HP | 0.45 | 2.35 | 3.35 | 4.25 | 5.98 |
| | Th.HP | 0.45 | 2.35 | 3.35 | 4.25 | 5.98 |
| | O.T. | 12800 | 12300 | 11900 | 11600 | 10900 |
| 62.5:1 2.5 x 25 | Me.HP | 0.44 | 2.19 | 3.08 | 3.84 | 5.13 |
| | Th.HP | 0.44 | 2.19 | 3.08 | 3.84 | 5.13 |
| | O.T. | 11900 | 11300 | 11000 | 10500 | 9450 |
| 72:1 1.8 x 40 | Me.HP | 0.38 | 1.82 | 2.52 | 3.05 | 3.88 |
| | Th.HP | 0.38 | 1.82 | 2.52 | 3.05 | 3.88 |
| | O.T. | 10300 | 9790 | 9360 | 8840 | 7650 |
| 75:1 2.5 x 30 | Me.HP | 0.37 | 1.83 | 2.58 | 3.22 | 4.30 |
| | Th.HP | 0.37 | 1.83 | 2.58 | 3.22 | 4.30 |
| | O.T. | 11400 | 10700 | 10300 | 9830 | 8990 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 0.35 | 1.80 | 2.56 | 3.26 | 4.58 |
| | Th.HP | 0.35 | 1.80 | 2.56 | 3.26 | 4.58 |
| | O.T. | 12400 | 12000 | 11500 | 11200 | 10700 |
| 90:1 1.8 x 50 | Me.HP | 0.31 | 1.46 | 2.02 | 2.45 | 3.12 |
| | Th.HP | 0.31 | 1.46 | 2.02 | 2.45 | 3.12 |
| | O.T. | 9240 | 9360 | 9110 | 8620 | 7380 |
| 100:1 4 x 25 | Me.HP | 0.28 | 1.45 | 2.06 | 2.63 | 3.70 |
| | Th.HP | 0.28 | 1.45 | 2.06 | 2.63 | 3.70 |
| | O.T. | 11900 | 11600 | 11400 | 11200 | 10600 |
| 108:1 1.8 x 60 | Me.HP | 0.26 | 1.22 | 1.68 | 2.05 | 2.60 |
| | Th.HP | 0.26 | 1.22 | 1.68 | 2.05 | 2.60 |
| | O.T. | 9100 | 9010 | 8640 | 8180 | 7110 |
| 120:1 4 x 30 | Me.HP | 0.24 | 1.21 | 1.73 | 2.20 | 3.10 |
| | Th.HP | 0.24 | 1.21 | 1.73 | 2.20 | 3.10 |
| | O.T. | 11400 | 11000 | 10700 | 10500 | 9920 |
| 125:1 2.5 x 50 | Me.HP | 0.23 | 1.10 | 1.56 | 1.94 | 2.60 |
| | Th.HP | 0.23 | 1.10 | 1.56 | 1.94 | 2.60 |
| | O.T. | 9240 | 9370 | 9330 | 9150 | 8380 |
| 150:1 2.5 x 60 | Me.HP | 0.20 | 0.92 | 1.30 | 1.62 | 2.17 |
| | Th.HP | 0.20 | 0.92 | 1.30 | 1.62 | 2.17 |
| | O.T. | 9100 | 9150 | 8950 | 8700 | 7990 |
| 160:1 4 x 40 | Me.HP | 0.18 | 0.91 | 1.30 | 1.66 | 2.33 |
| | Th.HP | 0.18 | 0.91 | 1.30 | 1.66 | 2.33 |
| | O.T. | 10300 | 10000 | 9770 | 9800 | 9490 |
| 200:1 4 x 50 | Me.HP | 0.15 | 0.73 | 1.04 | 1.33 | 1.87 |
| | Th.HP | 0.15 | 0.73 | 1.04 | 1.33 | 1.87 |
| | O.T. | 9240 | 9320 | 9360 | 9380 | 9200 |
| 240:1 4 x 60 | Me.HP | 0.13 | 0.61 | 0.87 | 1.11 | 1.56 |
| | Th.HP | 0.13 | 0.61 | 0.87 | 1.11 | 1.56 |
| | O.T. | 9100 | 9160 | 9170 | 9030 | 8760 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:

All units can be motorized. VR & SVR units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section. All RV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified. Steeple bearing arrangements follow in this section. When specified each unit can be supplied with a worm shaft extension located opposite the input end. Set screw end of hollow shaft is considered the extension end. Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set. Reducers are designed for shaft rotation in either direction. For cap and carrier dimensions not shown see mounting section. For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio. Refer to page 26 for lubrication information, efficiency, and service factors. Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided. Hand of assembly and mounting position diagrams follow in this section.

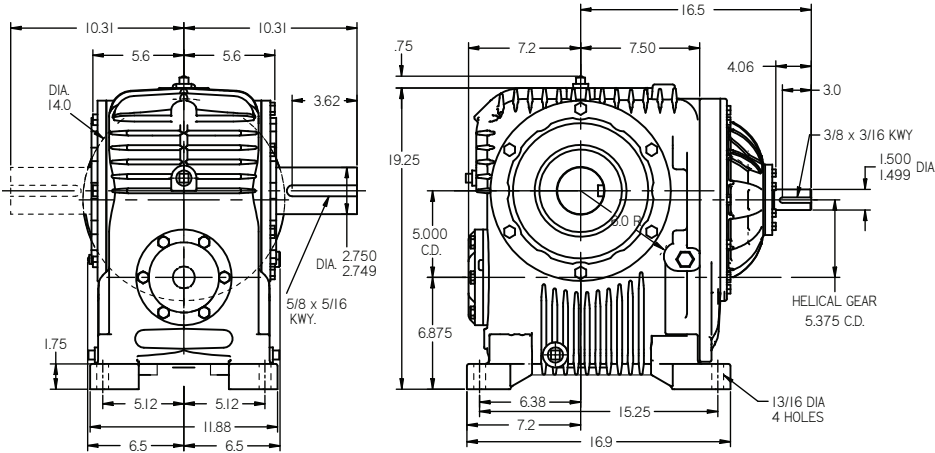
| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|-------------------|-------------|
| BORE INCHES | GEAR SHAFT NUMBER | KEYWAY SIZE |
| 2.9375* | 40-S60-215 | 5/8 X 5/16 |
| 2.6875* | 40-S60-211 | 5/8 X 5/16 |
| 2.4375* | 40-S60-207 | 5/8 X 5/16 |
| 2.1875* | 40-S60-203 | 5/8 X 5/16 |

Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard Bore Tolerance: +.003, -.000
 2 set screws at long end of shaft.

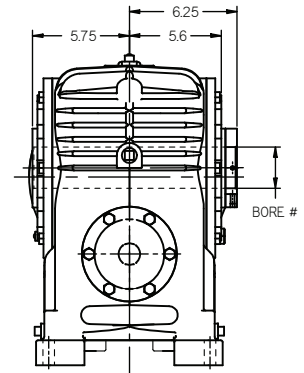
Cone Drive Helical/Worm Speed Reducers - 5.000" C.D.
Size 50 - Solid Shaft

Model RU est. net wt. 430 lbs



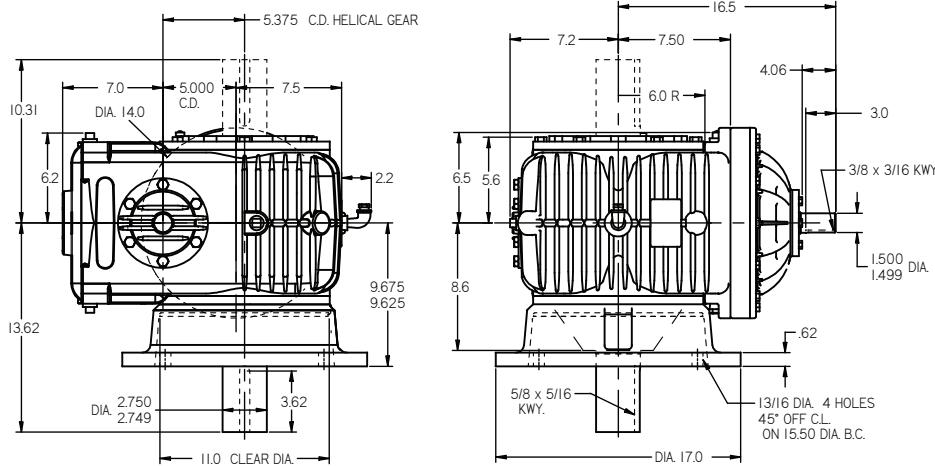
Hollow Shaft

SRU est. net wt. 430 lbs.

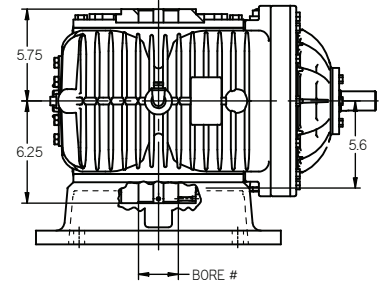


SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

Model RV est. net wt. 460 lbs



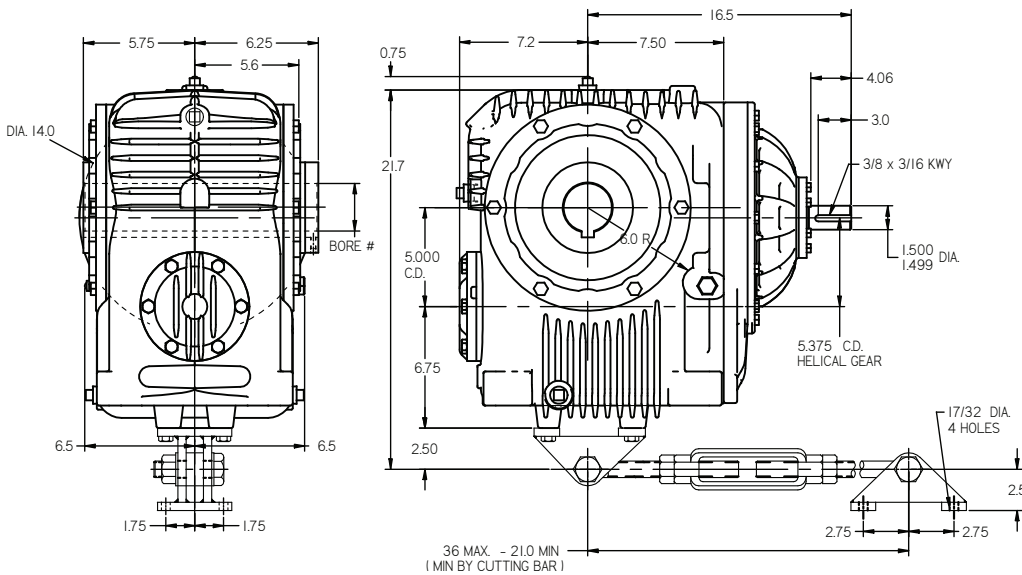
SRV est. net wt. 460 lbs



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SR est. net wt. 440 lbs



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

THIS UNIT CAN BE SUPPLIED WITH
 SOLID SHAFT, CONTACT CONE DRIVE

Cone Drive Helical/Worm Speed Reducer

Size 50 5.375" C.D. HELICAL PRI./5.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 3.91 | 20.8 | 30.4 | 39.2 | 48.8 |
| | Th.HP | 3.91 | 19.8 | 23.7 | 24.2 | 24.8 |
| | O.T. | 11000 | 10300 | 10100 | 9900 | 8140 |
| 7.5:1 1.5 x 5 | Me.HP | 3.23 | 17.3 | 25.3 | 32.7 | 41.1 |
| | Th.HP | 3.23 | 17.3 | 20.3 | 21.4 | 24.8 |
| | O.T. | 13400 | 12800 | 12500 | 12300 | 10200 |
| 9:1 1.8 x 5 | Me.HP | 2.82 | 15.2 | 22.2 | 28.8 | 37.6 |
| | Th.HP | 2.82 | 15.2 | 18.8 | 20.6 | 24.8 |
| | O.T. | 13900 | 13500 | 13200 | 13000 | 11200 |
| 10:1 1 x 10 | Me.HP | 3.91 | 19.3 | 24.1 | 28.0 | 34.3 |
| | Th.HP | 3.91 | 15.1 | 18.3 | 20.2 | 20.5 |
| | O.T. | 20600 | 18400 | 15500 | 13800 | 11200 |
| 12.5:1 2.5 x 5 | Me.HP | 2.27 | 12.3 | 18.0 | 23.4 | 31.5 |
| | Th.HP | 2.27 | 12.3 | 16.7 | 18.4 | 20.5 |
| | O.T. | 15400 | 15100 | 14800 | 14600 | 13000 |
| 15:1 1.5 x 10 | Me.HP | 3.23 | 14.9 | 19.3 | 22.6 | 28.3 |
| | Th.HP | 3.23 | 12.7 | 14.9 | 17.8 | 20.2 |
| | O.T. | 25000 | 21000 | 18400 | 16400 | 13700 |
| 18:1 1.8 x 10 | Me.HP | 2.71 | 12.9 | 17.3 | 20.4 | 25.6 |
| | Th.HP | 2.71 | 11.3 | 13.7 | 15.7 | 19.8 |
| | O.T. | 25100 | 21800 | 19700 | 17700 | 14800 |
| 20:1 1 x 20 | Me.HP | 2.57 | 10.6 | 13.2 | 15.3 | 18.9 |
| | Th.HP | 2.57 | 10.6 | 13.2 | 12.7 | 13.1 |
| | O.T. | 24500 | 19000 | 16000 | 14200 | 11600 |
| 22.5:1 1.5 x 15 | Me.HP | 2.27 | 10.5 | 13.7 | 16.0 | 20.1 |
| | Th.HP | 2.27 | 10.5 | 12.9 | 14.3 | 16.9 |
| | O.T. | 25200 | 21400 | 19100 | 17100 | 14300 |
| 25:1 2.5 x 10 | Me.HP | 1.98 | 9.91 | 13.7 | 16.7 | 21.5 |
| | Th.HP | 1.98 | 9.91 | 11.5 | 13.4 | 17.2 |
| | O.T. | 25100 | 23000 | 21500 | 20000 | 17100 |
| 27:1 1.8 x 15 | Me.HP | 1.91 | 9.11 | 12.3 | 14.5 | 18.2 |
| | Th.HP | 1.91 | 9.11 | 11.0 | 13.0 | 16.2 |
| | O.T. | 25200 | 22100 | 20200 | 18400 | 15500 |
| 30:1 1.5 x 20 | Me.HP | 1.74 | 8.04 | 10.6 | 12.3 | 15.4 |
| | Th.HP | 1.74 | 8.04 | 10.6 | 12.0 | 13.2 |
| | O.T. | 24500 | 21000 | 19000 | 16900 | 14100 |
| 36:1 1.8 x 20 | Me.HP | 1.46 | 6.98 | 9.40 | 11.2 | 14.0 |
| | Th.HP | 1.46 | 6.98 | 9.40 | 11.2 | 12.7 |
| | O.T. | 24500 | 21600 | 20000 | 18300 | 15300 |
| 37.5:1 2.5 x 15 | Me.HP | 1.39 | 6.97 | 9.68 | 11.9 | 15.3 |
| | Th.HP | 1.39 | 6.97 | 9.68 | 10.6 | 13.4 |
| | O.T. | 25200 | 23300 | 21800 | 20500 | 17800 |
| 40:1 4 x 10 | Me.HP | 1.26 | 6.59 | 9.37 | 11.8 | 16.2 |
| | Th.HP | 1.26 | 6.30 | 8.20 | 9.70 | 11.70 |
| | O.T. | 25100 | 24100 | 23200 | 22200 | 20300 |
| 45:1 1.8 x 25 | Me.HP | 1.19 | 5.63 | 7.59 | 9.01 | 11.3 |
| | Th.HP | 1.19 | 5.63 | 7.59 | 9.01 | 11.3 |
| | O.T. | 23600 | 21600 | 19800 | 18100 | 15300 |
| 50:1 2.5 x 20 | Me.HP | 1.07 | 5.33 | 7.41 | 9.10 | 11.7 |
| | Th.HP | 1.07 | 5.33 | 7.41 | 9.10 | 11.3 |
| | O.T. | 24500 | 22600 | 21400 | 20300 | 17600 |
| 54:1 1.8 x 30 | Me.HP | 1 | 4.72 | 6.36 | 7.55 | 9.48 |
| | Th.HP | 1 | 4.72 | 6.36 | 7.55 | 9.48 |
| | O.T. | 22600 | 20200 | 18500 | 17100 | 14700 |
| 60:1 4 x 15 | Me.HP | 0.88 | 4.63 | 6.60 | 8.32 | 11.5 |
| | Th.HP | 0.88 | 4.63 | 6.60 | 7.80 | 10.3 |
| | O.T. | 25200 | 24300 | 23400 | 22600 | 20800 |
| 62.5:1 2.5 x 25 | Me.HP | 0.87 | 4.30 | 5.98 | 7.35 | 9.49 |
| | Th.HP | 0.87 | 4.30 | 5.98 | 7.35 | 9.49 |
| | O.T. | 23600 | 22400 | 21300 | 20100 | 17500 |
| 72:1 1.8 x 40 | Me.HP | 0.76 | 3.55 | 4.79 | 5.69 | 7.14 |
| | Th.HP | 0.76 | 3.55 | 4.79 | 5.69 | 7.14 |
| | O.T. | 20400 | 19000 | 17800 | 16500 | 14100 |
| 75:1 2.5 x 30 | Me.HP | 0.73 | 3.60 | 5.01 | 6.16 | 7.95 |
| | Th.HP | 0.73 | 3.60 | 5.01 | 6.16 | 7.95 |
| | O.T. | 22600 | 21000 | 19900 | 18800 | 16600 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 0.68 | 3.54 | 5.05 | 6.37 | 8.79 |
| | Th.HP | 0.68 | 3.54 | 5.05 | 6.37 | 8.79 |
| | O.T. | 24500 | 23600 | 22700 | 21900 | 20500 |
| 90:1 1.8 x 50 | Me.HP | 0.61 | 2.85 | 3.84 | 4.57 | 5.73 |
| | Th.HP | 0.61 | 2.85 | 3.84 | 4.57 | 5.73 |
| | O.T. | 18200 | 18200 | 17400 | 16100 | 13600 |
| 100:1 4 x 25 | Me.HP | 0.56 | 2.86 | 4.07 | 5.14 | 7.09 |
| | Th.HP | 0.56 | 2.86 | 4.07 | 5.14 | 7.09 |
| | O.T. | 23600 | 22900 | 22500 | 21900 | 20400 |
| 108:1 1.8 x 60 | Me.HP | 0.52 | 2.38 | 3.21 | 3.81 | 4.79 |
| | Th.HP | 0.52 | 2.38 | 3.21 | 3.81 | 4.79 |
| | O.T. | 17900 | 17500 | 16500 | 15200 | 13100 |
| 120:1 4 x 30 | Me.HP | 0.47 | 2.39 | 3.41 | 4.3 | 5.94 |
| | Th.HP | 0.47 | 2.39 | 3.41 | 4.3 | 5.94 |
| | O.T. | 22600 | 21800 | 21200 | 20500 | 19000 |
| 125:1 2.5 x 50 | Me.HP | 0.45 | 2.18 | 3.03 | 3.72 | 4.81 |
| | Th.HP | 0.45 | 2.18 | 3.03 | 3.72 | 4.81 |
| | O.T. | 18200 | 18500 | 18100 | 17500 | 15500 |
| 150:1 2.5 x 60 | Me.HP | 0.39 | 1.82 | 2.53 | 3.11 | 4.01 |
| | Th.HP | 0.39 | 1.82 | 2.53 | 3.11 | 4.01 |
| | O.T. | 17900 | 18000 | 17400 | 16700 | 14800 |
| 160:1 4 x 40 | Me.HP | 0.36 | 1.8 | 2.57 | 3.24 | 4.47 |
| | Th.HP | 0.36 | 1.8 | 2.57 | 3.24 | 4.47 |
| | O.T. | 20400 | 19800 | 19300 | 19200 | 18200 |
| 175:1 2.5 x 70 | Me.HP | 0.33 | 1.56 | 2.17 | 2.67 | 3.44 |
| | Th.HP | 0.33 | 1.56 | 2.17 | 2.67 | 3.44 |
| | O.T. | 17600 | 17700 | 17100 | 16400 | 14600 |
| 200:1 4 x 50 | Me.HP | 0.29 | 1.45 | 2.06 | 2.6 | 3.59 |
| | Th.HP | 0.29 | 1.45 | 2.06 | 2.6 | 3.59 |
| | O.T. | 18200 | 18400 | 18500 | 18300 | 17700 |
| 240:1 4 x 60 | Me.HP | 0.25 | 1.21 | 1.72 | 2.17 | 3.00 |
| | Th.HP | 0.25 | 1.21 | 1.72 | 2.17 | 3.00 |
| | O.T. | 17900 | 18000 | 18100 | 17600 | 16800 |
| 280:1 4 x 70 | Me.HP | 0.22 | 1.04 | 1.48 | 1.86 | 2.57 |
| | Th.HP | 0.22 | 1.04 | 1.48 | 1.86 | 2.57 |
| | O.T. | 17600 | 17800 | 17800 | 17400 | 16600 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:
 All units can be motorized. VR & SVR units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section. All RV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified. Steeple bearing arrangements follow in this section. When specified each unit can be supplied with a worm shaft extension located opposite the input end. Set screw end of hollow shaft is considered the extension end. Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set. Reducers are designed for shaft rotation in either direction. For cap and carrier dimensions not shown see mounting section. For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio. Refer to page 26 for lubrication information, efficiency, and service factors. Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided. Hand of assembly and mounting position diagrams follow in this section.

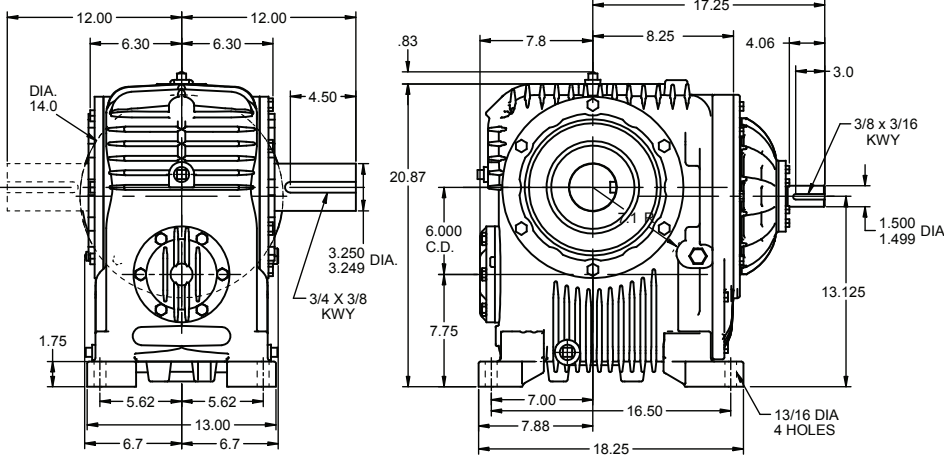
| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|-------------------|-------------|
| BORE INCHES | GEAR SHAFT NUMBER | KEYWAY SIZE |
| 3.4375* | 50-S60-307 | 5/8 X 5/16 |
| 3.1875* | 50-S60-303 | 5/8 X 5/16 |
| 2.750 | 50-S60-212 | 5/8 X 5/16 |

Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard Bore Tolerance: +.003, -.000
 2 set screws at long end of shaft.

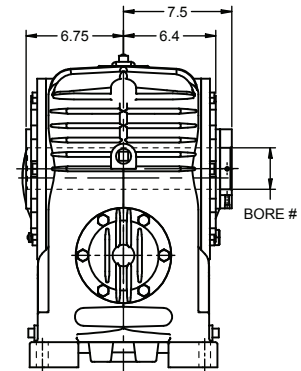
Cone Drive Helical/Worm Speed Reducers - 6.000" C.D.
Size 60 Solid Shaft

Model RU est. net wt. 545 lbs



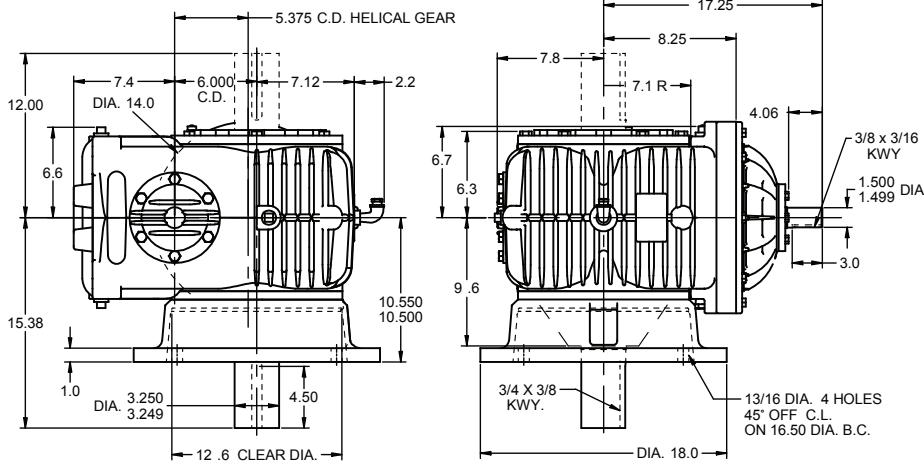
Hollow Shaft

SRU est. net wt. 545 lbs

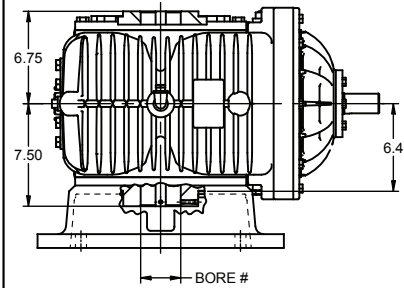


SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

Model RV est. net wt. 580 lbs



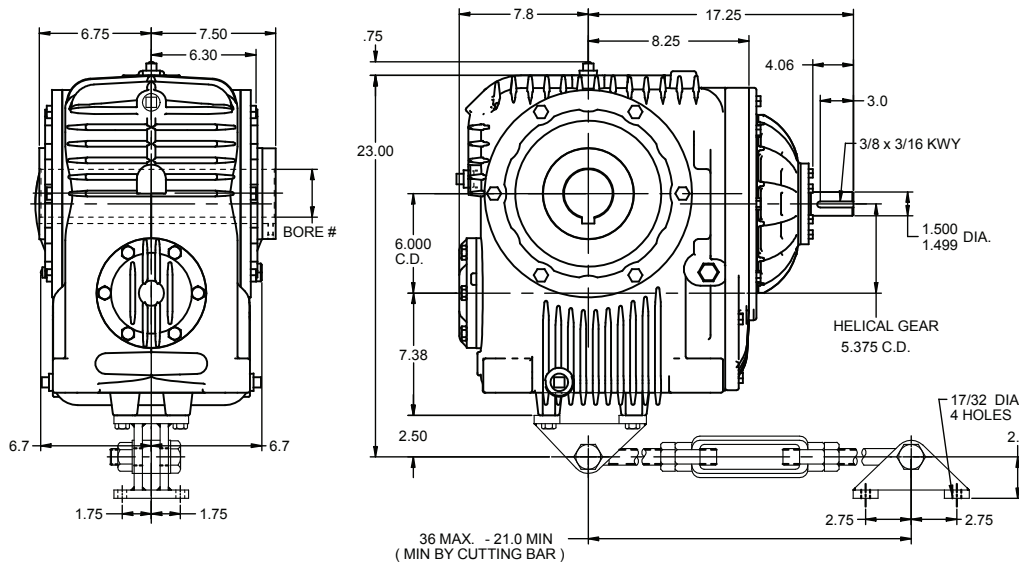
SRV est. net wt. 580 lbs



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SR est. net wt. 560 lbs



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

THIS UNIT CAN BE SUPPLIED
 WITH SOLID SHAFT,
 CONTACT CONE DRIVE

Cone Drive Helical/Worm Speed Reducer

Size 60 5.375" C.D. HELICAL PRI./6.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 3.91 | 20.8 | 30.4 | 39.2 | 57.4 |
| | Th.HP | 3.91 | 19.8 | 25.3 | 25.8 | 26.5 |
| | O.T. | 11000 | 10300 | 10100 | 9900 | 9580 |
| 7.5:1 1.5 x 5 | Me.HP | 3.23 | 17.3 | 25.3 | 32.7 | 48.1 |
| | Th.HP | 3.23 | 17.3 | 21.6 | 22.8 | 26.5 |
| | O.T. | 13400 | 12800 | 12500 | 12300 | 12000 |
| 9:1 1.8 x 5 | Me.HP | 2.82 | 15.2 | 22.2 | 28.8 | 42.3 |
| | Th.HP | 2.82 | 15.2 | 20.0 | 21.9 | 26.5 |
| | O.T. | 13900 | 13500 | 13200 | 13000 | 12600 |
| 10:1 1 x 10 | Me.HP | 3.91 | 20.8 | 30.4 | 39.2 | 47.9 |
| | Th.HP | 3.91 | 16.1 | 19.5 | 21.5 | 21.9 |
| | O.T. | 20600 | 19900 | 19500 | 19200 | 15600 |
| 12.5:1 2.5 x 5 | Me.HP | 2.27 | 12.3 | 18.0 | 23.4 | 34.1 |
| | Th.HP | 2.27 | 12.3 | 18.0 | 19.6 | 22.3 |
| | O.T. | 15400 | 15100 | 14800 | 14600 | 14100 |
| 15:1 1.5 x 10 | Me.HP | 3.23 | 17.3 | 25.3 | 32.5 | 40.3 |
| | Th.HP | 3.23 | 13.6 | 15.8 | 19.0 | 21.6 |
| | O.T. | 25000 | 24500 | 24100 | 23600 | 19500 |
| 18:1 1.8 x 10 | Me.HP | 2.82 | 15.2 | 22.2 | 28.8 | 36.9 |
| | Th.HP | 2.82 | 12.1 | 14.6 | 16.7 | 21.1 |
| | O.T. | 26100 | 25600 | 25300 | 25000 | 21300 |
| 20:1 1 x 20 | Me.HP | 3.91 | 15.2 | 19 | 21.9 | 26.4 |
| | Th.HP | 3.91 | 12.7 | 13.3 | 14.3 | 15.4 |
| | O.T. | 37300 | 27500 | 23000 | 20300 | 16200 |
| 22.5:1 1.5 x 15 | Me.HP | 3.23 | 15.6 | 19.8 | 23.1 | 28.7 |
| | Th.HP | 3.23 | 11.4 | 13.8 | 15.3 | 18.0 |
| | O.T. | 35800 | 31700 | 27600 | 24600 | 20400 |
| 25:1 2.5 x 10 | Me.HP | 2.27 | 12.3 | 18.0 | 23.4 | 30.9 |
| | Th.HP | 2.27 | 10.1 | 12.3 | 14.2 | 18.3 |
| | O.T. | 28700 | 28600 | 28200 | 27900 | 24600 |
| 27:1 1.8 x 15 | Me.HP | 2.82 | 13.7 | 17.9 | 20.9 | 26.2 |
| | Th.HP | 2.82 | 9.46 | 11.7 | 13.9 | 17.2 |
| | O.T. | 37400 | 33200 | 29600 | 26500 | 22300 |
| 30:1 1.5 x 20 | Me.HP | 2.67 | 11.9 | 15.2 | 17.7 | 22.0 |
| | Th.HP | 2.67 | 9.9 | 12.2 | 12.8 | 14.0 |
| | O.T. | 37500 | 31200 | 27500 | 24300 | 20100 |
| 36:1 1.8 x 20 | Me.HP | 2.24 | 10.5 | 13.8 | 16.1 | 20.1 |
| | Th.HP | 2.24 | 8.1 | 10.1 | 13.6 | 15.1 |
| | O.T. | 37500 | 32400 | 29300 | 26400 | 21900 |
| 37.5:1 2.5 x 15 | Me.HP | 2.13 | 10.6 | 14.5 | 17.4 | 22.0 |
| | Th.HP | 2.13 | 7.95 | 9.93 | 11.3 | 14.2 |
| | O.T. | 38600 | 35300 | 32600 | 30100 | 25600 |
| 40:1 4 x 10 | Me.HP | 1.45 | 7.47 | 10.8 | 13.8 | 19.8 |
| | Th.HP | 1.45 | 6.80 | 8.80 | 10.4 | 12.5 |
| | O.T. | 28700 | 27300 | 26600 | 25900 | 24800 |
| 45:1 1.8 x 25 | Me.HP | 1.82 | 8.47 | 11.1 | 13.0 | 16.3 |
| | Th.HP | 1.82 | 7.60 | 9.90 | 10.5 | 12.6 |
| | O.T. | 36100 | 32400 | 29000 | 26100 | 22000 |
| 50:1 2.5 x 20 | Me.HP | 1.63 | 8.10 | 11.1 | 13.4 | 16.9 |
| | Th.HP | 1.63 | 6.80 | 8.30 | 9.80 | 12.1 |
| | O.T. | 37500 | 34300 | 31900 | 29800 | 25300 |
| 54:1 1.8 x 30 | Me.HP | 1.52 | 7.09 | 9.31 | 10.9 | 13.6 |
| | Th.HP | 1.52 | 6.09 | 7.18 | 8.55 | 10.1 |
| | O.T. | 34500 | 30300 | 27200 | 24600 | 21200 |
| 60:1 4 x 15 | Me.HP | 1.35 | 7.10 | 10.0 | 12.6 | 16.9 |
| | Th.HP | 1.35 | 5.60 | 7.10 | 8.40 | 11.0 |
| | O.T. | 38600 | 37300 | 35700 | 34100 | 30700 |
| 62.5:1 2.5 x 25 | Me.HP | 1.33 | 6.54 | 8.95 | 10.8 | 13.6 |
| | Th.HP | 1.33 | 6.05 | 7.64 | 8.97 | 10.5 |
| | O.T. | 36100 | 33900 | 31900 | 29600 | 25100 |
| 72:1 1.8 x 40 | Me.HP | 1.16 | 5.34 | 7.01 | 8.19 | 10.3 |
| | Th.HP | 1.16 | 5.10 | 6.30 | 7.70 | 8.70 |
| | O.T. | 31200 | 28600 | 26100 | 23700 | 20200 |
| 75:1 2.5 x 30 | Me.HP | 1.12 | 5.48 | 7.5 | 9.05 | 11.4 |
| | Th.HP | 1.12 | 5.30 | 6.40 | 7.10 | 9.30 |
| | O.T. | 34500 | 31900 | 29800 | 27700 | 23900 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 1.04 | 5.43 | 7.69 | 9.62 | 13.0 |
| | Th.HP | 1.04 | 4.60 | 6.00 | 6.70 | 9.40 |
| | O.T. | 37500 | 36200 | 34600 | 33100 | 30300 |
| 90:1 1.8 x 50 | Me.HP | 0.94 | 4.28 | 5.63 | 6.57 | 8.24 |
| | Th.HP | 0.94 | 4.28 | 5.63 | 6.57 | 7.80 |
| | O.T. | 27900 | 27400 | 25400 | 23100 | 19500 |
| 100:1 4 x 25 | Me.HP | 0.85 | 4.38 | 6.2 | 7.76 | 10.5 |
| | Th.HP | 0.85 | 3.90 | 5.40 | 6.30 | 8.40 |
| | O.T. | 36100 | 35100 | 34200 | 33000 | 30000 |
| 108:1 1.8 x 60 | Me.HP | 0.79 | 3.58 | 4.70 | 5.49 | 6.88 |
| | Th.HP | 0.79 | 3.58 | 4.70 | 5.49 | 6.78 |
| | O.T. | 27500 | 26400 | 24100 | 21900 | 18800 |
| 120:1 4 x 30 | Me.HP | 0.72 | 3.67 | 5.20 | 6.50 | 8.77 |
| | Th.HP | 0.72 | 3.50 | 4.60 | 5.30 | 6.80 |
| | O.T. | 34500 | 33400 | 32200 | 31000 | 28100 |
| 125:1 2.5 x 50 | Me.HP | 0.69 | 3.31 | 4.53 | 5.47 | 6.90 |
| | Th.HP | 0.69 | 3.31 | 4.53 | 5.47 | 6.90 |
| | O.T. | 27900 | 28000 | 27100 | 25800 | 22300 |
| 150:1 2.5 x 60 | Me.HP | 0.59 | 2.76 | 3.78 | 4.57 | 5.77 |
| | Th.HP | 0.59 | 2.76 | 3.78 | 4.57 | 5.77 |
| | O.T. | 27500 | 27400 | 26000 | 24500 | 21200 |
| 160:1 4 x 40 | Me.HP | 0.56 | 2.76 | 3.91 | 4.89 | 6.60 |
| | Th.HP | 0.56 | 2.60 | 3.40 | 4.20 | 5.80 |
| | O.T. | 31200 | 30300 | 29400 | 28900 | 26900 |
| 175:1 2.5 x 70 | Me.HP | 0.51 | 2.37 | 3.25 | 3.92 | 4.95 |
| | Th.HP | 0.51 | 2.37 | 3.25 | 3.92 | 4.95 |
| | O.T. | 27000 | 27000 | 25600 | 24100 | 21000 |
| 200:1 4 x 50 | Me.HP | 0.45 | 2.22 | 3.14 | 3.92 | 5.30 |
| | Th.HP | 0.45 | 2.10 | 2.90 | 3.60 | 5.10 |
| | O.T. | 27900 | 28100 | 28100 | 27700 | 26000 |
| 240:1 4 x 60 | Me.HP | 0.39 | 1.85 | 2.62 | 3.28 | 4.42 |
| | Th.HP | 0.39 | 1.85 | 2.50 | 3.10 | 4.40 |
| | O.T. | 27500 | 27700 | 27600 | 26700 | 24800 |
| 280:1 4 x 70 | Me.HP | 0.33 | 1.59 | 2.25 | 2.81 | 3.80 |
| | Th.HP | 0.33 | 1.50 | 2.10 | 2.70 | 3.80 |
| | O.T. | 27000 | 27200 | 27200 | 26300 | 24400 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:

All units can be motorized. VR & SVR units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section. All RV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified. Steeple bearing arrangements follow in this section. When specified each unit can be supplied with a worm shaft extension located opposite the input end. Set screw end of hollow shaft is considered the extension end. Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set. Reducers are designed for shaft rotation in either direction. For cap and carrier dimensions not shown see mounting section. For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio. Refer to page 26 for lubrication information, efficiency, and service factors. Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided. Hand of assembly and mounting position diagrams follow in this section.

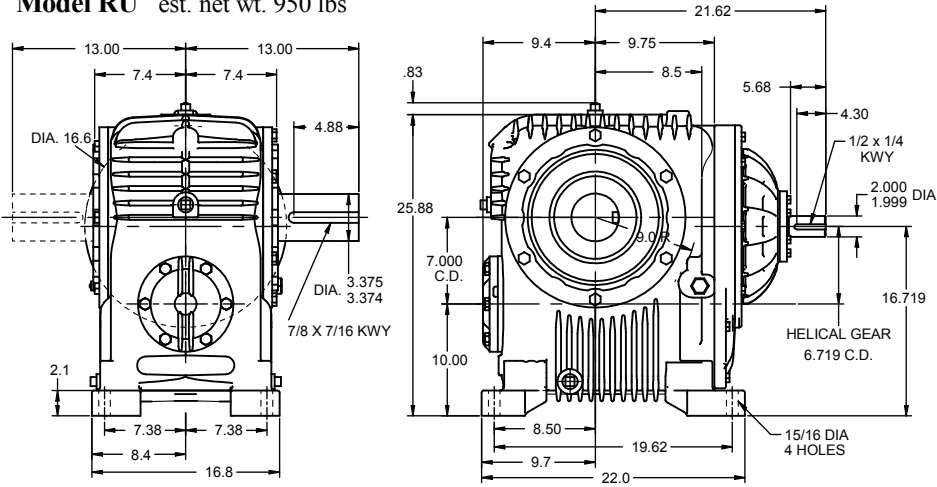
| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|-------------------|-------------|
| BORE INCHES | GEAR SHAFT NUMBER | KEYWAY SIZE |
| 3.9375* | 60-S60-315 | 3/4 X 3/8 |
| 3.4375* | 60-S60-307 | 3/4 X 3/8 |
| 2.9375* | 60-S60-215 | 3/4 X 3/8 |

Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard Bore Tolerance: +.003, -.000
 2 set screws at long end of shaft.

Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

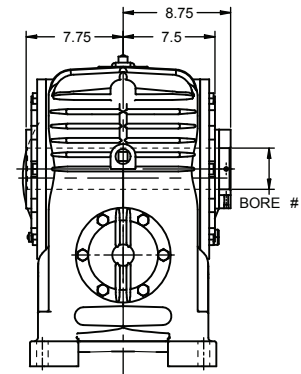
Cone Drive Helical/Worm Speed Reducers - 7.000" C.D.
Size 70 Solid Shaft

Model RU est. net wt. 950 lbs



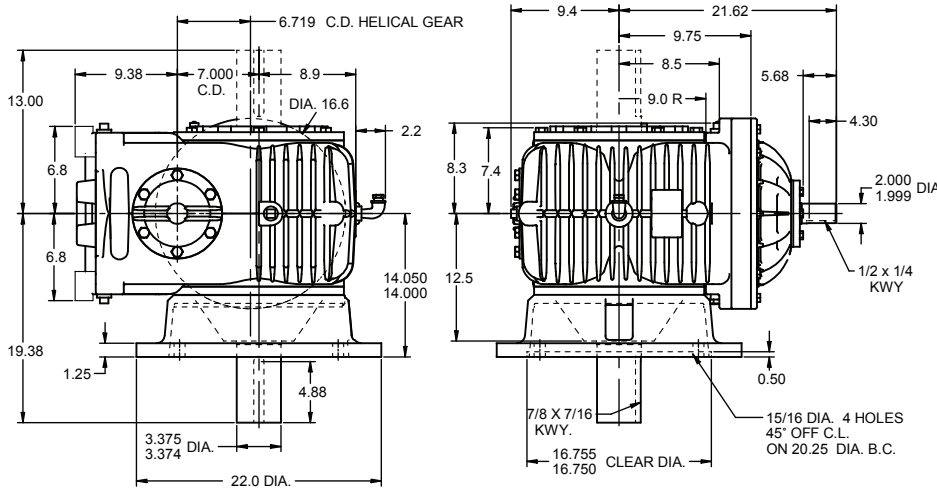
Hollow Shaft

SRU est. net wt. 950 lbs

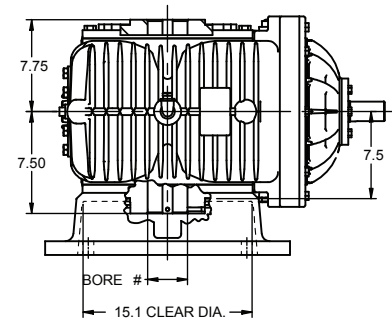


SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

Model RV est. net wt. 1000 lbs



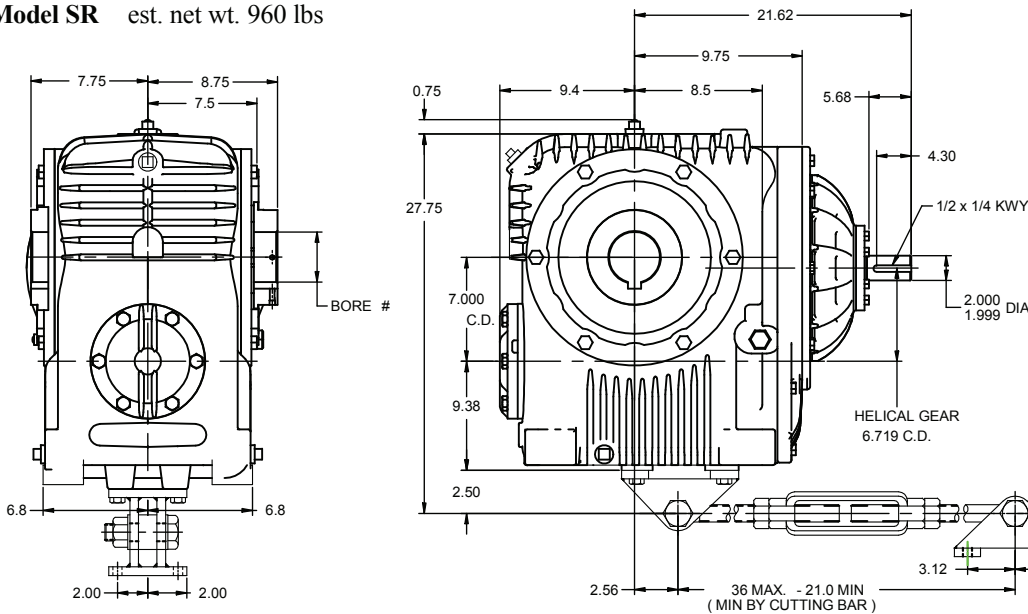
SRV est. net wt. 1000 lbs



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SR est. net wt. 960 lbs



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

THIS UNIT CAN BE SUPPLIED
 WITH SOLID SHAFT,
 CONTACT CONE DRIVE

Cone Drive Helical/Worm Speed Reducer

Size 70 6.719" C.D. HELICAL PRI./7.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 9.23 | 48.8 | 70.9 | 86.2 | 99.4 |
| | Th.HP | 8.77 | 31.1 | 36.6 | 37.3 | 38.2 |
| | O.T. | 25900 | 24200 | 23600 | 21800 | 16600 |
| 7.5:1 1.5 x 5 | Me.HP | 7.24 | 38.6 | 56.2 | 71.5 | 86.7 |
| | Th.HP | 7.24 | 27.9 | 31.2 | 32.9 | 38.2 |
| | O.T. | 30000 | 28500 | 27900 | 26900 | 21600 |
| 9:1 1.8 x 5 | Me.HP | 6.67 | 35.7 | 52.0 | 65.1 | 80.5 |
| | Th.HP | 5.24 | 24.6 | 28.9 | 31.7 | 38.2 |
| | O.T. | 33000 | 31600 | 30900 | 29400 | 24000 |
| 10:1 1 x 10 | Me.HP | 9.23 | 42.4 | 52.7 | 60.5 | 70.6 |
| | Th.HP | 9.23 | 23.3 | 28.1 | 31.1 | 31.6 |
| | O.T. | 48500 | 40400 | 33900 | 29700 | 23000 |
| 12.5:1 2.5 x 5 | Me.HP | 5.37 | 28.9 | 42.3 | 54.2 | 68.4 |
| | Th.HP | 4.73 | 20.1 | 25.7 | 28.3 | 32.2 |
| | O.T. | 36400 | 35500 | 34700 | 33800 | 28200 |
| 15:1 1.5 x 10 | Me.HP | 7.24 | 33.9 | 42.4 | 49.3 | 61.0 |
| | Th.HP | 6.38 | 19.6 | 22.9 | 27.4 | 31.1 |
| | O.T. | 56100 | 47900 | 40400 | 35800 | 29500 |
| 18:1 1.8 x 10 | Me.HP | 6.57 | 30.0 | 38.5 | 44.7 | 55.7 |
| | Th.HP | 4.18 | 17.4 | 21.1 | 24.1 | 30.5 |
| | O.T. | 60600 | 50700 | 43800 | 38800 | 32100 |
| 20:1 1 x 20 | Me.HP | 6.21 | 23.2 | 28.9 | 33.2 | 39.1 |
| | Th.HP | 6.21 | 18.3 | 19.2 | 20.7 | 22.2 |
| | O.T. | 59200 | 41900 | 35100 | 30700 | 24000 |
| 22.5:1 1.5 x 15 | Me.HP | 5.50 | 24.1 | 30.2 | 35.1 | 43.5 |
| | Th.HP | 5.50 | 16.5 | 19.9 | 22.0 | 26.0 |
| | O.T. | 61100 | 49100 | 42100 | 37500 | 31000 |
| 25:1 2.5 x 10 | Me.HP | 4.80 | 23.5 | 31.6 | 37.4 | 46.9 |
| | Th.HP | 3.59 | 14.5 | 17.7 | 20.6 | 26.4 |
| | O.T. | 60600 | 54600 | 49500 | 44700 | 37300 |
| 27:1 1.8 x 15 | Me.HP | 4.61 | 21.3 | 27.4 | 31.9 | 39.7 |
| | Th.HP | 3.82 | 13.7 | 16.9 | 20.1 | 24.9 |
| | O.T. | 61100 | 51600 | 45300 | 40400 | 33900 |
| 30:1 1.5 x 20 | Me.HP | 4.22 | 18.5 | 23.2 | 27.0 | 33.4 |
| | Th.HP | 4.22 | 14.2 | 17.6 | 18.4 | 20.3 |
| | O.T. | 59200 | 48200 | 41900 | 37100 | 30500 |
| 36:1 1.8 x 20 | Me.HP | 3.54 | 16.3 | 21.0 | 24.5 | 30.5 |
| | Th.HP | 3.19 | 11.7 | 14.6 | 18.4 | 19.6 |
| | O.T. | 59200 | 50400 | 44800 | 40100 | 33300 |
| 37.5:1 2.5 x 15 | Me.HP | 3.36 | 16.6 | 22.4 | 26.6 | 33.5 |
| | Th.HP | 3.19 | 11.5 | 14.4 | 16.4 | 20.5 |
| | O.T. | 61100 | 55500 | 50500 | 46100 | 39000 |
| 40:1 4 x 10 | Me.HP | 3.06 | 16.0 | 22.4 | 27.7 | 36.4 |
| | Th.HP | 2.40 | 9.80 | 12.6 | 15.0 | 18.0 |
| | O.T. | 60600 | 58500 | 55300 | 52200 | 45600 |
| 45:1 1.8 x 25 | Me.HP | 2.87 | 13.2 | 17.0 | 19.8 | 24.7 |
| | Th.HP | 2.87 | 11.0 | 14.3 | 15.2 | 18.2 |
| | O.T. | 57000 | 50400 | 44400 | 39700 | 33400 |
| 50:1 2.5 x 20 | Me.HP | 2.59 | 12.7 | 17.2 | 20.4 | 25.7 |
| | Th.HP | 2.59 | 9.80 | 12.0 | 14.2 | 17.4 |
| | O.T. | 59200 | 53800 | 49500 | 45600 | 38600 |
| 54:1 1.8 x 30 | Me.HP | 2.41 | 11.0 | 14.3 | 16.6 | 20.7 |
| | Th.HP | 2.41 | 8.80 | 10.4 | 12.4 | 14.6 |
| | O.T. | 54700 | 47200 | 41600 | 37600 | 32200 |
| 60:1 4 x 15 | Me.HP | 2.14 | 11.2 | 15.8 | 19.6 | 25.9 |
| | Th.HP | 2.00 | 8.00 | 10.3 | 12.1 | 15.9 |
| | O.T. | 61100 | 59000 | 56100 | 53300 | 47000 |
| 62.5:1 2.5 x 25 | Me.HP | 2.11 | 10.3 | 13.9 | 16.5 | 20.8 |
| | Th.HP | 2.11 | 8.74 | 11.0 | 13.0 | 15.1 |
| | O.T. | 57000 | 53300 | 49500 | 45200 | 38300 |
| 72:1 1.8 x 40 | Me.HP | 1.84 | 8.31 | 10.7 | 12.5 | 15.6 |
| | Th.HP | 1.84 | 7.40 | 9.10 | 11.1 | 12.6 |
| | O.T. | 49400 | 44600 | 39900 | 36100 | 30700 |
| 75:1 2.5 x 30 | Me.HP | 1.77 | 8.61 | 11.7 | 13.9 | 17.4 |
| | Th.HP | 1.77 | 7.70 | 9.30 | 10.3 | 13.4 |
| | O.T. | 54700 | 50200 | 46300 | 42300 | 36400 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 1.65 | 8.60 | 12.1 | 15 | 19.9 |
| | Th.HP | 1.58 | 6.70 | 8.60 | 9.90 | 13.6 |
| | O.T. | 59200 | 57300 | 54400 | 51600 | 46400 |
| 90:1 1.8 x 50 | Me.HP | 1.48 | 6.67 | 8.61 | 10.0 | 12.5 |
| | Th.HP | 1.48 | 6.40 | 8.40 | 9.9 | 11.2 |
| | O.T. | 44100 | 42700 | 38900 | 35300 | 29600 |
| 100:1 4 x 25 | Me.HP | 1.35 | 6.93 | 9.75 | 12.1 | 16.1 |
| | Th.HP | 1.30 | 5.70 | 7.70 | 9.10 | 12.2 |
| | O.T. | 57000 | 55600 | 53700 | 51700 | 46100 |
| 108:1 1.8 x 60 | Me.HP | 1.25 | 5.57 | 7.19 | 8.37 | 10.5 |
| | Th.HP | 1.22 | 5.30 | 6.98 | 8.31 | 9.79 |
| | O.T. | 43400 | 41000 | 36900 | 33500 | 28600 |
| 120:1 4 x 30 | Me.HP | 1.13 | 5.81 | 8.17 | 10.2 | 13.5 |
| | Th.HP | 1.13 | 5.00 | 6.60 | 7.70 | 9.90 |
| | O.T. | 54700 | 52900 | 50700 | 48400 | 43200 |
| 125:1 2.5 x 50 | Me.HP | 1.10 | 5.20 | 7.04 | 8.38 | 10.5 |
| | Th.HP | 1.10 | 5.09 | 6.60 | 7.85 | 10.1 |
| | O.T. | 44100 | 44100 | 42100 | 39400 | 34000 |
| 150:1 2.5 x 60 | Me.HP | 0.93 | 4.34 | 5.88 | 6.99 | 8.79 |
| | Th.HP | 0.93 | 4.34 | 5.88 | 6.99 | 8.79 |
| | O.T. | 43400 | 43000 | 40400 | 37500 | 32400 |
| 160:1 4 x 40 | Me.HP | 0.88 | 4.37 | 6.14 | 7.65 | 10.1 |
| | Th.HP | 0.88 | 3.80 | 5.0 | 6.10 | 8.30 |
| | O.T. | 49400 | 47900 | 46200 | 45200 | 41300 |
| 175:1 2.5 x 70 | Me.HP | 0.80 | 3.72 | 5.04 | 6.00 | 7.55 |
| | Th.HP | 0.80 | 3.72 | 5.04 | 6.00 | 7.55 |
| | O.T. | 42700 | 42400 | 39800 | 36900 | 32000 |
| 200:1 4 x 50 | Me.HP | 0.71 | 3.51 | 4.93 | 6.14 | 8.14 |
| | Th.HP | 0.71 | 3.00 | 4.20 | 5.20 | 7.30 |
| | O.T. | 44100 | 44600 | 44200 | 43300 | 40000 |
| 240:1 4 x 60 | Me.HP | 0.61 | 2.93 | 4.12 | 5.13 | 6.80 |
| | Th.HP | 0.61 | 2.50 | 3.60 | 4.40 | 6.40 |
| | O.T. | 43400 | 43800 | 43300 | 41700 | 38100 |
| 280:1 4 x 70 | Me.HP | 0.53 | 2.51 | 3.53 | 4.40 | 5.84 |
| | Th.HP | 0.53 | 2.10 | 3.00 | 3.90 | 5.80 |
| | O.T. | 42700 | 43100 | 42700 | 41100 | 37500 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:
 All units can be motorized. VR & SVR units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section. All RV units having shaft extended thru base side will be supplied with a steep bearing mounting on base side, unless otherwise specified. Steep bearing arrangements follow in this section. When specified each unit can be supplied with a worm shaft extension located opposite the input end. Set screw end of hollow shaft is considered the extension end. Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set. Reducers are designed for shaft rotation in either direction. For cap and carrier dimensions not shown see mounting section. For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio. Refer to page 26 for lubrication information, efficiency, and service factors. Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided. Hand of assembly and mounting position diagrams follow in this section.

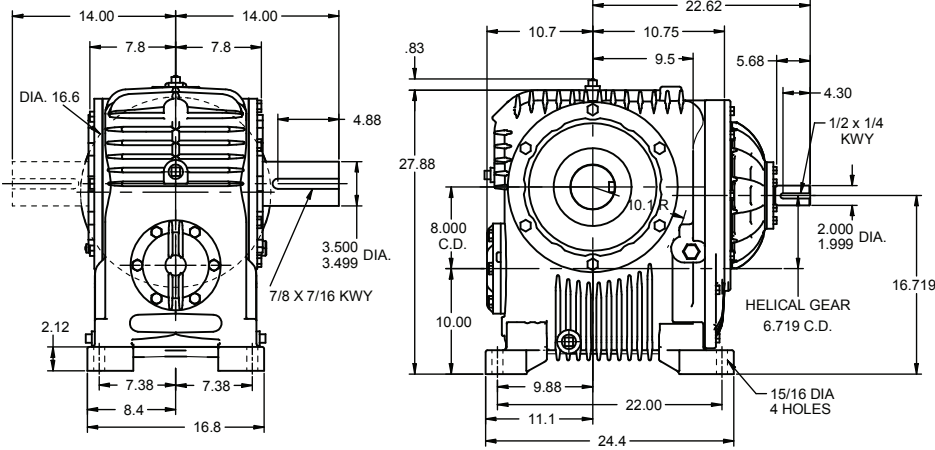
| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|-------------------|-------------|
| BORE INCHES | GEAR SHAFT NUMBER | KEYWAY SIZE |
| 4.4375* | 80-S60-407 | 1 X 1/2 |
| 3.9375* | 80-S60-315 | 1 X 1/2 |

Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard Bore Tolerance: +.003, -.000
 2 set screws at long end of shaft.

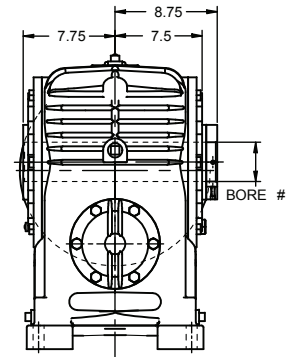
Cone Drive Helical/Worm Speed Reducers - 8.000" C.D.
Size 80 Solid Shaft

Model RU est. net wt. 1080 lbs



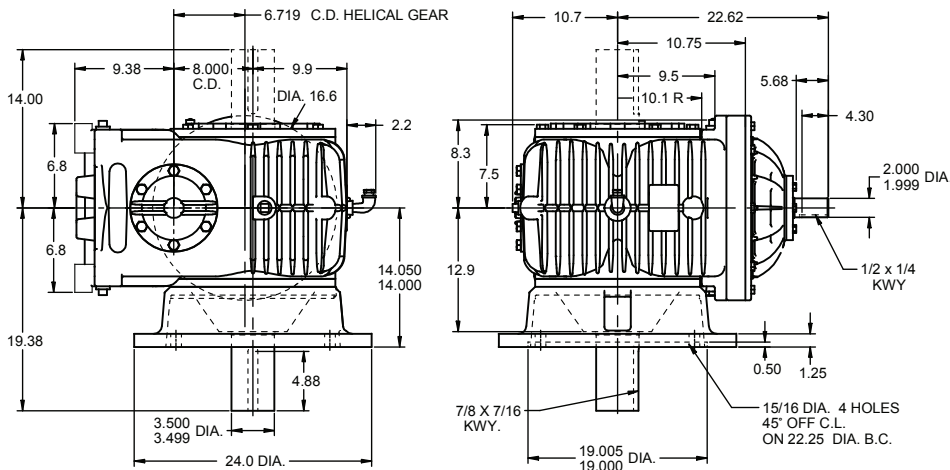
Hollow Shaft

SRU est. net wt. 1080 lbs.

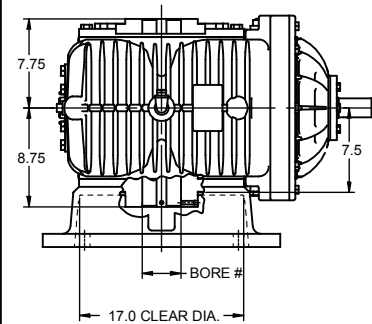


SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

Model RV est. net wt. 1150 lbs



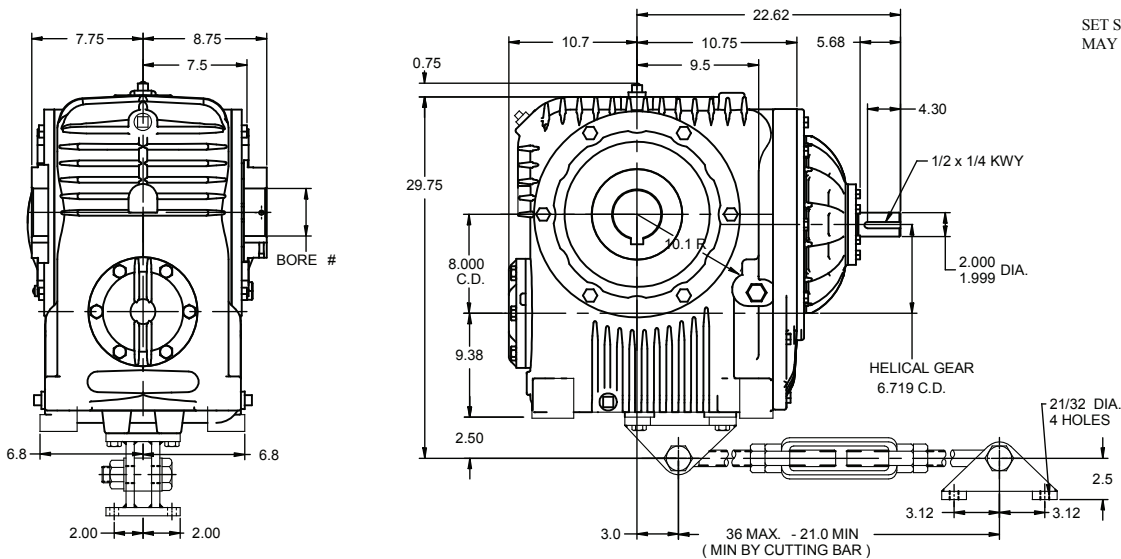
SRV est. net wt. 1150 lbs



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SR est. net wt. 1100 lbs



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

THIS UNIT CAN BE SUPPLIED
 WITH SOLID SHAFT,
 CONTACT CONE DRIVE

Cone Drive Helical/Worm Speed Reducer

Size 80 6.719" C.D. HELICAL PRI./8.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 9.23 | 48.8 | 70.9 | 91.4 | 134 |
| | Th.HP | 8.77 | 33.4 | 39.2 | 40.0 | 41.0 |
| | O.T. | 25900 | 24200 | 23600 | 23100 | 22300 |
| 7.5:1 1.5 x 5 | Me.HP | 7.24 | 38.6 | 56.2 | 72.6 | 106 |
| | Th.HP | 7.03 | 29.9 | 33.5 | 35.3 | 41.0 |
| | O.T. | 30000 | 28500 | 27900 | 27300 | 26400 |
| 9:1 1.8 x 5 | Me.HP | 6.67 | 35.7 | 52 | 67.2 | 98.6 |
| | Th.HP | 5.61 | 26.4 | 31.0 | 33.9 | 41.0 |
| | O.T. | 33000 | 31600 | 30900 | 30300 | 29400 |
| 10:1 1 x 10 | Me.HP | 9.23 | 48.8 | 70.9 | 87.8 | 102 |
| | Th.HP | 8.77 | 25.0 | 30.1 | 33.3 | 33.9 |
| | O.T. | 48500 | 46500 | 45600 | 43100 | 33200 |
| 12.5:1 2.5 x 5 | Me.HP | 5.37 | 28.9 | 42.3 | 54.2 | 77.1 |
| | Th.HP | 5.37 | 21.5 | 27.5 | 30.4 | 34.5 |
| | O.T. | 36400 | 35500 | 34700 | 33800 | 31800 |
| 15:1 1.5 x 10 | Me.HP | 7.24 | 38.6 | 56.2 | 71.9 | 88.3 |
| | Th.HP | 6.84 | 21.0 | 24.5 | 29.4 | 33.4 |
| | O.T. | 56100 | 54500 | 53500 | 52300 | 42700 |
| 18:1 1.8 x 10 | Me.HP | 6.67 | 35.7 | 52 | 65.2 | 81.0 |
| | Th.HP | 4.48 | 18.7 | 22.6 | 25.9 | 32.7 |
| | O.T. | 61600 | 60100 | 59200 | 56600 | 46800 |
| 20:1 1 x 20 | Me.HP | 9.23 | 34.0 | 42.2 | 48.5 | 56.4 |
| | Th.HP | 6.88 | 19.7 | 20.6 | 22.2 | 23.9 |
| | O.T. | 88000 | 61300 | 51200 | 44900 | 34600 |
| 22.5:1 1.5 x 15 | Me.HP | 7.24 | 35.4 | 44.2 | 51.4 | 63.4 |
| | Th.HP | 6.04 | 17.7 | 21.3 | 23.6 | 27.9 |
| | O.T. | 80400 | 72100 | 61500 | 54900 | 45200 |
| 25:1 2.5 x 10 | Me.HP | 5.37 | 28.9 | 42.3 | 54.2 | 68.5 |
| | Th.HP | 3.85 | 15.6 | 19.0 | 22.1 | 28.3 |
| | O.T. | 67900 | 67100 | 66200 | 64800 | 54400 |
| 27:1 1.8 x 15 | Me.HP | 6.67 | 31.4 | 40.1 | 46.6 | 58 |
| | Th.HP | 4.1 | 14.7 | 18.1 | 21.5 | 26.7 |
| | O.T. | 88300 | 76200 | 66300 | 59100 | 49500 |
| 30:1 1.5 x 20 | Me.HP | 6.29 | 27.1 | 34.0 | 39.5 | 48.8 |
| | Th.HP | 5.30 | 15.3 | 18.9 | 19.8 | 21.7 |
| | O.T. | 88500 | 70900 | 61300 | 54200 | 44500 |
| 36:1 1.8 x 20 | Me.HP | 5.29 | 24.1 | 30.8 | 35.8 | 44.5 |
| | Th.HP | 3.43 | 12.5 | 15.7 | 21.0 | 22.0 |
| | O.T. | 88500 | 74400 | 65600 | 58700 | 48600 |
| 37.5:1 2.5 x 15 | Me.HP | 5.02 | 24.7 | 33.1 | 39 | 48.9 |
| | Th.HP | 3.42 | 12.3 | 15.4 | 17.6 | 22 |
| | O.T. | 91200 | 82400 | 74500 | 67600 | 57000 |
| 40:1 4 x 10 | Me.HP | 3.36 | 17.1 | 24.6 | 31.3 | 44.9 |
| | Th.HP | 2.58 | 11.8 | 14.4 | 17.2 | 20.2 |
| | O.T. | 66600 | 62700 | 60700 | 59000 | 56300 |
| 45:1 1.8 x 25 | Me.HP | 4.29 | 19.5 | 24.9 | 28.9 | 36.0 |
| | Th.HP | 3.04 | 11.8 | 15.4 | 16.3 | 19.5 |
| | O.T. | 85200 | 74500 | 65100 | 58100 | 48800 |
| 50:1 2.5 x 20 | Me.HP | 3.86 | 18.9 | 25.4 | 30.0 | 37.6 |
| | Th.HP | 2.89 | 10.5 | 12.9 | 15.2 | 18.7 |
| | O.T. | 88500 | 79900 | 73000 | 66900 | 56400 |
| 54:1 1.8 x 30 | Me.HP | 3.60 | 16.3 | 20.9 | 24.3 | 30.2 |
| | Th.HP | 2.75 | 9.44 | 11.1 | 13.2 | 15.6 |
| | O.T. | 81600 | 69800 | 60900 | 55000 | 47000 |
| 60:1 4 x 15 | Me.HP | 3.19 | 16.8 | 23.5 | 29.0 | 37.9 |
| | Th.HP | 2.15 | 8.60 | 11.0 | 12.9 | 17.1 |
| | O.T. | 91200 | 88100 | 83400 | 78800 | 68900 |
| 62.5:1 2.5 x 25 | Me.HP | 3.15 | 15.3 | 20.5 | 24.2 | 30.4 |
| | Th.HP | 2.54 | 9.37 | 11.8 | 13.9 | 16.2 |
| | O.T. | 85200 | 79200 | 72900 | 66300 | 56000 |
| 72:1 1.8 x 40 | Me.HP | 2.74 | 12.3 | 15.7 | 18.3 | 22.8 |
| | Th.HP | 2.30 | 7.90 | 9.80 | 11.9 | 13.5 |
| | O.T. | 73800 | 65900 | 58600 | 52900 | 44900 |
| 75:1 2.5 x 30 | Me.HP | 2.64 | 12.8 | 17.2 | 20.3 | 25.5 |
| | Th.HP | 1.98 | 8.20 | 10.0 | 11.1 | 14.4 |
| | O.T. | 81600 | 74600 | 68300 | 62100 | 53300 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 2.46 | 12.8 | 18.0 | 22.3 | 29.1 |
| | Th.HP | 1.69 | 7.20 | 9.20 | 10.3 | 14.6 |
| | O.T. | 88500 | 85500 | 80900 | 76500 | 68000 |
| 90:1 1.8 x 50 | Me.HP | 2.21 | 9.86 | 12.6 | 14.7 | 18.3 |
| | Th.HP | 1.62 | 6.90 | 9.00 | 10.6 | 12.1 |
| | O.T. | 65900 | 63100 | 57000 | 51600 | 43300 |
| 100:1 4 x 25 | Me.HP | 2.02 | 10.4 | 14.5 | 18.0 | 23.5 |
| | Th.HP | 1.39 | 6.10 | 8.30 | 9.70 | 13.1 |
| | O.T. | 85200 | 83100 | 80000 | 76500 | 67600 |
| 108:1 1.8 x 60 | Me.HP | 1.87 | 8.24 | 10.6 | 12.3 | 15.3 |
| | Th.HP | 1.31 | 5.68 | 7.72 | 9.08 | 10.5 |
| | O.T. | 64900 | 60700 | 54100 | 49000 | 41700 |
| 120:1 4 x 30 | Me.HP | 1.69 | 8.68 | 12.2 | 15.1 | 19.8 |
| | Th.HP | 1.23 | 5.40 | 7.10 | 8.30 | 10.6 |
| | O.T. | 81600 | 78900 | 75400 | 71800 | 63300 |
| 125:1 2.5 x 50 | Me.HP | 1.64 | 7.72 | 10.4 | 12.3 | 15.4 |
| | Th.HP | 1.54 | 5.45 | 7.07 | 8.42 | 10.8 |
| | O.T. | 65900 | 65500 | 62100 | 57800 | 49700 |
| 150:1 2.5 x 60 | Me.HP | 1.40 | 6.45 | 8.66 | 10.3 | 12.9 |
| | Th.HP | 1.31 | 4.64 | 6.35 | 7.39 | 9.46 |
| | O.T. | 64900 | 63900 | 59600 | 55000 | 47400 |
| 160:1 4 x 40 | Me.HP | 1.31 | 6.53 | 9.15 | 11.3 | 14.9 |
| | Th.HP | 0.96 | 4.00 | 5.40 | 6.50 | 9.00 |
| | O.T. | 73800 | 71600 | 68700 | 67100 | 60600 |
| 175:1 2.5 x 70 | Me.HP | 1.20 | 5.53 | 7.43 | 8.80 | 11.1 |
| | Th.HP | 1.15 | 4.20 | 6.20 | 7.20 | 9.30 |
| | O.T. | 63800 | 63000 | 58600 | 54200 | 46800 |
| 200:1 4 x 50 | Me.HP | 1.06 | 5.24 | 7.34 | 9.10 | 11.9 |
| | Th.HP | 0.79 | 3.20 | 4.50 | 5.60 | 7.80 |
| | O.T. | 65900 | 66600 | 65800 | 64200 | 58700 |
| 240:1 4 x 60 | Me.HP | 0.92 | 4.37 | 6.13 | 7.60 | 9.97 |
| | Th.HP | 0.72 | 2.70 | 3.80 | 4.70 | 6.90 |
| | O.T. | 64900 | 65400 | 64500 | 61800 | 55900 |
| 280:1 4 x 70 | Me.HP | 0.79 | 3.75 | 5.26 | 6.52 | 8.56 |
| | Th.HP | 0.69 | 2.30 | 3.20 | 4.20 | 6.30 |
| | O.T. | 63800 | 64400 | 63500 | 60900 | 55000 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:

All units can be motorized. VR & SVR units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section. All RV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified. Steeple bearing arrangements follow in this section. When specified each unit can be supplied with a worm shaft extension located opposite the input end. Set screw end of hollow shaft is considered the extension end. Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set. Reducers are designed for shaft rotation in either direction. For cap and carrier dimensions not shown see mounting section. For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio. Refer to page 26 for lubrication information, efficiency, and service factors. Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided. Hand of assembly and mounting position diagrams follow in this section.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|-------------------|-------------|
| BORE INCHES | GEAR SHAFT NUMBER | KEYWAY SIZE |
| 4.4375* | 80-S60-407 | 1 X 1/2 |
| 3.9375* | 80-S60-315 | 1 X 1/2 |

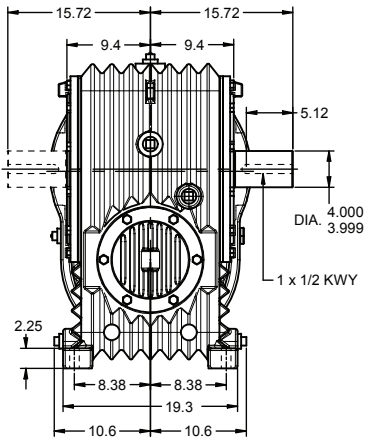
Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard Bore Tolerance: +.003, -.000
 2 set screws at long end of shaft.

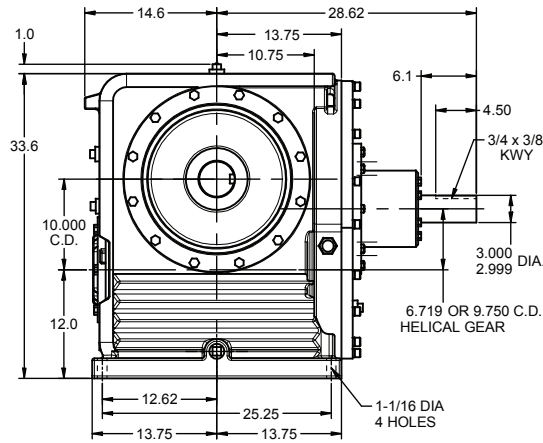
Cone Drive Helical/Worm Speed Reducers - 10.000" C.D. Size 100 Solid Shaft

Hollow Shaft

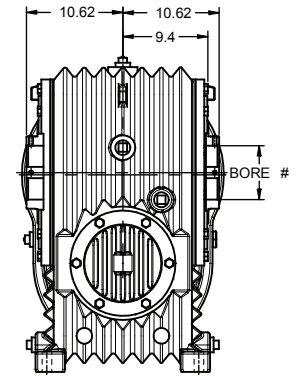
Model RU est. net wt. 1650 lbs



100 - 9.750 C.D. HELICALS
100 L - 6.719 C.D. HELICALS

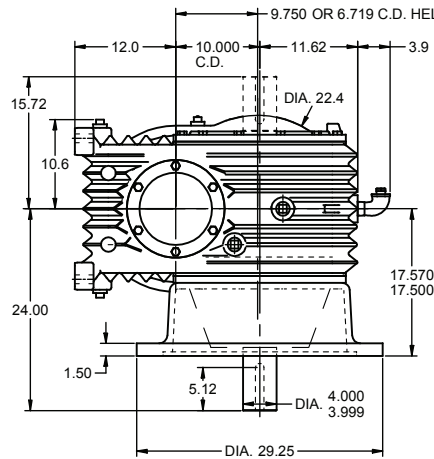


SRU est. net wt. 1650 lbs.

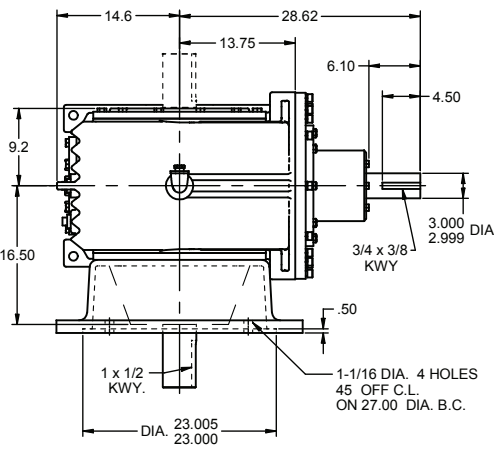


SEE GEAR SHAFT CHART

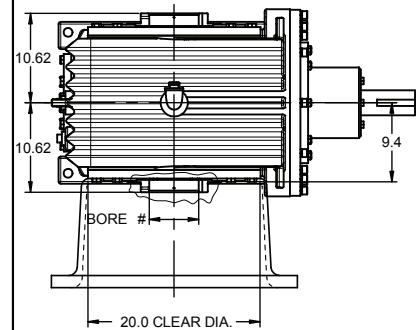
Model RV est. net wt. 1725 lbs



100 - 9.750 C.D. HELICALS
100 L - 6.719 C.D. HELICALS



SRV est. net wt. 1725 lbs



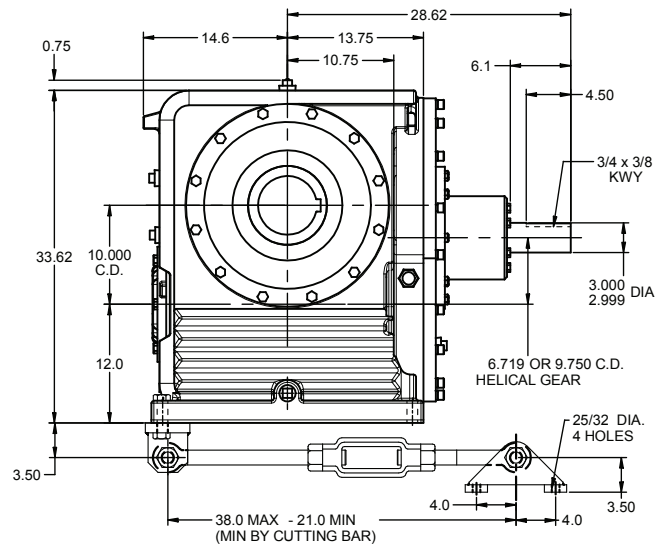
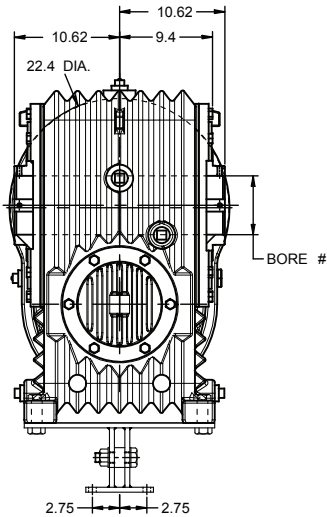
SEE GEAR SHAFT CHART

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SR est. net wt. 1700 lbs

100 - 9.750 C.D. HELICALS
100 L - 6.719 C.D. HELICALS

SEE GEAR SHAFT CHART



NOTE: HOLLOW SHAFT IS DOUBLE EXTENDED.

THIS UNIT CAN BE SUPPLIED WITH SOLID SHAFT. CONTACT CONE DRIVE

TORQUE ARM BRACKET CAN BE MOUNTED ON EITHER END OF HOUSING.

Cone Drive Helical/Worm Speed Reducer

Size 100 6.719" or 9.750" C.D. HELICAL PRI./10.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| UNITS WITH 6.719" C.D. HELICALS | | | | | | |
|---------------------------------------|-------|-----------|--------|--------|--------|--------|
| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
| | | 100 | 580 | 870 | 1150 | 1750 |
| 20:1 1 x 20 | Me.HP | 9.23 | 48.8 | 70.9 | 82.3 | 94.7 |
| | Th.HP | 8.30 | 24.1 | 25.3 | 27.4 | 29.7 |
| | O.T. | 90200 | 90000 | 88100 | 77900 | 59500 |
| 30:1 1.5 x 20 | Me.HP | 7.24 | 38.6 | 56.2 | 68.5 | 82.8 |
| | Th.HP | 6.40 | 18.5 | 23.2 | 24.3 | 26.9 |
| | O.T. | 104000 | 103000 | 104000 | 96300 | 77300 |
| 45:1 1.8 x 25 | Me.HP | 6.67 | 34.8 | 43.4 | 50.5 | 62.2 |
| | Th.HP | 3.60 | 14.1 | 18.7 | 19.8 | 24.0 |
| | O.T. | 136000 | 136000 | 116000 | 104000 | 86100 |
| 50:1 2.5 x 20 | Me.HP | 5.37 | 28.9 | 42.3 | 52.3 | 65.5 |
| | Th.HP | 3.50 | 12.6 | 15.5 | 18.5 | 22.9 |
| | O.T. | 126000 | 125000 | 125000 | 119000 | 101000 |
| 54:1 1.8 x 30 | Me.HP | 6.67 | 29.2 | 36.5 | 42.3 | 52.9 |
| | Th.HP | 3.00 | 11.4 | 13.5 | 16.3 | 19.3 |
| | O.T. | 156000 | 128000 | 109000 | 98400 | 83000 |
| 62.5:1 2.5 x 25 | Me.HP | 5.37 | 28 | 36.3 | 42.3 | 52.9 |
| | Th.HP | 3.00 | 11.4 | 14.6 | 17.3 | 20.3 |
| | O.T. | 149000 | 149000 | 132000 | 119000 | 99900 |
| 72:1 1.8 x 40 | Me.HP | 5.15 | 22 | 27.5 | 31.9 | 39.3 |
| | Th.HP | 2.70 | 9.20 | 11.5 | 14.1 | 16.0 |
| | O.T. | 143000 | 121000 | 105000 | 94700 | 79400 |
| 75:1 2.5 x 30 | Me.HP | 4.95 | 23.4 | 30.5 | 35.5 | 44.4 |
| | Th.HP | 2.30 | 9.70 | 11.7 | 13.1 | 17.3 |
| | O.T. | 158000 | 140000 | 124000 | 111000 | 95200 |
| 90:1 1.8 x 50 | Me.HP | 4.15 | 17.6 | 22 | 25.6 | 31.6 |
| | Th.HP | 1.90 | 8.00 | 10.6 | 12.5 | 14.2 |
| | O.T. | 128000 | 116000 | 102000 | 92500 | 76700 |
| 100:1 4 x 25 | Me.HP | 3.36 | 17.1 | 24.6 | 31.3 | 41.2 |
| | Th.HP | 1.60 | 7.10 | 9.80 | 11.6 | 15.7 |
| | O.T. | 146000 | 141000 | 139000 | 137000 | 121000 |
| 108:1 1.8 x 60 | Me.HP | 3.51 | 14.7 | 18.4 | 21.4 | 26.4 |
| | Th.HP | 1.50 | 6.70 | 9.20 | 10.9 | 12.6 |
| | O.T. | 126000 | 112000 | 97200 | 87900 | 74000 |
| 120:1 4 x 30 | Me.HP | 3.17 | 16.2 | 22.4 | 27.1 | 34.5 |
| | Th.HP | 1.40 | 6.30 | 8.30 | 9.70 | 12.5 |
| | O.T. | 158000 | 152000 | 142000 | 133000 | 114000 |
| 125:1 2.5 x 50 | Me.HP | 3.07 | 14.2 | 18.4 | 21.5 | 26.9 |
| | Th.HP | 1.80 | 6.50 | 8.40 | 10.1 | 13.1 |
| | O.T. | 128000 | 124000 | 113000 | 104000 | 89100 |
| 150:1 2.5 x 60 | Me.HP | 2.61 | 11.8 | 15.4 | 17.9 | 22.5 |
| | Th.HP | 1.50 | 5.50 | 7.50 | 8.80 | 11.4 |
| | O.T. | 126000 | 121000 | 109000 | 98900 | 85100 |
| 160:1 4 x 40 | Me.HP | 2.46 | 12.2 | 16.8 | 20.4 | 26 |
| | Th.HP | 1.10 | 4.70 | 5.90 | 7.60 | 10.5 |
| | O.T. | 143000 | 138000 | 130000 | 124000 | 109000 |
| 175:1 2.5 x 70 | Me.HP | 2.25 | 10.2 | 13.2 | 15.4 | 19.3 |
| | Th.HP | 1.60 | 4.80 | 7.10 | 8.40 | 10.9 |
| | O.T. | 124000 | 119000 | 107000 | 97500 | 84000 |
| 200:1 4 x 50 | Me.HP | 1.99 | 9.79 | 13.5 | 16.4 | 20.9 |
| | Th.HP | 0.90 | 3.70 | 5.20 | 6.50 | 9.10 |
| | O.T. | 128000 | 128000 | 125000 | 119000 | 106000 |
| 240:1 4 x 60 | Me.HP | 1.71 | 8.17 | 11.3 | 13.7 | 17.4 |
| | Th.HP | 0.80 | 3.10 | 4.40 | 5.40 | 8.00 |
| | O.T. | 126000 | 126000 | 122000 | 115000 | 101000 |
| 280:1 4 x 70 | Me.HP | 1.48 | 7.01 | 9.67 | 11.8 | 15.0 |
| | Th.HP | 0.80 | 2.60 | 3.70 | 4.80 | 7.20 |
| | O.T. | 124000 | 125000 | 121000 | 113000 | 99200 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|-------------------|--------------|
| BORE INCHES | GEAR SHAFT NUMBER | KEYWAY SIZE |
| 5.9375 | 100-S61-515 | 1-1/4 X 7/16 |

Special hollow gear shaft bore sizes are available at additional cost.

*AGMA Standard Bore Tolerance: +.004, -.000
 2 set screws at long end of shaft.

| UNITS WITH 9.750" C.D. HELICALS* | | | | | | |
|---------------------------------------|-------|-----------|--------|--------|--------|--------|
| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 34.9 | 151 | 182 | 199 | 231 |
| | Th.HP | 16.3 | 44.5 | 53.2 | 54.3 | 55.7 |
| | O.T. | 102000 | 78200 | 63000 | 52200 | 40200 |
| 7.5:1 1.5 x 5 | Me.HP | 28.4 | 124 | 153 | 174 | 201 |
| | Th.HP | 11.0 | 39.8 | 44.6 | 47.1 | 55.7 |
| | O.T. | 120000 | 93500 | 77400 | 66900 | 51100 |
| 9:1 1.8 x 5 | Me.HP | 25.4 | 112 | 139 | 160 | 189 |
| | Th.HP | 7.10 | 35.2 | 41.3 | 45.2 | 55.7 |
| | O.T. | 128000 | 102000 | 84600 | 73800 | 57500 |
| 10:1 1 x 10 | Me.HP | 31.8 | 107 | 131 | 148 | 170 |
| | Th.HP | 12.2 | 31.6 | 39.0 | 43.7 | 44.4 |
| | O.T. | 174000 | 106000 | 89000 | 75500 | 57800 |
| 12.5:1 2.5 x 5 | Me.HP | 20.6 | 94.2 | 118 | 137 | 169 |
| | Th.HP | 6.50 | 28.2 | 36.7 | 40.4 | 46 |
| | O.T. | 142000 | 117000 | 98100 | 86500 | 70500 |
| 15:1 1.5 x 10 | Me.HP | 21.9 | 87 | 108 | 125 | 149 |
| | Th.HP | 8.50 | 26.4 | 31.1 | 38.0 | 43.8 |
| | O.T. | 174000 | 126000 | 105000 | 92600 | 73700 |
| 18:1 1.8 x 10 | Me.HP | 18.4 | 78.6 | 98.0 | 114 | 139 |
| | Th.HP | 5.50 | 23.4 | 28.6 | 33.1 | 42.9 |
| | O.T. | 174000 | 136000 | 114000 | 101000 | 82200 |
| 22.5:1 1.5 x 15 | Me.HP | 15.4 | 62 | 77.1 | 89 | 107 |
| | Th.HP | 7.40 | 21.7 | 26.6 | 29.6 | 35.7 |
| | O.T. | 175000 | 129000 | 110000 | 97300 | 78200 |
| 25:1 2.5 x 10 | Me.HP | 13.6 | 64.2 | 82.8 | 96.2 | 120 |
| | Th.HP | 4.70 | 19.4 | 23.8 | 27.9 | 36.7 |
| | O.T. | 174000 | 151000 | 131000 | 117000 | 96800 |
| 27:1 1.8 x 15 | Me.HP | 12.9 | 56 | 69.9 | 81.2 | 99.8 |
| | Th.HP | 5.00 | 18.4 | 23.0 | 27.7 | 35.0 |
| | O.T. | 175000 | 139000 | 118000 | 105000 | 87000 |
| 36:1 1.8 x 20 | Me.HP | 9.93 | 43 | 53.7 | 62.4 | 76.8 |
| | Th.HP | 4.10 | 15.0 | 19.0 | 25.8 | 26.0 |
| | O.T. | 170000 | 136000 | 117000 | 105000 | 85700 |
| 37.5:1 2.5 x 15 | Me.HP | 9.50 | 45.5 | 58.9 | 68.6 | 85.8 |
| | Th.HP | 4.20 | 15.4 | 19.40 | 22.3 | 28.3 |
| | O.T. | 175000 | 154000 | 135000 | 121000 | 101000 |
| 40:1 4 x 10 | Me.HP | 8.56 | 44.4 | 60.9 | 73.6 | 92.9 |
| | Th.HP | 3.10 | 12.9 | 16.9 | 20.2 | 24.3 |
| | O.T. | 174000 | 166000 | 154000 | 142000 | 119000 |
| 60:1 4 x 15 | Me.HP | 59.9 | 31.3 | 43.1 | 52.2 | 65.3 |
| | Th.HP | 2.60 | 10.4 | 13.3 | 15.8 | 21.1 |
| | O.T. | 175000 | 168000 | 157000 | 145000 | 123000 |
| 80:1 4 x 20 | Me.HP | 4.62 | 24 | 33 | 40.1 | 50.9 |
| | Th.HP | 2.00 | 8.50 | 11.0 | 12.9 | 17.7 |
| | O.T. | 170000 | 164000 | 152000 | 141000 | 122000 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:
 All units can be motorized. VR & SVR units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section.
 All RV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified.
 Steeple bearing arrangements follow in this section.

When specified each unit can be supplied with a worm shaft extension located opposite the input end. Set screw end of hollow shaft is considered the extension end.

Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set.

Reducers are designed for shaft rotation in either direction.

For cap and carrier dimensions not shown see mounting section.

For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio.

Refer to page 26 for lubrication information, efficiency, and service factors.

Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided.

Hand of assembly and mounting position diagrams follow in this section.

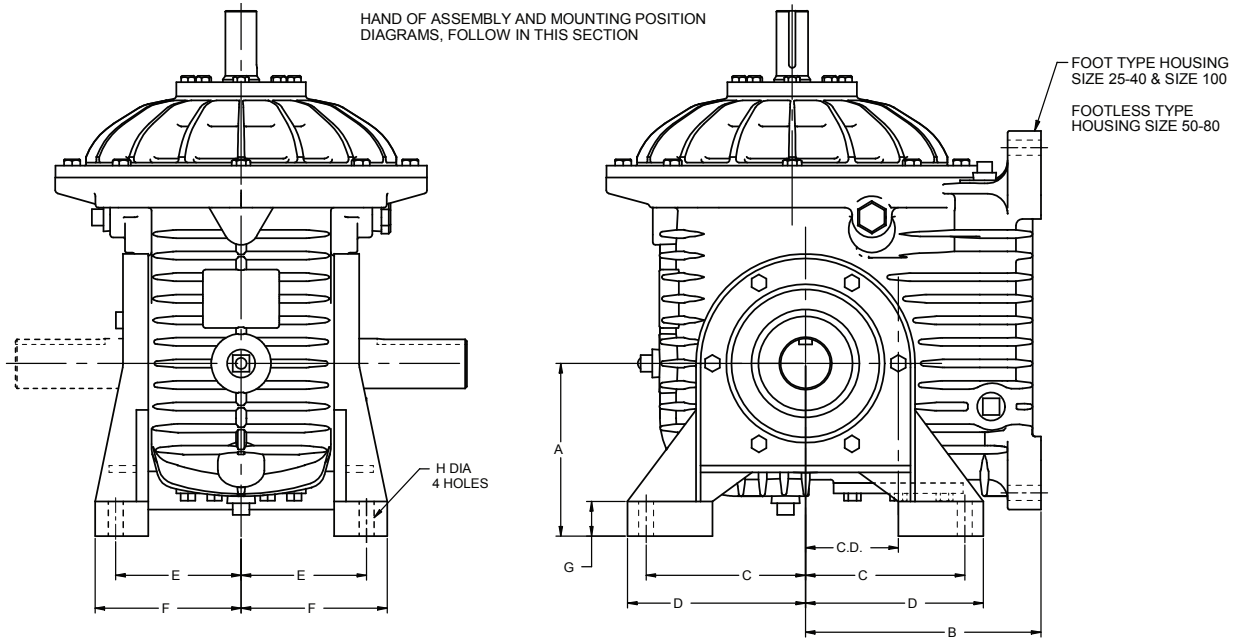
*Available at additional cost.

Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

Cone Drive Helical/Worm Speed Reducer

Sizes 25 thru 100

Models VR & SVR Input Vertical-Horizontal Output Shaft
 Special Foot Brackets

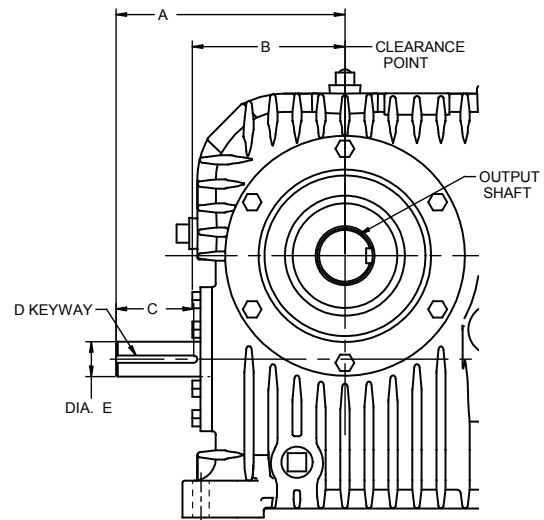


MODEL AVAILABLE IN ALL SOLID AND HOLLOW OUTPUT SHAFT CONFIGURATIONS.
 FOR ALL OTHER DIMENSIONS REFER TO CORRESPONDING SIZE MODEL SR OR RU.

| Reducer Size | Center Distance | A | B | C | D | E | F | G | H |
|--------------|-----------------|-------|-------|-------|------|-------|------|-----|--------|
| 25 | 2.500 | 4.50 | 6.75 | 4.25 | 4.8 | 4.75 | 5.4 | 0.9 | 15/32 |
| 30 | 3.000 | 5.50 | 7.75 | 5.00 | 5.7 | 5.25 | 5.9 | 1.2 | 9/16 |
| 35 | 3.500 | 6.50 | 8.87 | 6.00 | 6.7 | 6.50 | 7.2 | 1.3 | 9/16 |
| 40 | 4.000 | 7.50 | 10.00 | 6.75 | 7.6 | 7.75 | 8.6 | 1.5 | 11/16 |
| 50 | 5.000 | 8.50 | 11.8 | 7.50 | 8.4 | 8.25 | 9.2 | 1.8 | 13/16 |
| 60 | 6.000 | 8.50 | 13.4 | 8.25 | 9.1 | 9.00 | 9.9 | 1.5 | 13/16 |
| 70 | 7.000 | 13.75 | 16.4 | 10.00 | 11.3 | 9.75 | 10.8 | 1.5 | 15/16 |
| 80 | 8.000 | 15.50 | 17.4 | 11.50 | 12.8 | 10.30 | 11.3 | 1.8 | 15/16 |
| 100 | 10.000 | 19.50 | 22.0 | 14.50 | 16 | 13.10 | 14.3 | 2.3 | 1-1/16 |

Worm Extension Opposite Reducer Input

| Reducer Size | Center Distance | A | B | C | D | E |
|--------------|-----------------|-------|------|------|-------------|-------|
| 25 | 2.500 | 5.25 | 3.8 | 1.00 | 3/16 x 3/32 | 0.750 |
| 30 | 3.000 | 6.69 | 4.6 | 1.75 | 1/4 x 1/8 | 1.000 |
| 35 | 3.500 | 7.75 | 5.2 | 2.62 | 1/4 x 1/8 | 1.188 |
| 40 | 4.000 | 9.31 | 6.1 | 2.75 | 3/8 x 3/16 | 1.500 |
| 50 | 5.000 | 10.50 | 7.2 | 2.75 | 3/8 x 3/16 | 1.500 |
| 60 | 6.000 | 11.75 | 7.8 | 3.50 | 3/8 x 3/16 | 1.750 |
| 70 | 7.000 | 14.50 | 9.4 | 4.50 | 1/2 x 1/4 | 1.875 |
| 80 | 8.000 | 15.50 | 10.8 | 4.75 | 1/2 x 1/4 | 2.000 |
| 100 | 10.000 | 19.25 | 14.5 | 4.20 | 5/8 x 5/16 | 2.375 |



FOR SHAFT SPEED DIVIDE INPUT SPEED BY HELICAL GEAR RATIO.

Fan & Water Cooling for Cone Drive Helical/Worm Speed Reducer

Model FRV, FRU, FSR, FSRU, FSRV

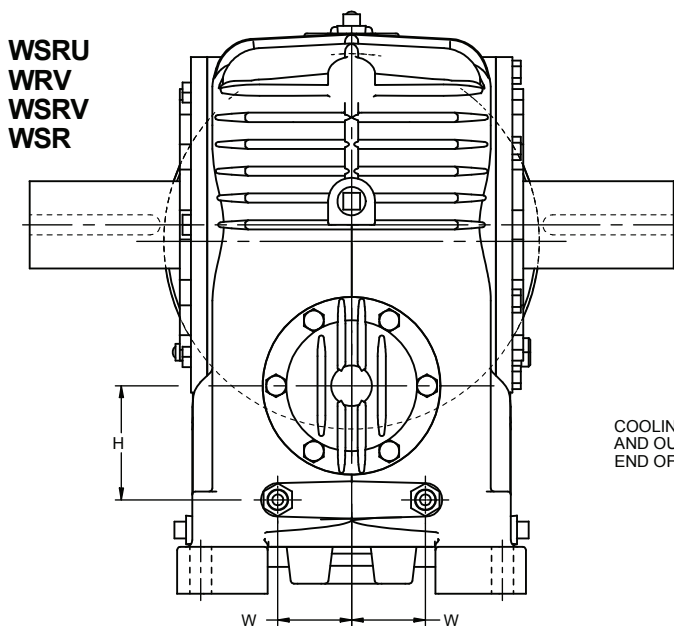
Fan Cooling

Cone Drive fan-cooled helical/worm double reduction speed reducers are available in all models size 40 through 100. They are identical with standard models except for the use of an extended worm shaft, fan and air-flow control cover. All size 40 fan-cooled models have thermal horsepower ratings equal to mechanical horsepower ratings, regardless of ratio.

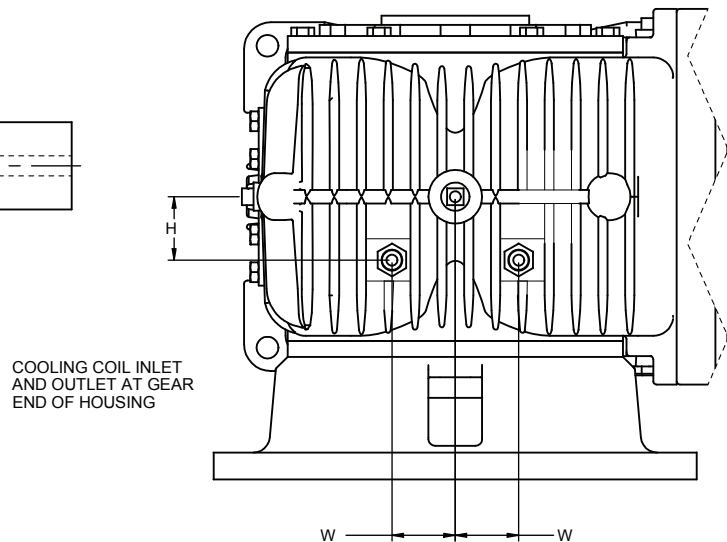
| CLEARANCE DIMENSION FROM CENTERLINE OF UNIT OVER FAN COVER | | | | | | |
|--|-----|-----|------|------|------|------|
| SIZE | 40 | 50 | 60 | 70 | 80 | 100 |
| DIM | 8.0 | 9.5 | 10.2 | 12.9 | 14.3 | 16.5 |

Water Cooling Inlet and Outlet Locations

WRU Shown



WRV and WSRV sizes 70-100 only



Floor Mounted Position Shown

| MODELS | SIZE | W | H | FEMALE THREAD |
|-------------|------|------|------|---------------|
| WRU WRV WSR | 40 | 2.43 | 3.50 | 3/8 - 18 NPT |
| WRU WRV WSR | 50 | 2.25 | 3.75 | 3/8 - 18 NPT |
| WRU WRV WSR | 60 | 2.06 | 4.44 | 3/8 - 18 NPT |
| WRU WSR | 70 | 3.25 | 5.88 | 3/8 - 18 NPT |
| WRU WSR | 80 | 3.25 | 5.88 | 3/8 - 18 NPT |
| WRU WSR | 100 | 4.25 | 8.00 | 3/8 - 18 NPT |

COOLING COILS MAY BE SUPPLIED IN EITHER PLAIN OR FINNED O.D. TUBING.

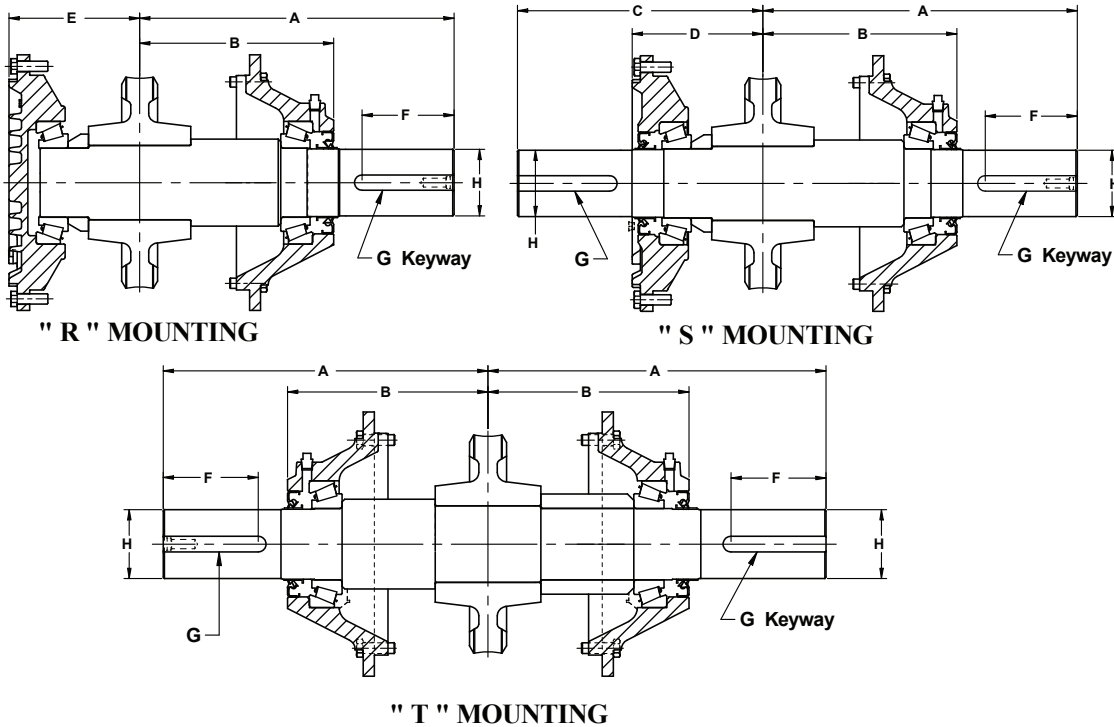
Floor Mounted Position Shown

| MODELS | SIZE | W | H | FEMALE THREAD |
|----------|------|------|------|---------------|
| WRV WSRV | 70 | 3.00 | 3.75 | 3/8 - 18 NPT |
| WRV WSRV | 80 | 3.50 | 3.75 | 3/8 - 18 NPT |
| WRV WSRV | 100 | 5.00 | 4.25 | 3/8 - 18 NPT |

IMPORTANT: WHEN ASSEMBLING EXTERNAL PIPING TO REDUCER INLET AND OUTLET FITTINGS A BACKUP WRENCH MUST BE USED ON REDUCER FITTINGS TO PREVENT TURNING TO AVOID DAMAGE TO COOLING COILS INSIDE UNIT.

INLET AND OUTLET LOCATIONS MAY VARY DEPENDING ON MOUNTING POSITION OF UNIT.

Steeple Bearings for Cone Drive Helical/Worm Speed Reducers



| Reducer Size | Center Distance | A | B | C | D | E | F | G | H DIA. |
|--------------|-----------------|-------|------|-------|-----|-----|------|------------|----------------|
| 25 | 2.500 | 7.88 | 4.9 | 4.50 | 2.6 | 2.6 | 1.38 | 1/4 x 1/8 | 1.250 1.249 |
| 30 | 3.000 | 8.62 | 5.9 | 5.94 | 3.4 | 3.4 | 2.00 | 3/8 x 3/16 | 1.500 1.499 |
| 35 | 3.500 | 10.25 | 6.3 | 7.88 | 4.2 | 4.2 | 2.68 | 1/2 x 1/4 | 1.875 1.875 |
| 40 | 4.000 | 11.25 | 6.6 | 9.25 | 4.9 | 4.9 | 3.31 | 1/2 x 1/4 | 2.250 2.249 |
| 50 | 5.000 | 13.62 | 8.6 | 10.31 | 5.6 | 5.6 | 3.62 | 5/8 x 5/16 | 2.750 2.749 |
| 60 | 6.000 | 15.38 | 9.6 | 12.00 | 6.3 | 6.4 | 4.62 | 3/4 x 3/8 | 3.250 3.249 |
| 70 | 7.000 | 19.38 | 12.5 | 13.00 | 7.4 | 7.4 | 4.88 | 7/8 x 7/16 | 3.375 3.374 |
| 80 | 8.000 | 19.38 | 12.9 | 14.00 | 7.8 | 7.8 | 4.88 | 7/8 x 7/16 | 3.500 3.499 |
| 100 | 10.000 | 24.00 | 16.5 | 15.72 | 9.4 | 9.4 | 5.12 | 1 x 1/2 | 4.000 3.999 |

When ordering, specify model size, hand of assembly, and steeple bearings using the letter designation R, S, or T for the mounting configuration required.

For R and T mountings, use the standard hand of assembly designation shown throughout the catalog for various sizes of reducers and mounting positions.

For double-extended S mountings on worm over and worm under

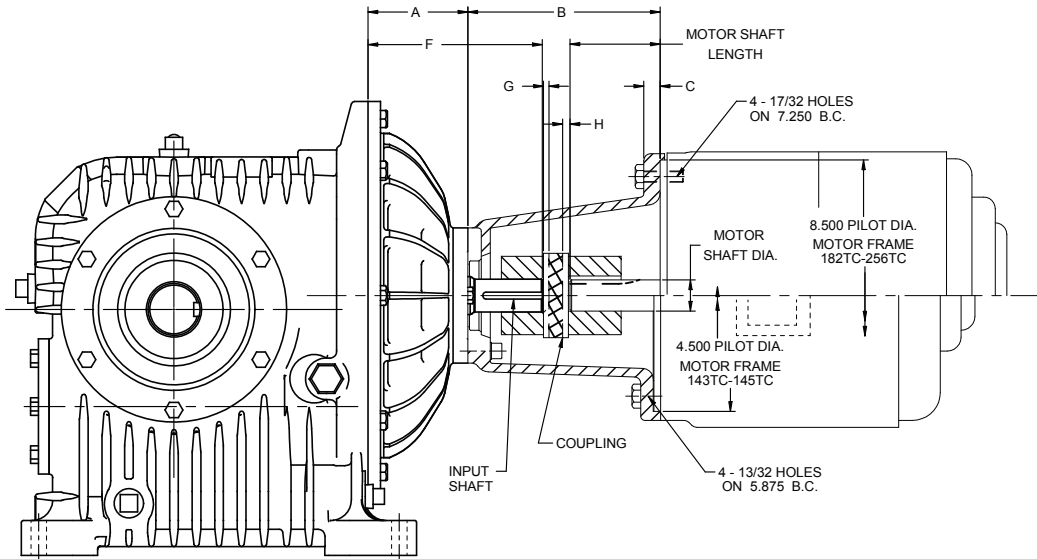
units, specify steeple bearing on left (L) or right (R) of unit as viewed from the input end.

For S mounting on vertical gear shaft unit, specify steeple bearing opposite feet (U) or through feet (D).

Motorizing for Cone Drive Standard Helical/Worm Reducers

Models RV, RU, SR, VR, SRU, SRV, SVR NEMA "C" Face Motor

Add letter 'MA' before model designation.



General Information

Reducer dimensions precede in this section.

Motor bolts and coupling keys are furnished when mounted by Cone Drive.

Important

Note 1: Motor shaft length, frame 213TC-215TC, must be 2.250 (cut off) for reducer size 25 & 30 and standard length 3.125 for reducer sizes 35 & 40.

Note 2: Motor shaft length, frame 254TC-256TC to be 2.750 (cut off) for reducer sizes 35 & 40.

Note 3: input shaft detail number G60 required for all standard helical pinion ratios except 4:1 which requires shaft detail. G61. All dash number will remain the same.

Note 4: It is the purchaser's or user's responsibility to guard all shafting in accordance to OSHA requirements.

| MOTOR FRAME SIZE | PILOT DIA. | SHAFT | | | A REDUCER SIZE | | | B REDUCER SIZE | | | C REDUCER SIZE | | |
|------------------|------------|--------|-------|------|----------------|---------|---------|----------------|---------|---------|----------------|---------|---------|
| | | LGTH. | DIA. | KWY | 25 & 30 | 35 & 40 | 50 & 60 | 25 & 30 | 35 & 40 | 50 & 60 | 25 & 30 | 35 & 40 | 50 & 60 |
| 143TC-145TC | 4.500 | 2.125 | .875 | 3/16 | 2.500 | 3.125 | 4.00 | 4.812 | 5.937 | 7.960 | .56 | .53 | .400 |
| 182TC-184TC | 8.500 | 2.625 | 1.125 | 1/4 | | | | N.A | N.A | N.A | | | N.A |
| 213TC - 215TC | | Note 1 | 1.375 | 5/16 | | | | 5.531 | 6.562 | 9.060 | | | .580 |
| 254TC-256TC | | Note 2 | 1.625 | 3/8 | | | | N.A | N.A | N.A | N.A | N.A | N.A |

| MOTORFRAME SIZE | F REDUCER SIZE | | | G REDUCER SIZE | | | H REDUCER SIZE | | | INPUT SHAFT (NOTE #3) REDUCER SIZE | | |
|-----------------|----------------|---------|---------|----------------|---------|---------|----------------|---------|---------|------------------------------------|----------|----------|
| | 25 & 30 | 35 & 40 | 50 & 60 | 25 & 30 | 35 & 40 | 50 & 60 | 25 & 30 | 35 & 40 | 50 & 60 | 25 & 30 | 35 & 40 | 50 & 60 |
| 143TC - 145TC | 4.687 | 6.250 | 9.000 | .00 | .00 | .00 | .18 | .00 | .00 | 30-G60A-1 | 40-G60 | 53-G60 |
| 182TC - 184TC | | | | .21 | .12 | | .00 | -.06 | .56 | | | |
| 213TC - 215TC | 5.062 | 5.812 | | | | | .00 | .00 | .00 | 30-G60A | 40-G60-1 | |
| 254TC - 256TC | N.A | 6.250 | 8.375 | .00 | .31 | | | | | N.A | 40-G60 | 53-G60-1 |

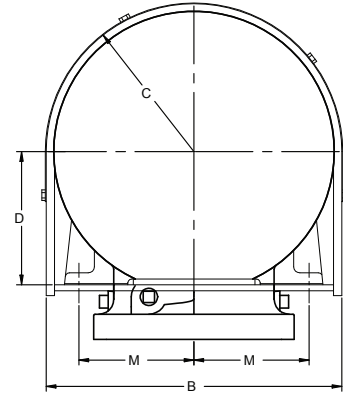
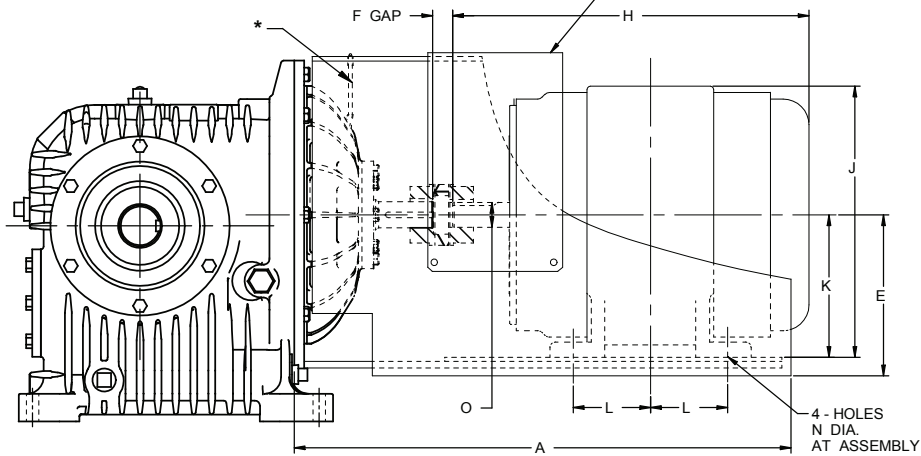
| MOTOR ADAPTOR NUMBER | | | | COUPLING NUMBER | | |
|----------------------|--------------|---------|------------|-----------------|----------|---------|
| MOTORFRAME SIZE | REDUCER SIZE | | | REDUCER SIZE | | |
| | 25 & 30 | 35 & 40 | 50 & 60 | 25 & 30 | 35 & 40 | 50 & 60 |
| 143TC - 145TC | 30-MG20 | 40-MG20 | 53-MG20-SW | 720107 | 720112 | 720207 |
| 182TC - 184TC | 30-MG21 | 40-MG21 | 53-MG21-SW | 720109 | 720113 | 720208 |
| 213TC - 215TC | | | | 720201-1 | 720204 | 720209 |
| 254TC - 256TC | N.A | | | N.A | 720254-1 | 720258 |

Motorizing for Cone Drive Standard Helical/Worm Reducers

Models RV, RU, SR, VR, SRU, SRV, SVR

Add letter "M" before model letter designation.

COUPLING GUARD FURNISHED WITH REDUCER ONLY WHEN MOTOR IS ASSEMBLED BY CONE DRIVE. SEE IMPORTANT NOTE BELOW.



CAUTION: It is the purchaser's or user's responsibility to guard all shafting in accordance with current, local, state or federal requirements.

| MODEL SIZE | APPROX. BRACKET WEIGHT LBS. LESS MOTOR | FRAMES NEW NEMA | FRAMES OLD NEMA | A | B | C | D | E | FGAP | MOTOR SUPPORT BRACKET | GUARD COVER (supplied only with motor) |
|------------|--|-----------------|----------------------|------|------|-------|------|-------|------------------|-----------------------|--|
| 25 & 30 | 55 | 143T - 145T | 143 - 145 | 16.0 | 12.0 | 5.75 | 3.56 | 4.38 | TO SUIT COUPLING | 30-G84 | 111500 |
| | 120 | 182T - 215T | 182 - 215 | 23.0 | 14.8 | 6.00 | 5.31 | 6.25 | | 30-G85 | 111503 |
| 35 & 40 | 85 | 143T - 145T | 143 - 145 | 17.0 | 13.3 | 6.00 | 3.56 | 4.38 | | 40-G84 | 111500 |
| | 150 | 182T - 215T | 182 - 215 | 24.5 | 17.0 | 7.38 | 5.31 | 6.25 | | 40-G85 | 111503 |
| 50 & 60 | 190 | 254T - 286TS | 254U - 286U | 31.0 | 18.0 | 7.38 | 7.06 | 8.00 | | 40-G86 | 111503 |
| | 150 | 182T - 215T | 182-215 | 25.8 | 17.0 | 7.62 | 5.31 | 6.31 | | 40-G85 | 111503 |
| | 190 | 254T - 286T | 254U - 286U | 32.4 | 18.0 | 8.62 | 7.06 | 7.88 | | 40-G86 | 111506 |
| 70 & 80 | 270 | 324T - 326TS | 324US - 365US | 34.8 | 23.0 | 10.88 | 9.06 | 10.00 | | 53-G87 | 111506 |
| | 200 | 182T - 215T | 182 - 215 | 27.2 | 19.0 | 8.88 | 5.31 | 6.50 | | 67-G85 | 111503 |
| | 230 | 254T - 286TS | 254U - 286U | 33.2 | 19.0 | 8.88 | 7.06 | 8.00 | | 67-G86 | 111506 |
| | 310 | 324T - 365TS | 324U - 365US | 39.6 | 23.0 | 10.88 | 9.06 | 10.00 | | 67-G87 | 111506 |

| MOTOR FRAME | H | | | J | | | K | L | M | N | O | | HORSEPOWER | |
|-------------|-------|--------|---------|-------|-------|---------|------|------|------|-------|-------|------|------------|----------|
| | OPEN | TEFC | TEFC-XP | OPEN | TEFC | TEFC-XP | | | | | DIA. | DIA. | KEYWAY | 1800 RPM |
| 143T | 11.56 | 12.00 | | 7.25 | 7.25 | | 3.50 | 2.00 | 2.75 | 11/32 | .875 | 3/16 | 1 | .75 |
| 145T | 12.56 | 13.00 | | 7.25 | 7.25 | | 3.50 | 2.50 | 2.75 | 11/32 | .875 | 3/16 | 1.5 & 2 | 1 |
| 182T | 13.75 | 14.62 | | 9.38 | 9.38 | | 4.50 | 2.25 | 3.75 | 13/32 | 1.125 | 1/4 | 3 | 1.5 |
| 184T | 14.75 | 15.62 | | 9.38 | 9.38 | | 4.50 | 2.75 | 3.75 | 13/32 | 1.125 | 1/4 | 5 | 2 |
| 213T | 15.94 | 17.75 | | 10.31 | 12.00 | | 5.25 | 2.75 | 4.25 | 13/32 | 1.375 | 5/16 | 7.5 | 3 |
| 215T | 17.44 | 19.25 | | 10.31 | 12.00 | | 5.25 | 3.50 | 4.25 | 13/32 | 1.375 | 5/16 | 10 | 5 |
| 254T | 20.56 | 21.81 | | 12.62 | 13.62 | | 6.25 | 4.12 | 5.00 | 17/32 | 1.625 | 3/8 | 15 | 7.5 |
| 256T | 22.31 | 23.56 | | 12.62 | 13.62 | | 6.25 | 5.00 | 5.00 | 17/32 | 1.625 | 3/8 | 20 | 10 |
| 284TS | 22.06 | 23.19 | | 14.00 | 15.25 | | 7.00 | 4.75 | 5.50 | 17/32 | 1.625 | 3/8 | 25 | 15 |
| 286TS | 23.56 | 24.69 | | 14.00 | 15.25 | | 7.00 | 5.50 | 5.50 | 17/32 | 1.625 | 3/8 | 30 | 20 |
| 324TS | 24.56 | 25.69 | | 16.00 | 17.38 | | 8.00 | 5.25 | 6.25 | 21/32 | 1.875 | 1/2 | 40 | 25 |
| 182 | 12.31 | 12.31* | 14.19* | 9.00 | 8.94* | 9.31* | 4.50 | 2.25 | 3.75 | 13/32 | .875 | 3/16 | 1 | .75 |
| 184 | 13.31 | 15.19* | 15.19* | 9.00 | 9.19* | 9.38 | 4.50 | 2.75 | 3.75 | 13/32 | .875 | 3/16 | 1.5 & 2 | 1 & 1.5 |
| 213 | 15.62 | 17.50 | 17.50 | 10.50 | 10.75 | 11.00 | 5.25 | 2.75 | 4.25 | 13/32 | 1.125 | 1/4 | 3 | 2 |
| 215 | 17.12 | 18.94 | 18.94 | 10.50 | 10.75 | 11.00 | 5.25 | 3.50 | 4.25 | 13/32 | 1.125 | 1/4 | 5 | 3 |
| 254U | 20.62 | 21.56 | 21.56 | 12.62 | 13.06 | 13.12 | 6.25 | 4.12 | 5.00 | 17/32 | 1.375 | 5/16 | 7.5 | 5 |
| 256U | 22.06 | 23.31 | 23.31 | 12.62 | 13.06 | 13.12 | 6.25 | 5.00 | 5.00 | 17/32 | 1.375 | 5/16 | 10 | 7.5 |
| 284U | 23.69 | 24.81 | 24.81 | 14.00 | 14.62 | 14.62 | 7.00 | 4.75 | 5.50 | 17/32 | 1.625 | 3/8 | 15 | 10 |
| 286U | 25.31 | 26.31 | 26.31 | 14.00 | 14.62 | 14.62 | 7.00 | 5.50 | 5.50 | 17/32 | 1.625 | 3/8 | 20 | |
| 324U | 26.44 | 27.56 | 27.56 | 16.00 | 16.75 | 16.75 | 8.00 | 5.25 | 6.25 | 21/32 | 1.875 | 1/2 | 25 | 15 |
| 326U | 27.94 | 29.06 | 29.06 | 16.00 | 16.75 | 16.75 | 8.00 | 6.00 | 6.25 | 21/32 | 1.875 | 1/2 | 30 | 10 |
| 364US | 29.56 | 30.94 | 30.94 | 18.25 | 18.75 | 18.75 | 9.00 | 5.62 | 7.00 | 21/32 | 1.875 | 1/2 | 40 | 25 |
| 365US | 27.56 | 31.94 | 31.94 | 18.25 | 18.75 | 18.75 | 9.00 | 6.12 | 7.00 | 21/32 | 1.875 | 1/2 | 50 | 30 |

Motor dimensions shown are for reference only and may vary with each manufacturer. For all other dimensions see corresponding

model size dimension pages. Unless otherwise specified, motor support bracket surface shall be under motor, except when mounted vertically.

*Frame 182 is TENV, frame 184 may be TENV.

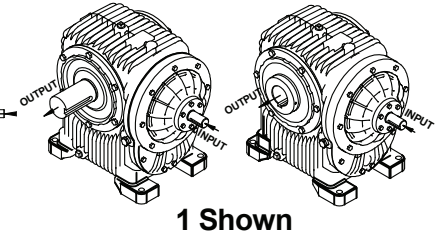
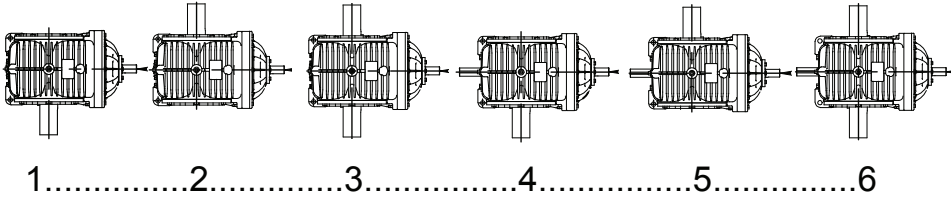
Assembly & Mounting Position Numbers for Cone Drive Helical/Worm Speed Reducers

Models RU, SRU, MRU, MSRU, SR, MSR - Solid & Hollow Shaft

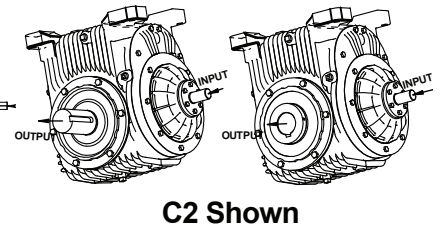
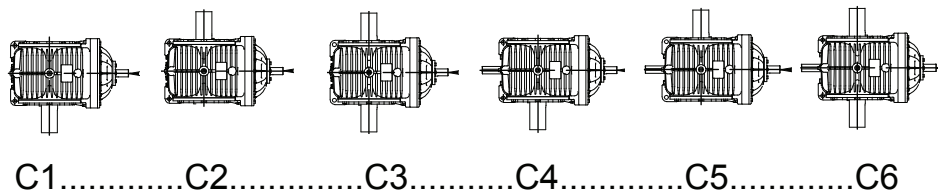
ALL DIAGRAMS SHOW REDUCER WITH FEET ON FAR SIDE

◀ = INPUT

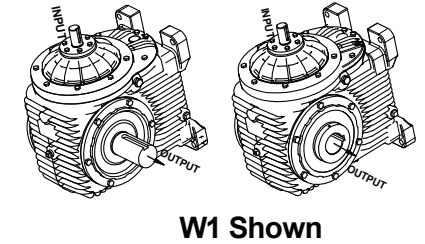
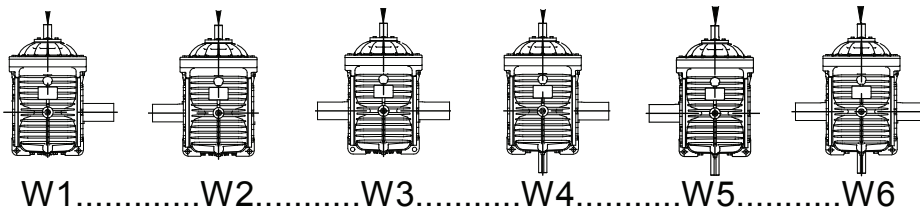
Top View, Floor Mounted



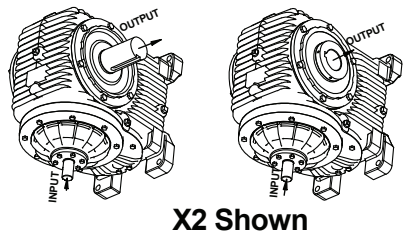
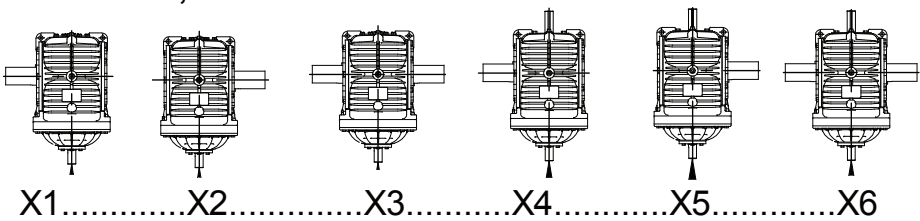
Ceiling Mounted



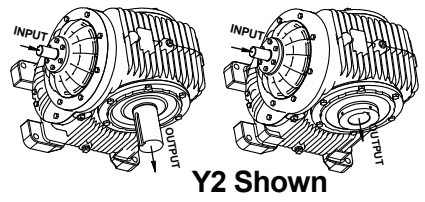
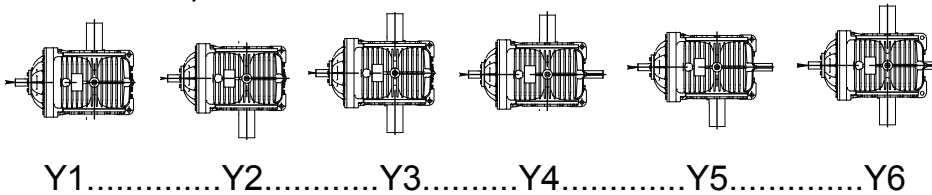
Wall Mounted, Worm Vertical Up



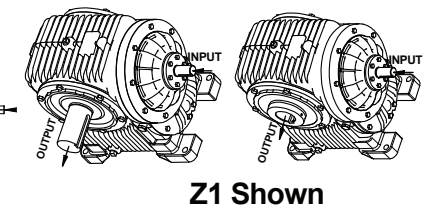
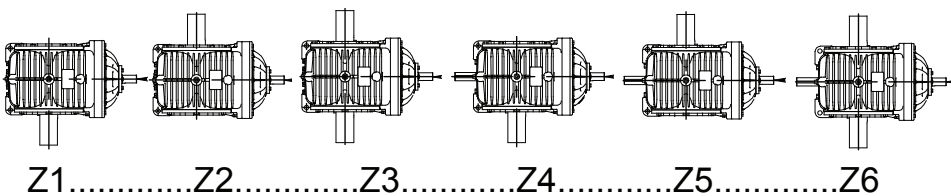
Wall Mounted, Worm Vertical Down



Wall Mounted, Worm Horizontal to the Left



Wall Mounted, Worm Horizontal to the Right



Assembly & Mounting Position Numbers for Cone Drive Helical/Worm Speed Reducers

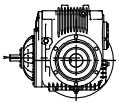
Models RV, SRV, MRV, MSRV - Solid & Hollow Shaft

ALL DIAGRAMS SHOW REDUCER WITH BASE ON FAR SIDE

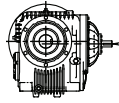
| | | |
|-----------|------------|---|
| RV | SRV | |
| A | A | Gearshaft Extended Opposite Base |
| BR | B | Gearshaft Extended Through Base |
| SD | C | Gearshaft Double Extended |

Floor Mounted - Top View

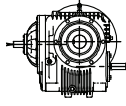
◀ = INPUT



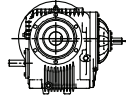
RV SRV
1A 1A
1BR 1B
1SD 1C



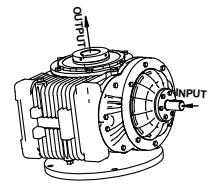
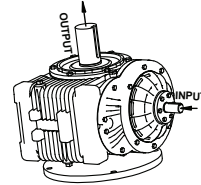
RV SRV
2A 2A
2BR 2B
2SD 2C



RV SRV
3A 3A
3BR 3B
3SD 3C

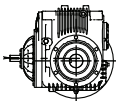


RV SRV
4A 4A
4BR 4B
4SD 4C

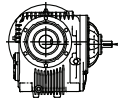


2A Shown

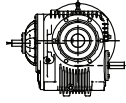
Ceiling Mounted



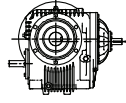
RV SRV
C1A C1A
C1BR C1B
C1SD C1C



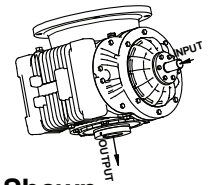
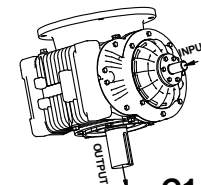
RV SRV
C2A C2A
C2BR C2B
C2SD C2C



RV SRV
C3A C3A
C3BR C3B
C3SD C3C

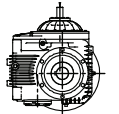


RV SRV
C4A C4A
C4BR C4B
C4SD C4C

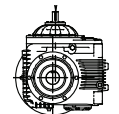


C1A Shown

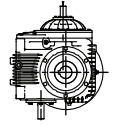
Wall Mounted - Input Shaft Up



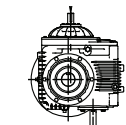
RV SRV
W1A W1A
W1BR W1B
W1SD W1C



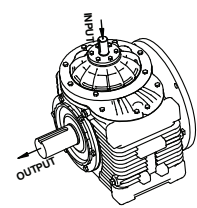
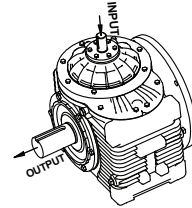
RV SRV
W2A W2A
W2BR W2B
W2SD W2C



RV SRV
W3A W3A
W3BR W3B
W3SD W3C

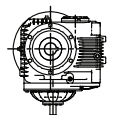


RV SRV
W4A W4A
W4BR W4B
W4SD W4C

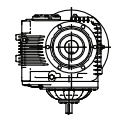


W2A Shown

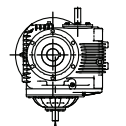
Wall Mounted - Input Shaft Down



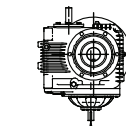
RV SRV
X1A X1A
X1BR X1B
X1SD X1C



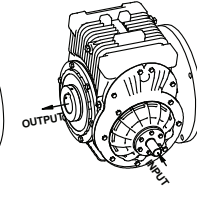
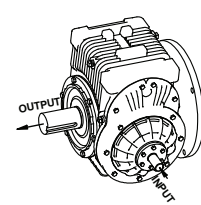
RV SRV
X2A X2A
X2BR X2B
X2SD X2C



RV SRV
X3A X3A
X3BR X3B
X3SD X3C

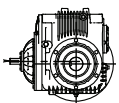


RV SRV
X4A X4A
X4BR X4B
X4SD X4C

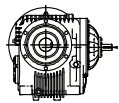


X1A Shown

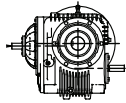
Wall Mounted - Worm Under



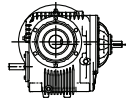
RV SRV
Y1A Y1A
Y1BR Y1B
Y1SD Y1C



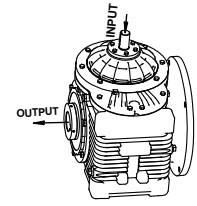
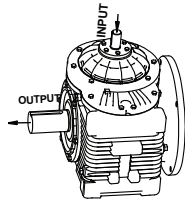
RV SRV
Y2A Y2A
Y2BR Y2B
Y2SD Y2C



RV SRV
Y3A Y3A
Y3BR Y3B
Y3SD Y3C

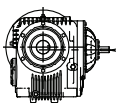


RV SRV
Y4A Y4A
Y4BR Y4B
Y4SD Y4C

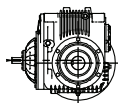


Y2A Shown

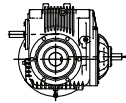
Wall Mounted - Worm Over



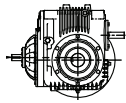
RV SRV
Z1A Z1A
Z1BR Z1B
Z1SD Z1C



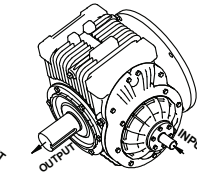
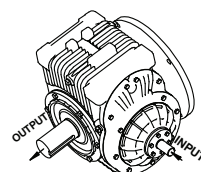
RV SRV
Z2A Z2A
Z2BR Z2B
Z2SD Z2C



RV SRV
Z3A Z3A
Z3BR Z3B
Z3SD Z3C



RV SRV
Z4A Z4A
Z4BR Z4B
Z4SD Z4C



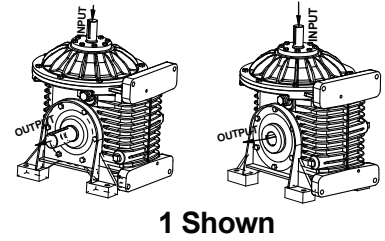
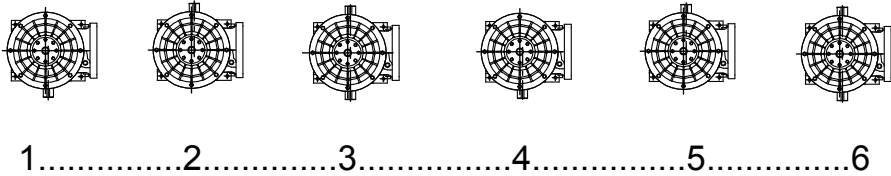
Z1A Shown

Assembly & Mounting Position Numbers for Cone Drive Helical/Worm Speed Reducers

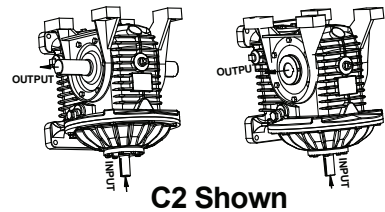
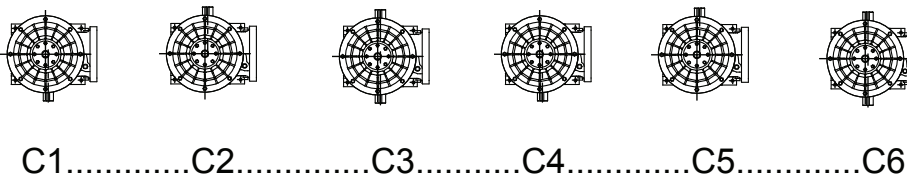
Models VR, SVR, MVR, MSVR - Solid & Hollow Shaft

ALL DIAGRAMS SHOW REDUCER WITH FEET ON FAR SIDE. DIAGRAMS 4-6 HAVE SHAFT EXTENSION OPPOSITE INPUT END.

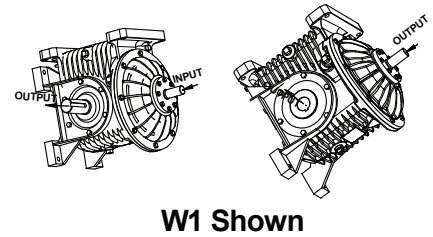
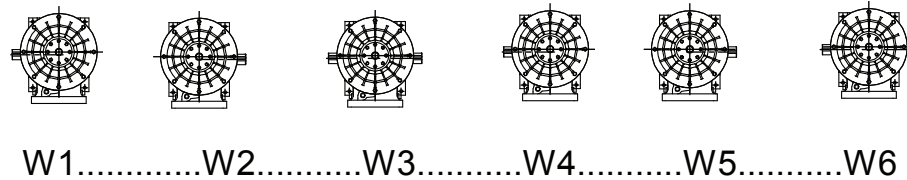
Top View, Floor Mounted



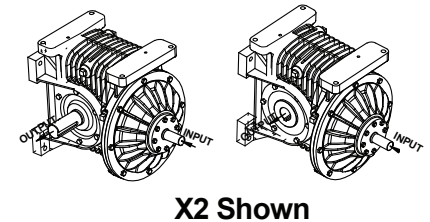
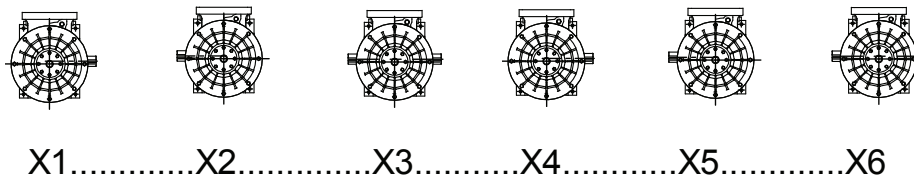
Ceiling Mounted



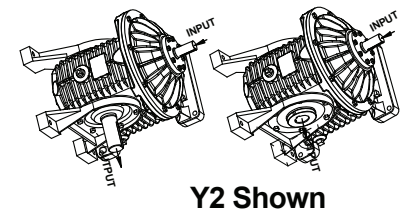
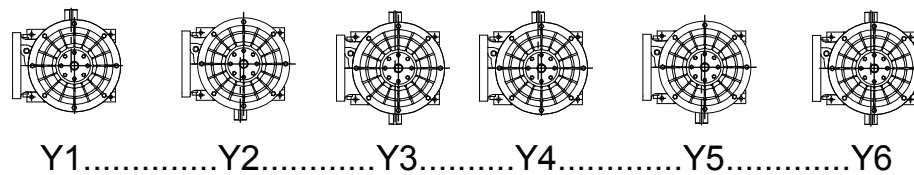
Wall Mounted, Worm Under Horizontal Gearshaft



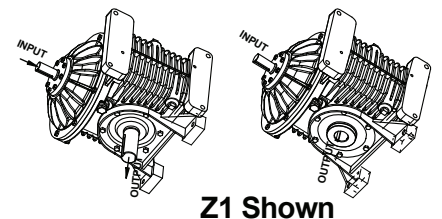
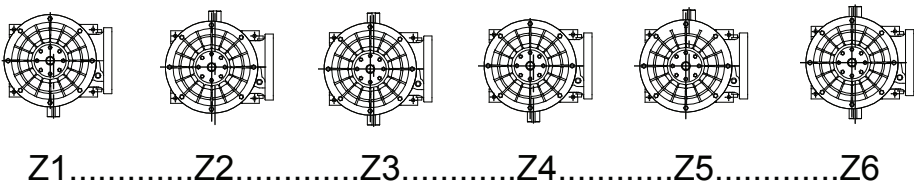
Wall Mounted, Worm Over Horizontal Gearshaft

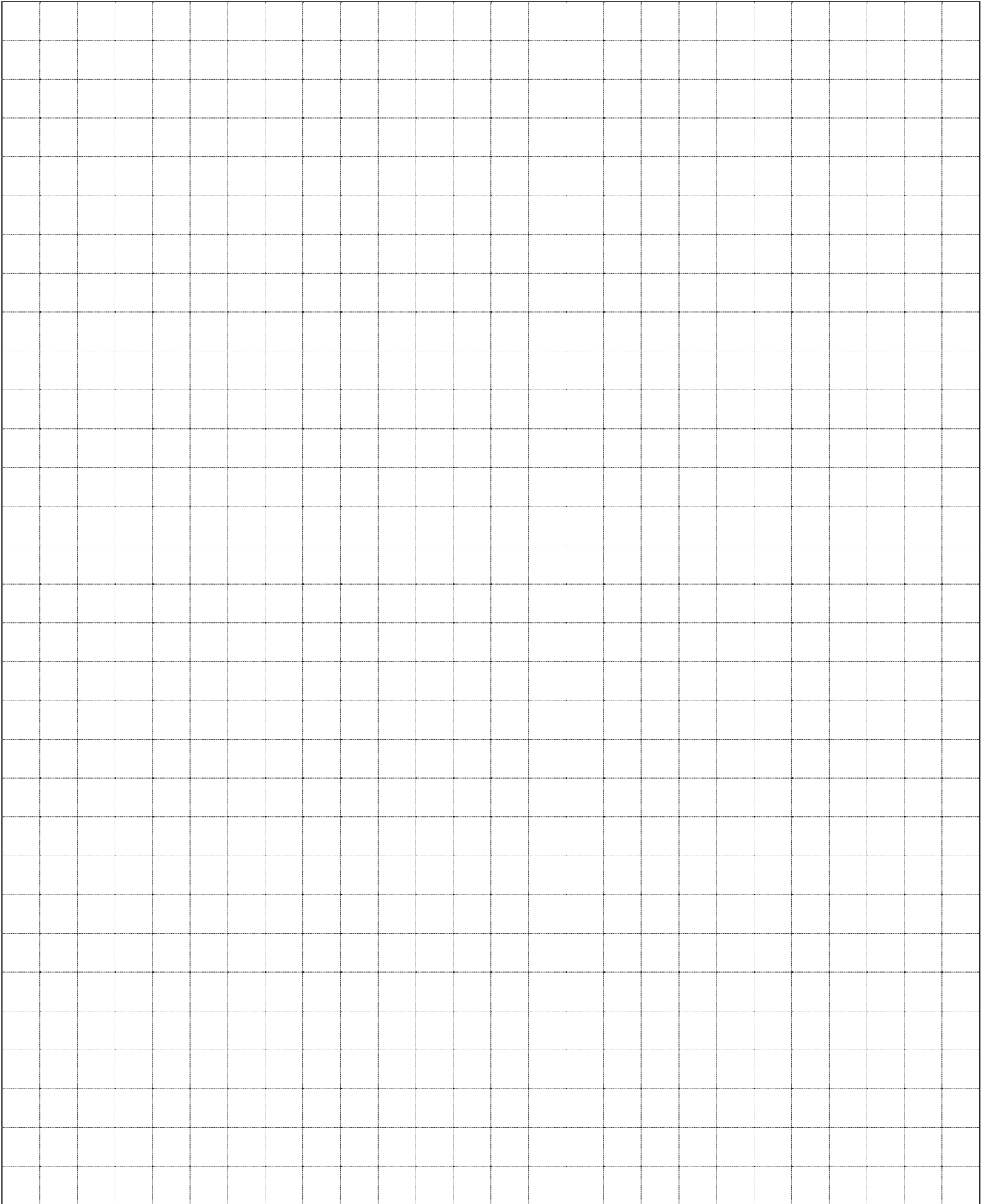


Wall Mounted, Worm Left Vertical Gearshaft



Wall Mounted, Worm Right Vertical Gearshaft

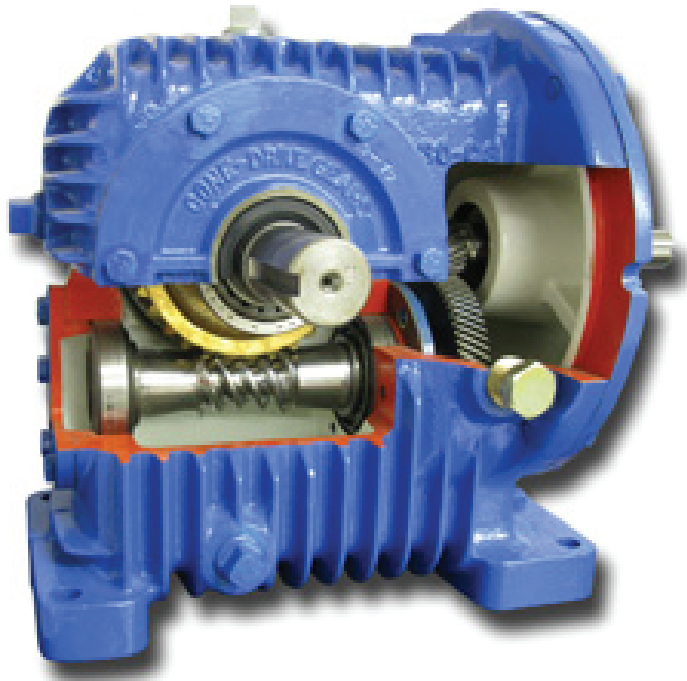




Helical/Worm Illustrations

Shown below are two Cone Drive helical/worm configurations

Helical/Worm Speed Reducer

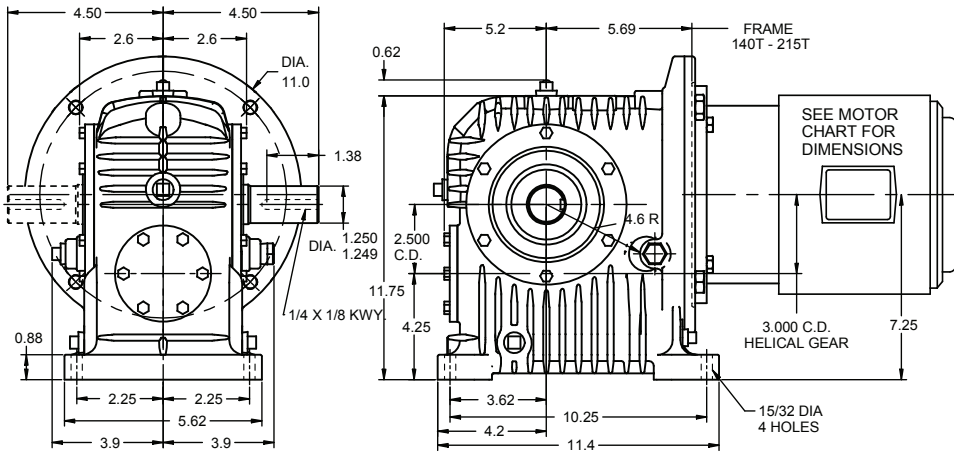


Helical/Worm D-Flange Gearhead

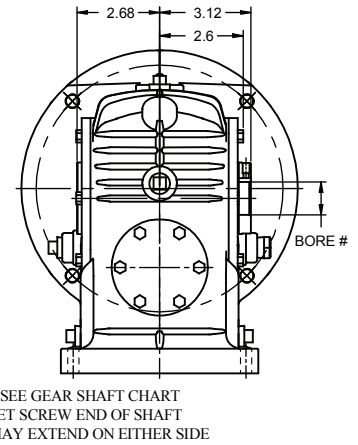


Cone Drive Helical/Worm D-Flange Gearhead - 2.500" C.D. Size 25 Solid Shaft

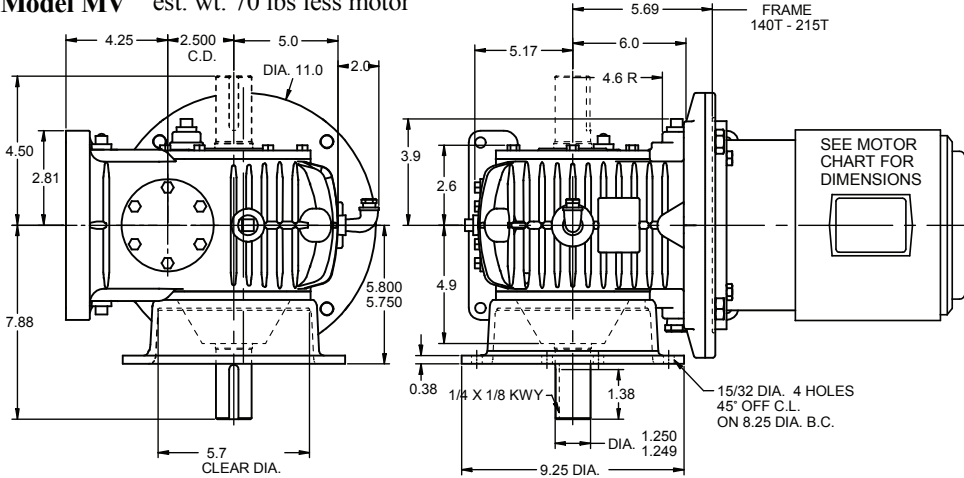
Model MU est. wt. 70 lbs less motor



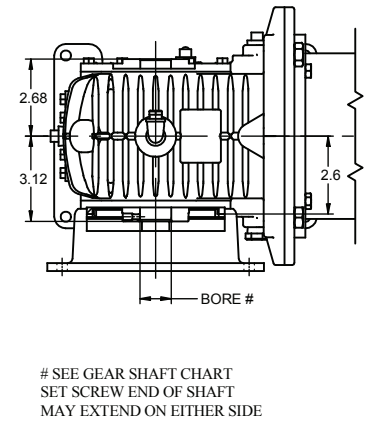
SMU est. wt. 70 lbs less motor



Model MV est. wt. 70 lbs less motor

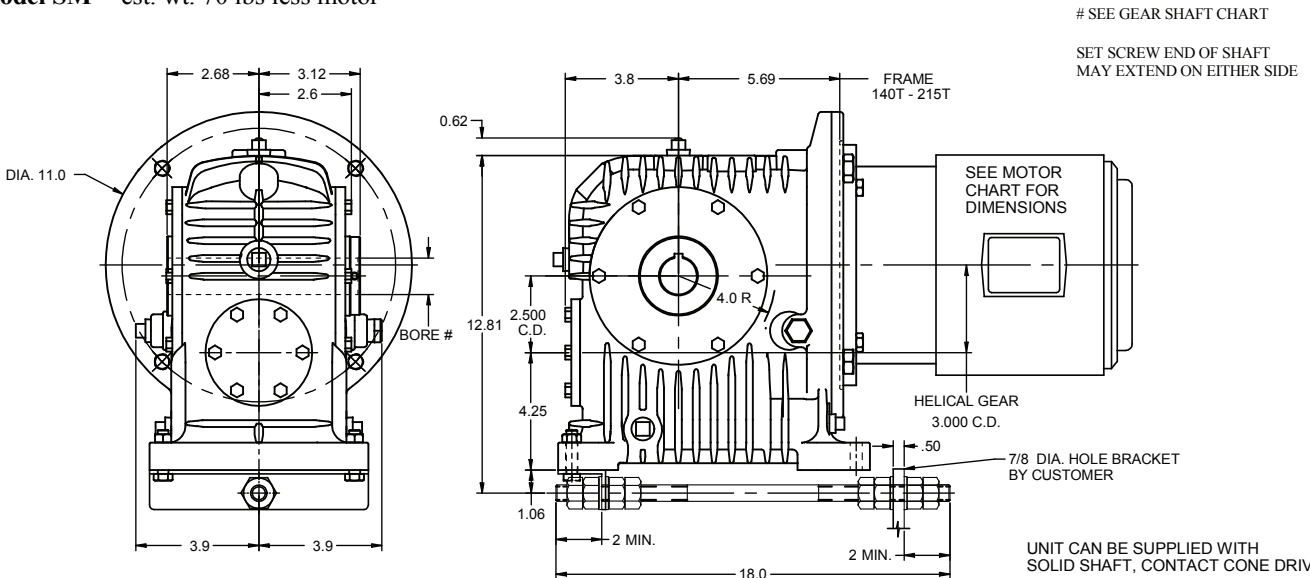


SMV est. wt. 70 lbs less motor



SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SM est. wt. 70 lbs less motor



UNIT CAN BE SUPPLIED WITH SOLID SHAFT, CONTACT CONE DRIVE

Cone Drive Helical/Worm D-Flange Gearhead

Size 25 3.000" C.D. HELICAL PRI./2.500" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|------|------|------|------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 0.80 | 3.63 | 4.82 | 5.65 | 7.08 |
| | Th.HP | 0.80 | 3.63 | 4.82 | 5.65 | 7.08 |
| | O.T. | 2180 | 1740 | 1550 | 1380 | 1140 |
| 7.5:1 1.5 x 5 | Me.HP | 0.54 | 2.62 | 3.63 | 4.44 | 5.69 |
| | Th.HP | 0.54 | 2.62 | 3.63 | 4.44 | 5.69 |
| | O.T. | 2180 | 1880 | 1740 | 1620 | 1370 |
| 9:1 1.8 x 5 | Me.HP | 0.46 | 2.24 | 3.15 | 3.91 | 5.14 |
| | Th.HP | 0.46 | 2.24 | 3.15 | 3.91 | 5.14 |
| | O.T. | 2180 | 1920 | 1810 | 1710 | 1480 |
| 10:1 1 x 10 | Me.HP | 0.51 | 2.33 | 3.14 | 3.73 | 4.68 |
| | Th.HP | 0.51 | 2.33 | 3.14 | 3.73 | 4.68 |
| | O.T. | 2580 | 2150 | 1960 | 1770 | 1480 |
| 12.5:1 2.5 x 5 | Me.HP | 0.33 | 1.68 | 2.40 | 3.02 | 4.17 |
| | Th.HP | 0.33 | 1.68 | 2.40 | 3.02 | 4.17 |
| | O.T. | 2180 | 2000 | 1910 | 1820 | 1660 |
| 15:1 1.5 x 10 | Me.HP | 0.35 | 1.67 | 2.33 | 2.88 | 3.76 |
| | Th.HP | 0.35 | 1.67 | 2.33 | 2.88 | 3.76 |
| | O.T. | 2580 | 2280 | 2150 | 2030 | 1760 |
| 18:1 1.8 x 10 | Me.HP | 0.29 | 1.42 | 2.01 | 2.52 | 3.39 |
| | Th.HP | 0.29 | 1.42 | 2.01 | 2.52 | 3.39 |
| | O.T. | 2580 | 2320 | 2210 | 2110 | 1890 |
| 20:1 4 x 5 | Me.HP | 0.21 | 1.12 | 1.59 | 2.03 | 2.90 |
| | Th.HP | 0.21 | 1.12 | 1.59 | 2.03 | 2.90 |
| | O.T. | 2180 | 2110 | 2010 | 1950 | 1840 |
| 22.5:1 1.5 x 15 | Me.HP | 0.24 | 1.17 | 1.64 | 2.04 | 2.67 |
| | Th.HP | 0.24 | 1.17 | 1.64 | 2.04 | 2.67 |
| | O.T. | 2590 | 2310 | 2210 | 2100 | 1840 |
| 25:1 2.5 x 10 | Me.HP | 0.21 | 1.07 | 1.52 | 1.93 | 2.70 |
| | Th.HP | 0.21 | 1.07 | 1.52 | 1.93 | 2.70 |
| | O.T. | 2580 | 2400 | 2300 | 2230 | 2070 |
| 27:1 1.8 x 15 | Me.HP | 0.20 | 1.00 | 1.42 | 1.77 | 2.39 |
| | Th.HP | 0.20 | 1.00 | 1.42 | 1.77 | 2.39 |
| | O.T. | 2590 | 2340 | 2260 | 2170 | 1970 |
| 30:1 1.5 x 20 | Me.HP | 0.19 | 0.90 | 1.26 | 1.56 | 2.05 |
| | Th.HP | 0.19 | 0.90 | 1.26 | 1.56 | 2.05 |
| | O.T. | 2510 | 2260 | 2190 | 2070 | 1800 |
| 36:1 1.8 x 20 | Me.HP | 0.16 | 0.77 | 1.09 | 1.36 | 1.84 |
| | Th.HP | 0.16 | 0.77 | 1.09 | 1.36 | 1.84 |
| | O.T. | 2510 | 2280 | 2230 | 2150 | 1930 |
| 37.5:1 2.5 x 15 | Me.HP | 0.15 | 0.75 | 1.07 | 1.36 | 1.90 |
| | Th.HP | 0.15 | 0.75 | 1.07 | 1.36 | 1.90 |
| | O.T. | 2590 | 2420 | 2330 | 2280 | 2140 |
| 40:1 4 x 10 | Me.HP | 0.14 | 0.71 | 1.01 | 1.29 | 1.85 |
| | Th.HP | 0.14 | 0.71 | 1.01 | 1.29 | 1.85 |
| | O.T. | 2580 | 2510 | 2410 | 2350 | 2250 |
| 45:1 1.8 x 25 | Me.HP | 0.13 | 0.62 | 0.88 | 1.09 | 1.48 |
| | Th.HP | 0.13 | 0.62 | 0.88 | 1.09 | 1.48 |
| | O.T. | 2410 | 2270 | 2200 | 2120 | 1930 |
| 50:1 2.5 x 20 | Me.HP | 0.11 | 0.57 | 0.82 | 1.04 | 1.46 |
| | Th.HP | 0.11 | 0.57 | 0.82 | 1.04 | 1.46 |
| | O.T. | 2510 | 2340 | 2270 | 2240 | 2110 |
| 54:1 1.8 x 30 | Me.HP | 0.11 | 0.52 | 0.73 | 0.92 | 1.24 |
| | Th.HP | 0.11 | 0.52 | 0.73 | 0.92 | 1.24 |
| | O.T. | 2300 | 2120 | 2060 | 2000 | 1860 |
| 60:1 4 x 15 | Me.HP | 0.09 | 0.50 | 0.71 | 0.91 | 1.30 |
| | Th.HP | 0.09 | 0.50 | 0.71 | 0.91 | 1.30 |
| | O.T. | 2590 | 2530 | 2430 | 2370 | 2290 |
| 62.5:1 2.5 x 25 | Me.HP | 0.09 | 0.46 | 0.66 | 0.84 | 1.18 |
| | Th.HP | 0.09 | 0.46 | 0.66 | 0.84 | 1.18 |
| | O.T. | 2410 | 2320 | 2260 | 2220 | 2090 |
| 72:1 1.8 x 40 | Me.HP | 0.08 | 0.39 | 0.55 | 0.69 | 0.93 |
| | Th.HP | 0.08 | 0.39 | 0.55 | 0.69 | 0.93 |
| | O.T. | 2070 | 2000 | 1970 | 1920 | 1770 |
| 75:1 2.5 x 30 | Me.HP | 0.08 | 0.39 | 0.55 | 0.70 | 0.98 |
| | Th.HP | 0.08 | 0.39 | 0.55 | 0.70 | 0.98 |
| | O.T. | 2300 | 2170 | 2110 | 2070 | 1980 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|------|------|------|------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 0.07 | 0.38 | 0.54 | 0.69 | 1.00 |
| | Th.HP | 0.07 | 0.38 | 0.54 | 0.69 | 1.00 |
| | O.T. | 2510 | 2450 | 2360 | 2290 | 2250 |
| 90:1 1.8 x 50 | Me.HP | 0.07 | 0.31 | 0.44 | 0.55 | 0.75 |
| | Th.HP | 0.07 | 0.31 | 0.44 | 0.55 | 0.75 |
| | O.T. | 1840 | 1910 | 1910 | 1870 | 1700 |
| 100:1 4 x 25 | Me.HP | 0.06 | 0.31 | 0.44 | 0.56 | 0.80 |
| | Th.HP | 0.06 | 0.31 | 0.44 | 0.56 | 0.80 |
| | O.T. | 2410 | 2370 | 2320 | 2290 | 2230 |
| 108:1 1.8 x 60 | Me.HP | 0.06 | 0.27 | 0.38 | 0.46 | 0.64 |
| | Th.HP | 0.06 | 0.27 | 0.38 | 0.46 | 0.64 |
| | O.T. | 1800 | 1835 | 1820 | 1785 | 1665 |
| 120:1 4 x 30 | Me.HP | 0.05 | 0.26 | 0.37 | 0.47 | 0.67 |
| | Th.HP | 0.05 | 0.26 | 0.37 | 0.47 | 0.67 |
| | O.T. | 2300 | 2250 | 2180 | 2140 | 2080 |
| 125:1 2.5 x 50 | Me.HP | 0.05 | 0.23 | 0.33 | 0.42 | 0.59 |
| | Th.HP | 0.05 | 0.23 | 0.33 | 0.42 | 0.59 |
| | O.T. | 1840 | 1900 | 1910 | 1920 | 1840 |
| 150:1 2.5 x 60 | Me.HP | 0.04 | 0.20 | 0.28 | 0.36 | 0.49 |
| | Th.HP | 0.04 | 0.20 | 0.28 | 0.36 | 0.49 |
| | O.T. | 1800 | 1880 | 1835 | 1820 | 1760 |
| 160:1 4 x 40 | Me.HP | 0.04 | 0.19 | 0.28 | 0.35 | 0.51 |
| | Th.HP | 0.04 | 0.19 | 0.28 | 0.35 | 0.51 |
| | O.T. | 2070 | 2030 | 1980 | 1990 | 1980 |
| 200:1 4 x 50 | Me.HP | 0.03 | 0.16 | 0.22 | 0.28 | 0.41 |
| | Th.HP | 0.03 | 0.16 | 0.22 | 0.28 | 0.41 |
| | O.T. | 1840 | 1880 | 1890 | 1900 | 1920 |
| 240:1 4 x 60 | Me.HP | 0.03 | 0.13 | 0.19 | 0.24 | 0.34 |
| | Th.HP | 0.03 | 0.13 | 0.19 | 0.24 | 0.34 |
| | O.T. | 1800 | 1845 | 1890 | 1850 | 1825 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:

- For motor data refer to pages 71 and 72.
- VM & SVM units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section.
- All MV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified.
- Steeple bearing arrangements follow in this section.
- All units can be supplied with fan cooling.
- When specified each unit can be supplied with a worm shaft extension located opposite the input end.
- When specified, units can be supplied with water cooling coils in oil sump.
- Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set.
- Reducers are designed for shaft rotation in either direction.
- For cap and carrier dimensions not shown see mounting section.
- For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio.
- Refer to page 26 for lubrication information, efficiency, and service factors.
- Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided.
- Hand of assembly and mounting position diagrams follow in this section.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|------------------|-------------|
| BORE INCHES | GEARSHAFT NUMBER | KEYWAY SIZE |
| 2.000* | 25-S60-200 | 1/4 X 1/8 |
| 1.9375* | 25-S60-115 | 1/4 X 1/8 |
| 1.6875* | 25-S60-111 | 3/8 X 3/16 |
| 1.4375* | 25-S60-107 | 3/8 X 3/16 |
| 1.250* | 25-S60-104 | 1/4 X 1/8 |
| 1.1875* | 25-S60-103 | 1/4 X 1/8 |

Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard Bore Tolerance: +.002, -.000
 2 set screws at long end of shaft.

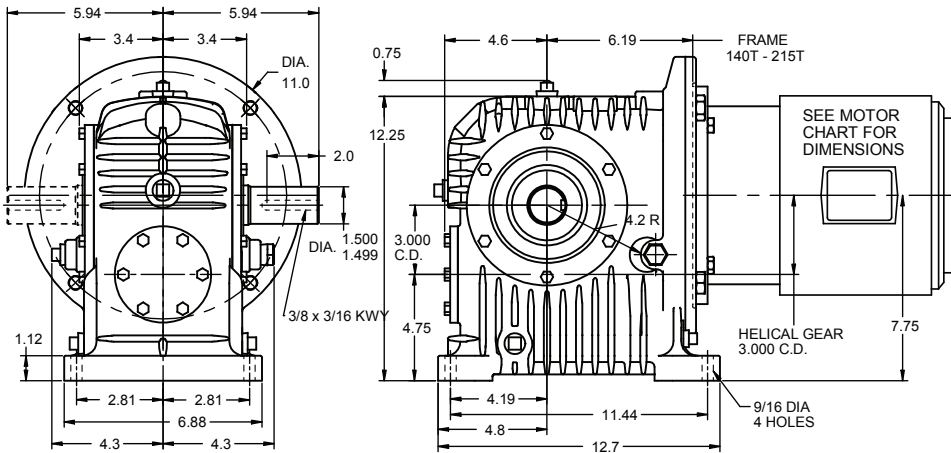
Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

Cone Drive Helical/Worm D-Flange Gearhead - 3.000" C.D.

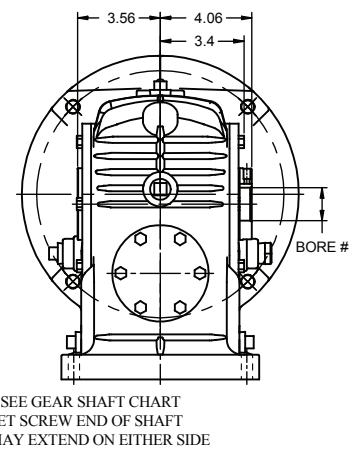
Size 30 Solid Shaft

Hollow Shaft

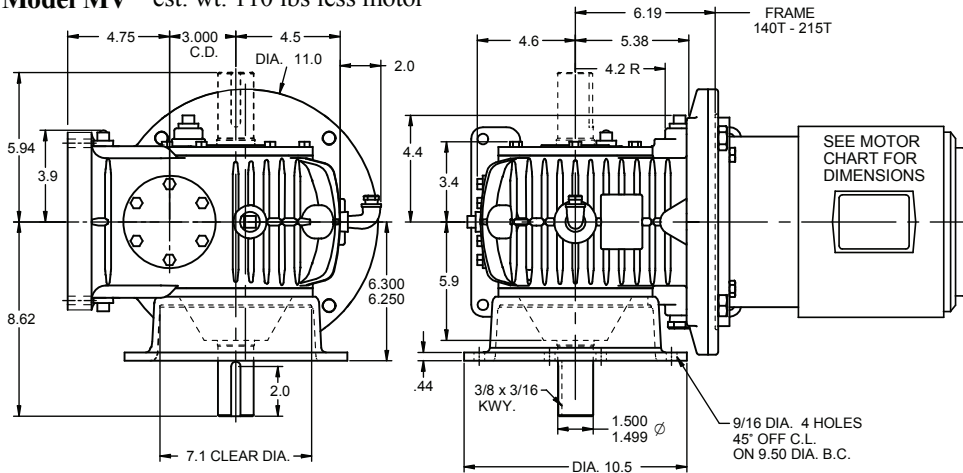
Model MU est. wt. 100 lbs less motor



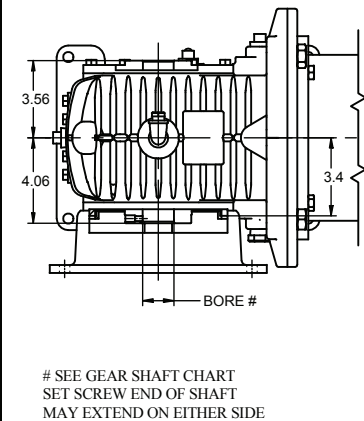
SMU est. wt. 100 lbs less motor



Model MV est. wt. 110 lbs less motor

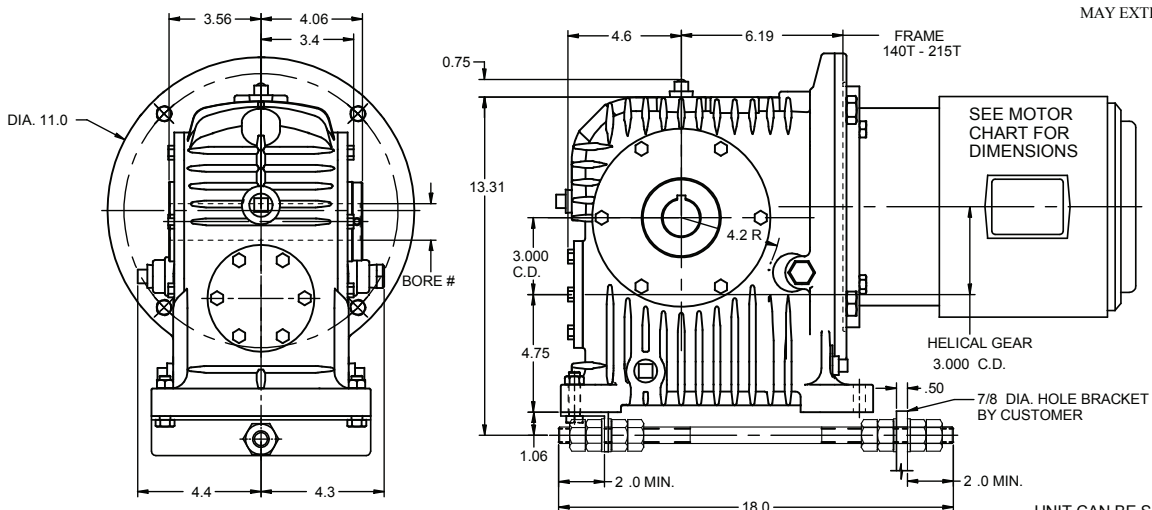


SMV est. wt. 110 lbs less motor



SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SM est. wt. 100 lbs less motor



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

UNIT CAN BE SUPPLIED WITH
 SOLID SHAFT, CONTACT CONE DRIVE

Cone Drive Helical/Worm D-Flange Gearhead

Size 30 3.000" C.D. HELICAL PRI./3.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|------|------|------|------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 1.42 | 6.24 | 8.03 | 9.34 | 11.7 |
| | Th.HP | 1.42 | 6.24 | 8.03 | 9.34 | 9.20 |
| | O.T. | 3870 | 3000 | 2590 | 2280 | 1880 |
| 7.5:1 1.5 x 5 | Me.HP | 0.97 | 4.57 | 6.24 | 7.47 | 9.41 |
| | Th.HP | 0.97 | 4.57 | 6.24 | 7.47 | 9.20 |
| | O.T. | 3870 | 3280 | 3000 | 2730 | 2270 |
| 9:1 1.8 x 5 | Me.HP | 0.81 | 3.94 | 5.45 | 6.66 | 8.53 |
| | Th.HP | 0.81 | 3.94 | 5.45 | 6.66 | 8.53 |
| | O.T. | 3870 | 3380 | 3140 | 2910 | 2460 |
| 10:1 1 x 10 | Me.HP | 0.91 | 4.09 | 5.43 | 6.35 | 7.96 |
| | Th.HP | 0.91 | 4.09 | 5.43 | 6.35 | 7.96 |
| | O.T. | 4600 | 3770 | 3380 | 3010 | 2510 |
| 12.5:1 2.5 x 5 | Me.HP | 0.59 | 2.97 | 4.20 | 5.25 | 7.08 |
| | Th.HP | 0.59 | 2.97 | 4.20 | 5.25 | 7.08 |
| | O.T. | 3870 | 3520 | 3340 | 3170 | 2820 |
| 15:1 1.5 x 10 | Me.HP | 0.62 | 2.96 | 4.09 | 4.99 | 6.40 |
| | Th.HP | 0.62 | 2.96 | 4.09 | 4.99 | 6.40 |
| | O.T. | 4600 | 4040 | 3770 | 3510 | 3000 |
| 18:1 1.8 x 10 | Me.HP | 0.52 | 2.53 | 3.55 | 4.40 | 5.78 |
| | Th.HP | 0.52 | 2.53 | 3.55 | 4.40 | 5.78 |
| | O.T. | 4600 | 4130 | 3910 | 3700 | 3230 |
| 20:1 4 x 5 | Me.HP | 0.35 | 1.97 | 2.80 | 3.58 | 5.05 |
| | Th.HP | 0.35 | 1.97 | 2.80 | 3.58 | 5.05 |
| | O.T. | 3550 | 3720 | 3550 | 3430 | 3200 |
| 22.5:1 1.5 x 15 | Me.HP | 0.43 | 2.08 | 2.89 | 3.54 | 4.55 |
| | Th.HP | 0.43 | 2.08 | 2.89 | 3.54 | 4.55 |
| | O.T. | 4620 | 4100 | 3880 | 3660 | 3140 |
| 25:1 2.5 x 10 | Me.HP | 0.38 | 1.90 | 2.70 | 3.41 | 4.70 |
| | Th.HP | 0.38 | 1.90 | 2.70 | 3.41 | 4.70 |
| | O.T. | 4600 | 4260 | 4090 | 3930 | 3610 |
| 27:1 1.8 x 15 | Me.HP | 0.36 | 1.78 | 2.50 | 3.11 | 4.11 |
| | Th.HP | 0.36 | 1.78 | 2.50 | 3.11 | 4.11 |
| | O.T. | 4620 | 4170 | 3990 | 3820 | 3390 |
| 30:1 1.5 x 20 | Me.HP | 0.33 | 1.59 | 2.22 | 2.72 | 3.50 |
| | Th.HP | 0.33 | 1.59 | 2.22 | 2.72 | 3.50 |
| | O.T. | 4470 | 4020 | 3860 | 3600 | 3090 |
| 36:1 1.8 x 20 | Me.HP | 0.28 | 1.36 | 1.92 | 2.39 | 3.16 |
| | Th.HP | 0.28 | 1.36 | 1.92 | 2.39 | 3.16 |
| | O.T. | 4470 | 4060 | 3940 | 3780 | 3330 |
| 37.5:1 2.5 x 15 | Me.HP | 0.26 | 1.34 | 1.90 | 2.40 | 3.32 |
| | Th.HP | 0.26 | 1.34 | 1.90 | 2.40 | 3.32 |
| | O.T. | 4620 | 4300 | 4140 | 4020 | 3740 |
| 40:1 4 x 10 | Me.HP | 0.24 | 1.26 | 1.80 | 2.29 | 3.27 |
| | Th.HP | 0.24 | 1.26 | 1.80 | 2.29 | 3.27 |
| | O.T. | 4600 | 4460 | 4280 | 4170 | 3970 |
| 45:1 1.8 x 25 | Me.HP | 0.23 | 1.10 | 1.55 | 1.92 | 2.55 |
| | Th.HP | 0.23 | 1.10 | 1.55 | 1.92 | 2.55 |
| | O.T. | 4300 | 4050 | 3890 | 3730 | 3340 |
| 50:1 2.5 x 20 | Me.HP | 0.20 | 1.02 | 1.46 | 1.84 | 2.55 |
| | Th.HP | 0.20 | 1.02 | 1.46 | 1.84 | 2.55 |
| | O.T. | 4470 | 4160 | 4040 | 3960 | 3690 |
| 54:1 1.8 x 30 | Me.HP | 0.19 | 0.92 | 1.29 | 1.61 | 2.14 |
| | Th.HP | 0.19 | 0.92 | 1.29 | 1.61 | 2.14 |
| | O.T. | 4110 | 3780 | 3630 | 3510 | 3200 |
| 60:1 4 x 15 | Me.HP | 0.17 | 0.89 | 1.26 | 1.61 | 2.31 |
| | Th.HP | 0.17 | 0.89 | 1.26 | 1.61 | 2.31 |
| | O.T. | 4620 | 4500 | 4330 | 4220 | 4050 |
| 62.5:1 2.5 x 25 | Me.HP | 0.17 | 0.82 | 1.18 | 1.48 | 2.06 |
| | Th.HP | 0.17 | 0.82 | 1.18 | 1.48 | 2.06 |
| | O.T. | 4300 | 4120 | 4030 | 3920 | 3660 |
| 72:1 1.8 x 40 | Me.HP | 0.14 | 0.69 | 0.97 | 1.21 | 1.61 |
| | Th.HP | 0.14 | 0.69 | 0.97 | 1.21 | 1.61 |
| | O.T. | 3700 | 3560 | 3480 | 3370 | 3050 |
| 75:1 2.5 x 30 | Me.HP | 0.14 | 0.69 | 0.98 | 1.24 | 1.72 |
| | Th.HP | 0.14 | 0.69 | 0.98 | 1.24 | 1.72 |
| | O.T. | 4110 | 3870 | 3760 | 3650 | 3470 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|------|------|------|------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 0.13 | 0.68 | 0.97 | 1.23 | 1.77 |
| | Th.HP | 0.13 | 0.68 | 0.97 | 1.23 | 1.77 |
| | O.T. | 4470 | 4350 | 4190 | 4080 | 3980 |
| 90:1 1.8 x 50 | Me.HP | 0.12 | 0.56 | 0.78 | 0.97 | 1.29 |
| | Th.HP | 0.12 | 0.56 | 0.78 | 0.97 | 1.29 |
| | O.T. | 3280 | 3400 | 3380 | 3290 | 2940 |
| 100:1 4 x 25 | Me.HP | 0.11 | 0.55 | 0.78 | 0.99 | 1.43 |
| | Th.HP | 0.11 | 0.55 | 0.78 | 0.99 | 1.43 |
| | O.T. | 4300 | 4220 | 4130 | 4080 | 3940 |
| 108:1 1.8 x 60 | Me.HP | 0.10 | 0.46 | 0.65 | 0.81 | 1.08 |
| | Th.HP | 0.10 | 0.46 | 0.65 | 0.81 | 1.08 |
| | O.T. | 3230 | 3260 | 3200 | 3110 | 2830 |
| 120:1 4 x 30 | Me.HP | 0.09 | 0.46 | 0.65 | 0.83 | 1.19 |
| | Th.HP | 0.09 | 0.46 | 0.65 | 0.83 | 1.19 |
| | O.T. | 4110 | 4000 | 3880 | 3810 | 3680 |
| 125:1 2.5 x 50 | Me.HP | 0.09 | 0.42 | 0.59 | 0.75 | 1.04 |
| | Th.HP | 0.09 | 0.42 | 0.59 | 0.75 | 1.04 |
| | O.T. | 3280 | 3370 | 3400 | 3390 | 3230 |
| 150:1 2.5 x 60 | Me.HP | 0.07 | 0.35 | 0.50 | 0.63 | 0.87 |
| | Th.HP | 0.07 | 0.35 | 0.50 | 0.63 | 0.87 |
| | O.T. | 3230 | 3290 | 3260 | 3210 | 3070 |
| 160:1 4 x 40 | Me.HP | 0.07 | 0.35 | 0.49 | 0.63 | 0.90 |
| | Th.HP | 0.07 | 0.35 | 0.49 | 0.63 | 0.90 |
| | O.T. | 3700 | 3610 | 3520 | 3550 | 3510 |
| 200:1 4 x 50 | Me.HP | 0.06 | 0.28 | 0.39 | 0.50 | 0.72 |
| | Th.HP | 0.06 | 0.28 | 0.39 | 0.50 | 0.72 |
| | O.T. | 3280 | 3350 | 3370 | 3390 | 3400 |
| 240:1 4 x 60 | Me.HP | 0.05 | 0.23 | 0.33 | 0.42 | 0.60 |
| | Th.HP | 0.05 | 0.23 | 0.33 | 0.42 | 0.60 |
| | O.T. | 3230 | 3280 | 3300 | 3250 | 3230 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:

- For motor data refer to pages 71 and 72.
- VM & SVM units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section.
- All MV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified.
- Steeple bearing arrangements follow in this section.
- All units can be supplied with fan cooling.
- When specified each unit can be supplied with a worm shaft extension located opposite the input end.
- When specified, units can be supplied with water cooling coils in oil sump.
- Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set.
- Reducers are designed for shaft rotation in either direction.
- For cap and carrier dimensions not shown see mounting section.
- For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio.
- Refer to page 26 for lubrication information, efficiency, and service factors.
- Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided.
- Hand of assembly and mounting position diagrams follow in this section.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|-------------------|-------------|
| BORE INCHES | GEAR SHAFT NUMBER | KEYWAY SIZE |
| 2.500* | 30-S60-208 | 3/8 x 3/16 |
| 2.4375* | 30-S60-207 | 3/8 x 3/16 |
| 2.1875* | 30-S60-203 | 1/2 x 1/4 |
| 1.9375* | 30-S60-115 | 1/2 x 1/4 |
| 1.6875* | 30-S60-111 | 3/8 x 3/16 |
| 1.500* | 30-S60-108 | 3/8 x 3/16 |

Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard
 Bore Tolerance: +.002, -.000
 2 set screws at long end of shaft.

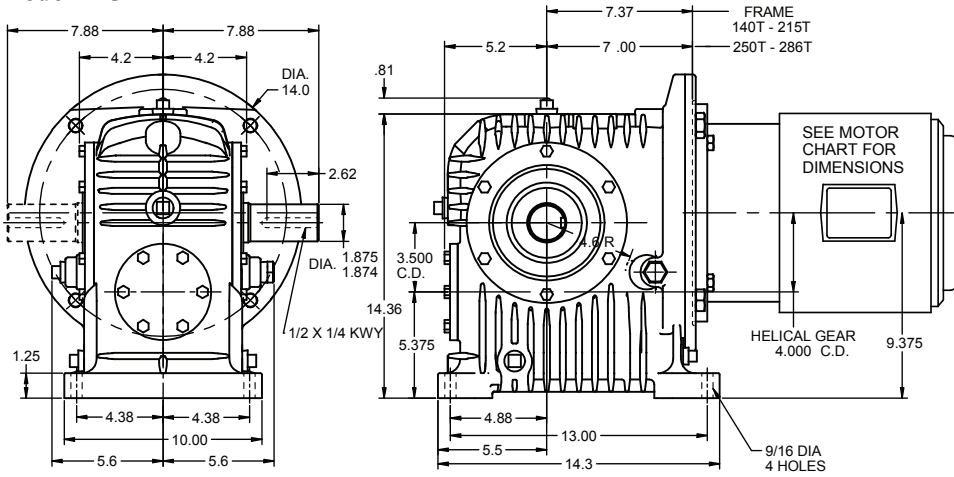
Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

Cone Drive Helical/Worm D-Flange Gearhead - 3.500" C.D.

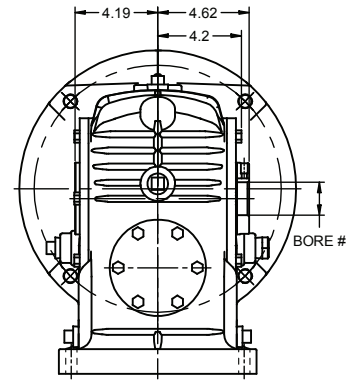
Size 35 Solid Shaft

Hollow Shaft

Model MU est. wt. 180 lbs less motor

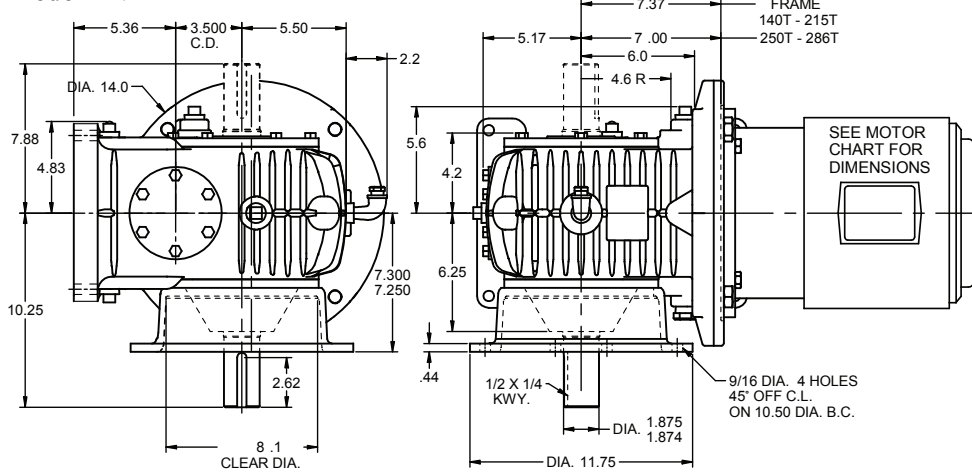


SMU est. wt. 180 lbs less motor

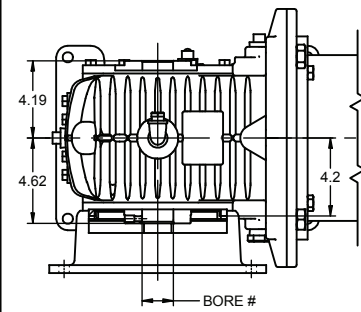


SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

Model MV est. wt. 190 lbs less motor



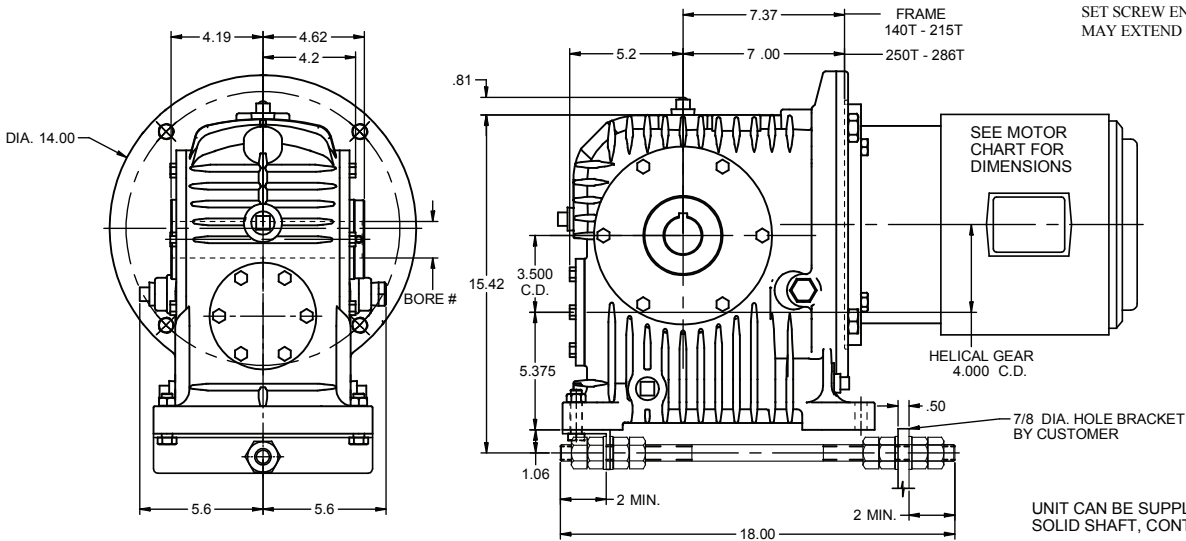
SMV est. wt. 190 lbs less motor



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SM est. wt. 180 lbs less motor



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

UNIT CAN BE SUPPLIED WITH
 SOLID SHAFT, CONTACT CONE DRIVE

Cone Drive Helical/Worm D-Flange Gearhead

Size 35 4.000" C.D. HELICAL PRI./3.500" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|------|------|------|------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 1.66 | 8.93 | 13.1 | 16.4 | 20.3 |
| | Th.HP | 1.66 | 8.93 | 11.7 | 11.9 | 12.2 |
| | O.T. | 4520 | 4290 | 4200 | 4000 | 3280 |
| 7.5:1 1.5 x 5 | Me.HP | 1.38 | 7.45 | 10.9 | 13.2 | 16.5 |
| | Th.HP | 1.38 | 7.45 | 10.1 | 10.7 | 12.2 |
| | O.T. | 5520 | 5340 | 5240 | 4800 | 3970 |
| 9:1 1.8 x 5 | Me.HP | 1.20 | 6.50 | 9.53 | 11.9 | 15.0 |
| | Th.HP | 1.20 | 6.50 | 9.53 | 10.2 | 12.2 |
| | O.T. | 5720 | 5580 | 5480 | 5180 | 4310 |
| 10:1 1 x 10 | Me.HP | 1.66 | 7.37 | 9.50 | 11.1 | 13.8 |
| | Th.HP | 1.66 | 7.37 | 9.30 | 10.2 | 10.3 |
| | O.T. | 8430 | 6790 | 5910 | 5250 | 4360 |
| 12.5:1 2.5 x 5 | Me.HP | 0.96 | 5.26 | 7.68 | 9.52 | 12.5 |
| | Th.HP | 0.96 | 5.26 | 7.68 | 9.20 | 10.4 |
| | O.T. | 6300 | 6240 | 6110 | 5750 | 4980 |
| 15:1 1.5 x 10 | Me.HP | 1.14 | 5.40 | 7.37 | 8.84 | 11.1 |
| | Th.HP | 1.14 | 5.40 | 7.37 | 8.84 | 10.2 |
| | O.T. | 8510 | 7370 | 6790 | 6220 | 5210 |
| 18:1 1.8 x 10 | Me.HP | 0.96 | 4.65 | 6.44 | 7.87 | 10.1 |
| | Th.HP | 0.96 | 4.65 | 6.44 | 7.87 | 10.1 |
| | O.T. | 8510 | 7580 | 7080 | 6600 | 5640 |
| 20:1 1 x 20 | Me.HP | 0.90 | 3.99 | 5.18 | 6.04 | 7.55 |
| | Th.HP | 0.90 | 3.99 | 5.18 | 6.04 | 7.55 |
| | O.T. | 8270 | 6950 | 6080 | 5390 | 4480 |
| 22.5:1 1.5 x 15 | Me.HP | 0.80 | 3.80 | 5.21 | 6.28 | 7.92 |
| | Th.HP | 0.80 | 3.80 | 5.21 | 6.28 | 7.92 |
| | O.T. | 8540 | 7490 | 7000 | 6480 | 5460 |
| 25:1 2.5 x 10 | Me.HP | 0.70 | 3.50 | 4.96 | 6.20 | 8.36 |
| | Th.HP | 0.70 | 3.50 | 4.96 | 6.20 | 8.36 |
| | O.T. | 8510 | 7840 | 7500 | 7150 | 6420 |
| 27:1 1.8 x 15 | Me.HP | 0.67 | 3.27 | 4.54 | 5.57 | 7.18 |
| | Th.HP | 0.67 | 3.27 | 4.54 | 5.57 | 7.18 |
| | O.T. | 8540 | 7650 | 7250 | 6830 | 5920 |
| 30:1 1.5 x 20 | Me.HP | 0.61 | 2.91 | 3.99 | 4.82 | 6.08 |
| | Th.HP | 0.61 | 2.91 | 3.99 | 4.82 | 6.08 |
| | O.T. | 8270 | 7340 | 6950 | 6390 | 5360 |
| 36:1 1.8 x 20 | Me.HP | 0.51 | 2.50 | 3.48 | 4.28 | 5.52 |
| | Th.HP | 0.51 | 2.50 | 3.48 | 4.28 | 5.52 |
| | O.T. | 8270 | 7450 | 7150 | 6770 | 5810 |
| 37.5:1 2.5 x 15 | Me.HP | 0.49 | 2.46 | 3.49 | 4.37 | 5.92 |
| | Th.HP | 0.49 | 2.46 | 3.49 | 4.37 | 5.92 |
| | O.T. | 8540 | 7920 | 7600 | 7310 | 6660 |
| 40:1 4 x 10 | Me.HP | 0.45 | 2.32 | 3.31 | 4.22 | 5.96 |
| | Th.HP | 0.45 | 2.32 | 3.31 | 4.22 | 5.96 |
| | O.T. | 8510 | 8210 | 7890 | 7680 | 7220 |
| 45:1 1.8 x 25 | Me.HP | 0.42 | 2.02 | 2.81 | 3.45 | 4.46 |
| | Th.HP | 0.42 | 2.02 | 2.81 | 3.45 | 4.46 |
| | O.T. | 7950 | 7440 | 7070 | 6690 | 5820 |
| 50:1 2.5 x 20 | Me.HP | 0.38 | 1.88 | 2.67 | 3.35 | 4.54 |
| | Th.HP | 0.38 | 1.88 | 2.67 | 3.35 | 4.54 |
| | O.T. | 8270 | 7660 | 7420 | 7200 | 6580 |
| 54:1 1.8 x 30 | Me.HP | 0.35 | 1.69 | 2.35 | 2.89 | 3.73 |
| | Th.HP | 0.35 | 1.69 | 2.35 | 2.89 | 3.73 |
| | O.T. | 7600 | 6950 | 6590 | 6300 | 5590 |
| 60:1 4 x 15 | Me.HP | 0.31 | 1.63 | 2.33 | 2.97 | 4.20 |
| | Th.HP | 0.31 | 1.63 | 2.33 | 2.97 | 4.20 |
| | O.T. | 8540 | 8270 | 7970 | 7780 | 7360 |
| 62.5:1 2.5 x 25 | Me.HP | 0.31 | 1.52 | 2.16 | 2.70 | 3.66 |
| | Th.HP | 0.31 | 1.52 | 2.16 | 2.70 | 3.66 |
| | O.T. | 7950 | 7580 | 7390 | 7120 | 6520 |
| 72:1 1.8 x 40 | Me.HP | 0.27 | 1.27 | 1.77 | 2.18 | 2.81 |
| | Th.HP | 0.27 | 1.27 | 1.77 | 2.18 | 2.81 |
| | O.T. | 6830 | 6540 | 6320 | 6050 | 5330 |
| 75:1 2.5 x 30 | Me.HP | 0.26 | 1.27 | 1.81 | 2.26 | 3.07 |
| | Th.HP | 0.26 | 1.27 | 1.81 | 2.26 | 3.07 |
| | O.T. | 7600 | 7120 | 6900 | 6640 | 6180 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

Notes:

- For motor data refer to pages 71 and 72.
- VM & SVM units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section.
- All MV units having shaft extended thru base side will be supplied with a steeple bearing mounting on on base side, unless otherwise specified.
- Steeple bearing arrangements follow in this section.
- All units can be supplied with fan cooling.
- When specified each unit can be supplied with a worm shaft extension located opposite the input end.
- When specified, units can be supplied with water cooling coils in oil sump.
- Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set.
- Reducers are designed for shaft rotation in either direction.
- For cap and carrier dimensions not shown see mounting section.
- For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio.
- Refer to page 26 for lubrication information, efficiency, and service factors.
- Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided.
- Hand of assembly and mounting position diagrams follow in this section.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|-------------------|-------------|
| BORE INCHES | GEAR SHAFT NUMBER | KEYWAY SIZE |
| 2.7500 | 35-S60-212 | 3/8 x 3/16 |
| 2.6875* | 35-S60-211 | 3/8 x 3/16 |
| 2.500 | 35-S60-208 | 3/8 x 3/16 |
| 2.4375* | 35-S60-207 | 5/8 x 5/16 |
| 2.1875* | 35-S60-203 | 1/2 x 1/4 |
| 1.9375* | 35-S60-115 | 1/2 x 1/4 |
| 1.6875* | 35-S60-111 | 3/8 x 3/16 |

Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard Bore Tolerance: +.002, -.000
 2 set screws at long end of shaft.

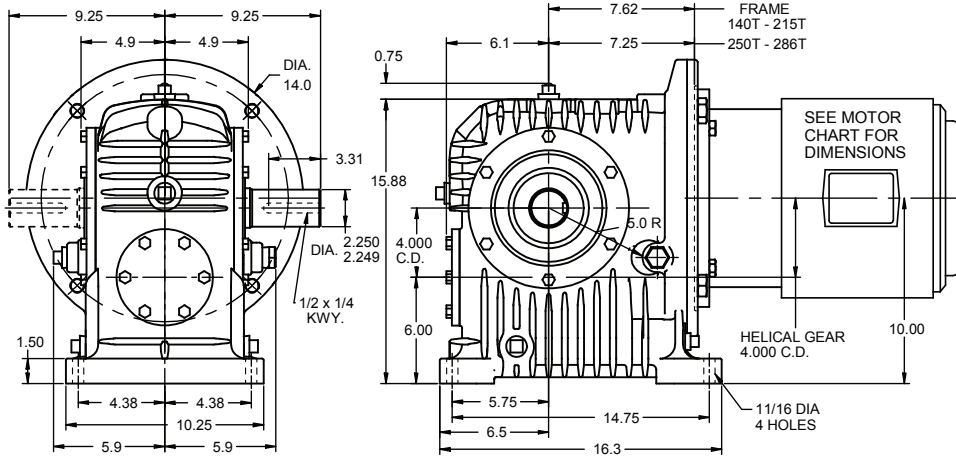
Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

Cone Drive Helical/Worm D-Flange Gearhead - 4.000" C.D.

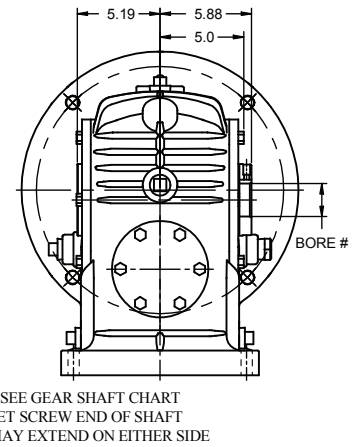
Size 40 Solid Shaft

Hollow Shaft

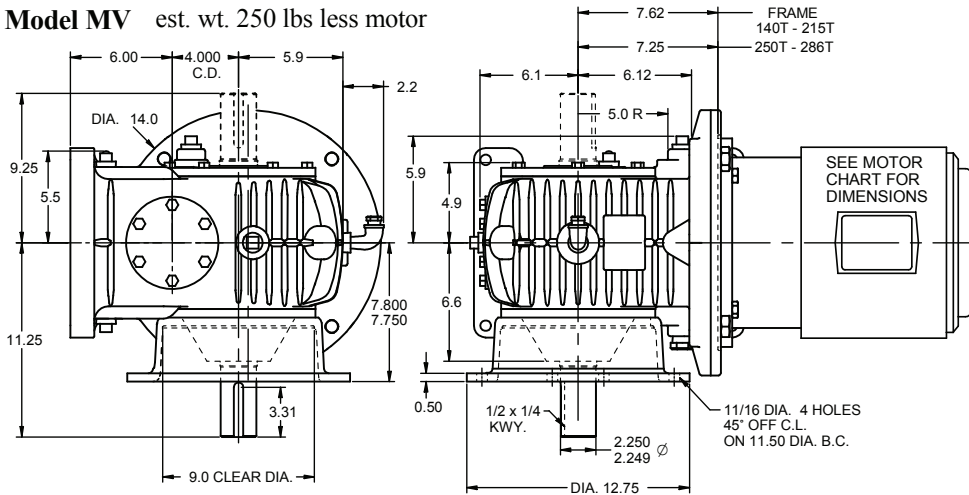
Model MU est. wt. 230 lbs less motor



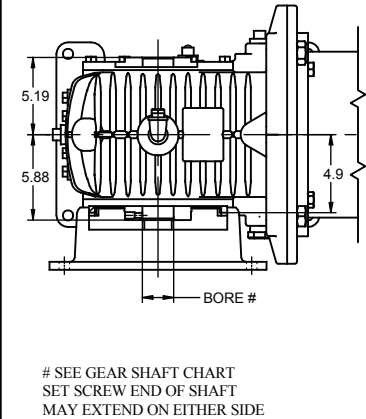
SMU est. wt. 230 lbs less motor



Model MV est. wt. 250 lbs less motor



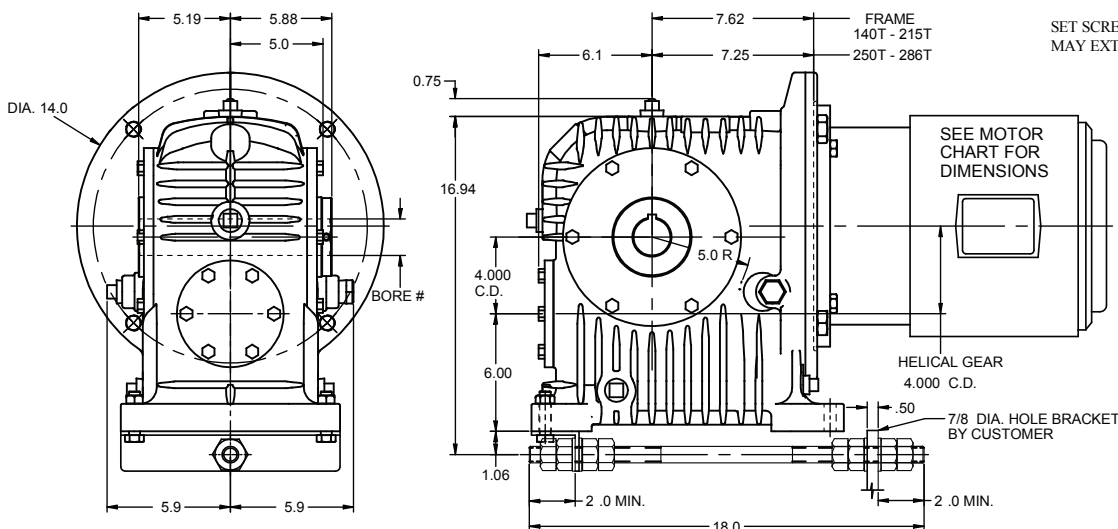
SMV est. wt. 250 lbs less motor



SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SM est. wt. 230 lbs less motor

SEE GEAR SHAFT CHART



SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

UNIT CAN BE SUPPLIED WITH
 SOLID SHAFT, CONTACT CONE DRIVE

Cone Drive Helical/Worm D-Flange Gearhead

Size 40 4.000" C.D. HELICAL PRI./4.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 1.66 | 8.93 | 13.1 | 16.9 | 24.9 |
| | Th.HP | 1.66 | 8.93 | 13.1 | 16.9 | 18.7 |
| | O.T. | 4670 | 4430 | 4340 | 4270 | 4140 |
| 7.5:1 1.5 x 5 | Me.HP | 1.38 | 7.45 | 10.9 | 14.2 | 20.9 |
| | Th.HP | 1.38 | 7.45 | 10.9 | 14.2 | 18.7 |
| | O.T. | 5710 | 5520 | 5410 | 5330 | 5190 |
| 9:1 1.8 x 5 | Me.HP | 1.20 | 6.50 | 9.53 | 12.4 | 18.3 |
| | Th.HP | 1.20 | 6.50 | 9.53 | 12.4 | 17.9 |
| | O.T. | 5920 | 5770 | 5660 | 5580 | 5440 |
| 10:1 1 x 10 | Me.HP | 1.66 | 8.93 | 13.1 | 15.3 | 19 |
| | Th.HP | 1.66 | 8.93 | 13.1 | 15.3 | 15.4 |
| | O.T. | 8730 | 8520 | 8400 | 7490 | 6190 |
| 12.5:1 2.5 x 5 | Me.HP | 0.96 | 5.26 | 7.72 | 10.0 | 14.8 |
| | Th.HP | 0.96 | 5.26 | 7.72 | 10.0 | 14.8 |
| | O.T. | 6520 | 6450 | 6350 | 6260 | 6110 |
| 15:1 1.5 x 10 | Me.HP | 1.38 | 7.45 | 10.3 | 12.3 | 15.4 |
| | Th.HP | 1.38 | 7.45 | 10.3 | 12.3 | 15.2 |
| | O.T. | 10700 | 10500 | 9860 | 8910 | 7440 |
| 18:1 1.8 x 10 | Me.HP | 1.20 | 6.50 | 9.13 | 11.0 | 13.9 |
| | Th.HP | 1.20 | 6.50 | 9.13 | 11.0 | 13.9 |
| | O.T. | 11100 | 11000 | 10400 | 9580 | 8050 |
| 20:1 1 x 20 | Me.HP | 1.30 | 5.62 | 7.17 | 8.34 | 10.4 |
| | Th.HP | 1.30 | 5.62 | 7.17 | 8.34 | 10.4 |
| | O.T. | 12400 | 10100 | 8720 | 7710 | 6380 |
| 22.5:1 1.5 x 15 | Me.HP | 1.15 | 5.43 | 7.33 | 8.70 | 10.9 |
| | Th.HP | 1.15 | 5.43 | 7.33 | 8.70 | 10.9 |
| | O.T. | 12800 | 11100 | 10200 | 9300 | 7790 |
| 25:1 2.5 x 10 | Me.HP | 0.96 | 5.04 | 7.07 | 8.80 | 11.6 |
| | Th.HP | 0.96 | 5.04 | 7.07 | 8.80 | 11.6 |
| | O.T. | 12200 | 11700 | 11100 | 10500 | 9240 |
| 27:1 1.8 x 15 | Me.HP | 0.97 | 4.69 | 6.45 | 7.82 | 9.91 |
| | Th.HP | 0.97 | 4.69 | 6.45 | 7.82 | 9.91 |
| | O.T. | 12800 | 11400 | 10700 | 9920 | 8460 |
| 30:1 1.5 x 20 | Me.HP | 0.88 | 4.16 | 5.62 | 6.68 | 8.4 |
| | Th.HP | 0.88 | 4.16 | 5.62 | 6.68 | 8.4 |
| | O.T. | 12400 | 10900 | 10100 | 9190 | 7670 |
| 36:1 1.8 x 20 | Me.HP | 0.74 | 3.59 | 4.94 | 5.99 | 7.62 |
| | Th.HP | 0.74 | 3.59 | 4.94 | 5.99 | 7.62 |
| | O.T. | 12400 | 11100 | 10500 | 9840 | 8300 |
| 37.5:1 2.5 x 15 | Me.HP | 0.70 | 3.54 | 4.99 | 6.21 | 8.26 |
| | Th.HP | 0.70 | 3.54 | 4.99 | 6.21 | 8.26 |
| | O.T. | 12800 | 11800 | 11200 | 10800 | 9620 |
| 40:1 4 x 10 | Me.HP | 0.61 | 3.18 | 4.60 | 5.91 | 8.47 |
| | Th.HP | 0.61 | 3.18 | 4.60 | 5.91 | 8.47 |
| | O.T. | 12100 | 11700 | 11400 | 11100 | 10600 |
| 45:1 1.8 x 25 | Me.HP | 0.60 | 2.89 | 3.99 | 4.84 | 6.15 |
| | Th.HP | 0.60 | 2.89 | 3.99 | 4.84 | 6.15 |
| | O.T. | 11900 | 11100 | 10400 | 9730 | 8330 |
| 50:1 2.5 x 20 | Me.HP | 0.54 | 2.71 | 3.82 | 4.76 | 6.35 |
| | Th.HP | 0.54 | 2.71 | 3.82 | 4.76 | 6.35 |
| | O.T. | 12400 | 11500 | 11000 | 10600 | 9530 |
| 54:1 1.8 x 30 | Me.HP | 0.50 | 2.42 | 3.34 | 4.06 | 5.16 |
| | Th.HP | 0.50 | 2.42 | 3.34 | 4.06 | 5.16 |
| | O.T. | 11400 | 10400 | 9740 | 9190 | 8010 |
| 60:1 4 x 15 | Me.HP | 0.45 | 2.35 | 3.35 | 4.25 | 5.98 |
| | Th.HP | 0.45 | 2.35 | 3.35 | 4.25 | 5.98 |
| | O.T. | 12800 | 12300 | 11900 | 11600 | 10900 |
| 62.5:1 2.5 x 25 | Me.HP | 0.44 | 2.19 | 3.08 | 3.84 | 5.13 |
| | Th.HP | 0.44 | 2.19 | 3.08 | 3.84 | 5.13 |
| | O.T. | 11900 | 11300 | 11000 | 10500 | 9450 |
| 72:1 1.8 x 40 | Me.HP | 0.38 | 1.82 | 2.52 | 3.05 | 3.88 |
| | Th.HP | 0.38 | 1.82 | 2.52 | 3.05 | 3.88 |
| | O.T. | 10300 | 9790 | 9360 | 8840 | 7650 |
| 75:1 2.5 x 30 | Me.HP | 0.37 | 1.83 | 2.58 | 3.22 | 4.30 |
| | Th.HP | 0.37 | 1.83 | 2.58 | 3.22 | 4.30 |
| | O.T. | 11400 | 10700 | 10300 | 9830 | 8990 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 0.35 | 1.80 | 2.56 | 3.26 | 4.58 |
| | Th.HP | 0.35 | 1.80 | 2.56 | 3.26 | 4.58 |
| | O.T. | 12400 | 12000 | 11500 | 11200 | 10700 |
| 90:1 1.8 x 50 | Me.HP | 0.31 | 1.46 | 2.02 | 2.45 | 3.12 |
| | Th.HP | 0.31 | 1.46 | 2.02 | 2.45 | 3.12 |
| | O.T. | 9240 | 9360 | 9110 | 8620 | 7380 |
| 100:1 4 x 25 | Me.HP | 0.28 | 1.45 | 2.06 | 2.63 | 3.70 |
| | Th.HP | 0.28 | 1.45 | 2.06 | 2.63 | 3.70 |
| | O.T. | 11900 | 11600 | 11400 | 11200 | 10600 |
| 108:1 1.8 x 60 | Me.HP | 0.26 | 1.22 | 1.68 | 2.05 | 2.60 |
| | Th.HP | 0.26 | 1.22 | 1.68 | 2.05 | 2.60 |
| | O.T. | 9100 | 9010 | 8640 | 8180 | 7110 |
| 120:1 4 x 30 | Me.HP | 0.24 | 1.21 | 1.73 | 2.20 | 3.10 |
| | Th.HP | 0.24 | 1.21 | 1.73 | 2.20 | 3.10 |
| | O.T. | 11400 | 11000 | 10700 | 10500 | 9920 |
| 125:1 2.5 x 50 | Me.HP | 0.23 | 1.10 | 1.56 | 1.94 | 2.60 |
| | Th.HP | 0.23 | 1.10 | 1.56 | 1.94 | 2.60 |
| | O.T. | 9240 | 9370 | 9330 | 9150 | 8380 |
| 150:1 2.5 x 60 | Me.HP | 0.20 | 0.92 | 1.30 | 1.62 | 2.17 |
| | Th.HP | 0.20 | 0.92 | 1.30 | 1.62 | 2.17 |
| | O.T. | 9100 | 9150 | 8950 | 8700 | 7990 |
| 160:1 4 x 40 | Me.HP | 0.18 | 0.91 | 1.30 | 1.66 | 2.33 |
| | Th.HP | 0.18 | 0.91 | 1.30 | 1.66 | 2.33 |
| | O.T. | 10300 | 10000 | 9770 | 9800 | 9490 |
| 200:1 4 x 50 | Me.HP | 0.15 | 0.73 | 1.04 | 1.33 | 1.87 |
| | Th.HP | 0.15 | 0.73 | 1.04 | 1.33 | 1.87 |
| | O.T. | 9240 | 9320 | 9360 | 9380 | 9200 |
| 240:1 4 x 60 | Me.HP | 0.13 | 0.61 | 0.87 | 1.11 | 1.56 |
| | Th.HP | 0.13 | 0.61 | 0.87 | 1.11 | 1.56 |
| | O.T. | 9100 | 9160 | 9170 | 9030 | 8760 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:

For motor data refer to pages 71 and 72.

VM & SVM units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section.

All MV units having shaft extended thru base side will be supplied with a steep bearing mounting on base side, unless otherwise specified.

Steep bearing arrangements follow in this section.

All units can be supplied with fan cooling.

When specified each unit can be supplied with a worm shaft extension located opposite the input end.

When specified, units can be supplied with water cooling coils in oil sump.

Set screw end of hollow shaft is considered the extension end.

Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set.

Reducers are designed for shaft rotation in either direction.

For cap and carrier dimensions not shown see mounting section.

For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio.

Refer to page 26 for lubrication information, efficiency, and service factors.

Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided.

Hand of assembly and mounting position diagrams follow in this section.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|-------------------|-------------|
| BORE INCHES | GEAR SHAFT NUMBER | KEYWAY SIZE |
| 2.9375* | 40-S60-215 | 5/8 X 5/16 |
| 2.6875* | 40-S60-211 | 5/8 X 5/16 |
| 2.4375* | 40-S60-207 | 5/8 X 5/16 |
| 2.1875* | 40-S60-203 | 5/8 X 5/16 |

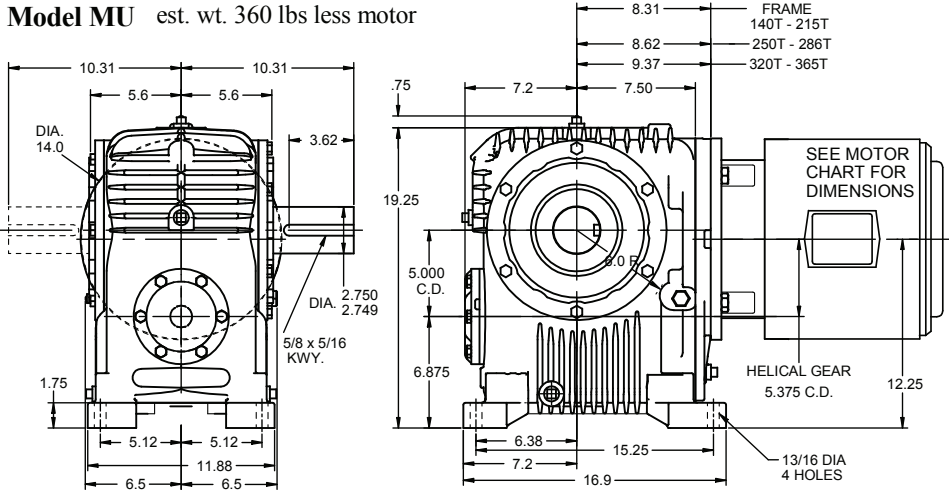
Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard Bore Tolerance: +.003, -.000
 2 set screws at long end of shaft.

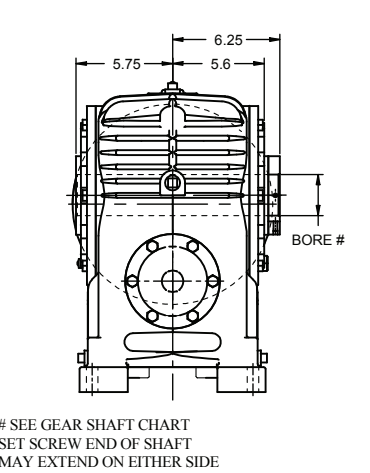
Cone Drive Helical/Worm D-Flange Gearhead - 5.000" C.D. Size 50 Solid Shaft

Hollow Shaft

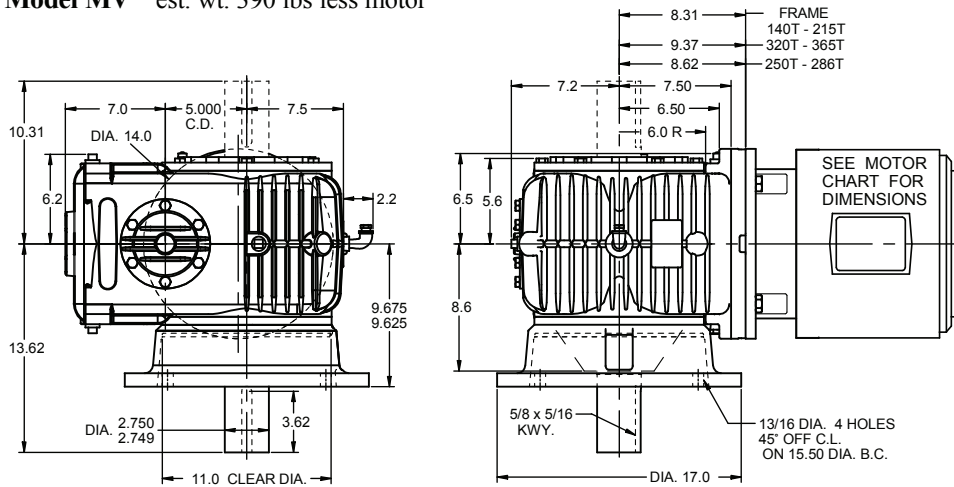
Model MU est. wt. 360 lbs less motor



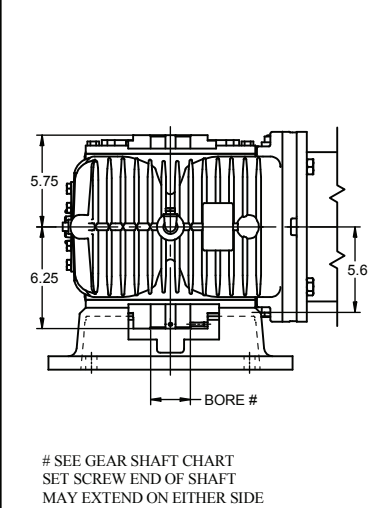
SMU est. wt. 360 lbs less motor



Model MV est. wt. 390 lbs less motor

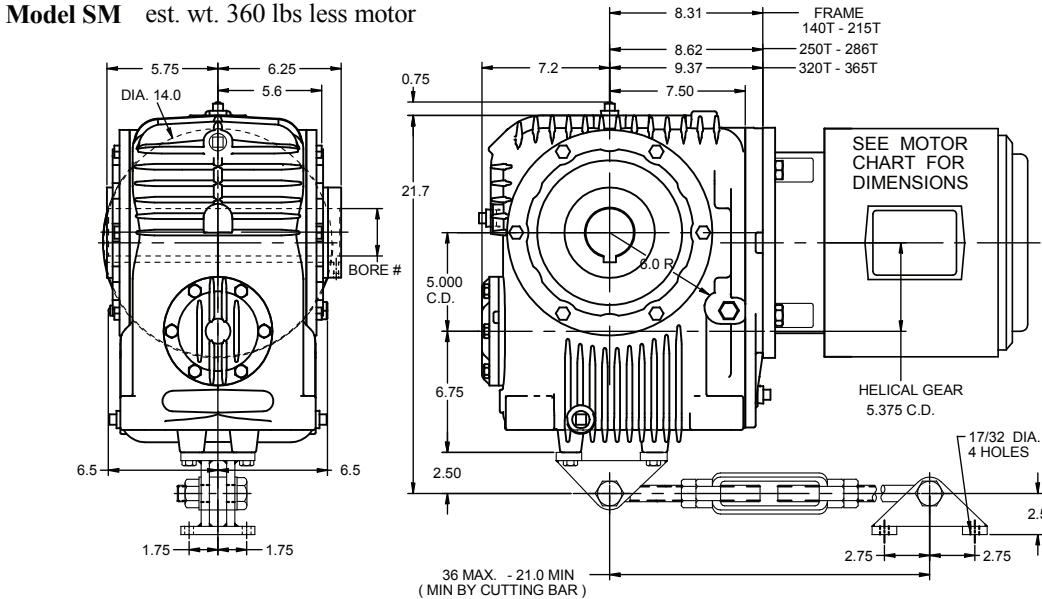


SMV est. wt. 390 lbs less motor



SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SM est. wt. 360 lbs less motor



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

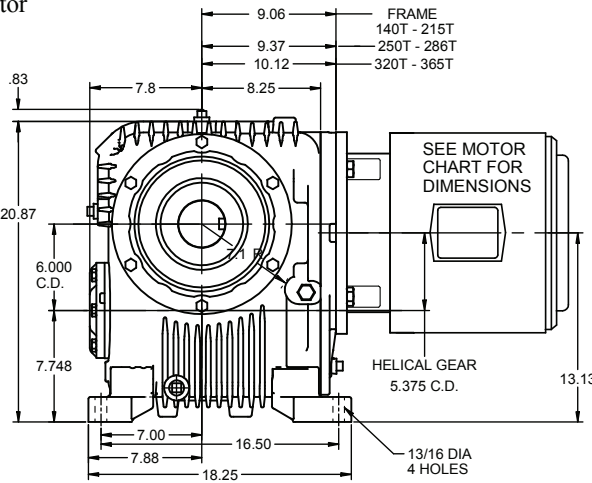
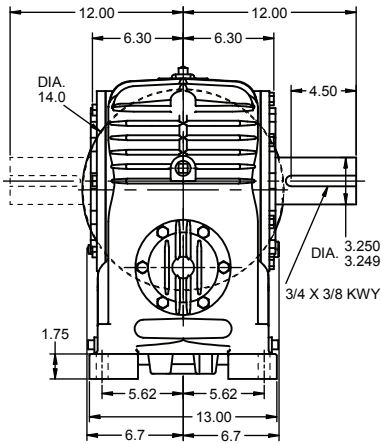
UNIT CAN BE SUPPLIED WITH SOLID
 SHAFT, CONTACT CONE DRIVE

Cone Drive Helical/Worm D-Flange Gearhead - 6.000" C.D.

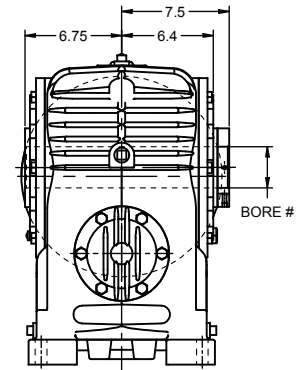
Size 60 Solid Shaft

Hollow Shaft

Model MU est. wt. 480 lbs less motor

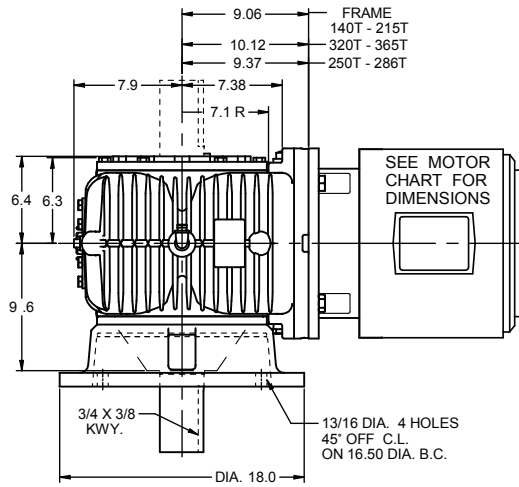
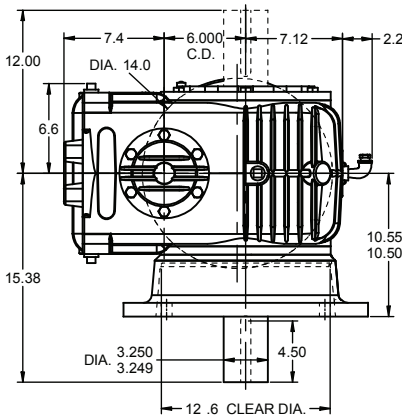


SMU est. wt. 480 lbs less motor

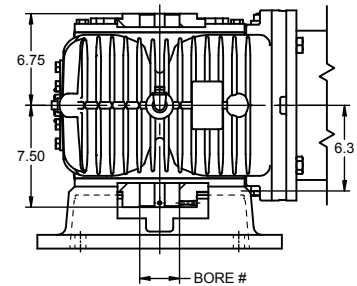


SEE GEAR SHAFT CHART
SET SCREW END OF SHAFT
MAY EXTEND ON EITHER SIDE

Model MV est. wt. 510 lbs less motor



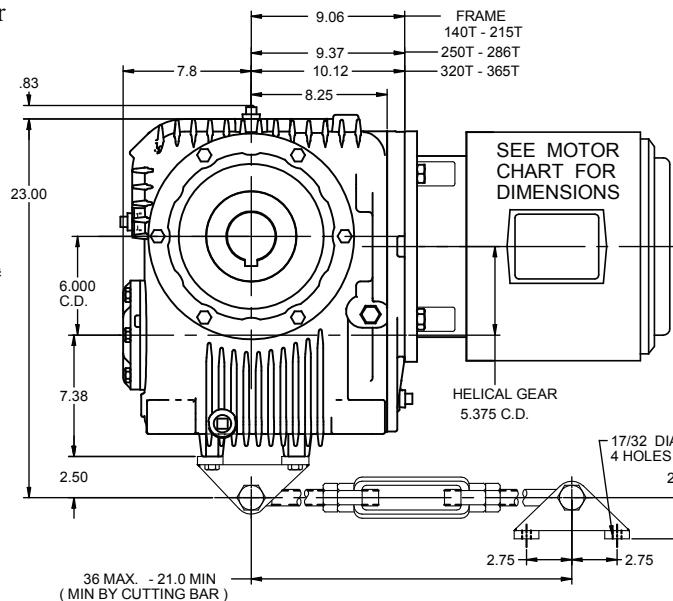
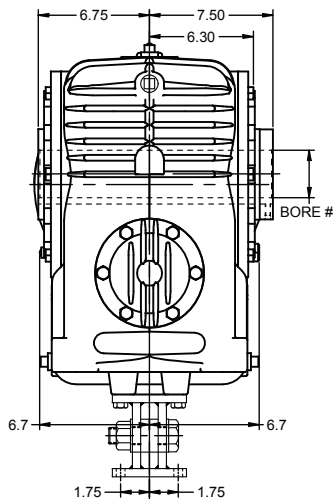
SMV est. wt. 510 lbs less motor



SEE GEAR SHAFT CHART
SET SCREW END OF SHAFT
MAY EXTEND ON EITHER SIDE

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SM est. wt. 480 lbs less motor



SEE GEAR SHAFT CHART
SET SCREW END OF SHAFT
MAY EXTEND ON EITHER SIDE

UNIT CAN BE SUPPLIED
WITH SOLID SHAFT,
CONTACT CONE DRIVE

Cone Drive Helical/Worm D-Flange Gearhead

Size 60 5.375" C.D. HELICAL PRI./6.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 3.91 | 20.8 | 30.4 | 39.2 | 57.4 |
| | Th.HP | 3.91 | 19.8 | 25.3 | 25.8 | 26.5 |
| | O.T. | 11000 | 10300 | 10100 | 9900 | 9580 |
| 7.5:1 1.5 x 5 | Me.HP | 3.23 | 17.3 | 25.3 | 32.7 | 48.1 |
| | Th.HP | 3.23 | 17.3 | 21.6 | 22.8 | 26.5 |
| | O.T. | 13400 | 12800 | 12500 | 12300 | 12000 |
| 9:1 1.8 x 5 | Me.HP | 2.82 | 15.2 | 22.2 | 28.8 | 42.3 |
| | Th.HP | 2.82 | 15.2 | 20.0 | 21.9 | 26.5 |
| | O.T. | 13900 | 13500 | 13200 | 13000 | 12600 |
| 10:1 1 x 10 | Me.HP | 3.91 | 20.8 | 30.4 | 39.2 | 47.9 |
| | Th.HP | 3.91 | 16.1 | 19.5 | 21.5 | 21.9 |
| | O.T. | 20600 | 19900 | 19500 | 19200 | 15600 |
| 12.5:1 2.5 x 5 | Me.HP | 2.27 | 12.3 | 18 | 23.4 | 31.1 |
| | Th.HP | 2.27 | 12.3 | 17.8 | 19.6 | 22.3 |
| | O.T. | 15400 | 15100 | 14800 | 14600 | 14100 |
| 15:1 1.5 x 10 | Me.HP | 3.23 | 17.3 | 25.3 | 32.5 | 40.3 |
| | Th.HP | 3.23 | 13.6 | 15.8 | 19.0 | 21.6 |
| | O.T. | 25000 | 24500 | 24100 | 23600 | 19500 |
| 18:1 1.8 x 10 | Me.HP | 2.82 | 15.2 | 22.2 | 28.8 | 36.9 |
| | Th.HP | 2.82 | 12.1 | 14.6 | 16.7 | 21.1 |
| | O.T. | 26100 | 25600 | 25300 | 25000 | 21300 |
| 20:1 1 x 20 | Me.HP | 3.91 | 15.2 | 19.0 | 21.9 | 26.4 |
| | Th.HP | 3.91 | 12.7 | 13.3 | 14.3 | 15.4 |
| | O.T. | 37300 | 27500 | 23000 | 20300 | 16200 |
| 22.5:1 1.5 x 15 | Me.HP | 3.23 | 15.6 | 19.8 | 23.1 | 28.7 |
| | Th.HP | 3.23 | 11.4 | 13.8 | 15.3 | 18 |
| | O.T. | 35800 | 31700 | 27600 | 24600 | 20400 |
| 25:1 2.5 x 10 | Me.HP | 2.27 | 12.3 | 18.0 | 23.4 | 30.9 |
| | Th.HP | 2.27 | 10.1 | 12.3 | 14.2 | 18.3 |
| | O.T. | 28700 | 28600 | 28200 | 27900 | 24600 |
| 27:1 1.8 x 15 | Me.HP | 2.82 | 13.7 | 17.9 | 20.9 | 26.2 |
| | Th.HP | 2.82 | 9.46 | 11.7 | 13.9 | 17.2 |
| | O.T. | 37400 | 33200 | 29600 | 26500 | 22300 |
| 30:1 1.5 x 20 | Me.HP | 2.67 | 11.9 | 15.2 | 17.7 | 22 |
| | Th.HP | 2.67 | 9.90 | 12.2 | 12.8 | 14 |
| | O.T. | 37500 | 31200 | 27500 | 24300 | 20100 |
| 36:1 1.8 x 20 | Me.HP | 2.24 | 10.5 | 13.8 | 16.1 | 20.1 |
| | Th.HP | 2.24 | 8.10 | 10.1 | 13.6 | 15.1 |
| | O.T. | 37500 | 32400 | 29300 | 26400 | 21900 |
| 37.5:1 2.5 x 15 | Me.HP | 2.13 | 10.6 | 14.5 | 17.4 | 22 |
| | Th.HP | 2.13 | 7.95 | 9.93 | 11.3 | 14.2 |
| | O.T. | 38600 | 35300 | 32600 | 30100 | 25600 |
| 40:1 4 x 10 | Me.HP | 1.45 | 7.47 | 10.8 | 13.8 | 19.8 |
| | Th.HP | 1.45 | 6.80 | 8.80 | 10.4 | 12.5 |
| | O.T. | 28700 | 27300 | 26600 | 25900 | 24800 |
| 45:1 1.8 x 25 | Me.HP | 1.82 | 8.47 | 11.1 | 13 | 16.3 |
| | Th.HP | 1.82 | 7.60 | 9.90 | 10.5 | 12.6 |
| | O.T. | 36100 | 32400 | 29000 | 26100 | 22000 |
| 50:1 2.5 x 20 | Me.HP | 1.63 | 8.10 | 11.1 | 13.4 | 16.9 |
| | Th.HP | 1.63 | 6.80 | 8.30 | 9.80 | 12.1 |
| | O.T. | 37500 | 34300 | 31900 | 29800 | 25300 |
| 54:1 1.8 x 30 | Me.HP | 1.52 | 7.09 | 9.31 | 10.9 | 13.6 |
| | Th.HP | 1.52 | 6.09 | 7.18 | 8.55 | 10.1 |
| | O.T. | 34500 | 30300 | 27200 | 24600 | 21200 |
| 60:1 4 x 15 | Me.HP | 1.35 | 7.1 | 10 | 12.6 | 16.9 |
| | Th.HP | 1.35 | 5.6 | 7.1 | 8.4 | 11 |
| | O.T. | 38600 | 37300 | 35700 | 34100 | 30700 |
| 62.5:1 2.5 x 25 | Me.HP | 1.33 | 6.54 | 8.95 | 10.8 | 13.6 |
| | Th.HP | 1.33 | 6.05 | 7.64 | 8.97 | 10.5 |
| | O.T. | 36100 | 33900 | 31900 | 29600 | 25100 |
| 72:1 1.8 x 40 | Me.HP | 1.16 | 5.34 | 7.01 | 8.19 | 10.3 |
| | Th.HP | 1.16 | 5.10 | 6.30 | 7.70 | 8.70 |
| | O.T. | 31200 | 28600 | 26100 | 23700 | 20200 |
| 75:1 2.5 x 30 | Me.HP | 1.12 | 5.48 | 7.5 | 9.05 | 11.4 |
| | Th.HP | 1.12 | 5.30 | 6.40 | 7.10 | 9.30 |
| | O.T. | 34500 | 31900 | 29800 | 27700 | 23900 |

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 1.04 | 5.43 | 7.69 | 9.62 | 13.0 |
| | Th.HP | 1.04 | 4.60 | 6.00 | 6.70 | 9.40 |
| | O.T. | 37500 | 36200 | 34600 | 33100 | 30300 |
| 90:1 1.8 x 50 | Me.HP | 0.94 | 4.28 | 5.63 | 6.57 | 8.24 |
| | Th.HP | 0.94 | 4.28 | 5.63 | 6.57 | 7.8 |
| | O.T. | 27900 | 27400 | 25400 | 23100 | 19500 |
| 100:1 4 x 25 | Me.HP | 0.85 | 4.38 | 6.20 | 7.76 | 10.5 |
| | Th.HP | 0.85 | 3.90 | 5.40 | 6.30 | 8.40 |
| | O.T. | 36100 | 35100 | 34200 | 33000 | 30000 |
| 108:1 1.8 x 60 | Me.HP | 0.79 | 3.58 | 4.70 | 5.49 | 6.88 |
| | Th.HP | 0.79 | 3.58 | 4.70 | 5.49 | 6.78 |
| | O.T. | 27500 | 26400 | 24100 | 21900 | 18800 |
| 120:1 4 x 30 | Me.HP | 0.72 | 3.67 | 5.20 | 6.50 | 8.77 |
| | Th.HP | 0.72 | 3.50 | 4.60 | 5.30 | 6.80 |
| | O.T. | 34500 | 33400 | 32200 | 31000 | 28100 |
| 125:1 2.5 x 50 | Me.HP | 0.69 | 3.31 | 4.53 | 5.47 | 6.90 |
| | Th.HP | 0.69 | 3.31 | 4.53 | 5.47 | 6.90 |
| | O.T. | 27900 | 28000 | 27100 | 25800 | 22300 |
| 150:1 2.5 x 60 | Me.HP | 0.59 | 2.76 | 3.78 | 4.57 | 5.77 |
| | Th.HP | 0.59 | 2.76 | 3.78 | 4.57 | 5.77 |
| | O.T. | 27500 | 27400 | 26000 | 24500 | 21200 |
| 160:1 4 x 40 | Me.HP | 0.56 | 2.76 | 3.91 | 4.89 | 6.60 |
| | Th.HP | 0.56 | 2.60 | 3.40 | 4.20 | 5.80 |
| | O.T. | 31200 | 30300 | 29400 | 28900 | 26900 |
| 175:1 2.5 x 70 | Me.HP | 0.51 | 2.37 | 3.25 | 3.92 | 4.95 |
| | Th.HP | 0.51 | 2.37 | 3.25 | 3.92 | 4.95 |
| | O.T. | 27000 | 27000 | 25600 | 24100 | 21000 |
| 200:1 4 x 50 | Me.HP | 0.45 | 2.22 | 3.14 | 3.92 | 5.30 |
| | Th.HP | 0.45 | 2.10 | 2.90 | 3.60 | 5.10 |
| | O.T. | 27900 | 28100 | 28100 | 27700 | 26000 |
| 240:1 4 x 60 | Me.HP | 0.39 | 1.85 | 2.62 | 3.28 | 4.42 |
| | Th.HP | 0.39 | 1.85 | 2.50 | 3.10 | 4.40 |
| | O.T. | 27500 | 27700 | 27600 | 26700 | 24800 |
| 280:1 4 x 70 | Me.HP | 0.33 | 1.59 | 2.25 | 2.81 | 3.80 |
| | Th.HP | 0.33 | 1.50 | 2.10 | 2.70 | 3.80 |
| | O.T. | 27000 | 27200 | 27200 | 26300 | 24400 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:
 For motor data refer to pages 71 and 72.
 VM & SVM units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in

this section.
 All MV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified.
 Steeple bearing arrangements follow in this section.
 All units can be supplied with fan cooling.
 When specified each unit can be supplied with a worm shaft extension located opposite the input end.
 When specified, units can be supplied with water cooling coils in oil sump.
 Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set.
 Reducers are designed for shaft rotation in either direction.
 For cap and carrier dimensions not shown see mounting section.
 For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio.
 Refer to page 26 for lubrication information, efficiency, and service factors.
 Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided.
 Hand of assembly and mounting position diagrams follow in this section.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|------------------|-------------|
| BORE INCHES | GEARSHAFT NUMBER | KEYWAY SIZE |
| 3.69375* | 60-S60-315 | 3/4 X 3/8 |
| 3.4375* | 60-S60-307 | 3/4 X 3/8 |
| 2.9375* | 60-S60-215 | 3/4 X 3/8 |

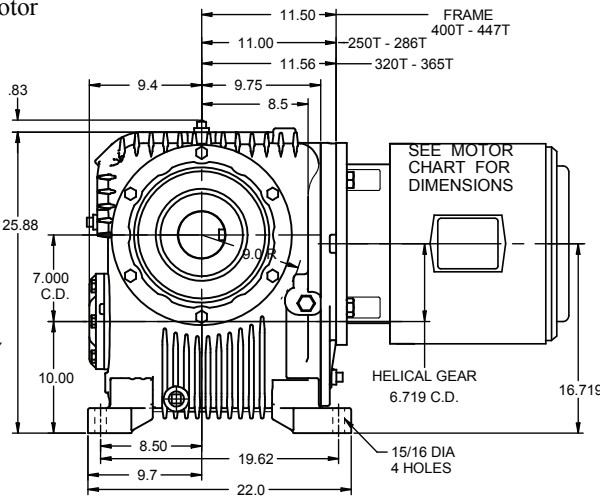
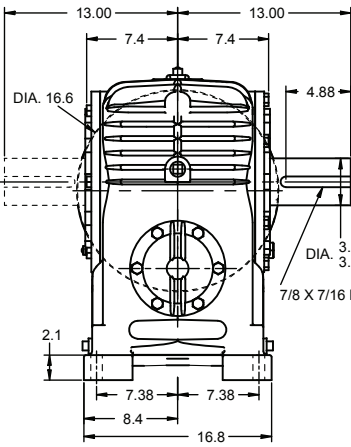
Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard
 Bore Tolerance: +.003, -.000
 2 set screws at long end of shaft.

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.
Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

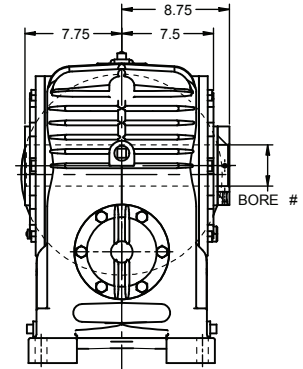
Cone Drive Helical/Worm D-Flange Gearhead - 7.000" C.D. Size 70 Solid Shaft

Hollow Shaft

Model MU est. wt. 850 lbs less motor

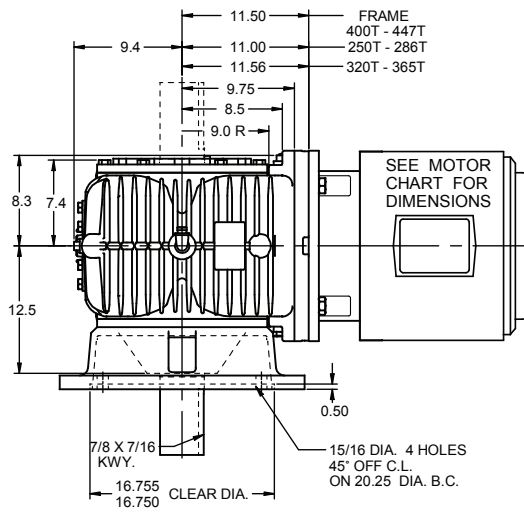
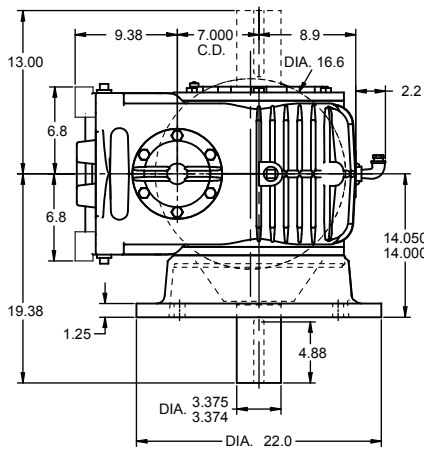


SMU est. wt. 850 lbs less motor

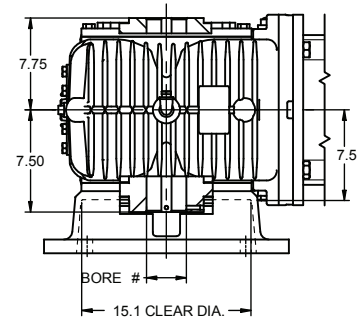


SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

Model MV est. wt. 900 lbs less motor



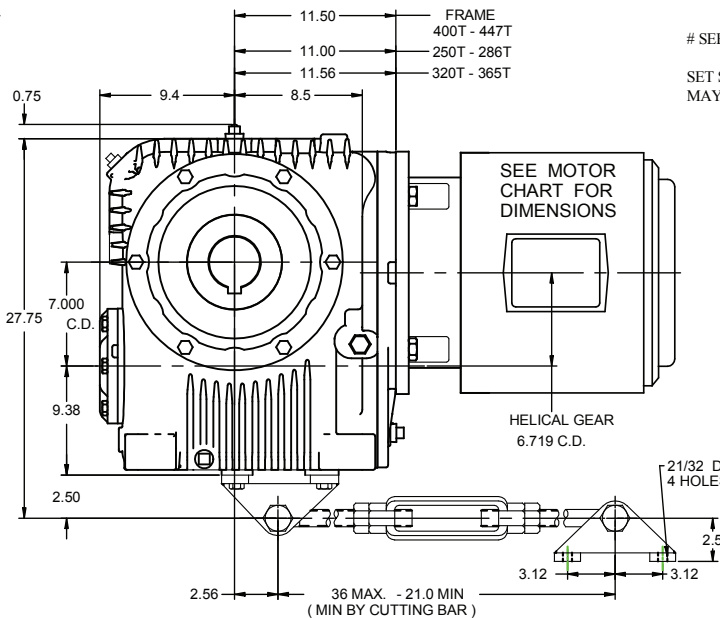
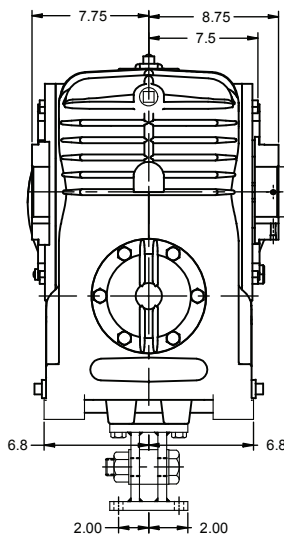
SMV est. wt. 900 lbs less motor



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SM est. wt. 850 lbs less motor



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

UNIT CAN BE SUPPLIED
 WITH SOLID SHAFT.
 CONTACT CONE DRIVE

Cone Drive Helical/Worm D-Flange Gearhead

Size 70 6.719" C.D. HELICAL PRI./7.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 9.23 | 48.8 | 70.9 | 86.2 | 99.4 |
| | Th.HP | 8.77 | 31.1 | 36.6 | 37.3 | 38.2 |
| | O.T. | 25900 | 24200 | 23600 | 21800 | 16600 |
| 7.5:1 1.5 x 5 | Me.HP | 7.24 | 38.6 | 56.2 | 71.5 | 86.7 |
| | Th.HP | 7.24 | 27.9 | 31.2 | 32.9 | 38.2 |
| | O.T. | 30000 | 28500 | 27900 | 26900 | 21600 |
| 9:1 1.8 x 5 | Me.HP | 6.67 | 35.7 | 52.0 | 65.1 | 80.5 |
| | Th.HP | 5.24 | 24.6 | 28.9 | 31.7 | 38.2 |
| | O.T. | 33000 | 31600 | 30900 | 29400 | 24000 |
| 10:1 1 x 10 | Me.HP | 9.23 | 42.4 | 52.7 | 60.5 | 70.6 |
| | Th.HP | 9.23 | 23.3 | 28.1 | 31.1 | 31.6 |
| | O.T. | 48500 | 40400 | 33900 | 29700 | 23000 |
| 12.5:1 2.5 x 5 | Me.HP | 5.37 | 28.9 | 42.3 | 54.2 | 68.4 |
| | Th.HP | 4.73 | 20.1 | 25.7 | 28.3 | 32.2 |
| | O.T. | 36400 | 35500 | 34700 | 33800 | 28200 |
| 15:1 1.5 x 10 | Me.HP | 7.24 | 33.9 | 42.4 | 49.3 | 61.0 |
| | Th.HP | 6.38 | 19.6 | 22.9 | 27.4 | 31.1 |
| | O.T. | 56100 | 47900 | 40400 | 35800 | 29500 |
| 18:1 1.8 x 10 | Me.HP | 6.57 | 30.0 | 38.5 | 44.7 | 55.7 |
| | Th.HP | 4.18 | 17.4 | 21.1 | 24.1 | 30.5 |
| | O.T. | 60600 | 50700 | 43800 | 38800 | 32100 |
| 20:1 1 x 20 | Me.HP | 6.21 | 23.2 | 28.9 | 33.2 | 39.1 |
| | Th.HP | 6.21 | 18.3 | 19.2 | 20.7 | 22.2 |
| | O.T. | 59200 | 41900 | 35100 | 30700 | 24000 |
| 22.5:1 1.5 x 15 | Me.HP | 5.50 | 24.1 | 30.2 | 35.1 | 43.5 |
| | Th.HP | 5.50 | 16.5 | 19.9 | 22.00 | 26 |
| | O.T. | 61100 | 49100 | 42100 | 37500 | 31000 |
| 25:1 2.5 x 10 | Me.HP | 4.80 | 23.5 | 31.6 | 37.4 | 46.9 |
| | Th.HP | 3.59 | 14.5 | 17.7 | 20.6 | 26.4 |
| | O.T. | 60600 | 54600 | 49500 | 44700 | 37300 |
| 27:1 1.8 x 15 | Me.HP | 4.61 | 21.3 | 27.4 | 31.9 | 39.7 |
| | Th.HP | 3.82 | 13.7 | 16.9 | 20.1 | 24.9 |
| | O.T. | 61100 | 51600 | 45300 | 40400 | 33900 |
| 30:1 1.5 x 20 | Me.HP | 4.22 | 18.5 | 23.2 | 27.0 | 33.4 |
| | Th.HP | 4.22 | 14.2 | 17.6 | 18.4 | 20.3 |
| | O.T. | 59200 | 48200 | 41900 | 37100 | 30500 |
| 36:1 1.8 x 20 | Me.HP | 3.54 | 16.3 | 21.0 | 24.5 | 30.5 |
| | Th.HP | 3.19 | 11.7 | 14.6 | 18.4 | 19.6 |
| | O.T. | 59200 | 50400 | 44800 | 40100 | 33300 |
| 37.5:1 2.5 x 15 | Me.HP | 3.36 | 16.6 | 22.4 | 26.6 | 33.5 |
| | Th.HP | 3.19 | 11.5 | 14.4 | 16.4 | 20.5 |
| | O.T. | 61100 | 55500 | 50500 | 46100 | 39000 |
| 40:1 4 x 10 | Me.HP | 3.06 | 16.0 | 22.4 | 27.7 | 36.4 |
| | Th.HP | 2.40 | 9.80 | 12.6 | 15.0 | 18.0 |
| | O.T. | 60600 | 58500 | 55300 | 52200 | 45600 |
| 45:1 1.8 x 25 | Me.HP | 2.87 | 13.2 | 17.0 | 19.8 | 24.7 |
| | Th.HP | 2.87 | 11.0 | 14.3 | 15.2 | 18.2 |
| | O.T. | 57000 | 50400 | 44400 | 39700 | 33400 |
| 50:1 2.5 x 20 | Me.HP | 2.59 | 12.7 | 17.2 | 20.4 | 25.7 |
| | Th.HP | 2.59 | 9.80 | 12.0 | 14.2 | 17.4 |
| | O.T. | 59200 | 53800 | 49500 | 45600 | 38600 |
| 54:1 1.8 x 30 | Me.HP | 2.41 | 11.0 | 14.3 | 16.6 | 20.7 |
| | Th.HP | 2.41 | 8.80 | 10.4 | 12.4 | 14.6 |
| | O.T. | 54700 | 47200 | 41600 | 37600 | 32200 |
| 60:1 4 x 15 | Me.HP | 2.14 | 11.2 | 15.8 | 19.6 | 25.9 |
| | Th.HP | 2.00 | 8.00 | 10.3 | 12.1 | 15.9 |
| | O.T. | 61100 | 59000 | 56100 | 53300 | 47000 |
| 62.5:1 2.5 x 25 | Me.HP | 2.11 | 10.3 | 13.9 | 16.5 | 20.8 |
| | Th.HP | 2.11 | 8.74 | 11.0 | 13.0 | 15.1 |
| | O.T. | 57000 | 53300 | 49500 | 45200 | 38300 |
| 72:1 1.8 x 40 | Me.HP | 1.84 | 8.31 | 10.7 | 12.5 | 15.6 |
| | Th.HP | 1.84 | 7.40 | 9.10 | 11.1 | 12.6 |
| | O.T. | 49400 | 44600 | 39900 | 36100 | 30700 |
| 75:1 2.5 x 30 | Me.HP | 1.77 | 8.61 | 11.7 | 13.9 | 17.4 |
| | Th.HP | 1.77 | 7.70 | 9.30 | 10.3 | 13.4 |
| | O.T. | 54700 | 50200 | 46300 | 42300 | 36400 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 1.65 | 8.60 | 12.1 | 15.0 | 19.9 |
| | Th.HP | 1.58 | 6.70 | 8.60 | 9.90 | 13.6 |
| | O.T. | 59200 | 57300 | 54400 | 51600 | 46400 |
| 90:1 1.8 x 50 | Me.HP | 1.48 | 6.67 | 8.61 | 10.0 | 12.5 |
| | Th.HP | 1.48 | 6.40 | 8.40 | 9.90 | 11.2 |
| | O.T. | 44100 | 42700 | 38900 | 35300 | 29600 |
| 100:1 4 x 25 | Me.HP | 1.35 | 6.93 | 9.75 | 12.1 | 16.1 |
| | Th.HP | 1.30 | 5.70 | 7.70 | 9.10 | 12.2 |
| | O.T. | 57000 | 55600 | 53700 | 51700 | 46100 |
| 108:1 1.8 x 60 | Me.HP | 1.25 | 5.57 | 7.19 | 8.37 | 10.5 |
| | Th.HP | 1.22 | 5.30 | 6.98 | 8.31 | 9.79 |
| | O.T. | 43400 | 41000 | 36900 | 33500 | 28600 |
| 120:1 4 x 30 | Me.HP | 1.13 | 5.81 | 8.17 | 10.2 | 13.5 |
| | Th.HP | 1.13 | 5.00 | 6.60 | 7.70 | 9.90 |
| | O.T. | 54700 | 52900 | 50700 | 48400 | 43200 |
| 125:1 2.5 x 50 | Me.HP | 1.10 | 5.20 | 7.04 | 8.38 | 10.5 |
| | Th.HP | 1.10 | 5.09 | 6.60 | 7.85 | 10.1 |
| | O.T. | 44100 | 44100 | 42100 | 39400 | 34000 |
| 150:1 2.5 x 60 | Me.HP | 0.93 | 4.34 | 5.88 | 6.99 | 8.79 |
| | Th.HP | 0.93 | 4.34 | 5.88 | 6.99 | 8.79 |
| | O.T. | 43400 | 43000 | 40400 | 37500 | 32400 |
| 160:1 4 x 40 | Me.HP | 0.88 | 4.37 | 6.14 | 7.65 | 10.1 |
| | Th.HP | 0.88 | 3.80 | 5.00 | 6.10 | 8.30 |
| | O.T. | 49400 | 47900 | 46200 | 45200 | 41300 |
| 175:1 2.5 x 70 | Me.HP | 0.80 | 3.72 | 5.04 | 6.00 | 7.55 |
| | Th.HP | 0.80 | 3.72 | 5.04 | 6.00 | 7.55 |
| | O.T. | 42700 | 42400 | 39800 | 36900 | 32000 |
| 200:1 4 x 50 | Me.HP | 0.71 | 3.51 | 4.93 | 6.14 | 8.14 |
| | Th.HP | 0.71 | 3.00 | 4.20 | 5.20 | 7.30 |
| | O.T. | 44100 | 44600 | 44200 | 43300 | 40000 |
| 240:1 4 x 60 | Me.HP | 0.61 | 2.93 | 4.12 | 5.13 | 6.80 |
| | Th.HP | 0.61 | 2.50 | 3.60 | 4.40 | 6.40 |
| | O.T. | 43400 | 43800 | 43300 | 41700 | 38100 |
| 280:1 4 x 70 | Me.HP | 0.53 | 2.51 | 3.53 | 4.4 | 5.84 |
| | Th.HP | 0.53 | 2.10 | 3.00 | 3.90 | 5.80 |
| | O.T. | 42700 | 43100 | 42700 | 41100 | 37500 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:
 For motor data refer to pages 71 and 72.
 VM & SVM units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section.
 All MV units having shaft extended thru base side will

be supplied with a steple bearing mounting on base side, unless otherwise specified. Steple bearing arrangements follow in this section. All units can be supplied with fan cooling. When specified each unit can be supplied with a worm shaft extension located opposite the input end. When specified, units can be supplied with water cooling coils in oil sump. Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set. Reducers are designed for shaft rotation in either direction. For cap and carrier dimensions not shown see mounting section. For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio. Refer to page 26 for lubrication information, efficiency, and service factors. Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided. Hand of assembly and mounting position diagrams follow in this section.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|------------------|-------------|
| BORE INCHES | GEARSHAFT NUMBER | KEYWAY SIZE |
| 4.4375* | 80-S60-407 | 1 X 1/2 |
| 3.9375* | 80-S60-315 | 1 X 1/2 |

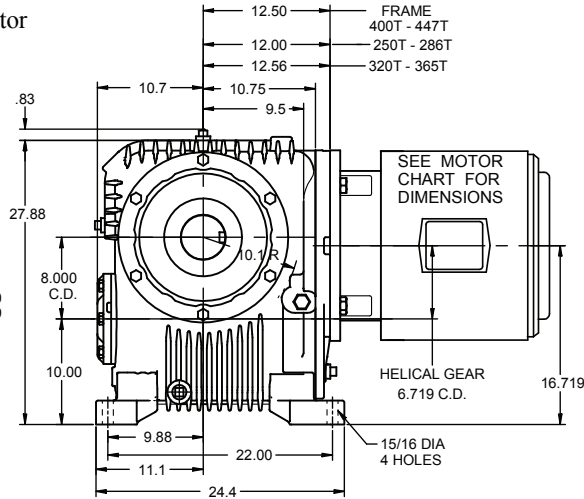
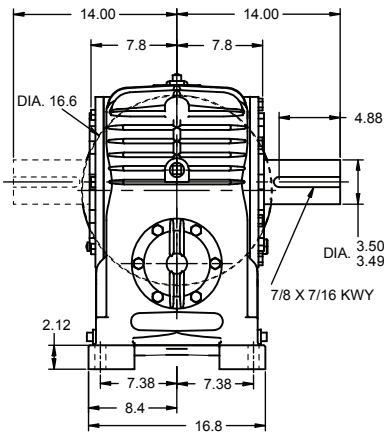
Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard
 Bore Tolerance: +.003, -.000
 2 set screws at long end of shaft.

Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

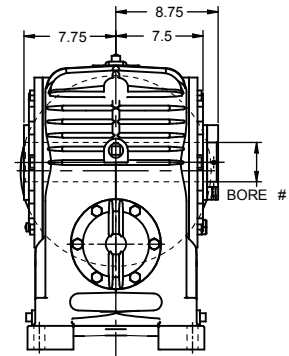
Cone Drive Helical/Worm D-Flange Gearhead - 8.000" C.D. Size 80 Solid Shaft

Hollow Shaft

Model MU est. wt. 980 lbs less motor

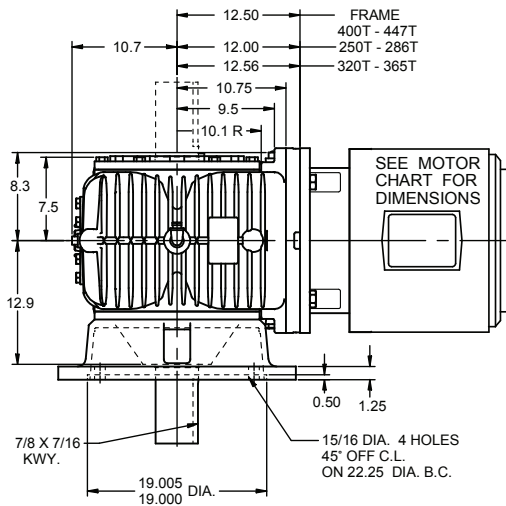
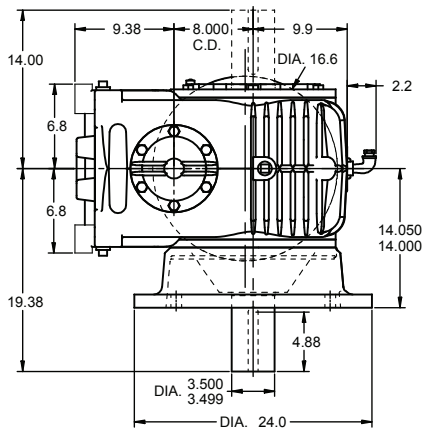


SMU est. wt. 980 lbs less motor

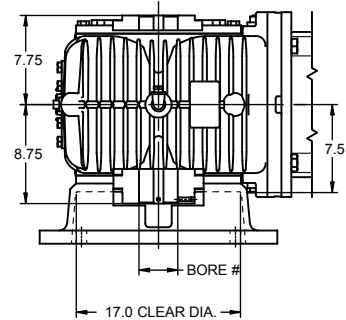


SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

Model MV est. wt. 1050 lbs less motor



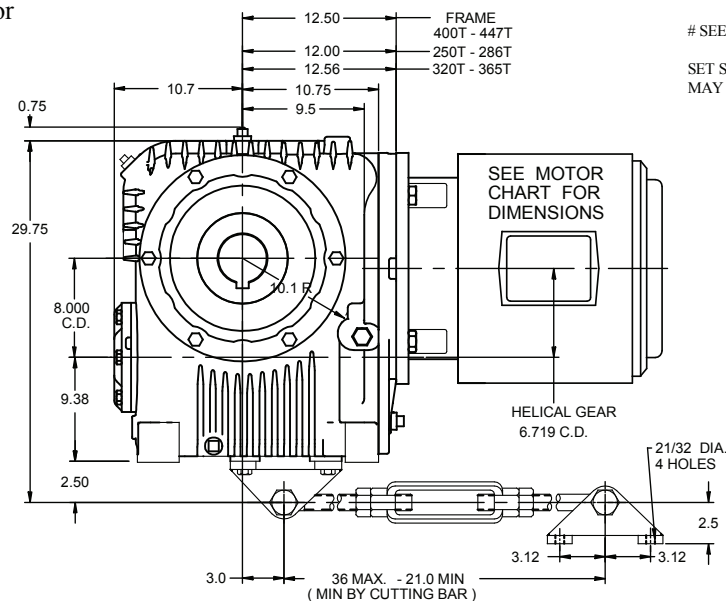
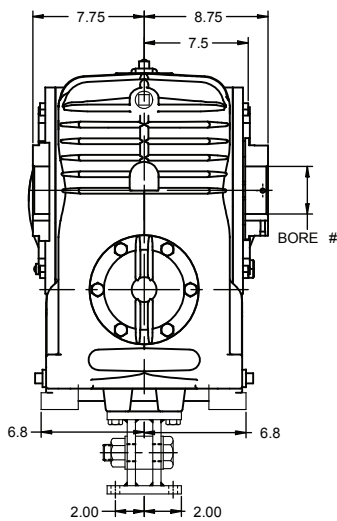
SMV est. wt. 1050 lbs less motor



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SM est. wt. 1000 lbs less motor



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

UNIT CAN BE SUPPLIED
 WITH SOLID SHAFT,
 CONTACT CONE DRIVE

Cone Drive Helical/Worm D-Flange Gearhead
 Size 80 6.719" C.D. HELICAL PRI./8.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 9.23 | 48.8 | 70.9 | 91.4 | 134 |
| | Th.HP | 8.77 | 33.4 | 39.2 | 40.0 | 41.0 |
| | O.T. | 25900 | 24200 | 23600 | 23100 | 22300 |
| 7.5:1 1.5 x 5 | Me.HP | 7.24 | 38.6 | 56.2 | 72.6 | 106 |
| | Th.HP | 7.03 | 29.9 | 33.5 | 35.3 | 41.0 |
| | O.T. | 30000 | 28500 | 27900 | 27300 | 26400 |
| 9:1 1.8 x 5 | Me.HP | 6.67 | 35.7 | 52.0 | 67.2 | 98.6 |
| | Th.HP | 5.61 | 26.4 | 31.0 | 33.9 | 41.0 |
| | O.T. | 33000 | 31600 | 30900 | 30300 | 29400 |
| 10:1 1 x 10 | Me.HP | 9.23 | 48.8 | 70.9 | 87.8 | 102 |
| | Th.HP | 8.77 | 25.0 | 30.1 | 33.3 | 33.9 |
| | O.T. | 48500 | 46500 | 45600 | 43100 | 33200 |
| 12.5:1 2.5 x 5 | Me.HP | 5.37 | 28.9 | 42.3 | 54.2 | 77.1 |
| | Th.HP | 5.37 | 21.5 | 27.5 | 30.4 | 34.5 |
| | O.T. | 36400 | 35500 | 34700 | 33800 | 31800 |
| 15:1 1.5 x 10 | Me.HP | 7.24 | 38.6 | 56.2 | 71.9 | 88.3 |
| | Th.HP | 6.84 | 21.0 | 24.5 | 29.4 | 33.4 |
| | O.T. | 56100 | 54500 | 53500 | 52300 | 42700 |
| 18:1 1.8 x 10 | Me.HP | 6.67 | 35.7 | 52.0 | 65.2 | 81.0 |
| | Th.HP | 4.48 | 18.7 | 22.6 | 25.9 | 32.7 |
| | O.T. | 61600 | 60100 | 59200 | 56600 | 46800 |
| 20:1 1 x 20 | Me.HP | 9.23 | 34.0 | 42.2 | 48.5 | 56.4 |
| | Th.HP | 6.88 | 19.7 | 20.6 | 22.2 | 23.9 |
| | O.T. | 88000 | 61300 | 51200 | 44900 | 34600 |
| 22.5:1 1.5 x 15 | Me.HP | 7.24 | 35.4 | 44.2 | 51.4 | 63.4 |
| | Th.HP | 6.04 | 17.7 | 21.3 | 23.6 | 27.9 |
| | O.T. | 80400 | 72100 | 61500 | 54900 | 45200 |
| 25:1 2.5 x 10 | Me.HP | 5.37 | 28.9 | 42.3 | 54.2 | 68.5 |
| | Th.HP | 3.85 | 15.6 | 19.0 | 22.1 | 28.3 |
| | O.T. | 67900 | 67100 | 66200 | 64800 | 54400 |
| 27:1 1.8 x 15 | Me.HP | 6.67 | 31.4 | 40.1 | 46.6 | 58.0 |
| | Th.HP | 4.10 | 14.7 | 18.1 | 21.5 | 26.7 |
| | O.T. | 88300 | 76200 | 66300 | 59100 | 49500 |
| 30:1 1.5 x 20 | Me.HP | 6.29 | 27.1 | 34.0 | 39.5 | 48.8 |
| | Th.HP | 5.30 | 15.3 | 18.9 | 19.8 | 21.7 |
| | O.T. | 88500 | 70900 | 61300 | 54200 | 44500 |
| 36:1 1.8 x 20 | Me.HP | 5.29 | 24.1 | 30.8 | 35.8 | 44.5 |
| | Th.HP | 3.43 | 12.5 | 15.7 | 21.0 | 22.0 |
| | O.T. | 88500 | 74400 | 65600 | 58700 | 48600 |
| 37.5:1 2.5 x 15 | Me.HP | 5.02 | 24.7 | 33.1 | 39.0 | 48.9 |
| | Th.HP | 3.42 | 12.3 | 15.4 | 17.6 | 22.0 |
| | O.T. | 91200 | 82400 | 74500 | 67600 | 57000 |
| 40:1 4 x 10 | Me.HP | 3.36 | 17.1 | 24.6 | 31.3 | 44.9 |
| | Th.HP | 2.58 | 11.8 | 14.4 | 17.2 | 20.2 |
| | O.T. | 66600 | 62700 | 60700 | 59000 | 56300 |
| 45:1 1.8 x 25 | Me.HP | 4.29 | 19.5 | 24.9 | 28.9 | 36.0 |
| | Th.HP | 3.04 | 11.8 | 15.4 | 16.3 | 19.5 |
| | O.T. | 85200 | 74500 | 65100 | 58100 | 48800 |
| 50:1 2.5 x 20 | Me.HP | 3.86 | 18.9 | 25.4 | 30.0 | 37.6 |
| | Th.HP | 2.89 | 10.5 | 12.9 | 15.2 | 18.7 |
| | O.T. | 88500 | 79900 | 73000 | 66900 | 56400 |
| 54:1 1.8 x 30 | Me.HP | 3.60 | 16.3 | 20.9 | 24.3 | 30.2 |
| | Th.HP | 2.75 | 9.44 | 11.1 | 13.2 | 15.6 |
| | O.T. | 81600 | 69800 | 60900 | 55000 | 47000 |
| 60:1 4 x 15 | Me.HP | 3.19 | 16.8 | 23.5 | 29 | 37.9 |
| | Th.HP | 2.15 | 8.6 | 11 | 12.9 | 17.1 |
| | O.T. | 91200 | 88100 | 83400 | 78800 | 68900 |
| 62.5:1 2.5 x 25 | Me.HP | 3.15 | 15.3 | 20.5 | 24.2 | 30.4 |
| | Th.HP | 2.54 | 9.37 | 11.8 | 13.9 | 16.2 |
| | O.T. | 85200 | 79200 | 72900 | 66300 | 56000 |
| 72:1 1.8 x 40 | Me.HP | 2.74 | 12.3 | 15.7 | 18.3 | 22.8 |
| | Th.HP | 2.30 | 7.90 | 9.80 | 11.9 | 13.5 |
| | O.T. | 73800 | 65900 | 58600 | 52900 | 44900 |
| 75:1 2.5 x 30 | Me.HP | 2.64 | 12.8 | 17.2 | 20.3 | 25.5 |
| | Th.HP | 1.98 | 8.20 | 10.0 | 11.10 | 14.4 |
| | O.T. | 81600 | 74600 | 68300 | 62100 | 53300 |

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
 O.T. = Output torque in Lb. in.

| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
|---------------------------------------|-------|-----------|-------|-------|-------|-------|
| | | 100 | 580 | 870 | 1150 | 1750 |
| 80:1 4 x 20 | Me.HP | 2.46 | 12.8 | 18.0 | 22.3 | 29.1 |
| | Th.HP | 1.69 | 7.20 | 9.20 | 10.3 | 14.6 |
| | O.T. | 88500 | 85500 | 80900 | 76500 | 68000 |
| 90:1 1.8 x 50 | Me.HP | 2.21 | 9.86 | 12.6 | 14.7 | 18.3 |
| | Th.HP | 1.62 | 6.90 | 9.00 | 10.6 | 12.1 |
| | O.T. | 65900 | 63100 | 57000 | 51600 | 43300 |
| 100:1 4 x 25 | Me.HP | 2.02 | 10.4 | 14.5 | 18.0 | 23.5 |
| | Th.HP | 1.39 | 6.10 | 8.30 | 9.70 | 13.1 |
| | O.T. | 85200 | 83100 | 80000 | 76500 | 67600 |
| 108:1 1.8 x 60 | Me.HP | 1.87 | 8.24 | 10.6 | 12.3 | 15.3 |
| | Th.HP | 1.31 | 5.68 | 7.72 | 9.08 | 10.5 |
| | O.T. | 64900 | 60700 | 54100 | 49000 | 41700 |
| 120:1 4 x 30 | Me.HP | 1.69 | 8.68 | 12.2 | 15.1 | 19.8 |
| | Th.HP | 1.23 | 5.40 | 7.1 | 8.30 | 10.6 |
| | O.T. | 81600 | 78900 | 75400 | 71800 | 63300 |
| 125:1 2.5 x 50 | Me.HP | 1.64 | 7.72 | 10.4 | 12.3 | 15.4 |
| | Th.HP | 1.54 | 5.45 | 7.07 | 8.42 | 10.8 |
| | O.T. | 65900 | 65500 | 62100 | 57800 | 49700 |
| 150:1 2.5 x 60 | Me.HP | 1.40 | 6.45 | 8.66 | 10.3 | 12.9 |
| | Th.HP | 1.31 | 4.64 | 6.35 | 7.39 | 9.46 |
| | O.T. | 64900 | 63900 | 59600 | 55000 | 47400 |
| 160:1 4 x 40 | Me.HP | 1.31 | 6.53 | 9.15 | 11.3 | 14.9 |
| | Th.HP | 0.96 | 4.00 | 5.40 | 6.50 | 9.00 |
| | O.T. | 73800 | 71600 | 68700 | 67100 | 60600 |
| 175:1 2.5 x 70 | Me.HP | 1.2 | 5.53 | 7.43 | 8.8 | 11.1 |
| | Th.HP | 1.15 | 4.20 | 6.20 | 7.20 | 9.3 |
| | O.T. | 63800 | 63000 | 58600 | 54200 | 46800 |
| 200:1 4 x 50 | Me.HP | 1.06 | 5.24 | 7.34 | 9.10 | 11.9 |
| | Th.HP | 0.79 | 3.20 | 4.50 | 5.60 | 7.80 |
| | O.T. | 65900 | 66600 | 65800 | 64200 | 58700 |
| 240:1 4 x 60 | Me.HP | 0.92 | 4.37 | 6.13 | 7.6 | 9.97 |
| | Th.HP | 0.72 | 2.70 | 3.80 | 4.70 | 6.90 |
| | O.T. | 64900 | 65400 | 64500 | 61800 | 55900 |
| 280:1 4 x 70 | Me.HP | 0.79 | 3.75 | 5.26 | 6.52 | 8.56 |
| | Th.HP | 0.69 | 2.30 | 3.20 | 4.20 | 6.30 |
| | O.T. | 63800 | 64400 | 63500 | 60900 | 55000 |

CAUTION:
 It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:
 For motor data refer to pages 71 and 72.
 VM & SVM units supplied with special footbrackets which provides a vertical input and a horizontal output shaft reducer follow in this section.
 All MV units having shaft extended thru base side will be supplied with a

steep bearing mounting on base side, unless otherwise specified.
 Steep bearing arrangements follow in this section.
 All units can be supplied with fan cooling.
 When specified each unit can be supplied with a worm shaft extension located opposite the input end.
 When specified, units can be supplied with water cooling coils in oil sump.
 Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set.
 Reducers are designed for shaft rotation in either direction.
 For cap and carrier dimensions not shown see mounting section.
 For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio.
 Refer to page 26 for lubrication information, efficiency, and service factors.
 Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided.
 Hand of assembly and mounting position diagrams follow in this section.

| STANDARD HOLLOW GEAR SHAFTS | | |
|-----------------------------|------------------|-------------|
| BORE INCHES | GEARSHAFT NUMBER | KEYWAY SIZE |
| 4.4375* | 80-S60-407 | 1 X 1/2 |
| 3.9375* | 80-S60-315 | 1 X 1/2 |

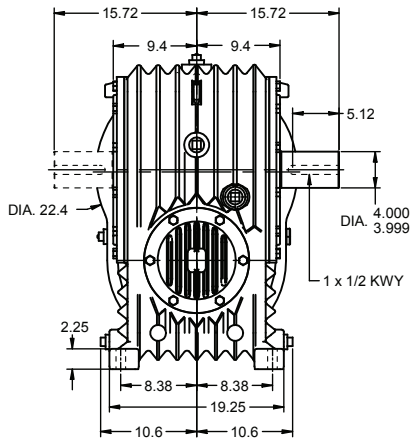
Special hollow gear shaft bore sizes are available at additional cost.
 *AGMA Standard
 Bore Tolerance: +.003, -.000
 2 set screws at long end of shaft.

Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

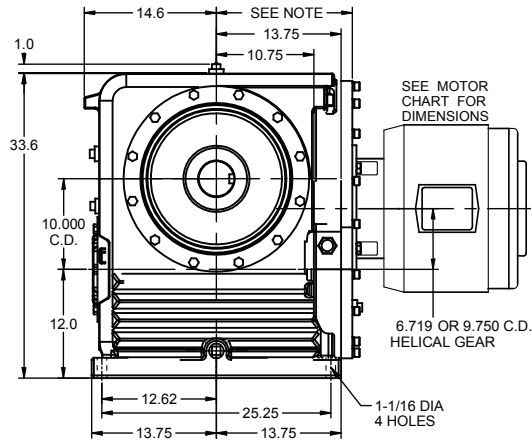
Cone Drive Helical/Worm D-Flange Gearhead - 10.000" C.D. Size 100 Solid Shaft

Hollow Shaft

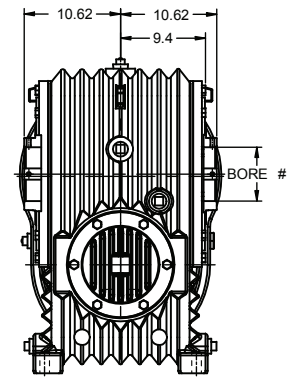
Model MU est. wt. 1600 lbs less motor



100 - 9.750 C.D. HELICALS
100 L - 6.719 C.D. HELICALS

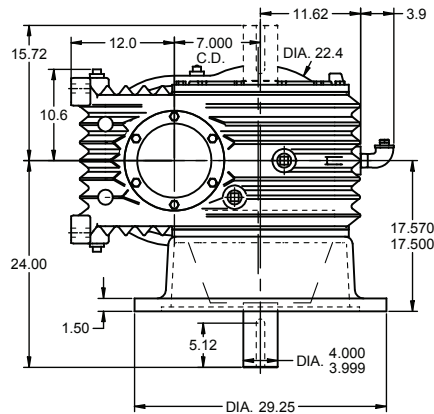


SMU est. wt. 1600 lbs less motor

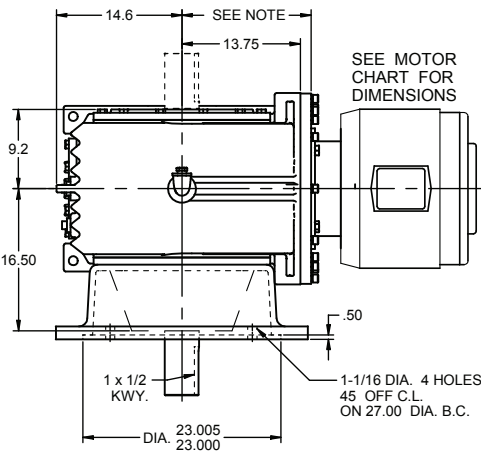


SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

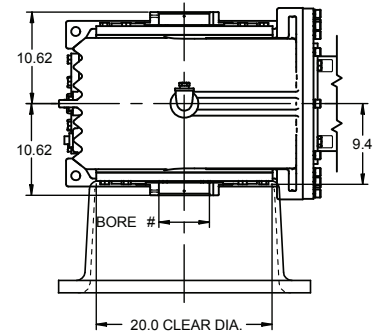
Model MV est. wt. 1675 lbs less motor



100 - 9.750 C.D. HELICALS
100 L - 6.719 C.D. HELICALS



SMV est. wt. 1675 lbs less motor

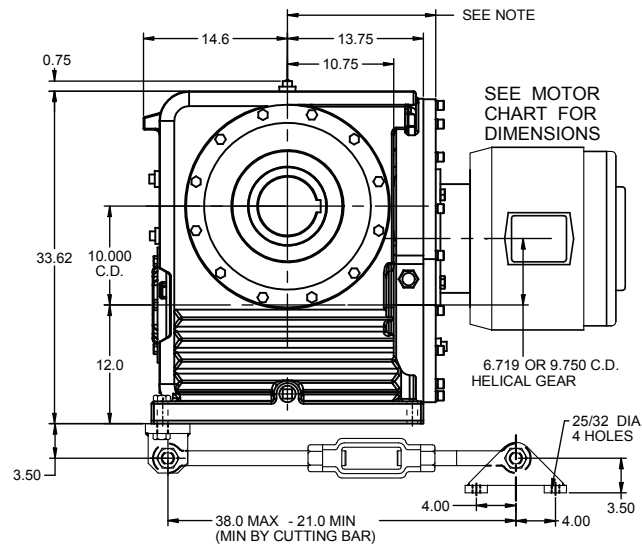
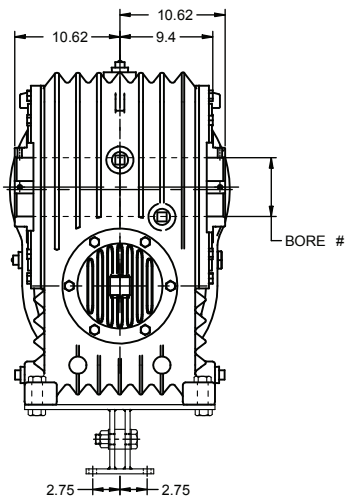


SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

Model SM est. wt. 1650 lbs less motor

100 - 9.750 C.D. HELICALS
100 L - 6.719 C.D. HELICALS



SEE GEAR SHAFT CHART
 SET SCREW END OF SHAFT
 MAY EXTEND ON EITHER SIDE

NOTE: HOLLOW SHAFT IS
 DOUBLE EXTENDED.

UNIT CAN BE SUPPLIED
 WITH SOLID SHAFT.
 CONTACT CONE DRIVE

TORQUE ARM BRACKET
 CAN BE MOUNTED
 ON EITHER END OF HOUSING.

Cone Drive Helical/Worm D-Flange Gearhead

Size 100 6.719" or 9.750" C.D. HELICAL PRI./10.000" C.D. WORM GEAR SEC.

AGMA HORSEPOWER & OUTPUT TORQUE RATINGS FOR 1.0 SERVICE FACTOR

| UNITS WITH 9.750" C.D. HELICALS* | | | | | | |
|---------------------------------------|-------|-----------|--------|--------|--------|--------|
| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
| | | 100 | 580 | 870 | 1150 | 1750 |
| 20:1 4 x 5 | Me.HP | 9.23 | 48.8 | 70.9 | 82.3 | 94.7 |
| | Th.HP | 8.30 | 24.1 | 25.3 | 27.4 | 29.7 |
| | O.T. | 90200 | 90000 | 88100 | 77900 | 59500 |
| 30:1 1.5 x 20 | Me.HP | 7.24 | 38.6 | 56.2 | 68.5 | 82.8 |
| | Th.HP | 6.40 | 18.5 | 23.2 | 24.3 | 26.9 |
| | O.T. | 104000 | 103000 | 104000 | 96300 | 77300 |
| 45:1 1.8 x 25 | Me.HP | 6.67 | 34.8 | 43.4 | 50.5 | 62.2 |
| | Th.HP | 3.60 | 14.1 | 18.7 | 19.8 | 24.0 |
| | O.T. | 136000 | 136000 | 116000 | 104000 | 86100 |
| 50:1 2.5 x 20 | Me.HP | 5.37 | 28.9 | 42.3 | 52.3 | 65.5 |
| | Th.HP | 3.50 | 12.6 | 15.5 | 18.5 | 22.9 |
| | O.T. | 126000 | 125000 | 125000 | 119000 | 101000 |
| 54:1 1.8 x 30 | Me.HP | 6.67 | 29.2 | 36.5 | 42.3 | 52.2 |
| | Th.HP | 3.30 | 11.4 | 13.5 | 16.3 | 19.3 |
| | O.T. | 156000 | 128000 | 109000 | 98400 | 83000 |
| 62.5:1 2.5 x 25 | Me.HP | 5.37 | 28.0 | 36.3 | 42.3 | 52.9 |
| | Th.HP | 3.00 | 11.4 | 14.6 | 17.3 | 20.3 |
| | O.T. | 149000 | 149000 | 132000 | 119000 | 99900 |
| 72:1 1.8 x 40 | Me.HP | 5.15 | 22.0 | 27.5 | 31.9 | 39.3 |
| | Th.HP | 2.70 | 9.20 | 11.5 | 14.1 | 16.0 |
| | O.T. | 143000 | 121000 | 105000 | 94700 | 79400 |
| 75:1 2.5 x 30 | Me.HP | 4.95 | 23.4 | 30.5 | 35.5 | 44.4 |
| | Th.HP | 2.30 | 9.70 | 11.7 | 13.1 | 17.3 |
| | O.T. | 158000 | 140000 | 124000 | 111000 | 95200 |
| 90:1 1.8 x 50 | Me.HP | 4.15 | 17.6 | 22.0 | 25.6 | 31.6 |
| | Th.HP | 1.90 | 8.00 | 10.6 | 12.5 | 14.2 |
| | O.T. | 128000 | 116000 | 102000 | 92500 | 76700 |
| 100:1 4 x 25 | Me.HP | 3.36 | 17.1 | 24.6 | 31.3 | 41.2 |
| | Th.HP | 1.60 | 7.10 | 9.80 | 11.6 | 15.7 |
| | O.T. | 146000 | 141000 | 139000 | 137000 | 121000 |
| 108:1 1.8 x 60 | Me.HP | 3.51 | 14.7 | 18.4 | 21.4 | 26.4 |
| | Th.HP | 1.50 | 6.70 | 9.20 | 10.9 | 12.6 |
| | O.T. | 126000 | 112000 | 97200 | 87900 | 74000 |
| 120:1 4 x 30 | Me.HP | 3.17 | 16.2 | 22.4 | 27.1 | 34.5 |
| | Th.HP | 1.40 | 6.30 | 8.30 | 9.70 | 12.5 |
| | O.T. | 158000 | 152000 | 142000 | 133000 | 114000 |
| 125:1 2.5 x 50 | Me.HP | 3.07 | 14.2 | 18.4 | 21.5 | 26.9 |
| | Th.HP | 1.80 | 6.50 | 8.40 | 10.1 | 13.1 |
| | O.T. | 128000 | 124000 | 113000 | 104000 | 89100 |
| 150:1 2.5 x 60 | Me.HP | 2.61 | 11.8 | 15.4 | 17.9 | 22.5 |
| | Th.HP | 1.50 | 5.50 | 7.50 | 8.80 | 11.4 |
| | O.T. | 126000 | 121000 | 109000 | 98900 | 85100 |
| 160:1 4 x 40 | Me.HP | 2.46 | 12.2 | 16.8 | 20.4 | 26.0 |
| | Th.HP | 1.10 | 4.70 | 5.90 | 7.60 | 10.5 |
| | O.T. | 143000 | 138000 | 130000 | 124000 | 109000 |
| 175:1 2.5 x 70 | Me.HP | 2.25 | 10.2 | 13.2 | 15.4 | 19.3 |
| | Th.HP | 1.60 | 4.80 | 7.10 | 8.40 | 10.9 |
| | O.T. | 124000 | 119000 | 107000 | 97500 | 84000 |
| 200:1 4 x 50 | Me.HP | 1.99 | 9.79 | 13.5 | 16.4 | 20.9 |
| | Th.HP | 0.90 | 3.70 | 5.20 | 6.50 | 9.10 |
| | O.T. | 128000 | 128000 | 125000 | 119000 | 106000 |
| 240:1 4 x 60 | Me.HP | 1.71 | 8.17 | 11.3 | 13.7 | 17.4 |
| | Th.HP | 0.80 | 3.10 | 4.40 | 5.40 | 8.00 |
| | O.T. | 126000 | 126000 | 122000 | 115000 | 101000 |
| 280:1 4 x 70 | Me.HP | 1.48 | 7.01 | 9.67 | 11.8 | 15.0 |
| | Th.HP | 0.80 | 2.60 | 3.70 | 4.80 | 7.20 |
| | O.T. | 124000 | 125000 | 121000 | 113000 | 99200 |

| UNITS WITH 9.750" C.D. HELICALS* | | | | | | |
|---------------------------------------|-------|-----------|--------|--------|--------|--------|
| TOTAL RATIO PRIMARY X SECONDARY | | INPUT RPM | | | | |
| | | 100 | 580 | 870 | 1150 | 1750 |
| 5:1 1 x 5 | Me.HP | 34.9 | 151 | 182 | 199 | 231 |
| | Th.HP | 16.3 | 44.5 | 53.2 | 54.3 | 55.7 |
| | O.T. | 102000 | 78200 | 63000 | 52200 | 40200 |
| 7.5:1 1.5 x 5 | Me.HP | 28.4 | 124 | 153 | 174 | 201 |
| | Th.HP | 11.0 | 39.8 | 44.6 | 47.1 | 55.7 |
| | O.T. | 120000 | 93500 | 77400 | 66900 | 51100 |
| 9:1 1.8 x 5 | Me.HP | 25.4 | 112 | 139 | 160 | 189 |
| | Th.HP | 7.10 | 35.2 | 41.3 | 45.2 | 55.7 |
| | O.T. | 128000 | 102000 | 84600 | 73800 | 57500 |
| 10:1 1 x 10 | Me.HP | 31.8 | 107 | 131 | 148 | 170 |
| | Th.HP | 12.2 | 31.6 | 39.0 | 43.7 | 44.4 |
| | O.T. | 174000 | 106000 | 88000 | 75500 | 57800 |
| 12.5:1 2.5 x 5 | Me.HP | 20.6 | 94.2 | 118 | 137 | 169 |
| | Th.HP | 6.50 | 28.2 | 36.7 | 40.4 | 46.0 |
| | O.T. | 142000 | 117000 | 98100 | 86500 | 70500 |
| 15:1 1.5 x 10 | Me.HP | 21.9 | 87.0 | 108 | 125 | 149 |
| | Th.HP | 8.50 | 26.4 | 31.1 | 38.0 | 43.8 |
| | O.T. | 174000 | 126000 | 105000 | 92600 | 73700 |
| 18:1 1.8 x 10 | Me.HP | 18.4 | 78.6 | 98.0 | 114 | 139 |
| | Th.HP | 5.50 | 23.4 | 28.6 | 33.1 | 42.9 |
| | O.T. | 174000 | 136000 | 114000 | 101000 | 82200 |
| 22.5:1 1.5 x 15 | Me.HP | 15.4 | 62.0 | 77.1 | 89.0 | 107 |
| | Th.HP | 7.40 | 21.7 | 26.6 | 29.6 | 35.7 |
| | O.T. | 175000 | 129000 | 110000 | 97300 | 78200 |
| 25:1 2.5 x 10 | Me.HP | 13.6 | 64.2 | 82.8 | 96.2 | 120 |
| | Th.HP | 4.70 | 19.4 | 23.8 | 27.9 | 36.7 |
| | O.T. | 174000 | 151000 | 131000 | 117000 | 96800 |
| 27:1 1.8 x 15 | Me.HP | 12.9 | 56.0 | 69.9 | 81.2 | 99.8 |
| | Th.HP | 5.00 | 18.4 | 23.0 | 27.7 | 35.0 |
| | O.T. | 175000 | 139000 | 118000 | 105000 | 87000 |
| 36:1 1.8 x 20 | Me.HP | 9.93 | 43.0 | 53.7 | 62.4 | 76.8 |
| | Th.HP | 4.10 | 15.0 | 19.0 | 25.8 | 26.0 |
| | O.T. | 170000 | 136000 | 117000 | 105000 | 85700 |
| 37.5:1 2.5 x 15 | Me.HP | 9.50 | 45.5 | 58.9 | 68.6 | 85.8 |
| | Th.HP | 4.20 | 15.4 | 19.4 | 22.3 | 28.3 |
| | O.T. | 175000 | 154000 | 135000 | 121000 | 101000 |
| 40:1 4 x 10 | Me.HP | 8.56 | 44.4 | 60.9 | 73.6 | 92.9 |
| | Th.HP | 3.10 | 12.9 | 16.9 | 20.2 | 24.3 |
| | O.T. | 174000 | 166000 | 154000 | 142000 | 119000 |
| 60:1 4 x 15 | Me.HP | 59.9 | 31.3 | 43.1 | 52.2 | 65.3 |
| | Th.HP | 2.60 | 10.4 | 13.3 | 15.8 | 21.1 |
| | O.T. | 175000 | 168000 | 157000 | 145000 | 123000 |
| 80:1 4 x 20 | Me.HP | 4.62 | 24.0 | 33.0 | 40.1 | 50.9 |
| | Th.HP | 2.00 | 8.50 | 11.0 | 12.9 | 17.7 |
| | O.T. | 170000 | 164000 | 152000 | 141000 | 122000 |

CAUTION:
It is the purchaser's or user's responsibility to guard all shafting in accordance with current local, state or federal requirements.

Notes:
For motor data refer to pages 71 and 72.
All MV units having shaft extended thru base side will be supplied with a steeple bearing mounting on base side, unless otherwise specified.
Steeple bearing arrangements follow in this section.
All units can be supplied with fan cooling.
When specified each unit can be supplied with a worm shaft extension located opposite the input end.
When specified, units can be supplied with water cooling coils

in oil sump.
Unless otherwise specified, all reducers are supplied with a right hand helix worm gear set.
Reducers are designed for shaft rotation in either direction.
For cap and carrier dimensions not shown see mounting section.
For output shaft chain pull capacity, see single reduction rating chart for size unit required. Determine worm speed by dividing input speed by helical gear ratio.
Refer to page 26 for lubrication information, efficiency, and service factors.
Reducers may be used in floor, ceiling, or wall mounted positions, however, they must be ordered for the position required so that suitable oil level, grease fittings, filler and drains are provided.
Hand of assembly and mounting position diagrams follow in this section.
* Available at additional cost.

Me.HP = Mechanical horsepower Th.HP = Thermal horsepower
O.T. = Output torque in Lb. in.

| STANDARD HOLLOW GEAR SHAFTS | | |
|--|------------------|--------------|
| BORE INCHES | GEARSHAFT NUMBER | KEYWAY SIZE |
| 5.9375 | 100-S61-515 | 1-1/4 X 7/16 |
| Special hollow gear shaft bore sizes are available at additional cost. *AGMA Standard Bore Tolerance: +.004, -.000 2 set screws at long end of shaft. | | |

Important: In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

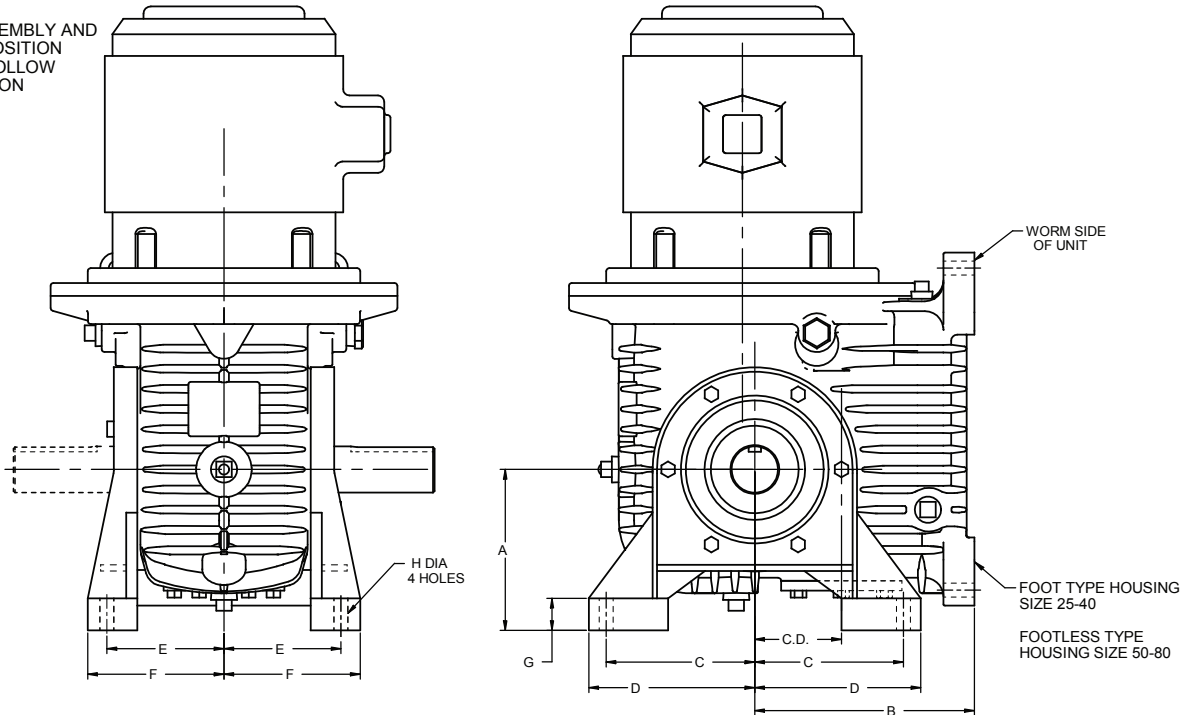
Cone Drive Helical/Worm D Flange Gearhead

Sizes 25 thru 80

Models VR & SVM Input Vertical-Horizontal Output Shaft

Special Foot Brackets

HAND OF ASSEMBLY AND MOUNTING POSITION DIAGRAMS, FOLLOW IN THIS SECTION

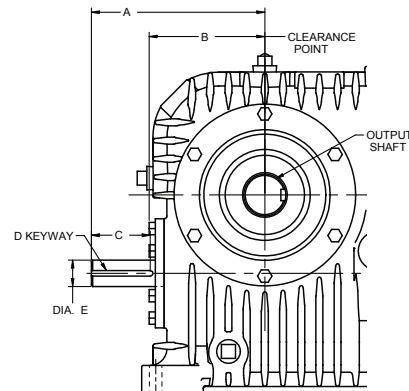


MODEL AVAILABLE IN ALL SOLID AND HOLLOW OUTPUT SHAFT CONFIGURATIONS. FOR ALL OTHER DIMENSIONS REFER TO CORRESPONDING SIZE MODEL SM OR MU.

| Reducer Size | Center Distance | A | B | C | D | E | F | G | H |
|--------------|-----------------|-------|-------|-------|------|-------|------|-----|-------|
| 25 | 2.500 | 4.50 | 6.25 | 4.25 | 4.8 | 4.75 | 5.4 | 0.9 | 15/32 |
| 30 | 3.000 | 5.50 | 7.75 | 5.00 | 5.7 | 5.25 | 5.9 | 1.2 | 9/16 |
| 35 | 3.500 | 6.50 | 8.87 | 6.00 | 6.7 | 6.50 | 7.2 | 1.3 | 9/16 |
| 40 | 4.000 | 7.50 | 10.00 | 6.75 | 7.6 | 7.75 | 8.6 | 1.5 | 11/16 |
| 50 | 5.000 | 8.50 | 11.8 | 7.50 | 8.4 | 8.25 | 9.2 | 1.8 | 13/16 |
| 60 | 6.000 | 8.50 | 13.4 | 8.25 | 9.1 | 9.00 | 9.9 | 1.5 | 13/16 |
| 70 | 7.000 | 13.75 | 16.4 | 10.00 | 11.3 | 9.75 | 10.8 | 1.5 | 15/16 |
| 80 | 8.000 | 15.50 | 17.4 | 11.50 | 12.8 | 10.30 | 11.3 | 1.8 | 15/16 |

Worm Extension Opposite Reducer Input

| Reducer Size | Center Distance | A | B | C | D | E |
|--------------|-----------------|-------|------|------|-------------|--------|
| 25 | 2.500 | 5.25 | 3.8 | 1.00 | 3/16 x 3/32 | 0.750 |
| 30 | 3.000 | 6.69 | 4.6 | 1.75 | 1/4 x 1/8 | 1.000 |
| 35 | 3.500 | 7.75 | 5.2 | 2.62 | 1/4 x 1/8 | 1.1875 |
| 40 | 4.000 | 9.31 | 6.1 | 2.75 | 3/8 x 3/16 | 1.500 |
| 50 | 5.000 | 10.50 | 7.2 | 2.75 | 3/8 x 3/16 | 1.500 |
| 60 | 6.000 | 11.75 | 7.8 | 3.50 | 3/8 x 3/16 | 1.750 |
| 70 | 7.000 | 14.50 | 9.4 | 4.50 | 1/2 x 1/4 | 1.875 |
| 80 | 8.000 | 15.50 | 10.8 | 4.75 | 1/2 x 1/4 | 2.000 |
| 100 | 10.000 | 19.25 | 14.5 | 4.20 | 5/8 x 5/16 | 2.375 |



FOR SHAFT SPEED DIVIDE INPUT SPEED BY HELICAL GEAR RATIO.

Fan Cooling for Cone Drive Helical/Worm D Flange Gearhead

MODEL NUMBERS FMU, FMV, FSM, FSMU, FSMV

Cone Drive fan-cooled helical worm double reduction gearmotors are available in all models size 40 through 100. (see note below.) They are identical with standard models except for the use of an extended worm shaft, fan and air-flow control cover.

The control cover directs air over the lower portion of the reducer housing and the fins on the housing guide the air for maximum cooling efficiency.

Thermal horsepower ratings are naturally increased with fan cooling

All size 40 fan-cooled models have thermal horsepower ratings equal to mechanical horsepower ratings, regardless of ratio. In the rating table on this page are shown thermal horsepower ratings for certain ratios of size 50 through size 80 models. Any ratio and speed not listed is limited to the maximum thermal ratings found on ratings page of this section.

| CLEARANCE DIMENSION FROM CENTERLINE OF UNIT OVER FAN COVER | | | | | | |
|--|-----|-----|------|------|------|------|
| SIZE | 40 | 50 | 60 | 70 | 80 | 100 |
| DIM. | 8.0 | 9.5 | 10.2 | 12.9 | 14.3 | 16.5 |

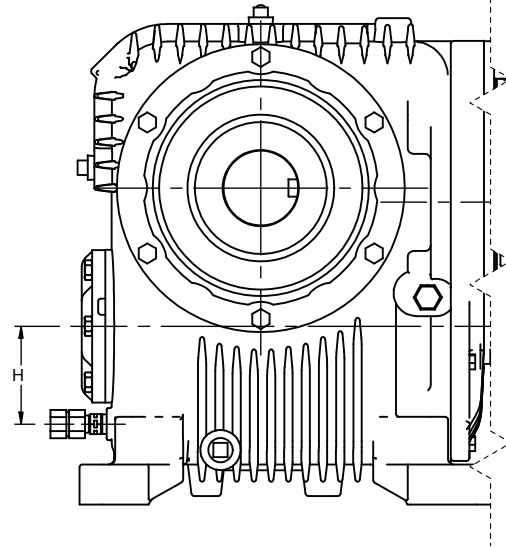
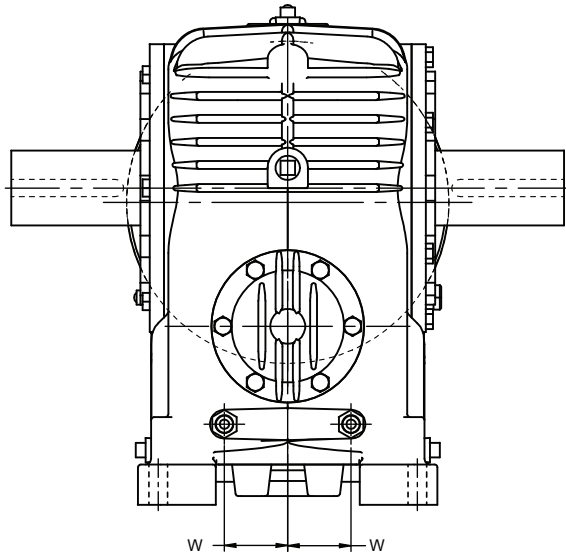
Thermal Ratings
 of Fan Cooled Gearmotors

| UNIT SIZE | TOTAL RATIO | INPUT RPM | | |
|-----------|--|-----------|------|------|
| | | 870 | 1150 | 1750 |
| 40 | ALL RATINGS ARE EQUAL TO MECHANICAL RATING OF SIZE 40 HELICAL/WORM D-FLANGE GEARHEAD IN THIS SECTION | | | |
| 50 | 5:1 | 29.0 | 36.3 | 49.6 |
| | 7.5:1 | 23.3 | 25.7 | 37.0 |
| | 9:1 | 21.6 | 24.7 | 33.3 |
| | 10:1 | 23.8 | 28.0 | 34.4 |
| | 12.5:1 | | 20.2 | 24.6 |
| 60 | 15:1 | 17.1 | 21.4 | 28.3 |
| | 5:1 | 29.0 | 37.5 | 53.0 |
| | 7.5:1 | 24.6 | 27.4 | 38.4 |
| | 9:1 | 22.1 | 26.3 | 35.8 |
| | 10:1 | 25.4 | 32.3 | 43.8 |
| 70 | 12.5:1 | | 21.6 | 26.8 |
| | 15:1 | 18.1 | 22.8 | 31.3 |
| | 18:1 | 16.9 | 20.0 | 28.5 |
| | 5:1 | 47.6 | 56.0 | 76.4 |
| | 7.5:1 | 35.9 | 39.5 | 55.4 |
| | 9:1 | 33.2 | 38.0 | 51.6 |
| | 10:1 | 36.5 | 46.7 | 63.2 |
| | 12.5:1 | | 31.1 | 38.6 |
| | 15:1 | 26.3 | 32.9 | 45.1 |
| | 18:1 | 24.3 | 28.9 | 41.2 |
| | 22.5:1 | 22.9 | 26.4 | 37.7 |
| | 25:1 | | 22.6 | 31.7 |
| | 30:1 | 20.2 | 22.1 | 29.4 |
| 36:1 | 16.8 | 22.1 | 26.5 | |
| 45:1 | 16.4 | 18.2 | 24.6 | |
| 50:1 | | 15.6 | 20.9 | |
| 54:1 | 11.9 | 14.8 | 19.6 | |
| 72:1 | 10.8 | 12.5 | 15.6 | |
| 80 | 5:1 | 51.0 | 60.0 | 82.0 |
| | 7.5:1 | 38.5 | 42.4 | 59.5 |
| | 9:1 | 35.7 | 40.7 | 55.4 |
| | 10:1 | 39.1 | 50.0 | 67.8 |
| | 12.5:1 | | 33.4 | 41.4 |
| | 15:1 | 28.1 | 35.3 | 48.4 |
| | 18:1 | 26.0 | 31.1 | 44.1 |
| | 20:1 | 26.8 | 33.3 | 47.8 |
| | 22.5:1 | 24.5 | 28.3 | 40.5 |
| | 25:1 | | 24.3 | 34.0 |
| | 30:1 | 21.7 | 23.8 | 31.5 |
| | 36:1 | 18.1 | 25.2 | 29.7 |
| | 37.5:1 | | 19.3 | 26.4 |
| | 45:1 | 17.7 | 19.6 | 26.3 |
| 50:1 | | 16.7 | 22.4 | |
| 54:1 | 12.8 | 15.8 | 21.1 | |
| 72:1 | 11.3 | 14.3 | 18.2 | |
| 100 | CONTACT CONE DRIVE ENGINEERING FOR RATINGS | | | |

Water Cooling Inlet and Outlet Locations for Cone Drive Helical/Worm D Flange Gearhead

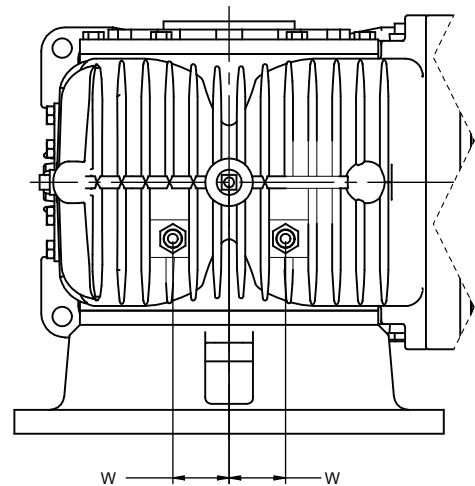
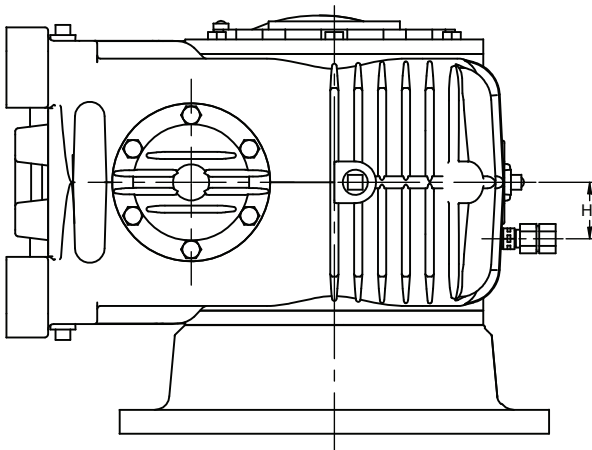
Model MU Shown SMU, MV, SMV, SM

Floor Mounted Position Shown



MV and SMV Shown Sizes 70-100 only

Floor Mounted Position Shown



| MODELS | SIZE | W | H | FEMALE THREAD |
|----------|------|------|------|---------------|
| MU MV SM | 40 | 2.43 | 3.50 | 3/8 - 18 NPT |
| MU MV SM | 50 | 2.25 | 3.75 | 3/8 - 18 NPT |
| MU MV SM | 60 | 2.06 | 4.44 | 3/8 - 18 NPT |
| MU SM | 70 | 3.25 | 5.88 | 3/8 - 18 NPT |
| MU SM | 80 | 3.25 | 5.88 | 3/8 - 18 NPT |
| MU SM | 100 | 4.25 | 8.00 | 3/8 - 18 NPT |

| MODELS | SIZE | W | H | FEMALE THREAD |
|--------|------|------|------|---------------|
| MV | 70 | 3.00 | 3.75 | 3/8 - 18 NPT |
| MV | 80 | 3.50 | 3.75 | 3/8 - 18 NPT |
| MV | 100 | 5.00 | 4.25 | 3/8 - 18 NPT |

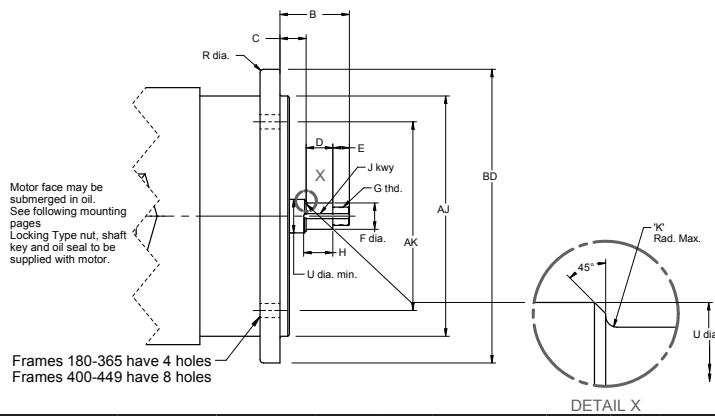
IMPORTANT: WHEN ASSEMBLING EXTERNAL PIPING TO REDUCER INLET AND OUTLET FITTINGS A BACKUP WRENCH MUST BE USED ON REDUCER FITTINGS TO PREVENT TURNING TO AVOID DAMAGE TO COOLING COIL INSIDE UNIT.

INLET AND OUTLET LOCATIONS MAY VARY DEPENDING ON MOUNTING POSITION OF UNIT. COOLING COILS SUPPLIED MAY BE EITHER PLAIN OR FINNED O.D. TUBING.

Cone Drive Helical/Worm D Flange Gearhead

Dimensions for Mounting NEMA 'D' Flange Motor

Standard Helical Stocked Ratios are:
 1:1, 1.5:1, 1.8:1, 2.5:1, and 4:1. Other ratios are also available. For information Contact Cone Drive.
 2.5:1 and 4:1 ratios are not available with all motor shaft sizes. See chart below.



| FRAME | AK | AJ | BD | B | C | D | E | +0.000 F -0.0005 | G | H | K | J | U | R | RATIOS | HELICAL PINION DET. |
|--|-------|-------|-------|-------|-------|-------|------|---------------------|-----------------------|------|-----|-------------|------|-----|--------------------------|---------------------|
| REDUCER SIZES: 25 & 30, HELICAL C.D. 3.000 | | | | | | | | | | | | | | | | |
| 180DZ-210DZ 140TDZ-184TDZ* | 9.00 | 10.00 | 11.00 | 2.375 | .968 | .968 | .44 | .6697 | 1/2 - 20 | 1.00 | .06 | 3/16 x 3/32 | .88 | .53 | all ratios | 30-700 |
| 210TDZ-215TDZ* | 9.00 | 10.00 | 11.00 | 2.688 | .875 | 1.062 | .75 | .9847 | 7/8 - 14 | 1.12 | .06 | 3/16 x 3/32 | 1.38 | .53 | all ratios but 2.5:1,4:1 | 30-710 |
| 210TDZ-215TDZ* | 9.00 | 10.00 | 11.00 | 2.375 | .968 | .968 | .44 | .6697 | 1/2 - 20 | 1.00 | .06 | 3/16 x 3/32 | .88 | .53 | for ratios 2.5:1,4:1 | 30-700 |
| REDUCER SIZES: 35 & 40, HELICAL C.D. 4.000 | | | | | | | | | | | | | | | | |
| 180DZ-210DZ 140TDZ-184TDZ | 9.00 | 10.00 | 11.00 | 2.375 | .968 | .968 | .44 | .6697 | 1/2 - 20 | 1.00 | .06 | 3/16 x 3/32 | .88 | .53 | all ratios | 40-700 |
| 210TDZ-215TDZ | 9.00 | 10.00 | 11.00 | 2.688 | .875 | 1.062 | .75 | .9847 | 7/8 - 14 | 1.12 | .06 | 3/16 x 3/32 | 1.38 | .53 | all ratios | 40-710 |
| 254UDZ-286UDZ 250TDZ-256TDZ* | 11.00 | 12.50 | 14.00 | 3.094 | 1.281 | 1.218 | .59 | .9847 | 7/8 - 14 | 1.31 | .06 | 3/16 x 3/32 | 1.50 | .81 | all ratios | 40-710 |
| REDUCER SIZES: 50 & 60, HELICAL C.D. 5.375 | | | | | | | | | | | | | | | | |
| 180DZ-210DZ 140TDZ-184TDZ | 9.00 | 10.00 | 11.00 | 2.375 | .968 | .968 | .44 | .6697 | 1/2-20 | 1.00 | .06 | 3/16 x 3/32 | .88 | .53 | all ratios | 53-700 |
| 210TDZ-215TDZ | 9.00 | 10.00 | 11.00 | 2.688 | .875 | 1.062 | .75 | .9847 | 7/8-14 | 1.12 | .06 | 3/16 x 3/32 | 1.38 | .53 | all ratios | 53-710 |
| 254UDZ-286UDZ 250TDZ-256TDZ | 11.00 | 12.50 | 14.00 | 3.094 | 1.281 | 1.218 | .59 | .9847 | 7/8-14 | 1.31 | .06 | 3/16 x 3/32 | 1.50 | .81 | all ratios | 53-710 |
| 280TDZ-286TDZ | 11.00 | 12.50 | 14.00 | 3.875 | .968 | 1.593 | 1.31 | 1.5013 | 1 1/4-12 | 1.68 | .12 | 3/8 x 3/16 | 1.88 | .81 | all ratios but 4:1 | 53-720 |
| 320UDZ-360UDZ 320TDZ-326TDZ | 14.00 | 16.00 | 18.00 | 4.750 | 1.875 | 1.562 | 1.31 | 1.5013 | 1 1/4 - 12 | 1.75 | .12 | 3/8 x 3/16 | 1.88 | .81 | all ratios but 4:1 | 53-720 |
| 280TDZ-286TDZ | 11.00 | 12.50 | 14.00 | 3.094 | 1.281 | 1.218 | .59 | .9847 | 7/8-14 | 1.31 | .06 | 3/16 x 3/32 | 1.50 | .81 | for 4:1 ratios | 53-710 |
| 320UDZ-360UDZ 320TDZ-326TDZ | 14.00 | 16.00 | 18.00 | 3.906 | 2.093 | 1.218 | .59 | .9847 | 7/8-14 | 1.31 | .06 | 3/16 x 3/32 | 1.50 | .81 | for 4:1 ratio | 53-710 |
| REDUCER SIZES: 70 & 80, 100L HELICAL C.D. 6.719 | | | | | | | | | | | | | | | | |
| 210TDZ-215TDZ | 9.00 | 10.00 | 11.00 | 2.688 | .875 | 1.062 | .75 | .9847 | 7/8-14 | 1.12 | .06 | 3/16 x 3/32 | 1.38 | .53 | all ratios | 67-715 |
| 254UDZ-286UDZ 250TDZ-256TDZ | 11.00 | 12.50 | 14.00 | 3.094 | 1.281 | 1.218 | .59 | .9847 | 7/8-14 | 1.31 | .06 | 3/16 x 3/32 | 1.50 | .81 | all ratios | 67-715 |
| 280TDZ-286TDZ | 11.00 | 12.50 | 14.00 | 3.875 | .968 | 1.593 | 1.31 | 1.5013 | 1 1/4-12 | 1.68 | .12 | 3/8 x 3/16 | 1.88 | .81 | all ratios | 67-725 |
| 320UDZ-360UDZ 320TDZ-326TDZ | 14.00 | 16.00 | 18.00 | 4.750 | 1.875 | 1.562 | 1.31 | 1.5013 | 1 1/4 - 12 | 1.75 | .12 | 3/8 x 3/16 | 1.88 | .81 | all ratios | 67-725 |
| 360TDZ-365TDZ | 14.00 | 16.00 | 18.00 | 5.000 | 1.875 | 1.687 | 1.44 | 1.875 | 1 1/2-12 | 1.88 | .12 | 1/2 x 1/4 | 2.38 | .81 | all ratios but 4:1 | 67-730 |
| 400UDZ-445UDZ 400TDZ-445TDZ | 18.00 | 20.00 | 22.00 | 5.000 | 1.812 | 1.687 | 1.50 | 1.875 | 1 1/2 - 12 | 1.88 | .12 | 1/2 x 1/4 | 2.38 | .81 | all ratios but 4:1 | 67-730 |
| 360TDZ-365TDZ | 14.00 | 16.00 | 18.00 | 4.750 | 1.875 | 1.562 | 1.31 | 1.5013 | 1 1/4-12 | 1.75 | .12 | 3/8 x 3/16 | 1.88 | .81 | for 4:1 | 67-725 |
| 400UDZ-445UDZ 400TDZ-445TDZ | 18.00 | 20.00 | 22.00 | 4.688 | 1.812 | 1.562 | 1.31 | 1.5013 | 1 1/4 - 12 | 1.75 | .12 | 3/8 x 3/16 | 1.88 | .81 | for 4:1 | 67-725 |
| REDUCER SIZE: 100, HELICAL C.D. 9.750 | | | | | | | | | | | | | | | | |
| 324UDZ-365UDZ 324TDZ-365TDZ | 14.00 | 16.00 | 18.00 | 4.75 | 1.250 | 2.687 | .75 | 1.875 | 1.767-18 1.731P.D. | 2.87 | .06 | 1/2 x 1/4 | 2.38 | .81 | all ratios | 97-735 |
| 400UDZ-445UDZ 400TDZ-449TDZ | 18.00 | 20.00 | 22.00 | 5.375 | 1.875 | 2.687 | .81 | 2.375 | 2.360-18 2.324P.D. | 2.87 | .06 | 5/8 x 5/16 | 2.81 | .81 | all ratios but 4:1 | 97-740 |
| 400UDZ-445UDZ 400TDZ-449TDZ | 18.00 | 20.00 | 22.00 | 5.312 | 1.875 | 2.687 | .75 | 1.875 | 1.767-18 1.731P.D. | 2.87 | .06 | 1/2 x 1/4 | 2.38 | .81 | all ratios | 97-735 |

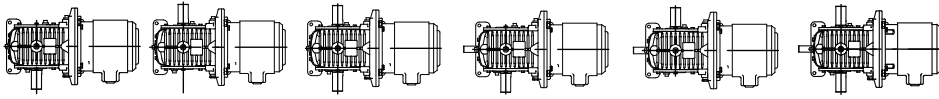
*Reducers marked with asterisk do not require motor adapters.

Assembly & Mounting Position Numbers for Cone Drive Helical/Worm D Flange Gearhead

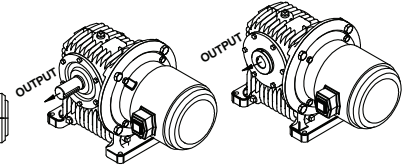
Models MU, SMU, MV, SMV, SM, Solid & Hollow Shaft

ALL DIAGRAMS SHOW REDUCER WITH FEET ON FAR SIDE

Top View, Floor Mounted

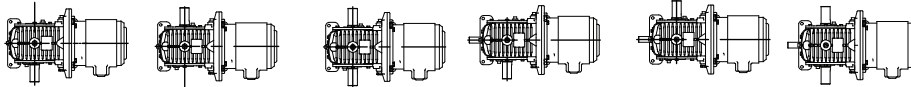


1.....2.....3.....4.....5.....6

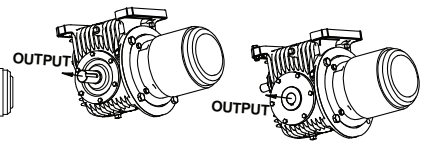


1 Shown

Ceiling Mounted*

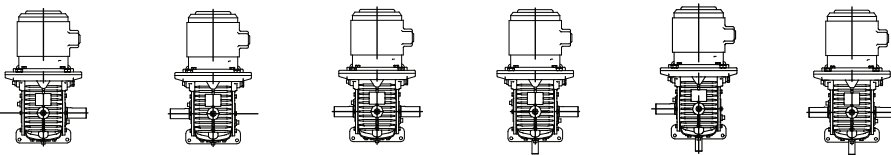


C1.....C2.....C3.....C4.....C5.....C6

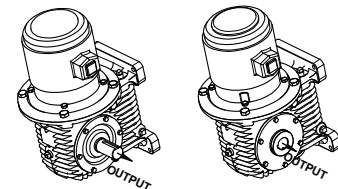


C2 Shown

Wall Mounted, Motor Up

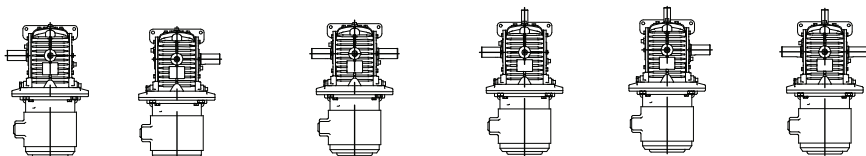


W1.....W2.....W3.....W4.....W5.....W6

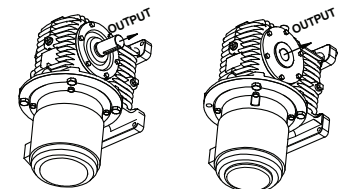


W1 Shown

Wall Mounted, Motor Down*

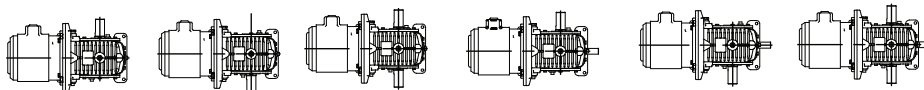


X1.....X2.....X3.....X4.....X5.....X6

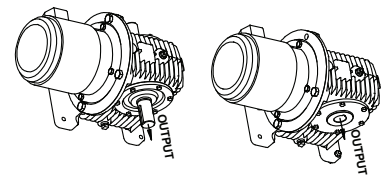


X2 Shown

Wall Mounted, Motor To Left*

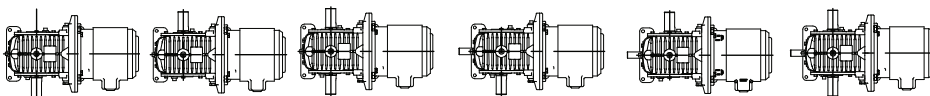


Y1.....Y2.....Y3.....Y4.....Y5.....Y6

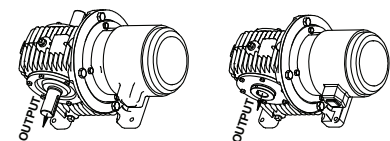


Y2 Shown

Wall Mounted, Motor To Right



Z1.....Z2.....Z3.....Z4.....Z5.....Z6



Z1 Shown

*Motor face may be submerged in oil. Contact motor supplier regarding shaft seal requirements.

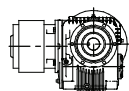
Assembly & Mounting Position Numbers for Cone Drive Helical/Worm D Flange Gearhead

Models MV, SMV - Solid & Hollow Shaft

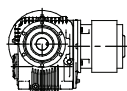
ALL DIAGRAMS SHOW REDUCER WITH BASE ON FAR SIDE

| | | |
|-----------|------------|----------------------------------|
| RV | SRV | |
| A | A | Gearshaft Extended Opposite Base |
| BR | B | Gearshaft Extended Through Base |
| SD | C | Gearshaft Double Extended |

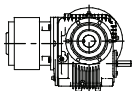
Floor Mounted - Top View*



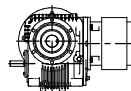
MV **SMV**
 1A 1A
 1BR 1B
 1SD 1C



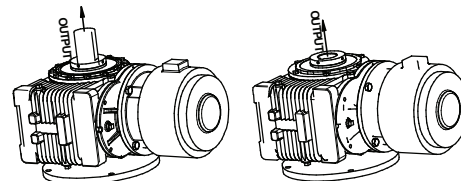
MV **SMV**
 2A 2A
 2BR 2B
 2SD 2C



MV **SMV**
 3A 3A
 3BR 3B
 3SD 3C

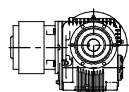


MV **SMV**
 4A 4A
 4BR 4B
 4SD 4C

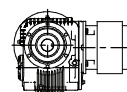


2A Shown

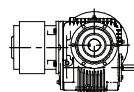
Ceiling Mounted*



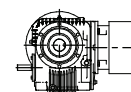
MV **SMV**
 C1A C1A
 C1BR C1B
 C1SD C1C



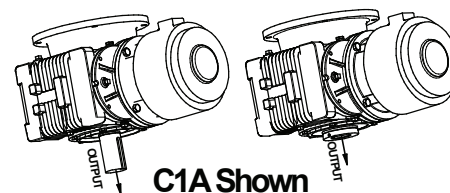
MV **SMV**
 C2A C2A
 C2BR C2B
 C2SD C2C



MV **SMV**
 C3A C3A
 C3BR C3B
 C3SD C3C

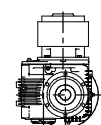


MV **SMV**
 C4A C4A
 C4BR C4B
 C4SD C4C

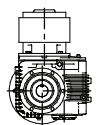


C1A Shown

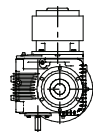
Wall Mounted - Motor Up



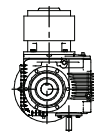
MV **SMV**
 W1A W1A
 W1BR W1B
 W1SD W1C



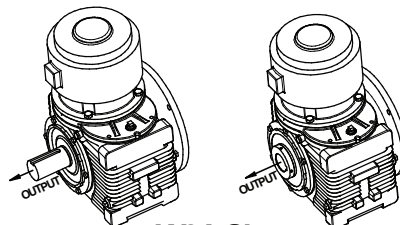
MV **SMV**
 W2A W2A
 W2BR W2B
 W2SD W2C



MV **SMV**
 W3A W3A
 W3BR W3B
 W3SD W3C

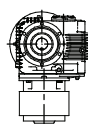


MV **SMV**
 W4A W4A
 W4BR W4B
 W4SD W4C

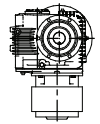


W2A Shown

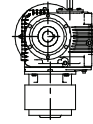
Wall Mounted - MotorDown*



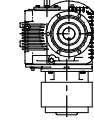
MV **SMV**
 X1A X1A
 X1BR X1B
 X1SD X1C



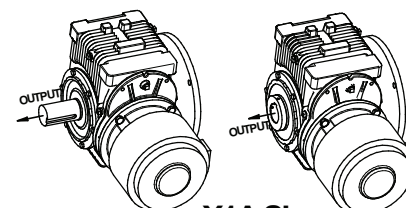
MV **SMV**
 X2A X2A
 X2BR X2B
 X2SD X2C



MV **SMV**
 X3A X3A
 X3BR X3B
 X3SD X3C

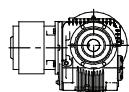


MV **SMV**
 X4A X4A
 X4BR X4B
 X4SD X4C

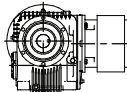


X1A Shown

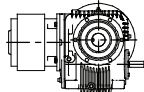
Wall Mounted - Worm Under



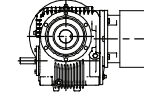
MV **SMV**
 Y1A Y1A
 Y1BR Y1B
 Y1SD Y1C



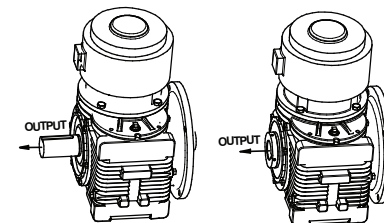
MV **SMV**
 Y2A Y2A
 Y2BR Y2B
 Y2SD Y2C



MV **SMV**
 Y3A Y3A
 Y3BR Y3B
 Y3SD Y3C

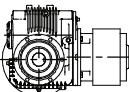


MV **SMV**
 Y4A Y4A
 Y4BR Y4B
 Y4SD Y4C

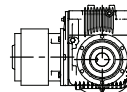


Y2A Shown

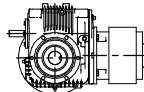
Wall Mounted - Worm Over



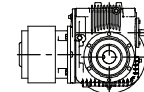
MV **SMV**
 Z1A Z1A
 Z1BR Z1B
 Z1SD Z1C



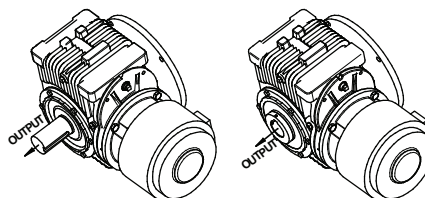
MV **SMV**
 Z2A Z2A
 Z2BR Z2B
 Z2SD Z2C



MV **SMV**
 Z3A Z3A
 Z3BR Z3B
 Z3SD Z3C



MV **SMV**
 Z4A Z4A
 Z4BR Z4B
 Z4SD Z4C



Z1A Shown

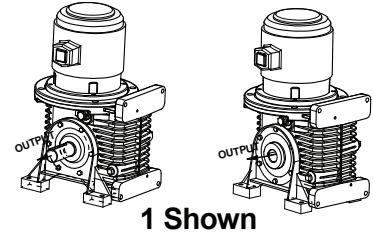
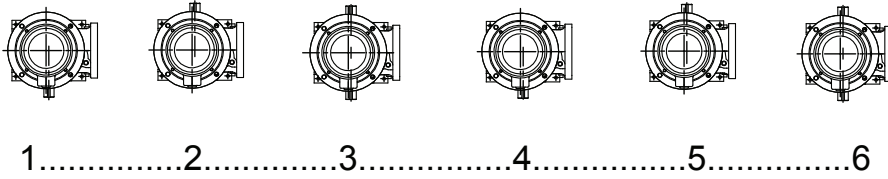
*Motor face may be submerged in oil. Contact motor supplier regarding shaft seal requirements.

Assembly & Mounting Position Numbers for Cone Drive Helical/Worm D Flange Gearhead

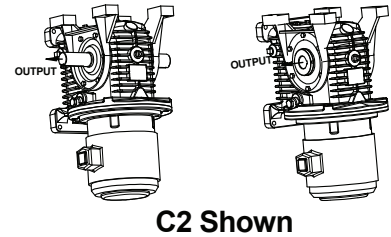
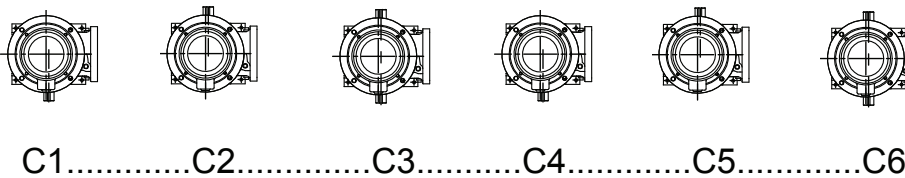
Models VM, SVM - Solid & Hollow Shaft

ALL DIAGRAMS SHOW REDUCER WITH FEET ON FAR SIDE. DIAGRAMS 4-6 HAVE SHAFT EXTENSION OPPOSITE MOTOR END.

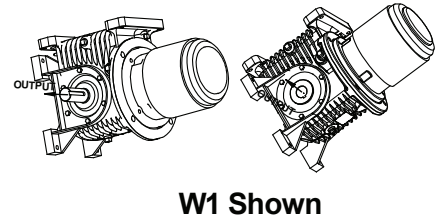
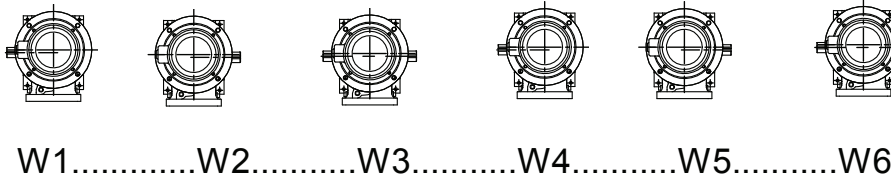
Top View, Floor Mounted



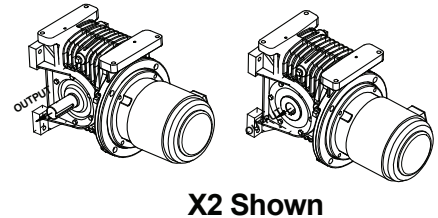
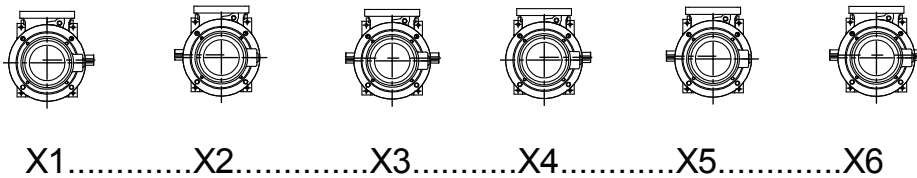
Ceiling Mounted*



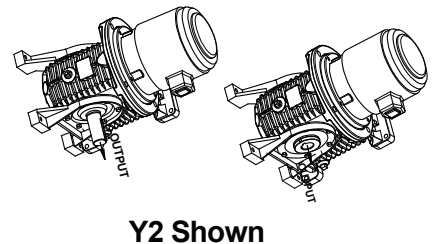
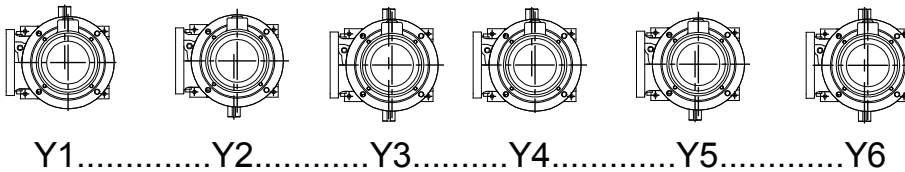
Wall Mounted, Worm Under Horizontal Gearshaft



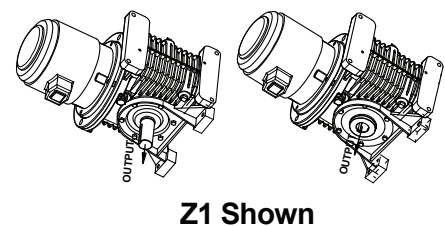
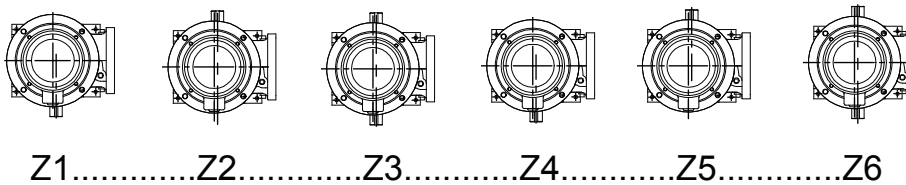
Wall Mounted, Worm Over Horizontal Gearshaft*



Wall Mounted, Worm Left Vertical Gearshaft*



Wall Mounted, Worm Right Vertical Gearshaft*



*Motor face may be submerged in oil. Contact motor supplier regarding shaft seal requirements.