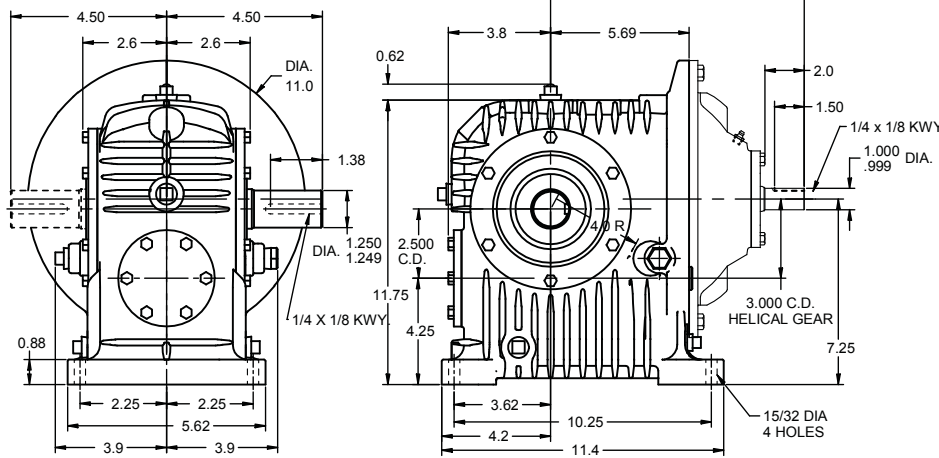
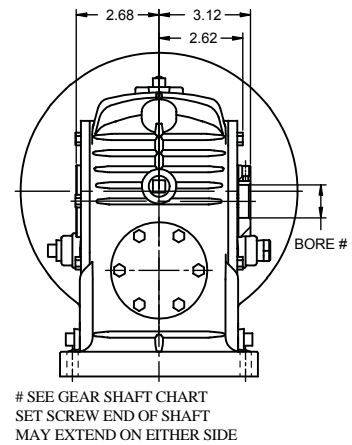


# Cone Drive Helical/Worm Speed Reducer - 2.500" C.D. Size 25 Solid Shaft

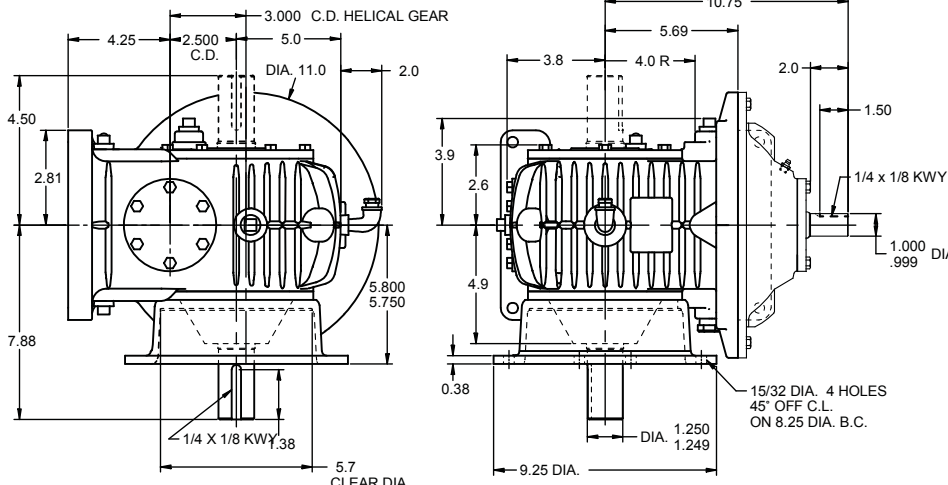
**Model RU** est. net wt. 95 lbs



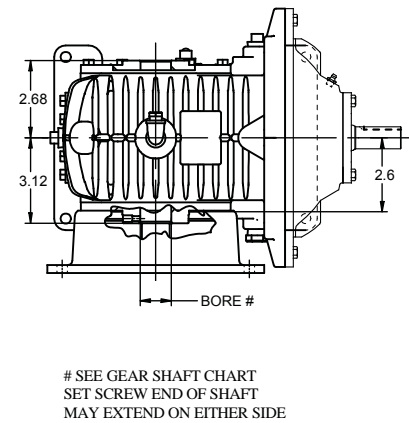
**Hollow Shaft**  
**SRU** est. net wt. 95 lbs



**Model RV** est. net wt. 95 lbs

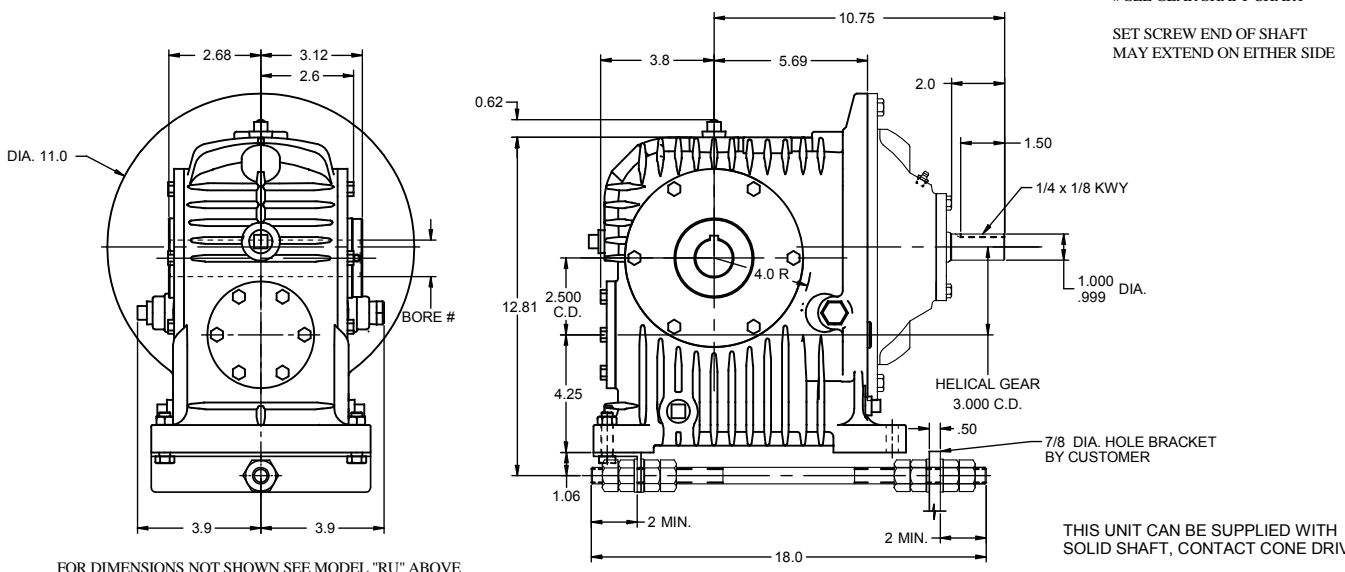


**SRV** est. net wt. 95 lbs



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

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

# 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

**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

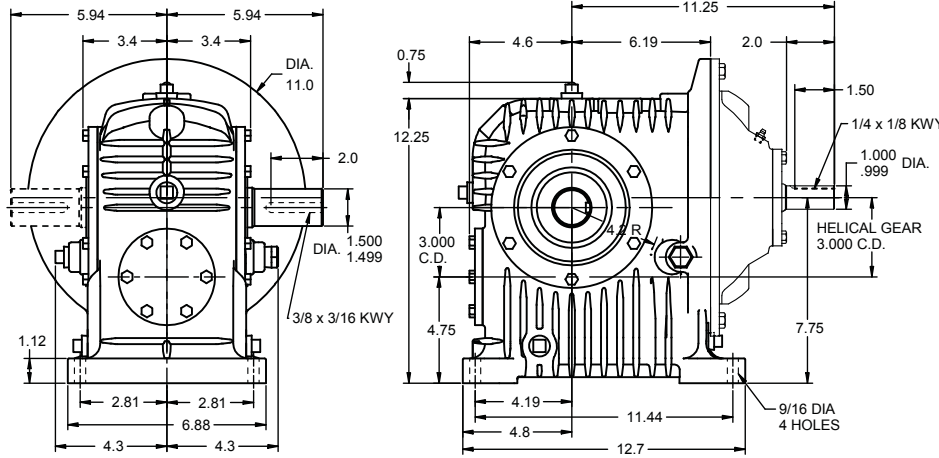
**Important:** In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an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

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

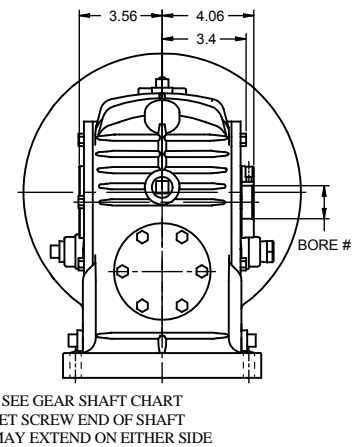
# Cone Drive Helical/Worm Speed Reducer - 3.000" C.D. Size 30 Solid Shaft

**Model RU** est. net wt. 125 lbs.

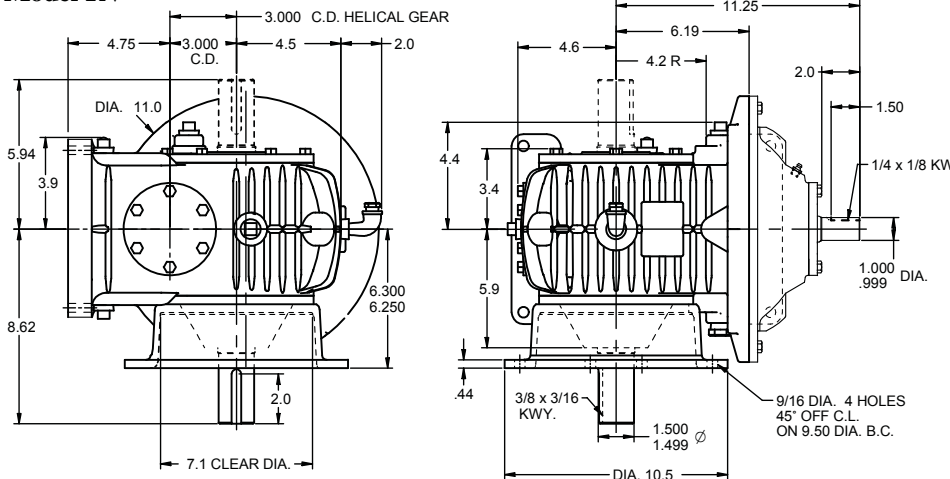


# Hollow Shaft

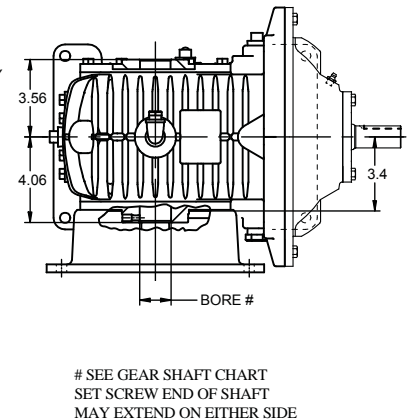
**SRU** est. net wt. 125 lbs.



**Model RV** est. net wt. 135 lbs.

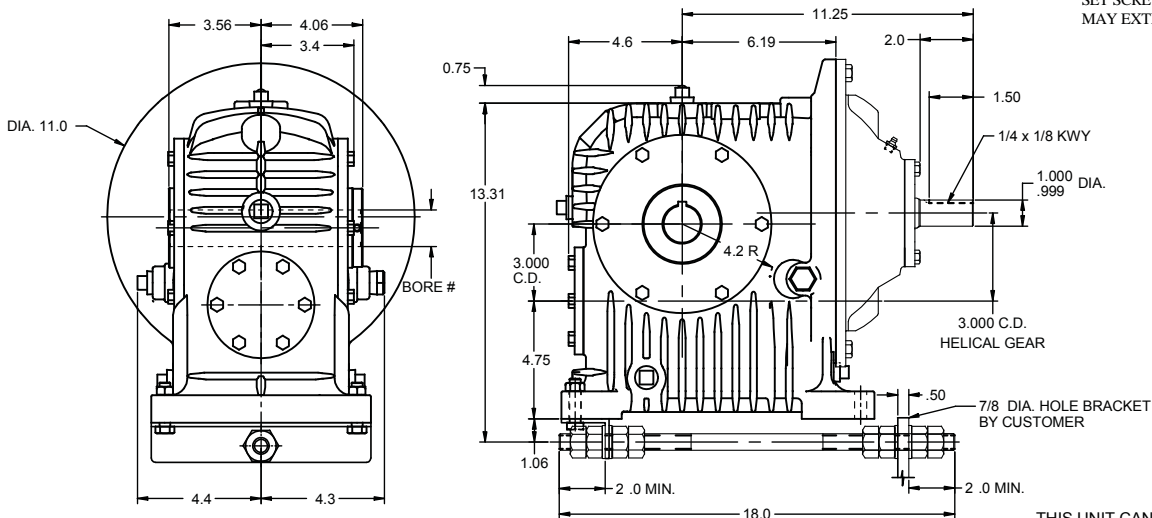


**SRV** est. net wt. 135 lbs.



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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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
<b>10:1</b> 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
<b>12.5:1</b> 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
<b>15:1</b> 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
<b>18:1</b> 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
<b>20:1</b> 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
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 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
<b>37.5:1</b> 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
<b>40:1</b> 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
<b>45:1</b> 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
<b>50:1</b> 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
<b>54:1</b> 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
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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

**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.

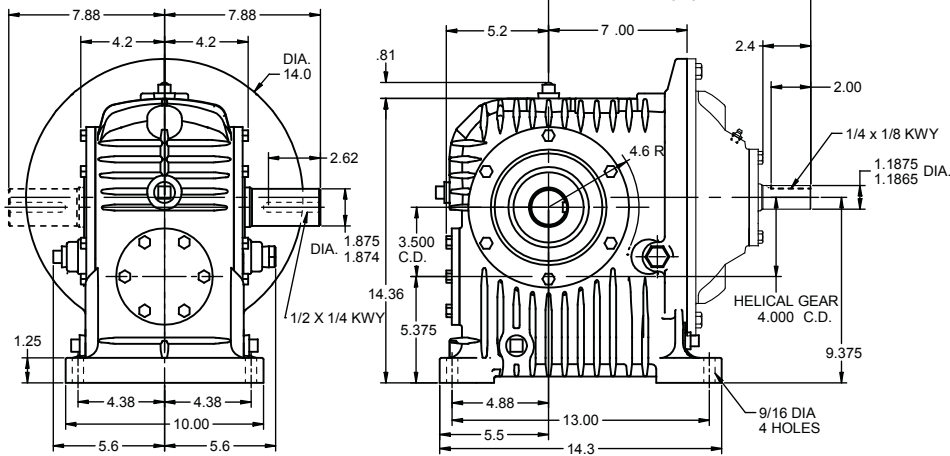
Me.HP - Mechanical horsepower      Th.HP - Thermal horsepower  
 O.T. - Output torque in Lb. in.

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.

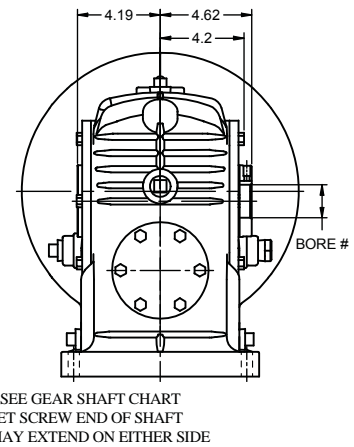
# Cone Drive Helical/Worm Speed Reducer - 3.500" C.D. Size 35 Solid Shaft

## Hollow Shaft

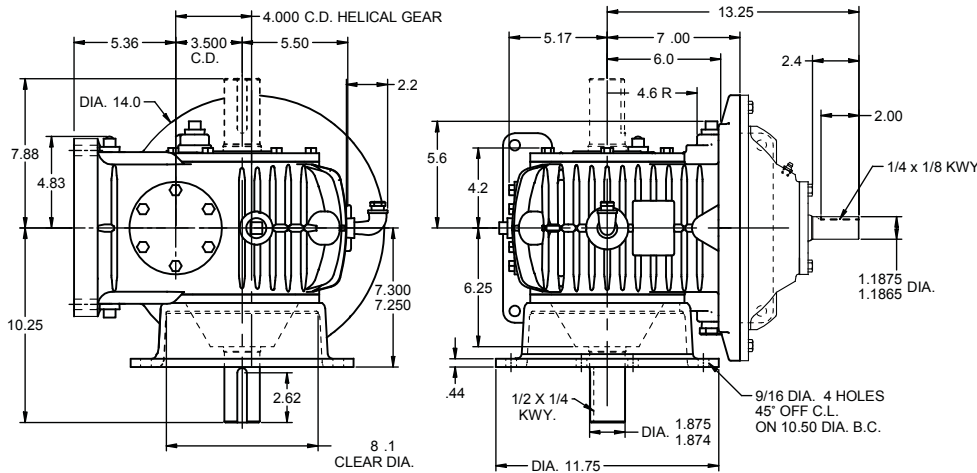
**Model RU** est. net wt. 220 lbs.



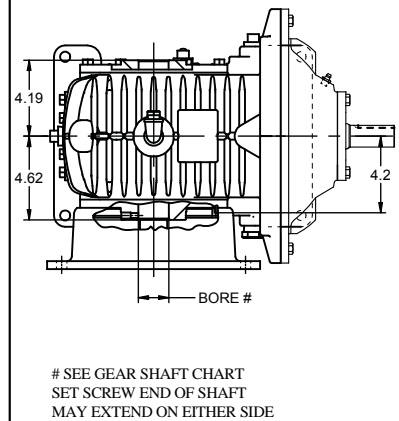
**SRU** est. net wt. 220 lbs.



**Model RV** est. net wt. 230 lbs.



**SRV** est. net wt. 230 lbs.

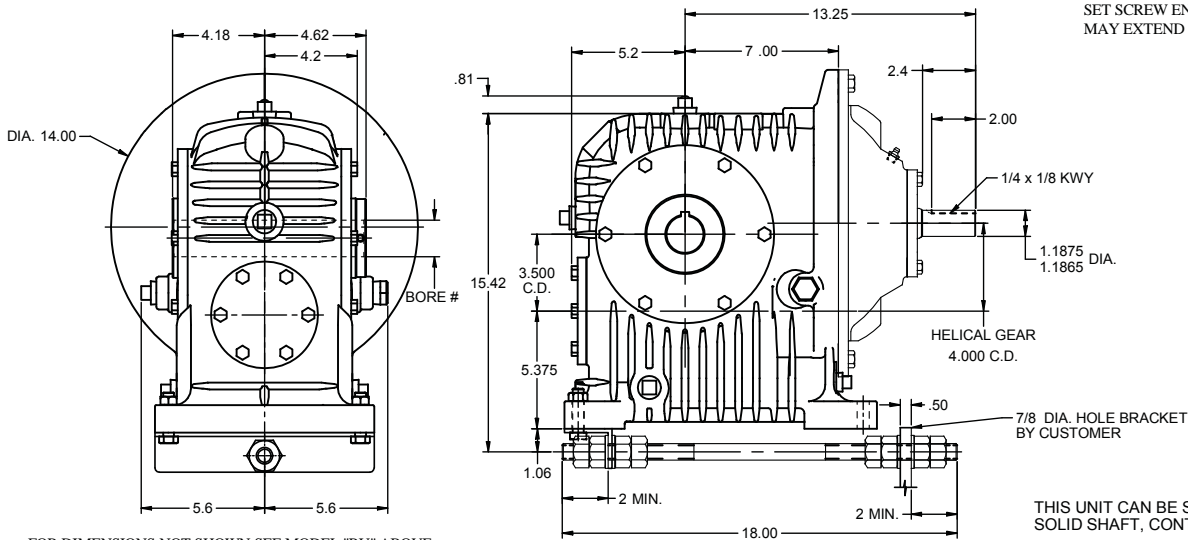


SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

**Model SR** est. net wt. 225 lbs.

# SEE GEAR SHAFT CHART

SET SCREW END OF SHAFT  
MAY EXTEND ON EITHER SIDE



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 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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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
<b>10:1</b> 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
<b>12.5:1</b> 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
<b>15:1</b> 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
<b>18:1</b> 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
<b>20:1</b> 4 x 5	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
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 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
<b>37.5:1</b> 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
<b>40:1</b> 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
<b>45:1</b> 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
<b>50:1</b> 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
<b>54:1</b> 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
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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

TOTAL RATIO PRIMARY X SECONDARY		INPUT RPM				
		100	580	870	1150	1750
<b>80:1</b> 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
<b>90:1</b> 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
<b>100:1</b> 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
<b>108:1</b> 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
<b>120:1</b> 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
<b>125:1</b> 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
<b>150:1</b> 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
<b>160:1</b> 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
<b>200:1</b> 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
<b>240:1</b> 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 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
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

**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.

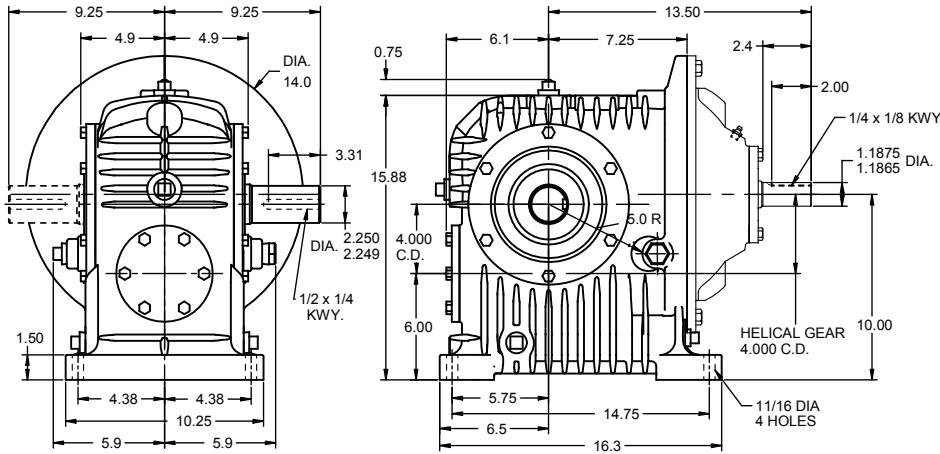
Me.HP - Mechanical horsepower Th.HP - Thermal horsepower  
O.T. - Output torque in Lb. in.

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

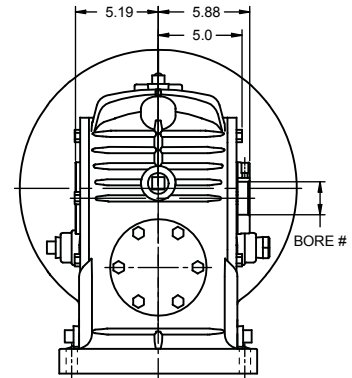
Size 40 Solid Shaft

Hollow Shaft

Model RU est. net wt. 275 lbs.

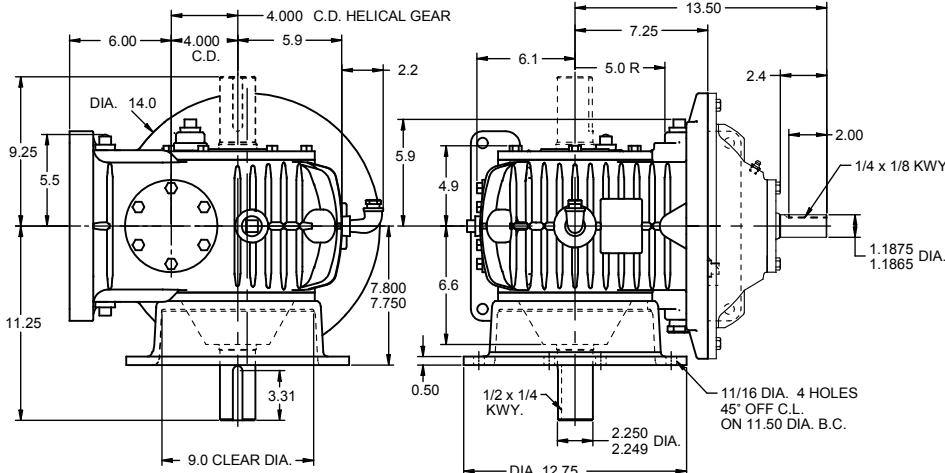


SRU est. net wt. 275 lbs.



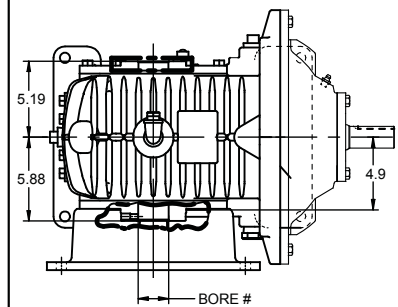
# SEE GEAR SHAFT CHART  
 SET SCREW END OF SHAFT  
 MAY EXTEND ON EITHER SIDE

Model RV est. net wt. 290 lbs.



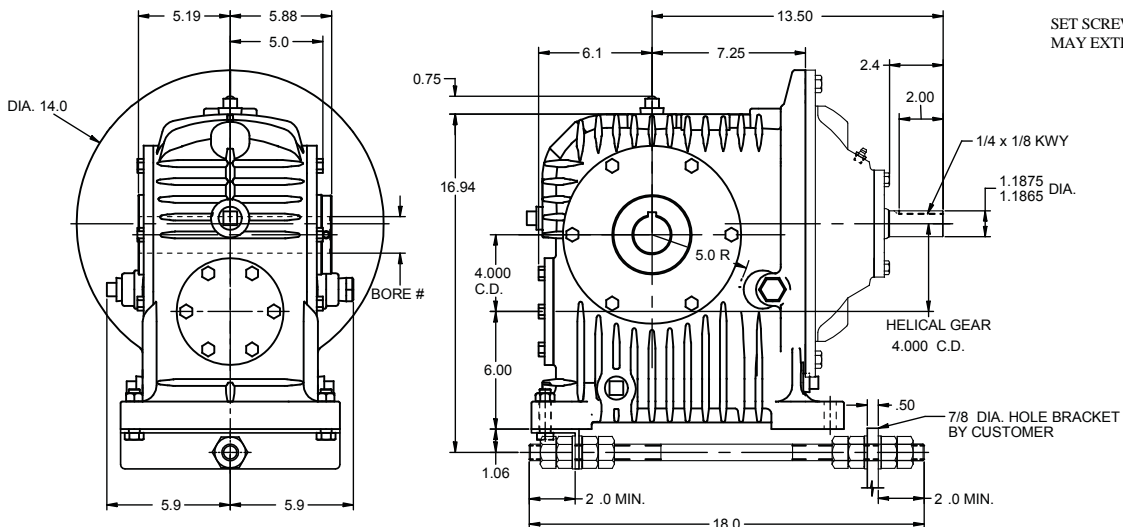
SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

SRV est. net wt. 290 lbs.



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

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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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
<b>10:1</b> 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
<b>12.5:1</b> 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
<b>15:1</b> 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
<b>18:1</b> 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
<b>20:1</b> 4 x 5	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
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 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
<b>37.5:1</b> 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
<b>40:1</b> 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
<b>45:1</b> 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
<b>50:1</b> 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
<b>54:1</b> 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
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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

**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.

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

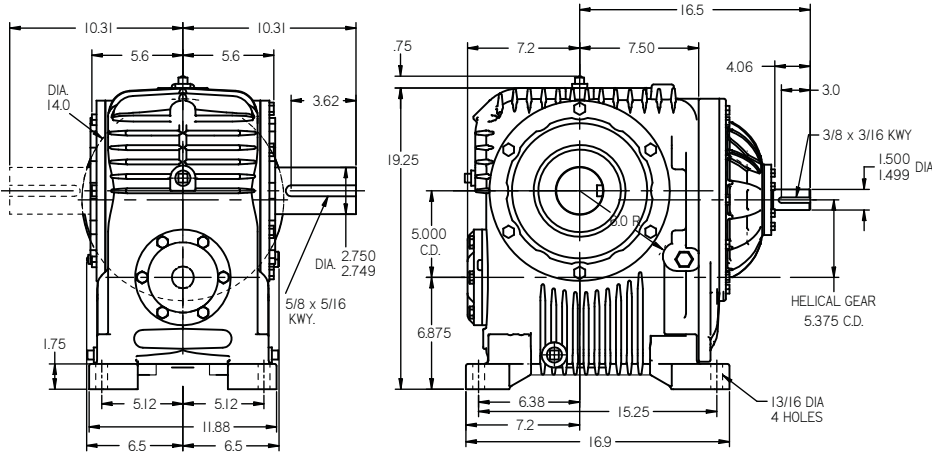
Special hollow gear shaft bore sizes are available at additional cost.  
 \*AGMA Standard Bore Tolerance: +.003, -.000  
 2 set screws at long end of shaft.



# Cone Drive Helical/Worm Speed Reducers - 5.000" C.D.

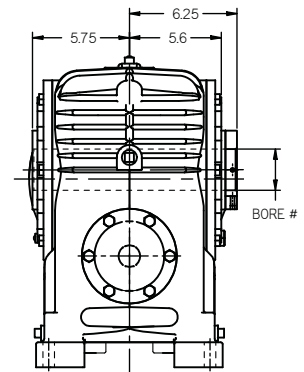
## Size 50 - Solid Shaft

**Model RU** est. net wt. 430 lbs



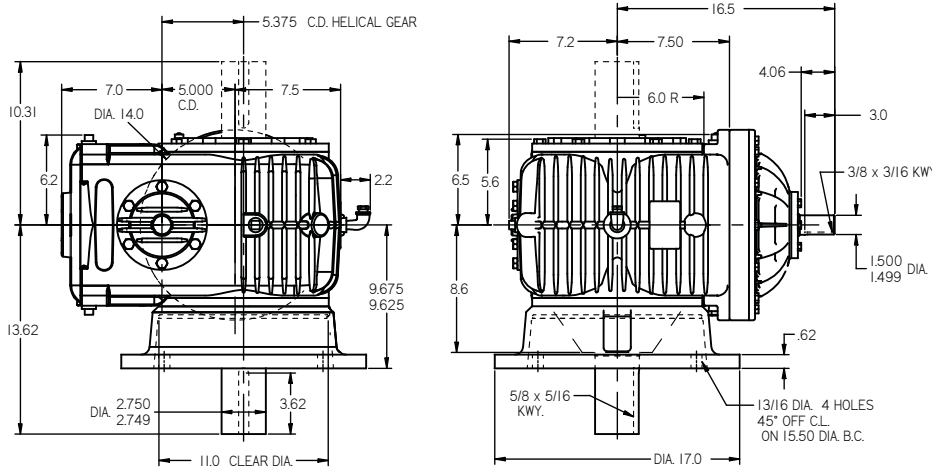
## Hollow Shaft

**SRU** est. net wt. 430 lbs.

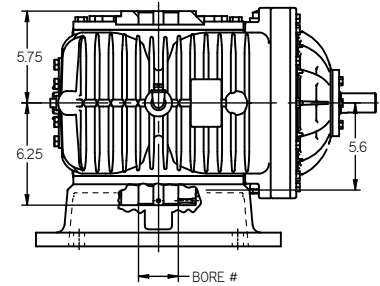


# SEE GEAR SHAFT CHART  
 SET SCREW END OF SHAFT  
 MAY EXTEND ON EITHER SIDE

**Model RV** est. net wt. 460 lbs



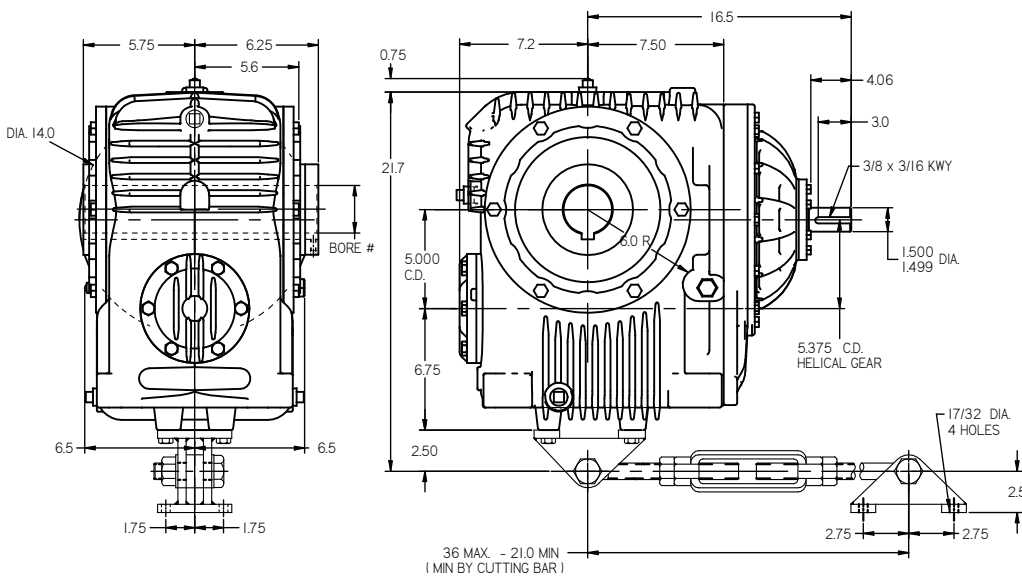
**SRV** est. net wt. 460 lbs



# 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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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
<b>10:1</b> 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
<b>12.5:1</b> 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
<b>15:1</b> 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
<b>18:1</b> 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
<b>20:1</b> 4 x 5	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
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 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
<b>37.5:1</b> 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
<b>40:1</b> 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
<b>45:1</b> 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
<b>50:1</b> 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
<b>54:1</b> 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
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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

**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
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.

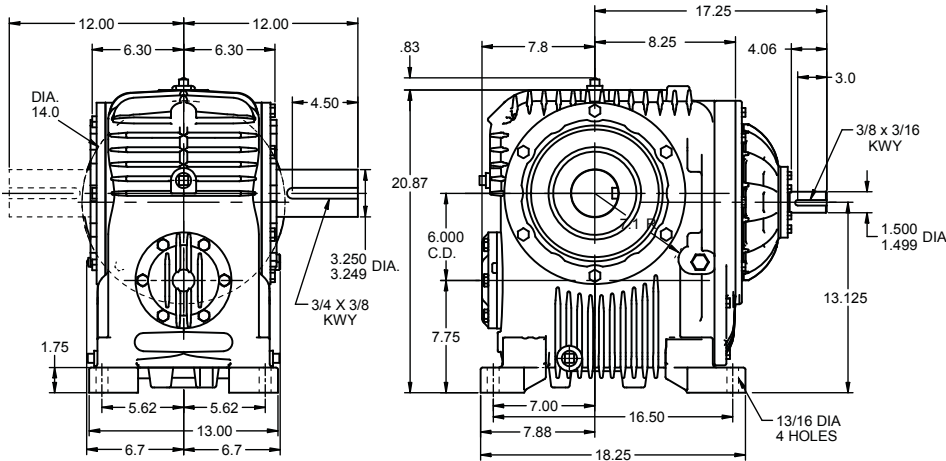
Special hollow gear shaft bore sizes are available at additional cost.  
 \*AGMA Standard Bore Tolerance: +.003, -.000  
 2 set screws at long end of shaft.

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

# Cone Drive Helical/Worm Speed Reducers - 6.000" C.D.

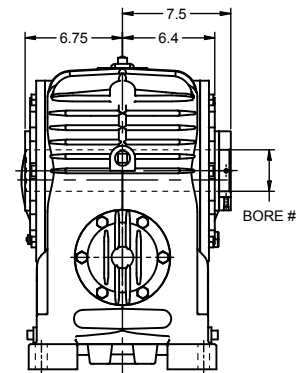
## Size 60 Solid Shaft

**Model RU** est. net wt. 545 lbs



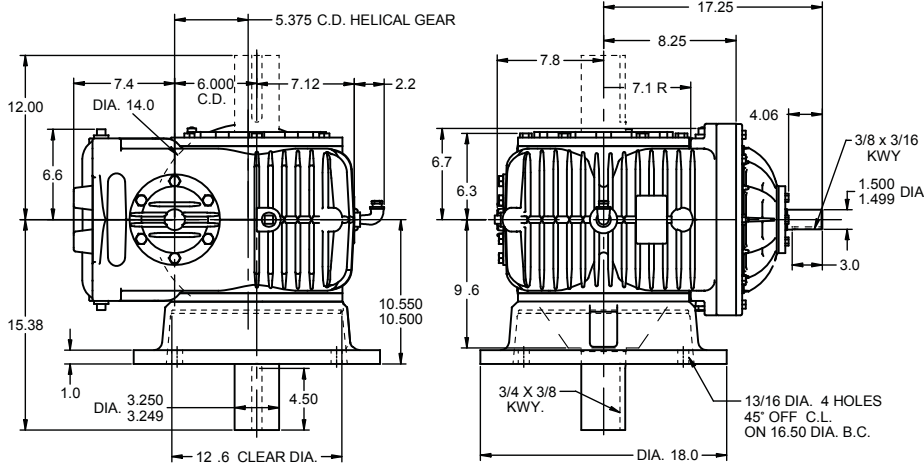
## Hollow Shaft

**SRU** est. net wt. 545 lbs

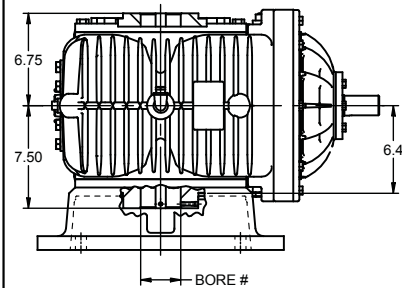


# SEE GEAR SHAFT CHART  
SET SCREW END OF SHAFT  
MAY EXTEND ON EITHER SIDE

**Model RV** est. net wt. 580 lbs



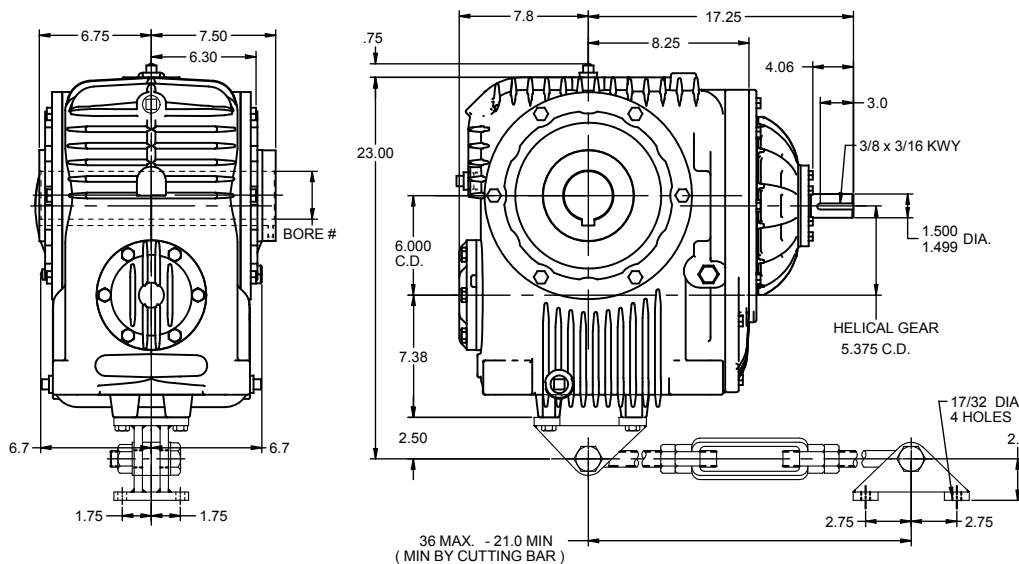
**SRV** est. net wt. 580 lbs



# 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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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
<b>10:1</b> 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	18600
<b>12.5:1</b> 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
<b>15:1</b> 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	23000
<b>18:1</b> 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	24300
<b>20:1</b> 4 x 5	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
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 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
<b>37.5:1</b> 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
<b>40:1</b> 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
<b>45:1</b> 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
<b>50:1</b> 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
<b>54:1</b> 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
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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
<b>80:1</b> 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
<b>90:1</b> 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
<b>100:1</b> 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
<b>108:1</b> 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
<b>120:1</b> 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
<b>125:1</b> 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
<b>150:1</b> 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
<b>160:1</b> 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
<b>175:1</b> 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
<b>200:1</b> 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
<b>240:1</b> 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
<b>280:1</b> 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

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.

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

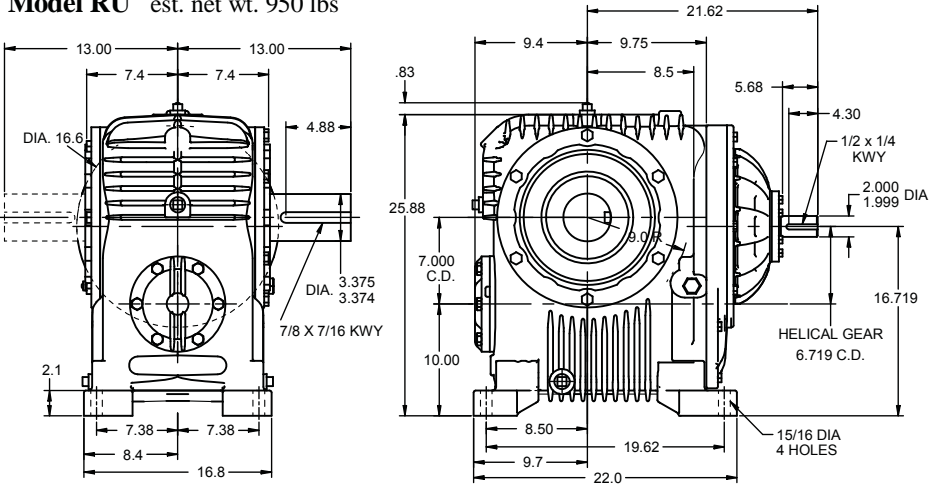
Special hollow gear shaft bore sizes are available at additional cost.

\*AGMA Standard Bore Tolerance: +.003, -.000  
 2 set screws at long end of shaft.

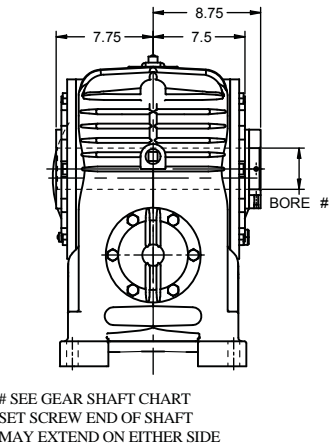
**Cone Drive Helical/Worm Speed Reducers - 7.000" C.D.**  
**Size 70 Solid Shaft**

**Hollow Shaft**

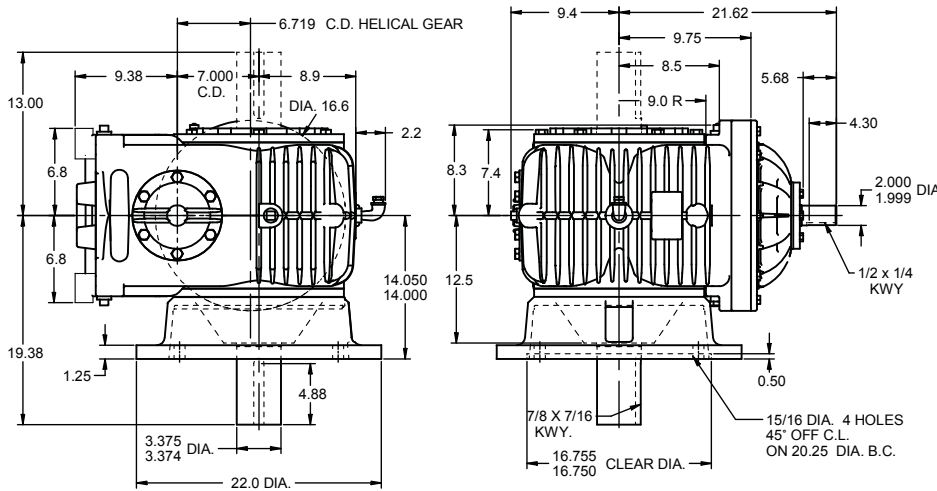
**Model RU** est. net wt. 950 lbs



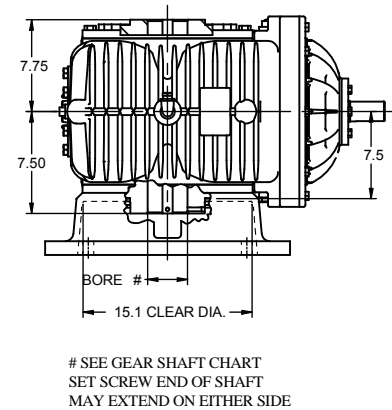
**SRU** est. net wt. 950 lbs



**Model RV** est. net wt. 1000 lbs

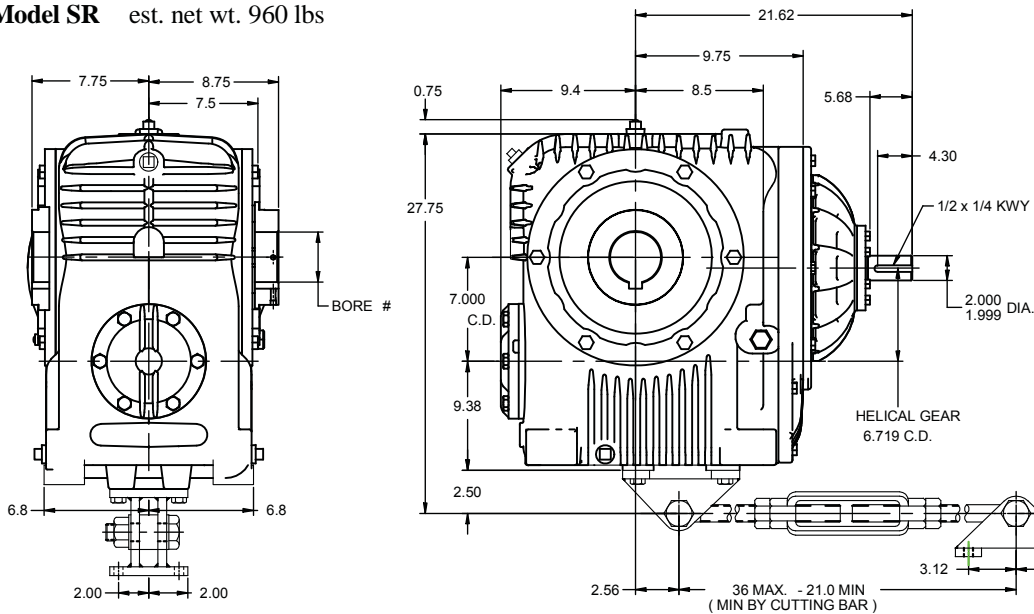


**SRV** est. net wt. 1000 lbs



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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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
<b>10:1</b> 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
<b>12.5:1</b> 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
<b>15:1</b> 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
<b>18:1</b> 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
<b>20:1</b> 4 x 5	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
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 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
<b>37.5:1</b> 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
<b>40:1</b> 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
<b>45:1</b> 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
<b>50:1</b> 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
<b>54:1</b> 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
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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

**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

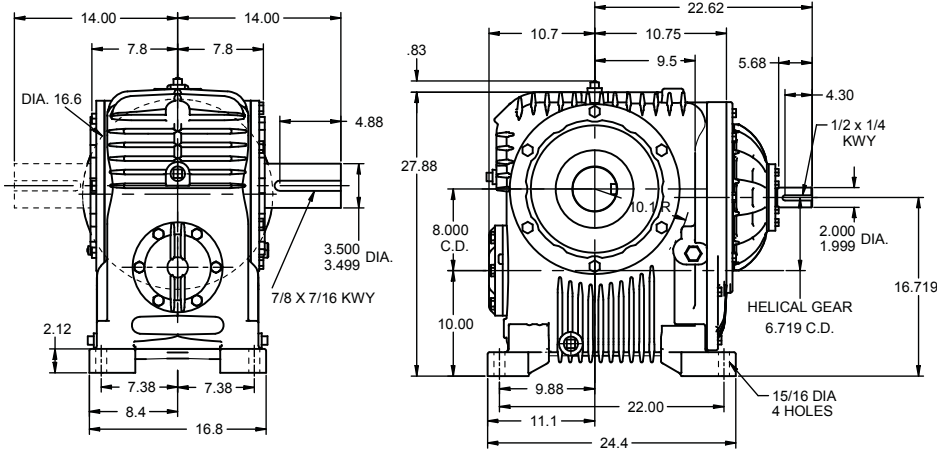
**Important:** In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an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

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

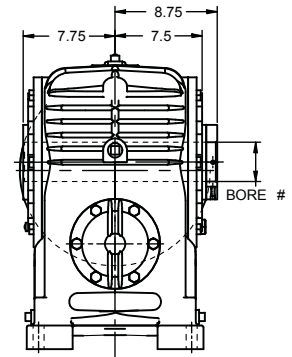
**Cone Drive Helical/Worm Speed Reducers - 8.000" C.D.**  
**Size 80 Solid Shaft**

**Model RU** est. net wt. 1080 lbs



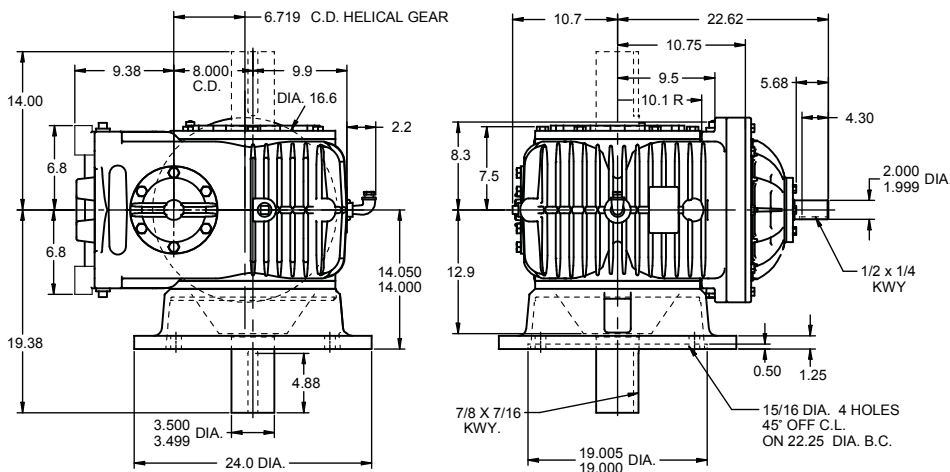
**Hollow Shaft**

**SRU** est. net wt. 1080 lbs.

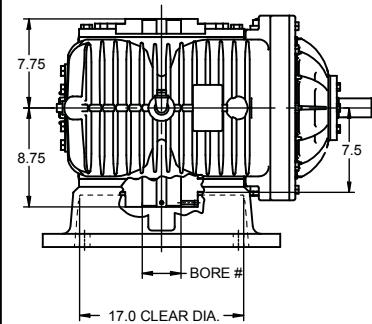


# SEE GEAR SHAFT CHART  
 SET SCREW END OF SHAFT  
 MAY EXTEND ON EITHER SIDE

**Model RV** est. net wt. 1150 lbs



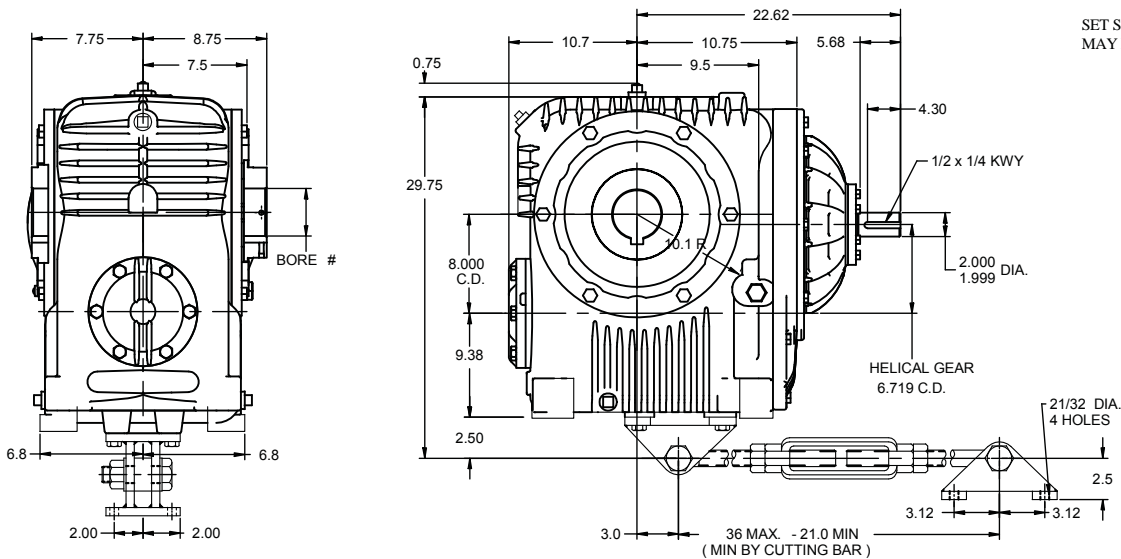
**SRV** est. net wt. 1150 lbs



# 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	52.0	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 4 x 5	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 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 pul 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

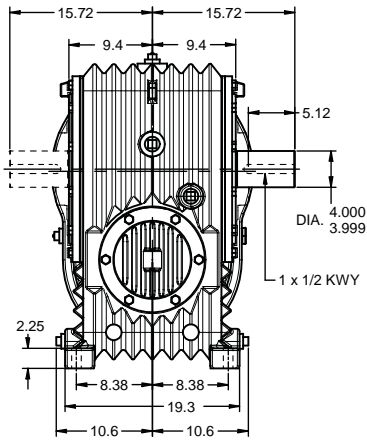
**Important:** In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an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

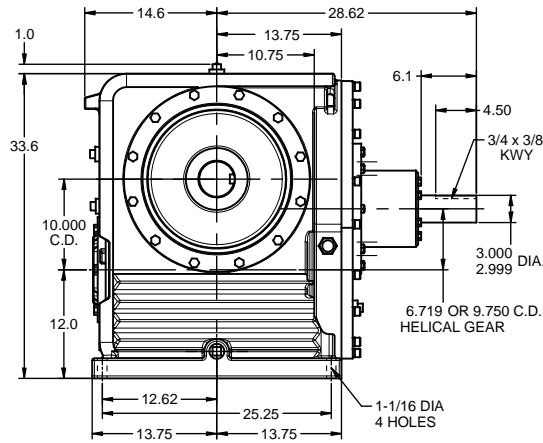


**Cone Drive Helical/Worm Speed Reducers - 10.000" C.D.**  
**Size 100 Solid Shaft**

**Model RU** est. net wt. 1650 lbs

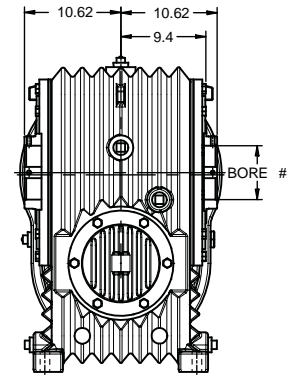


**100 - 9.750 C.D. HELICALS**  
**100 L - 6.719 C.D. HELICALS**



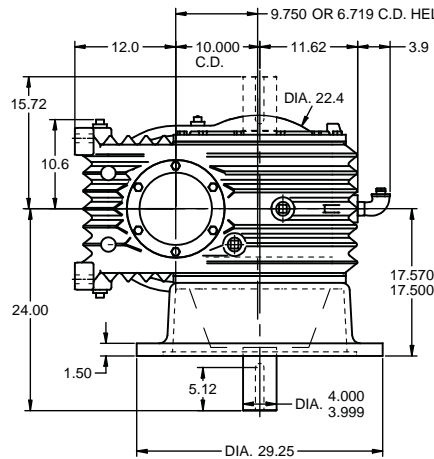
**Hollow Shaft**

**SRU** est. net wt. 1650 lbs.

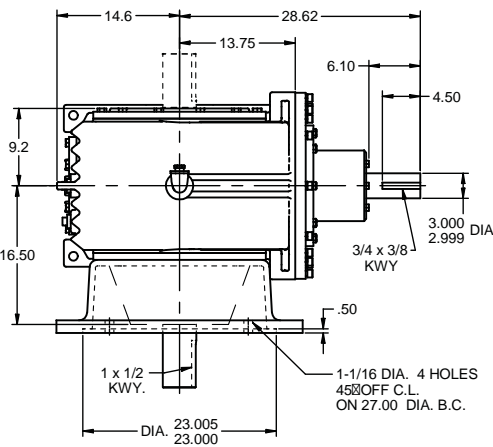


# SEE GEAR SHAFT CHART

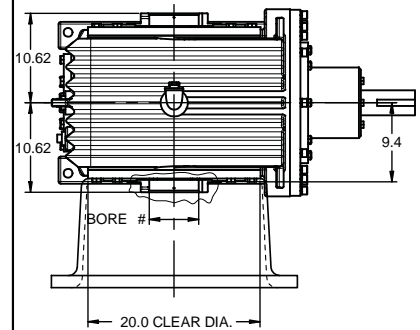
**Model RV** est. net wt. 1725 lbs



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



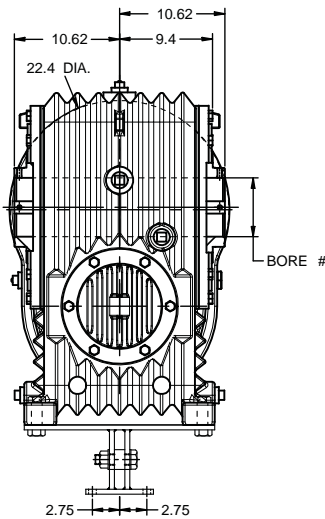
**SRV** est. net wt. 1725 lbs



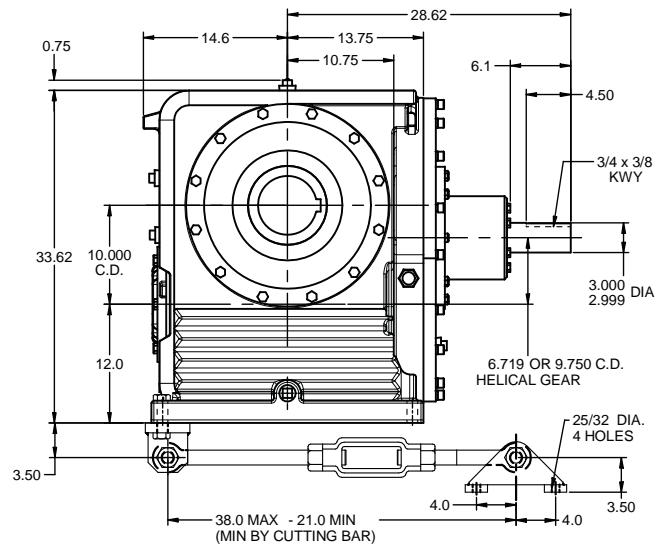
# SEE GEAR SHAFT CHART

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						UNITS WITH 9.750" C.D. HELICALS*							
TOTAL RATIO PRIMARY X SECONDARY		INPUT RPM					TOTAL RATIO PRIMARY X SECONDARY		INPUT RPM				
		100	580	870	1150	1750			100	580	870	1150	1750
<b>20:1</b> 4 x 5	Me.HP	9.23	48.8	70.9	82.3	94.7	<b>5:1</b> 1 x 5	Me.HP	34.9	151	182	199	231
	Th.HP	8.30	24.1	25.3	27.4	29.7		Th.HP	16.3	44.5	53.2	54.3	55.7
	O.T.	90200	90000	88100	77900	59500		O.T.	102000	78200	63000	52200	40200
<b>30:1</b> 1.5 x 20	Me.HP	7.24	38.6	56.2	68.5	82.8	<b>7.5:1</b> 1.5 x 5	Me.HP	28.4	124	153	174	201
	Th.HP	6.40	18.5	23.2	24.3	26.9		Th.HP	11.0	39.8	44.6	47.1	55.7
	O.T.	104000	103000	104000	96300	77300		O.T.	120000	93500	77400	66900	51100
<b>45:1</b> 1.8 x 25	Me.HP	6.67	34.8	43.4	50.5	62.2	<b>9:1</b> 1.8 x 5	Me.HP	25.4	112	139	160	189
	Th.HP	3.60	14.1	18.7	19.8	24.0		Th.HP	7.10	35.2	41.3	45.2	55.7
	O.T.	136000	136000	116000	104000	86100		O.T.	128000	102000	84600	73800	57500
<b>50:1</b> 2.5 x 20	Me.HP	5.37	28.9	42.3	52.3	65.5	<b>10:1</b> 1 x 10	Me.HP	31.8	107	131	148	170
	Th.HP	3.50	12.6	15.5	18.5	22.9		Th.HP	12.2	31.6	39.0	43.7	44.4
	O.T.	126000	125000	125000	119000	101000		O.T.	174000	106000	88000	75000	57800
<b>54:1</b> 1.8 x 30	Me.HP	6.67	29.2	36.5	42.3	52.9	<b>12.5:1</b> 2.5 x 5	Me.HP	20.6	94.2	118	137	169
	Th.HP	3.00	11.4	13.5	16.3	19.3		Th.HP	6.50	28.2	36.7	40.4	46
	O.T.	156000	128000	109000	98400	83000		O.T.	142000	117000	98100	86500	70500
<b>62.5:1</b> 2.5 x 25	Me.HP	5.37	28	36.3	42.3	52.9	<b>15:1</b> 1.5 x 10	Me.HP	21.9	87	108	125	149
	Th.HP	3.00	11.4	14.6	17.3	20.3		Th.HP	8.50	26.4	31.1	38.0	43.8
	O.T.	149000	149000	132000	119000	99900		O.T.	174000	126000	105000	92600	73700
<b>72:1</b> 1.8 x 40	Me.HP	5.15	22	27.5	31.9	39.3	<b>18:1</b> 1.8 x 10	Me.HP	18.4	78.6	98.0	114	139
	Th.HP	2.70	9.20	11.5	14.1	16.0		Th.HP	5.50	23.4	28.6	33.1	42.9
	O.T.	143000	121000	105000	94700	79400		O.T.	174000	136000	114000	101000	82200
<b>75:1</b> 2.5 x 30	Me.HP	4.95	23.4	30.5	35.5	44.4	<b>22.5:1</b> 1.5 x 15	Me.HP	15.4	62	77.1	89	107
	Th.HP	2.30	9.70	11.7	13.1	17.3		Th.HP	7.40	21.7	26.6	29.6	35.7
	O.T.	158000	140000	124000	111000	95200		O.T.	175000	129000	110000	97300	78200
<b>90:1</b> 1.8 x 50	Me.HP	4.15	17.6	22	25.6	31.6	<b>25:1</b> 2.5 x 10	Me.HP	13.6	64.2	82.8	96.2	120
	Th.HP	1.90	8.00	10.6	12.5	14.2		Th.HP	4.70	19.4	23.8	27.9	36.7
	O.T.	128000	116000	102000	92500	76700		O.T.	174000	151000	131000	117000	96800
<b>100:1</b> 4 x 25	Me.HP	3.36	17.1	24.6	31.3	41.2	<b>27:1</b> 1.8 x 15	Me.HP	12.9	56	69.9	81.2	99.8
	Th.HP	1.60	7.10	9.80	11.6	15.7		Th.HP	5.00	18.4	23.0	27.7	35.0
	O.T.	146000	141000	139000	137000	121000		O.T.	175000	139000	118000	105000	87000
<b>108:1</b> 1.8 x 60	Me.HP	3.51	14.7	18.4	21.4	26.4	<b>36:1</b> 1.8 x 20	Me.HP	9.93	43	53.7	62.4	76.8
	Th.HP	1.50	6.70	9.20	10.9	12.6		Th.HP	4.10	15.0	19.0	25.8	26.0
	O.T.	126000	112000	97200	87900	74000		O.T.	170000	136000	117000	105000	85700
<b>120:1</b> 4 x 30	Me.HP	3.17	16.2	22.4	27.1	34.5	<b>37.5:1</b> 2.5 x 15	Me.HP	9.50	45.5	58.9	68.6	85.8
	Th.HP	1.40	6.30	8.30	9.70	12.5		Th.HP	4.20	15.4	19.40	22.3	28.3
	O.T.	158000	152000	142000	133000	114000		O.T.	175000	154000	135000	121000	101000
<b>125:1</b> 2.5 x 50	Me.HP	3.07	14.2	18.4	21.5	26.9	<b>40:1</b> 4 x 10	Me.HP	8.56	44.4	60.9	73.6	92.9
	Th.HP	1.80	6.50	8.40	10.1	13.1		Th.HP	3.10	12.9	16.9	20.2	24.3
	O.T.	128000	124000	113000	104000	89100		O.T.	174000	166000	154000	142000	119000
<b>150:1</b> 2.5 x 60	Me.HP	2.61	11.8	15.4	17.9	22.5	<b>60:1</b> 4 x 15	Me.HP	59.9	31.3	43.1	52.2	65.3
	Th.HP	1.50	5.50	7.50	8.80	11.4		Th.HP	2.60	10.4	13.3	15.8	21.1
	O.T.	126000	121000	109000	98900	85100		O.T.	175000	168000	157000	145000	123000
<b>160:1</b> 4 x 40	Me.HP	2.46	12.2	16.8	20.4	26	<b>80:1</b> 4 x 20	Me.HP	4.62	24	33	40.1	50.9
	Th.HP	1.10	4.70	5.90	7.60	10.5		Th.HP	2.00	8.50	11.0	12.9	17.7
	O.T.	143000	138000	130000	124000	109000		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 steep 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.

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.

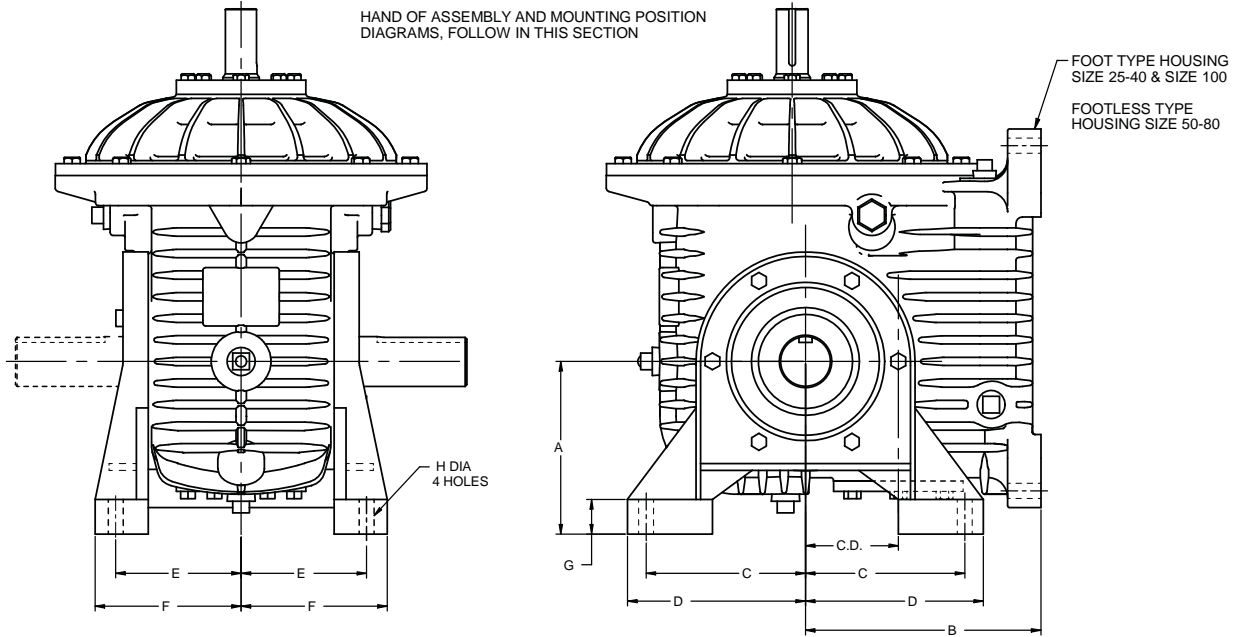
\*AGMA Standard Bore Tolerance: +.004, -.000

2 set screws at long end of shaft.

# Cone Drive Helical/Worm Speed Reducer

Sizes 25 thru 100

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

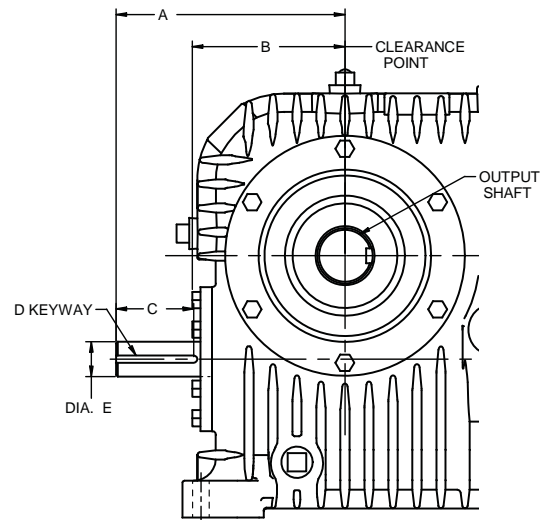


MODEL AVAILABLE IN ALL SOLID AND HOLLOW OUTPUT SHAFT CONFIGURATIONS.  
 FOR ALL OTHER DIMENSIONS REFER TO CORRESPONDING SIZE MODEL SR OR RU.

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

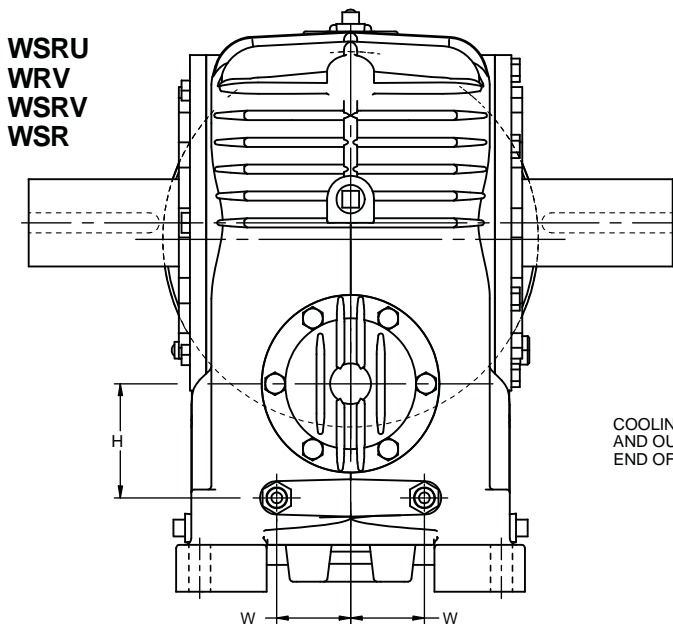
## Fan Cooling

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.

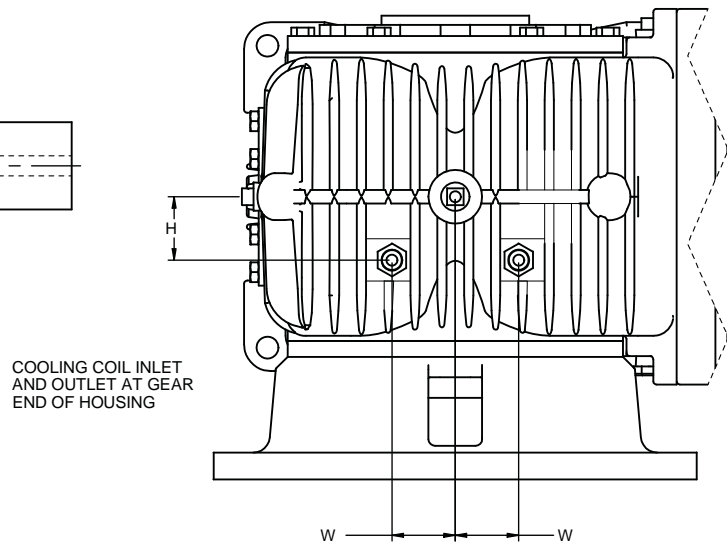
CLEARANCE DIMENSION FROM CENTERLINE OF UNIT OVER FAN COVER						
SIZE	40	50	60	70	80	100
DIM	8.0	9.5	10.2	12.9	14.3	16.5

## 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.

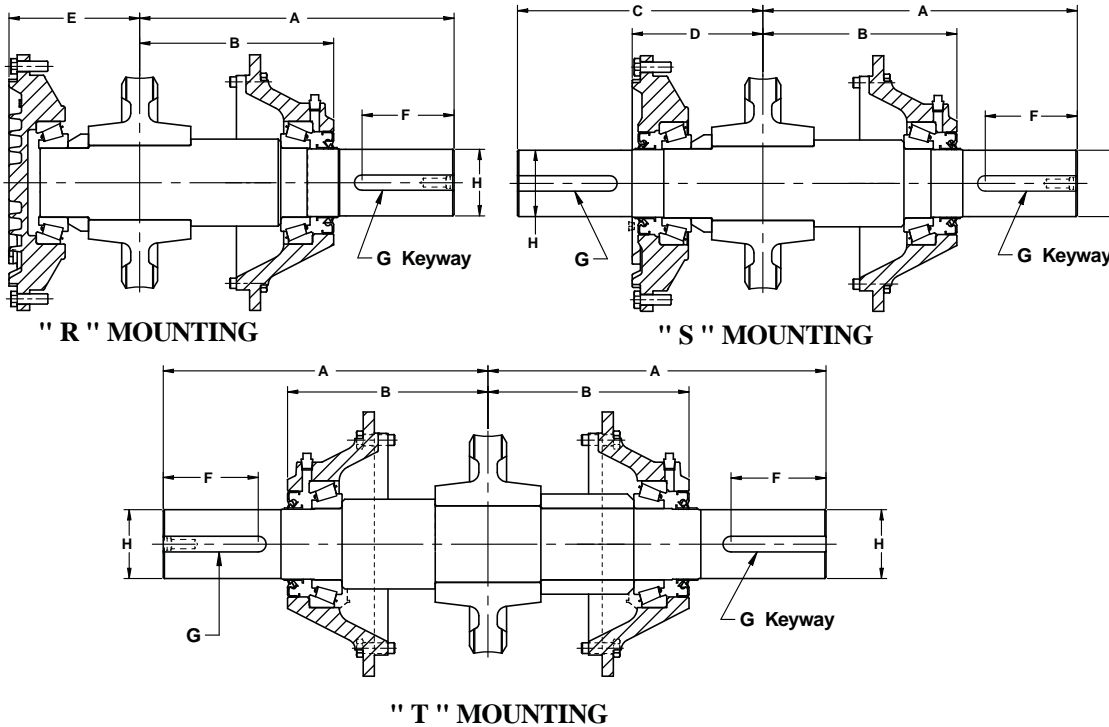
Floor Mounted Position Shown

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

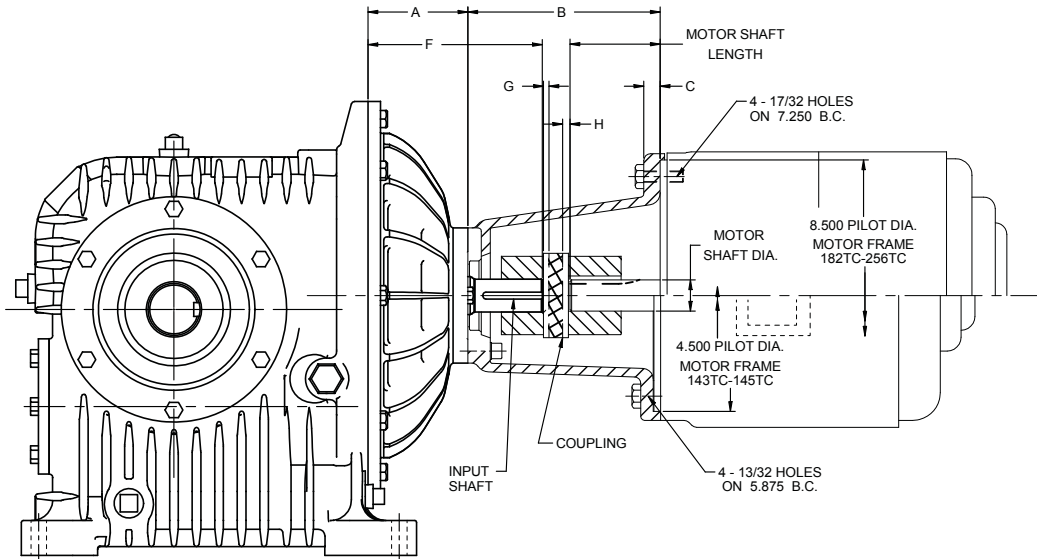
units, specify steeple bearing on left (L) or right (R) of unit as viewed from the input end.

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				5.531	6.562	9.060			
213TC - 215TC		Note 1	1.375	5/16	N.A	N.A	N.A						
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	30-G60A	40-G60-1	
213TC - 215TC	5.062	5.812					.00	.00	.00	N.A	40-G60	53-G60-1
254TC - 256TC	N.A	6.250	8.375	.00	.31							

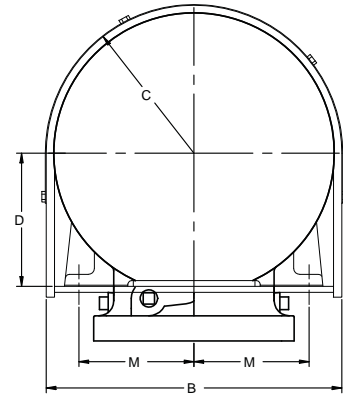
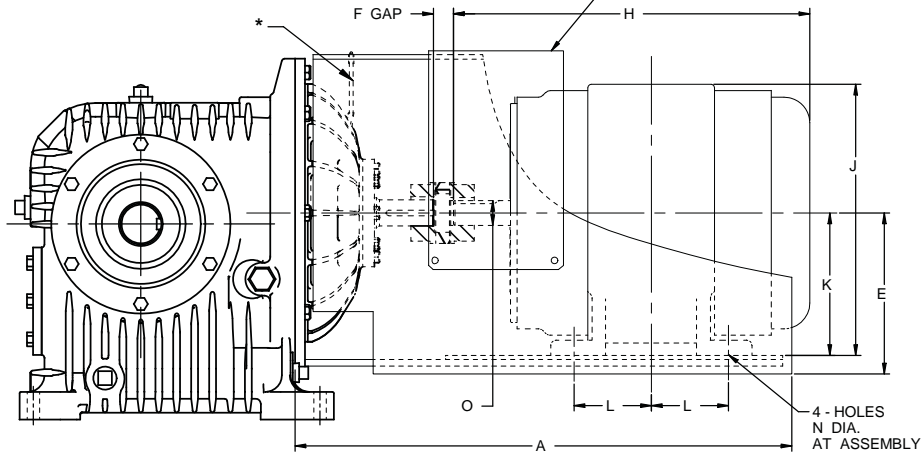
MOTOR ADAPTER NUMBER				COUPLING NUMBER		
MOTORFRAME SIZE	REDUCER SIZE			REDUCER SIZE		
	25 & 30	35 & 40	50 & 60	25 & 30	35 & 40	50 & 60
143TC - 145TC	30-MG20	40-MG20	53-MG20-SW	720107	720112	720207
182TC - 184TC	30-MG21	40-MG21	53-MG21-SW	720109	720113	720208
213TC - 215TC				720201-1	720204	720209
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. Unless otherwise specified, motor support bracket surface shall be under motor, except when mounted vertically.

For all other dimensions see corresponding model size dimension pages.



Cone Drive reserves the right to improve or change product design and specifications without notice.

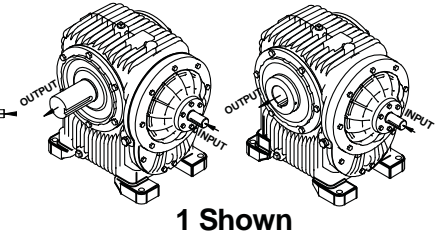
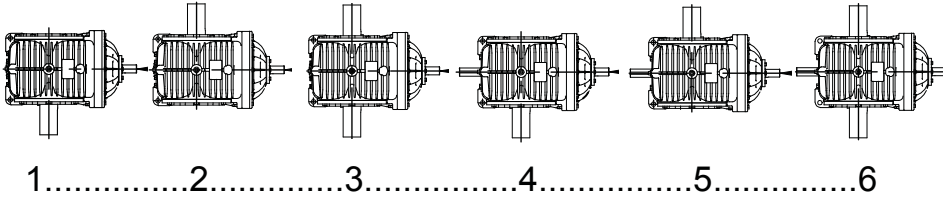
# Assembly & Mounting Position Numbers for Cone Drive Helical/Worm Speed Reducers

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

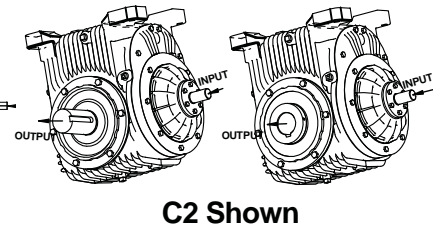
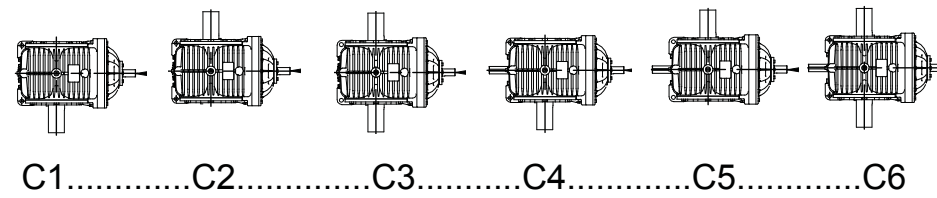
ALL DIAGRAMS SHOW REDUCER WITH FEET ON FAR SIDE

◀ = INPUT

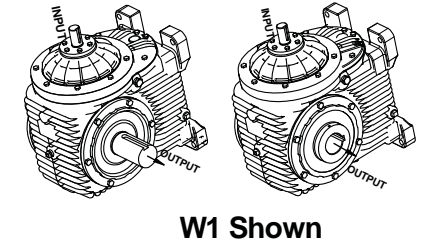
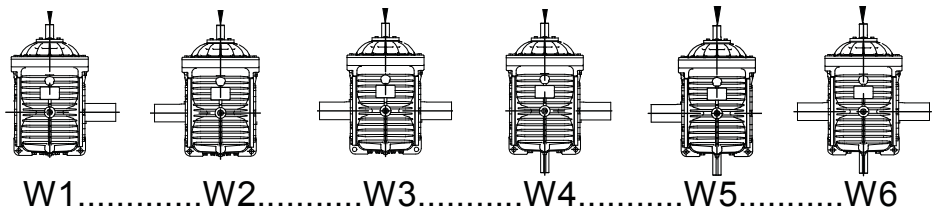
## Top View, Floor Mounted



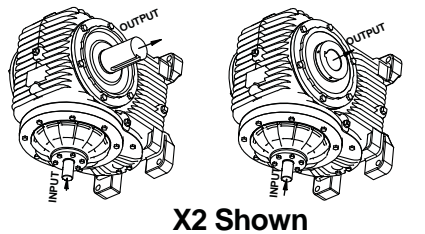
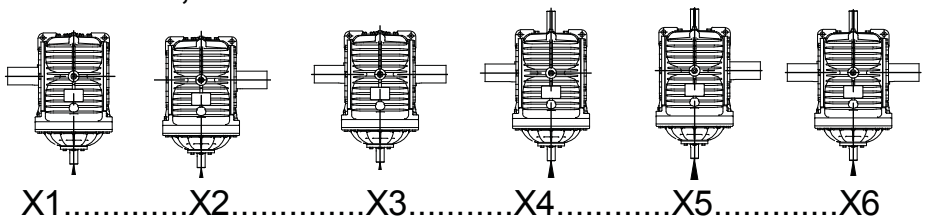
## Ceiling Mounted



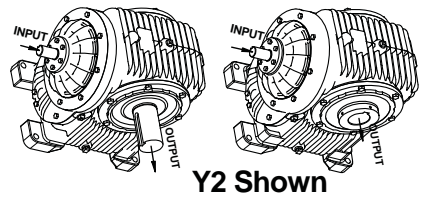
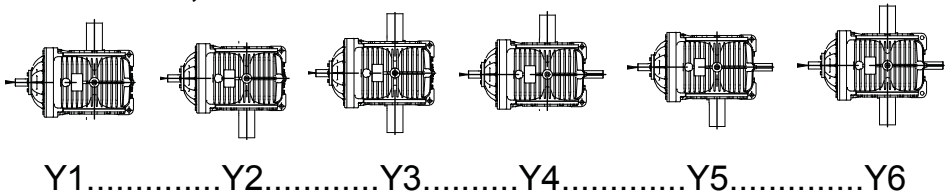
## Wall Mounted, Worm Vertical Up



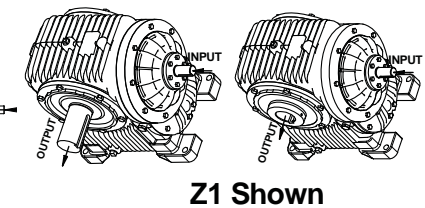
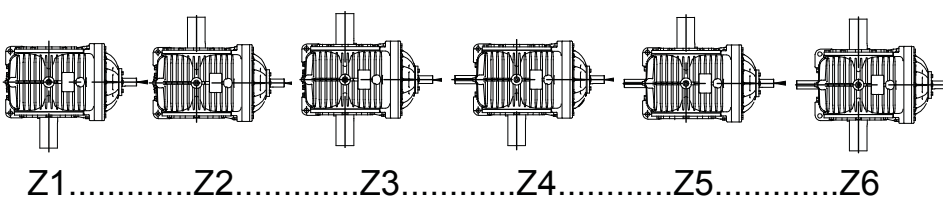
## Wall Mounted, Worm Vertical Down



## 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

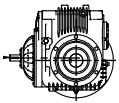
Models RV, SRV, MRV, MSRV - Solid & Hollow Shaft

ALL DIAGRAMS SHOW REDUCER WITH BASE ON FAR SIDE

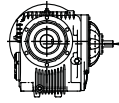
<b>RV</b>	<b>SRV</b>	
<b>A</b>	<b>A</b>	<b>Gearshaft Extended Opposite Base</b>
<b>BR</b>	<b>B</b>	<b>Gearshaft Extended Through Base</b>
<b>SD</b>	<b>C</b>	<b>Gearshaft Double Extended</b>

## Floor Mounted - Top View

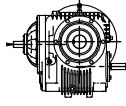
◀ = INPUT



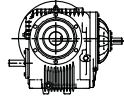
**RV SRV**  
1A 1A  
1BR 1B  
1SD 1C



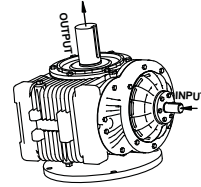
**RV SRV**  
2A 2A  
2BR 2B  
2SD 2C



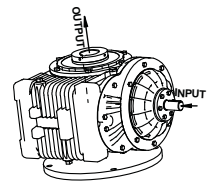
**RV SRV**  
3A 3A  
3BR 3B  
3SD 3C



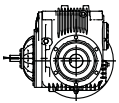
**RV SRV**  
4A 4A  
4BR 4B  
4SD 4C



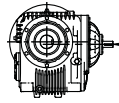
**2A Shown**



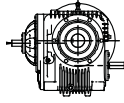
## Ceiling Mounted



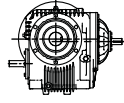
**RV SRV**  
C1A C1A  
C1BR C1B  
C1SD C1C



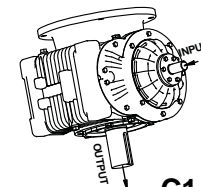
**RV SRV**  
C2A C2A  
C2BR C2B  
C2SD C2C



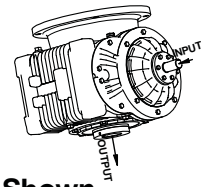
**RV SRV**  
C3A C3A  
C3BR C3B  
C3SD C3C



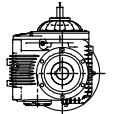
**RV SRV**  
C4A C4A  
C4BR C4B  
C4SD C4C



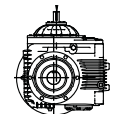
**C1A Shown**



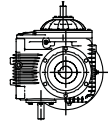
## Wall Mounted - Input Shaft Up



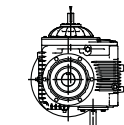
**RV SRV**  
W1A W1A  
W1BR W1B  
W1SD W1C



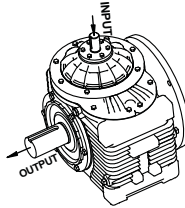
**RV SRV**  
W2A W2A  
W2BR W2B  
W2SD W2C



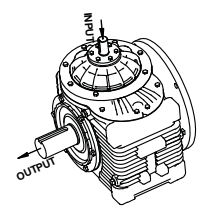
**RV SRV**  
W3A W3A  
W3BR W3B  
W3SD W3C



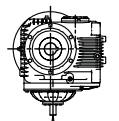
**RV SRV**  
W4A W4A  
W4BR W4B  
W4SD W4C



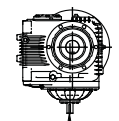
**W2A Shown**



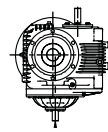
## Wall Mounted - Input Shaft Down



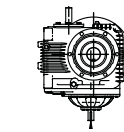
**RV SRV**  
X1A X1A  
X1BR X1B  
X1SD X1C



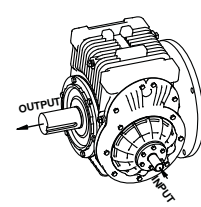
**RV SRV**  
X2A X2A  
X2BR X2B  
X2SD X2C



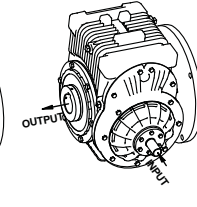
**RV SRV**  
X3A X3A  
X3BR X3B  
X3SD X3C



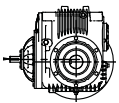
**RV SRV**  
X4A X4A  
X4BR X4B  
X4SD X4C



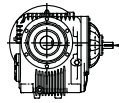
**X1A Shown**



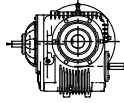
## Wall Mounted - Worm Under



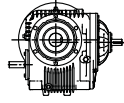
**RV SRV**  
Y1A Y1A  
Y1BR Y1B  
Y1SD Y1C



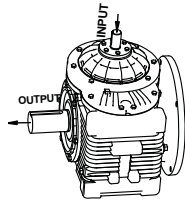
**RV SRV**  
Y2A Y2A  
Y2BR Y2B  
Y2SD Y2C



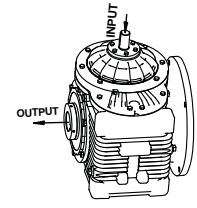
**RV SRV**  
Y3A Y3A  
Y3BR Y3B  
Y3SD Y3C



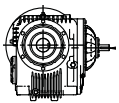
**RV SRV**  
Y4A Y4A  
Y4BR Y4B  
Y4SD Y4C



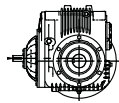
**Y2A Shown**



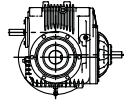
## Wall Mounted - Worm Over



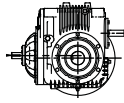
**RV SRV**  
Z1A Z1A  
Z1BR Z1B  
Z1SD Z1C



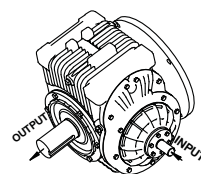
**RV SRV**  
Z2A Z2A  
Z2BR Z2B  
Z2SD Z2C



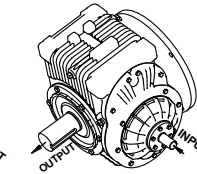
**RV SRV**  
Z3A Z3A  
Z3BR Z3B  
Z3SD Z3C



**RV SRV**  
Z4A Z4A  
Z4BR Z4B  
Z4SD Z4C



**Z1A Shown**

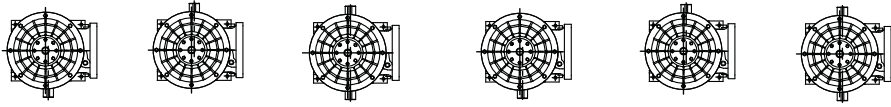


# Assembly & Mounting Position Numbers for Cone Drive Helical/Worm Speed Reducers

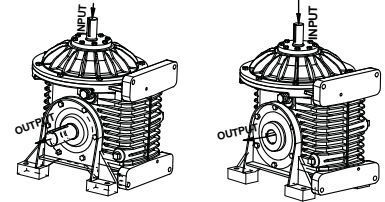
Models VR, SVR, MVR, MSVR - Solid & Hollow Shaft

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

## Top View, Floor Mounted

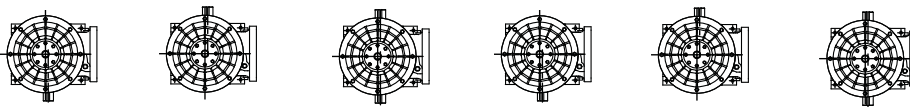


1.....2.....3.....4.....5.....6

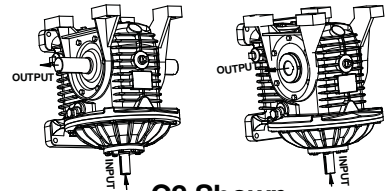


1 Shown

## Ceiling Mounted

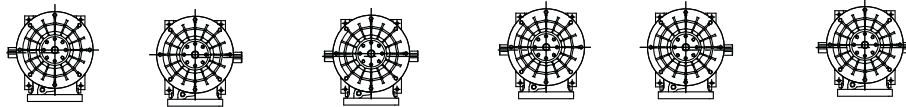


C1.....C2.....C3.....C4.....C5.....C6

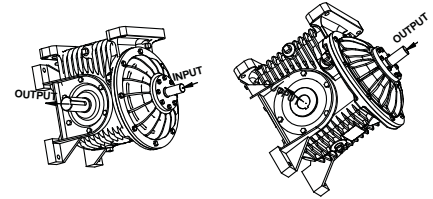


C2 Shown

## Wall Mounted, Worm Under Horizontal Gearshaft

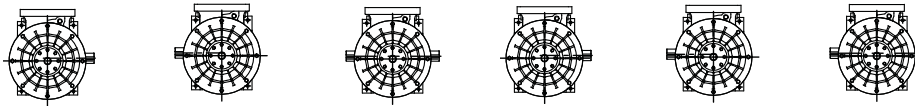


W1.....W2.....W3.....W4.....W5.....W6

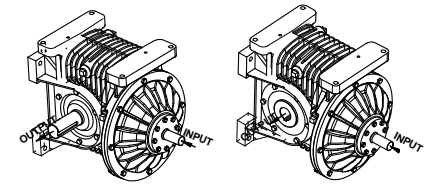


W1 Shown

## Wall Mounted, Worm Over Horizontal Gearshaft

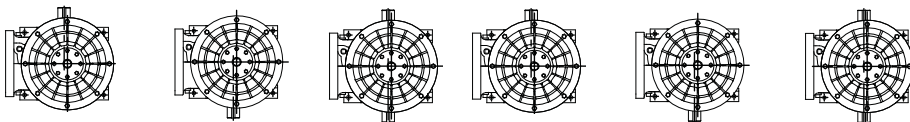


X1.....X2.....X3.....X4.....X5.....X6

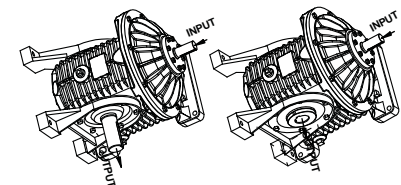


X2 Shown

## Wall Mounted, Worm Left Vertical Gearshaft

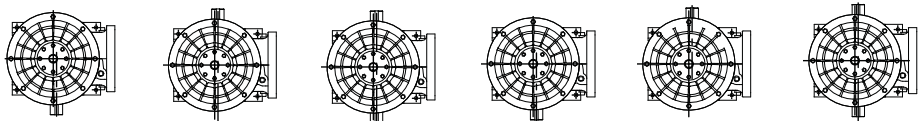


Y1.....Y2.....Y3.....Y4.....Y5.....Y6

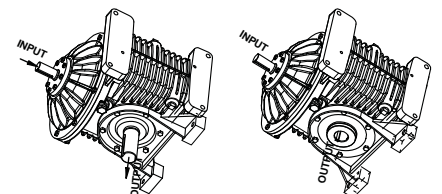


Y2 Shown

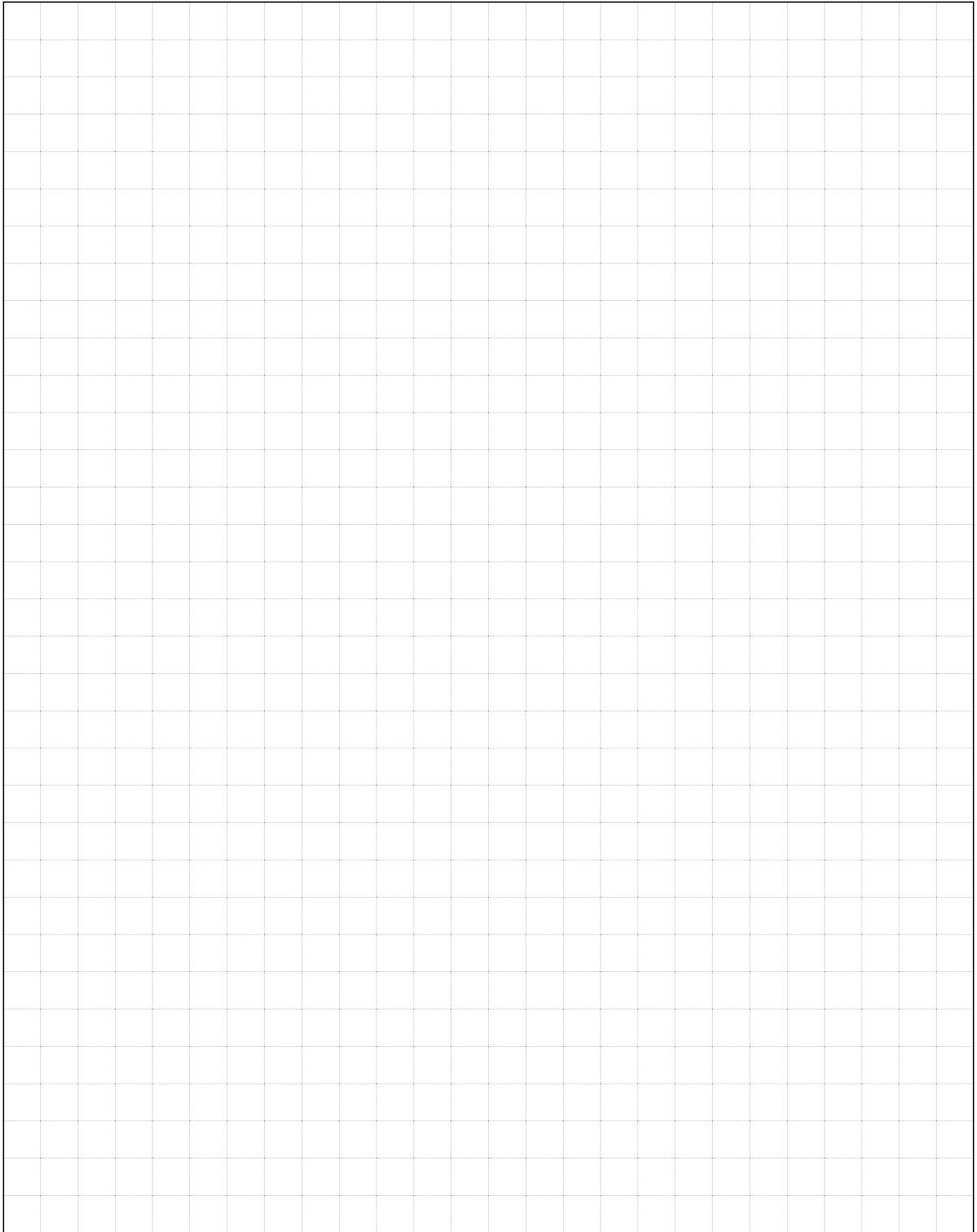
## Wall Mounted, Worm Right Vertical Gearshaft



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



Z1 Shown



## Helical/Worm Illustrations

Shown below are two Cone Drive helical/worm configurations

### Helical/Worm Speed Reducer

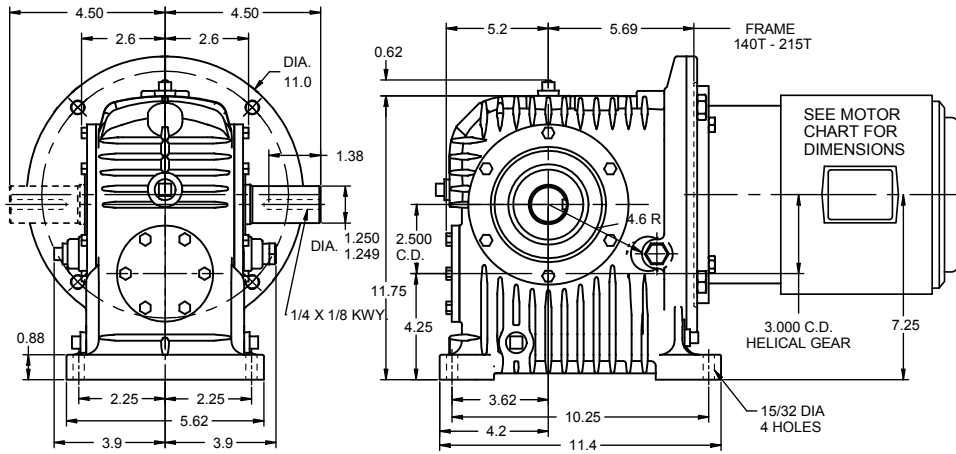


### Helical/Worm D-Flange Gearhead

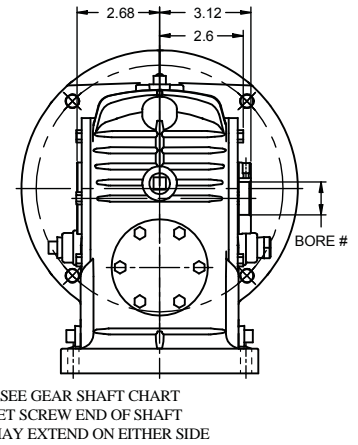


# Cone Drive Helical/Worm D-Flange Gearhead - 2.500" C.D. Size 25 Solid Shaft

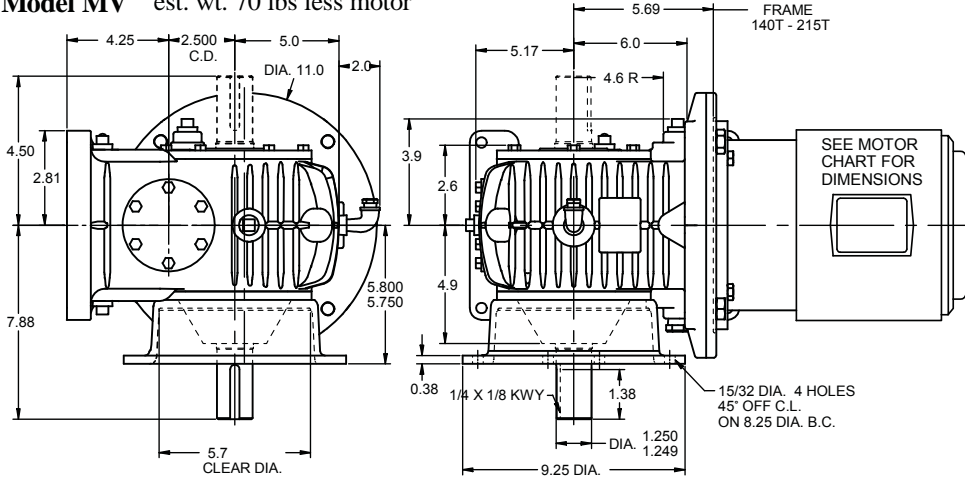
**Model MU** est. wt. 70 lbs less motor



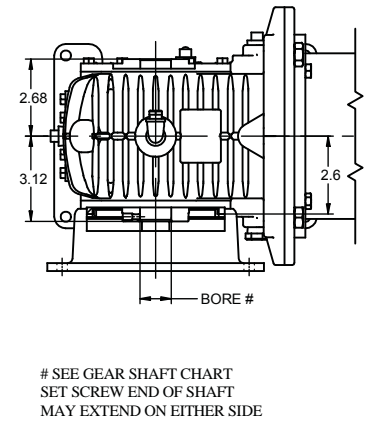
**SMU** est. wt. 70 lbs less motor



**Model MV** est. wt. 70 lbs less motor



**SMV** est. wt. 70 lbs less motor

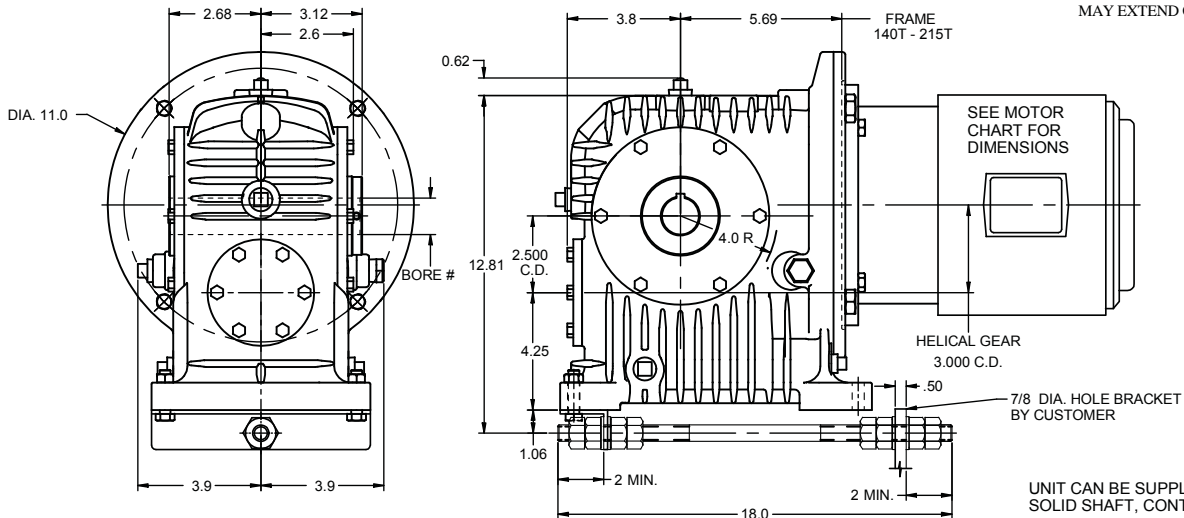


SOLID OUTPUT SHAFT MAY EXTEND ON EITHER SIDE OR BE DOUBLE EXTENDED.

**Model SM** est. wt. 70 lbs less motor

# 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 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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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
<b>10:1</b> 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
<b>12.5:1</b> 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
<b>15:1</b> 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
<b>18:1</b> 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
<b>20:1</b> 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
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 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
<b>37.5:1</b> 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
<b>40:1</b> 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
<b>45:1</b> 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
<b>50:1</b> 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
<b>54:1</b> 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
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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

TOTAL RATIO PRIMARY X SECONDARY		INPUT RPM				
		100	580	870	1150	1750
<b>80:1</b> 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
<b>90:1</b> 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
<b>100:1</b> 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
<b>108:1</b> 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
<b>120:1</b> 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
<b>125:1</b> 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
<b>150:1</b> 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
<b>160:1</b> 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
<b>200:1</b> 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
<b>240:1</b> 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.

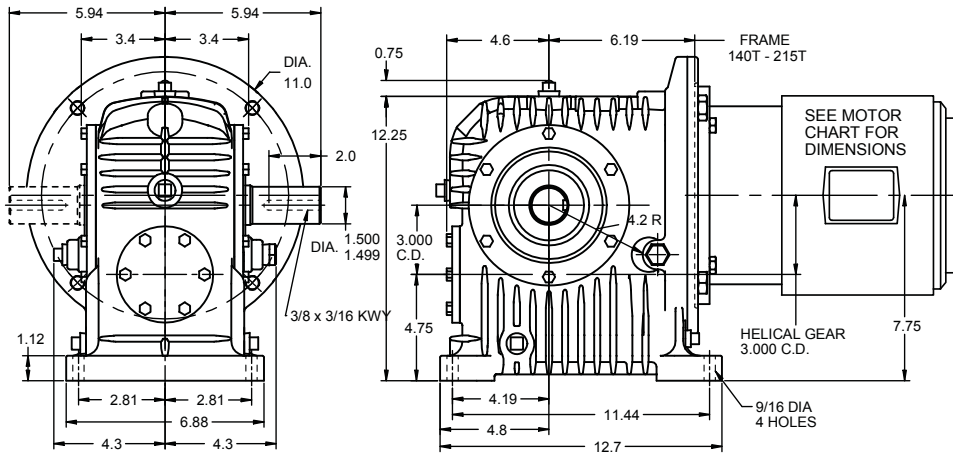
Me.HP - Mechanical horsepower      Th.HP - Thermal horsepower  
 O.T. - Output torque in Lb. in.

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

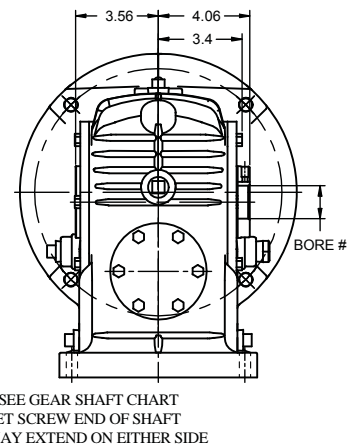
## Size 30 Solid Shaft

## Hollow Shaft

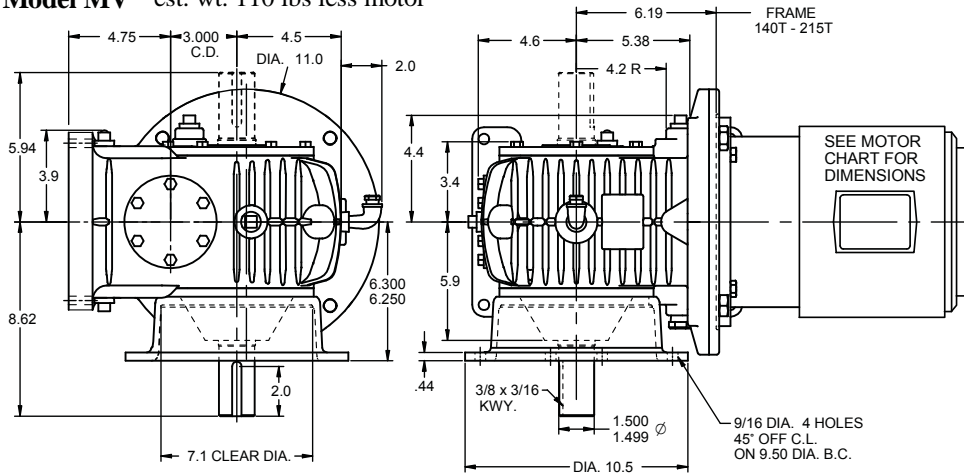
**Model MU** est. wt. 100 lbs less motor



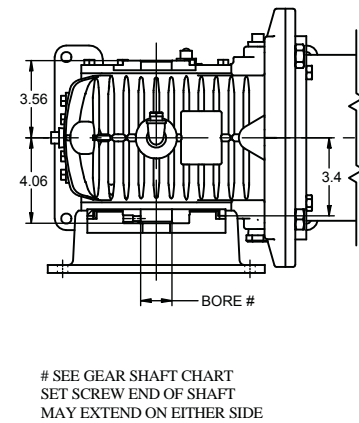
**SMU** est. wt. 100 lbs less motor



**Model MV** est. wt. 110 lbs less motor



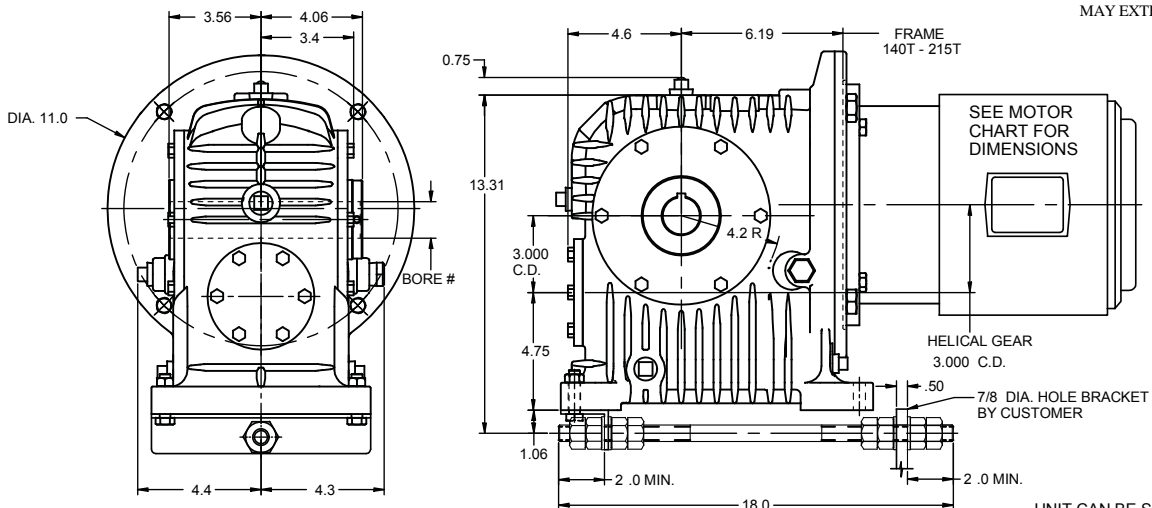
**SMV** est. wt. 110 lbs less motor



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					TOTAL RATIO PRIMARY X SECONDARY		INPUT RPM				
		100	580	870	1150	1750			100	580	870	1150	1750
<b>5:1</b> 1 x 5	Me.HP	1.42	6.24	8.03	9.34	11.7	<b>80:1</b> 4 x 20	Me.HP	0.13	0.68	0.97	1.23	1.77
	Th.HP	1.42	6.24	8.03	9.34	9.20		Th.HP	0.13	0.68	0.97	1.23	1.77
	O.T.	3870	3000	2590	2280	1880		O.T.	4470	4350	4190	4080	3980
<b>7.5:1</b> 1.5 x 5	Me.HP	0.97	4.57	6.24	7.47	9.41	<b>90:1</b> 1.8 x 50	Me.HP	0.12	0.56	0.78	0.97	1.29
	Th.HP	0.97	4.57	6.24	7.47	9.20		Th.HP	0.12	0.56	0.78	0.97	1.29
	O.T.	3870	3280	3000	2730	2270		O.T.	3280	3400	3380	3290	2940
<b>9:1</b> 1.8 x 5	Me.HP	0.81	3.94	5.45	6.66	8.53	<b>100:1</b> 4 x 25	Me.HP	0.11	0.55	0.78	0.99	1.43
	Th.HP	0.81	3.94	5.45	6.66	8.53		Th.HP	0.11	0.55	0.78	0.99	1.43
	O.T.	3870	3380	3140	2910	2460		O.T.	4300	4220	4130	4080	3940
<b>10:1</b> 1 x 10	Me.HP	0.91	4.09	5.43	6.35	7.96	<b>108:1</b> 1.8 x 60	Me.HP	0.10	0.46	0.65	0.81	1.08
	Th.HP	0.91	4.09	5.43	6.35	7.96		Th.HP	0.10	0.46	0.65	0.81	1.08
	O.T.	4600	3770	3380	3010	2510		O.T.	3230	3260	3200	3110	2830
<b>12.5:1</b> 2.5 x 5	Me.HP	0.59	2.97	4.20	5.25	7.08	<b>120:1</b> 4 x 30	Me.HP	0.09	0.46	0.65	0.83	1.19
	Th.HP	0.59	2.97	4.20	5.25	7.08		Th.HP	0.09	0.46	0.65	0.83	1.19
	O.T.	3870	3520	3340	3170	2820		O.T.	4110	4000	3880	3810	3680
<b>15:1</b> 1.5 x 10	Me.HP	0.62	2.96	4.09	4.99	6.40	<b>125:1</b> 2.5 x 50	Me.HP	0.09	0.42	0.59	0.75	1.04
	Th.HP	0.62	2.96	4.09	4.99	6.40		Th.HP	0.09	0.42	0.59	0.75	1.04
	O.T.	4600	4040	3770	3510	3000		O.T.	3280	3370	3400	3390	3230
<b>18:1</b> 1.8 x 10	Me.HP	0.52	2.53	3.55	4.40	5.78	<b>150:1</b> 2.5 x 60	Me.HP	0.07	0.35	0.50	0.63	0.87
	Th.HP	0.52	2.53	3.55	4.40	5.78		Th.HP	0.07	0.35	0.50	0.63	0.87
	O.T.	4600	4130	3910	3700	3230		O.T.	3230	3290	3260	3210	3070
<b>20:1</b> 4 x 5	Me.HP	0.35	1.97	2.80	3.58	5.05	<b>160:1</b> 4 x 40	Me.HP	0.07	0.35	0.49	0.63	0.90
	Th.HP	0.35	1.97	2.80	3.58	5.05		Th.HP	0.07	0.35	0.49	0.63	0.90
	O.T.	3550	3720	3550	3430	3200		O.T.	3700	3610	3520	3550	3510
<b>22.5:1</b> 1.5 x 15	Me.HP	0.43	2.08	2.89	3.54	4.55	<b>200:1</b> 4 x 50	Me.HP	0.06	0.28	0.39	0.50	0.72
	Th.HP	0.43	2.08	2.89	3.54	4.55		Th.HP	0.06	0.28	0.39	0.50	0.72
	O.T.	4620	4100	3880	3660	3140		O.T.	3280	3350	3370	3390	3400
<b>25:1</b> 2.5 x 10	Me.HP	0.38	1.90	2.70	3.41	4.70	<b>240:1</b> 4 x 60	Me.HP	0.05	0.23	0.33	0.42	0.60
	Th.HP	0.38	1.90	2.70	3.41	4.70		Th.HP	0.05	0.23	0.33	0.42	0.60
	O.T.	4600	4260	4090	3930	3610		O.T.	3230	3280	3300	3250	3230
<b>27:1</b> 1.8 x 15	Me.HP	0.36	1.78	2.50	3.11	4.11	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.						
	Th.HP	0.36	1.78	2.50	3.11	4.11							
	O.T.	4620	4170	3990	3820	3390							
<b>30:1</b> 1.5 x 20	Me.HP	0.33	1.59	2.22	2.72	3.50	STANDARD HOLLOW GEAR SHAFTS						
	Th.HP	0.33	1.59	2.22	2.72	3.50							
	O.T.	4470	4020	3860	3600	3090							
<b>36:1</b> 1.8 x 20	Me.HP	0.28	1.36	1.92	2.39	3.16	<b>BORE</b>	<b>GEAR SHAFT</b>	<b>KEYWAY</b>	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.			
	Th.HP	0.28	1.36	1.92	2.39	3.16	<b>INCHES</b>	<b>NUMBER</b>	<b>SIZE</b>				
	O.T.	4470	4060	3940	3780	3330	2.500*	30-S60-208	3/8 x 3/16				
<b>37.5:1</b> 2.5 x 15	Me.HP	0.26	1.34	1.90	2.40	3.32	2.4375*	30-S60-207	3/8 x 3/16				
	Th.HP	0.26	1.34	1.90	2.40	3.32	2.1875*	30-S60-203	1/2 x 1/4				
	O.T.	4620	4300	4140	4020	3740	1.9375*	30-S60-115	1/2 x 1/4				
<b>40:1</b> 4 x 10	Me.HP	0.24	1.26	1.80	2.29	3.27	1.6875*	30-S60-111	3/8 x 3/16				
	Th.HP	0.24	1.26	1.80	2.29	3.27	1.500*	30-S60-108	3/8 x 3/16				
	O.T.	4600	4460	4280	4170	3970	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.						
<b>45:1</b> 1.8 x 25	Me.HP	0.23	1.10	1.55	1.92	2.55	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.						
	Th.HP	0.23	1.10	1.55	1.92	2.55							
	O.T.	4300	4050	3890	3730	3340							
<b>50:1</b> 2.5 x 20	Me.HP	0.20	1.02	1.46	1.84	2.55	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.						
	Th.HP	0.20	1.02	1.46	1.84	2.55							
	O.T.	4470	4160	4040	3960	3690							
<b>54:1</b> 1.8 x 30	Me.HP	0.19	0.92	1.29	1.61	2.14	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.						
	Th.HP	0.19	0.92	1.29	1.61	2.14							
	O.T.	4110	3780	3630	3510	3200							
<b>60:1</b> 4 x 15	Me.HP	0.17	0.89	1.26	1.61	2.31	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.						
	Th.HP	0.17	0.89	1.26	1.61	2.31							
	O.T.	4620	4500	4330	4220	4050							
<b>62.5:1</b> 2.5 x 25	Me.HP	0.17	0.82	1.18	1.48	2.06	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.						
	Th.HP	0.17	0.82	1.18	1.48	2.06							
	O.T.	4300	4120	4030	3920	3660							
<b>72:1</b> 1.8 x 40	Me.HP	0.14	0.69	0.97	1.21	1.61	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.						
	Th.HP	0.14	0.69	0.97	1.21	1.61							
	O.T.	3700	3560	3480	3370	3050							
<b>75:1</b> 2.5 x 30	Me.HP	0.14	0.69	0.98	1.24	1.72	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.						
	Th.HP	0.14	0.69	0.98	1.24	1.72							
	O.T.	4110	3870	3760	3650	3470							

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.

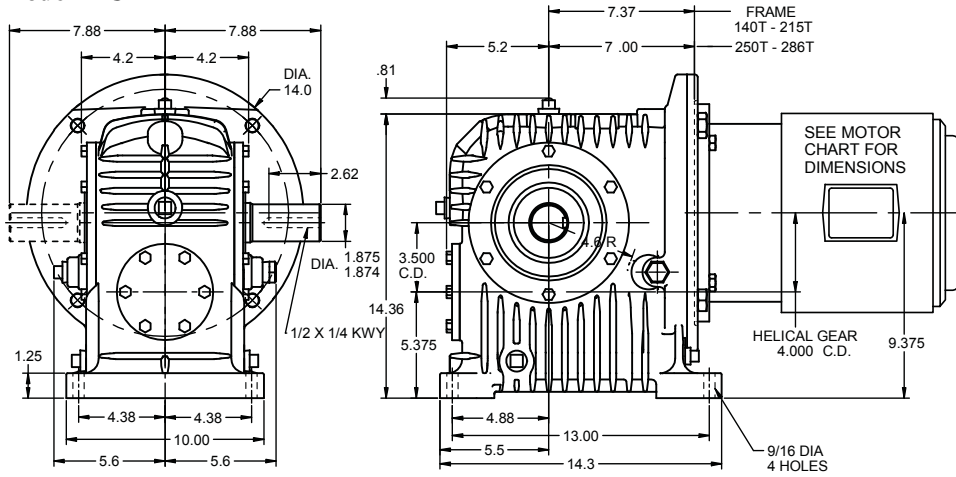


# Cone Drive Helical/Worm D-Flange Gearhead - 3.500" C.D.

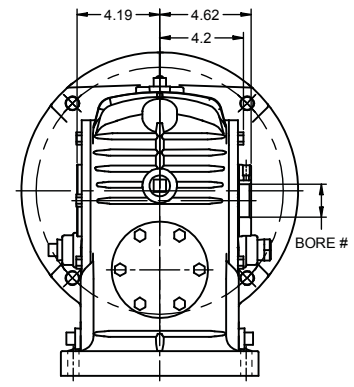
Size 35 Solid Shaft

Hollow Shaft

**Model MU** est. wt. 180 lbs less motor

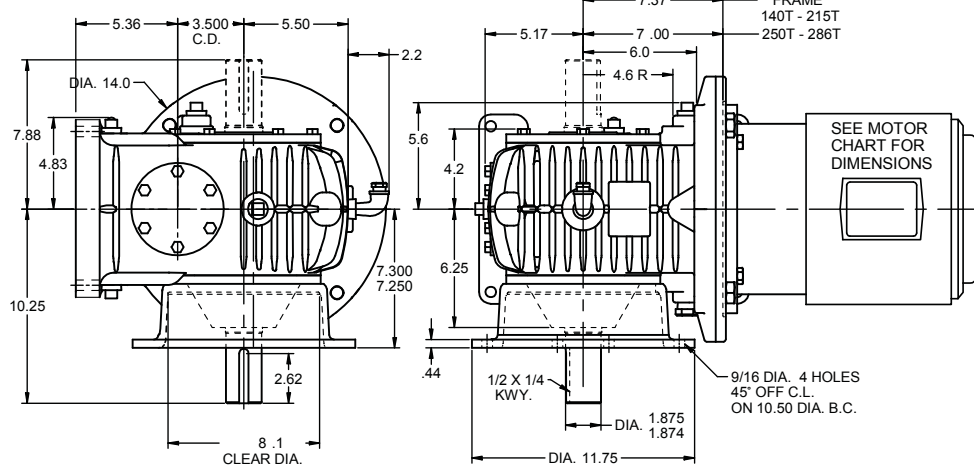


**SMU** est. wt. 180 lbs less motor

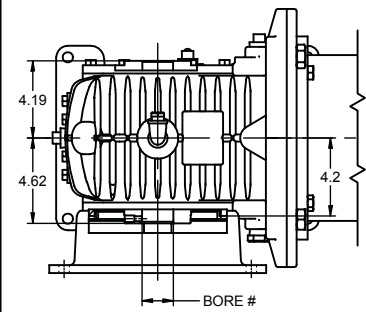


# SEE GEAR SHAFT CHART  
SET SCREW END OF SHAFT  
MAY EXTEND ON EITHER SIDE

**Model MV** est. wt. 190 lbs less motor



**SMV** est. wt. 190 lbs less motor



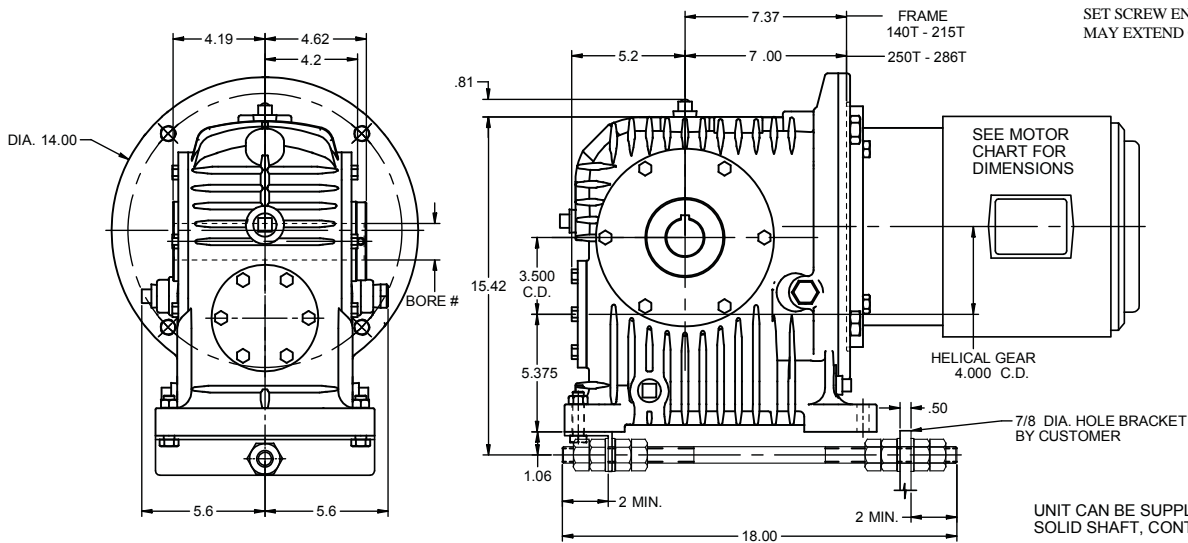
# SEE GEAR SHAFT CHART  
SET SCREW END OF SHAFT  
MAY EXTEND ON EITHER SIDE

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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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
<b>10:1</b> 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
<b>12.5:1</b> 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
<b>15:1</b> 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
<b>18:1</b> 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
<b>20:1</b> 4 x 5	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
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 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
<b>37.5:1</b> 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
<b>40:1</b> 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
<b>45:1</b> 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
<b>50:1</b> 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
<b>54:1</b> 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
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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
<b>80:1</b> 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
<b>90:1</b> 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
<b>100:1</b> 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
<b>108:1</b> 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
<b>120:1</b> 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
<b>125:1</b> 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
<b>150:1</b> 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	5450
<b>160:1</b> 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
<b>200:1</b> 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
<b>240:1</b> 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:**

- 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
2.5000	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.

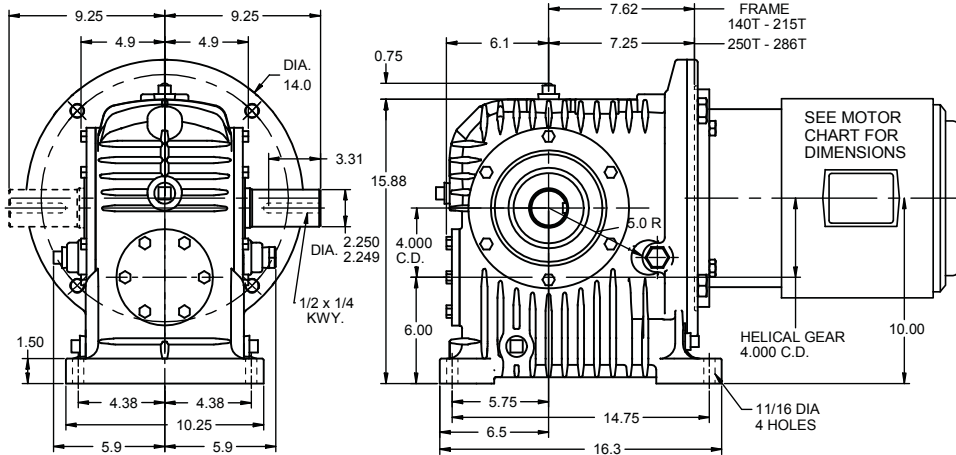
**Important:** In any applications of Cone Drive products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an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

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

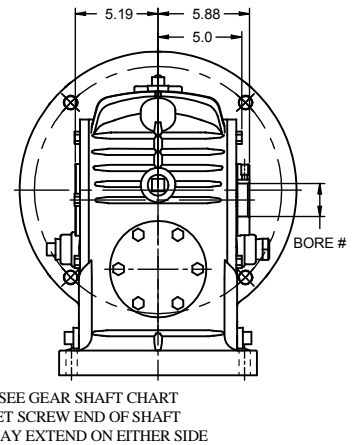
## Size 40 Solid Shaft

## Hollow Shaft

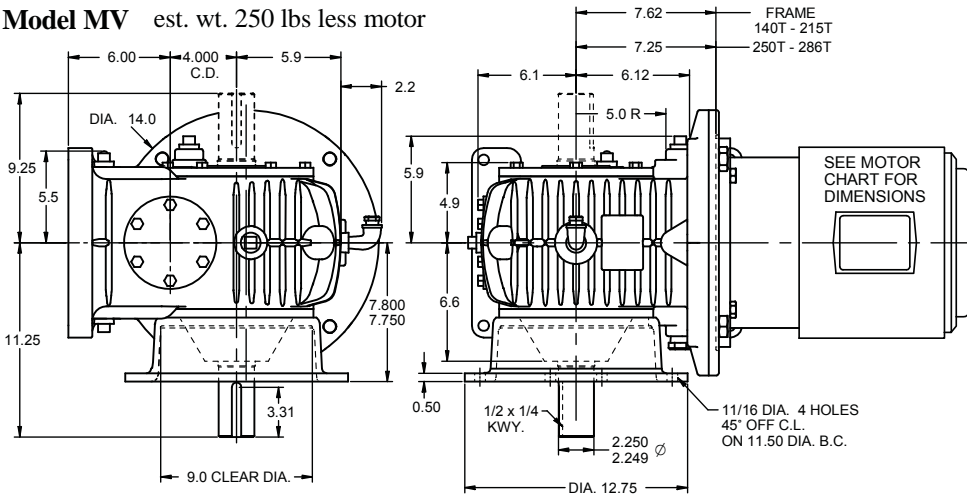
**Model MU** est. wt. 230 lbs less motor



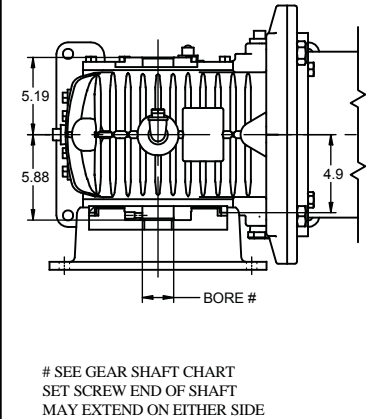
**SMU** est. wt. 230 lbs less motor



**Model MV** est. wt. 250 lbs less motor



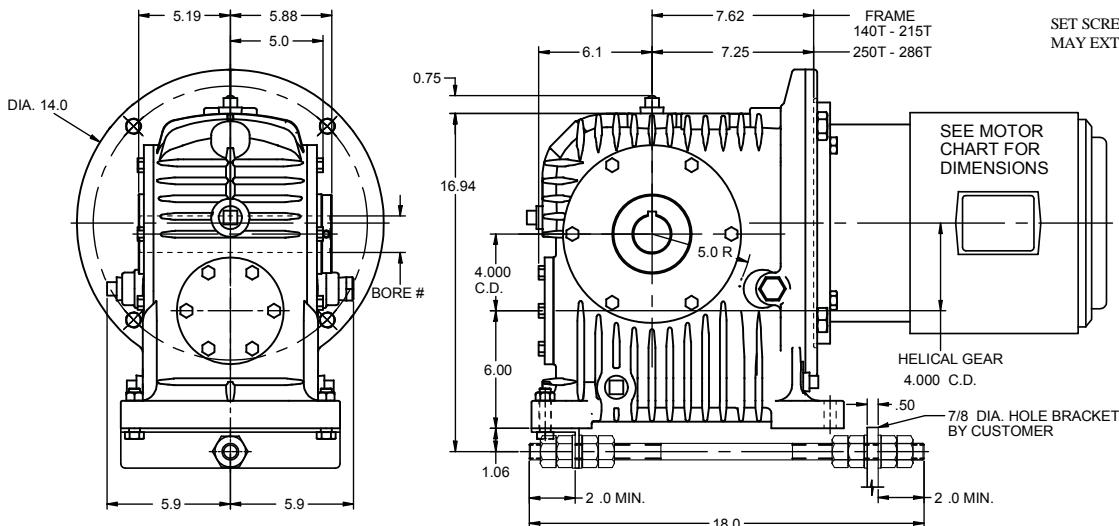
**SMV** est. wt. 250 lbs less motor



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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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
<b>10:1</b> 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
<b>12.5:1</b> 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
<b>15:1</b> 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
<b>18:1</b> 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
<b>20:1</b> 4 x 5	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
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 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
<b>37.5:1</b> 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
<b>40:1</b> 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
<b>45:1</b> 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
<b>50:1</b> 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
<b>54:1</b> 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
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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

**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

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.

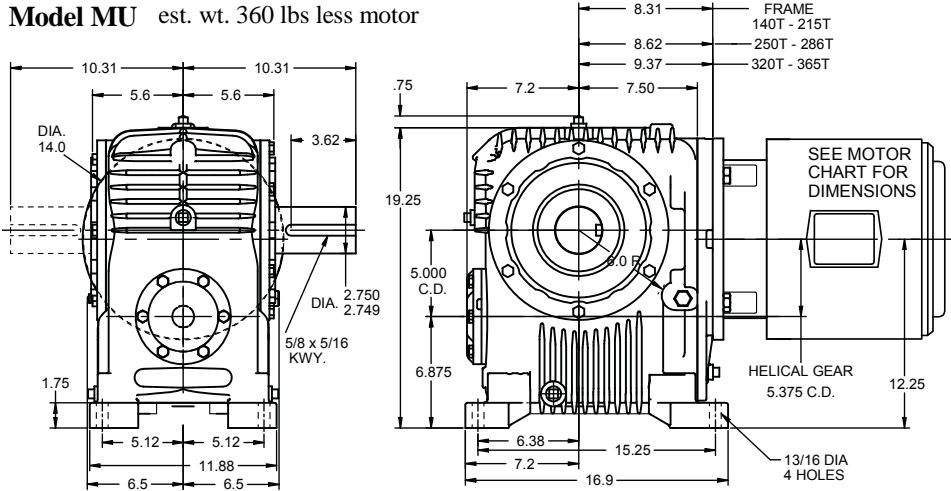
Me.HP - Mechanical horsepower      Th.HP - Thermal horsepower  
 O.T. - Output torque in Lb. in.

# Cone Drive Helical/Worm D-Flange Gearhead - 5.000" C.D.

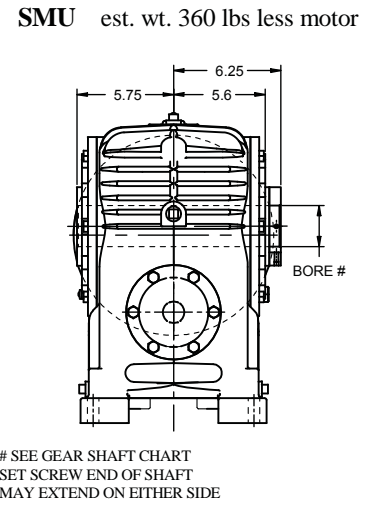
## Size 50 Solid Shaft

## Hollow Shaft

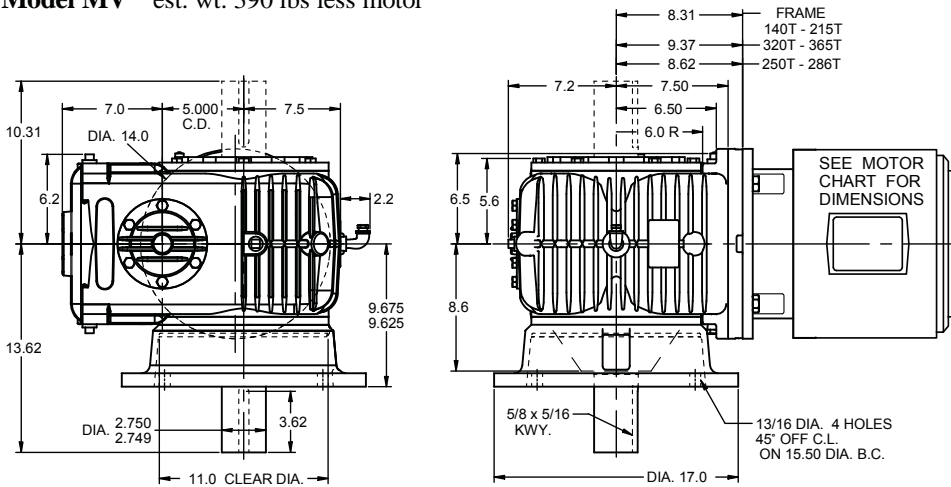
**Model MU** est. wt. 360 lbs less motor



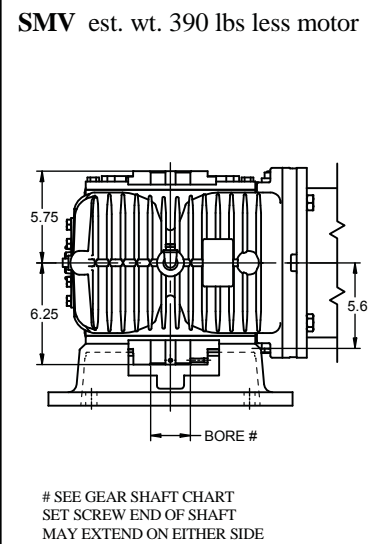
**SMU** est. wt. 360 lbs less motor



**Model MV** est. wt. 390 lbs less motor

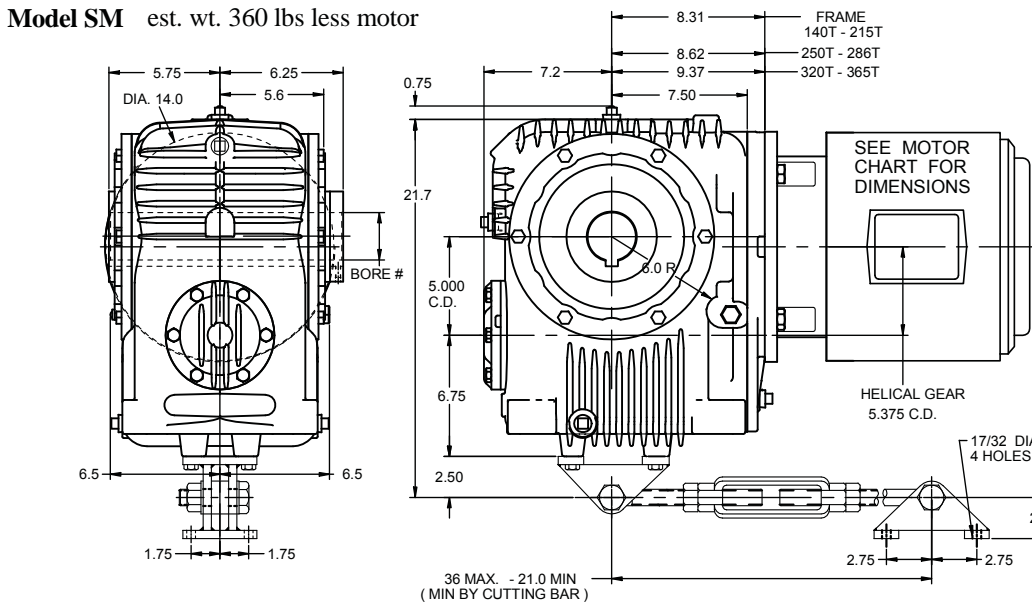


**SMV** est. wt. 390 lbs less motor



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

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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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	11500
<b>10:1</b> 1 x 10	Me.HP	3.91	19.3	24.1	28	34.3
	Th.HP	3.91	15.1	18.3	20.2	20.5
	O.T.	20600	18400	15500	13800	11200
<b>12.5:1</b> 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
<b>15:1</b> 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
<b>18:1</b> 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
<b>20:1</b> 4 x 5	Me.HP	2.57	10.6	13.2	15.3	18.9
	Th.HP	2.57	10.6	13.0	12.7	13.1
	O.T.	24500	19000	16000	14200	11600
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 1.8 x 20	Me.HP	1.46	6.98	9.40	11.2	14
	Th.HP	1.46	6.98	9.40	11.2	12.7
	O.T.	24500	21600	20000	18300	15300
<b>37.5:1</b> 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
<b>40:1</b> 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	11.7
	O.T.	25100	24100	23200	22200	20300
<b>45:1</b> 1.8 x 25	Me.HP	1.19	5.63	7.59	9.01	11.32
	Th.HP	1.19	5.63	7.59	9.01	11.3
	O.T.	23600	21600	19800	18100	15300
<b>50:1</b> 2.5 x 20	Me.HP	1.07	5.33	7.41	9.1	11.73
	Th.HP	1.07	5.33	7.41	9.1	11.3
	O.T.	24500	22600	21400	20300	17600
<b>54:1</b> 1.8 x 30	Me.HP	1.00	4.72	6.36	7.55	9.48
	Th.HP	1.00	4.72	6.36	7.55	9.48
	O.T.	22600	20200	18500	17100	14700
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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

**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	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

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.

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

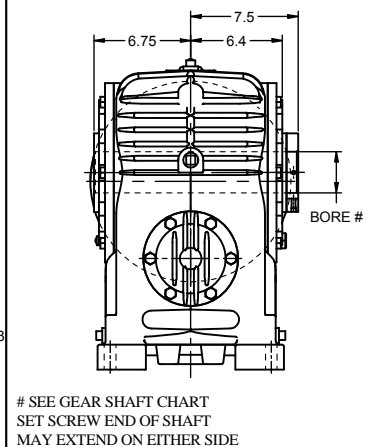
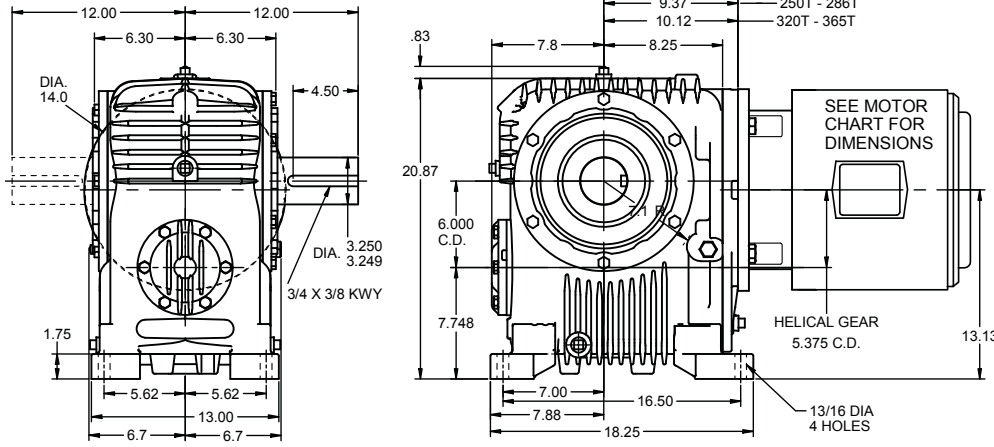
# Cone Drive Helical/Worm D-Flange Gearhead - 6.000" C.D.

## Size 60 Solid Shaft

## Hollow Shaft

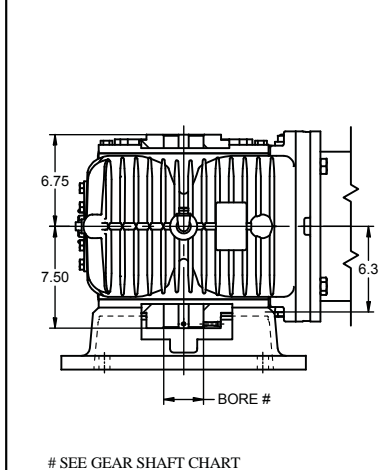
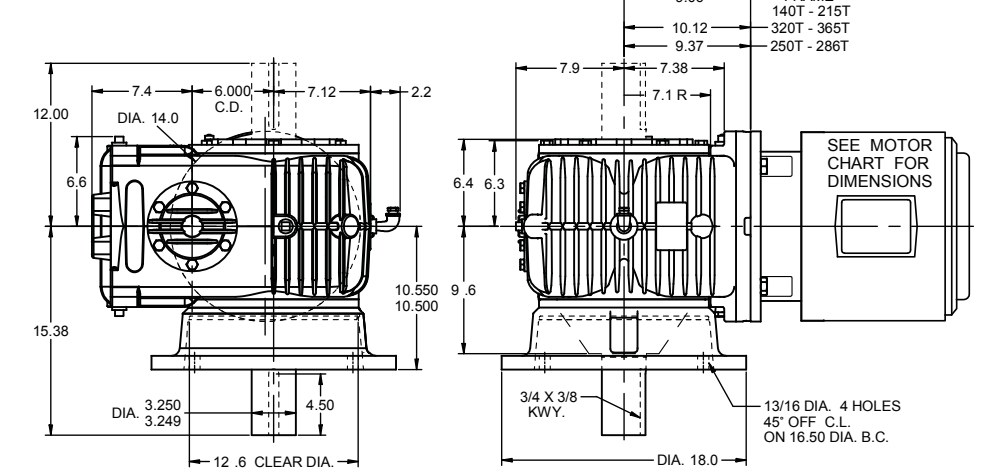
**Model MU** est. wt. 480 lbs less motor

**SMU** est. wt. 480 lbs less motor



**Model MV** est. wt. 510 lbs less motor

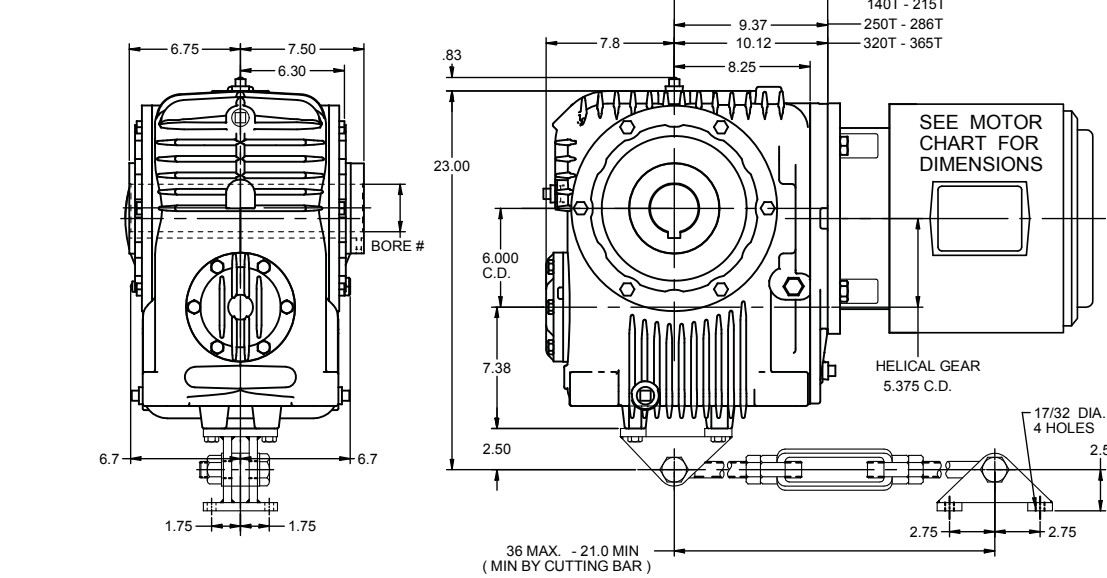
**SMV** est. wt. 510 lbs less motor



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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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
<b>10:1</b> 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
<b>12.5:1</b> 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
<b>15:1</b> 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
<b>18:1</b> 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
<b>20:1</b> 4 x 5	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
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 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
<b>37.5:1</b> 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
<b>40:1</b> 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
<b>45:1</b> 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
<b>50:1</b> 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
<b>54:1</b> 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
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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

**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.

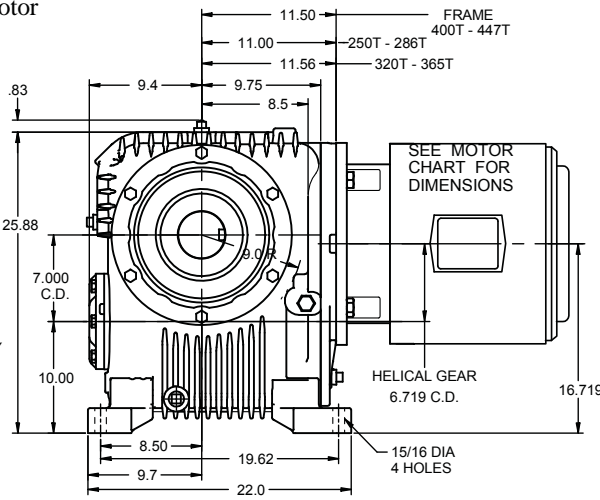
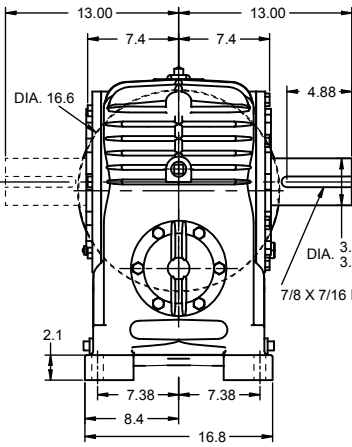


# Cone Drive Helical/Worm D-Flange Gearhead - 7.000" C.D.

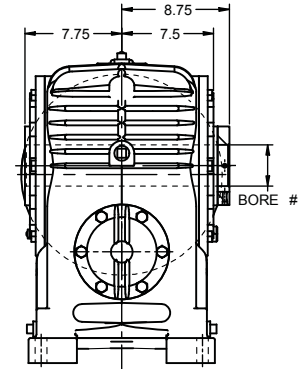
## Size 70 Solid Shaft

## Hollow Shaft

**Model MU** est. wt. 850 lbs less motor

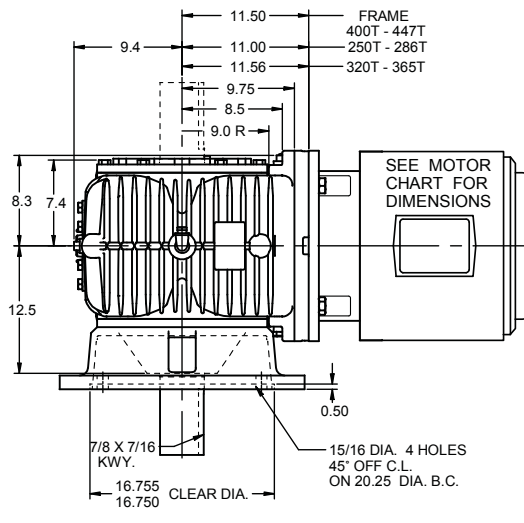
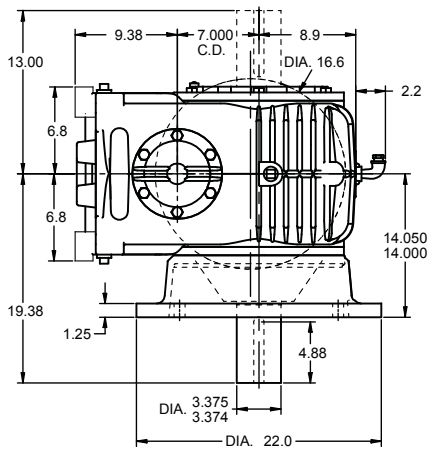


**SMU** est. wt. 850 lbs less motor

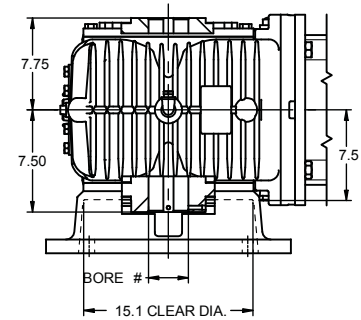


# SEE GEAR SHAFT CHART  
 SET SCREW END OF SHAFT  
 MAY EXTEND ON EITHER SIDE

**Model MV** est. wt. 900 lbs less motor



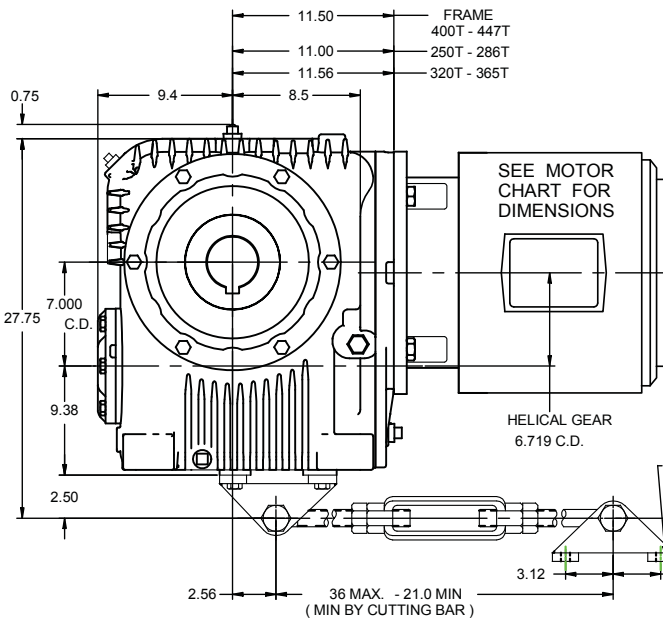
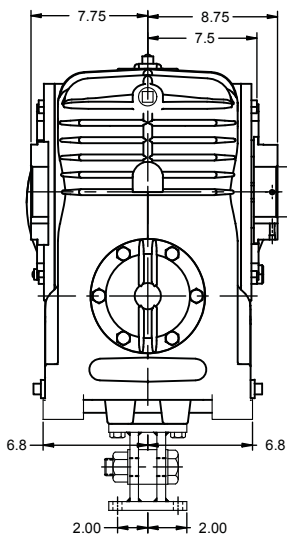
**SMV** est. wt. 900 lbs less motor



# 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
<b>5:1</b> 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
<b>7.5:1</b> 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
<b>9:1</b> 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
<b>10:1</b> 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
<b>12.5:1</b> 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
<b>15:1</b> 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
<b>18:1</b> 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
<b>20:1</b> 4 x 5	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
<b>22.5:1</b> 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
<b>25:1</b> 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
<b>27:1</b> 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
<b>30:1</b> 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
<b>36:1</b> 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
<b>37.5:1</b> 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
<b>40:1</b> 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
<b>45:1</b> 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
<b>50:1</b> 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
<b>54:1</b> 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
<b>60:1</b> 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
<b>62.5:1</b> 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
<b>72:1</b> 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
<b>75:1</b> 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.

**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
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.

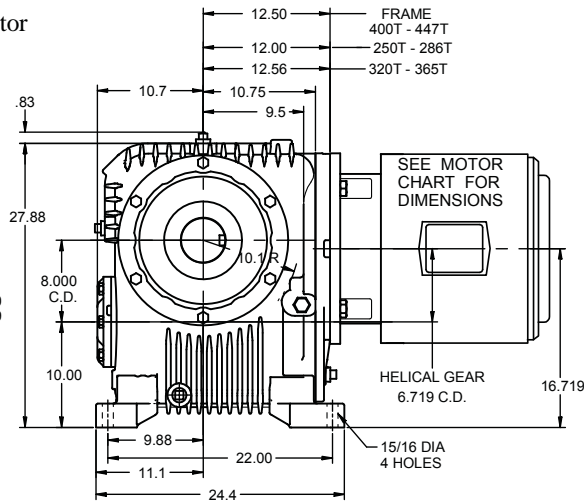
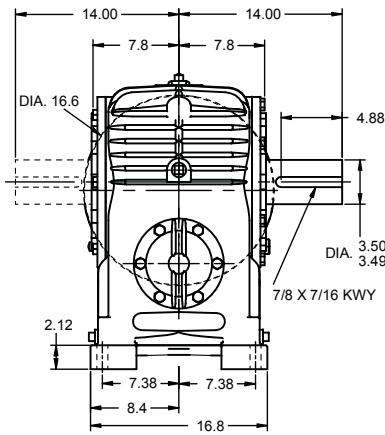
Special hollow gear shaft bore sizes are available at additional cost.  
 \*AGMA Standard  
 Bore Tolerance: +.003, -.000  
 2 set screws at long end of shaft.

# Cone Drive Helical/Worm D-Flange Gearhead - 8.000" C.D.

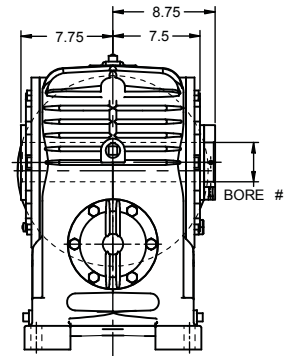
## Size 80 Solid Shaft

## Hollow Shaft

**Model MU** est. wt. 980 lbs less motor

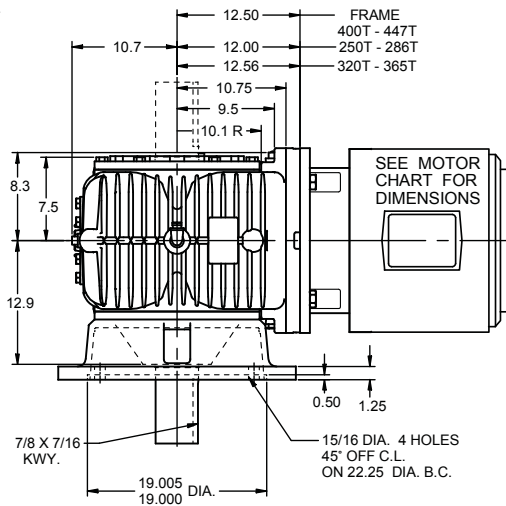
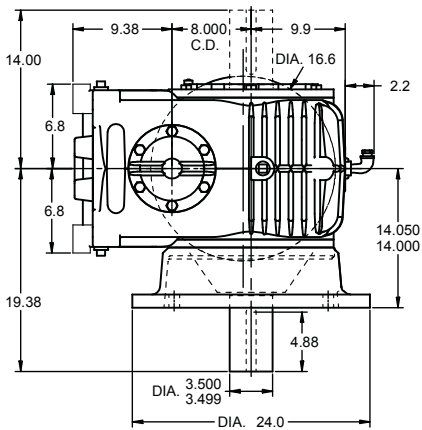


**SMU** est. wt. 980 lbs less motor

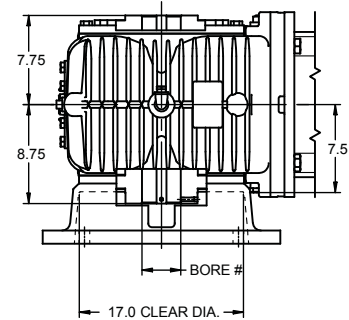


# SEE GEAR SHAFT CHART  
 SET SCREW END OF SHAFT  
 MAY EXTEND ON EITHER SIDE

**Model MV** est. wt. 1050 lbs less motor



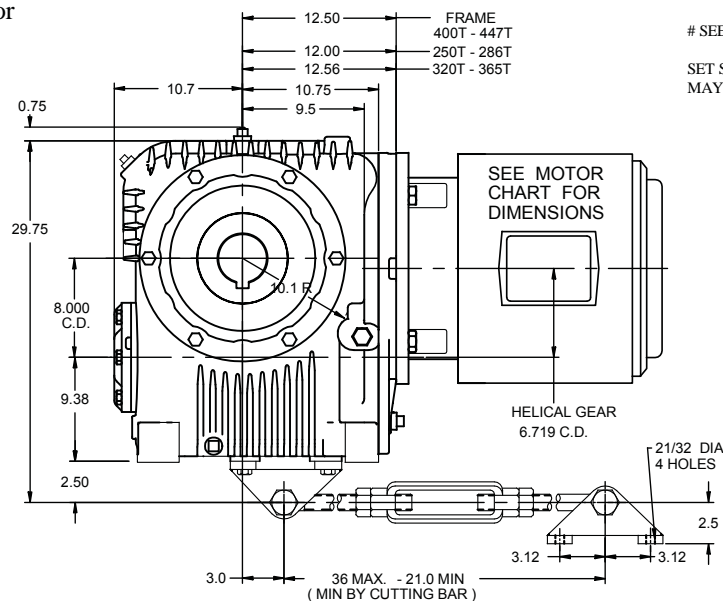
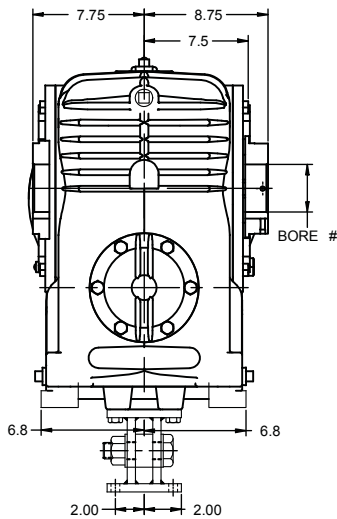
**SMV** est. wt. 1050 lbs less motor



# 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

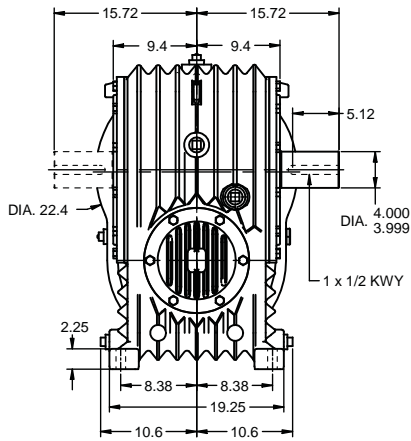


# Cone Drive Helical/Worm D-Flange Gearhead - 10.000" C.D.

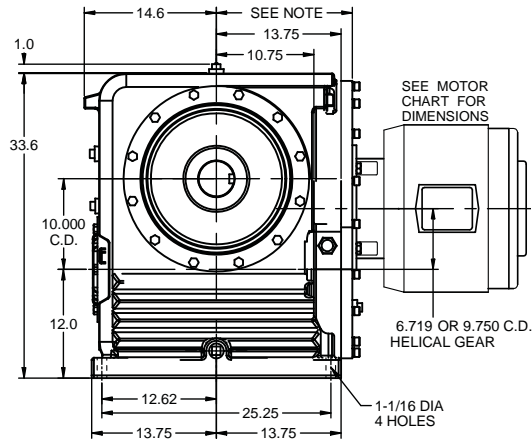
## Size 100 Solid Shaft

## Hollow Shaft

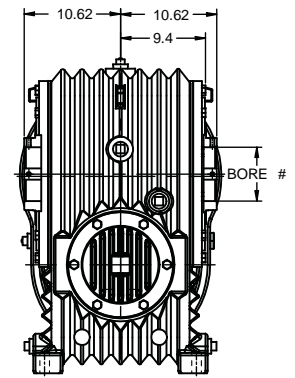
**Model MU** est. wt. 1600 lbs less motor



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

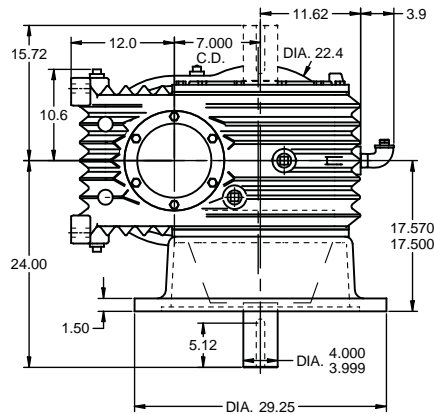


**SMU** est. wt. 1600 lbs less motor

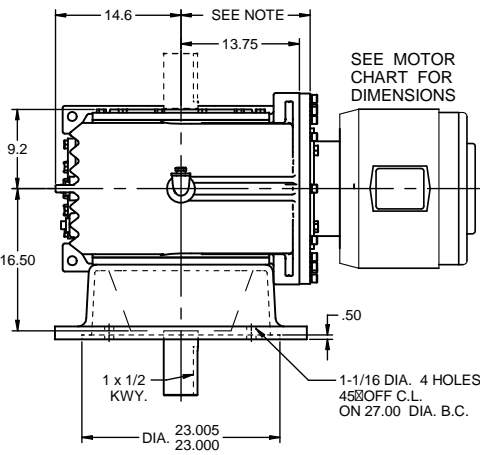


# SEE GEAR SHAFT CHART  
 SET SCREW END OF SHAFT  
 MAY EXTEND ON EITHER SIDE

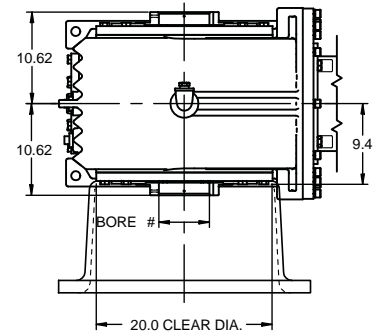
**Model MV** est. wt. 1675 lbs less motor



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



**SMV** est. wt. 1675 lbs less motor

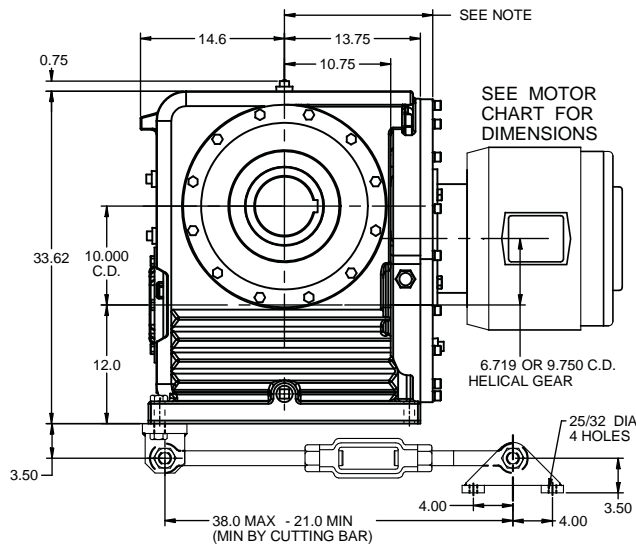
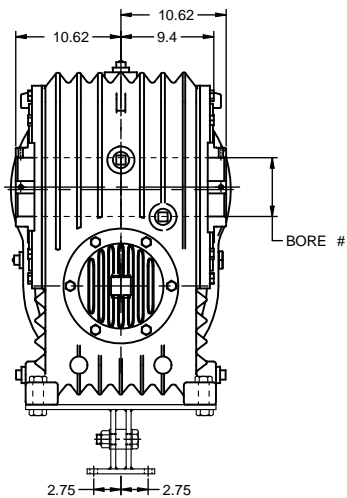


# SEE GEAR SHAFT CHART  
 SET SCREW END OF SHAFT  
 MAY EXTEND ON EITHER SIDE

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.



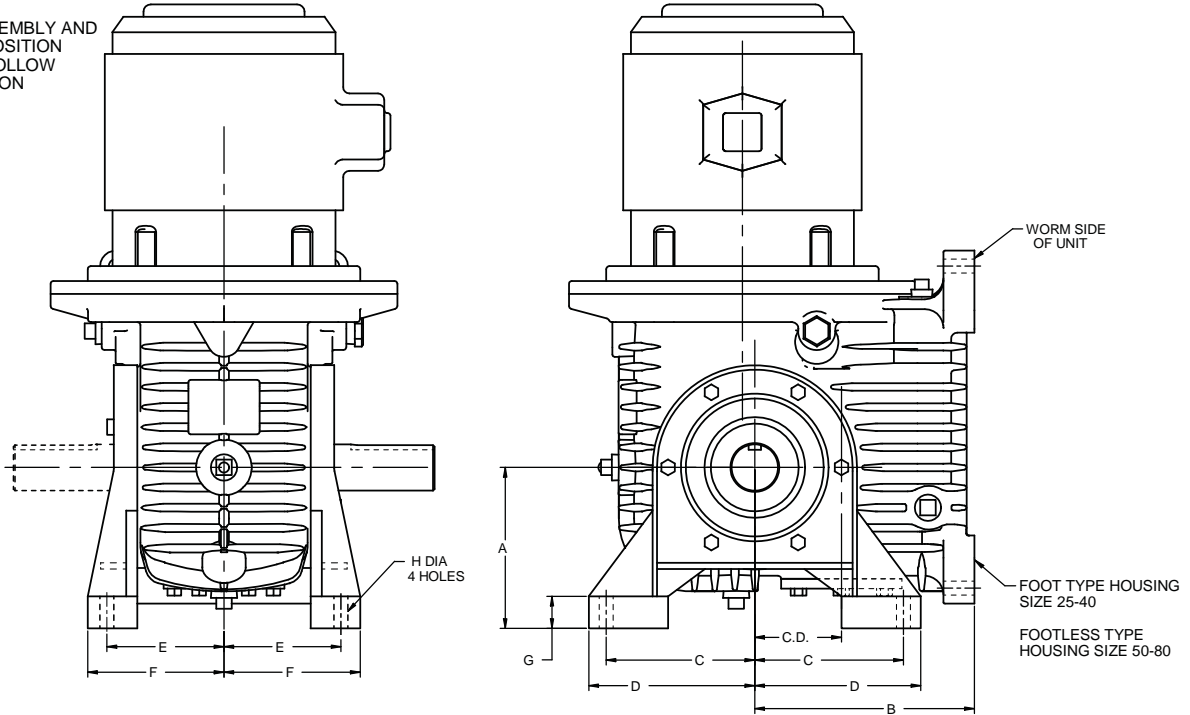
# Cone Drive Helical/Worm D Flange Gearhead

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

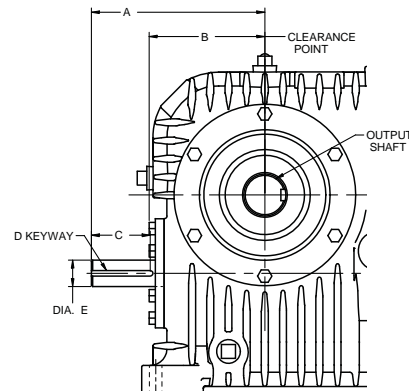


MODEL AVAILABLE IN ALL SOLID AND HOLLOW OUTPUT SHAFT CONFIGURATIONS. FOR ALL OTHER DIMENSIONS REFER TO CORRESPONDING SIZE MODEL SM OR MU.

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

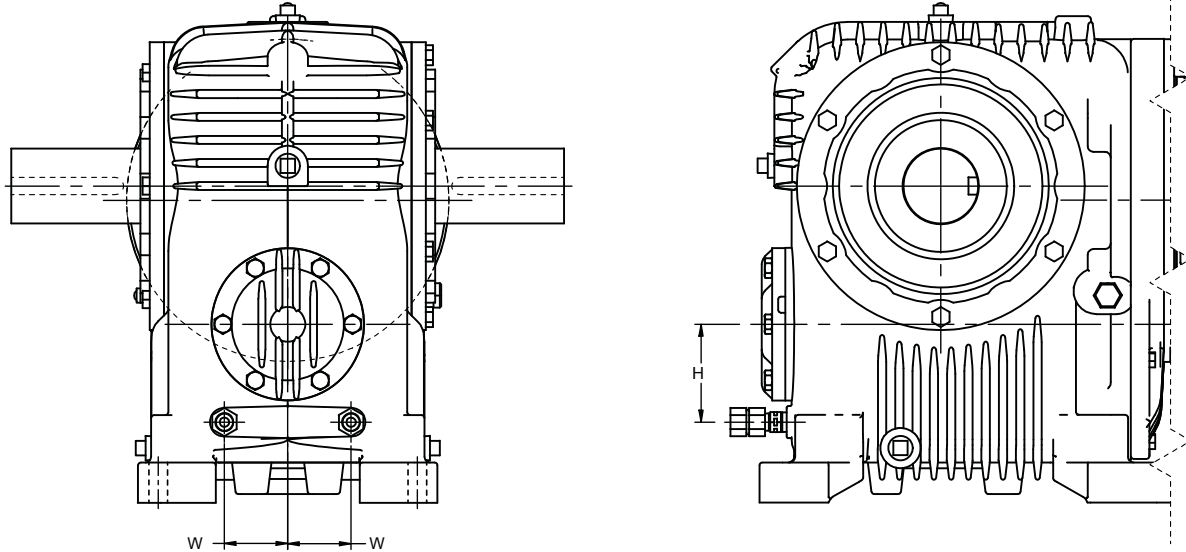
UNIT SIZE	TOTAL RATIO	INPUT RPM		
		870	1150	1750
40	ALL RATINGS ARE EQUAL TO MECHANICAL RATING OF SIZE 40 HELICAL/WORM D-FLANGE GEARHEAD IN THIS SECTION			
50	5:1	29.0	36.3	49.6
	7.5:1	23.3	25.7	37.0
	9:1	21.6	24.7	33.3
	10:1	23.8	28.0	34.4
	12.5:1		20.2	24.6
60	15:1	17.1	21.4	28.3
	5:1	29.0	37.5	53.0
	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
	80	30:1	20.2	22.1
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
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

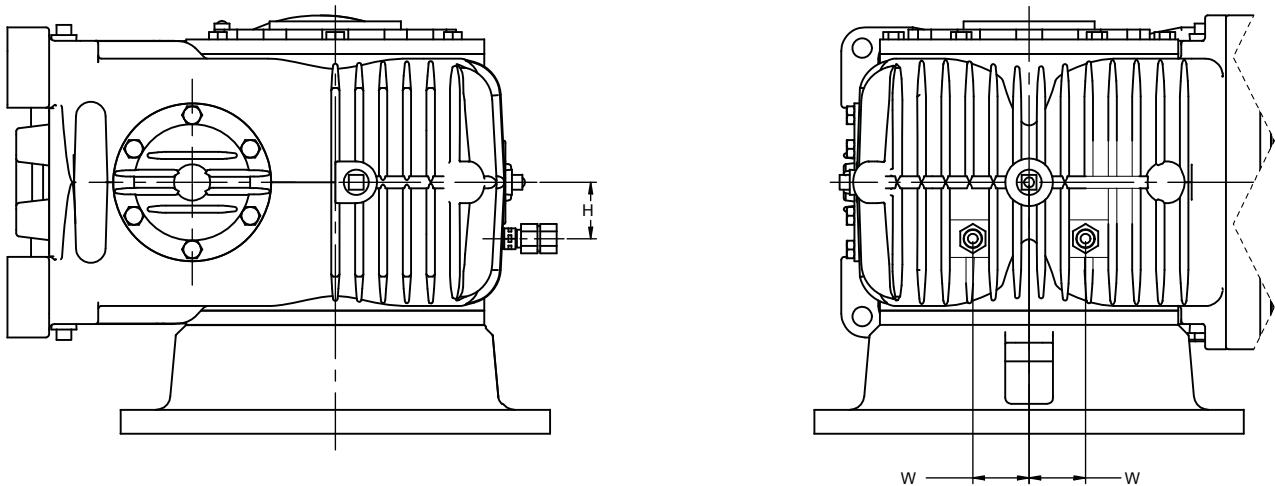
**Model MU** Shown **SMU, MV, SMV, SM**

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

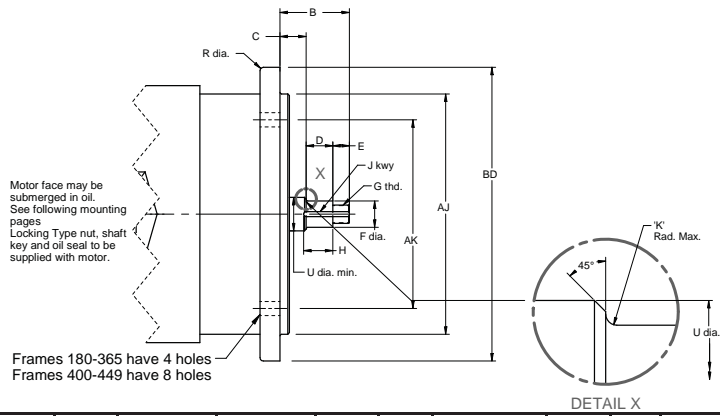
**IMPORTANT:** WHEN ASSEMBLING EXTERNAL PIPING TO REDUCER INLET AND OUTLET FITTINGS A BACKUP WRENCH MUST BE USED ON REDUCER FITTINGS TO PREVENT TURNING TO AVOID DAMAGE TO COOLING COIL INSIDE UNIT.

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.
<b>REDUCER SIZES: 25 &amp; 30, HELICAL C.D. 3.000</b>																
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
<b>REDUCER SIZES: 35 &amp; 40, HELICAL C.D 4.000</b>																
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
<b>REDUCER SIZES: 50 &amp; 60, HELICAL C.D 5.375</b>																
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
<b>REDUCER SIZES: 70 &amp; 80, 100L HELICAL C.D 6.719</b>																
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
<b>REDUCER SIZE: 100, HELICAL C.D. 9.750</b>																
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

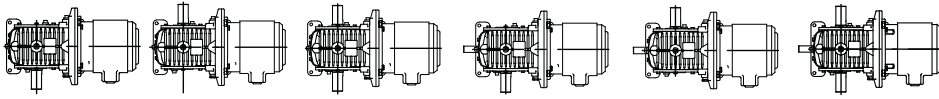
\*Reducers marked with asterisk do not require motor adapters.

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

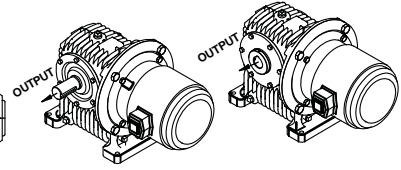
Models MU, SMU, MV, SMV, SM, Solid & Hollow Shaft

ALL DIAGRAMS SHOW REDUCER WITH FEET ON FAR SIDE

## Top View, Floor Mounted

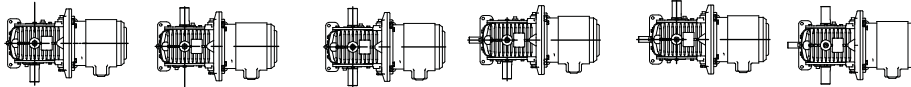


1.....2.....3.....4.....5.....6

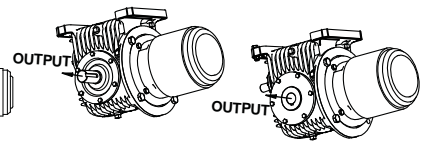


1 Shown

## Ceiling Mounted\*

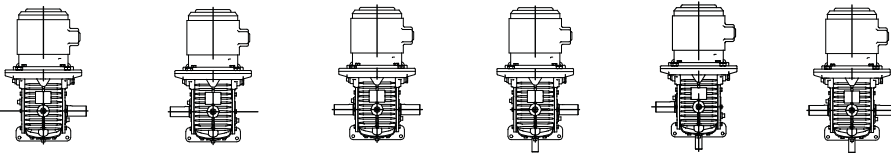


C1.....C2.....C3.....C4.....C5.....C6

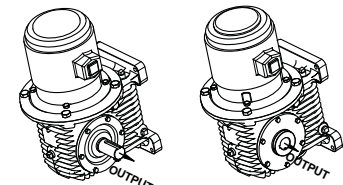


C2 Shown

## Wall Mounted, Motor Up

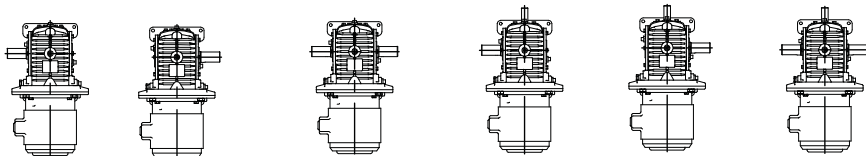


W1.....W2.....W3.....W4.....W5.....W6

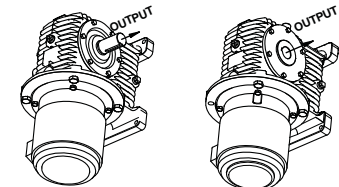


W1 Shown

## Wall Mounted, Motor Down\*

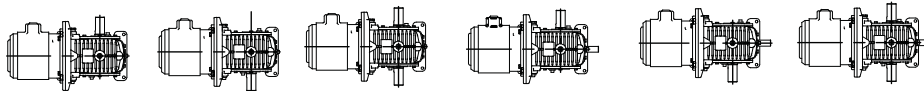


X1.....X2.....X3.....X4.....X5.....X6

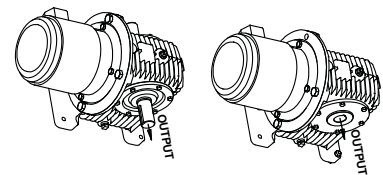


X2 Shown

## Wall Mounted, Motor To Left\*

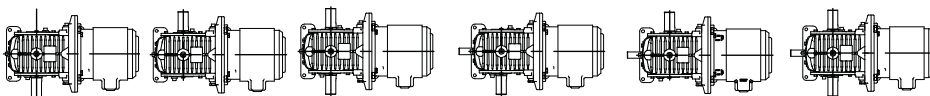


Y1.....Y2.....Y3.....Y4.....Y5.....Y6

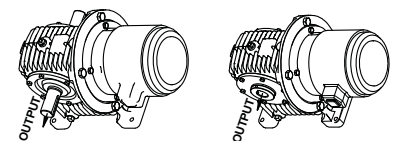


Y2 Shown

## 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.

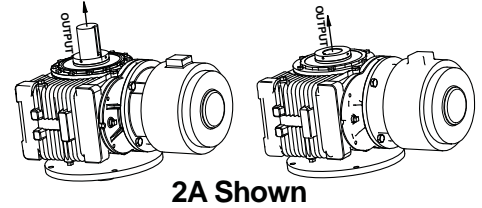
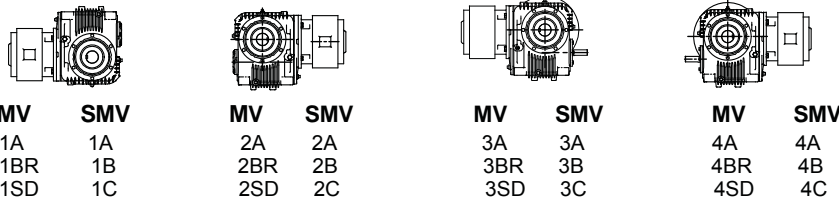
# Assembly & Mounting Position Numbers for Cone Drive Helical/Worm D Flange Gearhead

Models MV, SMV - Solid & Hollow Shaft

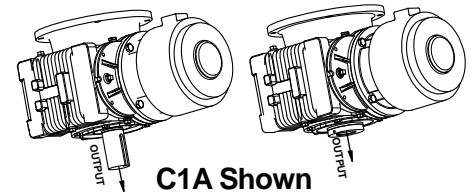
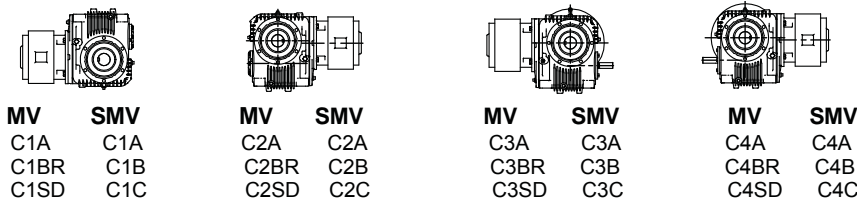
ALL DIAGRAMS SHOW REDUCER WITH BASE ON FAR SIDE

<b>RV</b>	<b>SRV</b>	
<b>A</b>	<b>A</b>	Gearshaft Extended Opposite Base
<b>BR</b>	<b>B</b>	Gearshaft Extended Through Base
<b>SD</b>	<b>C</b>	Gearshaft Double Extended

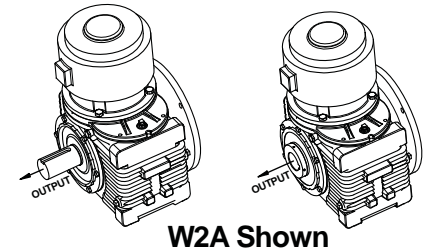
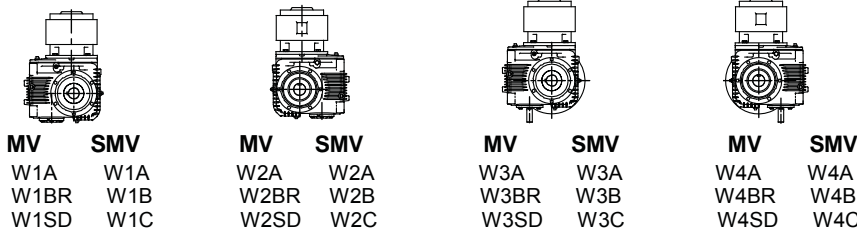
## Floor Mounted - Top View\*



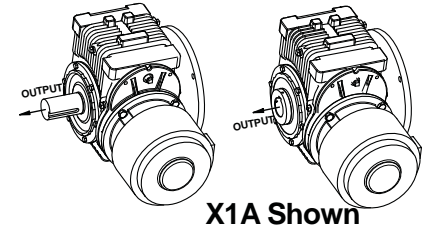
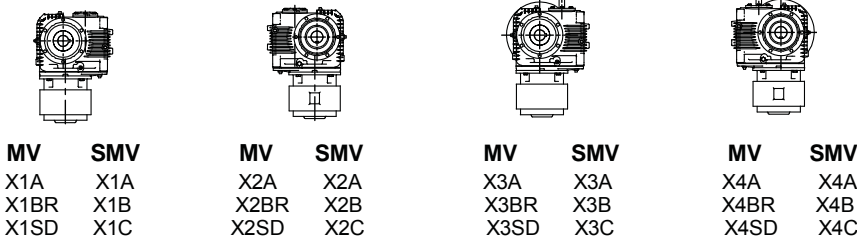
## Ceiling Mounted\*



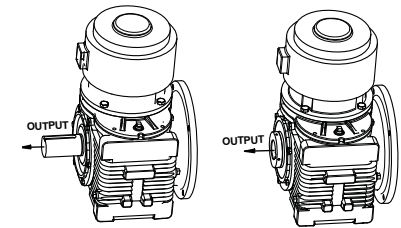
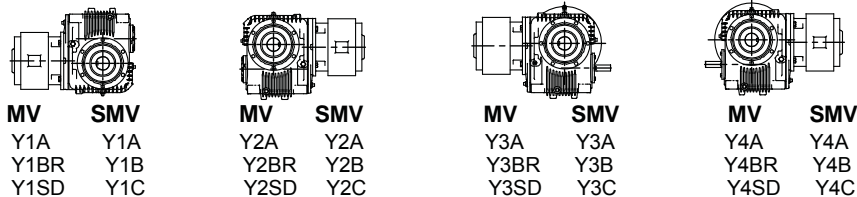
## Wall Mounted - Motor Up



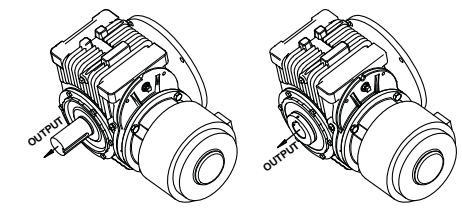
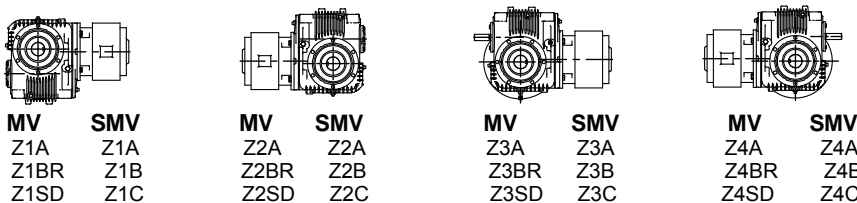
## Wall Mounted - MotorDown\*



## Wall Mounted - Worm Under



## Wall Mounted - Worm Over



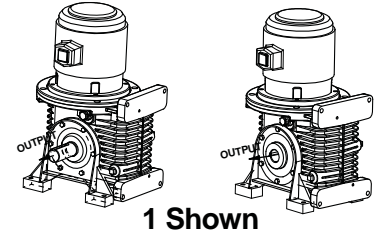
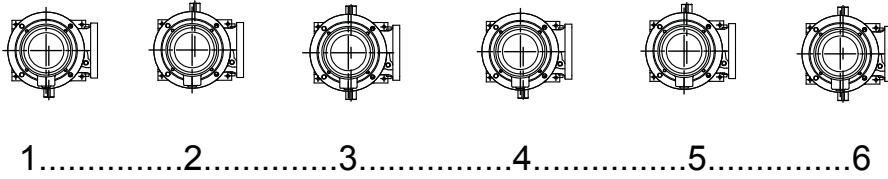
\*Motor face may be submerged in oil. Contact motor supplier regarding shaft seal requirements.

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

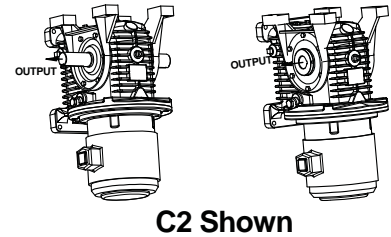
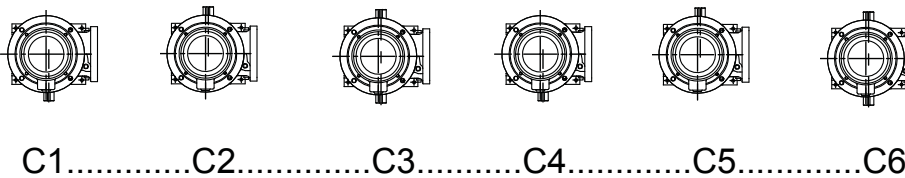
Models VM, SVM - Solid & Hollow Shaft

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

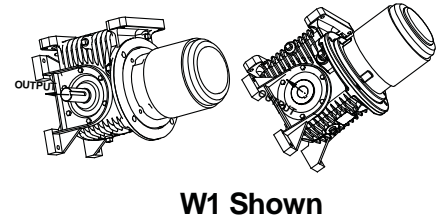
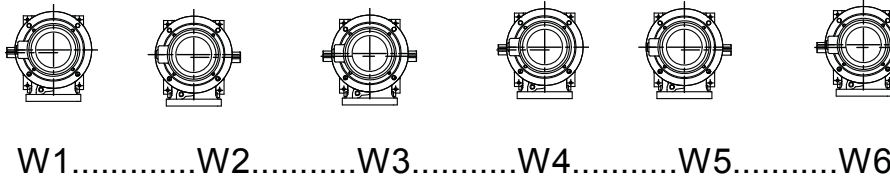
## Top View, Floor Mounted



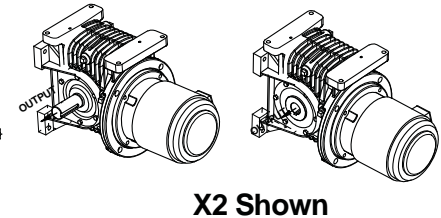
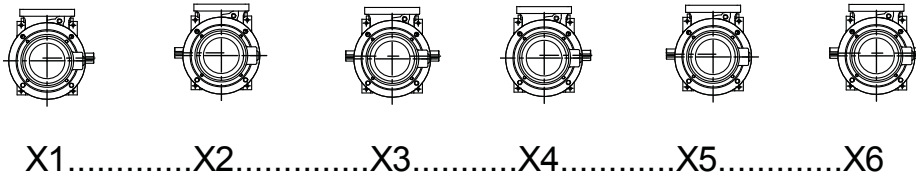
## Ceiling Mounted\*



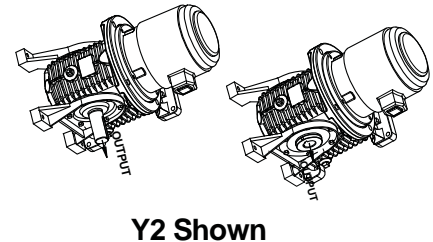
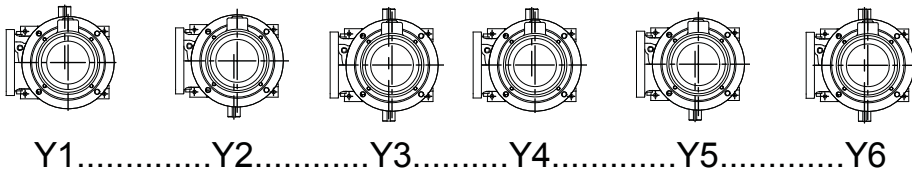
## Wall Mounted, Worm Under Horizontal Gearshaft



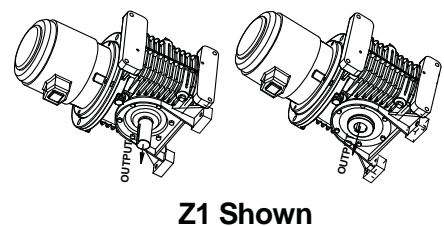
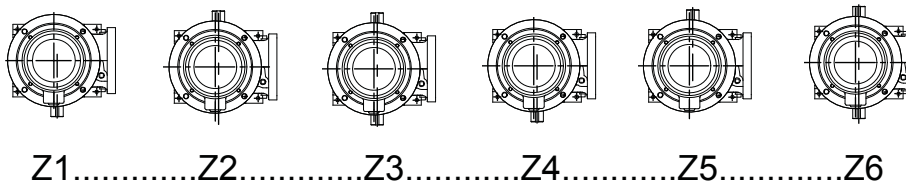
## Wall Mounted, Worm Over Horizontal Gearshaft\*



## 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.