



HOW TO SELECT

TWO METHODS OF SELECTION (presented on pages 8 to 21) have been designed, utilizing proper service factors, to compliment both the electrical and mechanical engineer.

- 1 **Horsepower Method** — Gearmotor Selection (Input Horsepower and Output RPM or Ratio known).
- 2 **Torque Method** — (Output Torque and Output RPM or Ratio known).

HOW TO SELECT

HORSEPOWER METHOD

Note:

Previous editions of catalog 100 referred to a "Gearmotor Selection Chart". Gearmotor selections are now shown in Gearmotor Section D. To select a reducer by the horsepower method use the following procedure.

Example A—A customer requires a reducer to drive the head shaft of his bucket conveyor at a speed of 250 RPM. The motor is 3 HP, 1800 RPM. The conveyor operates 10 hours per day, uniformly fed.

Selection Procedure

1. Determine the service factor. Based on the load classification for the given application from the tables on pages 228-231 (U) select the service factor (from the service factor table below) corresponding to the duration of service (10 hours) and type of prime mover (electric motor).
Example A = 1.00 service factor.
2. Choose the ratio which will result in the output RPM which is closest to the required output RPM.
Example A = $7\frac{1}{2}:1$ ratio = 240 RPM.
3. Using the output RPM or ratio selected in step 2, refer to the appropriate selection chart (based on input speed, see pages 8-21) and select a reducer which has an input horsepower capacity equal to or greater than the motor horsepower.

Example A = size 4 as indicated on the chart below which is rated at 3.53 HP @ 1800 RPM input speed with a service factor of 1.00.

Output RPM	Ratio	Unit Size	1	1FC	2	2FC	3	3FC	4	4FC	5	5FC	6	6FC	7	7FC	8
360	5	Output Torque	144	165	251	287	358	409	703	804	979	1119	1304	1490			
		Input H.P.	1.00	1.13	1.68	1.91	2.34	2.66	4.45	5.06	5.91	6.72	8.49	9.68			
240	7-1/2	Output Torque	175	201	329	379	453	519	819	942	1123	1287	1556	1788	2097	2407	2942
		Input H.P.	.84	.95	1.49	1.69	2.00	2.21	3.53	4.03	4.95	5.65	6.58	7.53	9.14	10.45	11.92

SEE SECTION D

TORQUE METHOD

Example B — 650 inch lbs. of output torque is required to drive a pure liquid agitator at an output speed of 245 RPM, 24 hours per day. Prime mover = 1200 RPM electric motor.

Selection Procedure

1. Determine the service factor from the table below, based on the load classification for the given application (see pages 228-231), length of service and type of prime mover. **Example B** — Service Factor = 1.25.
2. Calculate the **Design Torque** by multiplying the required output torque by the service factor. **Example B** — **Design Torque** = 650 in lbs. x 1.25 = 812 in lbs.
3. Choose the output RPM or ratio on the appropriate selection chart (based on input speed) (see pages 8-21) which is closest to the required output RPM or ratio. **Example B** — Select 240 RPM.
4. Select a reducer corresponding to (a) the lowest output torque value on the selection chart which is greater than, or equal to, the **Design Torque** and (b) the required output RPM or ratio.

Example B — A size 4C unit is chosen at 878 in. lbs. of output torque. See chart below.

Ratio	Out RPM	Unit Size	1	1FC	2	2FC	3	3FC	4	4FC	5
5	240	Output Torque	173	107	322	368	448	512	878	1004	1217
		Input H.P.	.81	.91	1.45	1.64	1.97	2.24	3.74	4.25	4.94

SEE PAGE 12

SERVICE FACTORS FOR DESIGN HP AND TORQUE

Prime Mover	Duration of Service Per Day	Driven Machine Load Classifications		
		Uniform U	Moderate Shock M	Heavy Shock H
Electric Motor	Occasional 1/2 hour	0.80	0.90	1.00
	Intermittent 2 hours	0.90	1.00	1.25
	10 hours	1.00	1.25	1.50
	24 hours	1.25	1.50	1.75
Multi-cylinder Internal Combustion Engine	Occasional 1/2 hour	0.90	1.00	1.25
	Intermittent 2 hours	1.00	1.25	1.50
	10 hours	1.25	1.50	1.75
	24 hours	1.50	1.75	2.00
Single cylinder Internal Combustion Engine	Occasional 1/2 hour	1.00	1.25	1.50
	Intermittent 2 hours	1.25	1.50	1.75
	10 hours	1.50	1.75	2.00
	24 hours	1.75	2.00	2.25

Following Service Factors Apply for Applications Involving Frequent Starts and Stops

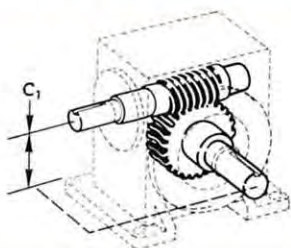
Prime Mover	Duration of Service Per Day	Driven Machine Load Classifications		
		Uniform U	Moderate Shock M	Heavy Shock H
Electric Motor	Occasional 1/2 hour	0.90	1.00	1.25
	Intermittent 2 hours	1.00	1.25	1.50
	10 hours	1.25	1.50	1.75
	24 hours	1.50	1.75	2.00

EXPLANATORY NOTES: 1. Time specified for intermittent and occasional service refers to total operating time per day.
2. Term "Frequent starts and stops" refers to more than 10 - 20 starts per hour.

REDUCER SIZES

REDUCER SIZE IS DETERMINED BY SHAFT TO SHAFT CENTERLINE DISTANCE IN INCHES.
See pages 22-27 for a complete index of sizes available for a specific reducer type.

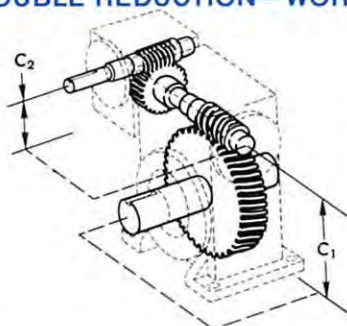
SINGLE REDUCTION—WORM GEAR



Size	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
C ₁	1 1/3	1 3/4	2	2 5/8	3	3 1/2	4	4.6	5.167	6	6 1/2	7	7 5/8	8 1/8	9

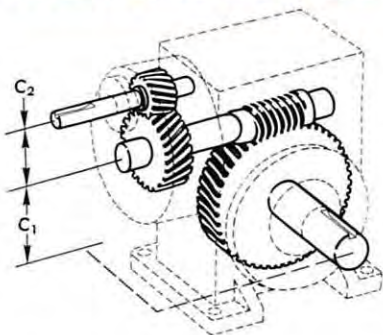
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DOUBLE REDUCTION—WORM GEAR



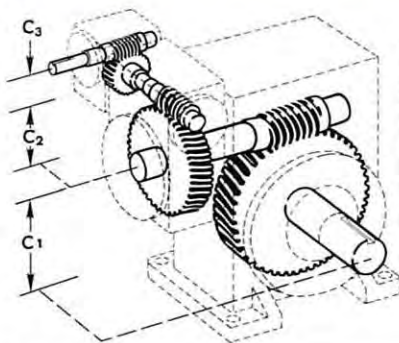
Size	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
C ₂ Primary		1 1/3	1 1/3	1 1/3	2	2	2 5/8	2 5/8	2 5/8	3	3	3 1/2	3 1/2	4	5.167
C ₁ Secondary		1 3/4	2	2 5/8	3	3 1/2	4	4.6	5.167	6	6 1/2	7	7 5/8	8 1/8	9

DOUBLE REDUCTION—HELICAL AND WORM GEAR



Size	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
C ₂ Primary (Helical)					1 7/8	1 7/8	1 7/8	1 7/8	1 7/8	3	3	3	3	3	
C ₁ Secondary (Worm)					3	3 1/2	4	4.6	5.167	6	6 1/2	7	7 5/8	8 1/8	

TRIPLE REDUCTION—WORM GEAR



Size	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
C ₃ Primary					1 1/3	1 1/3	1 1/3	1 1/3	1 1/3	2	2	2	2	2 5/8	2 5/8
C ₂ Secondary					2	2	2 5/8	2 5/8	2 5/8	3	3	3 1/2	3 1/2	4	5.167
C ₁ Third					3	3 1/2	4	4.6	5.167	6	6 1/2	7	7 5/8	8 1/8	9



REDUCER SELECTION

SINGLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

See page 6 and 7 for selection procedure, service factors and unit center distances.
See page 22-27 for a complete index of models available within each size.
For "BEST BUY" compare the price of the selected unit with that of the next higher rated unit.
FC indicates a fan cooled unit.

1800 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

Output RPM	Ratio	Unit Size	1	1FC	2	2FC	3	3FC	4	4FC	5	5FC	6	6FC	7	7FC	8
360	5	Output Torque	144	165	251	287	358	409	703	804	979	1119	1383	1580			
		Input H.P.	1.00	1.13	1.68	1.91	2.34	2.66	4.45	5.06	5.91	6.72	8.31	9.47			
240	7-1/2	Output Torque	175	201	329	379	453	519	819	942	1123	1287	1556	1788	2097	2407	2942
		Input H.P.	.84	.95	1.49	1.69	2.00	2.21	3.53	4.03	4.95	5.65	6.58	7.53	9.14	10.45	11.92
180	10	Output Torque	172	198	353	407	486	562	890	1026	1202	1389	1679	1935	2293	2643	3100
		Input H.P.	.68	.77	1.25	1.42	1.66	1.90	2.92	3.35	3.78	4.34	5.31	6.09	7.53	8.63	10.12
120	15	Output Torque	197	229	374	435	507	590	932	1084	1282	1501	1770	2059	2402	2797	3329
		Input H.P.	.55	.63	.96	1.09	1.26	1.44	2.20	2.54	2.83	3.28	4.05	4.68	5.64	6.51	7.19
90	20	Output Torque	183	215	380	445	512	603	964	1134	1314	1546	1864	2195	2514	2958	3392
		Input H.P.	.46	.52	.79	.90	1.02	1.18	1.76	2.05	2.32	2.70	3.26	3.80	4.41	5.13	5.81
72	25	Output Torque	190	225	378	448	527	624	977	1160	1289	1530	1740	2066	2515	2994	3271
		Input H.P.	.41	.47	.67	.78	.88	1.02	1.46	1.71	1.95	2.28	2.70	3.16	3.52	4.13	4.66
60	30	Output Torque	197	236	375	449	520	622	933	1118	1297	1554	1772	2122	2419	2898	3404
		Input H.P.	.37	.42	.60	.69	.77	.90	1.31	1.54	1.69	2.00	2.36	2.79	3.20	3.77	4.32
45	40	Output Torque	175	214	363	444	492	601	927	1134	1268	1551	1797	2199	2430	2968	3316
		Input H.P.	.32	.36	.49	.58	.63	.75	1.04	1.23	1.34	1.60	1.85	2.22	2.55	3.05	3.38
36	50	Output Torque	152	152	348	398	477	596	888	1109	1197	1496	1641	2052	2271	2851	3106
		Input H.P.	.28	.28	.42	.47	.52	.62	.83	1.00	1.09	1.32	1.46	1.78	1.98	2.40	2.68
30	60	Output Torque	167	187	318	400	444	566	826	1052	1113	1418	1507	1919	2062	2626	2869
		Input H.P.	.24	.26	.37	.44	.46	.55	.70	.85	.91	1.11	1.32	1.62	1.64	2.01	2.19

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

REDUCER SELECTION

SINGLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

*Note: The energy efficient "D" line is available to replace "C" line units to 3" CD. See the D Line Catalog.

1800 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

	8FC	9	9FC	10	10FC	11	11FC	12	12FC	13	13FC	14	14FC	15	15FC	Unit Size	Ratio	Output RPM
																Output Torque	5	360
																Input H.P.		
	3372	3664	4211	5276	6462	6201	7107	7508	8617							Output Torque	7-1/2	240
	13.60	15.89	18.19	21.92	26.70	26.62	30.39	30.16	34.47							Input H.P.		
	3573	4113	4748	5689	6567	6833	7877	8062	9307	9581	11060	11105	12783	13957	16089	Output Torque	10	180
	11.60	12.77	14.67	17.47	20.06	21.60	24.78	24.81	28.50	29.36	33.71	36.61	41.93	44.75	51.32	Input H.P.		
	3876	4189	4864	5869	6824	7130	8291	8606	10007	10381	12071	11632	13526	14771	17176	Output Torque	15	120
	8.30	9.78	11.27	12.85	14.83	16.32	18.84	19.15	22.11	22.00	25.39	25.03	29.00	31.28	36.09	Input H.P.		
	3985	4454	5240	6156	7242	7386	8690	8654	10181	10318	12139	12179	14307	15363	18022	Output Torque	20	90
	6.75	7.67	8.93	10.12	11.79	12.65	14.74	14.62	17.03	17.16	19.98	21.55	25.07	26.37	30.63	Input H.P.		
	3889	4459	5292	5895	7008	7419	8832	8566	10167	10598	12598	12207	14511	15366	18266	Output Torque	25	72
	5.45	6.35	7.43	8.72	10.24	10.22	12.01	11.81	13.83	14.81	17.40	16.89	19.82	20.72	24.30	Input H.P.		
	4077	4209	5033	6178	7399	7332	8780	8560	10251	10527	12607	12081	14555	15056	18031	Output Torque	30	60
	5.09	5.53	6.50	7.46	8.80	9.06	10.69	10.69	12.60	12.86	15.16	13.20	15.77	17.62	20.76	Input H.P.		
	4050	4266	5226	5991	7328	7102	8687	8430	10328	10011	12265	11839	14416	14834	18119	Output Torque	40	45
	4.04	4.23	5.07	5.83	6.98	7.10	8.51	8.31	9.96	9.44	11.31	12.05	14.37	14.60	17.46	Input H.P.		
	3894	4052	5065	5655	7057	6734	8417	7774	9733	9661	12057	11021	13797	13908	17386	Output Torque	50	36
	3.26	3.49	4.23	4.69	5.70	5.56	6.75	6.74	8.19	8.06	9.77	9.19	11.16	11.40	13.82	Input H.P.		
	3660	3760	4790	5239	6673	6278	7998	7325	9346	8986	11430	10350	13184	13001	16562	Output Torque	60	30
	2.67	2.86	3.49	3.85	4.72	4.63	5.68	5.33	6.54	6.98	8.56	7.69	9.42	8.71	10.87	Input H.P.		

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.





REDUCER SELECTION

SINGLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

See page 6 and 7 for selection procedure, service factors and unit center distances.

See page 22-27 for a complete index of models available within each size.

For "BEST BUY" compare the price of the selected unit with that of the next higher rated unit.

FC indicates a fan cooled unit.

1200 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

Output RPM	Ratio	Unit Size	1	1FC	2	2FC	3	3FC	4	4FC	5	5FC	6	6FC	7	7FC	8
240	5	Output Torque	173	197	322	368	448	512	878	1004	1217	1391	1684	1878			
		Input H.P.	.81	.91	1.45	1.64	1.97	2.24	3.74	4.25	4.94	5.62	6.81	8.20			
160	7-1/2	Output Torque	202	231	395	454	546	626	1025	1179	1406	1612	1913	2198	2643	3034	3708
		Input H.P.	.66	.74	1.20	1.37	1.57	1.80	2.97	3.40	4.17	4.76	5.45	6.24	7.72	8.83	10.05
120	10	Output Torque	205	236	422	487	582	673	1116	1287	1517	1754	2071	2387	2866	3303	3854
		Input H.P.	.55	.62	1.01	1.15	1.34	1.54	2.47	2.83	3.21	3.70	4.43	5.08	6.31	7.24	8.42
80	15	Output Torque	226	263	446	519	618	718	1165	1355	1606	1881	2189	2545	2930	3412	4166
		Input H.P.	.43	.49	.77	.88	1.04	1.19	1.87	2.15	2.39	2.78	3.40	3.93	4.64	5.36	6.02
60	20	Output Torque	217	255	453	530	623	733	1199	1411	1616	1901	2330	2744	3147	3703	4243
		Input H.P.	.37	.42	.64	.73	.85	.98	1.49	1.73	1.94	2.25	2.77	3.23	3.71	4.32	4.86
48	25	Output Torque	223	264	449	533	620	735	1164	1380	1638	1944	2128	2526	3143	3742	4227
		Input H.P.	.33	.38	.55	.63	.71	.82	1.19	1.39	1.69	1.98	2.26	2.66	2.96	3.47	4.02
40	30	Output Torque	226	270	446	534	618	740	1166	1396	1622	1942	2194	2627	2959	3543	4201
		Input H.P.	.29	.33	.49	.57	.63	.73	1.12	1.32	1.45	1.70	2.01	2.37	2.66	3.14	3.60
30	40	Output Torque	208	215	431	527	597	731	1151	1408	1554	1901	2245	2747	3043	3716	4152
		Input H.P.	.26	.26	.41	.48	.53	.63	.88	1.06	1.12	1.34	1.58	1.90	2.16	2.59	2.85
24	50	Output Torque	152	152	398	398	556	693	1056	1320	1450	1812	2118	2648	2845	3562	3884
		Input H.P.	.20	.20	.34	.34	.42	.50	.68	.83	.91	1.10	1.30	1.58	1.67	2.03	2.26
20	60	Output Torque	187	187	379	400	522	650	978	1137	1338	1704	1866	2376	2661	3390	3584
		Input H.P.	.19	.19	.31	.32	.37	.44	.58	.65	.75	.92	1.14	1.41	1.42	1.75	1.83

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

REDUCER SELECTION

SINGLE REDUCTION
TORQUE* AND OUTPUT RPM OR RATIO

1200 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

	8FC	9	9FC	10	10FC	11	11FC	12	12FC	13	13FC	14	14FC	15	15FC	Unit Size	Ratio	Output RPM
																Output Torque	5	240
																Input H.P.		
	4250	4618	5308	6650	8145	7816	8958	9464	10862							Output Torque	7-1/2	160
	11.48	13.43	15.38	18.50	22.56	22.47	25.67	25.48	29.13							Input H.P.		
	4443	5184	5984	7171	9278	8613	9928	10162	11732	12077	13941	13998	16113	17593	20281	Output Torque	10	120
	9.66	10.79	12.39	14.74	16.94	18.24	20.94	20.99	24.12	24.78	28.47	30.92	35.43	37.82	43.38	Input H.P.		
	4851	5280	6131	7397	8602	8987	10450	10848	12614	13086	15216	14633	17015	18619	21650	Output Torque	15	80
	6.95	8.30	9.57	10.91	12.61	13.83	15.98	16.21	18.73	18.60	21.48	20.68	23.87	26.46	30.54	Input H.P.		
	4985	5434	6393	7593	8933	9310	10953	10909	12834	13006	15302	15352	18035	19366	22717	Output Torque	20	60
	5.66	6.30	7.34	8.38	9.77	10.73	12.51	12.43	14.49	14.50	16.90	18.27	21.28	22.37	26.00	Input H.P.		
	5024	5512	6542	7431	8834	9352	11133	10523	12491	13359	15879	15388	18291	19369	23025	Output Torque	25	48
	4.72	5.28	6.19	7.43	8.74	8.66	10.19	9.76	11.44	12.56	14.76	14.36	16.87	17.62	20.68	Input H.P.		
	5032	5305	6344	7788	9326	9242	11068	10790	12922	13269	15891	14853	17788	18979	22729	Output Torque	30	40
	4.24	4.72	5.57	6.32	7.47	7.70	9.11	9.12	10.77	10.94	12.92	11.64	13.73	14.97	17.66	Input H.P.		
	5072	5217	6391	7552	9237	8952	10950	10626	13018	12619	15460	14924	18172	18699	22839	Output Torque	40	30
	3.41	3.50	4.21	4.94	5.94	6.05	7.27	7.09	8.51	8.00	9.60	10.28	12.28	12.47	14.92	Input H.P.		
	4870	5016	6270	6915	8630	8488	10610	9800	12269	12177	15198	13892	17392	17532	21915	Output Torque	50	24
	2.75	2.93	3.55	3.88	4.72	4.73	5.76	5.78	7.05	6.87	8.35	7.86	9.57	9.75	11.85	Input H.P.		
	4572	4702	5990	6485	8261	7914	10081	8958	11429	11328	14407	13046	16619	16388	20877	Output Torque	60	20
	2.25	2.40	2.95	3.21	3.95	3.93	4.84	4.42	5.43	5.98	7.36	6.56	8.07	7.49	9.37	Input H.P.		

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

WINSMITH 



REDUCER SELECTION

SINGLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

See page 6 and 7 for selection procedure, service factors and unit center distances.
See page 22-27 for a complete index of models available within each size.
For "BEST BUY" compare the price of the selected unit with that of the next higher rated unit.

900 RPM INPUT

FC indicates a fan cooled unit.

All ratings stated are for A.G.M.A. Class 1 service.

Output RPM	Ratio	Unit Size	1	1FC	2	2FC	3	3FC	4	4FC	5	5FC	6	6FC	7	7FC	8
180	5	Output Torque	189	216	365	417	514	587	1028	1147	1439	1644	1918	2192			
		Input H.P.	.67	.76	1.24	1.41	1.71	1.94	3.30	3.76	4.41	5.02	6.34	7.22			
120	7-1/2	Output Torque	217	249	433	498	599	687	1176	1351	1618	1855	2295	2638	3091	3548	4341
		Input H.P.	.54	.60	1.00	1.14	1.31	1.50	2.58	2.95	3.63	4.14	4.94	5.66	6.81	7.79	8.87
90	10	Output Torque	223	257	462	532	637	736	1250	1441	1704	1970	2475	2853	3346	3857	4551
		Input H.P.	.46	.52	.84	.95	1.12	1.28	2.10	2.41	2.74	3.15	4.01	4.60	5.56	6.38	7.49
60	15	Output Torque	243	282	487	566	682	793	1329	1545	1797	2105	2608	3032	3544	4128	4776
		Input H.P.	.36	.40	.64	.74	.88	1.00	1.62	1.87	2.04	2.37	3.08	3.56	4.24	4.91	5.26
45	20	Output Torque	237	279	494	573	688	800	1338	1475	1792	2108	2658	3131	3645	4288	4852
		Input H.P.	.31	.35	.53	.61	.72	.82	1.27	1.39	1.64	1.91	2.41	2.81	3.26	3.80	4.20
36	25	Output Torque	242	286	490	582	673	740	1271	1380	1847	2192	2568	3048	3585	4267	4804
		Input H.P.	.28	.31	.46	.53	.59	.64	.99	1.07	1.46	1.71	2.09	2.46	2.56	3.01	3.46
30	30	Output Torque	242	290	486	582	674	809	1328	1590	1813	2171	2609	3124	3570	4276	5017
		Input H.P.	.24	.27	.41	.48	.53	.62	.99	1.16	1.24	1.46	1.84	2.17	2.44	2.89	3.25
22.5	40	Output Torque	215	215	470	573	658	800	1283	1475	1721	2105	2557	3128	3516	4295	4798
		Input H.P.	.21	.21	.34	.40	.45	.53	.76	.86	.96	1.15	1.39	1.67	1.90	2.28	2.50
18	50	Output Torque	152	152	398	398	599	740	1151	1380	1596	1995	2406	3000	3240	4056	4525
		Input H.P.	.16	.16	.27	.27	.35	.41	.58	.67	.77	.94	1.14	1.39	1.45	1.77	2.00
15	60	Output Torque	187	187	400	400	567	650	1065	1137	1466	1867	2218	2825	3023	3851	4081
		Input H.P.	.15	.15	.25	.25	.32	.35	.49	.52	.64	.79	1.05	1.30	1.24	1.52	1.58

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

REDUCER SELECTION

SINGLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

900 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

	8FC	9	9FC	10	10FC	11	11FC	12	12FC	13	13FC	14	14FC	15	15FC	Unit Size	Ratio	Output RPM
																Output Torque	5	180
																Input H.P.		
	4975	5443	6256	7837	9599	9211	10557	11153	12801							Output Torque	7-1/2	120
	10.13	11.93	13.67	16.44	20.04	19.96	22.80	22.62	25.87							Input H.P.		
	5247	6063	6999	8367	9658	10151	11701	11977	13826	13745	15867	16498	18990	20734	23901	Output Torque	10	90
	8.60	9.51	10.93	12.96	14.90	16.21	18.61	18.66	21.44	21.28	24.45	27.47	31.49	33.61	38.56	Input H.P.		
	5561	6223	7225	8718	10137	10592	12316	12784	14865	15014	17458	17035	19809	21943	25515	Output Torque	15	60
	6.02	7.41	8.55	9.74	11.26	12.33	14.25	14.42	16.67	16.13	18.63	18.17	20.98	23.54	27.18	Input H.P.		
	5700	6573	7734	9073	10675	10973	12909	12856	15125	15213	17897	18093	21254	22823	26773	Output Torque	20	45
	4.89	5.76	6.72	7.55	8.82	9.57	11.17	11.10	12.95	12.80	14.93	16.29	18.98	19.96	23.20	Input H.P.		
	5711	6567	7795	8758	10411	10886	12959	12636	14998	15743	18714	18135	21557	22827	27135	Output Torque	25	36
	4.06	4.76	5.59	6.66	7.85	7.63	8.99	8.83	10.37	11.21	13.18	12.83	15.08	15.75	18.50	Input H.P.		
	6008	6252	7476	9115	10916	10892	13044	12716	15229	15638	18728	17379	20814	21745	26042	Output Torque	30	30
	3.85	4.24	5.01	5.61	6.64	6.89	8.16	8.16	9.65	9.79	11.57	10.31	12.17	13.04	15.39	Input H.P.		
	5860	6295	7713	8839	10812	10550	12905	12171	14911	14770	18096	17588	21416	22037	26916	Output Torque	40	22.5
	2.99	3.21	3.86	4.39	5.29	5.43	6.54	6.18	7.44	7.10	8.52	9.21	11.02	11.19	13.40	Input H.P.		
	5392	5966	7457	8344	10414	9888	12360	11549	14459	14351	17911	16372	20497	20662	25827	Output Torque	50	18
	2.56	2.64	3.22	3.54	4.33	4.19	5.12	5.20	6.36	6.16	7.50	7.07	8.62	8.78	10.68	Input H.P.		
	5207	5478	6978	7712	9824	9263	11800	10810	13792	13350	16979	15375	19586	19314	24604	Output Torque	60	15
	1.95	2.13	2.62	2.89	3.58	3.50	4.32	4.02	4.96	5.38	6.64	5.90	7.26	6.75	8.45	Input H.P.		

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

WINSMITH 



REDUCER SELECTION

SINGLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

See page 6 and 7 for selection procedure, service factors and unit center distances.

See page 22-27 for a complete index of models available within each size.

For "BEST BUY" compare the price of the selected unit with that of the next higher rated unit.

FC indicates a fan cooled unit.

600 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

Output RPM	Ratio	Unit Size	1	1FC	2	2FC	3	3FC	4	4FC	5	5FC	6	6FC	7	7FC	8
120	5	Output Torque	207	237	413	472	589	673	1202	1374	1700	1943	2370	2709			
		Input H.P.	.50	.56	.95	1.08	1.33	1.51	2.61	2.98	3.52	4.01	5.28	6.02			
80	7-1/2	Output Torque	233	267	474	545	658	754	1348	1549	1862	2134	2753	3165	3784	4343	5273
		Input H.P.	.39	.44	.75	.85	.097	1.11	2.01	2.30	2.83	3.23	4.01	4.60	5.62	6.43	7.25
60	10	Output Torque	244	281	505	582	697	806	1400	1475	1915	2214	2957	3409	3907	4504	5375
		Input H.P.	.34	.39	.63	.71	.84	.96	1.60	1.68	2.09	2.40	3.26	3.74	4.38	5.03	5.97
40	15	Output Torque	260	302	532	595	752	857	1516	1762	2012	2356	3107	3613	4287	4993	5475
		Input H.P.	.26	.30	.49	.54	.67	.75	1.27	1.47	1.56	1.81	2.52	2.90	3.49	4.04	4.03
30	20	Output Torque	258	304	539	573	758	800	1475	1475	1987	2328	3033	3573	4221	4966	5549
		Input H.P.	.24	.27	.40	.43	.55	.58	.97	.97	1.25	1.46	1.89	2.20	2.57	3.00	3.26
24	25	Output Torque	262	310	534	621	730	740	1380	1380	2082	2471	3099	3678	4088	4867	5461
		Input H.P.	.21	.24	.35	.40	.45	.46	.75	.75	1.14	1.33	1.76	2.06	2.00	2.35	2.68
20	30	Output Torque	259	310	530	595	735	857	1512	1785	2027	2428	3103	3716	4309	5160	5991
		Input H.P.	.18	.21	.31	.35	.41	.46	.79	.91	.97	1.14	1.52	1.80	2.03	2.40	2.66
15	40	Output Torque	215	215	513	573	726	800	1430	1475	1905	2330	2913	3563	4064	4963	5543
		Input H.P.	.15	.15	.26	.29	.36	.39	.60	.62	.75	.89	1.11	1.33	1.52	1.82	1.98
12	50	Output Torque	152	152	398	398	647	740	1255	1380	1756	2195	2734	3000	3690	4619	5272
		Input H.P.	.12	.12	.19	.19	.27	.30	.45	.48	.60	.73	.91	.99	1.15	1.40	1.61
10	60	Output Torque	187	187	400	400	614	650	1137	1137	1607	2047	2636	2850	3434	4374	4648
		Input H.P.	.11	.11	.19	.19	.25	.26	.37	.37	.50	.62	.89	.95	.98	1.21	1.25

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

REDUCER SELECTION

SINGLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

600 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

	8FC	9	9FC	10	10FC	11	11FC	12	12FC	13	13FC	14	14FC	15	15FC	Unit Size	Ratio	Output RPM
																Output Torque	5	120
																Input H.P.		
	6044	6811	7829	9812	12018	11481	13158	13901	15955							Output Torque	7-1/2	80
	8.28	10.06	11.52	13.84	16.89	16.74	19.13	18.96	21.69							Input H.P.		
	6195	7422	8568	10342	11939	12704	14644	14956	17265	17767	20510	20562	23669	25818	29762	Output Torque	10	60
	6.85	7.85	9.02	10.78	12.39	13.67	15.70	15.70	18.05	18.47	21.23	23.04	26.41	28.16	32.31	Input H.P.		
	6375	7777	9030	10901	12676	13241	15397	15989	18592	19193	22317	21193	24643	27398	31858	Output Torque	15	40
	4.67	6.28	7.25	8.27	9.57	10.44	12.07	12.18	14.08	13.88	16.05	15.23	17.59	19.83	22.89	Input H.P.		
	6518	7951	9355	10842	12756	13714	16134	16077	18915	18611	21895	22618	26571	28528	33465	Output Torque	20	30
	3.80	4.73	5.52	6.12	7.14	8.12	9.48	9.43	11.00	10.58	12.34	13.79	16.07	16.89	19.64	Input H.P.		
	6491	7825	9287	10955	13022	13547	16128	15173	18009	19676	23389	22678	26958	28544	33930	Output Torque	25	24
	3.14	3.86	4.54	5.70	6.72	6.45	7.60	7.19	8.44	9.50	11.18	10.91	12.83	13.38	15.73	Input H.P.		
	7175	7810	9339	11088	13279	13608	16296	15905	19048	19582	23451	21202	25392	27853	33357	Output Torque	30	20
	3.15	3.64	4.31	4.64	5.50	5.88	6.97	6.98	8.26	8.35	9.88	8.55	10.04	11.33	13.37	Input H.P.		
	6771	7597	9307	10756	13157	13179	16121	15598	19109	17967	22011	21999	26788	27563	33666	Output Torque	40	15
	2.38	2.66	3.21	3.66	4.41	4.66	5.61	5.41	6.52	5.88	7.06	7.89	9.44	9.57	11.48	Input H.P.		
	6610	7095	8869	10069	12567	12280	15350	14447	18087	17928	22375	20479	25639	25845	32307	Output Torque	50	12
	1.97	2.17	2.64	2.94	3.59	3.58	4.37	4.49	5.50	5.28	6.43	6.08	7.43	7.55	9.19	Input H.P.		
	5930	6382	8130	9172	11685	11264	14350	13044	15754	16700	21240	19206	24466	24160	30777	Output Torque	60	10
	1.54	1.72	2.12	2.37	2.93	2.93	3.62	3.33	3.92	4.64	5.74	5.07	6.25	5.81	7.29	Input H.P.		

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.





REDUCER SELECTION

DOUBLE AND TRIPLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

See page 6 and 7 for selection procedure, service factors and unit center distances.
See page 22-27 for a complete index of models available within each size.

EXPLANATION:

H Double Reduction Series Helical and Worm Gear
D Double Reduction Series Worm Gear
T Triple Reduction Series Worm Gear

Output Torque
Input H.P.

1800 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

Output RPM	Ratio	2	3	4	5	6	7	8	9	10	11	12	13	14	15
36	50 H				2192	3048	4267	5711	7795	10411	12959	14998	18714	21557	
					1.76	2.53	3.10	4.19	5.76	8.09	9.27	10.69	13.59	15.55	
36	50 D	595	857	1139	2430	2975	5088	5894	6113	8656	8269	12403	12536		
		.60	.80	1.00	1.89	2.34	3.88	4.44	4.45	5.90	5.90	8.23	8.23		
30	60 H				2171	3124	4276	6008	7476	10916	16134	15229	18728	20806	
					1.51	2.24	2.98	3.96	5.16	6.84	9.77	9.95	11.93	12.04	
24	75 H				2471	3678	4867	6491	7200	13022	16128	18009	22600	22500	
					1.37	2.12	2.42	3.24	3.68	6.93	7.84	8.70	11.16	11.16	
24	75 D	595	857	1553	2578	4061	5815	6746	7985	9792	11279	13306	18123	17497	30863
		.46	.63	1.00	1.47	2.34	3.27	3.53	4.45	4.95	5.90	6.58	8.23	9.00	15.90
22.5	80 H				2105	3128	4295	5860	7713	10812	12905	14911	18096	21408	
					1.18	1.72	2.35	3.09	3.98	5.45	6.74	7.67	8.79	10.86	
20	90 H				2428	3716	5160	7175	7800	13279	12296	19048	23451	25382	
					1.18	1.85	2.48	3.24	3.75	5.68	5.52	8.51	10.18	9.97	
18	100 H				1995	3000	4056	5392	7457	10414	12360	14459	17911	20497	
					.97	1.43	1.82	2.41	3.31	4.46	5.28	6.55	7.74	8.89	
18	100 D	583	857	1475	2606	3855	5569	7256	9903	14831	15123	22364	23349	18907	34092
		.42	.51	.78	1.14	1.66	2.39	2.96	4.04	5.45	5.90	8.23	8.23	7.34	12.78
15	120 H				1867	2825	3851	5207	9307	13157	16121	19109	22011	26777	
					.81	1.34	1.57	2.01	3.30	4.55	5.79	6.67	7.28	9.31	
12	150 H				2195	3000	4619	6610	8869	12567	15350	18087	22375	25639	
					.75	1.02	1.44	2.03	2.72	3.71	4.51	5.66	6.63	7.66	
12	150 D	595	857	1720	2759	4075	6518	8269	11388	15673	20320	24565	29719	32220	45855
		.33	.39	.68	.91	1.34	2.04	2.59	3.70	4.34	5.77	6.77	7.89	8.98	10.84
10	180 H				2047	2850	4374	5930	8130	11685	14350	15754	21240	24466	
					.63	.98	1.24	1.59	2.18	3.03	3.74	4.04	5.91	6.44	
9	200 D	595	857	1475	2699	3791	6065	7864	9903	16424	20200	23519	27277	34542	56980
		.29	.35	.50	.74	1.02	1.48	1.79	2.27	3.33	4.74	5.11	5.23	7.34	11.72

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

REDUCER SELECTION

DOUBLE AND TRIPLE REDUCTION
TORQUE* AND OUTPUT RPM OR RATIO

EXPLANATION:

Output Torque

Input H.P.

1800 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

Output RPM	Ratio	2	3	4	5	6	7	8	9	10	11	12	13	14	15
6	300 D	595	857	1652	2838	4075	6664	9198	11388	17535	23598	28584	33881	33425	47328
		.25	.29	.46	.64	.86	1.33	1.65	2.15	2.75	3.77	4.68	5.31	4.72	6.45
3.6	500 D	621	800	1475	3029	4804	6149	8253	10550	19512	16867	23120	31049	34825	62173
		.22	.24	.32	.51	.78	.79	.97	1.25	2.32	1.95	2.69	3.26	3.36	6.35
2.4	750 D	621	857	1785	3066	4804	6664	9805	11388	18745	22257	28584	30580	36081	51552
		.19	.22	.33	.42	.62	.74	.94	1.15	1.58	1.95	2.60	2.69	2.35	3.49
1.8	1000 D	621	800	1475	3084	4804	6149	8387	10550	17000	20200	28584	31073	42459	63234
		.19	.21	.26	.39	.56	.55	.66	.84	1.27	1.57	2.13	2.13	2.60	4.29
1.8	1000 T				2775	4075	6149	8387	9903	17587	20200	28584	34466	40307	64076
					.31	.397	.515	.62	.72	1.06	1.24	1.83	1.95	2.21	3.43
1.2	1500 D	621	740	1380	3103	4075	6664	10016	11388	19191	18253	24733	31750	36902	53107
		.17	.18	.21	.33	.40	.53	.66	.82	1.06	1.09	1.46	1.87	1.56	2.29
1.2	1500 T				2994	4075	6664	10016	11388	19205	25384	28584	37110	39642	57483
					.31	.29	.482	.60	.70	.93	1.19	1.41	1.70	1.69	2.18
.9	2000 D	573	800	1380	2715	3600	5293	7900	9439	17000	20200	28584	31812	42458	64075
		.18	.20	.21	.275	.322	.393	.489	.591	.855	1.043	1.371	1.384	1.72	2.933
.9	2000 T				2785	4075	6149	8455	9903	17587	20200	28584	34918	39483	64076
					.243	.302	.361	.423	.481	.692	.817	1.132	1.188	1.33	2.008
.6	3000 D	398	740	1380	2350	3000	4770	7180	8864	15000	17464	20739	31750	33260	52354
		.14	.16	.18	.236	.273	.321	.406	.483	.663	.749	1.056	1.363	1.40	2.103
.6	3000 T				3015	4075	6664	10123	11388	19212	25384	28584	37110	39344	57483
					.240	.269	.347	.421	.484	.598	.758	.888	1.060	.94	1.31
.5	3600 D	400	650	1137	2056	2850	4635	6510	8864	14200	16388	15754	24961	33260	48070
		.14	.16	.17	.219	.283	.306	.357	.430	.595	.668	.732	1.155	1.303	1.44
.36	5000 T				3129	4804	6149	8496	10550	23688	20200	28584	35186	42459	64076
					.219	.271	.258	.289	.340	.597	.519	.78	.779	.79	1.088
.24	7500 T				3133	4804	6664	10188	11388	23760	25384	28584	37110	39344	57483
					.193	.234	.255	.295	.334	.500	.518	.621	.719	.538	.775

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

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REDUCER SELECTION

DOUBLE AND TRIPLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

See page 6 and 7 for selection procedure, service factors and unit center distances.
See page 22-27 for a complete index of models available within each size.

H Double Reduction Series Helical and Worm Gear
D Double Reduction Series Worm Gear
T Triple Reduction Series Worm Gear

EXPLANATION:

Output Torque
Input H.P.

1800 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

Output RPM	Ratio	2	3	4	5	6	7	8	9	10	11	12	13	14	15
.18	10000 T				3135	4804	6149	8517	10550	23797	20200	28584	35284	42459	64076
					.188	.226	.217	.206	.270	.446	.391	.545	.513	.537	.799
.09	20000 T				3138	4804	6149	8517	10550	23851	20200	28584	32492	42459	64076
					.175	.206	.190	.206	.232	.362	.32	.422	.421	.426	.636
.06	30000 T				3139	4804	6664	10221	11380	23869	25384	28584	37110	39344	57483
					.168	.194	.193	.214	.237	.338	.327	.367	.435	.295	.407
.045	40000 T				3139	4804	6149	8520	10550	17000	20200	28584	32531	42459	64076
					.168	.195	.178	.190	.211	.252	.282	.35	.346	.335	.492
.036	50000 T				3139	4804	6149	8521	10550	17000	20200	28584	32538	42459	64076
					.168	.196	.179	.190	.212	.233	.259	.319	.314	.303	.445
.03	60000 T				3139	4075	6664	10226	10550	19212	20200	28584	32543	39344	57483
					.153	.173	.182	.199	.189	.244	.254	.314	.308	.255	.343
.024	75000 T				3140	4075	6664	10227	8864	19212	17464	25790	31750	39344	57483
					.148	1.73	.184	.200	.180	.227	.224	.281	.307	.234	.312
.0225	80000 T				2715	3600	5293	7900	9439	17000	20200	28584	32549	40422	64076
					.153	.161	.163	.175	.189	.228	.24	.277	.272	.283	.43
.02	90000 T				3034	4075	6664	10228	8864	19212	17464	24614	31750	39344	57483
					.145	.158	.167	.180	.172	.223	.22	.273	.303	.225	.299
.018	100000 T				2715	3600	5293	7900	9439	17000	20200	28584	32553	37755	64076
					.152	.160	.164	.175	.190	.213	.233	.271	.265	.249	.395
.012	150000 T				2350	3000	4770	7180	8864	15000	17464	20739	31118	33260	52354
					.149	.155	.156	.169	.173	.199	.208	.264	.291	.268	.338
.01	180000 T				2350	3000	4635	7180	8864	15000	17464	20739	29579	33260	52354
					.138	.143	.155	.155	.158	.196	.205	.262	.283	.259	.323

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

REDUCER SELECTION

DOUBLE AND TRIPLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

See page 6 and 7 for selection procedure, service factors and unit center distances.
See page 22-27 for a complete index of models available within each size.

H Double Reduction Series Helical and Worm Gear
D Double Reduction Series Worm Gear
T Triple Reduction Series Worm Gear

EXPLANATION:

Output Torque
Input H.P.

1800 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

Output RPM	Ratio	2	3	4	5	6	7	8	9	10	11	12	13	14	15
24	50 H				2471	3678	4867	6491	7800	13022	16128	18009	23389	24100	
					1.37	2.12	2.42	3.24	3.97	6.93	7.84	8.70	11.52	11.90	
24	50 D	595	857	1335	2546	3632	5407	7251	7508	10602	10118	14860	15071		
		.43	.57	.81	1.39	1.97	2.85	3.23	3.74	4.93	4.93	6.74	6.74		
20	60 H				2428	3716	4160	7175	8200	13279	19000	19048	23451	25382	
					1.17	1.85	2.48	3.24	3.93	5.68	7.86	8.51	10.18	9.97	
16	75 H				2676	4169	5050	7498	7200	15945	17464	20345	22600	22500	
					1.04	1.68	1.74	2.56	2.55	5.85	5.83	6.72	7.70	7.74	
16	75 D	595	857	1785	2697	4075	6275	7906	9689	12009	13687	16060	21684	21745	38344
		.33	.45	.80	1.08	1.67	2.46	2.85	3.74	4.17	4.93	5.95	6.74	7.61	13.43
15	80 H				2330	3563	4963	6771	9307	13157	16121	19109	22011	26777	
					.92	1.37	1.88	2.45	3.30	4.55	5.79	6.72	7.28	9.31	
13.33	90 H				2615	4075	5849	8076	7800	15131	19391	23324	26100	28979	
					.89	1.43	1.96	2.52	2.63	4.45	5.89	7.18	7.82	7.77	
12	100 H				2195	3000	4619	6610	8869	12567	15350	18087	22375	25639	
					.75	1.02	1.44	2.03	2.72	3.71	4.51	5.66	6.63	7.66	
12	100 D	591	857	1475	2667	4075	5903	7656	9903	15881	18286	26460	27890	23255	42328
		.31	.37	.56	.83	1.24	1.78	2.18	2.85	4.06	4.93	6.74	6.74	6.20	10.79
10	120 H				2047	2850	4374	5930	9909	14997	19173	22545	25082	32787	
					.63	.98	1.25	1.59	2.46	3.59	4.77	5.44	5.71	7.85	
8	150 H				2339	3000	4770	7180	9439	14244	17464	20739	26611	31382	
					.57	.74	1.06	1.55	2.04	2.92	3.58	4.56	5.47	6.50	
8	150 D	595	857	1785	2822	4075	6611	8778	11388	16899	23464	27631	33159	39604	48220
		.24	.29	.51	.66	.97	1.47	1.95	2.65	3.29	4.66	5.33	6.14	7.61	7.87
6.67	180 H				2056	2850	4635	6467	8864	13116	16348	15754	24961	29094	
					.46	.72	.93	1.22	1.67	2.38	2.98	2.87	4.87	5.34	
6	200 D	595	857	1475	2730	4075	6149	8078	9903	17001	20200	25889	30296	41397	60517
		.22	.26	.37	.55	.78	1.07	1.31	1.62	2.43	3.40	3.96	4.04	6.12	8.67

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

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REDUCER SELECTION

DOUBLE AND TRIPLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

See page 6 and 7 for selection procedure, service factors and unit center distances.
See page 24-29 for a complete index of models available within each size.

EXPLANATION:

H Double Reduction Series Helical and Worm Gear
D Double Reduction Series Worm Gear
T Triple Reduction Series Worm Gear

Output Torque

Input H.P.

1200 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

Output RPM	Ratio	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4	300 D	595	857	1785	2902	4075	6664	9531	11388	18213	24818	28584	37012	34816	49670
		.19	.21	.36	.48	.63	.97	1.23	1.56	2.03	2.83	3.37	4.13	3.44	4.74
2.4	500 D	621	800	1475	3066	4804	6149	8342	10550	22497	20200	26521	31750	41397	64076
		.17	.19	.24	.39	.58	.58	.71	.92	1.92	1.65	2.22	2.41	2.81	4.65
1.6	750 D	621	857	1785	3091	4804	6664	9945	11388	19041	25384	28584	35587	36637	52583
		.15	.17	.25	.32	.47	.55	.74	.86	1.18	1.60	1.92	2.26	1.71	2.55
1.2	1000 D	621	800	1475	3103	4804	6149	8432	10550	17000	20200	28584	31564	42459	64075
		.15	.16	.20	.30	.43	.41	.50	.63	.94	1.16	1.59	1.60	1.89	3.17
1.2	1000 T				2781	4075	6149	8432	9903	17587	20200	28584	34767	40040	64076
					.23	.298	.382	.45	.52	.78	.90	1.36	1.43	1.58	2.47
.8	1500 D	621	740	1380	3115	4075	6664	10088	11388	19212	21020	28584	31750	37191	53635
		.13	.14	.16	.25	.31	.40	.51	.61	.79	.91	1.23	1.41	1.15	1.70
.8	1500 T				3008	4075	6664	10088	11388	19212	25384	28584	37110	41668	57483
					.23	.216	.361	.45	.52	.69	.88	1.04	1.26	1.29	1.59
.6	2000 D	573	800	1380	2715	3600	5293	7900	9439	17000	20200	28584	32062	42458	64075
		.14	.15	.16	.209	.249	.301	.374	.451	.649	.789	1.035	1.049	1.29	2.167
.6	2000 T				2785	4075	6149	8478	9903	17587	20200	28584	35070	38305	64076
					.185	.230	.273	.317	.359	.517	.611	.838	.878	.95	1.462
.4	3000 D	398	740	1380	2350	3000	4770	7180	8864	15000	17464	20739	31750	33260	52534
		.11	.12	.15	.185	.214	.249	.315	.355	.510	.573	.825	1.054	1.046	1.561
.4	3000 T				3021	4075	6664	10159	11388	19212	25384	28584	37110	39344	57483
					.183	.206	.262	.319	.367	.449	.568	.669	.792	.70	.968
.333	3600 D	400	650	1137	2056	2850	4635	6510	8864	14200	16388	15754	24961	33260	48070
		.11	.12	.13	.172	.223	.238	.278	.335	.460	.511	.573	.901	.978	1.09
.24	5000 T				3133	4804	6149	8505	10550	23760	20200	28584	35249	42459	64706
					.169	.209	.196	.220	.260	.458	.389	.604	.596	.60	.817
.16	7500 T				3133	4804	6664	10203	11388	23809	25384	28584	37110	39344	57483
					.150	.182	1.96	.227	.259	.388	.400	.484	.557	.411	.590

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

REDUCER SELECTION

DOUBLE AND TRIPLE REDUCTION TORQUE* AND OUTPUT RPM OR RATIO

EXPLANATION:

Output Torque

Input H.P.

1200 RPM INPUT

All ratings stated are for A.G.M.A. Class 1 service.

Output RPM	Ratio	2	3	4	5	6	7	8	9	10	11	12	13	14	15
.12	10000				3137	4804	6149	8514	10550	23833	20200	28584	35315	42459	64076
	T				.146	.177	.166	.181	.208	.35	.306	.427	.399	.416	.613
.06	20000				3139	4804	6149	8510	10550	23166	20200	28584	32518	42459	64076
	T				.133	.160	.146	.158	.179	.283	.253	.334	.331	.336	.496
.04	30000				3139	4804	6664	10225	11270	23328	25384	28584	37110	39344	57483
	T				.128	.151	.150	.166	.184	.268	.261	.293	.351	.236	.325
.03	40000				3139	4586	6149	8521	10550	17000	20200	28584	32543	42459	64076
	T				.129	.150	.138	.147	.165	.20	.224	.283	.277	.271	.389
.024	50000				3139	4312	6149	8522	10550	17000	20200	28584	32548	42459	64076
	T				.129	.149	.139	.148	.167	.185	.206	.258	.252	.245	.338
.02	60000				3139	4075	6664	10228	10550	19212	20200	28584	32552	39344	57483
	T				.117	.133	.142	.155	.148	.195	.203	.254	.247	.208	.280
.016	75000				3140	4075	6664	10229	8864	19212	17464	23228	31750	38926	57483
	T				.113	.135	.144	.157	.140	.181	.178	.219	.249	.190	.256
.015	80000				2715	3600	5273	7900	9439	17000	20200	28584	32556	35664	64076
	T				.116	.123	.126	.135	.147	.181	.192	.225	.219	.215	.346
.013	90000				3034	3924	6664	9954	8864	19212	17464	22129	31750	36898	57483
	T				.110	.121	.130	.139	.133	.179	.175	.212	.245	.178	.246
.012	100000				2715	3600	5293	7900	9439	17000	20200	28141	32558	33210	64076
	T				.116	.123	.126	.136	.149	.170	.187	.219	.214	.190	.316
.008	150000				2350	3000	4770	7180	8864	15000	17464	20739	27769	33260	52354
	T				.113	.119	.120	.131	.135	.158	.166	.216	.228	.216	.27
.0067	180000				2350	3000	4635	7180	8864	15000	17464	20739	26377	33260	52354
	T				.104	.109	.118	.119	.094	.157	.164	.214	.227	.21	.26

*The motor horsepower selected may exceed the reducer torque capacity. Limit torque to capacity shown.

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