

BEVEL GEARS

STEEL & IRON — STRAIGHT TOOTH

**L-Series/PA Series Pinions—Unhardened Steel
PA Series—Cast Iron
HL Series—Hardened Steel (Teeth Only)**

APPROXIMATE HP & TORQUE* RATINGS FOR CLASS I SERVICE (Service Factor = 1.0)

Catalog Number	Pitch	Ratio	50 RPM†		100 RPM		200 RPM		300 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
			HP	Torque	HP	Torque	HP	Torque	HP	Torque	HP	Torque	HP	Torque	HP	Torque	HP	Torque
L146Y	16	1-1/2:1	.03	55.6	.06	55.6	.11	51.0	.16	49.4	.29	44.8	.40	41.2	.48	37.1	.62	31.9
HL146Y	16		.04	74.1	.08	74.1	.16	74.1	.23	71.0	.41	63.3	.55	56.6	.67	51.7	.86	44.3
L151Y	12		.10	185	.20	185	.37	171	.53	164	.91	141	1.19	122	1.41	109	1.74	89.6
HL151Y	12		.14	259	.27	250	.52	241	.73	225	1.26	195	1.65	170	1.96	151	2.41	124
L153Y	10		.24	445	.45	417	.84	389	1.17	361	1.93	298	2.47	254	2.88	222	3.44	177
HL153Y	10		.33	611	.63	584	1.16	537	1.62	500	2.68	414	3.44	354	4.00	309	4.77	245
L148Y	16	2:1	.02	49.4	.03	37.1	.06	37.1	.09	37.1	.17	35.0	.23	31.6	.28	28.8	.37	25.4
HL148Y	16		.02	49.4	.04	49.4	.09	55.6	.12	49.4	.23	47.4	.32	43.9	.39	40.1	.52	35.7
L149Y	16		.04	98.8	.09	111	.17	105	.24	98.8	.43	88.5	.58	79.6	.71	73.1	.91	62.5
L150Y	14		.05	124	.09	111	.18	111	.26	107	.47	96.8	.64	87.8	.77	79.3	.99	67.9
HL150Y	14		.07	173	.13	161	.25	154	.36	148	.65	134	.88	121	1.07	110	1.38	94.7
HL149Y	16		.06	148	.12	148	.23	142	.33	136	.60	124	.81	111	.99	102	1.27	87.2
PA3212Y	12	2:1	.04	99	.09	111	.16	99	.23	95	.40	82	.52	71	.62	64	.76	52.2
PA4212Y	12		.08	198	.16	198	.29	179	.41	169	.68	140	.87	119	1.00	103	1.20	82.4
L152Y	12		.14	346	.27	334	.50	309	.72	296	1.23	253	1.62	222	1.92	198	2.36	162
PA5210Y	10		.15	371	.28	346	.51	315	.70	288	1.10	226	1.40	192	1.60	165	—	—
HL152Y	12		.19	469	.37	457	.70	432	.99	408	1.71	352	2.24	307	2.66	274	3.27	224
L155Y	10		.30	741	.58	716	1.08	667	1.51	622	2.50	515	3.20	439	3.73	384	4.45	305
PA528Y	8	2:1	.20	494	.38	469	.70	432	.96	395	1.50	309	1.90	261	2.20	226	—	—
L156Y	8		.54	1334	1.03	1272	1.88	1161	2.59	1066	4.16	856	5.21	715	5.96	614	6.97	478
HL155Y	10		.42	1038	.81	1001	1.50	926	2.10	865	3.48	716	4.45	611	5.18	533	6.18	424
PA626Y	6		.40	988	.75	926	1.30	803	1.80	741	2.90	597	3.50	480	4.00	412	—	—
PA625Y	5		.43	1062	.82	1013	1.50	926	2.00	824	3.10	638	3.80	522	4.30	443	—	—
PA726Y	6		.48	1186	.89	1099	1.60	988	2.10	865	3.90	803	—	—	—	—	—	—
L158Y	6	2:1	1.07	2644	2.02	2495	3.62	2236	4.92	2026	7.67	1579	9.43	1294	10.65	1096	12.24	840
PA826Y	6		.63	1556	1.20	1482	2.00	1235	2.70	1112	4.00	824	4.80	659	—	—	—	—
HL156Y	8		.76	1878	1.44	1779	2.62	1618	3.60	1482	5.78	1190	7.24	994	8.28	852	9.68	664
PA824Y	4		.98	2421	1.80	2224	3.20	1976	4.20	1729	7.30	1503	7.50	1029	—	—	—	—
HL158Y	6		1.49	3681	2.80	3459	5.02	3101	6.83	2812	10.65	2193	13.10	1798	14.79	1522	17.00	1167
PA3316Y	16		3:1	.05	185	.11	204	.20	185	.30	185	.53	164	.72	148	.88	136	1.12
PA45312Y	12	.16		593	.31	574	.59	547	.84	519	1.44	445	1.89	389	2.24	346	2.75	283
PA6310Y	10	.34		1260	.66	1223	1.21	1121	1.70	1050	2.81	868	3.60	741	4.18	645	5.00	515
PA638Y	8	.43		1594	.82	1519	1.52	1408	2.12	1309	3.51	1084	4.49	924	5.22	806	6.24	642
L157Y	10	.34		1260	.66	1223	1.21	1121	1.70	1050	2.81	868	3.60	741	4.18	645	5.00	515
PA7536Y	6	.88		3261	1.66	3076	3.03	2807	4.17	2576	6.69	2066	8.38	1725	9.59	1481	11.21	1154
PA935Y	5	1.53	5670	2.88	5336	5.16	4781	7.01	4330	10.93	3375	13.44	2767	15.19	2346	17.45	1796	
PA4416Y	16	4:1	.06	296	.12	296	.24	296	.34	280	.61	251	.83	228	1.02	210	1.30	4178
PA6412Y	12		.17	840	.32	791	.61	754	.86	708	1.48	609	1.94	533	2.31	476	2.83	388
PA6410Y	10		.22	1087	.42	1038	.80	988	1.13	931	1.95	803	2.56	703	3.04	626	3.74	513
PA848Y	8		.43	2125	.83	2051	1.54	1902	2.15	1771	3.56	1466	4.56	1252	5.30	1091	6.33	869
PA948Y	8		.75	3706	1.43	3533	2.62	3236	3.64	2998	5.92	2438	7.50	2059	8.65	1781	10.21	1401
PA6616Y	16		6:1	.09	667	.17	630	.33	611	.48	593	.86	531	1.17	482	1.42	439	1.82
PA6612Y	12	.12		889	.23	852	.44	815	.63	778	1.13	698	1.54	634	1.88	581	2.40	494

Ratings are based on strength calculation. Basic Static Strength Rating, or for hand operation of above gears is approximately 3 times the 100 RPM rating.

*Torque (Lb. Ins.) Output Rating

HP (Input)

†RPM of Pinion