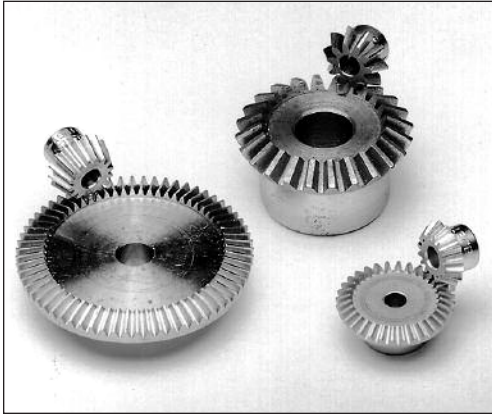


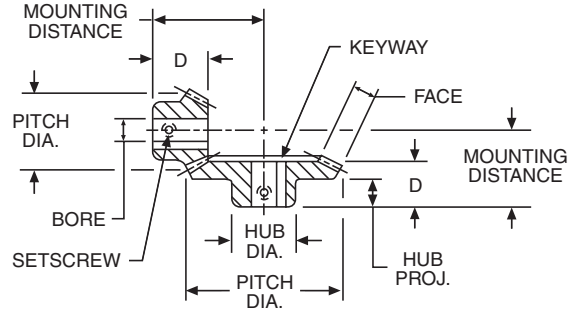
BEVEL GEARS

**48 THROUGH 20 DIAMETRAL PITCH
BRASS AND STAINLESS STEEL AND STEEL —
HARDENED AND UNHARDENED**

20° PRESSURE ANGLE



All gears have “Coniflex”® tooth form, except as noted. All hardened steel gears have teeth only hardened and are equipped with standard keyways and setscrews, except as noted.



REFERENCE PAGES

Alterations — 149
Lubrication — 149
Materials — 150

STANDARD TOLERANCES

DIMENSION		TOLERANCE
BORE	All	±.0005

ALL DIMENSIONS IN INCHES
ORDER BY CATALOG NUMBER OR ITEM CODE

Ratio	No. of Teeth	Pitch Dia.	Face	Bore	MD *	D	Hub		Catalog Number	Item Code	Catalog Number	Item Code
							Dia.	Proj.				
48 DIAMETRAL PITCH												
						BRASS			STAINLESS STEEL			
2:1	36	.750	.12	.1875	.438	.257	.44	.19	G479Y-G†	12136	GSS479Y-G†	49991
	18	.375		.125	.594	.335	.28	.19	G479Y-P†	12134	GSS479Y-P†	49990
3:1	36	.750	.09	.1875	.375	.257	.44	.19	G478Y-G†	12132	GSS478Y-G†	49989
	12	.250		.125	.562	.285	.22	.17	G478Y-P†	12130	GSS478Y-P†	49988
32 DIAMETRAL PITCH												
2:1	32	1.000	.14	.1875	.594	.382	.56	.25	G481Y-G†	12120	GSS481Y-G†	49993
	16	.500			.719	.365	.38	.17	G481Y-P†	12118	GSS481Y-P†	49992
4:1	64	2.000	.24	.3125	.688	.445	1.00	.31	G486Y-G†	12108	GSS486Y-G†	49995
	16	.500		.1875	1.250	.500	.38	.22	G486Y-P†	12106	GSS486Y-P†	49994
24 DIAMETRAL PITCH												
2:1	36	1.500	.24	.250	.781	.460	.88	.31	G485Y-G	12124	—	—
	18	.750		.1875	1.062	.540	.56	.25	G485Y-P	12122	—	—
	48	2.000	.26	.3125	.938	.507	1.12	.31	G487Y-G	12112	—	—
	24	1.000		.250	1.375	.630	.69	.28	G487Y-P	12110	—	—
20 DIAMETRAL PITCH												
						STEEL UNHARDENED			STEEL HARDENED			
2:1	20	1.000	.18	.375	.688	.460	.75	.31	L147Y-G	12234	—	—
	10	.500		.1875	.750	.425	.41	.25	L147Y-P	12236	—	—
	20	1.000	.18	.375	.688	.460	.75	.31	—	—	HL147Y-G‡	11854
	10	.500		.1875	.750	.425	.41	.25	—	—	HL147Y-P‡	11856

*Mounting Distance (MD) must not be made less than dimension shown, see Page 144.

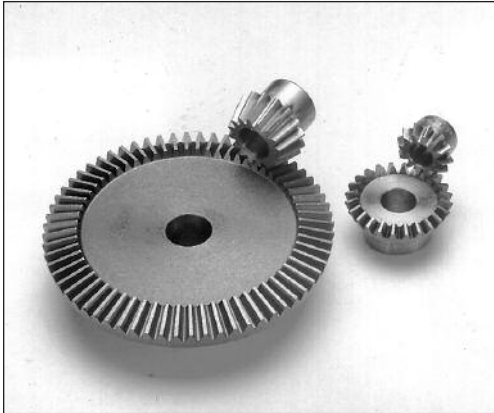
†Not “Coniflex” tooth form. Can be furnished with “Coniflex” tooth on special order.

‡These gears have No. 47 (.0785) drilled hole in hub. No keyway or setscrew.

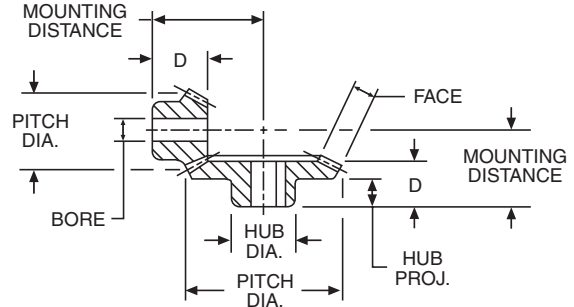
BEVEL GEARS

16 THROUGH 12 DIAMETRAL PITCH
STEEL—UNHARDENED AND HARDENED
AND CAST IRON

20° PRESSURE ANGLE



All gears have “Coniflex”[®] tooth form.
 All Hardened steel gears have teeth only hardened and are equipped with standard keyways and setscrews.



REFERENCE PAGES

Alterations — 149
 Horsepower Ratings — 70
 Lubrication — 149
 Materials — 150
 Selection Procedure — 67

STANDARD TOLERANCES

DIMENSION		TOLERANCE
BORE	All	±.0005

ALL DIMENSIONS IN INCHES
 ORDER BY CATALOG NUMBER OR ITEM CODE

Ratio	No. of Teeth	Pitch Dia.	Face	Bore	MD *	D	Hub		Catalog Number	Item Code	Catalog Number	Item Code	Catalog Number	Item Code
							Dia.	Proj.						
16 DIAMETRAL PITCH														
							STEEL UNHARDENED		STEEL HARDENED		CAST IRON GEARS STEEL PINIONS			
1-1/2:1	24	1.500	.26	.500	1.188	.760	1.12	.56	L146Y-G	12230	—	—	—	—
	16	1.000	.26	.375	1.250	.740	.81	.44	L146Y-P	12232	—	—	—	—
2:1	24	1.500	.20	.500	1.188	.750	1.12	.56	—	—	HL146Y-G	11850	—	—
	16	1.000	.19	.375	1.250	.740	.81	.44	—	—	HL146Y-P	11852	—	—
2:1	24	1.500	.20	.500	1.000	.625	1.00	.44	L148Y-G	12238	HL148Y-G	11858	—	—
	12	.750	.19	.375	1.125	.575	.66	.34	L148Y-P	12240	HL148Y-P	11860	—	—
3:1	32	2.000	.36	.500	1.188	.775	1.12	.50	L149Y-G	12242	HL149Y-G	11862	—	—
	16	1.000	.36	.375	1.500	.845	.81	.44	L149Y-P	12244	HL149Y-P	11864	—	—
4:1	48	3.000	.42	.625	1.312	.882	1.50	.56	—	—	—	—	PA3316Y-G	12484
	16	1.000	.42	.4375	2.000	.920	.88	.47	—	—	—	—	PA3316Y-P	12486
4:1	64	4.000	.49	.625	1.375	.898	2.25	.56	—	—	—	—	PA4416Y-G	12492
	16	1.000	.49	.500	2.500	.990	.81	.47	—	—	—	—	PA4416Y-P	12494
6:1	96	6.000	.62	.625	1.688	1.257	1.75	.88	—	—	—	—	PA6616Y-G	12516
	16	1.000	.62	.500	3.750	1.375	.94	.72	—	—	—	—	PA6616Y-P	12518
14 DIAMETRAL PITCH														
2:1	28	2.000	.36	.500	1.375	.945	1.62	.66	L150Y-G	12246	HL150Y-G	11866	—	—
	14	1.000	.35	.375	1.625	.965	.81	.56	—	—	HL150Y-P	11868	—	—
12 DIAMETRAL PITCH														
1-1/2:1	27	2.250	.42	.500	1.750	1.135	1.50	.78	L151Y-G	12250	—	—	—	—
	18	1.500	.41	.500	1.875	1.130	1.25	.66	—	—	HL151Y-G	11870	—	—
2:1	36	3.000	.54	.625	1.875	1.275	2.12	.88	L152BY-G	12260	—	—	—	—
	18	1.500	.54	.500	2.375	1.385	1.31	.81	L152BY-P	12262	—	—	—	—
	36	3.000	.54	1.000	1.875	1.275	2.12	.88	L152Y-G	12256	HL152Y-G	11874	—	—
	18	1.500	.53	.625	2.375	1.375	1.31	.81	—	—	HL152Y-P	11876	—	—
									L152Y-P	12258	—	—	—	—

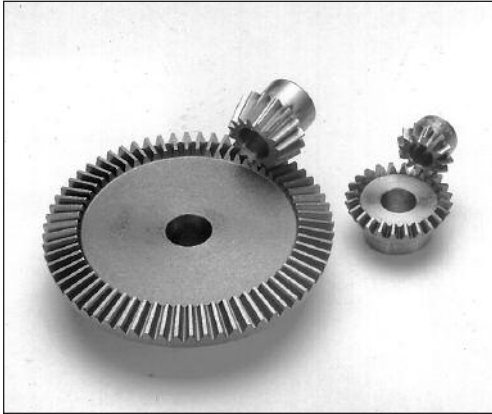
*Mounting Distance (MD) must not be made less than dimension shown, see Page 144.

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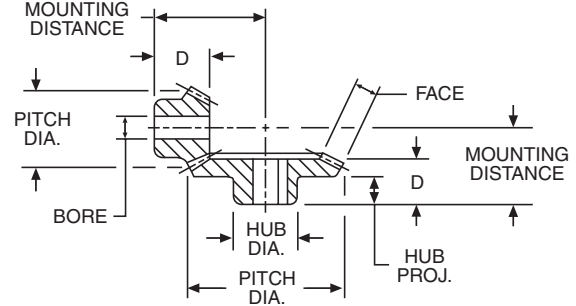
BEVEL GEARS

12 AND 10 DIAMETRAL PITCH
STEEL—UNHARDENED AND HARDENED
AND CAST IRON

20° PRESSURE ANGLE



All gears have “Coniflex”® tooth form.
 All Hardened steel gears have teeth only hardened and are equipped with standard keyways and setscrews.



REFERENCE PAGES

Alterations — 149
 Horsepower Ratings — 70
 Lubrication — 149
 Materials — 150
 Selection Procedure — 67

STANDARD TOLERANCES

DIMENSION		TOLERANCE
BORE	All	±.0005

ALL DIMENSIONS IN INCHES
 ORDER BY CATALOG NUMBER OR ITEM CODE

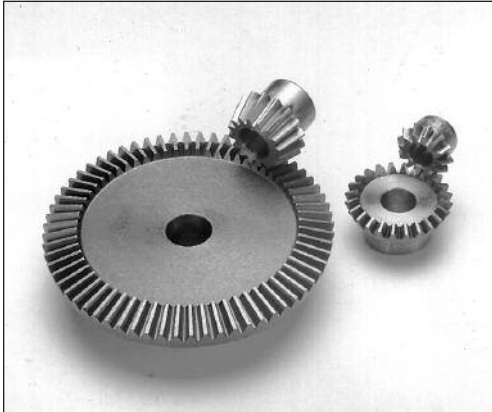
Ratio	No. of Teeth	Pitch Dia.	Face	Bore	MD *	D	Hub		Catalog Number	Item Code	Catalog Number	Item Code	Catalog Number	Item Code
							Dia.	Proj.						
12 DIAMETRAL PITCH														
									STEEL UNHARDENED		STEEL HARDENED		CAST IRON GEARS STEEL PINIONS	
2:1	36	3.000	.47	.625	1.500	.882	1.44	.50	—	—	—	—	PA3212Y-G	12480
	18	1.500		.500	2.250	1.205	1.25	.69	—	—	—	—	PA3212Y-P	12482
	48	4.000	.59	.625	2.000	1.180	1.63	.75	—	—	—	—	PA4212Y-G	12488
	24	2.000		.500	2.875	1.440	1.50		—	—	—	—	PA4212Y-P	12490
3:1	54	4.500	.60	.625	1.750	1.063	1.75	.75	—	—	—	—	PA45312Y-G	12532
	18	1.500		.500	3.000	1.350	1.25	.69	—	—	—	—	PA45312Y-P	12534
4:1	72	6.000	.61	.750	2.000	1.320	2.00	.95	—	—	—	—	PA6412Y-G	12508
	18	1.500		.500	3.750	1.365	1.25	.72	—	—	—	—	PA6412Y-P	12510
6:1	72	6.000	.74	.750	1.750	1.320	2.00	.95	—	—	—	—	PA6612Y-G	12512
	12	1.000		.500	3.750	1.495	.94	.72	—	—	—	—	PA6612Y-P	12514
10 DIAMETRAL PITCH														
1 1/2:1	30	3.000	.58	.750	2.250	1.445	2.50	1.00	L153Y-G	12264	—	—	—	—
				1.000					—	—	HL153Y-G	11878	—	—
2:1	20	2.000	.58	.750	2.500	1.525	1.75	.91	L153Y-P	12266	HL153Y-P	11880	—	—
	40	4.000	.72	.875	2.500	1.695	3.00	1.19	L155Y-G	12268	—	—	—	—
	20	2.000		.750	3.125	1.805	1.75	1.06	L155Y-P	12270	—	—	—	—
	40	4.000	.72	1.250	2.500	1.695	3.00	1.19	—	—	HL155Y-G	11882	—	—
	20	2.000		.875	3.125	1.805	1.75	1.06	—	—	HL155Y-P	11884	—	—
	50	5.000	.71	.750	2.625	1.600	2.00	1.00	—	—	—	—	PA5210Y-G	12496
3:1	25	2.500			3.375	1.555	2.00	.75	—	—	—	—	PA5210Y-P	12498
	60	6.000	.79	1.000	2.750	1.865	3.00	1.38	L157Y-G	12274	—	—	—	—
	20	2.000		.875	4.375	2.155	1.75	1.31	L157Y-P	12276	—	—	—	—
	60	6.000	.79	.875	2.750	1.913	3.00	1.38	—	—	—	—	PA6310Y-G	12500
4:1	20	2.000		.750	4.375	2.155	1.75	1.31	—	—	—	—	PA6310Y-P	12502
	60	6.000	.73	.875	2.250	1.632	2.50	1.13	—	—	—	—	PA6410Y-G	12504
6:1	15	1.500		.625	3.875	1.610	1.44	.84	—	—	—	—	PA6410Y-P	12506
	90	9.000	.86	1.000	2.500	1.820	2.75	1.31	—	—	—	—	PA9610Y-G	12524
	15	1.500		.625	5.500	1.870	1.44	.97	—	—	—	—	PA9610Y-P	12526

*Mounting Distance (MD) must not be made less than dimension shown, see Page 144.

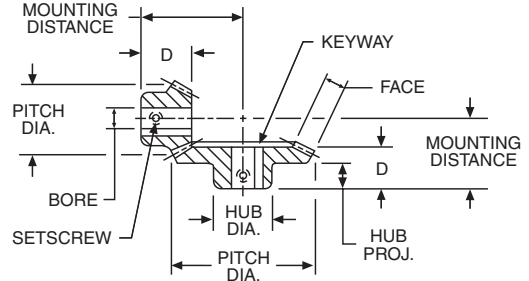
BEVEL GEARS

8 THROUGH 4 DIAMETRAL PITCH
STEEL—UNHARDENED AND HARDENED
AND CAST IRON

20° PRESSURE ANGLE



All gears have “Coniflex”® tooth form.
 All Hardened steel gears have teeth only hardened and are equipped with standard keyways and setscrews.



REFERENCE PAGES

Alterations — 149
 Horsepower Ratings — 70
 Lubrication — 149
 Materials — 150
 Selection Procedure — 67

STANDARD TOLERANCES

DIMENSION		TOLERANCE
BORE	All	±.0005

ALL DIMENSIONS IN INCHES
 ORDER BY CATALOG NUMBER OR ITEM CODE

Ratio	No. of Teeth	Pitch Dia.	Face	Bore	MD *	D	Hub		Catalog Number	Item Code	Catalog Number	Item Code	Catalog Number	Item Code	
							Dia.	Proj.							
8 DIAMETRAL PITCH															
							STEEL UNHARDENED		STEEL HARDENED		CAST IRON GEARS STEEL PINIONS				
2:1	40	5.000	.83	1.000 1.500	2.875	1.850	3.00	1.25	L156Y-G —	12252 —	— HL156Y-G	— 11886	— —	— —	
	20	2.500	.83	1.000 .875	4.000 4.000	2.290	2.12	1.41	L156Y-P —	12272 —	HL156Y-P —	11888 —	— —	PA528Y-G PA528Y-P	12424 12426
3:1	48	6.000	.84	.875 .750	2.375 4.250	1.632 2.085	2.75	1.00	—	—	—	—	—	PA638Y-G PA638Y-P	12436 12438
	16	2.000	.84	.875 .750	2.375 4.250	1.632 2.085	2.75	1.00	—	—	—	—	—	PA638Y-G PA638Y-P	12436 12438
4:1	64	8.000	.85	1.000 .875	2.750 5.250	1.882 2.105	2.75	1.25	—	—	—	—	—	PA848Y-G PA848Y-P	12452 12454
	16	2.000	.85	.875 .750	2.750 5.250	1.882 2.105	2.75	1.25	—	—	—	—	—	PA848Y-G PA848Y-P	12452 12454
	72	9.000	1.23	1.125 .875	3.250 5.750	2.320 2.470	3.00	1.69	—	—	—	—	—	PA948Y-G PA948Y-P	12460 12462
18	2.250	1.23	1.125 .875	3.250 5.750	2.320 2.470	3.00	1.69	—	—	—	—	—	—	PA948Y-G PA948Y-P	12460 12462
6 DIAMETRAL PITCH															
2:1	36	6.000	1.07	1.125	3.500	2.260	3.25	1.50	L158Y-G	12278	—	—	—	—	
	18	3.000	1.06	1.125	4.750	2.765	2.50	1.59	L158Y-P	12280	—	—	—	—	
	36	6.000	1.07	1.750	3.500	2.260	3.25	1.50	—	—	HL158Y-G	11890	—	—	
	18	3.000	1.06	1.125	4.750	2.765	2.50	1.59	—	—	HL158Y-P	11892	—	—	
	36	6.000	1.07	1.125	3.500	2.260	3.25	1.50	—	—	—	—	—	PA626Y-G	12432
	18	3.000	1.06	1.000	4.750	2.765	2.50	1.59	—	—	—	—	—	PA626Y-P	12434
	42	7.000	1.06	1.125	3.750	2.305	3.50	1.50	—	—	—	—	—	PA726Y-G	12440
	21	3.500	1.06	1.000	5.000	2.515	2.50	1.25	—	—	—	—	—	PA726Y-P	12442
3:1	48	8.000	1.18	1.125	3.438	1.898	3.25	1.00	—	—	—	—	—	PA826Y-G	12448
	24	4.000	1.18	1.000	5.438	2.560	2.62	1.25	—	—	—	—	—	PA826Y-P	12450
3:1	45	7.500	1.08	1.125	3.000	2.132	3.25	1.25	—	—	—	—	—	PA7536Y-G	12520
	15	2.500	1.08	.875	5.250	2.575	2.12	1.44	—	—	—	—	—	PA7536Y-P	12522
5 DIAMETRAL PITCH															
2:1	30	6.000	1.05	1.125	3.500	2.257	3.25	1.38	—	—	—	—	—	PA625Y-G	12428
	15	3.000	1.05	1.000	4.375	2.390	2.62	1.28	—	—	—	—	—	PA625Y-P	12430
3:1	45	9.000	1.32	1.250	3.750	2.507	3.75	1.69	—	—	—	—	—	PA935Y-G	12456
	15	3.000	1.32	1.000	5.875	2.685	2.62	1.31	—	—	—	—	—	PA935Y-P	12458
4 DIAMETRAL PITCH															
2:1	32	8.000	1.40	1.125	4.250	2.695	3.75	1.56	—	—	—	—	—	PA824Y-G	12444
	16	4.000	1.40	1.125	6.000	3.350	3.25	1.81	—	—	—	—	—	PA824Y-P	12446

*Mounting Distance (MD) must not be made less than dimension shown, see Page 144.