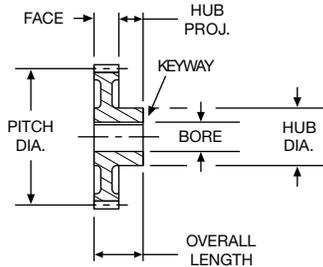


# Spur Gears

## 24 and 20 Diametral Pitch (Steel)

14-1/2° Pressure Angle (will not operate with 20° spurs)

A



### STANDARD TOLERANCES

DIMENSION		TOLERANCE
BORE	All	±.0005



### REFERENCE PAGES

- Alterations — 322
- Horsepower Ratings — 50, 51
- Lubrication — 322
- Materials — 323
- Selection Procedure — 49

\*Special Pitch Diameter, used for calculating Center Distance only, not Ratio.

†H2412 & H2414 have #35 (.110) drilled hole through one wall, no keyway.

‡H2415-H24144 has one setscrew, no keyway.

\*\*NA11B-5/16"-NA14B-5/16 bore has #35 (.110) drilled hole through one wall, no keyway.

††3/8" & 1/2" bores have one setscrew, no keyway.

NA40-5/8" & NA40-3/4" bores have standard keyway at 90° to setscrew. See Page 323.

ALL DIMENSIONS IN INCHES  
ORDER BY CATALOG NUMBER OR ITEM CODE

No. of Teeth	Pitch Dia.	Bore	Hub		Style See Page 323	Without Keyway or Setscrew		With Keyway & Setscrew†	
			Dia.	Proj.		Catalog Number	Item Code	Catalog Number	Item Code
<b>24 DIAMETRAL PITCH</b>						Face = .250" Outside Dia. = Pitch Dia. + .083" Overall Length = .250" + Hub Proj.			
<b>STEEL</b>									
12	.500	.250	-	-	A	S2412	09630	-	-
15	.625		-	-		S2415	09632	-	-
16	.667		-	-		S2416	09634	-	-
18	.750		-	-		S2418	09636	-	-
21	.875	.500	-	-		S2421	09638	-	-
24	1.000		-	-		S2424	09640	-	-
30	1.250		-	-		S2430	09642	-	-
36	1.500		-	-		S2436	09644	-	-
42	1.750		-	-		S2442	09646	-	-
48	2.000		-	-		S2448	09648	-	-
60	2.500		-	-		S2460	09650	-	-
72	3.000		-	-		S2472	09652	-	-
12	.500	.3125	.36	-		-	-	H2412†	09596
14	.583		.46	.31		-	-	H2414†	09598
15	.625		.50	-		-	-	H2415‡	09600
16	.667		.54	-		-	-	H2416‡	09602
18	.750		.62	.31		-	-	H2418‡	09604
20	.833		.70	-		-	-	H2420‡	09606
21	.875		.74	.31		-	-	H2421‡	09608
24	1.000		.87	-		-	-	H2424‡	09610
30	1.250		1.00	-		-	-	H2430‡	09612
36	1.500		1.12	.38		-	-	H2436‡	09614
42	1.750		1.12	-		-	-	H2442‡	09616
48	2.000		1.25	-		-	-	H2448‡	09618
60	2.500	1.25	-	-	-	H2460‡	09620		
72	3.000	1.38	-	-	-	H2472‡	09622		
96	4.000	2.00	.50	-	-	H2496‡	09624		
120	5.000	2.25	-	-	-	H24120‡	09626		
144	6.000	2.25	-	-	-	H24144‡	09628		
<b>20 DIAMETRAL PITCH</b>						Face = .375" Outside Dia. = Pitch Dia. + .100" Overall Length = .375" + Hub Proj.			
<b>STEEL</b>									
11	.600*	.3125	.46	.38	A	NA11B	09662	NA11B-5/16**	46000
12	.600		.46	.38		NA12B	09664	NA12B-5/16**	46001
13	.650		.50	.38		NA13B	09666	NA13B-5/16**	46002
14	.700		.56	.38		NA14B	09668	NA14B-5/16**	46003
15	.750	.375	.60	.38		NA15B	09670	NA15B-3/8††	46004
16	.800		.66	.38		NA16B	09672	NA16B-3/8††	46005
18	.900		.74	.38		NA18B	09674	NA18B-3/8††	46006
20	1.000	.375	.84	.38	A	NA20B	09676	NA20B-3/8††	46007
		.500	.84	.38		-	-	NA20B-1/2††	46008
22	1.100	.375	.82	.38		NA22B	09678	NA22B-3/8††	46009
		.500	.82	.38		-	-	NA22B-1/2††	46010
24	1.200	.375	.92	.38		NA24	09680	NA24-3/8††	46011
		.500	.92	.38		-	-	NA24-1/2††	46012
25	1.250	.375	.97	.38		NA25B	09682	NA25B-3/8††	46013
		.500	.97	.38		-	-	NA25B-1/2††	46014
28	1.400	.375	1.12	.38		NA28B	09684	NA28B-3/8††	46015
		.500	1.12	.38		-	-	NA28B-1/2††	46016
30	1.500	.375	1.22	.38		NA30B	09686	NA30B-3/8††	46017
		.500	1.22	.38		-	-	NA30B-1/2††	46018
32	1.600	.375	1.32	.50	NA32	09688	NA32-3/8††	46019	
		.500	1.32	.50	-	-	NA32-1/2††	46020	
35	1.750	.375	1.47	.50	NA35	09690	NA35-3/8††	46021	
		.500	1.47	.50	-	-	NA35-1/2††	46022	
36	1.800	.375	1.52	.50	NA36	09692	NA36-3/8††	46023	
		.500	1.52	.50	-	-	NA36-1/2††	46024	
40	2.000	.375	1.72	.50	NA40	09694	NA40-3/8††	46025	
		.500	1.72	.50	-	-	NA40-1/2††	46026	
		.625	1.72	.50	-	-	NA40-5/8	46027	
		.750	1.72	.50	-	-	NA40-3/4	46028	
48	2.400	.375	1.33	.50		NA48A	10208	-	-
50	2.500		1.42	.50		NA50A	10210	-	-
60	3.000		1.92	.50		NA60A	10212	-	-
			2.12	.50		NA64A	10214	-	-
64	3.200		2.12	.50					