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**Together  
For Success**



Quality

Parts

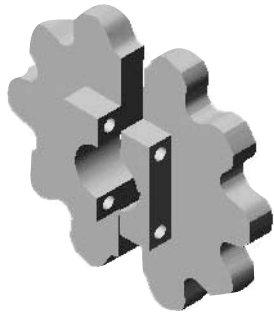


# INTRODUCTION

## Black Ace<sup>®</sup> Steel Sprockets

- Precision Flame Cut Steel
- Split For Easy Installation
- In-house Heat Treat Optional
- All Part Numbers Are Marked On The Sprocket For Easy Identification
- Made For A Wide Variety Of Chain Configurations And High Profile Belts
- Design And Production For Custom Applications
- Heat Treated Sprockets Hardened In The Tooth Section
- All Sprockets Are Made To Order With Short Lead Times
- Up To 18" In Diameter
- High Durability, Longevity And Pitch Integrity





## Hook & Rod Chain Sprockets

- 1" thick steel standard, other thicknesses available.
- Come standard with grade 5 bolts & nuts.

## Explanation of Hook Chain Item Numbers

The last two characters of our Hook Chain sprocket item numbers signify the bore and the keyway size. For example, the H15614E4 sprocket has the "E" (2") bore size and the #4 (3/8") keyway size. The square bore sprocket would only have the square bore size letter designation and not the keyway size designation. See the following page for the various round bore and keyway size combinations.

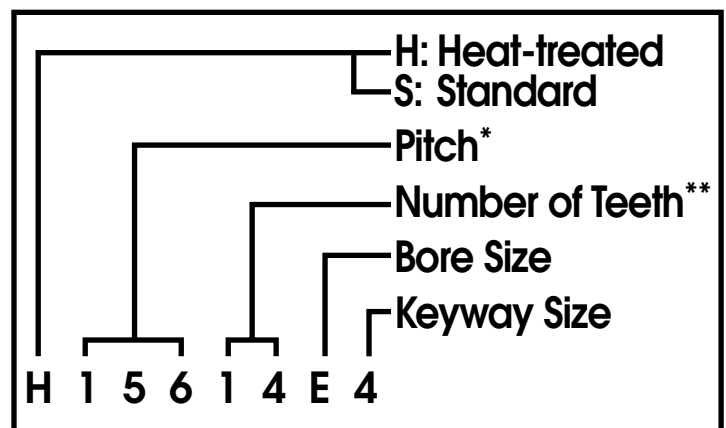


Figure 37A

\*In inches unless otherwise specified.  
 \*\*Unless otherwise specified.

### ROUND BORE SIZES

A = 1"	K = 1-5/16"
B = 1-1/4"	L = 1-11/16"
C = 1-3/8"	M = 1-3/4"
D = 1-15/16"	N = 1-1/2"
E = 2"	O = 1-5/8"
F = 2-7/16"	P = 2-1/2"
G = 1-3/16"	Q = 1-1/8"
H = 1-7/16"	R = 2-3/16"
I = 2-1/4"	S = 2-3/4"
J = 1-7/8"	

### KEYWAY SIZES

1 = 1/2"	6 = 5/16"
4 = 3/8"	7 = 3/16"
5 = 1/4"	8 = 1/8"

### SQUARE BORE SIZES

T = 1-1/4"	X = 1"
V = 1-3/4"	Y = 1-1/2"
W = 2"	Z = 1-1/8"



# Hook & Rod Chain Sprocket Profiles

ALL DIMENSIONS IN INCHES

Below is a list of sprocket profiles that we manufacture. The first numbers designate the pitch and the last one or two numbers designate the number of teeth. The list alongside is the outside diameter of the sprocket for reference purposes.

Pitch/# of Teeth	Outside Dia.	Pitch/# of Teeth	Outside Dia.	Pitch/# of Teeth	Outside Dia.
10011	4.28	15613	8	2007	5.6
10012	4.5	15614	8.12	2008	6.66
10014	5.15	15614LT	8.72	2008	6.66
11520	8	15616	9.43	2009	7.45
12510	4.54	15618	10.13	22510	9.1
12511	5.12	15620	10.92	22512	10.11
12511	5.05	15624	12.89	22514	11.12
12512	5.50	1569	5.5	2257	6.87
12514	6.22	16210	6.2	2258	7.57
12515	6.82	16214	8.40	2259	8.25
12516	6.95	1629	5.7	23710	9.08
12518	8.15	17510	7.01	23712	10.38
12520	8.93	17512	8.5	2377	6.62
12522	9.2	17516	10.41	2378	7.37
12523	10	17518	11.12	237-8A	7.36
12526	11.35	17520		2379	8.18
13710	5.28	17520	12.93	25010	9.7
13711	5.65	1758	5.27	25012	11.02
13712	6	1759	6.37	2506	6.76
13714	6.8	17614	9.69	2507	7.12
13716	7.64	18810	7.73	2508	8.5
13716LT	8.2	18812	8.75	3618-20-4	9.25
13718	8.71	18814	10.1	4906	11.5
13720	9.69	1887	5.21	5065 10T	9.98
13722	10.56	1888	6.30	506612T	11.5
1378	4.20	1889	7	5256	12.5
1379	4.5	20010	8.1	5325	10.5
15610	6	20012	9.5	6005	11.5
15611	6.5	20014	10.62		
15612	6.97	20016	11.87		

Rod Size Conversion Chart	
MM	INCH
10	0.394
11	0.433
12	0.472
13	0.511
14	0.551
15	0.590
16	0.629

Common Belt Chain Pitch Millimeter to Inches Conversion Chart					
MM	INCH	MM	INCH	MM	INCH
28	1.102	72	2.835	135	5.315
32	1.260	80	3.150	144	5.669
36	1.417	84	3.307	150	5.905
40	1.575	90	3.543	160	6.299
42	1.653	96	3.779	168	6.614
45	1.772	100	3.937	180	7.087
48	1.890	108	4.252	190	7.559
50	1.968	112	4.409	200	7.874
56	2.205	120	4.724	216	8.504
60	2.362	126	4.961	225	8.858
64	2.520	128	5.039		

Conversion based on 25.4 millimeters equal to 1 inch

Belt chain is made with three types of convexity. Black Ace® sprockets are made for convexity down unless specified. This is critical for correct sprocket pitch.

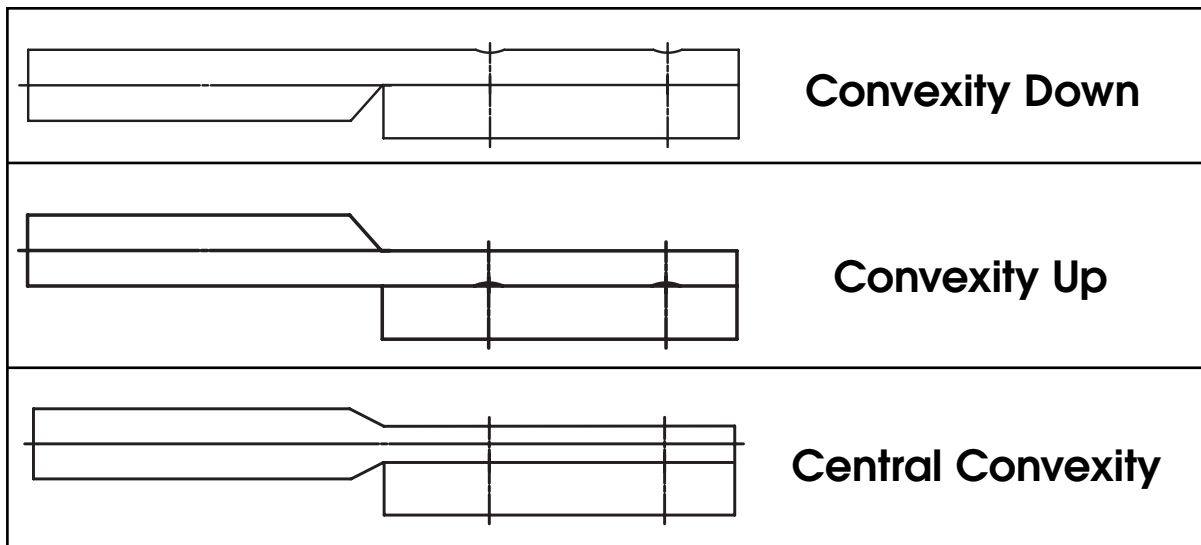


Figure 39A



# Sprocket Hub Data

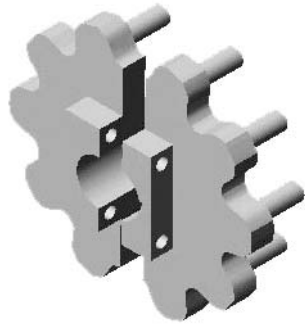
## Basic Round Bore Sprocket Data

ALL DIMENSIONS IN INCHES

HUB	HUB SIZE	MAX BORE	BOLT SIZE	DISTANCE ACROSS CORNERS	WIDTH OF BOLTED SECTION
HB1	1.25 X 2 X 2.5	1 1/8	3/8	3.5	2.0
HB125	1.25 X 2 3.0	1 5/16	3/8	3.7	2.0
HB125T	1 X 1.9 X 2.37	1 1/4	5/16	2.75	1.0
HB15	1.25 X 2.5 X 3.5	1 11/16	7/16	4.4	2.5
HB15T	1.25 X 2.7 X 3.0	1 11/16	3/8	3.2	1.0
HB2	1.5 X 3 X 4	2 1/4	1/2	5.2	3.0
HB25	1.5 X 3.5 X 4.5	2 3/4	1/2	5.85	3.5
HB25T	1.5 X 3.5 X 4.25	2 1/2	1/2	4.6	1.5
HB5T	2.5 X 4.6 X 6.5	3	3/4	6.25	2.5
HB7T	1.125 X 2.8 X 3.47	2	3/8	3.62	1.0
HB8T	1.25 X 2.8 X 3.47	2	3/8	3.62	1.0
HB9T	1.25 X 3 X 3.9	2 1/4	7/16	4.2	1.3



# Belt Chain Sprockets



- Made from 1" thick steel, other thicknesses available.
- Support pins are 5/8" diameter x 2" long.
- Come standard with grade 5 bolts & nuts.
- Black Ace sprockets are made for convex down unless otherwise specified.

## Explanation of Belt Chain Item Numbers

The last two characters of our Belted Chain sprocket item numbers signify the bore and the keyway size. For example, the H45M10B5 sprocket has the "B" (1-1/4") bore size and the #5 (1/4") keyway size. The square bore sprocket would only have the square bore size letter designation and not the keyway size designation. See the following page for the round bore and keyway size combination.

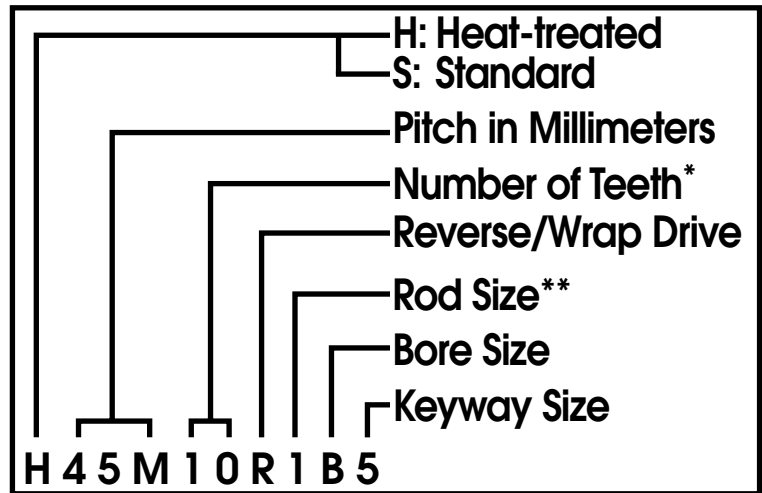


Figure 41A

An "X" at the end of the item number would designate no belt support. Example H45M10B5X.

\*Unless otherwise specified. \*\*No number = 7/16" rod. 7 = 9/16" rod. 1 = 1/2" rod. 2 = 5/8" rod (except on 126, 135, 150, 180, 200, 225 mm sprockets).

### ROUND BORE SIZES

A = 1"	K = 1-5/16"
B = 1-1/4"	L = 1-11/16"
C = 1-3/8"	M = 1-3/4"
D = 1-15/16"	N = 1-1/2"
E = 2"	O = 1-5/8"
F = 2-7/16"	P = 2-1/2"
G = 1-3/16"	Q = 1-1/8"
H = 1-7/16"	R = 2-3/16"
I = 2-1/4"	S = 2-3/4"
J = 1-7/8"	

### KEYWAY SIZES

1 = 1/2"	6 = 5/16"
4 = 3/8"	7 = 3/16"
5 = 1/4"	8 = 1/8"

### SQUARE BORE SIZES

T = 1-1/4"	X = 1"
V = 1-3/4"	Y = 1-1/2"
W = 2"	Z = 1-1/8"



# Belt Chain Sprocket Profiles

ALL DIMENSIONS IN INCHES

Below is a list of sprocket profiles we manufacture. The number in front of the M (which stands for millimeter) is the pitch of the chain. The number or two after the (M) is the number of teeth. The list alongside is the outside diameter of the sprocket. Our standard belt chain sprocket, 56mm and smaller pitch, is made for a 11mm rod convex down.

## Sprockets for 7/16" and 11 mm rods

Pitch/# of Teeth	Outside Dia.	Pitch/# of Teeth	Outside Dia.	Pitch/# of Teeth	Outside Dia.
28M10	4.31	36M8	4.65	45M8	5.75
28M12	5.17	38M15X	7.67	45M9X	6.43
28M14	5.68	40M10	6.06	50M10	7.61
28M16	6.3	40M12	7.32	50M12	8.85
28M18	7.1	40M14	8.32	50M12LT	9.15
28M20	7.71	40M16	9.42	50M14	10.1
28M22	8.4	40M18	10.41	50M5X	4.39
28M26	9.82	40M20	11.33	50M8	6.29
28M28	10.47	40M8	5.16	56M10	8.37
32M10	5	40M9X	5.55	56M10LTX	9.1
32M12	5.75	42M10	6.48	56M12	9.75
32M14	6.57	42M12	7.37	56M14	11.23
32M16	7.50	42M14	8.68	56M6	5.55
32M18	8.44	42M14LTX	9	56M7X	6.07
32M22	9.8	42M16	9.75	56M8	7.25
32M8X	4.21	42M20	11.81	60M10	9.09
36M10	5.35	42M8	5.58	60M12	10.57
36M11X	5.94	42M9X	5.98	60M8	7.44
36M12	6.47	45M10	6.98	64M10	9.5
36M14	7.36	45M11X	7.44	64M8	8.04
36M16	8.45	45M12	8.09	64M9X	8.84
36M18	9.21	45M14	9.14	Chart Continued on Page 43	
36M20	10.12	45M16	10.33		
36M22	10.84	45M18	11.53		

Sprockets for 11mm Rods often work on 12mm Rods





Chart Continued From Page 42

# Belt Chain Sprocket Profiles

ALL DIMENSIONS IN INCHES

## Sprockets for 7/16" and 11 mm rods (reverse drive)

Pitch/# of Teeth	Outside Dia.	Pitch/# of Teeth	Outside Dia.	Pitch/# of Teeth	Outside Dia.
28M14RX	4.98	40M15RX	8.55	45M8RX	5.04
32M12RX	5.13	42M10RX	6.45	45M9RX	5.76
36M10RX	4.96	42M12RX	7.29	50M10RX	7.26
36M12RX	5.82	42M14RX	8.22	50M12RX	8.54
36M14RX	6.66	45M10RX	6.57	50M14RX	9.79
36M18RX	8.41	45M12RX	7.61	50M8RX	5.73
40M10RX	5.34	45M14RX	8.72	56M10RX	7.8
40M12RX	6.68	45M8RIX	4.88	56M12RX	9.40

## Sprockets for 1/2", 12 & 13 mm chain

32M141	6.50	42M161	9.75	56M101LTX	9.00
32M161	7.48	45M101	6.97	56M101X	8.55
32M181	8.36	45M121	8.09	56M121	9.94
32M181X	8.36	45M141	9.26	56M121X	9.94
36M121	6.41	45M81	5.68	56M141	11.1
36M141	7.36	50M101	7.86	56M81	7.16
36M161	8.30	50M101X	7.86	56M81X	7.16
36M181	9.28	50M121	8.98	60M101	9.03
40M101	6.07	50M121X	8.98	60M121	10.51
40M141	8.33	50M141	10.1	60M161	13.10
42M101	6.46	50M161	11.37	60M81	7.38
42M101X	6.41	50M81	6.23	64M101	9.35
42M121	7.31	50M81X	6.23	64M81	7.86
42M141	8.68	56M101	8.55		

## Sprockets for 1/2", 12 & 13 mm chain (reverse drive)

28M22R1X	7.99	42M10R1X	5.95	50M8R1X	5.67
32M24R1X	9.80	42M14R1X	8.11	56M12R1X	8.98
36M12R1X	5.75	45M12R1X	7.55	56M14R1X	10.61
36M14R1X	6.60	45M14R1X	8.71	64M7R1X	6.46
36M20R1X	9.31	50M12R1X	8.20	64M8R1X	7.18
40M10R1X	5.3	50M14R1X	9.45		
40M12R1X	6.85	50M16R1X	10.82		

Chart Continued on Page 44

Quality



Parts

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# Belt Chain Sprocket Profiles

ALL DIMENSIONS IN INCHES

## Sprockets for 5/8", 15 & 16 mm chain

Pitch/# of Teeth	Outside Dia.	Pitch/# of Teeth	Outside Dia.	Pitch/# of Teeth	Outside Dia.
126M6	11.66	150M8	16.61	50M122	8.85
126M8T	14.15	180M5	13.6	50M82X	6.10
135M5	10.80	180M6	15.1	56M122X	9.87
135M6U	12.5	200M5	14.8	56M82X	7.16
135M7X	14.36	225M5	16.51	64M102	9.31
150M5	11.5	32M222	9.74		
150M6	13.65	36M142	7.14		

## Sprockets for 9/16", 14 & 15 mm chain (reverse drive)

45M14R7X	8.52	50M14R7X	9.52
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## Sprockets for 5/8", 15 & 16 mm chain (reverse drive)

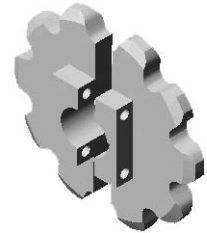
64M7R2X	6.33
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## Roller Chain Sprockets



\*

- Made for 550, 557, 620 and larger pitches.
- Have beveled teeth for engagement of chain.
- Steel construction.
- Come standard with grade 5 bolts & nuts.
- Split and non-split styles.
- Made in Idler styles with bearings.
- Available in a 1" wide mounting (as shown \*).



## Basic Explanation of Roller Chain Style Sprocket Item Numbers

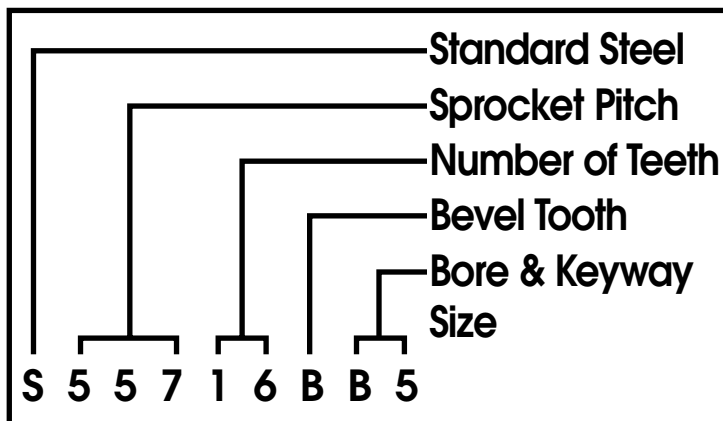


Figure 44A

Continued on page 45



**ROUND BORE SIZES**

<b>A = 1"</b>	<b>K = 1-5/16"</b>
<b>B = 1-1/4"</b>	<b>L = 1-11/16"</b>
<b>C = 1-3/8"</b>	<b>M = 1-3/4"</b>
<b>D = 1-15/16"</b>	<b>N = 1-1/2"</b>
<b>E = 2"</b>	<b>O = 1-5/8"</b>
<b>F = 2-7/16"</b>	<b>P = 2-1/2"</b>
<b>G = 1-3/16"</b>	<b>Q = 1-1/8"</b>
<b>H = 1-7/16"</b>	<b>R = 2-3/16"</b>
<b>I = 2-1/4"</b>	<b>S = 2-3/4"</b>
<b>J = 1-7/8"</b>	

**KEYWAY SIZES**

<b>1 = 1/2"</b>	<b>6 = 5/16"</b>
<b>4 = 3/8"</b>	<b>7 = 3/16"</b>
<b>5 = 1/4"</b>	<b>8 = 1/8"</b>

**SQUARE BORE SIZES**

<b>T = 1-1/4"</b>	<b>X = 1"</b>
<b>V = 1-3/4"</b>	<b>Y = 1-1/2"</b>
<b>W = 2"</b>	<b>Z = 1-1/8"</b>

**Roller Chain Sprocket Profiles**

ALL DIMENSIONS IN INCHES

Below is a list of 550, 557, 620, 662 and 667 roller chain sprocket profiles we manufacture for many agricultural and industrial uses. This list consists of the pitch and the number of teeth and the list alongside is the sprocket outside diameter.

Pitch/# of Teeth	Outside Dia.	Pitch/# of Teeth	Outside Dia.	Pitch/# of Teeth	Outside Dia.
55010	6.21	5577	4.33	62023	13.01
55011	6.55	5578	4.86	62024	13.54
55012	7.01	5579	5.33	62024	13.54
55013	7.60	5579	5.31	62026	14.58
55014	8.16	5579	11.04	6205	6.24
55015	8.53	62010	6.24	6208	5.21
55020	10.92	62011	6.75	6209	5.59
5507	4.4	62012	7.27	66216	8.75
5508	4.90	62013	7.79	66710	8.28
5509	5.41	62014	8.31	6676	5.7
55710	5.97	62015	8.83	6677	6.38
55713	7.60	62016	9.35	6678	7.11
55716	9.04	62017	9.88	6679	7.85
55717	9.56	62019	10.92		
5574T	9.12	62021	11.89		





## High Profile Belt Chain Sprockets



- Made from 3/8" plate.
- Drive pins are 1/2" sq x 2" or 2-9/16" long.
- All steel construction
- Come standard with grade 5 bolts & nuts.
- Precise engagement promoting belt life.



## Explanation of High Profile Belted Chain Item Numbers

The last two characters of our High Profile Belted Chain sprocket item numbers signify the bore and the keyway size. For example, the SH35M22E4 sprocket has the "E" (2") bore size and the #4 (3/8") keyway size. See the previous pages in this section for the various round bore and keyway size combinations.

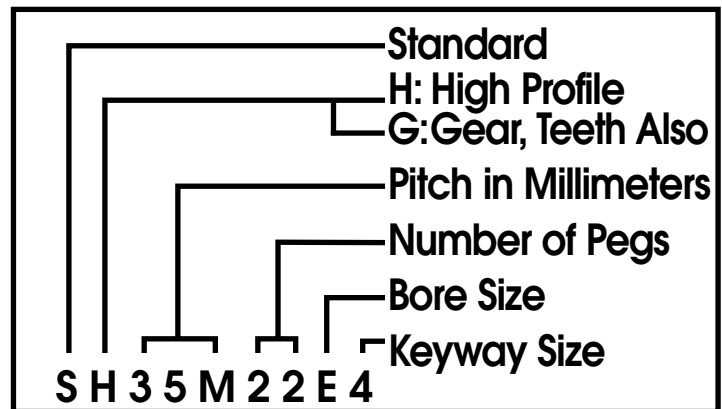


Figure 46A

### ROUND BORE SIZES

A = 1"	K = 1-5/16"
B = 1-1/4"	L = 1-11/16"
C = 1-3/8"	M = 1-3/4"
D = 1-15/16"	N = 1-1/2"
E = 2"	O = 1-5/8"
F = 2-7/16"	P = 2-1/2"
G = 1-3/16"	Q = 1-1/8"
H = 1-7/16"	R = 2-3/16"
I = 2-1/4"	S = 2-3/4"
J = 1-7/8"	

### KEYWAY SIZES

1 = 1/2"	6 = 5/16"
4 = 3/8"	7 = 3/16"
5 = 1/4"	8 = 1/8"

### SQUARE BORE SIZES

T = 1-1/4"	X = 1"
V = 1-3/4"	Y = 1-1/2"
W = 2"	Z = 1-1/8"





# High Profile Sprockets

Sprocket Number	Description
SG175P4T2M4T	SPK,HI PRO,60MMBELT,16P,4T,3/8T
SG35P12B5T	SPK,HI PRO,50MMBELT,12PIN,3/8T
SG35P14B5T	SPK,HI PRO,50MMBELT,14PIN,3/8T
SG35P16E4T	SPK,HI PRO,60MMBELT,16PIN,3/8T
SG35P16M4T	SPK,HI PRO,60MMBELT,16PIN,3/8T
SG35P20B5T	SPK,HI PRO,60MMBELT,20PIN,3/8T
SG35P20M4	SPK,HI PRO,60MMBELT,20PIN,1" T
SG35P20M4T	SPK,HI PRO,60MMBELT,20PIN,3/8T
SG40P12B5T	SPK,HI PRO,60MMBELT,12PIN,3/8T
SG45M10N4Y	SPK HI PRO,MM,5 PIN,1-1/2" ID
SG45M12E4Y	SPK HI PRO,MM,6 PIN,2" ID
SG45M12HB	SPK,HI PRO,MM,6 PIN,2.062" ID
SG45P10B5TY	SPK,HI PRO,50MMBELT,5PIN,3/8T
SG50M10HB	SPK,HI PRO,MM,5 PIN,2.062" ID
SG50M12E4	SPK,HI PRO,MM,12 PIN,2" ID
SG50M12HB	SPK,HI PRO,MM,6 PIN,2.062" ID
SG50M12N4	SPK,HI PRO,MM,12 PIN,1-1/2" ID
SG50M14E4	SPK,HI PRO,MM,14 PIN,2" ID
SG50M14E4X	SPK,HI PRO,MM,NO PIN,2" ID
SG50P12M4T	SPK,HI PRO,60MMBELT,12PIN,3/8T
SHF35M14A5	14 PIN DR,HI PRO,BELTED,NO FL
SHF35M14E4	14 PIN DR,HI PRO,BELTED,NO FL
SHF35M14M4	14 PIN DR,HI PRO,BELTED,NO FL
SHF40M12N4	12 PIN DR,HI PRO,BELTED,NO FL
SHF40M15E4	15 PIN DR,HI PRO,BELTED,NO FL
SHF40M18NSP-40	18 PIN DR,HIPRO,MMID,NO SP,FL
SHF42M12A5NSP	12 PIN DR,HIPRO,NO SPLT,KEY,FL
SHF45M10B5	10 PIN DR,HI PRO,BELTED,NO FL

Chart Continued on Page 48

Quality



Parts

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# High Profile Sprockets

Sprocket Number	Description
SHF45M12B5	12 PIN DR,HI PRO,BELTED,NO FL
SHF45M14N4	14 PIN DR,HI PRO,BELTED,NO FL
SHF45M16N4	16 PIN DR,HI PRO,BELTED,NO FL
SHF50M10HB	10 PIN DR,HI PRO,MM,NO FL,HB
SHF50M10N4	10 PIN DR,HI PRO,BELTED,NO FL
SHF50M12E4	12 PIN DR,HI PRO,BELTED,NO FL
SHF50M12HB	12 PIN DR,HI PRO,MM,NO FL,HB
SH35M14E4	14 PIN DR,HI PRO,BELTED
SH35M14M4	14 PIN DR,HI PRO,BELTED
SH35M14N4	14 PIN DR,HI PRO,BELTED
SH35M16H4	16 PIN DR,HI PRO,BELTED
SH35M17B5	17 PIN DR,HI PRO,BELTED
SH35M17C6	17 PIN DR,HI PRO,BELTED
SH35M18M4Y	9 PIN DR/18HOLE HI PRO 70MM
SH35M18N4Y	9 PIN DR/18HOLE HI PRO 70MM
SH35M20BB5	20 PIN DR,HI PRO,MM/BEV,60BELT
SH35M20B5	20 PIN DR,HI PRO,BELTED
SH35P12BB5	12 PIN DR,HI PRO,MM/BEV,50BELT
SH35P16BB5	16 PIN DR,HI PRO,MM/BEV,60BELT
SH35P16BM4	16 PIN DR,HI PRO,MM/BEV,50BELT
SH35P20BB5	20 PIN DR,HI PRO,MM/BEV,50BELT
SH40M11B5	11 PIN DR,HI PRO,BELTED
SH40M12A5	12 PIN DR,HI PRO,BELTED
SH40M12B5	12 PIN DR,HI PRO,BELTED
SH40M12C4	12 PIN DR,HI PRO,BELTED
SH40M12N4	12 PIN DR,HI PRO,BELTED
SH40M15A5	15 PIN DR,HI PRO,BELTED
SH40M15B5	15 PIN DR,HI PRO,BELTED

Chart Continued on Page 49







## Bolt-on Style Sprockets



- These sprockets bolt onto an existing hub and eliminate the need to replace a hub or alter the mounting position.
- Made from 1", 3/4" & 5/8" thick steel.
- Commonly used without support pins in belt and hook chain applications.

## Explanation of Bolt-on Style Sprocket Item Numbers

### Rod Chain Item #

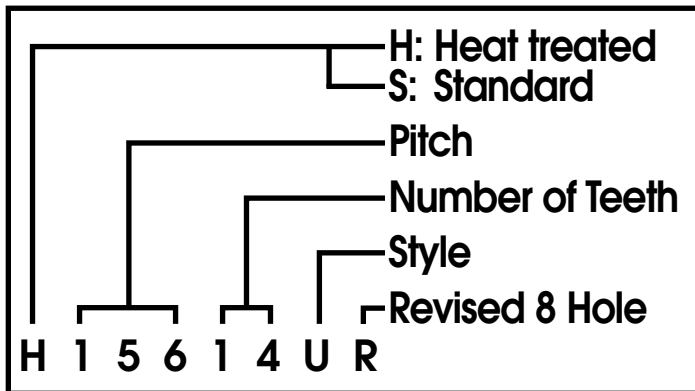


Figure 50A

### Belt Chain Item #

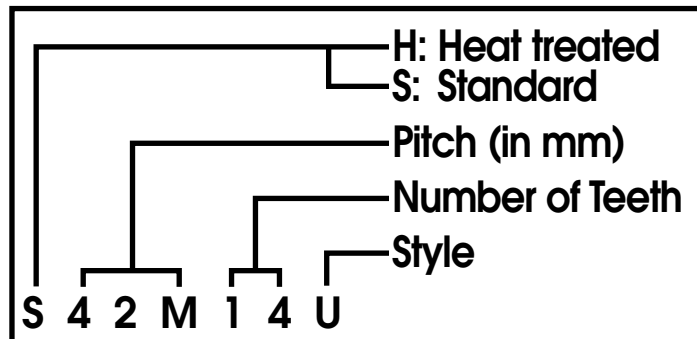
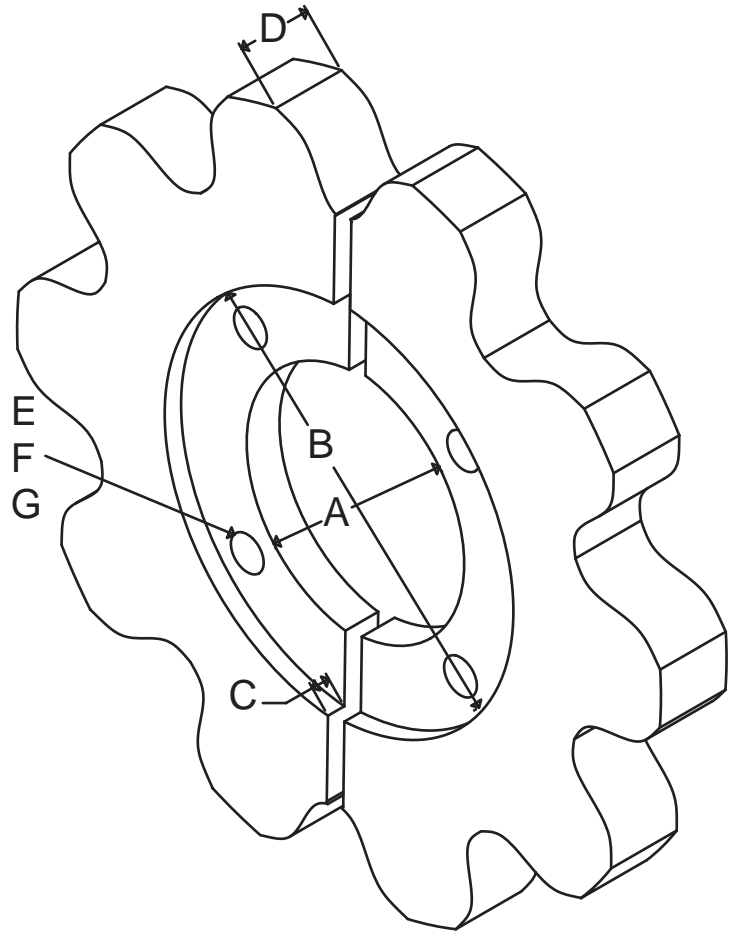


Figure 50B

## Bolt-on Style Sprockets

Due to the large number of combinations of sprocket profiles and bolt configurations, we do not list the complete item numbers in this catalog.

To order a new bolt-on sprocket: Find the sprocket profile on the following pages and choose the configuration from the bolt-on sprocket table below.



For Belt Supports, Flanges and Spacers, See Misc. Parts Page 108

## Bolt-on Style Sprockets Reference Table

ALL DIMENSIONS IN INCHES

Configuration	A	B	C	D	E Dia	F BHC	G # of Holes	# of Counterbores
1	3.00	5.25	.51	1.0	.40	4.0	6	1
2	3.56	6.00	.49	1.0	.40	4.88	6	1
3	4.06	6.50	.42	1.0	.40	5.06	6	1
4	3.38	5.27	.45	1.0	.45	4.18	4	1
5	2.92	5.12	.45	.85	.40	4.00	4	1
6	2.92	5.13	.45	.85	.39	4.12	4	1
7	2.44	3.69	.30	1.0	.40	3.12	4	1
8	3.25	6.10	.51	1.0	.40	4.50	6	1
9	3.00	5.25	.51	1.0	.40	4.00	6	1

Chart Continued on Page 52



# Bolt-on Style Sprockets Reference Table

ALL DIMENSIONS IN INCHES

Configuration	A	B	C	D	E Dia	F BHC	G # of Holes	# of Counterbores
10	3.38	-	-	1.0	.62	4.75	4	0
11	2.06	-	-	1.0	3/8-16	3.70	6	0
12	2.72	5.00	.30	1.0	.40	3.81	6	2
13	5.16	-	-	1.00	.40	6.00	6	0
14	5.16	8.80	.22	1.00	.40	6.00	6	2
15	2.725	4.75	.40	1.00	.40	3.81	6	1
16	2.12	4.12	.25	.75	.40	3.00	4	1
17	2.72	-	-	1.00	.40	3.81	6	0
18	5.75	-	-	1.00	.53	7.00	6	0
19	3.02	-	-	1.00	.40	3.81	6	0
20	2.92	4.66	.56	1.00	.42	3.77	4	1
21	3.01	4.35	.200	1.00	.40	3.75	6	1
22	5.63	-	-	1.00	.44	6.50	6	0
23	2.56	4.25	.25	1.00	.40	3.31	6	2
24	3.62	-	-	1.00	.40	5.00	6	0
25	2.12	4.02	.375	1.00	.40	3.00	4	1
26	3.83	5.55		1.00	.40	4.62	6	1
27	2.125	-	-	1.00	.40	3.00	4	0
28	2.50	-	-	1.00	.40	4.62	8*	0
29	3.83	-	-	1.00	.40	4.62	8*	0
30	3.83	5.55	.30	1.00	.40	4.62	8*	2
31	3.25	6.25	.375	.75	.40	4.50	6	1
32	4.35	-	-	1.00	.40	6.25	6	0
33	4.25	-	-	1.00	.40	5.25	6	0
34	3.25	-	-	1.00	.40	4.50	6	0
35	3.00	5.00	.60	1.00	.40	3.81	6	1
36	4.35	7.25	.37	1.00	.40	6.25	6	1
37	8.06	-	-	1.00	.44	9.44	6	0
38	8.80	-	-	1.00	.47	9.713	6	0
39	4.38	-	-	.62	.40	5.62	6	0

\*Not Evenly Spaced







## To Order Black Ace® Parts

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Your order will be acknowledged by fax upon request.

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Thank you in advance for your order.

