

# ■ SPROCKETS

## SPROCKET TYPES

Sprockets can be supplied in various materials and styles, depending upon the application and severity of service requirements. For most engineered chain applications, fabricated steel sprockets are recommended as offering the best combination of performance, availability, and price. Fabricated steel sprockets can be provided for every chain-tooth combination and are readily available.

Sprockets can also be supplied in various cast materials, with or without hardened teeth. The cast sprocket tables present the available patterns for producing cast sprockets.

Whatever the types selected, our sprockets are designed for proper chain-sprocket interaction. Rexnord engineers have selected the proper tooth pressure angle, pitch line clearance, bottom diameter and tooth pocket radius for optimum performance and service life.

## SPROCKET STYLES

**Cast Arm Body** – This type of sprocket is generally used where larger sizes are required. The use of arms reduces weight, facilitates handling, and lowers cost.

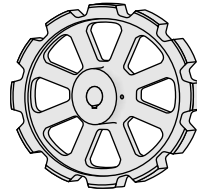
**Cast Split (Arm or Plate) Body** – The split body design facilitates mounting and removal from shafts without disturbing bearings or other connected equipment, which greatly reduces installation and downtime.

**Cast Plate Body** – Plate bodies are generally required for the smaller sizes where the use of arms is impractical, and on larger sizes when the chain pull exceeds the strength of the arm body sprockets.

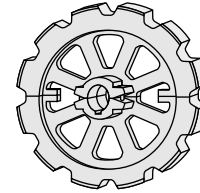
**Fabricated Steel Sprockets** – Fabricated steel sprockets are flame cut and manufactured from plain carbon steel. The teeth are flame or induction hardened.

**Shear Pin** – A sprocket is modified by the addition of shear pin hubs and shear pins. They are used in applications where jamming or overloading is prevalent. The shear pins are designed to transmit the required torque under normal operating conditions, but to fail when an overload or jam occurs, thus protecting machinery and equipment from damage.

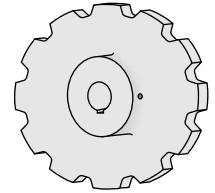
**Special Sprockets** – Sprockets can be made of special design, such as flanged-rim (used particularly in the rock products and fertilizer industries). Long-tooth or gapped-tooth sprockets can also be made.



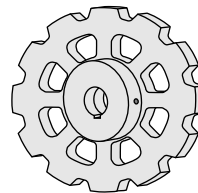
Cast Sprocket Arm Body



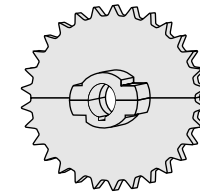
Cast Split Arm Body



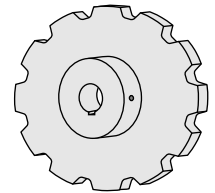
Cast Steel Plate Body



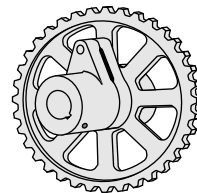
Fabricated Steel with Lightening Holes



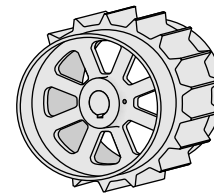
Fabricated Steel Split Sprocket



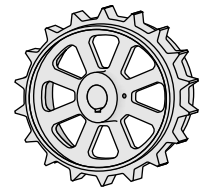
Fabricated Steel Plate Body



Shear Pin Sprocket



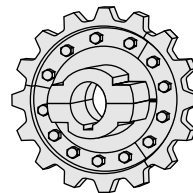
Drum Flanged Arm Body Sprocket



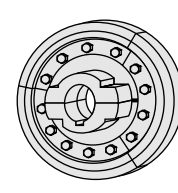
Flanged Rim Sprocket

## SEGMENTAL SPROCKETS AND TRACTION WHEELS

Can be supplied with either solid or split bodies, and have removable and replaceable sprocket segments or traction wheel rims. Rims are made of specially hardened steel for superior wear resistance. Accurate machining and precisely drilled holes permit sprocket segments to be reversed, thus doubling sprocket life and minimizing downtime.



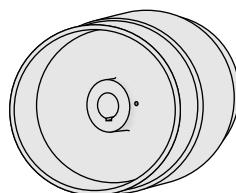
Segmental Sprocket with Split Body



Segmental Traction Wheel with Split Body

## TRACTION WHEELS

Primarily designed for single-strand bucket elevator service, traction wheels can also be used on other type conveyors providing the coefficient of friction is sufficient under normal load to allow the traction wheel to drive the unit. A distinct advantage of a traction wheel is



that the chain will slip on the wheel in the event of an obstruction or overload, thereby preventing damage to elevator or conveyor components. Traction wheels are ideal for service in abrasive environments since there is less scrubbing of the chain on a traction wheel as compared to sprocket.

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## SELECTION, SPECIFICATION AND ORDERING INFORMATION

### Number of Teeth

Sprockets preferably should have no less than 12 teeth, particularly if speeds are high and the chain loads great. Sprockets having less than 12 teeth should be adapted only to slow and medium speeds. The number of teeth and sprocket speed (revolutions per minute) control the amount of impact of the chain seating on the sprocket. Impact is reduced as the number of teeth is increased or as speed is decreased. Likewise the chain pull is reduced as the sprocket size is increased for any one power drive. Consequently, a lighter chain – for greater economy – may often be used. With a greater number of teeth angular motion or friction in the chain joints is reduced.

### Height of Teeth

Height of teeth of standard sprockets is generally based on providing a working face what will accept the maximum possible amount of wear elongation combined with a smooth topping curve. A further limitation that takes precedence over the above is that when a sprocket series is capable of being used with chains designed for conveyor/elevator service, the top of the tooth of all standard sprockets having ten or more teeth is designed to be low enough to clear a slat or carrier mounted on the lowest possible “K” attachment of any chain using sprockets of that series.

As a precaution, it is recommended that orders for sprockets specify whether it is necessary for the top of the tooth to clear any slat, bucket or carrier mounted to a chain attachment, or welded to the chain.

### Bore and Hub Size

The size of the bore and hub are determined by the torque to be transmitted. The hub specification charts included in this catalog provide selections based on a design shear stress of 6000 psi, maximum.

### Gapped Sprockets

Some attachments require gapped sprockets to avoid interference between the sprocket and chain or assembled fittings. Such attachments usually are those wherein the space between side bars is utilized by the attachment or its fitting. The gap spacing must be a multiple of the particular attachment spacing in the chain, also of the number of teeth on the sprocket.

When some teeth must be topped off (that is, omitted) – as distinguished from gaps that extend within the root diameter, it will be assumed that topping off the teeth flush with the root diameter will suffice to clear the obstruction. If gaps are required, complete details must accompany the order.

## HEAT TREATMENT

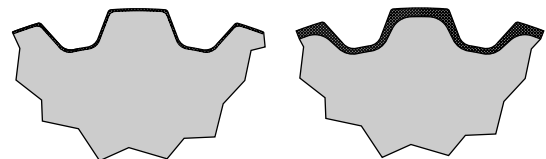
Fabricated steel sprockets are normally supplied with induction hardened teeth. Cast sprockets, if hardened, are either induction hardened or cast as chill iron. The catalog cast sprocket tables identify cast sprockets with hardened teeth.

Rexnord takes an extra step when heat treating segmental sprockets and traction wheels to provide the utmost in hardness and case depth.

Prior to induction hardening, segmental rims are “soaked” with carbon in large carburizing pits specifically designed for this purpose. The carburizing process provides deep penetration of carbon into the segment’s working surfaces, thereby increasing its hardenability.

After the carburizing process, the segments are taken to Rexnord’s induction heat treat area where the segments are enveloped in a large electrical coil, heated to a “cherry red”, and quickly quenched. This final process produces the hardest, deepest cases available in an engineered sprocket or traction wheel today.

The carburizing/induction heat treatment process is standard for most all of our segmental sprockets and traction wheels. If you have a very severe sprocket wear problem this may be the answer – contact Rexnord to find out if it is available for your particular sprocket type because not all sizes and styles are available.



*Relative depth of hardened material developed from flame, induction or chill rim hardening methods.*

*Relative depth of hardened material developed through the two-step carburizing/induction hardening process used in our segmental sprockets and traction wheels. More hardened material means longer sprocket and chain life!*

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## SELECTION, SPECIFICATION & ORDERING INFORMATION – (Cont'd.)

### Web Holes

Large plate or web-body sprockets can be furnished, when specified, with holes for hoisting slings or hooks. Such holes may necessitate an extra charge.

### Weights

Listed weights represent averages only and may differ from those of the sprockets furnished, because of the differences in hub sizes. Average weights do not necessarily indicate the relative strengths of the various sprockets. They are given primarily for estimating shaft loads and freight charges. All weights are based on arm body construction.

### Style Plate-Body or Arm-Body Construction

It will be noted that the smaller sprockets in each series (both stock and order-size) are furnished only with plate-body. Lack of space between the hub and the sprocket rim makes it impractical to furnish these sprockets with arm-body construction. All stock and order sizes will be furnished plate body. For arm body design, consult Rexnord.

### Hubs

All hubs are furnished long central (style C) unless specified by the customer or if footnoted in the tables. Depending on how mounted, offset hubs or flush one side (style B) may be preferable for driver sprockets mounted on gearbox output shafts. Offset hubs are where hubs are not of equal length. If other than long central hubs are desired, be sure to specify this on the order.

All hubs are given a squaring cut, (faced) then sprockets are finish bored. Facing is provided as follows:

CAST HUBS		FABRICATED HUBS
Long Central	Faced 1 side	Faced both sides
Flush one side	Hub faced	Hub faced
Offset hubs	Faced both sides	Both hubs faced

### Bore

Sprockets are bored to commercial tolerances (see table below) Closer tolerances are available at extra cost.

BORE RANGE	TOLERANCE (INCES)
Up thru 2.000	+ .001/+ .003
Over 2.000 thru 4.000	+ .001/+ .004
Over 4.000 thru 6.000	+ .001/+ .005
Over 6.000	+ .001/+ .006

### Keyseat and Keyscrews

Standard straight keyseats on the centerline of a tooth are finished with one setscrew over the keyseat and one at 90°.

### Multiple Sprocket Alignment

On a multiple strand conveyor or elevator, it is important that driving sprockets teeth be properly aligned in service. It is recommended that drive sprockets be ordered in sets with keyseats properly located relative to the teeth. Sprockets ordered as matched sets will be match marked. Sprockets are to be installed such that all match marks face the same end of the shaft.

At the tail end of a multiple strand conveyor, only one sprocket should be fixed (keyed or set screwed) to the shaft. The remainder of the tail sprockets should be allowed to turn freely on the shaft to compensate for differences in strand length that may change over time.

- **Sprockets with Hubs Central**

Order should specify “Matched in Sets of Two,” “Matched in Sets of Three,” etc.

- **Sprockets with Unequal Hubs**

If sprockets will be installed with like hubs all facing the same end of the shaft, the order should specify “Matched in Line.”

If sprockets will be assembled with like hubs facing opposite ends of the shaft, the order should specify “Matched in Pairs.”

### Sprocket Availability

Fabricated Steel sprockets (split or solid) are readily available and most any sprocket design can be provided. For the quickest possible delivery, Rexnord maintains an inventory of plates and hubs for many commonly used sprockets.

Cast sprockets with solid hubs are stocked and identified in the cast sprocket tables. The stocked sprocket is bored and keyed to order. Split sprockets, sprockets with hub dimensions other than shown, or sprockets with any other non-standard feature are available but must be cast to order. If delivery is an important factor, fabricated steel sprockets are recommended.

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## SELECTION, SPECIFICATION & ORDERING INFORMATION – (Cont'd.)

### How To Order

- 1. Quantity –**  
Number of sprockets required.
- 2. Sprocket Unit Number and Chain Number –**  
Refer to the chain and sprocket index.
- 3. Teeth –**  
Number of teeth on sprocket.
- 4. Material –**  
Cast or fabricated steel should be specified.  
Standard materials will be provided unless specified.
- 5. Heat Treatment –**  
Fabricated steel sprockets will have induction hardened teeth. Cast sprockets will have hardened teeth if specified in the cast tooth sprocket tables. Specify any non-standard heat treatments.
- 6. Hub Construction –**  
Hubs will be provided as standard with solid hubs, long central (Style C) unless specified otherwise. Refer to page 79 for standard hub specifications.
- 7. Hub Size – CAST SPROCKETS:**

Stocked cast tooth sprockets are listed in the tables with hub dimensions and a maximum bore. Sprockets with hub or bore dimensions other than as shown require a CAST TO ORDER sprocket. These special sprockets are available but if lead time is a factor, consider using a fabricated steel sprocket which is more readily available.

If no hub size is specified by the customer, the standard hub will be provided unless the shaft exceeds the maximum allowable bore, in which case a cast to order sprocket will be necessary.

For CAST TO ORDER sprockets: If no hub size is specified, a hub will be selected appropriate for the shaft size and most readily available from the foundry.

If desired, hub sizes may be specified on CAST TO ORDER sprockets, refer to the selection procedures on pages 81-82.

### Hub Size – FABRICATED STEEL SPROCKETS

For fabricated steel sprockets, most any size hub is readily available. When delivery is especially critical, standard hub sizes are recommended. Standard fabricated steel hubs as shown in the table on page 79 will be provided unless specified on the order.

- 8. Bore –**  
Specify size and type of bore. Standard tolerances will be provided unless specified.
- 9. Keyseat and Setscrews –**  
A keyway with two setscrews will be provided on all sprockets unless specified otherwise.
- 10. Previous Order or Quotation –**  
Provide information regarding previous order or quotation to assure compliance.
- 11. Gapped Sprockets –**  
Specify chain attachment used and spacing.
- 12. Drop Forged Chain Sprockets –**  
Specify number of actual teeth.
- 13. Shear Pin Sprockets –**  
Specify torque level sprockets should shear. A bore size must be specified.

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## FABRICATED STEEL SPROCKETS

Listed below is the plate thickness for each sprocket unit. Refer to chain and sprocket index to determine proper unit number for each chain.

All sprockets are readily available as fabricated steel. Fabricated assemblies for traction wheels, drum flanged, sprockets, and for wide mill chain sprockets are also readily available.

### PLATE SIZE

Sprocket Unit No.	Plate Width Inches	Sprocket Unit No.	Plate Width Inches	Sprocket Unit No.	Plate Width Inches
4	.63	698 <sup>Ⓞ</sup>	1.25	X1365	2.75
6SP	1.13	710	2.25	1535	1.00
25 <sup>Ⓞ</sup>	.38	720S <sup>Ⓞ</sup>	1.13	1536	1.25
32 <sup>Ⓞ</sup>	.50	CS720S <sup>Ⓞ</sup>	1.13	B1537	1.25
34	.50	A730 <sup>Ⓞ</sup>	1.13	1568	1.25
42 <sup>Ⓞ</sup>	.56	CS730 <sup>Ⓞ</sup>	1.13	1604	.88
45 <sup>Ⓞ</sup>	.63	823 <sup>Ⓞ</sup>	1.13	1654	2.00
51 <sup>Ⓞ</sup>	.56	825 <sup>Ⓞ</sup>	1.25	E1822	1.75
S51 <sup>Ⓞ</sup>	.56	830 <sup>Ⓞ</sup>	1.25	F1822	1.00
52 <sup>Ⓞ</sup>	.63	833	2.25	F1833	1.25
55 <sup>Ⓞ</sup>	.63	844 <sup>Ⓞ</sup>	2.25	E1836	2.00
57	.63	847	1.75	F1844	1.50
D60 <sup>Ⓞ</sup>	.88	RO850	2.00	F1855	1.50
H60	.63	SX850	2.00	1903	3.00
RS60	1.12	856	2.75	2047	1.25
62 <sup>Ⓞ</sup>	.75	859	3.25	2064	2.25
64S <sup>Ⓞ</sup>	1.25	RS860	1.75	2111	1.25
67 <sup>Ⓞ</sup>	.63	864	3.25	2113	1.12
78 <sup>Ⓞ</sup>	.88	SX877	2.50	2124 <sup>Ⓞ</sup>	1.25
H78 <sup>Ⓞ</sup>	1.00	SX886	2.25	2136	1.75
102B <sup>Ⓞ</sup>	1.75	E922	1.75	2180 <sup>Ⓞ</sup>	1.13
102-1/2 <sup>Ⓞ</sup>	1.75	E911	1.25	F2183	1.00
103 <sup>Ⓞ</sup>	1.13	F922 <sup>Ⓞ</sup>	1.13	2198	1.25
106	1.75	E928	1.75	2231	.63
110 <sup>Ⓞ</sup>	1.75	E933	2.00	2236	1.75
111SP	2.25	F933 <sup>Ⓞ</sup>	1.25	2342 <sup>Ⓞ</sup>	1.50
111 <sup>Ⓞ</sup>	2.25	S951	1.00	2348 <sup>Ⓞ</sup>	1.25
114	1.13	952 <sup>Ⓞ</sup>	.63	2397	1.75
119 <sup>Ⓞ</sup>	3.50	953	1.25	2405	1.50
SM120 <sup>Ⓞ</sup>	.75	958	2.75	2452	2.50
H124 <sup>Ⓞ</sup>	1.50	984	3.50	2590	2.50
130 <sup>Ⓞ</sup>	1.00	998 <sup>Ⓞ</sup>	1.25	2614	2.25
131T <sup>Ⓞ</sup>	1.50	1030	1.25	2800	1.50
132 <sup>Ⓞ</sup>	2.75	1036	1.25	2804	3.00
R133	1.25	1039 <sup>Ⓞ</sup>	1.50	2806	4.00
152	.75	1112	.88	2848	1.75
183 <sup>Ⓞ</sup>	.75	1113 <sup>Ⓞ</sup>	1.13	2858	1.75
SX175	2.75	1120 <sup>Ⓞ</sup>	.75	2868	1.75
183 <sup>Ⓞ</sup>	.75	1124	.88	RF3007	.63
188	1.00	1131 <sup>Ⓞ</sup>	1.25	RF3011	.88
194 <sup>Ⓞ</sup>	1.00	1204	2.00	3112	1.00
196 <sup>Ⓞ</sup>	1.00	1207	2.25	3125	1.25
197 <sup>Ⓞ</sup>	1.13	E1211	1.25	D3125	1.25
238	1.25	E1222	1.75	3285	1.75
270	1.00	F1222 <sup>Ⓞ</sup>	1.00	3433	1.75
303	.38	F1232	1.25	4004	2.25
X345	1.75	E1233	2.00	4005	1.13
348 <sup>Ⓞ</sup>	.63	F1233	1.25	RF4007	.63
458 <sup>Ⓞ</sup>	.88	1240	1.75	4009	1.75
468 <sup>Ⓞ</sup>	1.50	E1244	2.25	4010	2.75
501	.75	FR1244	1.50	4011	2.00
506	.75	1251	1.75	RF4011	.88
508	.88	1301	2.50	4038	1.25
514	1.25	RO1305	2.25	4539	1.25
520	.88	1306	2.50	4855	2.25
A522	.75	1307	2.75	5157	2.75
S521	1.25	A1309	2.75	5208	1.75
531 <sup>Ⓞ</sup>	1.13	X1311	2.75	6065	2.50
CA550	.63	AX1338	1.25	6121	3.50
568	1.25	X1343	1.50	6826	2.00
584	1.50	X1345	1.50	7539	1.25
589	1.13	X1351	1.75	8755	2.75
CA620	.88	X1353	2.00	9118	1.75
635	1.75	RO1355	2.25	9250 <sup>Ⓞ</sup>	.75
678 <sup>Ⓞ</sup>	1.13	RO1356	2.50	9856	2.50

<sup>Ⓞ</sup> Available in cast, see pages 81-88.

<sup>Ⓢ</sup> Available in cast or polymeric, see pages 81-88 and 94-98.

### Sprocket Weight

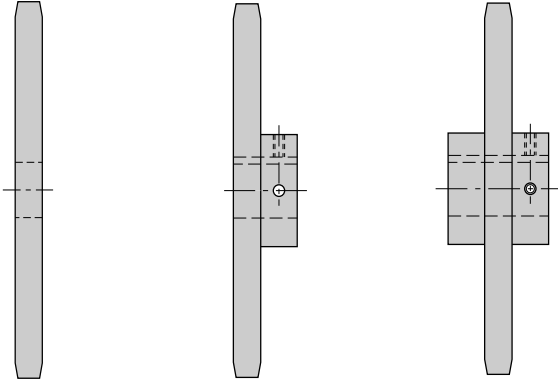
$$\text{Total Sprocket Weight} = [.22 (\text{PD})^2 \text{PW}] + W$$

PD = Pitch Diameter of Sprocket

PW = Plate Width of Sprocket (See table at left)

W = Hub Weight (See table below)

Calculated weight is an approximate to be used for estimating shaft loads and shipping weights.



STYLE "A" HUB      STYLE "B" HUB      STYLE "C" HUB

### TABLE INSTRUCTIONS

When using the tables below, and only the torque or Hub Size Letter is known, locate the appropriate row which will give you the recommended bore and hub size based on the limitations of typical SHAFT material having a maximum torsional shear stress of 6,000 psi.

If the shaft size is known, use the bore diameter column to find the recommended hub dimensions.

### SOLID HUBS

Dimensions are in inches. Strengths and weights are in pounds.

Bore <sup>Ⓛ</sup> Diameter	Hub <sup>Ⓢ</sup> Letter	Maximum <sup>Ⓢ</sup> Torque	Hub Diameter	Length <sup>Ⓢ</sup>	Weight <sup>Ⓢ</sup>
1 <sup>5</sup> / <sub>16</sub>	B	1.0	2.50	1.50	1.0
1 <sup>3</sup> / <sub>16</sub>	C	2.0	2.50	1.50	1.0
1 <sup>7</sup> / <sub>16</sub>	D	3.5	2.50	1.50	2.7
1 <sup>11</sup> / <sub>16</sub>	E	5.6	3.00	1.50	3.7
1 <sup>15</sup> / <sub>16</sub>	F	8.5	3.00	1.50	3.7
2 <sup>3</sup> / <sub>16</sub>	G	12.5	3.50	2.00	6.0
2 <sup>7</sup> / <sub>16</sub>	H	17.0	4.50	2.00	10.0
2 <sup>11</sup> / <sub>16</sub>	I	23.0	4.50	2.00	10.0
2 <sup>15</sup> / <sub>16</sub>	J	30.0	4.50	2.00	10.0
3 <sup>3</sup> / <sub>16</sub>	K	38.0	5.25	3.00	20.0
3 <sup>7</sup> / <sub>16</sub>	L	47.0	5.25	3.00	20.0
3 <sup>11</sup> / <sub>16</sub>	M	60.0	6.00	3.00	26.0
3 <sup>15</sup> / <sub>16</sub>	N	70.0	6.00	3.00	26.0
4 <sup>7</sup> / <sub>16</sub>	O	100.0	7.25	4.00	46.0
4 <sup>11</sup> / <sub>16</sub>	—	120.0	7.25	4.00	46.0
4 <sup>15</sup> / <sub>16</sub>	P	140.0	7.25	4.00	46.0
5 <sup>7</sup> / <sub>16</sub>	Q	190.0	8.75	5.00	85.0
5 <sup>15</sup> / <sub>16</sub>	R	245.0	8.75	5.00	85.0
6 <sup>1</sup> / <sub>2</sub>	S	320.0	9.50	6.50	115.7

### SPLIT HUBS

Dimensions are in inches. Strengths and weights are in pounds.

Bore Sizes	Maximum Torque	Hub Length	Bolt Clearance Diameter	Weight
1 <sup>15</sup> / <sub>16</sub> – 2 <sup>15</sup> / <sub>16</sub>	30	2.88	7.50	20.0
3 – 3 <sup>15</sup> / <sub>16</sub>	70	2.88	8.75	27.0
4 – 4 <sup>15</sup> / <sub>16</sub>	140	3.88	10.75	57.0
5 – 5 <sup>15</sup> / <sub>16</sub>	245	4.88	11.50	80.0

Consult factory for larger bores.

<sup>Ⓛ</sup> See instructions above.

<sup>Ⓢ</sup> Hub letter – From Drive Chain Selection tables.

<sup>Ⓢ</sup> In-Lbs. (in thousands)

<sup>Ⓢ</sup> Add plate thickness for length through bore (see table at left); Hubs furnished long central unless specified by customer.

<sup>Ⓢ</sup> Weight shown for solid hub. Actual weight should be reduced by bore.

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## FABRICATED STEEL SPROCKETS AND OCTAGONAL TAIL WHEELS FOR HEAVY DUTY WELDED STEEL DRAG CHAINS

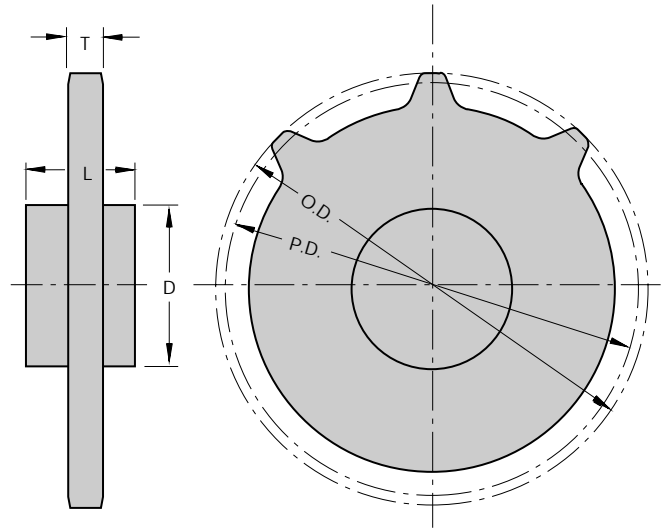
SPROCKETS

### Drive Sprockets

Rex Unit Number	Number of Teeth	Pitch Diameter	Outside Diameter	Tooth Width "T" Inches	"T" Average Plate Only Weight Lbs.
5157	6	12.10	12.10	2.75	93
	7	13.94	14.11		127
	8	15.81	16.13		166
	9	17.69	18.16		209
	10	19.58	20.18		256
	11	21.47	22.20		308
6121	12	23.38	24.22	3.50	365
	8	23.50	23.94		360
	9	26.30	26.95		440
	10	29.12	29.96		550
	11	31.95	32.40	680	

Ⓢ Sprockets listed are most common. Any number of teeth are readily available. Split sprockets are available.

Flame Cut Steel Sprocket with Hardened Teeth



(Teeth are hardened to Rc57)

### Unit No. 5157 for WHX 5157 Chain

Finished Bore Range Inches	Solid Hub Dia. x Length Inches	Average Hub Only Weight Lbs.
2 - 4	6 x 5.50	15
4 - 5	7.25 x 6.50	25
5 - 6	9 x 7.75	50

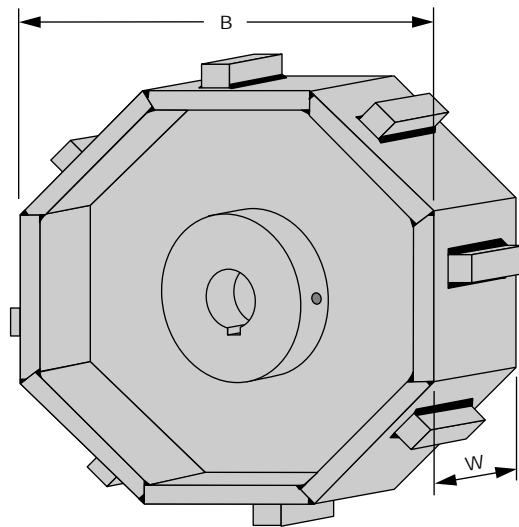
### Unit No. 6121 for WHX 5121/6121/6067 Chain

Finished Bore Range Inches	Solid Hub Dia. x Length Inches	Average Hub Only Weight Lbs.
2 - 4	6 x 5.50	15
4 - 5	7.50 x 6.50	25
5 - 6	9 x 7.75	50
6 - 7	10.50 x 8.50	100
7 - 8	11.50 x 10.50	130

## OCTAGONAL TAIL WHEELS

Octagonal tail wheels offer several advantages over conventional sprockets. Chain/tail wheel forces are transmitted directly between sidebars and the octagon surfaces, eliminating barrel and sprocket tooth wear. Side guide lugs are provided to keep the chain centralized on the tail wheel.

Octagon plates and guide lugs are made of hardened steel. Sidebar contact surfaces can be hardfaced for maximum wear resistance.



DIRECTION OF TRAVEL

Chain No. 5121      Chain No. 6121, 6067, 5157

Rex Chain Number	Bottom Flat "B" (Inches)	Width "W" (Inches)
WHX5157	11.85	6.50
WHX6067	18.88	7.50
WHX5121/WHX6121	18.88	9.00

Finished Bore Range (Inches)	Hub Dia. x Length (Inches)
0 to 3.937	6 x 5
4 to 4.937	7.25 x 6.50
5 to 5.937	9 x 7.75

# ■ SPROCKETS

## CAST SPROCKETS

### Cast to Order Hub Specifications

The following table provides recommended hub specifications for use when ordering cast to order sprockets.

### Procedure

#### If torque and bore size are known:

1. Locate torque in left hand column. The next column over gives the minimum hub length.
2. Locate bore size in top row.
3. The intersection of the top row and the column selected in Step 1 is the minimum hub O.D.

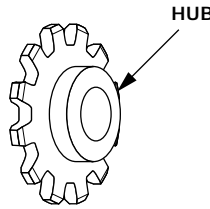
#### If torque only is known:

1. Locate torque in left hand column. The next column over gives the minimum hub length.
2. Move to the right to the first number shown (this is the minimum hub O.D.).
3. Move vertically to the top row to determine the minimum bore.

### Hub Sizes are Based on Use with Commercial Cold Finished Steel Shafting and Keys<sup>Ⓛ</sup>

Dimensions are in inches. Strengths are in pounds.

Bore		1 <sup>3</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>11</sup> / <sub>16</sub>	1 <sup>15</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	4 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>4</sub>	7	7 <sup>1</sup> / <sub>2</sub>	8	8 <sup>1</sup> / <sub>2</sub>	9	9 <sup>1</sup> / <sub>2</sub>	10							
Key Size	Width	1/4	1/4	3/8	3/8	1/2	1/2	5/8	5/8	3/4	3/4	7/8	7/8	1	1	1 1/4	1 1/4	1 1/2	1 1/2	1 3/4	1 3/4	2	2	2	2 1/2	2 1/2														
	Height	1/4	1/4	3/8	3/8	1/2	1/2	5/8	5/8	3/4	3/4	7/8	7/8	1	1	1 1/4	1 1/4	1 1/2	1 1/2	1 3/4	1 3/4	2	2	2	2 1/2	2 1/2														
Hub Size Letter	Allowable Torque	Hub <sup>Ⓜ</sup> Length	Square Key																	Flat Key																				
			Diameters of Hubs – Keyseated																																					
A	500	1 1/2	1 1/2	2	2 1/2	2 1/2	3	3 1/2	4	4	4 1/2	5																												
B	1,000	1 1/2	1 1/2	2	2 1/2	2 1/2	3	3 1/2	4	4	4 1/2	5	5 1/2																											
C	2,000	1 1/2		2	2 1/2	2 1/2	3	3 1/2	4	4	4 1/2	5	5 1/2	5 1/2																										
D	3,500	2			2 1/2	2 1/2	3	3 1/2	4	4	4 1/2	5	5 1/2	5 1/2	6																									
E	5,600	2				3	3 1/2	3 1/2	4	4	4 1/2	5	5 1/2	5 1/2	6	6 1/2																								
F	8,500	3					3 1/2	3 1/2	4	4	4 1/2	5	5 1/2	5 1/2	6	6 1/2	7 1/2																							
G	12,500	3						4	4	4 1/2	4 1/2	5	5 1/2	5 1/2	6	6 1/2	7 1/2	8																						
H	17,000	3							4 1/2	4 1/2	5	5	5 1/2	5 1/2	6	6 1/2	7 1/2	8	9																					
I	23,000	4								4 1/2	5	5	5 1/2	5 1/2	6	6 1/2	7 1/2	8	9	9 1/2																				
J	30,000	4									5	5	5 1/2	5 1/2	6	6 1/2	7 1/2	8	9	9 1/2	10																			
K	38,000	5										5	5 1/2	5 1/2	6	6 1/2	7 1/2	8	9	9 1/2	10	10 1/2																		
L	47,000	5											6	6	6 1/2	6 1/2	7 1/2	8	9	9 1/2	10	10 1/2	11																	
M	60,000	5												6 1/2	6 1/2	7	7 1/2	8	9	9 1/2	10	10 1/2	11	12																
N	70,000	6													6 1/2	7	7 1/2	8	9	9 1/2	10	10 1/2	11	12	12															
O	100,000	6														7 1/2	8	8 1/2	9	9 1/2	10	10 1/2	11	12	12	13														
P	140,000	6															8 1/2	9	9 1/2	10	10 1/2	11	12	12	13	13	14													
Q	190,000	8																9	9 1/2	10	10 1/2	11	12	12	13	13	14													
R	245,000	8																		10	10 1/2	11	12	12	13	13	14													
S	320,000	8																			11	12	12	12	13	13	14	14												
T	400,000	10																				12	12	12	13	13	14	14												
U	500,000	10																					13	13	13	14	14	15												
V	600,000	10																						13	14	14	15	15												
W	720,000	12																							14	14	15	15												
X	850,000	12																									15	15	16											
Y	1,000,000	12																										16	16											
Z	1,250,000	12																																						



When torque and bore intersect in one of these blank spaces, it indicates that the shaft is subject to greater than 6,000 psi torsional shear stress.

<sup>Ⓛ</sup> Design shear stress = 6,000 psi.  
<sup>Ⓜ</sup> These lengths are the minimum recommended; longer hubs can be furnished at additional cost. For drives, offset hubs, one side flush, are recommended for all Driver sprockets. Long central hubs are recommended for all DriveN. For improved system performance – fab steel drive sprockets are recommended over cast.  
<sup>Ⓝ</sup> For a sprocket without a keyseat, a somewhat smaller hub may be used. Consult Rexnord for assistance.

# SPROCKETS

## CAST SPROCKETS – (Cont'd.)

**Cast Split Hubs – For Cast to Order Tooth Sprockets and Traction Wheels** (*Hub sizes are based on use with commercial, cold finished, steel shafting and keys.*)<sup>①</sup>

**Use of Tables.** After having determined torque and knowing the required bore, refer to Table No. 1, below, to obtain the hub identification number.

**Hub dimensions** are listed in Table No. 2, below. The hub over-all length (F) – see drawing to the right – is definitely fixed for a given sprocket or wheel pattern and bore. It is determined by standard fixed hub pattern projections (D) and pattern body thickness (E)

– the latter depending on the sprocket or traction wheel pattern involved. When length F must be maintained or known, refer to the factory for certified dimensions.

**These hubs are furnished central and of fixed length only.**

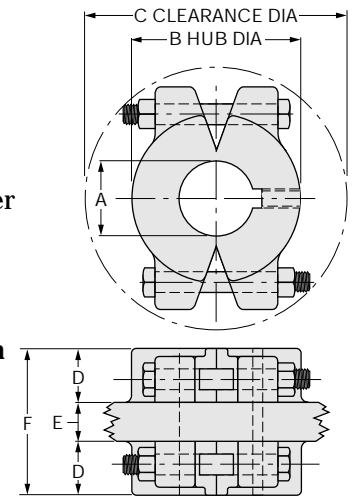


Table No. 1 – Hub Number for Given Class and Bore

Dimensions are in inches. Strengths are in pounds.

Bore	1 <sup>5</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>16</sub>	1 <sup>7</sup> / <sub>16</sub>	1 <sup>11</sup> / <sub>16</sub>	1 <sup>15</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>16</sub>	2 <sup>7</sup> / <sub>16</sub>	2 <sup>11</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>7</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	3 <sup>15</sup> / <sub>16</sub>	4 <sup>7</sup> / <sub>16</sub>	4 <sup>15</sup> / <sub>16</sub>	5 <sup>7</sup> / <sub>16</sub>	5 <sup>15</sup> / <sub>16</sub>
Sq. Key Size In.	1/4	1/4	3/8	3/8	1/2	1/2	5/8	5/8	3/4	3/4	7/8	7/8	1	1	1 1/4	1 1/4	1 1/2
Allow Torque ②	Hub Number																
500	L2-015	L2-103	L2-107	L2-111	L2-115	L2-203	L2-207	L2-211	L2-215	L2-303							
1,000	L2-015	L2-103	L2-107	L2-111	L2-115	L2-203	L2-207	L2-211	L2-215	L2-303	L2-307						
2,000		L2-103	L2-107	L2-111	L2-115	L2-203	L2-207	L2-211	L2-215	L2-303	L2-307	L2-311					
3,500			L2-107	L2-111	L2-115	L2-203	L2-207	L2-211	L2-215	L2-303	L2-307	L2-311	L2-315				
5,600				L2-111	L2-115	L2-203	L2-207	L2-211	L2-215	L2-303	L2-307	L2-311	L2-315	L2-407			
8,500					L2-115	L2-203	L2-207	L2-211	L2-215	L2-303	L2-307	L2-311	L2-315	L2-407	L2-415		
12,500						L2-203	L2-207	L2-211	L2-215	L2-303	L2-307	L2-311	L2-315	L2-407	L2-415	L2-507	
17,000							H2-207	H2-211	L2-215	L2-303	L2-307	L2-311	L2-315	L2-407	L2-415	L2-507	L2-515
23,000								H2-211	H2-215	L2-303	L2-307	L2-311	L2-315	L2-407	L2-415	L2-507	L2-515
30,000									H2-215	H2-303	H2-307	L2-311	L2-315	L2-407	L2-415	L2-507	L2-515
38,000										H2-303	H2-307	L2-311	L2-315	L2-407	L2-415	L2-507	L2-515
47,000											H2-307	H2-311	L2-315	L2-407	L2-415	L2-507	L2-515
60,000												H2-311	H2-315	H2-407	L2-415	L2-507	L2-515
70,000													H2-315	H2-407	L2-415	L2-507	L2-515
100,000														H2-407	H2-415	L2-507	L2-515
140,000															H2-415	H2-507	H2-515
190,000																H2-507	H2-515
245,000																	H2-515
Maximum Pitch Diameter (Inches) of Sprockets or Wheels for Use Without Rim-Lugs																	
	15	16	17	18	20	21	22	23	24	26	26	27	28	30	33	37	39

Table No. 2 – Standard Split Hubs – Dimensions In Inches

Hub No.	A Bore	B	C	D	E Max.	Wt. Ea. W/Bolts	Hub No.	A Bore	B	C	D	E Max.	Wt. Ea. W/Bolts	Hub No.	A Bore	B	C	D	E Max.	Wt. Ea. W/Bolts
L2-015	1 <sup>5</sup> / <sub>16</sub>	2.00	4.31	1.38	1.13	1	L2-215	2 <sup>15</sup> / <sub>16</sub>	5.25	8.06	1.69	2.00	7	H2-315	3 <sup>15</sup> / <sub>16</sub>	7.25	11.94	2.50	2.50	–
L2-103	1 <sup>3</sup> / <sub>16</sub>	2.25	4.56	1.38	1.13	1	H2-215	2 <sup>15</sup> / <sub>16</sub>	6.00	10.31	2.13	2.00	16	L2-407	4 <sup>7</sup> / <sub>16</sub>	7.50	11.50	2.31	2.50	17
L2-107	1 <sup>7</sup> / <sub>16</sub>	3.00	5.75	1.56	1.25	4	L2-303	3 <sup>3</sup> / <sub>16</sub>	6.00	9.44	1.81	2.00	10	H2-407	4 <sup>7</sup> / <sub>16</sub>	8.00	13.88	2.94	2.50	33
L2-111	1 <sup>11</sup> / <sub>16</sub>	3.50	6.38	1.69	1.25	5	H2-303	3 <sup>3</sup> / <sub>16</sub>	6.50	10.31	2.13	2.00	16	L2-415	4 <sup>15</sup> / <sub>16</sub>	8.50	12.88	2.56	2.50	28
L2-115	1 <sup>15</sup> / <sub>16</sub>	3.75	6.63	1.69	1.50	5	L2-307	3 <sup>7</sup> / <sub>16</sub>	6.25	9.63	1.81	2.00	10	H2-415	4 <sup>15</sup> / <sub>16</sub>	9.00	14.25	2.94	2.50	37
L2-203	2 <sup>3</sup> / <sub>16</sub>	4.25	7.25	1.69	1.50	7	H2-307	3 <sup>7</sup> / <sub>16</sub>	6.75	10.63	2.13	2.00	17	L2-507	5 <sup>7</sup> / <sub>16</sub>	9.50	14.63	1.75	2.50	37
L2-207	2 <sup>7</sup> / <sub>16</sub>	4.50	7.38	1.69	1.75	7	L2-311	3 <sup>11</sup> / <sub>16</sub>	6.75	10.63	2.13	2.00	17	H2-507	5 <sup>7</sup> / <sub>16</sub>	10.00	17.00	3.50	2.50	65
H2-207	2 <sup>7</sup> / <sub>16</sub>	5.00	8.63	1.81	1.75	9	H2-311	3 <sup>11</sup> / <sub>16</sub>	7.00	11.63	2.38	2.00	18	L2-515	5 <sup>15</sup> / <sub>16</sub>	10.00	15.00	1.75	3.00	34
L2-211	2 <sup>11</sup> / <sub>16</sub>	4.75	7.88	1.69	2.00	7	L2-315	3 <sup>15</sup> / <sub>16</sub>	7.25	11.13	2.25	2.50	25	H2-515	5 <sup>15</sup> / <sub>16</sub>	11.00	17.50	3.44	3.00	65
H2-211	2 <sup>11</sup> / <sub>16</sub>	5.50	8.88	1.81	2.00	15														

**Rim Lugs.** Sprockets and traction wheels with plate (web) body, or small-diameter arm body, require split rim-lugs projecting on each side. When the arm body is sufficiently large, single split rim-lugs are used between the arms. Some chain attachments (as G19) will interfere with projecting split rim-lugs, thus making special construction necessary; refer to factory.

① Design shear stress = 6,000 psi

② Inch-Pounds

**82** Note: Dimensions are subject to change. Certified dimensions of ordered material are furnished upon request.



# SPROCKETS

## CAST TOOTH SPROCKETS

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>25 CAST – PITCH 0.902</b>						
Tooth Face at Pitch Line .375 Inches						
6	1.80				.62	.5
7	2.08				.88	.6
8	2.36				.94	.8
9	2.64				1.06	1.1
10	2.92				1.18	1.4
11	3.49				1.44	1.5
12	3.49				1.68	1.6
13	3.77				1.68	1.7
14	4.50				1.68	1.9
15	4.34				1.94	2.5
16	4.62				2.18	2.9
17	4.91				2.44	3.1
18	5.19				2.44	3.2
19	5.48				2.94	3.4
21	6.05				2.94	4.2
22	6.34				3.18	4.4
23	6.62				3.18	4.7
24	6.91				3.44	5.2
25	7.20				3.44	5.8
26	7.48				3.94	6.3
28	8.06				3.94	7.2
29	8.34				4.44	7.5
30	8.63				4.44	8.3
32	9.20				4.94	9.0
36	10.33				4.94	10.4
37	10.63				4.94	10.8
40	11.50				4.94	8.9
52	14.94				4.94	14.0
<b>32 CAST – PITCH 1.154</b>						
Tooth Face at Pitch Line .500 Inches						
6	2.31				.94	1.0
7	2.66				.94	1.2
8	3.02				1.18	1.3
9	3.37				1.18	1.5
10	3.73				1.44	1.7
11	4.10				1.94	2.0
12	4.46				2.18	2.5
13	4.82				2.18	2.9
14	5.19				2.44	3.4
15	5.55				2.94	4.0
16	5.92				3.18	4.2
17	6.28				3.18	4.7
18	6.65				3.44	5.2
19	7.01				3.94	5.8
20	7.38				3.94	6.3
22	8.11				4.44	7.5
24	8.84				4.94	9.0
25	9.21				5.44	10.0
26	9.57				③	11.5
28	10.31					12.0
32	11.77					15.5
34	12.51					17.9
38	13.97					17.0
40	14.71					19.0
48	17.64					24.0

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt. Hub Dia.
		Hub Dia.	Hub Length	Max. Bore		
<b>42 CAST – PITCH 1.375</b>						
Tooth Face at Pitch Line .625 Inches						
6	2.75				.94	1.3
7	3.17				1.18	1.7
8	3.59				1.18	2.8
9	4.02				1.68	3.2
10	4.45				1.94	3.5
11	4.88				2.18	5.5
12 <sup>⓪</sup>	5.31				2.68	4.9
13	5.75				2.94	5.5
14	6.18				3.18	6.0
15	6.66				3.44	6.5
16	7.03				3.94	7.5
18	7.92				4.44	9.5
19	8.34				③	10.5
20	8.77					11.5
21	9.21					12.5
22	9.65					13.5
24	10.51					16.0
27	11.82					17.5
28	12.25					18.0
32	14.03					23.0
41	17.97					31.0
<b>45 CAST – PITCH 1.630</b>						
Tooth Face at Pitch Line .687 Inches Also available in polymeric.						
5	2.77				.94	1.3
6 <sup>⓪</sup>	3.26	2.00	1.50	1.25	1.18	2.3
7 <sup>⓪</sup>	3.76	2.50	1.50	1.62	1.68	2.6
8S <sup>⓪</sup>	4.26	3.00	1.50	1.82	1.94	4.0
8L	4.26	3.00	2.00	2.25	2.18	5.5
9 <sup>⓪</sup>	4.77	2.50	1.50	1.62	2.18	3.8
10 <sup>⓪</sup>	5.27	2.50	1.50	1.62	2.18	7.0
11	5.79	4.00	3.00	2.50	2.68	10.3
12S	6.30	2.50	2.00	1.62	2.94	6.3
12L	6.30	4.00	3.00	2.50	2.94	10.5
13	6.81	4.00	3.00	2.50	3.68	11.5
14	7.33	3.50	2.00	2.25	3.94	10.1
15	7.84				4.44	12.9
16	8.36	3.50	2.00	2.25	4.44	12.4
17	8.87				4.44	12.0
18	9.39	2.50	2.00	1.18	5.44	14.5
19	9.90				5.44	13.8
20	10.42	4.00	3.00	2.50	5.44	15.8
21	10.93				6.50	16.3
22	11.45				7.00	18.6
23	11.97				7.50	20.8
24	12.49	4.00	3.00	2.50	8.00	23.5
25	13.01					23.4
26	13.53					24.6
27	14.07					25.8
28	14.54					27.0
30	15.60					29.0
31	16.11					30.0
32	16.64					31.0
34	17.68					32.0
35	18.18					33.0
36	18.68					34.0
38	19.75					36.0
39	20.26					37.0
40	20.79					38.0
42	21.81					40.0
44	22.85					42.0
45	23.37					43.0
48	24.94					46.0
58	30.11					57.0

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>S51 CAST – PITCH 1.136</b>						
Tooth Face at Pitch Line .562 Inches						
12	4.39				1.94	3.5
15	5.46				2.44	5.0
18	6.58				3.18	6.0
<b>51 CAST – PITCH 1.150</b>						
Tooth Face at Pitch Line .562 Inches For Chain No. 51 (Cast) & 51 (Steel)						
6	2.31				.94	1.2
7	2.65				.94	2.0
8	3.02				.94	2.4
9	3.37				1.18	3.0
10	3.75				1.44	3.4
11	4.10				1.44	3.8
12	4.46				1.94	4.0
13	4.90				2.18	4.5
14	5.19				2.18	5.5
15	5.54				2.44	6.0
16	5.90				2.94	6.8
17	6.19				3.18	7.4
18	6.63				3.18	7.8
19	7.02				3.44	8.0
20	7.35				3.94	8.4
21	7.75				4.44	9.0
22	8.12				4.44	9.5
24	8.85				4.94	11.0
25	9.19				③	12.5
26	9.58					13.0
27	9.95					13.8
28	10.32					14.5
30	11.05					16.0
31	11.42					16.5
32	11.75					17.0
33	12.15					17.8
34	12.52					18.0
36	13.25					19.0
40	14.66					23.0
55	20.23					38.0
<b>52 CAST – PITCH 1.506</b>						
Tooth Face at Pitch Line .625 Inches						
5	2.56					2.3
6	3.01				.94	3.5
7	3.47				.94	4.0
8	3.94				1.68	4.4
9 <sup>⓪</sup>	4.40	3.00	1.50	1.82	1.94	3.3
10	4.87	3.00	2.00	1.82	2.18	3.4
11	5.34				2.68	4.3
12	5.82	3.00	2.00	1.82	2.68	5.4
13	6.29				2.94	5.8
14	6.77	4.00	3.00	2.50	3.18	11.1
15	7.24				3.68	7.4
16	7.72	4.00	3.00	2.50	3.94	12.0
17	8.20				4.44	9.0
18	8.67				4.44	14.0
19	9.15				③	12.0
20	9.60					14.0
21	10.10					15.0
22	10.56					17.0
23	11.06					18.0
24	11.54	4.00	3.00	2.50		21.0
25	12.00					22.0
26	12.49				③	23.0
27	12.97					19.0
28	13.45					19.0

52 Cast continued on next page

All dimensions given in inches and weight in Lbs.

① Hub one side. All other hubs are long central.

② If no hub data is listed, sprocket is cast to order.

③ Consult Rexnord for max. bore information.

Note: Dimensions are subject to change. Certified dimensions of ordered material are furnished upon request.

# SPROCKETS

## CAST TOOTH SPROCKETS – (Cont'd.)

SPROCKETS

No. of Teeth	Pitch Dia.	Stocked Sprockets <sup>②</sup>			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>52 CAST – PITCH 1.506 (Cont'd.)</b>						
Tooth Face at Pitch Line .625 Inches						
32	15.33					22
34	16.32					32
35	16.80					27
36	17.28					31
37	17.72					30
38	18.24					32
40	19.15					34
42	20.16					35
44	21.11					39
48	23.03					45
50	23.98					48
60	28.78					58
75	39.95					78
<b>55 CAST – PITCH 1.631</b>						
Tooth Face at Pitch Line .687 Inches						
5	2.77				.94	2
6	3.26				.94	3
7 <sup>①</sup>	3.76	2.50	1.50	1.62	1.68	2
8 <sup>②</sup>	4.26	2.50	1.50	1.62	1.68	3
9	4.77	3.00	2.00	1.94	1.94	3
10	5.28	3.50	2.00	2.18	2.18	4
11	5.79	4.50	3.00	2.88	2.94	9
12	6.30	4.50	3.00	2.88	2.94	11
13	6.82				3.18	10
14	7.33	4.50	3.00	2.88	3.68	17
15	7.84				3.94	15
16	8.36	4.50	3.00	2.88	4.44	16
17	8.88				4.44	17
18	9.39	4.50	3.00	2.88	4.94	18
19	9.90				5.44	20
20	10.43	4.50	3.00	2.88	5.44	22
21	10.94				5.94	23
22	11.43				5.94	24
23	11.97				6.50	26
24	12.50	5.00	4.00	3.25	6.50	33
26	13.53					31
27	14.07					24
28	14.54					25
29	15.08					26
30	15.60					27
31	16.11					23.5
32	16.64					29
34	17.68					31
35	18.20					32
36	18.68					33
38	19.75					35
40	20.79					37
41	21.31					36
48	24.94					45
50	25.98					47
54	28.00					50
<b>D60 CAST – PITCH 2.307</b>						
Tooth Face at Pitch Line .938 Inches						
6	4.61					4
7	5.32				2.68	8
8	6.03				2.88	8.4
9	6.75				2.94	13
10	7.46				3.18	14
13	9.64					27

No. of Teeth	Pitch Dia.	Stocked Sprockets <sup>②</sup>			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>62 CAST – PITCH 1.654 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line .812 Inches <sup>④</sup>						
5	2.81					1.5
6	3.32				.94	3
7	3.82	2.50	2.00	1.62	1.68	2
8	4.32	3.00	2.00	1.82	1.94	4
9	4.84	3.00	2.00	1.82	1.94	5
10	5.35	4.00	3.00	2.50	2.68	9
11	5.87	4.00	3.00	2.50	2.68	9
12	6.39	3.00	2.00	1.82	2.94	7
13	6.91	4.00	3.00	2.50	3.18	14
14	7.43	5.00	3.00	3.25	3.68	24
15	7.96	5.50	4.00	3.62	3.94	26
16	8.48				4.44	25
17	9.00				4.44	26
18	9.53	5.50	4.00	3.62	4.94	28
19	10.05	4.00	3.00	2.50	5.44	22
20	10.57	5.50	4.00	3.62	5.44	32
21	11.10				5.94	39
22	11.63				5.94	27
23	12.15				5.94	30
24	12.67	5.00	3.00	3.25	6.50	36
25	13.20				6.50	36
26	13.72				7.00	36
27	14.25				7.00	58
28	14.77				7.50	60
29	15.30					31.6
30	15.83				7.50	44
32	16.88				8.00	48
33	17.44				8.00	50
34	17.93				8.00	77
36	18.98					90
38	20.03	6.00	4.00	4.00	③	93
39	20.55					61
40	21.07					40.2
41	21.61					65
42	22.13					72
43	22.66					74
45	23.71					77
46	24.24					80
47	24.77					48.6
48	25.29					83
49	25.82					84
54	28.45					93
60	31.60					71
<b>67 CAST – PITCH 2.308 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line .687 Inches						
5	3.93				1.18	4
6	4.62	3.00	2.00	1.82	1.94	4
7	5.32	3.50	3.00	2.18	2.18	8
8	6.03	4.00	3.00	2.50	2.68	11
9	6.75	4.50	3.00	2.88	2.94	13
10	7.47	4.50	3.00	2.88	3.18	15
11	8.19	4.50	3.00	2.88	3.94	16
12	8.92	4.50	3.00	2.88	4.44	18
13	9.64				4.44	18
14	10.37	5.00	3.00	3.25	5.44	28
15	11.10				5.44	27
16	11.83	5.00	3.00	3.25	6.50	30
17	12.56				7.00	31
18	13.29				7.00	34
19	14.02				7.50	37
20	14.75	5.00	4.00	3.25	7.50	47
21	15.49				③	43
22	16.22					24
23	16.95					48
24	17.60					50

No. of Teeth	Pitch Dia.	Stocked Sprockets <sup>②</sup>			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>67 CAST – PITCH 2.308 (Cont'd) (With Hardened Teeth)</b>						
Tooth Face at Pitch Line .687 Inches						
Also available in polymeric.						
25	18.41					53
26	19.14					54
27	19.89					59
28	20.61					34
30	22.07				③	67
32	23.54					23
33	24.27					75
34	25.00					78
35	25.74					80
36	26.47					84
38	27.94					88
40	29.40					94
44	32.34					120
45	33.06					125
48	35.27					115
60	44.08					148
<b>78 CAST – PITCH 2.609</b>						
Tooth Face at Pitch Line .937 Inches						
Also Available in polymeric.						
5	4.44				1.18	5
6	5.22	3.00	2.00	1.44	1.94	6
7	6.00	4.00	3.00	2.44	2.94	11
8	6.82	4.50	3.00	2.50	2.94	15
9	7.63	4.50	3.00	2.50	3.18	24
10	8.44	4.50	3.00	2.75	3.94	19
11	9.26	5.00	4.00	3.25	4.44	29
12	10.08	6.00	4.00	4.00	5.44	40
13	10.90	5.00	4.00	3.25	5.44	36
14	11.72	5.00	4.00	3.25	6.50	39
15	12.55	6.00	4.00	4.00	7.00	44
16	13.37	6.00	5.00	4.00	7.00	55
17	14.20	5.00	4.00	3.25	7.50	53
18	15.02	6.00	4.00	4.00	7.50	61
19	15.85				③	64
20	16.68	6.00	5.00	4.00		89
21	17.50					90
22	18.33	6.00	5.00	4.00		87
23	19.16					95
24	19.99	7.00	5.00	4.56		111
25	20.77					99
26	21.64					107
27	22.42					112
28	23.31					114
29	24.13					116
30	24.96					119
31	25.79					123
32	26.62					85
33	27.38					136
34	28.28					141
35	29.11					146
36	29.94					153
38	31.60					162
39	32.42					176
40	33.25	8.00	6.00	5.50		267
41	34.08					180
42	34.91					193
43	35.65					197
44	36.57					202
45	37.31					190
46	38.18					212
48	39.89					221
54	44.87					249
55	45.70					253
58	48.19					267

All dimensions given in inches and weight in lbs.

① Hub one side. All other hubs are long central.

② If no hub data is listed, sprocket is cast to order.

③ Consult Rexnord for max. bore information.

④ For 962 chain, use unit no. 62 sprocket from 6 to 23 teeth, over 23 teeth, consult Rexnord.

# SPROCKETS

## CAST TOOTH SPROCKETS – (Cont'd.)

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>H102 DRUM FLANGED CAST – PITCH 5.000</b>						
Tooth Face at Pitch Line 6.250 Inches						
8	13.07				6.50	160
10	16.18				7.00	175
<b>H102 CAST – PITCH 5.000</b>						
Tooth Face at Pitch Line 6.250 Inches						
6	10.00				3.94	70
7	11.52				4.94	80
8	13.07				6.50	100
9	14.62				7.00	120
10	16.18				Ⓢ	140
12	19.32					165
13	20.89					180
<b>102B CAST – PITCH 4.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.875 Inches						
6	8.00				3.94	31
7	9.22				3.94	44
8	10.45				4.44	57
9	11.70	7.00	5.00	4.56	5.44	64
10	12.94	7.00	5.00	4.56	7.00	74
11	14.20	7.00	5.00	4.56	7.50	87
12	15.45	7.00	5.00	4.56	8.00	90
13	16.71				8.00	116
14	17.98	7.00	5.00	4.56	8.50	124
15	19.24	7.00	5.00	4.56		122
16	20.50	7.00	5.00	4.56		128
17	21.76					111
18	23.04					155
19	24.30	7.00	5.00	4.50		165
20	25.57					175
21	26.84					185
22	28.11					194
24	30.65					214
<b>102 1/2 CAST – PITCH 4.040 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.875 Inches						
6	8.08				3.94	30
8	10.56				4.44	55
9	11.81				5.44	62
10	13.07				5.94	64
11	14.34				6.50	70
12	15.61				7.00	78
13	16.88				7.50	85
14	18.16					94
15	19.43					105
16	20.71					112
17	21.98					122
19	24.55					140
20	25.83					150
22	28.39					175
24	30.95					190
25	32.23					210
26	33.33					230

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>103 CAST – PITCH 3.075 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.125 Inches. Also available in polymeric.						
6	6.15				1.94	20
7	7.09				2.68	23
8	8.04	5.50	4.00	3.62	2.94	31
9	8.99	5.50	4.00	3.62	3.68	42
10	9.95	6.00	4.00	4.00	4.44	41
11	10.91	6.00	4.00	4.00	4.94	45
12	11.88	6.50	4.00	4.50	5.44	57
13	12.85					59
14	13.82					63
15	14.79				7.00	75
16	15.76					76
17	16.74				8.00	100
18	17.71	6.50	4.00	4.50	8.00	93
19	18.68	7.00	5.00	4.56	8.50	114
20	19.66	7.00	5.00	4.56	Ⓢ	98
21	20.63					114
22	21.61					122
23	22.58					131
24	23.56					128
25	24.54					144
26	25.51					151
27	26.49					157
28	27.49					164
29	28.44					170
30	29.42					177
31	30.39					184
32	31.37					132
33	32.35					197
34	33.33					142
35	34.30					210
36	35.28					216
38	37.24					230
40	39.19					243
42	41.15					256
44	43.11					269
48	47.02					295
49	48.00					301
<b>H104 CAST – PITCH 6.000</b>						
Tooth Face at Pitch Line 4.000 Inches.						
5	10.21					52
6	12.00					64
7	13.83					70
8	15.68				7.00	100
9	17.54				Ⓢ	112
10	19.42					126
11	21.30					130
12	23.18					149
13	25.07					185
<b>H104 DRUM FLANGED CAST – PITCH 6.000</b>						
Tooth Face at Pitch Line 4.000 Inches.						
9	17.54					240
10	19.42					290

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>110 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.875 Inches.						
6	12.00				3.94	63
7	13.84					68
8	15.68	7.00	5.00	4.56	4.94	121
9	17.54	7.00	5.00	4.56	5.44	98
9.5	18.45					120
10	19.42	7.00	5.00	4.56	5.94	123
11	21.30				7.00	143
11.5	23.00				Ⓢ	126
12	23.18					256
12.5	24.12					124
13	25.07	7.00	5.00	4.50		169
14	26.96					
16	30.76					181
18	34.55					206
19	36.46					214
<b>H110 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Width at Pitch Line Matches Barrel Length.						
5	10.15					120
6	12.00				5.44	100
8	15.68				Ⓢ	150
9	17.54					180
10	19.42					217
11	21.30					225
12	23.18					296
15	28.86					610
<b>H110 DRUM FLANGED CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 8.875 Inches.						
8	15.68				Ⓢ	310
9	17.54					360
10	19.42					410
11	21.30					450
<b>111 CAST – PITCH 4.760 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 2.375 Inches.						
6	9.52					47
7	10.99					54
8	12.44	7.50	6.00	5.06	5.94	98
9	13.92				5.94	107
10	15.40	7.50	6.00	5.06		122
11	16.90				Ⓢ	136
12	18.39	6.00	5.00	3.44		130
13	19.89					170
14	21.39					175
15	22.89					134
16	24.40	7.50	6.00	4.82		189
17	25.90					218
18	27.41					185
20	30.43					510
22	33.44					230
24	36.47					351
<b>111SP CAST DOUBLE PITCH – PITCH 4.760 &amp; 7.240 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 2.375 Inches.						
8	15.74					90
10	19.40					107
12	23.22	-	-	5.94	9.00	190

SPROCKETS

All dimensions given in inches and weight in Lbs.

① Hub one side. All other hubs are long central.

② If no hub data is listed, sprocket is cast to order.

③ Consult Rexnord for max. bore information.

Note: Dimensions are subject to change. Certified dimensions of ordered material are furnished upon request.

# SPROCKETS

## CAST TOOTH SPROCKETS – (Cont'd.)

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>H112 CAST – PITCH 8.000</b>						
Tooth Face at Pitch Line 9.000 Inches.						
7	18.44				6.94	230
8	20.90				③	267
<b>H116 CAST – PITCH 8.000</b>						
Tooth Face at Pitch Line 12.750 Inches.						
7	18.44					400
8	20.90				6.94	325
9	23.39					460
<b>H119 CAST – PITCH 6.000</b>						
Tooth Face at Pitch Line 3.625 Inches.						
6	12.00				4.44	95
<b>H120 CAST – PITCH 6.000</b>						
Tooth Face at Pitch Line 8.750 Inches.						
6	12.00				5.44	130
8	15.68				6.94	250
9	17.54					190
10	19.42					215
<b>H121 CAST – PITCH 9.000</b>						
Tooth Face at Pitch Line 8.625 Inches.						
8	23.52	9.50		6.44		
<b>H122 CAST – PITCH 8.000</b>						
Tooth Face at Pitch Line 8.000 inches.						
7	18.44					210
<b>H123 CAST – PITCH 9.000</b>						
Tooth Face at Pitch Line 6.250 inches.						
8	23.52	9.50		6.44		
<b>H124 CAST – PITCH 4.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.500 inches.						
7	9.22				3.94	38
8	10.45				4.94	46
9	11.70				5.44	58
10	12.94				5.44	62
11	14.20				5.94	69
12	15.45				6.50	82
14	17.98				③	98
15	19.24					100
16	20.50					122
17	21.77					136
18	23.04					147
19	24.30					154
20	25.57					161
22	28.11					176
27	34.46					240
28	35.73					250
30	38.27					290
37	47.18					410
<b>130 CAST – PITCH 4.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.000 Inches						
5	6.77					18
6	8.00					21
7	9.22				3.94	25
8	10.45				4.94	32
9	11.70	5.00	4.00	3.25	③	44
10	12.94					48
11	14.20					52
12	15.45					59
13	16.71					58
14	17.95					61
16	20.50					75

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>132 CAST – PITCH 6.050 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 2.750 inches.						
5	10.29				2.94	102
6	12.10					92
7						
8	15.81	7.50	6.00	4.62	5.44	190
9	17.69				5.94	269
10	19.58	7.50	6.00	4.44	5.94	210
11	21.47	7.50	6.00	4.25	5.94	232
12	23.38	7.50	6.00	4.00	6.50	251
13	25.28				6.50	317
14	27.19				③	352
15	29.10					372
16	31.01					302
18	34.84					445
19	36.76					486
20	38.67					495
<b>132 DRUM FLANGED CAST – PITCH 6.050</b>						
Tooth Face at Pitch Line 3.000 inches.						
10						
11						
12						
<b>183 CAST – PITCH 3.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line .812 inches.						
6	6.00	4.00	3.00	2.50	2.68	11
7	6.91				2.68	14
8	7.84				2.68	16
9	8.77				2.94	22
10	9.71				2.94	25
11	10.65				2.94	30
12	11.59				3.18	32
13	12.54	5.00	4.00	3.25	3.49	38
14	13.48				4.94	40
15	14.43				5.44	45
16	15.38				5.94	47
18	17.28					55
19	18.23				③	58
20	19.18					65
25	23.94					85
38	36.33					140
<b>188 CAST – PITCH 4.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 0.937 inches.						
5	6.78					14
6	8.00				3.44	25
7	9.22				3.68	27
8	10.45				3.94	36
9	11.70				3.94	32
10	12.94				3.94	33
12	15.45				4.44	36
13	16.71				4.44	36
15	19.24				③	39
19	24.30					48
24	30.64					58

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>194 CAST – PITCH 4.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.031 inches.						
7	9.22				3.18	30
8	10.45	5.50	4.00	3.62	3.68	38
9	11.70	5.50	4.00	3.62	3.94	46
10	12.94	5.50	4.00	3.62	4.44	55
11	14.20				4.44	62
12	15.45	5.50	4.00	3.62	4.94	70
14	17.98				5.44	90
15	19.24				③	72
19	24.30					100
<b>196 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.031 inches.						
5	10.21					
6	12.00	6.00	4.00	4.00	3.94	33
7	13.82	4.50	3.00	2.75	4.44	49
8	15.68	7.00	5.00	4.56	4.94	84
9	17.54				5.44	93
10	19.42	7.00	5.00	4.56	4.44	114
12	23.18				6.50	148
13	25.07				③	119
14	26.96					128
16	30.75					160
18	34.55					195
19	36.45					210
25	47.87					304
<b>197 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.125 inches.						
6	12.00	6.50	5.00	4.75	4.44	56
7	13.83					61
8	15.68	6.50	5.00	4.56	4.94	90
9	17.54				5.44	80
10	19.42				5.94	95
12	23.18				③	115
15	28.86					178
<b>348 CAST – PITCH 3.031 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line .687 inches.						
4	7.92				1.94	15
5	9.81				1.94	23
6	11.59				2.18	24
7	13.48				2.44	43
9	17.28					56
10	19.18				③	68
11	21.03					75
12	22.98					83
16	30.60					120
19	36.33					159
<b>458 CAST – PITCH 4.031 (With Hardened Tooth)</b>						
(With Hardened Tooth)						
Tooth Face at Pitch Line .875 inches.						
3	7.95					20
4	10.53				3.18	44
5	13.04	7.50	5.00	5.06	5.06	54
6	15.57	7.50	5.00	5.06	5.06	81
7	18.12				5.06	71
8	20.66				5.06	95
9	23.13				③	130
10	25.77					145
11	28.33					193
12	30.68					200
14	35.87					228
19	48.63					345

All dimensions given in inches and weight in lbs.

① Hub one side. All other hubs are long central.

② If no hub data is listed, sprocket is cast to order.

③ Consult Rexnord for max. bore information.

86 Note: Dimensions are subject to change. Certified dimensions of ordered material are furnished upon request.

# SPROCKETS

## CAST TOOTH SPROCKETS – (Cont'd.)

No. of Teeth	Pitch Dia.	Stocked Sprockets <sup>②</sup>			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>468 CAST – PITCH 4.031</b>						
Tooth Face at Pitch Line 1.375 inches.						
4	10.53				3.44	36
5	13.05				3.44	65
6	15.57				5.94	100
7	18.12					92
8	20.66					118
9	23.21					148
10	25.77					160
12	30.88					240
<b>480 CAST – PITCH 8.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 11.250 inches.						
6	16.00				7.00	250
7	18.44				7.50	295
8	20.90				③	330
9	23.39					385
10	25.89					440
<b>480 DRUM FLANGED CAST (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 11.250 inches.						
6	16.00				③	490
7	18.44					560
8	20.90					654
9	23.39					750
10	25.89					840
<b>483 CAST – PITCH 4.000</b>						
Tooth Face at Pitch Line .875 inches.						
8	10.45					30
9	11.70					35
12	15.45					65
13	16.72					70
19	24.30					124
<b>520 CAST – PITCH 2.563 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line .875 inches.						
10	8.29	–	–	30	6.00	4
12	9.90	–	–	40	6.50	5
18	14.76					65
24	19.64	–	–	84		10
30	24.52					100
40	32.67					165
<b>531 CAST – PITCH 4.000</b>						
Tooth Face at Pitch Line 1.187 inches. For Chain No. 531.						
6	8.00				2.94	34
8	10.45				3.44	43
10	12.94				3.94	49
12	15.46				4.44	85
14	17.98					80
15	19.24					85
16	20.50					94
17	21.77					107
19	24.30					120

No. of Teeth	Pitch Dia.	Stocked Sprockets <sup>②</sup>			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>678 CAST – PITCH 6.031 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.187 inches.						
3	12.06					50
4	15.72				5.44	75
5	19.52				③	115
6	23.24					148
7	27.03					190
8	30.83					240
10						
<b>698 CAST – PITCH 6.031 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.375 inches.						
5	19.52				6.94	122
6	23.24				③	162
7	26.96					200
8	30.92					275
<b>CS720S CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.000 inches.						
6.5-13T	12.89					65.0
8.5P-17T	16.59				③	98.2
9-9T	17.51					80.0
9.5P-19T	18.48					115.3
10-10T	19.42					95.0
10.5-21T	20.33					110.0
11-11T	21.30					105.0
11.5P-23T	22.24					127.7
12.5P-25T	24.12					141.3
13-13T	25.07					130.0
16-16T	30.75					180.0
<b>720S CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.000 inches.						
6P-6T	12.00				③	47.9
6.5P-13T	12.91					53.1
8P-8T	15.68					71.3
8.5P-17T	16.61					92.2
9P-9T	17.54					99.5
9.5P-19T	18.48					107.3
10P-10T	19.42					115.4
10.5-21T	20.33					110.0
11P-11T	21.30					98.3
11.5P-23T	22.24					118.2
12P-12T	23.18					120.0
12.5P-25T	24.12					131.5
13P-13T	25.07					138.7
15P-15T	28.86					155.0
16P-16T	30.75					180.0
19P-19T	36.45					245.9
20P-20T	38.36					267.8
<b>CS730 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.125 inches.						
9.5P-19T	18.48					114.8
11.5P-23T	22.24					113.5
12.5P-25T	24.01					127.9
18P-18T	34.55					207.0
27P-27T						

No. of Teeth	Pitch Dia.	Stocked Sprockets <sup>②</sup>			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>A730 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.125 inches.						
6P-6T	12.00				③	47.9
8P-8T	15.68					71.3
9P-9T	17.54					85.5
9.5P-19T	18.48					107.3
10P-20T	19.42					115.4
11P-11T	21.30					105.0
11.5P-23T	22.24					104.5
12P-12T	23.14					110.8
12.5P-25T	24.12					117.9
13P-13T	25.07					125.1
13.5P-27T	26.02					132.5
14P-14T	26.96					153.7
15P-15T	28.86					170.0
16P-16T	30.75					187.2
18P-18T	34.55					225.2
24P-24T	45.79					363.5
<b>823 CAST – PITCH 4.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.125 inches.						
8	10.45				2.44	25
10	12.95				3.18	45
11	14.20				3.68	54
12	15.46				3.94	56
13	16.71				4.44	60
14	17.98				4.94	65
16	20.51				5.44	81
17	21.77				5.94	86
18	23.04				5.94	91
19	24.26					95
24	30.65				③	138
<b>825 CAST – PITCH 4.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.250 inches.						
10	12.94				6.44	58
12	15.45					78
13	16.71					82
14	17.98					94
15	19.24					112
16	20.50					115
19	24.30					140
<b>830 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.312 inches.						
6	12.00					58.5
8	15.68				6.44	79
9	17.54				③	88
10	19.42					102
11	21.20					105
11.5-23T	22.21					125
12	23.18					121
13	25.07					142
15	28.86					168
16	30.75					180

SPROCKETS

All dimensions given in inches and weight in Lbs.

① Hub one side. All other hubs are long central.

② If no hub data is listed, sprocket is cast to order.

③ Consult Rexnord for max. bore information.

Note: Dimensions are subject to change. Certified dimensions of ordered material are furnished upon request.

# SPROCKETS

## CAST TOOTH SPROCKETS – (Cont'd.)

SPROCKETS

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>844 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 2.125 inches.						
6						
8	15.88				6.44	94
9	17.54					112
10	19.42					125
11	21.30					140
12	23.18					160
13	25.07					171
15	28.86					200
16	30.75					217
19	36.45					275
<b>F922 CAST – PITCH 9.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.125 inches.						
6	18.00				5.94	74
8	23.52				③	150
9	26.31					160
10	29.12					175
<b>F933 CAST – PITCH 9.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.250 inches.						
6	18.00				5.94	93
7	20.74				③	120
8	23.52					152
<b>951 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.062 inches.						
6	12.00				5.44	62
8	15.68				5.44	81
<b>998 CAST – PITCH 9.031 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.375 inches.						
4	23.53				6.44	195
5	29.14				③	258
6	34.81					325

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>1113 CAST – PITCH 4.040 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.062 inches.						
6	8.08				2.44	24
8	10.56				2.94	38
9	11.81				3.18	40
10	13.07				3.68	45
11	14.34				3.94	50
12	15.61				4.44	60
13	16.88				4.94	68
14	18.16				③	85
16	20.71					95
17	21.99					104
18	23.67					110
24	30.95					178
<b>1120 CAST – PITCH 4.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line .687 inches.						
5	6.81				2.18	12
6	8.00				2.44	23
7	9.22				3.68	72
8	10.45				3.68	29
9	11.70				3.94	38
10	12.94				3.94	40
11	14.19				③	50
12	15.45					65
14	17.98					77
15	19.24					86
16	20.50					97
18	23.04					115
19	24.30					125
22	28.11					165
24	30.65					190
31	39.54					244
35	44.62					322
<b>1131 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.250 inches.						
6	12.00				3.94	62
8	15.68				3.94	78
9	17.54				3.95	120
12	23.18				4.44	153
13	25.03					175
14	26.96				③	190
16	30.75					225
25	47.87					350
<b>F1222 CAST – PITCH 12.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.000 inches.						
6	24.00				5.94	157
8	31.36					210

No. of Teeth	Pitch Dia.	Stocked Sprockets ②			Cast to Order Max. Bore	Avg. Wt.
		Hub Dia.	Hub Length	Max. Bore		
<b>2124 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.375 inches.						
6	12.00					50
8	15.68				6.44	62
10	19.42				③	95
12	23.18					133
13	25.07					150
15	28.86					186
16	30.76					220
24	45.97					250
<b>2180 CAST – PITCH 6.000 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line 1.125 inches.						
6	12.00				4.94	50
8	15.68				7.00	90
16	30.76					200
20	38.36					260
<b>9250 CAST – PITCH 2.500 (With Hardened Teeth)</b>						
Tooth Face at Pitch Line .750 inches. Also available in polymeric.						
6	5.00					5
7	5.76					9
8	6.53					10
10	8.09	4.00	3.00	2.50	2.68	13
11	8.87	4.00	3.00	2.50	2.68	16
12	9.66	4.00	3.00	2.50	3.18	18
14	11.24					23
15	12.03				3.94	28
16	12.81					30

All dimensions given in inches and weight in Lbs.

- ① Hub one side. All other hubs are long central.
- ② If no hub data is listed, sprocket is cast to order.
- ③ Consult Rexnord for max. bore information.

# ■ SPROCKETS

## CAST TRACTION WHEELS AND DRUM FLANGED TRACTION WHEELS

**Traction Wheels** are used primarily on the headshafts of bucket elevators and elevating conveyors to protect the system from obstructions. Providing the frictional grip between the chain and the traction wheel is sufficient to transmit the power under normal load. In the case of obstruction, the chain will slip on the wheel, and avoid damaging some machinery or part of the system.

**Drum Flanged Traction Wheels** are used on drag chain conveyors where discharge is over the head wheel.

**Materials.** Traction wheels are furnished cast and fabricated steel. Segmental rim traction wheels are available with fabricated bodies. See pages 90-93.

**Standard Sprocket Bore Tolerances; Keyseat and Set-screws; and Hubs.** See page 140 for key and set screw sizes. The corresponding paragraphs on page 90 applies to traction wheels.

To determine a shaft's pitch diameter, add to its outside diameter, the barrel diameter of the chain to be used.

**NOTE: For Replaceable Segmental-Rim Traction Wheels,** see pages 90-93.

Unit No.	O. D.	x = HDN	Face Width	Drum Width	Wt.
78	10	x	.94	-	30.0
	12	x	.94	-	45.0
	12.50	x	.94	-	50.0
	13.25	x	.94	-	58.0
	14	x	.94	-	62.0
	15	x	.94	-	65.0
	15.50	x	.94	-	68.0
	16	x	.94	-	70.0
	18	x	.94	-	75.0
	19	x	.94	-	80.0
20	x	.94	-	85.0	
102B	12	x	1.88	-	50.0
	13.50	x	1.88	-	60.0
	14	x	1.88	-	63.0
	14.63	x	1.88	-	68.0
	15.75	x	1.88	-	78.0
	16.75	x	1.88	-	89.0
	17	x	1.88	-	92.0
	18	x	1.88	-	100.0
	19.75	x	1.88	-	108.0
	21	x	1.88	-	117.0
	22	x	1.88	-	127.0
	23	x	1.88	-	139.0
	23.75	x	1.88	-	143.0
	27.63	x	1.88	-	160.0
29.63	x	1.88	-	166.0	
33	x	1.88	-	175.0	
H102	11.50		6.25	11.50	185.0
	14.63		6.25	11.50	230.0
103	7	x	1.13	-	25.0
	9.63	x	1.13	-	38.0
	14.63	x	1.13	-	49.0
	16	x	1.13	-	60.0
	17	x	1.13	-	70.0
	18	x	1.13	-	75.0
	20	x	1.13	-	90.0
	22	x	1.13	-	115.0
	22.50	x	1.13	-	125.0
	24	x	1.13	-	135.0
29.38	x	1.13	-	170.0	
H104	10.50		4	12	125.0
	12.38		4	12	145.0
	14		4	12	170.0
	16		4	12	205.0
	17.75		4	12	250.0
	19.75		4	12	305.0
20.13		4	12	345.0	

Unit No.	O. D.	x = HDN	Face Width	Drum Width	Wt.
H110	10.25		8.88	16.38	175.0
	14		8.88	16.38	250.0
	15.88		8.88	16.38	290.0
	17.75		8.88	16.38	335.0
	19.63		8.88	16.38	365.0
111	9.50	x	2.25	-	50.0
	14.56	x	2.25	-	85.0
	15.50	x	2.25	-	91.0
	18	x		-	105.0
	20	x	2.25	-	135.0
	22	x	2.25	-	143.0
	23	x	2.25	-	146.0
	23.75	x	2.25	-	149.0
	26	x	2.25	-	165.0
	29.50	x	2.25	-	198.0
30.75	x	2.25	-	210.0	
H112	16.75		9	16.50	200.0
	19.25		9	16.50	230.0
H116	16.88		13	20.50	395.0
	19		13	20.50	485.0
H118	13.88		13	20	495.0
	16.50		13	20	560.0
132	13	x	2.75	-	120.0
	13.75	x	2.75	-	124.0
	16	x	2.75	-	128.0
	16.25		2.75	14	510.0
	17	x	2.75	-	138.0
	18	x	2.75	-	147.0
	18.25		2.75	14	570.0
	20.25		2.75	14	620.0
	21.63	x	2.75	-	186.0
	22	x	2.75	-	190.0
	24	x	2.75	-	205.0
26.19	x	2.75	-	210.0	
27.75	x	2.75	-	225.0	
30	x	2.75	-	280.0	
H480	13.88		11.13	22	440.0
	16.25		11.13	22	510.0
	18.75		11.13	22	540.0
	21.13		11.13	22	600.0
23.75		11.13	22	630.0	

All dimensions given in inches and weight in Lbs.

Unit No.	O. D.	x = HDN	Face Width	Drum Width	Wt.
S825	10.50	x	1.25	-	45.0
	14	x	1.25	-	60.0
	15.50	x	1.25	-	68.0
	16	x	1.25	-	72.0
	17	x	1.25	-	79.0
	18.25	x	1.25	-	86.0
	20	x	1.25	-	95.0
	22	x	1.25	-	105.0
	24	x	1.25	-	120.0
	27.75	x	1.25	-	140.0
	31	x	1.25	-	160.0
844	12	x	2.13	-	65.0
	16	x	2.13	-	90.0
	19.75	x	2.13	-	109.0
	22.25	x	2.13	-	130.0
	23.75	x	2.13	-	148.0
	27.75	x	2.13	-	172.0
	29	x	2.13	-	190.0
720	15	x	1	-	62.0
	15.50	x	1	-	65.0
S856	18.25	x	1	-	85.0
	29	x	2.75	-	170.0
	21.50	x	2.75	-	187.0
	26	x	2.75	-	200.0
	27.75	x	2.75	-	218.0
955	29.50	x	2.75	-	225.0
	30	x	2.75	-	236.0
	8	x	.69	-	24.0
18.75	x	.69	-	65.0	

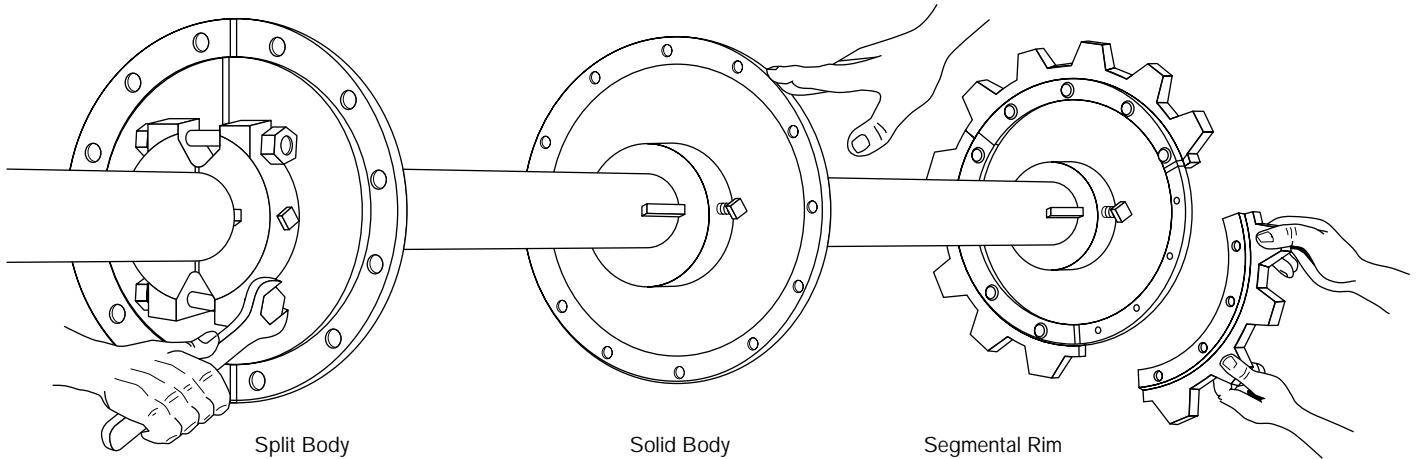
Note: Dimensions are subject to change. Certified dimensions of ordered material are furnished upon request.

# ■ SPROCKETS

## SEGMENTAL RIM SPROCKETS AND TRACTION WHEELS

Segmental sprockets and traction wheels significantly reduce the labor and down time associated with replacing worn standard type units. Worn segments can be replaced one at a time without removing the chain, disassembling shaft and/or bearing assemblies or realigning hub placement.

Sprockets and traction wheel rims are made of hardened steel and may be furnished with split or solid hub bodies.



### Solid Hub Bodies

Solid hub bodies are recommended for new installations. They are accurately machined of close-grained cast iron. The bodies can be made of steel, but dimensions will differ.

### Split Hub Bodies

Split hub bodies can be easily installed on existing installations without removing the shaft, bearings, or chain. They are accurately machined of close-grained cast iron. A complete set of hub bolts and nuts included. The bodies can be made of steel, but dimensions will differ.

### Traction Wheels vs. Sprockets at the Head Shaft

When properly applied, the use of a traction wheel at the head end of a centrifugal elevator will result in an increase in both chain and wheel life. In addition, the traction wheel will minimize peak chain tensions under impact or starting conditions.

Successful application of a traction wheel is dependent upon a frictional force between the traction wheel and the chain bushing which is great enough to handle the applied chain load without excessive slippage. Factors which can detract from the effectiveness of a traction wheel are:

1. Handling material with lubricating qualities.
2. Heavy digging loads.
3. Handling very dense material.

Dry and abrasive materials, on the other hand, have the desirable effect of increasing the coefficient of friction. Traction wheels have been used very successfully in the cement mill industry. Chain with rollers should not be used with a traction wheel.



# ■ SPROCKETS

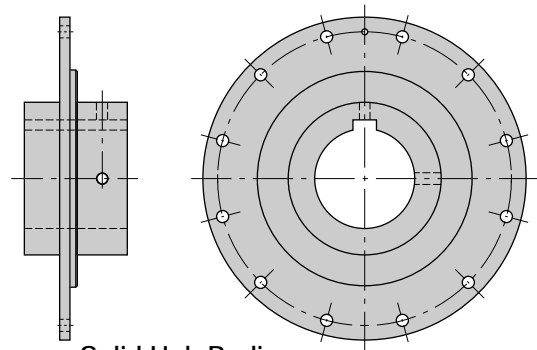
## SEGMENTAL RIM SPROCKETS AND TRACTION WHEELS – (Cont'd.)

### Solid Hub Bodies

Solid hub bodies are recommended for new or existing installation where it is expedient to install a solid hub to save added cost and weight of a split hub.

Solid hub bodies can be made of cast iron or fabricated steel. The outer rim of both cast and fabricated steel hub bodies is machined to exact concentricity and the flange base is machined to provide a mating surface for the rim. This insures correct fit and proper installation of segmental traction wheel and sprocket rims. Hubs are central with the center line of rims.

Fabricated steel bodies are recommended for use in severe applications, such as cement mill, to provide maximum fatigue and wear life.



Solid Hub Bodies

### CAST SOLID BODIES<sup>①</sup>

Body No. <sup>②</sup>	Bore Size	Hub Length	Wt.
10	1.94	4.25	43
	2.44	4.25	42
	2.94	4.25	41
	3.44	6.00	63
	3.94	6.00	60
4.44	6.00	56	
12	1.94	4.25	62
	2.44	4.25	60
	2.94	4.25	58
	3.44	6.00	90
	3.94	6.00	85
	4.44	6.00	80
16	4.94	6.50	96
	1.94	3.25	80
	2.44	5.00	86
	2.94	5.00	97
	3.44	5.00	94
	3.94	6.50	139
	4.44	6.50	134
20	4.94	6.50	127
	5.44	7.75	189
	5.94	7.75	180
	6.44	8.50	225
	6.94	8.50	272
	2.44	5.00	140
	2.94	5.00	138
	3.44	5.00	134
	3.94	6.50	180
4.44	6.50	174	
4.94	6.50	168	
5.44	7.75	229	
5.94	7.75	220	
6.44	9.50	323	
6.94	9.50	310	

### FABRICATED SOLID BODIES

Body No. <sup>②</sup>	Bore Size	Hub Length	Wt.
10	1.94	3.75	44
	2.44	3.75	44
	2.94	3.75	43
	3.44	3.75	41
	3.94	3.75	38
	4.44	6.50	61
4.94	6.50	55	
12	1.94	4.25	65
	2.44	4.25	63
	2.94	4.25	61
	3.44	4.25	58
	3.94	4.25	54
	4.44	6.00	87
	4.94	6.00	79
	5.44	7.75	110
5.94	7.75	100	
16	1.94	5.00	105
	2.44	5.00	103
	2.94	5.00	100
	3.44	5.00	96
	3.94	5.00	92
	4.44	7.00	116
	4.94	7.00	108
	5.44	7.00	136
	5.94	7.00	127
	6.44	8.50	178
	6.94	8.50	165
	7.44	8.50	186
7.94	8.50	172	
8.44	10.50	259	
20	1.94	5.50	157
	2.44	5.50	154
	2.94	5.50	151
	3.44	5.50	147
	3.94	5.50	142
	4.44	7.75	169
	4.94	7.75	161
	5.44	7.75	193
	5.94	7.75	183
	6.44	8.50	225
	6.94	8.50	213
	7.44	8.50	234
	7.94	8.50	220
	8.44	8.50	247
9.94	11.50	300	

### FABRICATED SOLID BODIES (Cont'd.)

Body No. <sup>②</sup>	Bore Size	Hub Length	Wt.
25	1.94	5.50	250
	2.44	5.50	289
	2.94	5.50	244
	3.44	5.50	240
	3.94	5.50	235
	4.44	7.75	262
	4.94	7.75	254
	5.44	7.75	286
	5.94	7.75	276
	6.44	8.50	314
	6.94	8.50	301
7.44	8.50	322	
7.94	8.50	308	
8.44	11.50	414	
35	1.94	5.50	325
	2.44	5.50	375
	2.94	5.50	448
	3.44	5.50	444
	3.94	5.50	440
	4.44	8.50	459
	4.94	8.50	452
	5.44	8.50	478
	5.94	8.50	469
	6.44	8.50	518
	6.94	8.50	506
	7.44	8.50	526
	7.94	8.50	512
8.44	11.50	619	

All dimensions given in inches and weight in Lbs.

<sup>①</sup> Steel bodies are recommended for use with RS856, ER956, ER857, ER859, ER864, SBX856, SBX2857, SBX2859 and SBX2864 rims used in severe service such as cement mill elevators.

<sup>②</sup> Body no. represents bolt circle diameter. See page 93 for bolting information.

**Note: Dimensions are subject to change. Certified dimensions of ordered material are furnished upon request.**

# ■ SPROCKETS

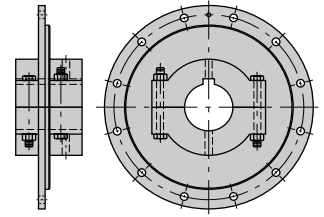
## SEGMENTAL RIM SPROCKETS AND TRACTION WHEELS – (Cont'd.)

### Split Hub Bodies

Split hub bodies can be easily installed in existing applications without removing the shaft, bearing or chain. Split hub bodies can be furnished in cast iron or fabricated steel. Complete set of hub bolts and nuts included.

The outer rim of both cast and fabricated steel hub bodies is machined to precise concentricity and the flange base is machined to provide a mating surface for

the rim. This insures correct fit and proper installation of segmental traction wheels and sprocket rims. Hubs are central with the center line of rims.



Fabricated steel bodies are recommended for use in severe applications, such as cement mill, to provide maximum fatigue and wear life.

### CAST SPLIT BODIES<sup>①</sup>

Body No. <sup>②</sup>	Bore Size	Hub Length	Wt.
10	1.94	5.63	53
	2.44	5.63	51
12	1.94	5.63	75
	2.44	5.63	72
	2.94	7.00	125
	3.44	7.00	120
	3.94	7.00	115
16	1.94	6.50	97
	2.44	6.50	125
	2.94	7.25	168
	3.44	7.25	164
	3.94	7.25	158
20	4.44	8.25	237
	4.94	8.25	229
	1.94	4.38	126
	2.44	5.00	163
	2.94	5.00	160
	3.44	5.00	157
	3.94	6.50	235
	4.44	6.50	229
	4.94	6.50	223
5.44	7.63	328	
5.94	7.63	319	
6.44	11.13	641	
6.94	11.13	626	
7.44	11.13	610	

### FABRICATED SPLIT BODIES

Body No. <sup>②</sup>	Bore Size	Hub Length	Wt.
12	1.94	6.75	109
	2.44	6.75	105
	2.94	6.75	101
	3.44	6.75	97
	3.94	6.75	91
	4.44	7.75	134
16	4.94	7.75	126
	1.94	6.75	145
	2.44	6.75	142
	2.94	6.75	138
	3.44	6.75	133
	3.94	6.75	127
	4.44	7.75	169
	4.94	7.75	161
20	5.44	7.75	212
	5.94	7.75	202
	1.94	6.75	198
	2.44	6.75	195
	2.94	6.75	191
	3.44	6.75	186
	3.94	6.75	181
	4.44	7.75	217
	4.94	7.75	209
	5.44	7.75	271
	5.94	7.75	261
	6.44	9.50	361
	6.94	9.50	347
	7.44	8.75	367
25	7.94	8.75	352
	8.44	8.75	430
	1.94	6.75	289
	2.44	6.75	286
	2.94	6.75	282
	3.44	6.75	277
	3.94	6.75	272
	4.44	7.75	307
	4.94	7.75	299
	5.44	7.75	359
35	5.94	7.75	349
	6.44	8.75	447
	6.94	8.75	433
	7.44	8.75	453
	7.94	8.75	438
	8.44	8.75	513
	1.94	6.75	375
	2.44	6.75	372
	2.94	6.75	487
	3.44	6.75	482
3.94	6.75	476	
4.44	7.75	511	
4.94	7.75	503	
5.44	7.75	564	
5.94	7.75	554	
6.44	8.75	652	
6.94	8.75	638	
7.44	8.75	657	
7.94	8.75	642	
8.44	8.75	717	

### BODY BOLTING

Body No.	Bolt Quantity	Bolt Size	Bolt Torque Ft./Lbs.
10	12	5/8	180
12	12	5/8	180
16	12	3/4	320
20	24	3/4	320
25	24	1	710
35	24	1	710

Torque values based on dry conditions.  
1 Ft. Lb. Torque = 1 Lb. Force With 1 Ft. Lever Arm.

All dimensions given in inches and weight in Lbs.

<sup>①</sup> Steel bodies are recommended for use with RS856, ER956, ER857, ER859, ER864, SBX856, SBX2857, SBX2859 and SBX2864 rims used in severe service such as cement mill elevators.

<sup>②</sup> Body no. represents bolt circle diameter.

92 **Note: Dimensions are subject to change. Certified dimensions of ordered material are furnished upon request.**

# ■ SPROCKETS

## SEGMENTAL RIM SPROCKETS AND TRACTION WHEELS – (Cont'd.)

### Cast Rims

Each traction wheel rim and sprocket rim is induction case-hardened to the highest practical hardness around the entire circumference. The hardness depth is controlled to give the longest wear life, yet leaving the interior tough and ductile – perfect qualities for absorbing the impact and shock loads encountered in “elevator-conveyor” service.

Segmental sprocket rims can be reversed (back side of tooth becomes the working face), in order to maximize wear life.

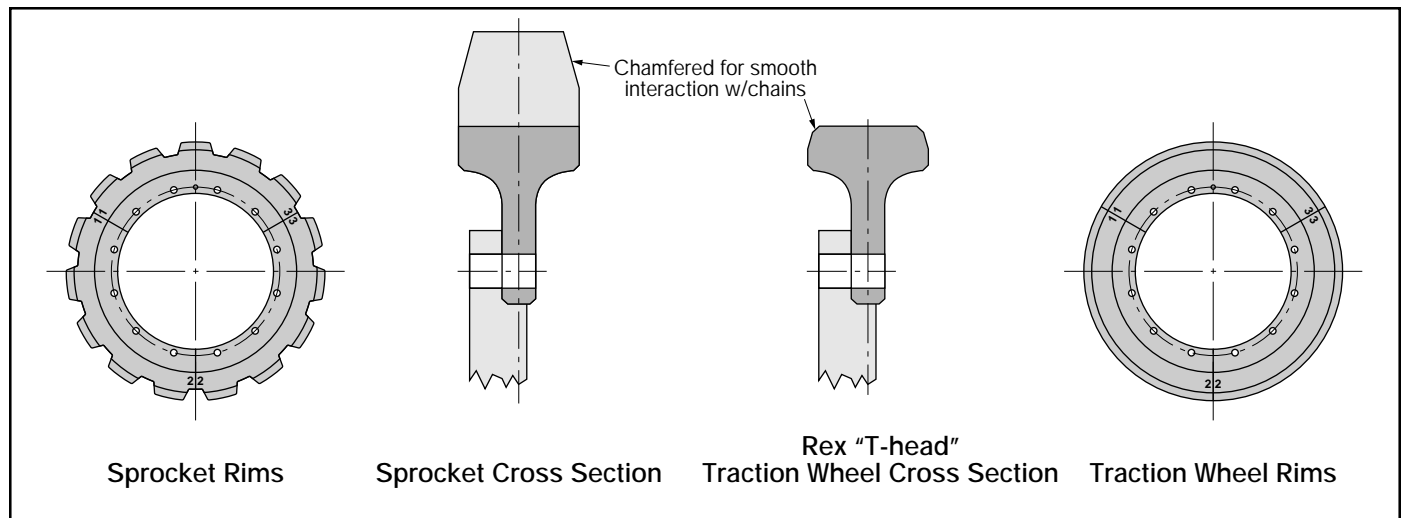
Segmental traction wheel rims can be easily installed, no need to even remove the chain in order to replace worn out rims. No burning or cutting is necessary.

Our “T” head traction wheel design moves the center of the chain load more closely over the body flange, thus reducing the possibility of hub fatigue problems.

Segmental rim traction wheels are split with cuts in the rims that are made diagonally. These diagonal cuts eliminate the possibility of the segments spalling or chipping at the line of split as a result of chain bushing or barrel line impact.

The sides of the segmental traction wheel & sprocket rims are chamfered to allow the chain to “enter” and “leave” smoothly without damaging the chain components.

All rims are furnished with high strength UNC thread nuts and bolts as standard.



### Available Cast Traction Wheel Rims (with Bolts, Washers and Nuts)

Rex Chain No.	Link-Belt Chain No.	No. of Teeth	Use Body No. ①	Pitch Dia. In.	Wt. Each Lbs.
S110 A102B S102B A102 <sup>1</sup> / <sub>2</sub> S102 <sup>1</sup> / <sub>2</sub>	SBS110 C102B SBS102B C102 <sup>1</sup> / <sub>2</sub> SBS102 <sup>1</sup> / <sub>2</sub>	24	16	115	1.75
ES111 A111	SBS111 C111	22 24 26 30	16 16 20 20	110 130 140 165	2.25
RS856 ER857 ER956	SBX856 SBX2857	20 22 24 26 28 30	12 16 16 20 20 20	90 115 145 155 170 185	2.75
ER859 ER864	SBX2859 SBX2864	24 26 30 36 42 49	16 20 20 20 35 35	165 175   235	3.50

NOTE: Fabricated steel rims are readily available for most every chain. Consult Rexnord.

① Body No. represents bolt circle diameter in inches.

**Note: Dimensions are subject to change. Certified dimensions of ordered material are furnished upon request.**

# ■ SPROCKETS

## POLYMERIC SPROCKET AND IDLER WHEELS

SPROCKETS



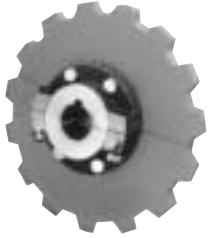
Cast Body  
Segmental  
Polymeric  
Sprocket



All Polymeric  
Dished Sprocket

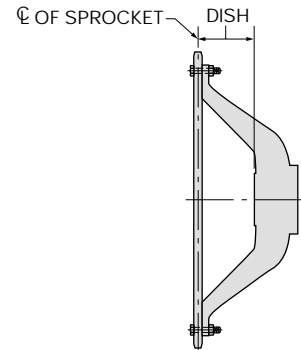
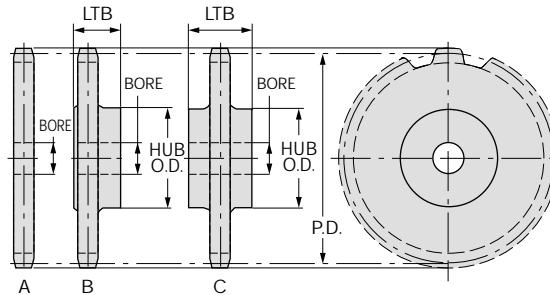


Polymeric Sprocket



Split  
Polymeric  
Sprocket

HUB STYLE



## POLYMERIC SPROCKET AND IDLER WHEELS

Polymeric chains will provide the ultimate in service when operated with properly designed sprockets. Just like polymeric chains differ from metal chains, so do polymeric sprockets differ vastly from metal sprockets.

The polymeric sprocket must be designed for the particular chain, considering the chain's special capability and intended use. Many factors are taken into account when designing these sprockets: Tooth pressure angle, pitch line clearance, bottom diameter, pocket and topping radii and tooth working face, to name a few. A poor design in any of these areas may cause chain failure.

Rex® Polymeric chain run better on Rex Polymeric sprockets. Polymeric sprockets resist corrosion and reduce friction, maximizing both chain and sprocket life. These quiet running, shock absorbing sprockets also improve system reliability.

The American Chain Association recommends that "Sprockets normally be obtained from the manufacturer of the chain involved." The Association further cautions that "worn sprockets should always be replaced when new chain is installed..."

### Features

- **Designed specifically for use with polymeric chains** for greatest chain and sprocket life.
- **Made from super tough urethane.** Rex sprockets resist particle embedment (and the rapid chain wear that can result), a common problem with other plastic materials.
- **One-piece design** – Rex polymeric sprockets are all polymeric, or available with a steel insert cast integral with the body.
- **Absorbs vibration and large shock loads better than steel sprockets,** thus protecting the chain and providing quieter operation.
- **Reduces friction,** which improves chain life.
- **Split sprockets** – most sprockets are available in split design for ease of installation.

# ■ SPROCKETS

## POLYMERIC SPROCKET AND IDLER WHEELS – (Cont'd.)

Dimensions are in inches. Weights are in pounds.

	Number of Teeth	P. D.	Hub <sup>③</sup>		Bore Capacities			Weight <sup>③</sup>
					W/O Key	With Key <sup>①</sup>		
			O. D.	L. T. B.	Max.	Min.	Max.	
<b>N45 Polymeric Sprocket</b> Pitch 1.630 Tooth Face at Pitch Line .75 Hub Style B Mandrel Bore .44	7	3.76	2.50	1.75	1.50	.88	1.25	.6
	8	4.26	3.00	1.75	2.00	.88	1.25	.9
	9	4.77	3.00	1.75	2.00	1.00	1.25	1.0
	10	5.27	3.75	1.75	2.75	1.13	2.63	2.0
	11	5.79	3.75	1.75	2.75	1.13	2.63	2.1
	12	6.30	3.75	1.75	2.75	1.25	2.63	2.3
	13	6.81	4.75	1.75	3.75	1.25	2.88	2.9
	14	7.33	4.75	1.75	3.75	1.25	2.88	3.1
	15	7.84	4.75	1.75	3.75	1.25	2.88	3.3
	16	8.36	4.75	1.75	3.75	1.38	2.88	3.5
17	8.87	4.75	1.75	3.75	1.50	2.88	3.7	
18	9.39	4.75	1.75	3.75	1.50	2.88	4.0	
<b>N77 Polymeric Sprocket</b> Pitch 2.308 Tooth Face at Pitch Line .75 Hub Style B Mandrel Bore .44	7	5.32	3.75	2.00	2.75	1.25	2.25	1.1
	8	6.03	3.75	2.00	2.75	1.25	2.25	1.3
	9	6.75	4.75	2.00	3.75	1.25	2.88	1.2
	10	7.47	4.75	2.00	3.75	1.50	2.88	1.5
	11	8.19	4.75	2.00	3.75	1.50	2.88	1.7
	12	8.92	4.75	2.00	3.75	1.50	2.88	2.0
	13	9.64	4.75	2.00	3.75	1.50	2.88	2.3
	14	10.37	4.75	2.00	3.75	1.63	2.88	2.7
15	11.10	4.75	2.00	3.75	1.75	2.88	3.0	

<b>N77 Polymeric Sprocket</b> Tooth sprocket with Cast Iron Body Pitch 2.308 Tooth Face at Pitch Line .75 Hub Style C Deep or Shallow Dished	Number of Teeth	P. D.	Hub Diameter	L. T. B.	Bolt Circle	Max. Bore	Weight <sup>③</sup>
	39	28.68	②	②	25	②	②

① Based upon keyed driver sprocket used with polymeric chain at the maximum rated working load. Consult Rexnord for information on steel hub inserts.

② Contact factory for hub sizes and weights.

③ Data without steel hub inserts.

**IMPORTANT: Polymeric sprockets with steel hub inserts are recommended for applications using metal chains.**

# SPROCKETS

## POLYMERIC SPROCKET AND IDLER WHEELS – (Cont'd.)

Dimensions are in inches. Weights are in pounds.

	Number of Teeth	P. D.	Hub <sup>®</sup>		Bore Capacities			Weight <sup>®</sup>
			O. D.	L. T. B.	W/O Key	With Key <sup>®</sup>		
					Max.	Min.	Max.	
	7	6.01	3.75	2.25	2.75	1.25	2.25	2.4
	8	6.82	3.75	2.25	2.75	1.50	2.25	3.1
	9	7.63	4.75	2.25	3.75	1.50	2.75	4.7
	10	8.44	4.75	2.25	3.75	1.50	2.75	5.0
	11	9.26	4.75	2.25	3.75	1.63	2.75	5.7
	12	10.08	4.75	2.25	3.75	1.75	2.75	6.2
	13	10.90	4.75	2.25	3.75	1.88	2.75	6.7
	14	11.73	4.75	2.25	3.75	1.88	2.75	7.3
	15	12.55	4.75	2.25	3.75	1.88	2.75	8.0
	16	13.37	7.00	4.00	6.00	1.50	4.00	15.8
	17	14.20	7.00	4.00	6.00	1.63	4.00	16.7
	18	15.03	7.00	4.00	6.00	1.63	4.00	17.4
	19	15.85	7.00	4.00	6.00	1.63	4.00	18.2
	20	16.68	7.00	4.00	6.00	1.75	4.00	19.3
	21	17.51	7.00	4.00	6.00	1.88	4.00	20.2
	22	18.33	7.00	4.00	6.00	1.88	4.00	21.4
	23	19.16	7.00	4.00	6.00	1.88	4.00	22.3
	24	19.99	7.00	4.00	6.00	1.88	4.00	22.5
	25	20.82	7.00	4.00	6.00	1.88	4.00	24.6
	26	21.64	7.00	4.00	6.00	1.88	4.00	26.1
	27	22.47	7.00	4.00	6.00	1.88	4.00	27.1
	28	23.30	7.00	4.00	6.00	1.88	4.00	28.6
	29	24.13	7.00	4.00	6.00	1.88	4.00	30.3
	30	24.96	7.00	4.00	6.00	1.88	4.00	31.4
	31	25.79	7.00	4.00	6.00	1.88	4.00	33.0

N78 Polymeric Sprocket  
Pitch 2.609  
Tooth Face at Pitch Line .94  
Hub Style B 7-15 Teeth  
Hub Style C 16-31 Teeth  
Mandrel Bore .94

N78 Polymeric Sprocket Segmental Tooth Sprocket with Cast Iron Body Pitch 2.609 Tooth Face at Pitch Line .94 Hub Style C Deep or Shallow Dished Contact Factory For Hub Sizes and Weights	Number of Teeth	P. D.	Hub Diameter	L. T. B.	Bolt Circle	Max. Bore	Weight <sup>®</sup>
	40	33.25	②	②	30	②	②
	43	35.65			30		
	48	39.89			30		
	54	44.87			30		

N78 All Polymeric Dished Sprocket with Segmental Tooth Pitch 2.609 Tooth Face at Pitch Line .94 Hub Style C Shallow or Deep Dished • Shallow Dished (SD) 1.5", 1.75", 2" • Deep Dished (DD) 6.25", 6.5"	Number of Teeth	P. D.	Max. Hub Diameter	L. T. B.	Bolt Circle	Max. Bore	Weight <sup>®</sup>
	40	33.25	8.0SD	7.31	30	5.44	81
	40	33.25	10.0SD	5.00	30	4.94	93
	43	35.65	8.0SD	7.31	30	5.44	92
	43	35.65	10.0SD	5.00	30	4.94	101
	48	39.89	8.0SD	7.31	30	5.44	112
	48	39.89	10.0SD	5.00	30	4.94	122

① Based upon keyed driver sprocket used with polymeric chain at the maximum rated working load. Consult Rexnord for information on steel hub inserts.

② Contact factory for hub sizes and weights.

③ Data without steel hub inserts.

**IMPORTANT:** Polymeric sprockets with steel hub inserts are recommended for applications using metal chains.

# ■ SPROCKETS

## POLYMERIC SPROCKET AND IDLER WHEELS – (Cont'd.)

Dimensions are in inches. Weights are in pounds.

SPROCKETS

	Number of Teeth	P. D.	Hub <sup>Ⓢ</sup>		Bore Capacities			Weight <sup>Ⓢ</sup>
					W/O Key	With Key <sup>Ⓢ</sup>		
			O. D.	L. T. B.	Max.	Min.	Max.	
<b>N82 Polymeric Sprocket</b> Pitch 3.075 Tooth Face at Pitch Line 1.13 Hub Style B 7-8 Teeth Hub Style C 9-18 Teeth Mandrel Bore .94	7	7.09	4.75	2.75	3.75	1.25	2.50	4.6
	8	8.04	4.75	2.75	3.75	1.38	2.50	5.2
	9	8.99	6.00	4.00	5.00	1.50	4.25	6.0
	10	9.95	7.00	4.00	5.00	1.50	4.25	6.8
	11	10.91	7.00	4.00	5.00	1.63	4.25	7.6
	12	11.88	7.00	4.00	5.00	1.75	4.25	8.6
	13	12.85	7.00	4.00	6.00	1.88	5.00	9.7
	14	13.82	7.00	4.00	6.00	1.88	5.00	10.8
	15	14.79	7.00	4.00	6.00	1.88	5.00	11.9
	16	15.76	7.00	4.00	6.00	1.88	5.00	13.0
17	16.73	7.00	4.00	6.00	1.88	5.00	14.1	
18	17.71	7.00	4.00	6.00	1.88	5.00	15.2	

<b>N82 Segmental Sprocket</b> Tooth sprocket with Cast Iron Body Pitch 3.075 Tooth Face at Pitch Line 1.13 Hub Style C Deep or Shallow Dished	Number of Teeth	P. D.	Hub Diameter	L. T. B.	Bolt Circle	Max. Bore	Weight <sup>Ⓢ</sup>
	36	35.28	Ⓢ	Ⓢ	25	Ⓢ	Ⓢ

<b>N82 Polymeric Dished Sprocket with Segmental Teeth</b> Pitch 3.075 Tooth Face at Pitch Line 1.3 Hub Style C Shallow or Deep Dished • Shallow Dished (SD) 1.5", 1.75", 2" • Deep Dished (DD) 6.25", 6.5"	Number of Teeth	P. D.	Max. Hub Diameter	L. T. B.	Bolt Circle	Max. Bore	Weight <sup>Ⓢ</sup>
	36	35.28	8.0SD	7.31	30	5.44	88
	36	35.28	10.0DD	5.00	30	4.94	100

	Number of Teeth	P. D.	Hub <sup>Ⓢ</sup>		Bore Capacities			Weight <sup>Ⓢ</sup>
					W/O Key	With Key <sup>Ⓢ</sup>		
			O. D.	L. T. B.	Max.	Min.	Max.	
<b>N250 All Polymeric</b> Pitch 2.500 Tooth Face at Pitch Line .63 Hub Style B Mandrel Bore .94	11	8.87	4.75	2.25	3.75	1.50	3.00	3.5
	12	9.66	4.75	2.25	3.75	1.50	3.00	4.1
	14	11.24	4.75	2.25	5.00	1.75	2.75	4.5

	Number of Teeth	P. D.	Hub <sup>Ⓢ</sup>		Bore Capacities			Weight <sup>Ⓢ</sup>
					W/O Key	With Key <sup>Ⓢ</sup>		
			O. D.	L. T. B.	Max.	Min.	Max.	
<b>N325 Polymeric Sprocket</b> Pitch 3.268 Tooth Face at Pitch Line .81 Hub Style C Mandrel Bore .94	10	10.58	4.75	3.00	3.75	1.50	3.00	5.7

	Number of Teeth	P. D.	Hub <sup>Ⓢ</sup>		Bore Capacities			Weight <sup>Ⓢ</sup>
					W/O Key	With Key <sup>Ⓢ</sup>		
			O. D.	L. T. B.	Max.	Min.	Max.	
<b>N9350 Polymeric Sprocket</b> Pitch 3.50 Tooth Face at Pitch Line .81 Hub Style C Mandrel Bore .94	10	11.33	4.75	3.00	3.75	1.88	2.75	6.2

Ⓢ Based upon keyed driver sprocket used with polymeric chain at the maximum rated working load. Consult Rexnord for information on steel hub inserts.

Ⓢ Contact factory for hub sizes and weights.

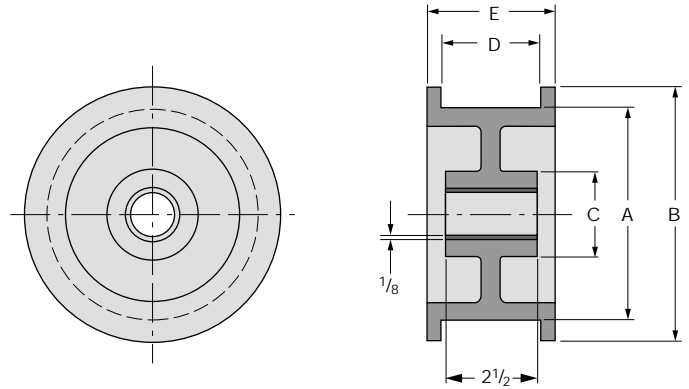
Ⓢ Data without steel hub inserts.

**IMPORTANT: Polymeric sprockets with steel hub inserts are recommended for applications using metal chains.**

# ■ SPROCKETS

## DOUBLE-FLANGED POLYMERIC IDLERS

Corrosion resistant Polymeric Double-Flanged Idlers are designed for use with polymeric chains to insure longer system life and quieter operation. The six inch (DF6) and eight inch (DF8) diameter double-flanged idler wheels are manufactured from high-strength, wear-resistant polymeric material with a bronze bushing assembled into each idler. Some of the chains used on these wheels: NH45, NH77, NH78\*, NHT78\*, N250, N250WS, N325, N348, N9350, N9350WS. DF8 – NH45, NH77, NH78, NHT78, WH78, NH82, WH82, WH260, WH784, WHT78, WHT130, WHT138.



### Features

- Made from polymeric and bronze materials that will not rust.
- Bronze bushed so that it can be used on nonrotating shafts as tail wheels, return support rollers, or drive take-up idlers.
- Double tapered flanges to effectively guide the chain into the center of the idler without unnecessary noise and chain wear.
- Engineered polymer reduces noise.
- Simple design means the idler is shaft ready and no machining is required.
- Designed so that two set collars will easily hold the idler in place.

\* *Must machine "D" Dimension to 3 inches.*

NOTE: For chains with extended rivets, single-flanged Polymeric idlers are available upon request.

Dimensions are in inches. Weights are in pounds.

Double Flanged Idler Wheels	Diameter			Length Thru Bore (L. T. B.)	Width		Max. Bore	Weight <sup>Ⓛ</sup>
	Inside	Outside	Hub		Inside	Outside		
	A	B	C		D	E		
6 D.F. Wheel	6	7.25	3.25	2.50	2.69	3.50	1.44	2.8
8 D.F. Wheel	8	9.50	4.25	3.00	3.63	4.50	2.44	4.5

Ⓛ Approx. – Not Bushed      Wheels are normally stocked.