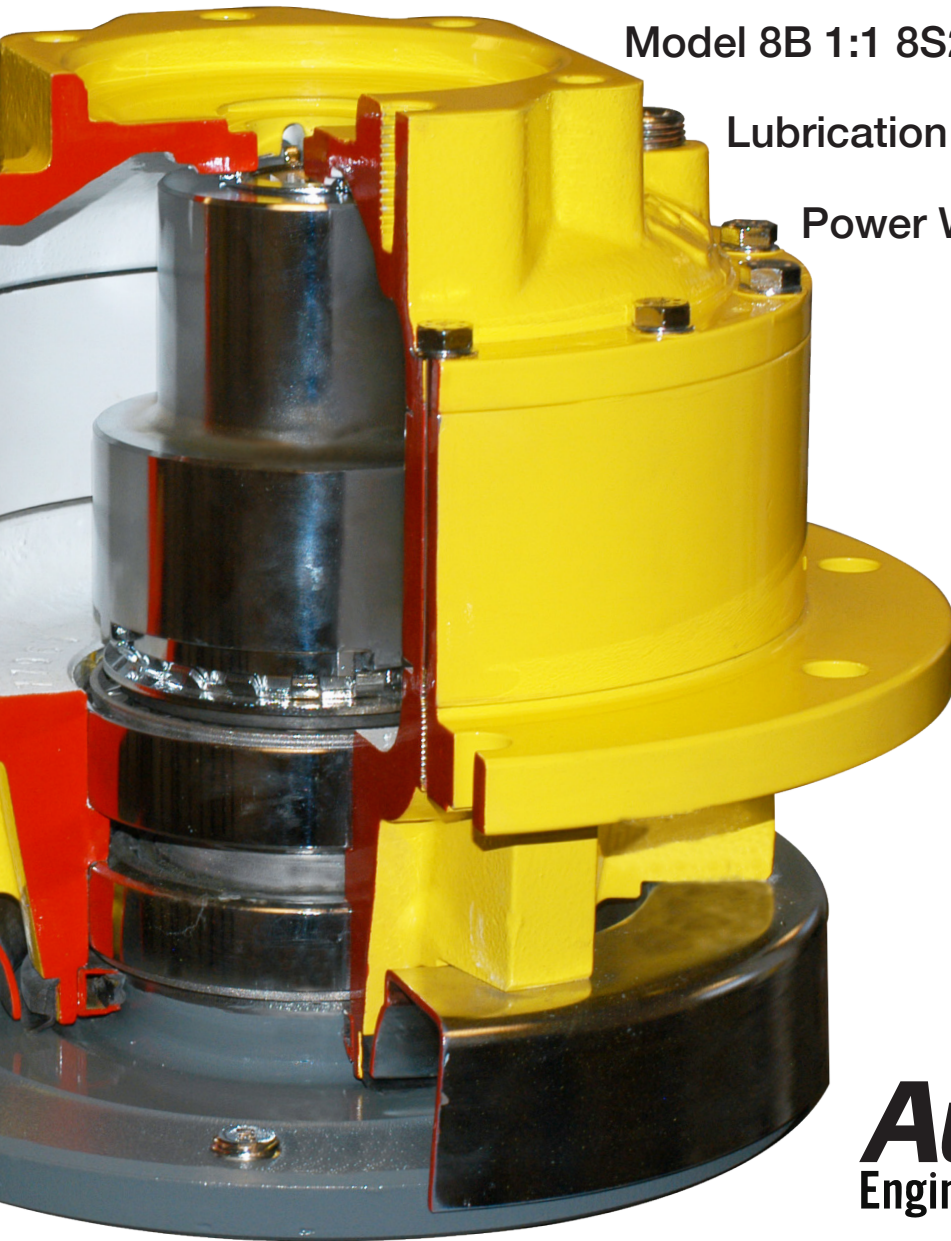


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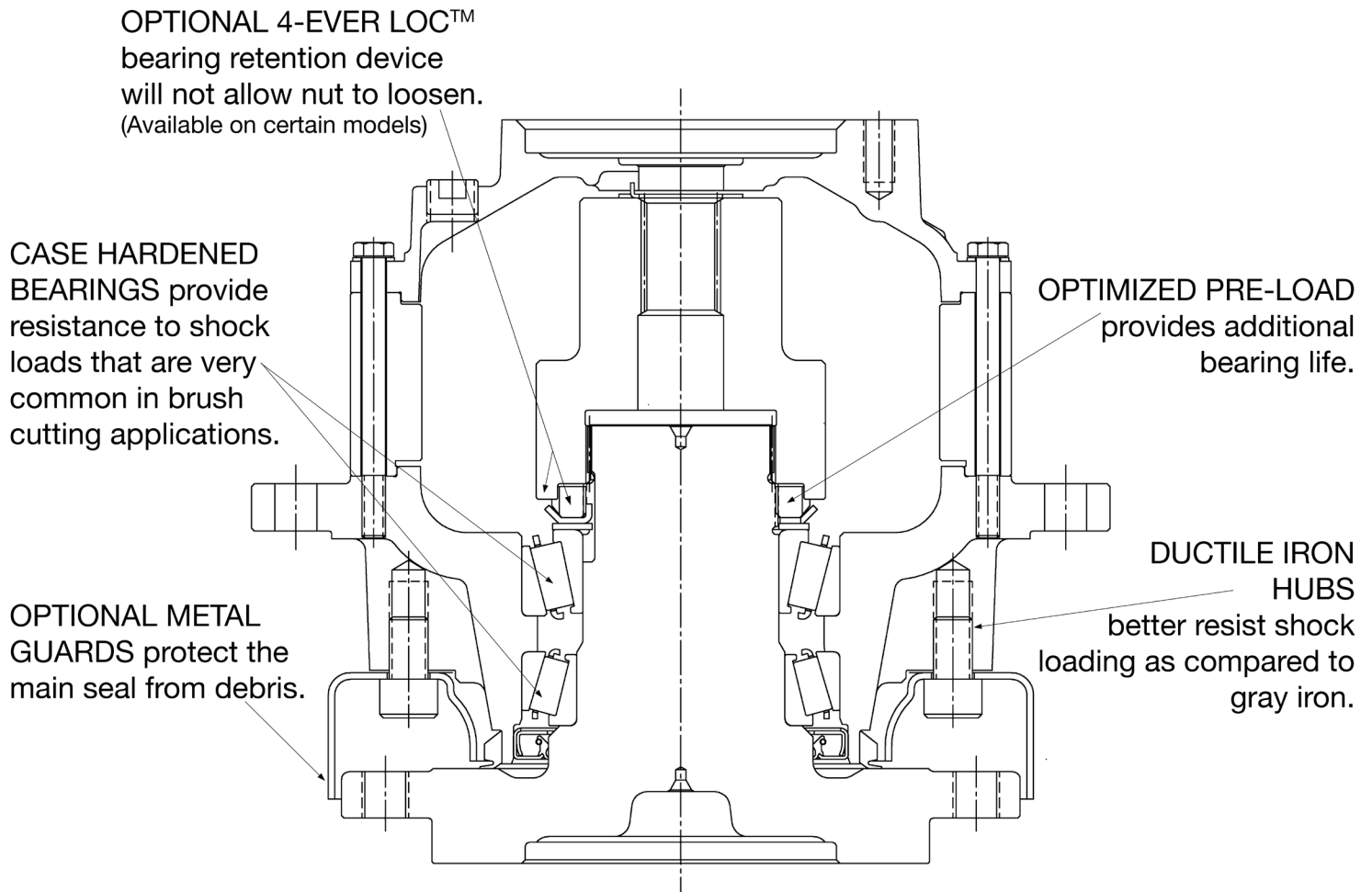
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**AuburnGear**  
Engineered Drive Solutions

## Power Wheel® 1:1 Direct Drive Features

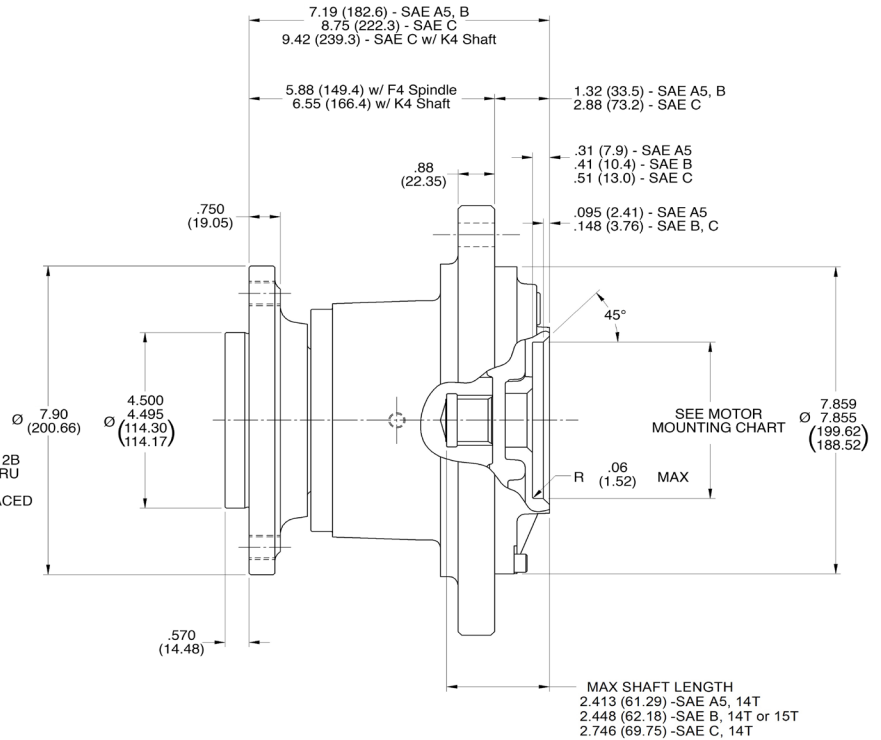
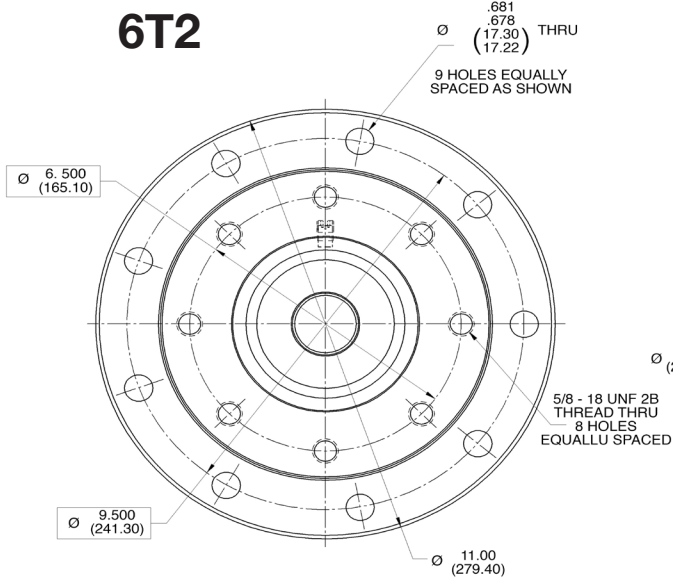
Auburn Gear's line of 1:1 Drives, sometimes referred to as bearing housings, have become the preferred standard in the brush cutting industry due to our robust designs. Our Trademarked 4-EVER LOC™ feature, available on most models, provides a positive lock to prevent any bearing nut loosening. By working with the leading OEMs in the market-place, we have identified the key design features needed to be successful in providing a proven, reliable system that customers demand.



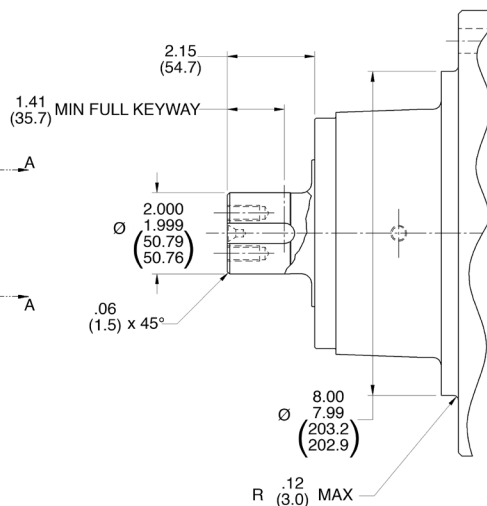
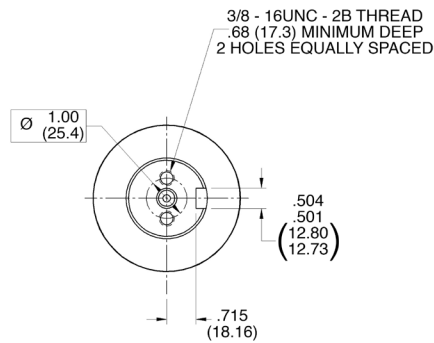
# MODEL 6B 1:1 Direct Drives

## GENERAL SPECIFICATIONS

Maximum Radial Load Capacity.....14,400 lbs. (6,600 kg)  
 Approximate Weight.....75 lbs. (34 kg)  
 Vertical Spindle Down Oil Capacity.....10 oz (300 mL)



## K4—Shaft Option



## FEATURE CHART: Model 6B 1:1 Direct Drives

OPTIONS	DESCRIPTION	MAKE ALL SELECTIONS IN ONE COLUMN			ORDER CODES	USE OPTION ORDER CODES TO BUILD ORDER NUMBER			
BASE MODEL	Model 6B 1:1 Drive	•	•	•	6T2	6T2			
MOTOR PILOT/HUB	A5	•			A5				
	SAE B		•		B		B		
	SAE C			•	C				
INPUT SPLINE	14T 12/24	•	•	•	14			14	
	15T 16/32	•	•	•	15				
RATIO	1:1	•	•	•	00				00
SHAFT/SPINDLE OPTIONS	(8) 5/8"-11 on 6.50" BC	•	•	•	F4				F4
	2.00" Keyed Shaft	•	•	•	K4				

Example of complete order code: 6T2 B 14 00 F4

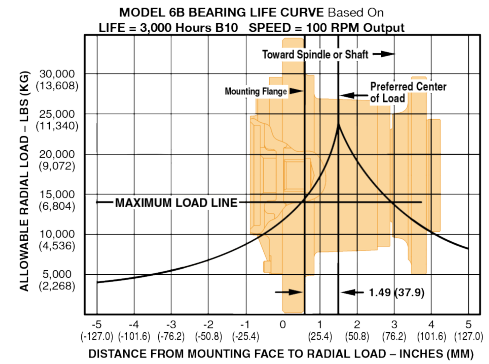
## MOTOR MOUNTING CHART

Motor Mounting Hole Dimensions	Pilot Diameter
<b>SAE A</b> (2) — 3/8" -16 UNC, -2B Thd Holes on 4.187 (106.35) B.C. diameter*	Ø 3.251 - 3.256 (82.58 - 82.70)
<b>A2</b> (2) — 1/2" -13 UNC, -2B Thd Holes on 4.187 (106.35) B.C. diameter*	Ø 3.251 - 3.256 (82.58 - 82.70)
<b>A5</b> (4) — 1/2" -13 UNC, -2B Thd Holes on 4.187 (106.35) B.C. diameter*	Ø 3.251 - 3.256 (82.58 - 82.70)
<b>SAE B</b> (4) — 1/2" -13 UNC, -2B Thd Holes on 5.75 (146.1) B.C. diameter*	Ø 4.001 - 4.006 (101.62 - 101.75)
<b>SAE C</b> (4) — 1/2" -13 UNC, -2B Thd Holes on 6.375 (161.93) B.C. diameter* <b>OR</b> (2) — 5/8" -11 UNC, -2B Thd Holes on 7.125 (180.97) B.C. diameter*	Ø 5.001 - 5.008 (127.02 - 127.15)

\* "O" RING OR GASKET REQUIRED (Not Supplied by Auburn Gear)  
"O" RING SIZES: SAE "A" 2-042 (614163), SAE "B" 2-155 (614120), SAE "C" 2-159 (614136)

**NOTE:**  
The data presented in this catalog is for general information and preliminary layout purposes only. Auburn Gear, through its policy of continual improvement, reserves the right to update its products; therefore, the information presented is subject to change. For specific application and/or dimensional information, contact Auburn Gear.

## BEARING LIFE CURVE



**NOTE:**  
These curves are supplied as a design guide and apply to resultant radial load only. They indicate the importance of maintaining wheel position over the bearing center.

For actual analysis, applications should be reviewed by Auburn Gear Engineering using data supplied on Application Data Form.

## BEARING LOAD, LIFE & SPEED RELATIONS

$$LF = \frac{SF \times R}{R'}$$

**R** = Allowable resultant load for given location from mounting flange

**R'** = Anticipated load at location from mounting flange

**LF** = Life Factor from table (see below)

**SF** = Speed Factor from table (see below)

Output Speed (RPM)	SF	LF	Bearing Hours B-10 Life
5	2.456	.584	500
10	1.994	.719	1000
20	1.620	.812	1500
30	1.435	.886	2000
40	1.316	.947	2500
50	1.231	1.000	3000
60	1.165	1.047	3500
70	1.113	1.090	4000
80	1.069	1.130	4500
90	1.032	1.166	5000
100	1.000	1.231	6000
200	.812	1.289	7000
300	.719	1.342	8000
400	.659	1.390	9000
500	.617	1.435	10000

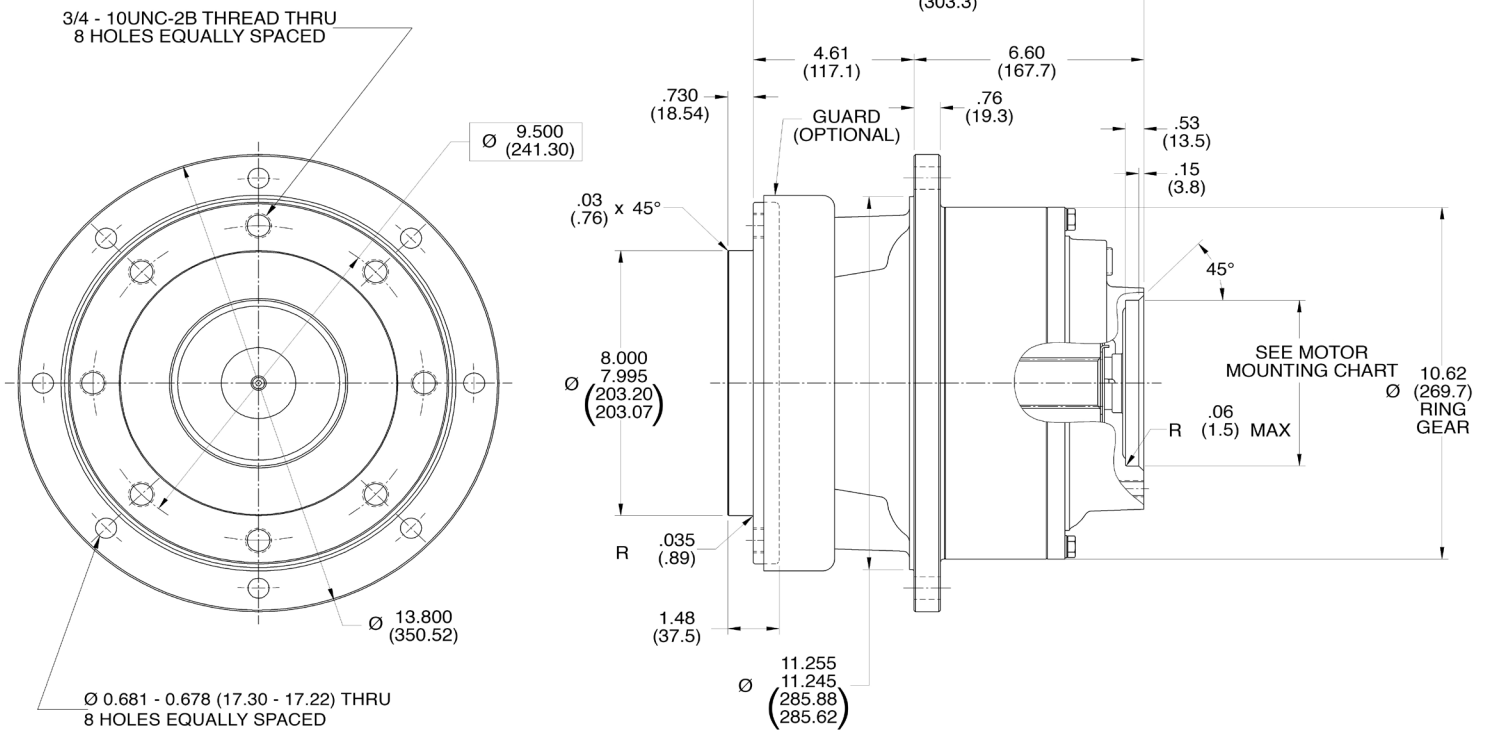
**CAUTION:** The same torsional loading constraints used in the driving mode must be used in the braking mode when braking through the Power Wheel Drive gear set.

# MODEL 8B 1:1 8T2 Direct Drives

## GENERAL SPECIFICATIONS

Maximum Radial Load Capacity.....18,800 lbs. (8,600 kg)  
 Approximate Weight.....145 lbs. (66 kg)  
 Vertical Spindle Down Oil Capacity.....85 oz (2500 mL)

### 8T2



## FEATURE CHART: Model 8B 1:1 8T2 Direct Drives

OPTIONS	DESCRIPTION	MAKE ALL SELECTIONS IN ONE COLUMN		ORDER CODES		USE OPTION ORDER CODES TO BUILD ORDER NUMBER			
BASE MODEL	Model 8B 1:1 Drive	•	•	8T2	8T2				
MOTOR PILOT/HUB	SAE C	•	•	C	C				
INPUT SPLINE	14T 12/24	•		14					
	17T 12/24		•	17		17			
RATIO	1:1	•	•	00				00	
SHAFT/SPINDLE OPTIONS	(8) 3/4"-11 on 6.50" BC	•	•	F5				F5	
OPTIONS	Guard	•	•	G1					G1
	Boot Seal	•	•	Z					Z

Example of complete order code: 8T2 C 17 00 F5 G1Z

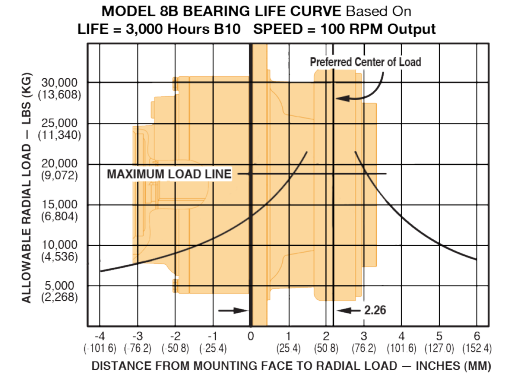
## MOTOR MOUNTING CHART

Motor Mounting Hole Dimensions	Pilot Diameter
SAE C (4) — 1/2" -13 UNC, -2B Thd Holes on 6.375 (161.93) B.C. diameter*	Ø 5.001 - 5.008 (127.02 - 127.15)
OR (2) — 5/8" -11 UNC, -2B Thd Holes on 7.125 (180.97) B.C. diameter*	

\* "O" RING OR GASKET REQUIRED (Not Supplied by Auburn Gear)  
"O" RING SIZE: SAE "C" 2-159 (614134)

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**NOTE:**  
These curves are supplied as a design guide and apply to resultant radial load only. They indicate the importance of maintaining wheel position over the bearing center.

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## BEARING LOAD, LIFE & SPEED RELATIONS

$$LF = \frac{SF \times R}{R'}$$

R = Allowable resultant load for given location from mounting flange

R' = Anticipated load at location from mounting flange

LF = Life Factor from table (see below)

SF = Speed Factor from table (see below)

Output Speed (RPM)	SF	LF	Bearing Hours B-10 Life
5	2.456	.584	500
10	1.994	.719	1000
20	1.620	.812	1500
30	1.435	.886	2000
40	1.316	.947	2500
50	1.231	1.000	3000
60	1.165	1.047	3500
70	1.113	1.090	4000
80	1.069	1.130	4500
90	1.032	1.166	5000
100	1.000	1.231	6000
200	.812	1.289	7000
300	.719	1.342	8000
400	.659	1.390	9000
500	.617	1.435	10000

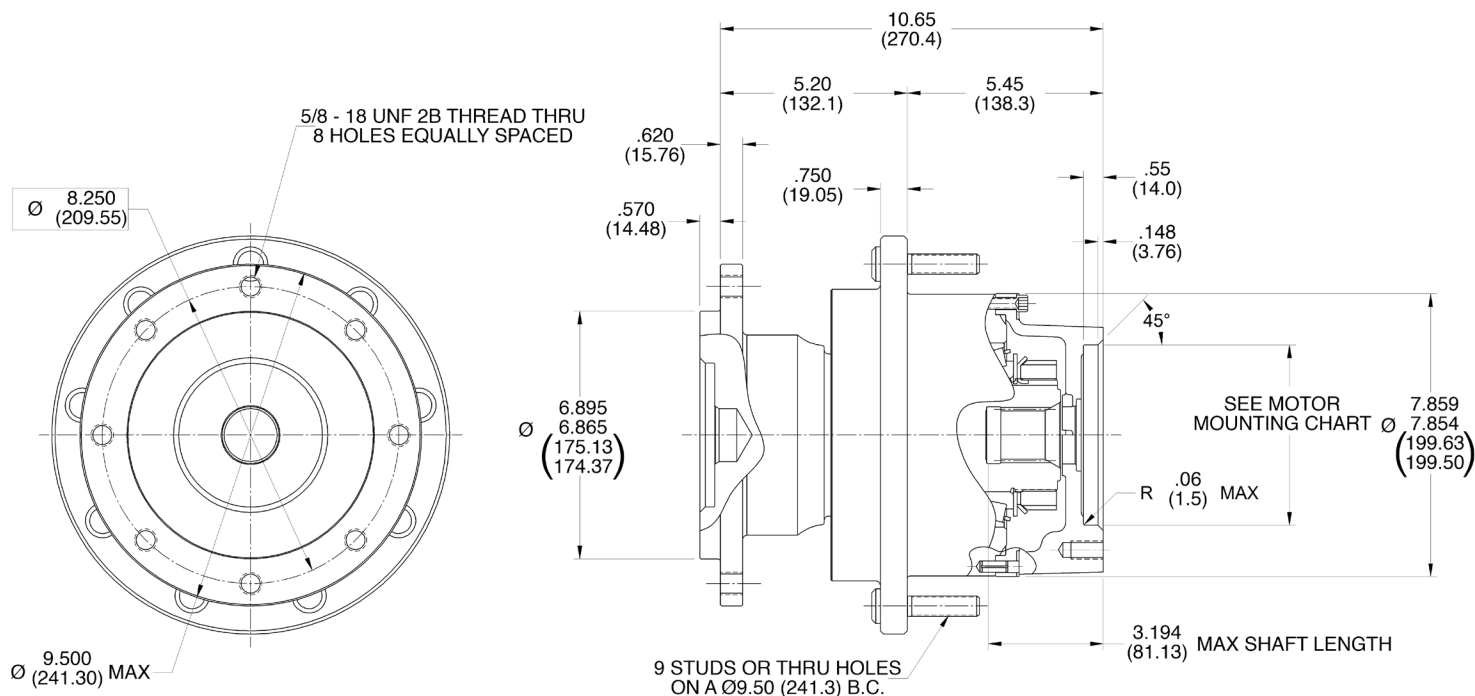
**CAUTION:** The same torsional loading constraints used in the driving mode must be used in the braking mode when braking through the Power Wheel Drive gear set.

# MODEL 8B 1:1 8S2 Direct Drives

## GENERAL SPECIFICATIONS

Maximum Radial Load Capacity.....26,000 lbs. (11,800 kg)  
 Approximate Weight.....120 lbs. (55 kg)  
 Vertical Spindle Down Oil Capacity.....25 oz (750 mL)

### 8S2





## FEATURE CHART: Model 8B 1:1 8S2 Direct Drives

OPTIONS	DESCRIPTION	MAKE ALL SELECTIONS IN ONE COLUMN		ORDER CODES		USE OPTION ORDER CODES TO BUILD ORDER NUMBER			
BASE MODEL	Model 8B 1:1 Drive	•	•	8S2	8S2				
MOTOR PILOT/HUB	SAE C	•	•	C	C				
INPUT SPLINE	14T 12/24	•		14					
	17T 12/24		•	17		17			
RATIO	1:1	•	•	00				00	
WHEEL STUDS IN HUB	5/8"-18 x 2.98"	•	•	12					
	9/16"-18 x 2.75"	•	•	18				18	
SPINDLE OPTIONS	(8) 5/8"-18 on 8.25" BC	•	•	F7					F7

Example of complete order code: 8S2 C 17 00 18 F7

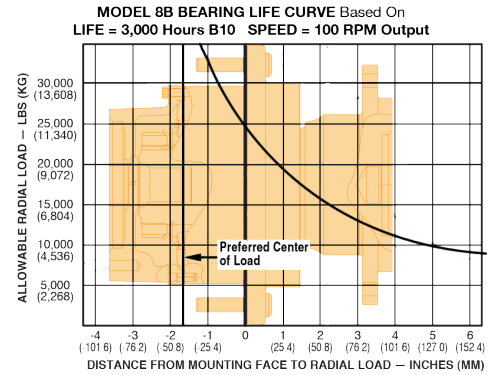
## MOTOR MOUNTING CHART

Motor Mounting Hole Dimensions	Pilot Diameter
SAE C (4) — 1/2" -13 UNC, -2B Thd Holes on 6.375 (161.93) B.C. diameter*	Ø 5.001 - 5.008 (127.02 - 127.15)
OR (2) — 5/8" -13 UNC, -2B Thd Holes on 7.125 (180.97) B.C. diameter*	

\* "O" RING OR GASKET REQUIRED (Not Supplied by Auburn Gear)  
"O" RING SIZE: SAE "C" 2-159 (614134)

**NOTE:**  
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80	1.069	1.130	4500
90	1.032	1.166	5000
100	1.000	1.231	6000
200	.812	1.289	7000
300	.719	1.342	8000
400	.659	1.390	9000
500	.617	1.435	10000

**CAUTION:** The same torsional loading constraints used in the driving mode must be used in the braking mode when braking through the Power Wheel Drive gear set.

## LUBRICATION DATA

Power Wheel Planetary Drives are shipped without lubricant and must be filled to the proper level prior to start-up.

### 1. Type

In normal applications use an extreme pressure lubricant API-GL-5 approved. Auburn Gear recommends SAE 80W, 90, 80W-90, and 85W-90 grades of lube under normal climate and operating conditions. See chart below. For severe or abnormal applications with special requirements consult either Auburn Gear or a lubricant manufacturer for further assistance.

### 2. Change Interval

Initial lubrication change after 50 hours of operation. Subsequent changes every 1000 hours or yearly whichever comes first.

### 3. Lube Temperature

Continuous operating temperatures of 160° F are allowable. Maximum intermittent temperature recommended is 200 F.

### 4. Amount of Lube

The unit should be half full when mounted horizontal. Lube levels for other mounts will vary. Consult Auburn Gear for details

### 5. Shaft or Spindle Up Mounting

If mounting unit vertically with shaft or spindle up, special provisions apply to ensure adequate lubrication of output bearings. Consult Auburn Gear.

### AUBURN GEAR POWER WHEEL LOW TEMPERATURE GEAR LUBE REQUIREMENT

SAE Viscosity Grade	Auburn Gear Recommended Minimum Temperature
75W-90	-40°F (-40°C)*
80W, 80W-90	-15°F (-26°C)*
85W, 85W-90	10°F (-26°C)*
90	35°F (2°C)

\* Maximum temperature for Brookfield Viscosity<sup>1</sup> of 150,000 centipoise (cP)<sup>2</sup> per SAE J306 MAR85

<sup>1</sup> Brookfield Viscosity— *apparent viscosity* as determined under ASTM D 2983

<sup>2</sup> 150,000 cP determined to provide sufficient low temperature lube properties for Auburn Gear Power Wheels

## **POWER WHEEL® WARRANTY**

Seller warrants to Purchaser that its Power Wheel® planetary gear products are free from defects in material and workmanship under normal use and service for a period of one year from the date the product is shown to have been placed into operation by original user or for two years from date of shipment from seller's plant, whichever shall first occur.

Seller's obligation under this warranty is expressly limited to the repair or replacement at its option, of the Power Wheel which is returned with a written claim of defect f.o.b. seller's factory, Auburn, Indiana, U.S.A., and which is determined by Seller to be defective in fact.

THIS IS THE SOLE AND ONLY WARRANTY OF SELLER AND NO OTHER WARRANTY IS APPLICABLE EITHER FOR EXPRESSED OR IMPLIED, IN FACT OR BY LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OF FITNESS FOR A PARTICULAR USE OR PURPOSE.

The sole and only remedy in regard to any defective Power Wheel shall be the repair or replacement thereof herein provided, and seller shall not be liable for any consequential, special, incidental, or punitive damages, losses or expenses resulting from or caused by any defects.

AUBURN GEAR LLC  
AUBURN, INDIANA, U.S.A

*Providing Technology, Quality, & Customer Support Around the Globe*



*All specifications and data contained herein are nominal and subject to change without notice.  
Specific applications should be referred to Auburn Gear for current information.*