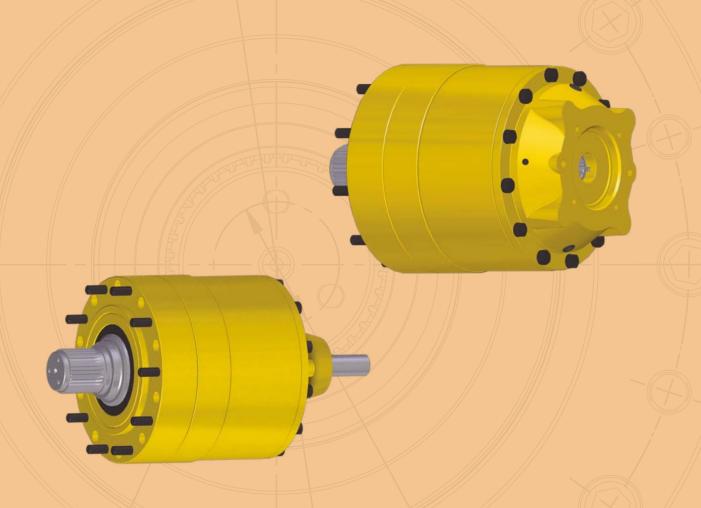
Power Wheel® Horizontal Feed Mixer Drives Model HM10, HM20, HM30





AuburnGear.com 260-925-3200 400 E. Auburn Drive, Auburn, IN 46706

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Power Wheel® Feed Mixer Drives

Our feed mixer gearboxes are designed, sourced, manufactured, and assembled in our facility in North America, allowing us to ensure the use of the highest quality components and materials while providing an industry leading lead time.

Located in Auburn, Indiana, USA, Auburn Gear provides unmatched technical and after sale service and support.



Vertical Mixer Product Line See auburngear.com



Horizontal Mixer Product Line

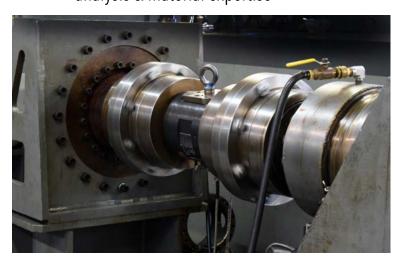
Designed to Perform

Auburn Gear has worked with numerous OEMs and end users to fully understand the performance and life expectancy requirements. The "voice of the customer" has led our design efforts. It has produced cooler operating oil temperatures, thus extending lubricant life. Our designs, when needed, provide integral oil channels, eliminating the need for external plumbing which is prone to leakage and damage. Lastly, our planetary designs provide for quiet, smooth, and efficient operation along with the ability to transfer more power in a given space.



Auburn Gear Testing

- Product validation using both in-house DVP&R and actual field acquired data
- Critical information for customer approvals
- Validation using high capacity on-site, in-house vertical and horizontal dyne capabilities
- Calculated Gear Life per AGMA standars based on duty cycle using current gearing/material options
- Physical confirmation testing using vertical & horizontal dynamometers
- In-house destructive and non-destructive analysis & material expertise

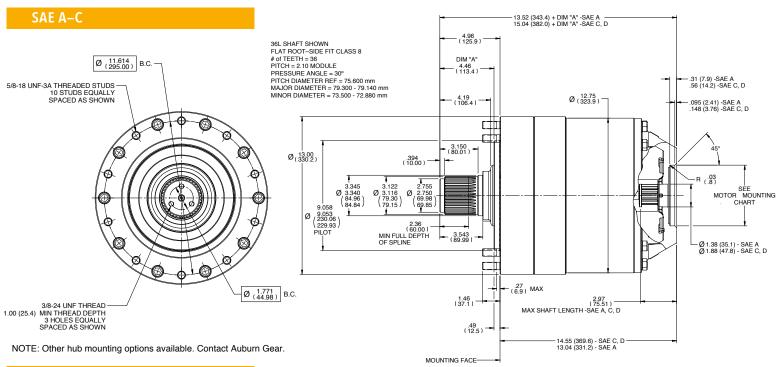


GENERAL SPECIFICATIONS

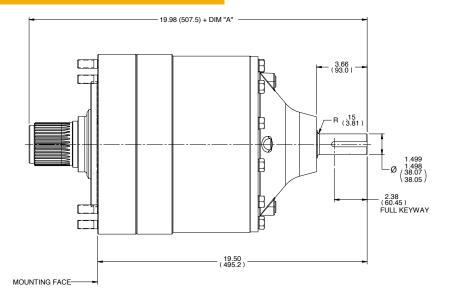
Model HM10

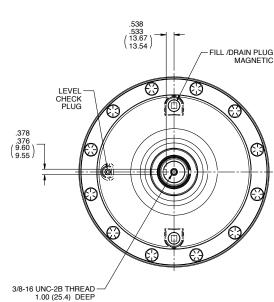
Max. Intermittent Output Torque ^{1,2}	200,000 lb-in (22,600 Nm)
Max. Input Speed ²	5,000 RPM
Approximate Weight	300 lb (135 kg)
Oil Capacity ³	96 oz (2,850 cc)
Max. Radial Load (@Pref. Load Center)	31,900 (14,500 kg)

- ¹ Depending on the duty cycle and the nature of the application, a normal coninuous output torque of 1/3 to 1/2 of the maximum intermittent should yield satisfactory Power Wheel® life. Customer testing and application analysis is strongly recommended.
- ² If application exceeds published limit, contact Auburn Gear.
- ³ Oil capacity indicated is an approximation. Unit should be filled 1/2 full of recommended oil.



KOO INPUT





FEATURE CHART: Model HM10 Horizontal Feed Mixer Drives

Options	Description		All Sele ne Colu		Order Codes	Use Option Order Codes To Build Order Number						
BASE MODEL	Model HM10	*	*	*	200S3	20053						
MOTOR PILOT/ HUB	SAE A SAE C SAE D Input Shaft & Hub (as shown)	*	*	*	A4 C4 D4 4		4					
INPUT SPLINE OR SHAFT*	14T 12/24 17T 12/24 13T 8/16 1-1/2" Male Keyed Input	*	*	*	14 17 13 K00			K00				
RATIO OPTIONS	17.79:1 20.93:1 27.18:1 37.82:1 45.58:1 52.35:1	* * * * * *	* * * * * *	*	17 20 27 37 45 52				27			
OUTPUT SHAFTS**	20T 6/12 23T 8/16 36T 2.10 Module 3-3/4" Keyed	* * *	* * *	* * * *	20 23 36L K2					36L		
SPECIAL FEATURES	Multi-Lip Cartridge Seal	*	*	*	T						T	
		200S3	4	K00	45	36L	T					

Bearing Chart currently unavailable. Contact Auburn Gear for more information.

MOTOR MOUNTING CHART # of Tapped Holes, Thread Size, SAE **Pilot Diameter** and Bolt Circle (2) 1/2"-13 UNC-2B on 4.187" 3.251"-3.256" Α2 (106.35mm) B.C. (82.5mm-82.70mm) (4) 1/2"-13 UNC-2B on 6.375" 5.001"-5.006" (161.93mm) B.C. & (2) 5/8"-11 UNC-2B on C (127.03mm-127.15mm) 7.125" (180.97mm) B.C. (4) 3/4"-10UNC-2B on 9.000" 6.001"-6.006" D (228.60mm) B.C. (152.43mm-152.55mm)

OUTPUT SHAFT OPTIONS** (2) .50 (12.7) - 20 U.N.C. 2B Thd 1.00 (25.4) Min. Deep (2) .50 (12.7) - 20 U.N.C. 2B Thd. 1.00 (25.4) Min. Deep 20 Dim "A' Dim "A" — 3.68 (93.5) (113.5) 4.19 (106.4) 3.57 (90.7) 2.90_ -2.25 -(57.2) Min. Full (73.7) Min. Full Spline Len Spline Len 1.750 (44.45) 4 External Involute Spline 30 Flat Root-Side Fit per ANSI Standard 92.1–1970 # of Teeth = 20 Pitch = 6/12 O.D. = 3.500–3.490 (88.90–88.65) Contact AG for detailed spline info. External Involute Spline 30 Flat Root-Side Fit per ANSI Standard 92.1–1970 # of Teeth = 23 Pitch = 8/16 O.D. = 2.971–2.965 (75.46–75.31) Contact AG for detailed spline info. Dim "A" 4.30 (109.2) 2 Holes 20 U.N.C. 2B Thd. 1.00 (25.4) Deep 4.19 (106.4) 3.25 (82.55) Min. Full Keyway 1.003 - 1.000 (25.48 - 25.40) 3.750 - 3.748 (95.25 - 95.20) 1.307 – 1.302 (33.20 – 33.07)

^{*}Other input shaft options available. Contact Auburn Gear.

^{**}For other shaft or flanged outputs. Contact Auburn Gear.

GENERAL SPECIFICATIONS

Model HM20

Model HM30

Max. Intermittent Output Torque^{1,2}.....350,000 lb-in (39,600 Nm)

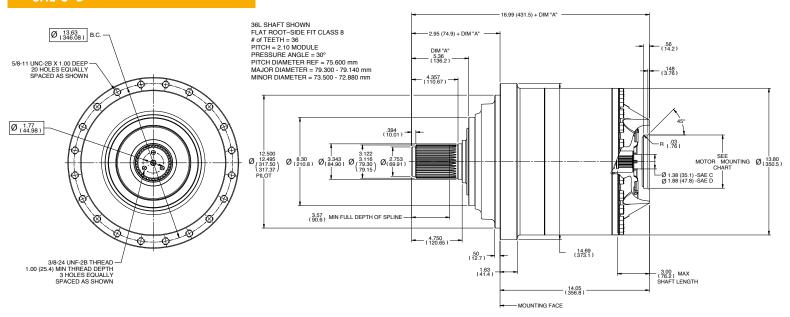
Max. Input Speed².....5,000 RPM

Approximate Weight......470 lb (215 kg)

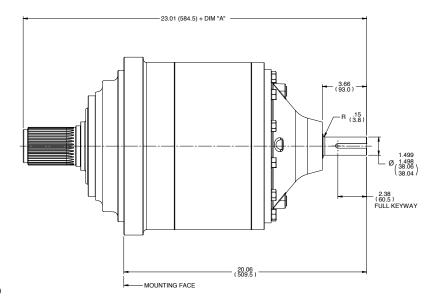
Oil Capacity³.....130 oz (3,800 cc)

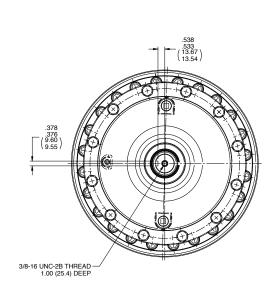
Max. Radial Load (@Pref. Load Center).....36,000 (16,300 kg)

SAE C-D



KOO INPUT





¹ Depending on the duty cycle and the nature of the application, a normal coninuous output torque of 1/3 to 1/2 of the maximum intermittent should yield satisfactory Power Wheel® life. Customer testing and application analysis is strongly recommended.

² If application exceeds published limit, contact Auburn Gear.

³ Oil capacity indicated is an approximation. Unit should be filled 1/2 full of recommended oil.

FEATURE CHART: Model HM20 and HM30 Horizontal Feed Mixer Drives

Options	Description	Make All Selections In One Column						Order Codes	Use Option Order Codes To Build Order Number				
BASE MODEL	Model 250 Model 350	*	*	*	*	*	*	250S 350S	250\$				
MOTOR PILOT/ HUB	SAE C SAE D Input Shaft & Hub (as shown)	*	*	*	*	*	*	C D X		Χ			
INPUT SPLINE OR SHAFT*	14T 12/24 17 12/24 13T 8/16 1-1/2" Male Keyed Input	*	*	*	*	*	*	14 17 13 K00			K00		
RATIO OPTIONS	20.53:1 26.07:1 29.94:1 40.02:1 45.97:1	* * * * *	* * * *	* * * *	* * * *	* * * *	* * * *	20 26 29 40 45				45	
OUTPUT SHAFTS**	36T 2.10 Module 20T 6/12 3-3/4" Keyed Shaft	* *	* * *	* *	* *	* * *	* * *	36L 20 K2					36L
		Exa	amp	le o	f co	mpl	ete	order code:	250	Χ	K00	45	36L

Bearing Chart currently unavailable. Contact Auburn Gear for more information.

MOTOR MOUNTING CHART # of Tapped Holes, Thread Size, SAE **Pilot Diameter** and Bolt Circle (4) 1/2"-13 UNC-2B on 6.375" 5.001"-5.006" (161.93mm) B.C. & (2) 5/8"-11 UNC-2B C (127.03mm-127.15mm) on 7.125" (180.97mm) B.C. (4) 3/4"-10UNC-2B on 9.000" 6.001"-6.006" D (228.60mm) B.C. (152.43mm-152.55mm)

(2) 1/2 – 20 U.N.C. 2B Thd. 1.00 (25.4) Min. Deep Dim "A" 4.81 (122.2) 4.19 (106.4) 2.90 (73.7) Min. Full Spline Length Spline Length 1.750 (44.45) External Involute Spline 30 Flat Root-Side Fit per ANSI Standard 92.1–1970 # of Teeth = 20 Pitch-6/12 0.D.=3.500-3.490 (88.96-88.65) Contact Auburn Gear for detailed spline information. K2 1/2–20 U.N.C. 2B Thd. 1.00 (25.4) Deep 1.003–1.000 (25.48–25.40) 1.207–1.302 (33.20–33.07) 3.750–3.748 (95.25–95.20)

^{*}Other input shaft options available. Contact Auburn Gear.

^{**}For other shaft or flanged outputs. Contact Auburn Gear.

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 chages every 1000 hours of yearly whichever comes first.

3. Lube Temperature

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

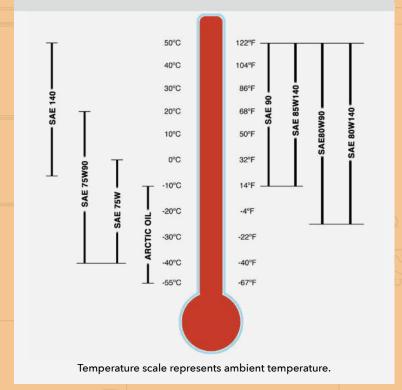
4. Amount of Lube

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

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.

POWER WHEEL TEMPERATURE GEAR LUBE REQUIREMENTS





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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.