Chelsea[®] 288 Series

Constant Mesh 10-Bolt PTO for Allison 3000/4000 Family Transmissions



Overview:

The 288 Series is a 10-Bolt, constant mesh PTO design which features wider gears and larger capacity bearing to provide a single, continuous duty torque rating of up to 390 lb-ft. The 288 Series is now built with ductile iron bearing caps, which are 117% stronger than its predecessor. It also features an o-ring sealing configuration between the housing and bearing cap to improve clamp load. These improvements are focused on reducing the damaging vibrational effects caused by today's and future engine designs. The standard output shaft features positive stop for driveline outputs which eliminates oil seal damage from shaft couplings. Wet Spline technology is available for the 288 Series, which prevents premature spline fretting and increases pump shaft life by providing a fresh, clean flow of oil through the PTO and pump shaft.

Applications:

 Snow & Ice 	 Aerial
 Vacuum 	 Refuse

Contact Information:

Parker Hannifin Corporation **Chelsea Products Division** 8225 Hacks Cross Road Olive Branch, MS 38654 USA

Phone: 1-888-PH4-TRUK (1-888-744-8785) chd_support@support.parker.com

www.parker.com/chelsea





Product Features and Benefits:

- Ductile Iron Bearing Cap 117% stronger than gray iron.
- Improved Seal O-ring sealing configuration to reduce vibrational effects and improve clamp load.
- Torque Features a single, continuous duty torque rating.
- · Constant Mesh Economical workhorse features a cast iron housing.
- Clearance Interference issues have been reduced with rotatable, cast iron flanges.
- Positive Stop Driveline outputs; eliminates oil seal damage from coupling.
- Protection Wet Spline Lubrication option provides 7 to 10 times greater shaft life.
- · Speeds Nine speed ratios including low and high speeds.
- Hose Included No need to order separately.

288 SERIES POWER TAKE-OFF SPECIFICATIONS AND TECHNICAL DATA

288 G B FJ P Basic Model 288 Mounting Option G = Standard 10-Bolt Mount w/ Metric Studs	- M 5 XV Output Option Driveline Output AB = DIN 120 Flange AC = DIN 100 Flange XD = Rd Standard Shaft (1-1/4" - 5/16" Key) XV = 1410 Series Companion Flange
Gear Ratio 3 & 5 Arr. 8 Arr. B = 22/50 B = 22/53 C = 25/47 C = 25/50 D = 28/44 D = 28/47 G = 31/41 G = 31/44 K = 33/39 M = 35/40 M = 35/37 P = 37/38 P = 37/35 S = 39/36 S = 39/33 T = 42/33 T = 41/31 Input Option FJ = Allison KV = Caterpillar NOTE: For more details, see Application Catalog (Transmission Model Number required)	Pump Mount 47 RB = Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T) 47 RK = Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T) 47 RF = Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (1" - 15T) 47 RF = Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (1" - 15T) 47 RF = Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T) 47 RS = Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T) 47 RY = Rotatable ISO 7653 Pump Mount DIN 5462 Shaft Assembly Arrangement 3 = Gear forward, Shaft rear, Left Side bulge up, Right Side bulge down 5 = Gear forward, Shaft rear, Right Side bulge up, Left Side bulge down 8 = Gear forward, Shaft rear, both sides bulge straight up Shift Option M = Constant Mesh

- Lube Option
- Pressure
- **P** = Pressure Lube
- **R** = Valve Cap Rotated 120°
- \$ = Valve Cap Rotated 240°
 Wet Spline
- 5 W = Wet Spline
- V = Valve Cap Rotated 120° w/ Wet Spline
- 5 Y = Valve Cap Rotated 240° w/ Wet Spline
- ⁵ Automatically pressured lubed
- ⁴⁷ Available with Wet Spline



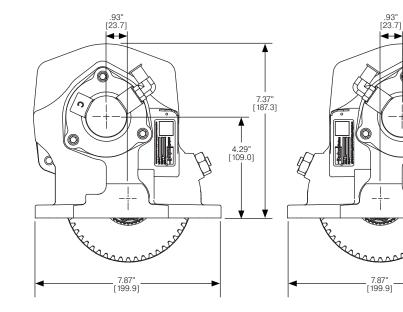
288 SERIES POWER TAKE-OFF SPECIFICATIONS AND TECHNICAL DATA

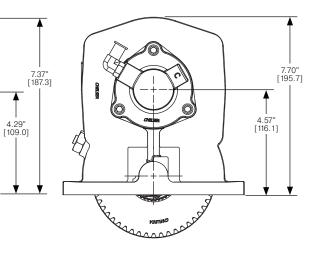
C

O

þ

Dimensions – For PTO output information see application catalog

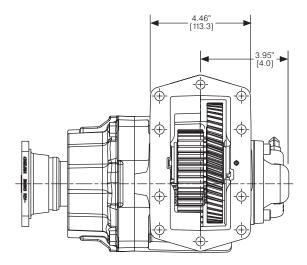




Assembly 3

Assembly 5

Assembly 8



Specifications Chart	Approximate Weight: 44 lbs. [20 kg]								
	288*B	288*C	288*D	288*G	288*K	288*M	288*P	288*S	288*T
Continuous Torque Rating (Ib-ft) [N-m]	300 [407]	390 [529]	390 [529]	360 [488]	340 [461]	318 [431]	290 [393]	265 [359]	240 [325]
HP Rating for Continuous Duty									
At 500 RPM of Output Shaft (HP) [kW]	29 [21]	37 [28]	37 [28]	34 [26]	32 [24]	30 [23]	28 [21]	25 [19]	23 [17]
At 1000 RPM of Output Shaft (HP) [kW]	57 [43]	74 [55]	74 [55]	69 [51]	65 [48]	61 [45]	55 [41]	50 [38]	46 [34]

© 2023 Parker Hannifin Corporation



ENGINEERING YOUR SUCCESS.

HY25-0209-B1/US December 2023