

Chelsea® 897 Series

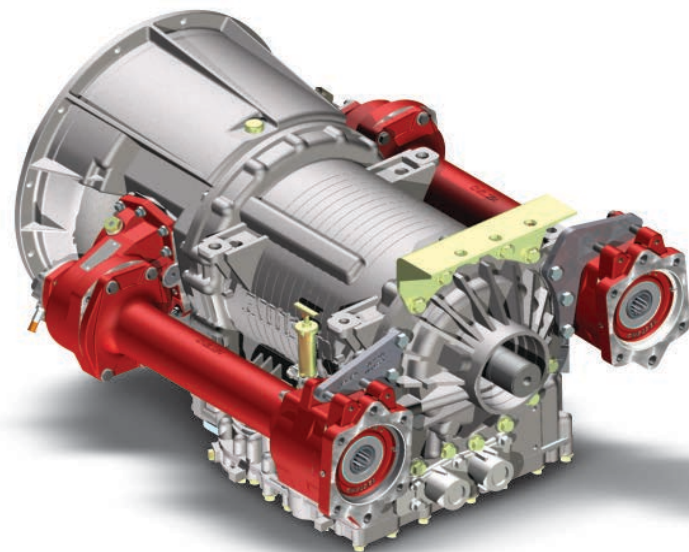
Constant Mesh PTO for
Allison 3000 & 4000 Transmission Family



Overview:

The 897 Series Power Take-Off (PTO) mounts like a standard side mounted PTO with an extended shaft and additional bracket at the rear of the transmission for greater pump support. The output of the PTO is beyond the rear of the transmission where there is extra space to mount larger pumps. The 897 Series is a single unit, not a PTO with an extension. The main shaft is a one piece solid shaft eliminating the input splines between the PTO and the shaft. The output utilizes Wet Spline Technology which virtually eliminates spline fretting problems.

- Fire & Rescue
- Pumper Cleaner
- Truck Cranes
- Refuse



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Product Features and Benefits:

- **Pump Clearance** – Moves the PTO output flange to the rear of the transmission.
- **Compact Design** – Requires less space than current PTOs.
- **Power** – Torque ratings up to 670 lbs-ft.
- **Ratio Choices** – Multiple output ratios available.
- **Ease of Installation** – Installed in two pieces.
- **Single piece shaft** – Solid steel shaft.
- **Wet Spline outputs** – Extends shaft life for Pump & PTO.
- **Patent Pending**



ENGINEERING YOUR SUCCESS.

897 SERIES POWER TAKE-OFF SPECIFICATIONS AND TECHNICAL DATA

897 L A FJ W - M 5 XS

Basic Model
897

Mounting Option

- X = Less Bracket & Hose Kit
- 3000 Family Side/Side**
- L = MD Left Side (5 Arr.)
- N = MD Left Side w/ Cooler (3 Arr.)
- M = MD Left Side w/ Retarder (5 Arr.)
- R = MD Right Side w/ or w/o Cooler (5 Arr.)
- Y = MD Right Rotated CW (5 Arr.)
- 3000 Family Side/Top**
- E = MD Left Side (5 Arr.)
- F = MD Left Side w/ Retarder (5 Arr.)
- T = MD Top Side w/ or w/o Cooler, w/o Retarder (5 Arr.)
- 4000 Family**
- H = HD Left Side (5 Arr.)
- C = HD Left Side w/ Cooler (3 Arr.)
- P = HD Left Side w/ Retarder (5 Arr.)
- J = HD Left Side w/ Retarder (3 Arr.)
- U = HD Top Side (5 Arr.)
- K = HD Top Side w/ Retarder (5 Arr.)

Gear Ratio

- A = 24/40 E = 29/35
- B = 25/39 F = 31/33
- C = 26/38 ^{33 61}G = 33/31
- D = 27/37 ^{33 61}H = 34/30

Input Option

- FJ = Allison

NOTE: For more details, see Application Catalog (Transmission model number required)

Output Option

3 Assembly Arrangement

- AC = DIN 100 Flange
- AB = DIN 120 Flange
- ³⁶CK = SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
- ³⁶CF = SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
- ³⁶CZ = SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
- ³⁶CS = SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
- ZS = SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
- XV = 1410 Series Companion Flange
- XY = ISO 7653 Pump Mounting DIN 5462 Shaft

5 Assembly Arrangement

- AC = DIN 100 Flange
- AB = DIN 120 Flange
- ³⁵XK = SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
- ³⁵AF = SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
- ³⁵AZ = SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
- ³⁵XS = SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
- ZS = SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
- ³⁴DA = SAE D 4-Bolt Flange, SAE D Shaft (1-3/4" - 13T)
- XV = 1410 Series Companion Flange
- XY = ISO 7653 Pump Mounting DIN 5462 Shaft

Assembly Arrangement

- ³⁶3 = Right side - bulge down
Left side - bulge up
- ³⁵5 = Left side - bulge down
Right side - bulge up

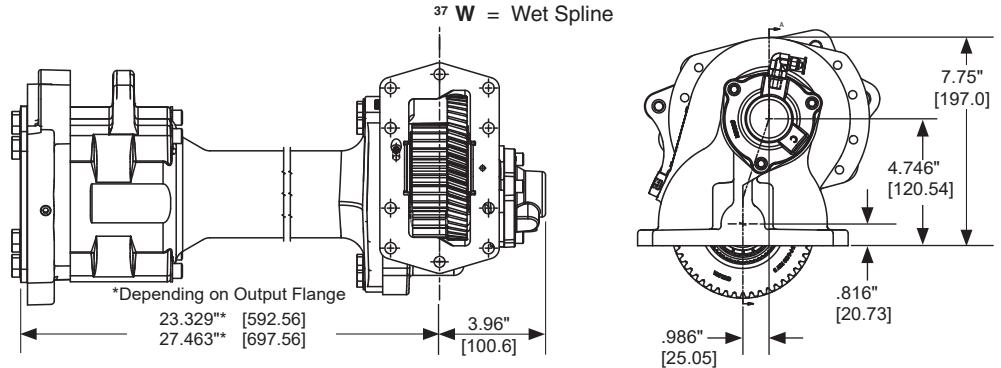
Shift Option

- M = Constant Mesh

Lube Option

Wet Spline

- ³⁷W = Wet Spline



³³ G & H ratio for Allison MD only
³⁴ DA output is not available for transmission with a retarder or cooler
³⁵ XS, XK, AF, AZ outputs only available with 5 ass'y arrangement
³⁶ CS, CK, CF, CZ outputs only available with 3 ass'y arrangement
³⁷ Automatically Pressure lubed with wet spline
⁶¹ For HD requires Engineering Approval

Specifications Chart	Approximate Weight: 86 lbs. [39 kg]							
	897*A	897*B	897*C	897*D	897*E	897*F	897*G	897*H
Intermittent & Continuous Torque Rating (lbs-ft) [Nm]	670 [908]	630 [854]	590 [800]	550 [746]	485 [658]	430 [583]	379 [513]	356 [482]
HP Rating for Intermittent & Continuous Duty								
At 500 RPM of Output Shaft (HP) [Kw]	64 [48]	60 [45]	56 [42]	52 [39]	46 [35]	41 [31]	36 [27]	34 [25]
At 1000 RPM of Output Shaft (HP) [Kw]	128 [95]	120 [90]	112 [84]	105 [78]	92 [69]	82 [61]	72 [53]	68 [50]

