

CHELSEA® 878L SERIES

Constant Mesh Extended Shaft PTO for Allison 3000/4000 Family Transmissions

Designed for Allison transmissions with cooler or retarder options, the 878L Series of PTOs allows direct mounted pumps to be moved further rearward in the truck chassis. When compared to our 890 Series, the elongated shaft design of the 878L provides an additional ~7 inches between PTO aperture and pump flange to allow for even larger pumps. An optimized bracket system available from Chelsea allows for the installation of pumps up to 120 lbs. The 878L are 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. High capacity bearings and superior gear designs provide impressive torque ratings up to 670 lb-ft for ultimate performance. Electronic Overspeed Control (EOC) is available to protect your driven equipment. Wet Spline is standard with all 5 outputs to ensure 7-10 times greater pump shaft life. Multiple gear ratios provide a wide variety of speeds to meet a variety of application requirements.

Applications:

- Fire & Rescue
- Refuse
- Pumper Cleaner
- Oil & Gas

Product Features and Benefits:

- Ductile Iron bearing cap – 117% stronger than gray iron.
- Improved Seal – O-ring sealing configuration.
- Power – Torque capacity up to 670 lb-ft / 908 N-m.
- Pump Clearance – Moves the PTO output flange rear of transmission cooler or retarder.
- Ease of Installation – Simplified output support bracketing.
- Quiet – Quiet Gear™ input gear available.
- Speeds – Eight speed ratios including low and high.
- Outputs – Five rotatable pump flange options.
- Protection – Wet Spline extends PTO and pump shaft life.

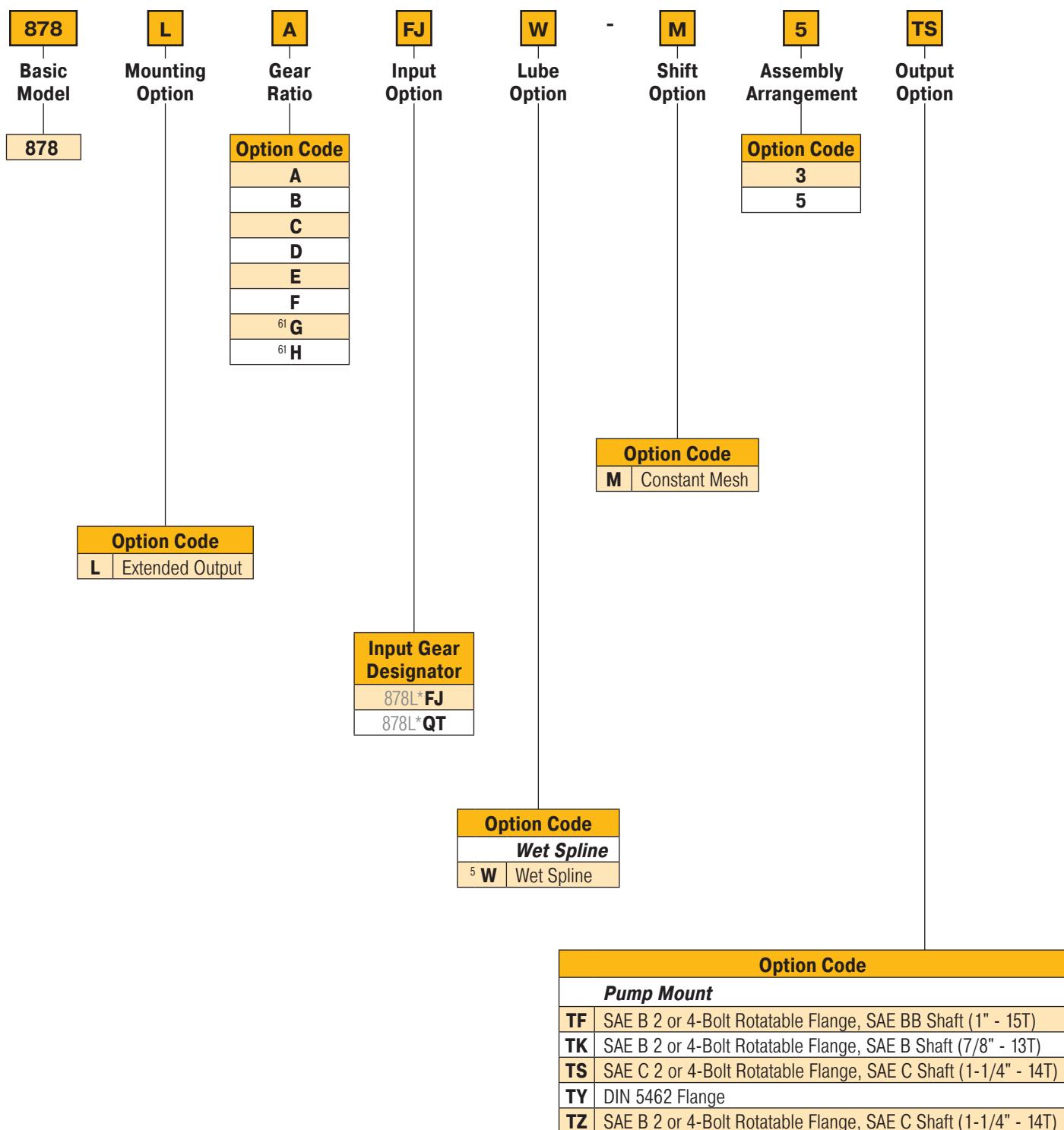


878L Series



878L Series Power Take-Off – Allison

Model Number Designator

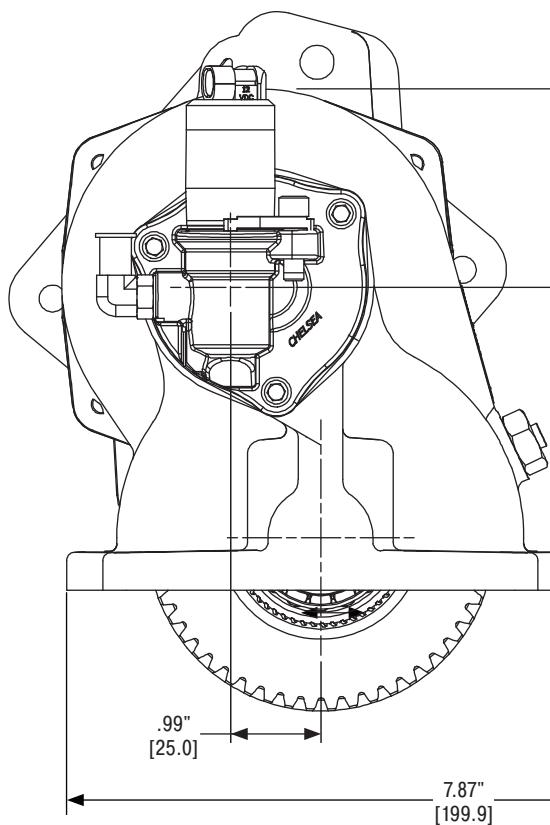


⁵ Automatically pressure lubed

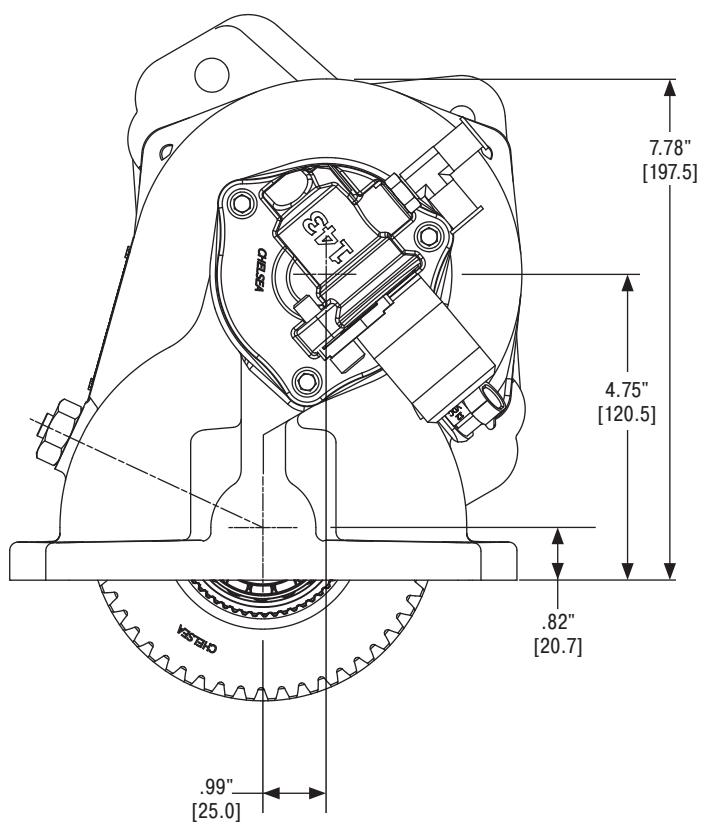
⁶¹ For the Allison 4000 Series Engineering Approval required

878L Series Power Take-Off – Allison

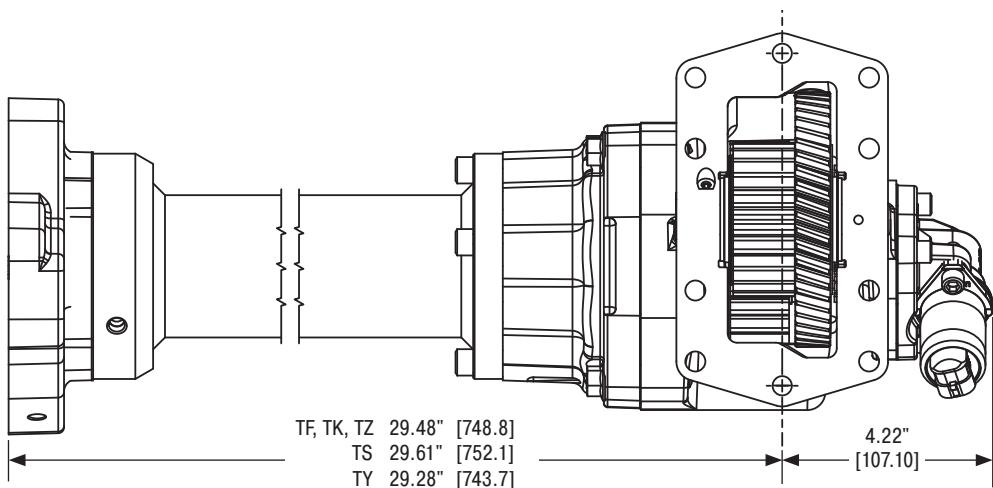
Dimensions – For PTO output information see application catalog



878L Assembly 3



878 L Assembly 5



878L Series Power Take-Off – Allison

For PTO output information see application catalog

Specifications

Specifications Chart		Approximate Weight: 152 lbs. [69 kg]							
		878L* A	878L* B	878L* C	878L* D	878L* E	878L* F	878L* G	878L* H
Continuous Torque Rating lb-ft [N-m]		670 [909]	630 [854]	590 [800]	550 [746]	485 [658]	430 [583]	380 [515]	355 [481]
HP Rating for Continuous Service									
At 500 RPM of Output Shaft HP [kW]		64 [48]	60 [45]	56 [42]	52 [39]	46 [34]	41 [31]	36 [27]	34 [25]
At 1000 RPM of Output Shaft HP [kW]		128 [95]	120 [89]	112 [84]	105 [78]	92 [69]	82 [61]	72 [54]	68 [50]

Brackets and Bolt Kits Supplied Separately from PTO

Model	Arr.	Allison Transmission	Location	Bracket	Bolt Kit w/o Cooler or Retarder	Bolt Kit with Cooler	Bolt Kit with Retarder
878L	5	3000 Family	Left	50-P-162	329928-1X	329928-1X	329928-3X
878L	3	3000 Family	Left	50-P-164	329928-1X	329928-1X	329928-3X
878L	5	3000 Family	Right	50-P-161	329928-1X	329928-1X	329928-3X
878L	3	3000 Family	Right	50-P-157	329928-1X	329928-1X	329928-3X
878L	5	3000 Family Side/Top	Left	50-P-163	329928-1X	329928-1X	329928-3X
878L	5	4000 Family	Left	50-P-165	329928-1X		329928-2X
878L	3	4000 Family	Left	50-P-158	329928-1X	329928-1X	329928-2X

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