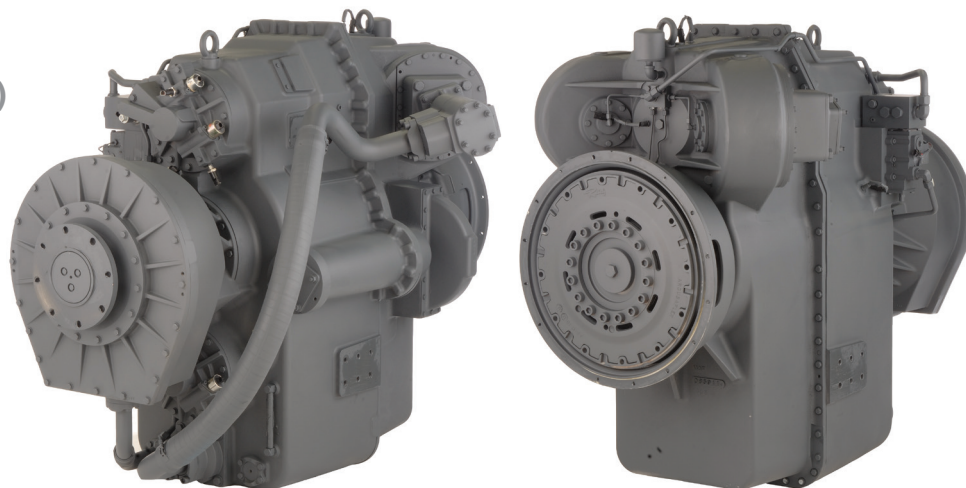


TA90-7601C**UP TO 2237 KW (3000 HP)**

The TA90-7601C Series transmission system consists of a 9-speed coaxial power-shift transmission and the advanced TDEC-500 electronic control system.

**FEATURES & BENEFITS:**

- Designed to match the engine life on pressure-pumping rigs for oil and gas well stimulation. The robust simplicity of the counter shaft design provides for an expected L10 life of 10,000 hours.*
- Designed specifically for the pressure-pumping market, the transmission does not require throttle dipping for any of the range-to-range shifts. It is designed to be power shifted under all loaded or unloaded situations.
- Lightweight yet durable aluminum housings to reduce overall vehicle weight.
- Automated line test/hydraulic pressure test for pressure-pumping applications.
- Does not require a torque converter, further contributing to overall weight savings.
- Compact in size and able to fit between the frame rails of mobile equipment.
- Small, evenly spaced gear ratio steps ensure that well pressure does not drop during gear shifts.
- Simple plumbing to ease installation in the cramped quarters of a pressure-pumping rig.
- In most cases uses the same oil as the engine, simplifying onsite fluids logistics and servicing requirements.
- Includes a highly flexible coupling to reduce the damaging effects of the torsional excitations by the engine and piston pump.
- Internal brake capability to hold the output shaft when not pumping.
- Oil fill port and sight glass are co-located, making oil fills a one-person operation.



**TDEC-500
ELECTRONIC CONTROL SYSTEM**

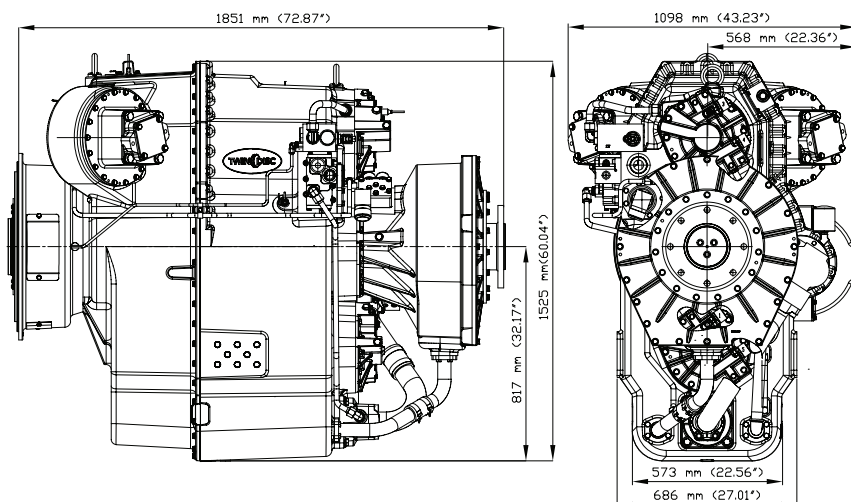
*The life estimate given is typical. Actual life will vary depending on the applications duty cycle.

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Overall
Ratios	4.45	3.84	3.26	2.74	2.36	2.01	1.75	1.51	1.28	3.47
Steps	1.16	1.18	1.19	1.16	1.18	1.15	1.16	1.18	N/A	N/A



Specifications subject to change without prior notice in the interest of continual product improvement.
Contact your local Twin Disc representative for engineering specifications. Patent pending.

TA90-7601C AUTOMATIC TRANSMISSION SYSTEMS



SPECIFICATIONS

TA90-7601C	9 forward speeds, no reverse
Maximum gross input power	2237 kW (3000 hp) at 1900 RPM
Maximum gross input torque	12890 Nm (9513 lb-ft*)
Maximum gross output torque	33895 Nm (25000 lb-ft)
Maximum input speed	1900 RPM
Dry Weight - estimated, without PTO	2472 kg (5450 lbs)
Available live PTO drives	0, 1 or 2
Power Each	149 kW (200 hp)
Available PTO ratios, per SAE J744	127-2, 22-4 (SAE B 2-bolt) 127-4, 22-4 (SAE B 4-bolt) 152-4, 32-4 (SAE C 4-bolt) 165-4, 44-4 (SAE D 4-bolt)
Available PTO ratios	1.087:1 step-up 1.579:1 step-up
Oil volume	83 liters (22 USG)
Oil flow	409 LPM (108 GPM)
Mounting	SAE #0 or SAE #00 dry flywheel housing
Highly flexible input coupling	SAE 460 & SAE 530

*Maximum permissible gross input torque may vary depending on engaged range and operating profile. Twin Disc application approval is required.

Important Notice: Torsional Vibration

Disregarding system torsional compatibility could cause damage to components in the drive train resulting in loss of mobility. At minimum, system incompatibility could result in gear clatter at low speeds.

The responsibility for ensuring that the torsional compatibility of the system is satisfactory rests with the assembler of the drive and driven equipment.

Torsional vibration analysis can be made by the engine builder, marine survey societies, independent consultants and others. Twin Disc is prepared to assist in finding solutions to potential torsional problems that relate to the transmission.

Twin Disc, Incorporated reminds users of these products that their safe operation depends on use in compliance with engineering information provided in our catalog. Users are also reminded that safe operation depends on proper installation, operation and routine maintenance and inspection under prevailing conditions. It is the responsibility of users (and not Twin Disc, Incorporated) to provide and install guards or safety devices which may be required by recognized safety standards or by the Occupational Safety and Health Act of 1970 and its subsequent provisions.

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For more than a century, we've been putting horsepower to work by designing, engineering and manufacturing rugged-duty industrial products. Our products and our reputation are bolted to the most renowned engine manufacturers and equipment OEMs in the world. Our mission is to make your machines and vehicles more productive, more durable, more operator-friendly, more cost-effective. From design and installation consultation through after-sale support, Twin Disc and its distributors are committed to your business. No one knows more about managing horsepower in more ways than Twin Disc.

TRANSMISSIONS • CLUTCHES • PTOS
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GEARBOXES • HYDRAULIC PTO PRODUCTS



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