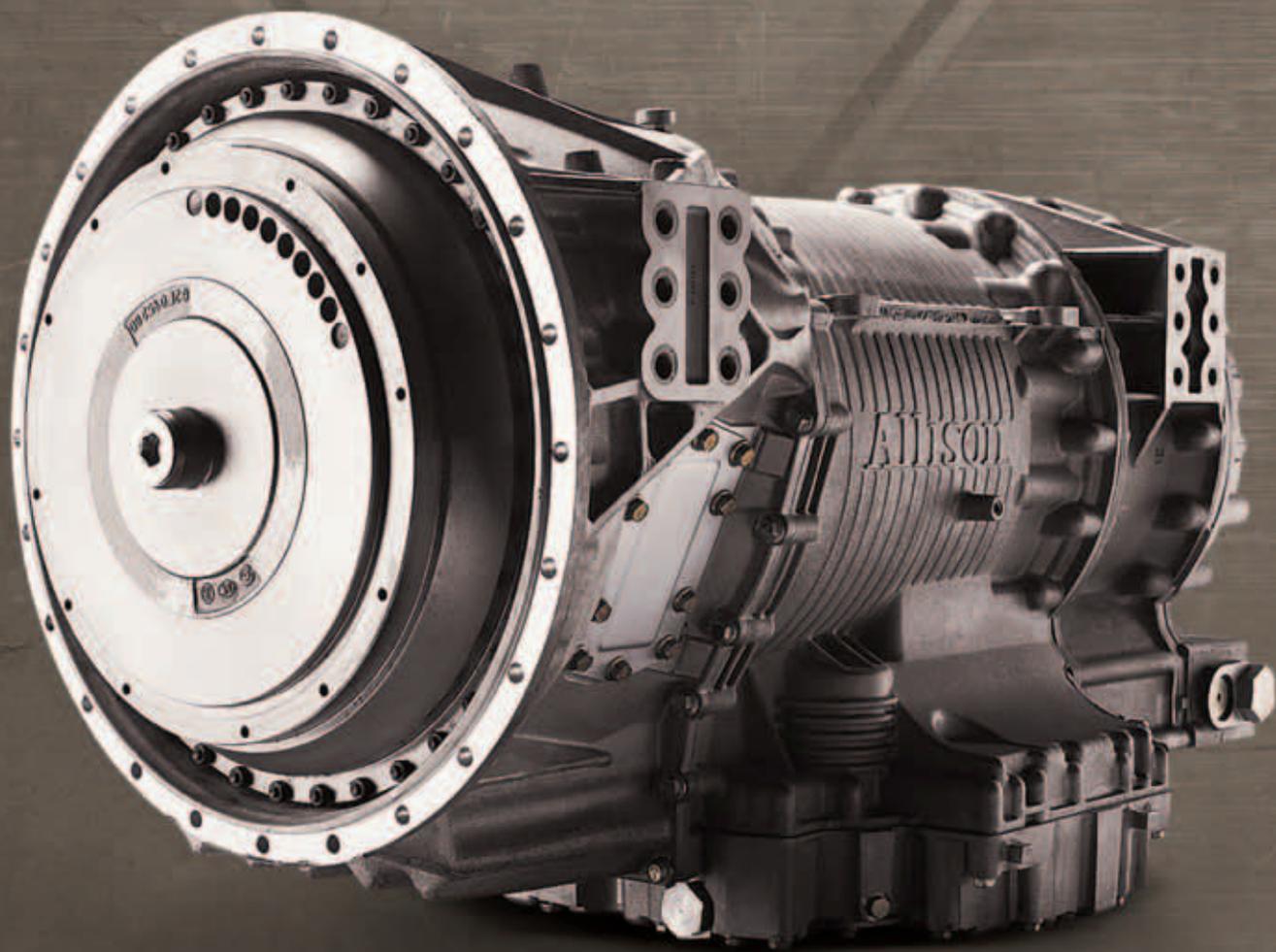




WORK AREA

OIL FIELD SERIES



**Stronger and smarter** > Oil and gas applications are about as continuous rugged duty as you'll ever find. That's why Allison engineered muscle into all critical wear components of our Oil Field Series transmission models. This alone would enhance service life, but we also made these transmissions smarter than other transmissions. Thanks to Allison's latest electronic controls, these transmissions work more precisely and more efficiently, reducing unnecessary shifts, thereby reducing stress and wear.

The Allison Oil Field Series models are tough transmissions that know how to control themselves.



**Right for the job** > From drilling, cementing, fracturing, hoisting and pumping, Allison Oil Field Series automatic transmissions offer the right horsepower ratings and ratios to make your specifying job easier. And, with installation options such as remote mounting, these models are at home in a vehicle, truck bed, skid or fixed platform.

Allison Oil Field Series models can also serve for vehicle propulsion. Taking a heavy vehicle off-road and into the backcountry can stress the driveline, cargo and driver. But the Allison Automatic's smooth, seamless shifts make negotiating rough terrain faster and easier, even for an inexperienced driver. And since it applies just the right amount of torque to the wheels for the engine speed and ground conditions, there's less chance of getting bogged down or hung up. So, not only will the Allison Oil Field Series models help you improve well productivity, it will help you get there faster.



This next generation of Allison electronic controls offers a variety of features to further improve fuel economy and maximize transmission protection with advanced prognostics.



## 5<sup>th</sup> Generation ELECTRONIC CONTROLS

### Fuel Economy and Efficiency

To get the most out of every drop of fuel, Allison 5th Generation Electronic Controls offer an enhanced array of smart controls designed to increase fuel economy and fuel efficiency for the specific needs of any application. These include Load-Based Shift Scheduling, Reduced Engine Load at Stop, Shift Energy Management, Vehicle Acceleration Control and the new Enhanced Converter Load Release. Next generation Allison 5th Generation Electronic Controls provide unprecedented flexibility when it comes to specifying maximum fuel economy.

### Prognostics

Calibrated to the vehicle's particular operating requirements, Allison prognostics monitor various operating parameters – oil level, oil life, filter life and transmission health – to determine and alert when service is due. This eliminates unnecessary oil and filter changes and provides maximum transmission protection.



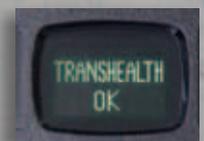
#### Oil Life Monitor

Based on the vehicle's duty cycle, this feature determines fluid life and alerts you when a fluid change is required. Not only does it help you get maximum oil life while providing the maximum protection for the transmission, the Oil Life Monitor also saves you money by preventing unnecessary fluid changes.



#### Filter Life Monitor

This provides an alert when the transmission's fluid filter(s) need to be replaced. It helps extend filter change intervals to reduce routine maintenance downtime and saves you money in the long run, all the while providing maximum protection for the transmission.



#### Transmission Health Monitor

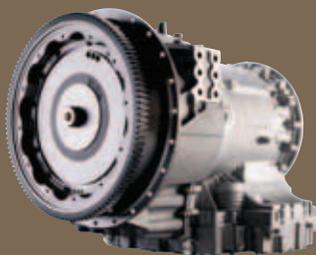
This prognostic feature determines the condition of the transmission's clutches and alerts you when clutch maintenance is required. It helps avoid costly repairs and downtime by taking the guesswork out of scheduling routine transmission maintenance. And, it ensures your transmission is operating at its maximum performance level.



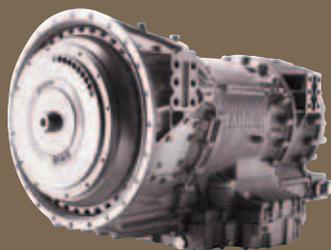
**Allison Oil Field Series fully automatic transmissions are designed and engineered specifically for the rigors of oil field operations. They are the only Allison transmissions certified for well servicing rig propulsion and auxiliary power applications such as high-pressure pumping and hoisting. Whether you're drilling, setting pipe or pumping, Allison Oil Field Series transmissions will work harder, faster and more reliably, allowing you to stay in production longer.**



3500 OFS



4500 OFS



4700 OFS

**Our core advantage >** For more than 30 years in oil and gas fields all over the world, Allison Automatics have made drilling, setting pipe, hydraulic fracturing and cementing easier and more productive. With their patented torque converter technology, Allison Automatics apply torque smoothly throughout the horsepower range, optimizing productive horsepower and reducing stress on the entire powertrain.

With their full-power shifts, Allison Automatics deliver continuous horsepower and torque where it's needed. So, besides speeding up the work process, the continuous Allison power advantage may allow you to spec an engine with less horsepower and torque that will still get the required productive horsepower down the well or to the pump.

**Dual mode operation >** Allison Oil Field Series automatic transmissions serve double duty in oil field operations. Vehicle propulsion mode puts power to the wheels to get you in and out of job sites no matter how rugged or remote. Stationary mode provides power to pumps, winches and augers in the field and allows you to select and maintain a gear while pulling pipe or other rig operations.

**Corrosion protection >** For offshore oil field applications, Allison offers corrosion protection on select configurations of our 4700 OFS model. The transmission's aluminum housing and other external aluminum components are anodized to protect against the harsh, corrosive environment in which this transmission must operate.

**Safety first >** Transmissions and control system components are available which meet Zone II certification requirements for offshore oil field applications. Contact your Allison representative for details.



**Smooth operator >** The patented Allison torque converter overcomes and eliminates the start-up shock associated with hoisting heavy loads for setting pipe. This greater control of loads enables the operator to make more connections in a shorter period of time. Again, it's about getting you into production quicker.

## 2nd Reverse\* >

This offers a second “deep reverse” in addition to the standard reverse to provide greater control and engine braking during operation on steep grades. 2nd Reverse will also enable more maneuverability when operating in confined spaces. When a vehicle is in 2nd Reverse, it will have a slow creep capability with high engine speeds. With a mechanical ratio of -17.12:1, it will have an effective torque converter multiplied ratio up to 32.5:1. 2nd Reverse provides overall better performance and enhanced applicability for a variety of applications.



\*Available on 4700 OFS model.



**Preferred choice >** Whether on a mobile rig or on a stationary platform, Allison Oil Field Series models make the job easier on the operator, the crew and the equipment. Because Allison Automatics allow people to be more productive and profitable at their jobs, they help you recruit and retain the best people. Training is virtually eliminated and safety is enhanced. You can make better use of your time orienting new recruits to proper well-site procedures and safety.

## Remote-mounted filter kit >

Allison Oil Field Series transmissions offer an optional remote-mounted filter kit for customer installation. This kit remotely locates the transmission fluid filters for ease of service in installations where standard internal filters would not be accessible.



## Maintenance made easy >

Routine oil and filter changes are the only regular preventive maintenance required with an Allison Automatic. Easily accessible integral and spin-on oil filters reduce labor costs and valuable downtime. Allison Oil Field Series models require either Allison-approved TES-389 or TES 295 transmission fluid. Either will keep your OFS model running like a well-oiled machine.

**Comprehensive coverage >** Allison Oil Field Series models offer two-year Standard Warranty with 100% parts and labor. In addition, Extended Transmission Coverage\* is available and may be combined with the Standard Warranty. Contact your Allison Representative for details. Keeping you in production is no game. When you need parts or service, you need them now. Allison's truly worldwide service channel puts you in touch with Allison product information, service and parts fast. With approximately 1,400 authorized service centers and distributors around the globe, finding and getting what you need becomes a whole lot easier.

\*Hour limitations may apply.



## Information Highway >

Visit [www.allisontransmission.com](http://www.allisontransmission.com) for a comprehensive library of informational brochures, including Mechanic's Tips, Operator's Manuals, Parts Catalogs, Troubleshooting Flyers and Service Manuals.

### TAILORED TO THE NEEDS OF THE OIL AND GAS PATCH >

- Meets higher horsepower demands
- Four, five, six or seven speeds (top two gears are overdrive)
- Selectable deep ratio first gear
- Precise control in auxiliary operations
- Automatic Lock-Up enhances performance with less heat generation (available in low gears if pre-selected)
- Vocational Input/Output packages maximize efficiency
- Two engine-driven PTO mounting positions available
- Optional integral output retarder provides additional braking power and maximizes service brake life

# Ratings and Specifications

**OIL FIELD SERIES**

## RATINGS

MODEL	RATIO	MAX GROSS INPUT POWER	MAX GROSS INPUT TORQUE	MAX GROSS INPUT w/SEM OR TORQUE LIMITING	MAX TURBINE TORQUE	MAX GVW	MAX GCW
		hp (kW)	lb-ft (N·m)	lb-ft (N·m)	lb-ft (N·m)	lbs (kg)	lbs (kg)
3500 OFS	Wide Ratio	330 (246)	860 (1166)	985 <sup>1</sup> (1335) <sup>1</sup>	1450 (1966)	-	-
4500 OFS	Wide Ratio	565 (421)	1650 (2237)	n/a	2600 (3525)	-	-
4700 OFS	Widest Ratio	600 (447)	1850 (2508)	n/a	2600 (3525)	-	-
4750 OFS	Widest Ratio	665 (496)	1950 (2644)	n/a	3000 (4067)	-	-

<sup>1</sup> In gears three through six.

**Right power-to-size ratio** > Because of their efficient size, horsepower and torque capacity, and superior horsepower throughput, Allison Oil Field Series models allow you to configure a versatile prime mover package

GEAR RATIO SUMMARY			
	3500 OFS	4500 OFS	4700/4750 OFS
First	4.59	4.70	7.63
Second	2.25	2.21	3.51
Third	1.54	1.53	1.91
Fourth	1.00	1.00	1.43
Fifth	0.75	0.76	1.00
Sixth	0.65	0.67	0.74
Seventh	-	-	0.64
Eighth	-	-	-
Reverse One	-5.00	-5.55	-4.80
Reverse Two	-	-	-17.12

for mobile rigs, truck bed-mounted applications or pallet-mounted stationary installations. They are also ideally suited for vehicle propulsion on- and off-road.



PHYSICAL DESCRIPTION					
	3500 OFS	4500 OFS	4500 OFS w/PTO and Retarder	4700 OFS/4750 OFS	4700 OFS/4750 OFS w/PTO and Retarder
Length FW housing to Output Flange*	28.3 in (718.6 mm)	31.2 in (793 mm)	34 in (866 mm)	41.3 in (1049 mm)	44.2 in (1122 mm)
Weight	535 lbs (243 kg)	831 lbs (377 kg)	968 lbs (439 kg)	1087 lbs (493 kg)	1224 lbs (555 kg)

\* Approximate length from engine housing to output flange (depending on output flange type).

OPTIONAL HARDWARE FEATURES		
	3500 OFS/4500 OFS	4700 OFS/4750 OFS
Corrosion Protection	-	•
Remote Mount	•	•
Engine Driven PTO Provision	•	•
Output Retarder	•	•
Drop Box Provision*	•	•
Integral Drop Box**	•	•
Remote Sump Filters	•	•
Oil Level Sensor	•	•

\*Customer-supplied drop box required. \*\*There are integral drop boxes available for the Oil Field Series models, but Allison does not build or provide drop boxes.

## PROGRAMMABLE FEATURES

	3500 OFS/4500 OFS	4700 OFS/4750 OFS
Powershift	•	•
Dual Shift Schedule	•	•
Dual Mode	•	•
Low - Lockup Hold	-	•
1st - Lockup Hold	•	•
PTO Request	•	•
Shift Selector Transition	•	•
Auxiliary Function Range Inhibit	•	•
Engine Brake & Preselect Request	•	•
Quick-To-Neutral	•	•
Manual Lockup Enable	•	•
Reverse Enable	•	•
Anti-Lock Brake Response	•	•
Retarder Enable	•	•
Service Brake Status	•	•
Auto 2-1 Preselect for 7 Speed	-	•
Auxiliary Box Transition	•	•
Shift Selector Transition & Oil Field Pumping	•	•
Sump/Retarder Temperature Indicator	•	•
Range Indicator	•	•
Output Speed Indicator	•	•
PTO Enable	•	•
Lockup Indicator	•	•
Secondary Mode Indicator	•	•
Retarder Indicator	•	•

**But wait, there's more** > Starting with a technologically advanced, extremely efficient transmission platform, you have a number of valuable optional features to maximize productivity for your particular operation.

## Allison Has You Covered

Our extensive network of over 1,200 authorized Allison Distributors and Dealers in North America, along with approximately 1,400 worldwide, means convenient, factory-quality Allison Transmission service is always close at hand.



### ALLISON BRAND PROMISE

The Allison Brand Promise is the automatic experience with an unrivaled combination of Quality, Reliability, Durability, Vocational Value, and Customer Service.

[www.allisontransmission.com](http://www.allisontransmission.com)