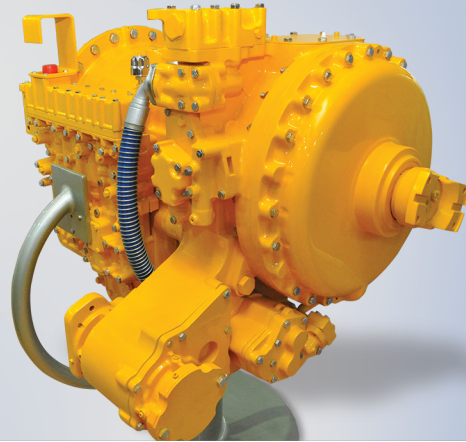


AVTEC 5600 Series Transmission



RATINGS

Straight - Thru Model	Input Power hp (kW)		Input Torque lb-ft (N.m)		Turbine Torque lb -ft(N.m)
	Gross	Net	Gross	Net	Net
Hauling Applications	600 (447)	550 (410)	1875 (2542)	1750 (2373)	3475 (4711)
General	600 (447)	550 (410)	1875 (2542)	1750 (2373)	3475 (4711)
Agricultural Tractor	500 (373)	450 (335)	1650 (2237)	1485 (2013)	3120 (4230)
Aircraft Rescue (ARFF) Vehicle	750 (559)	710 (529)	2500 (3390)	2270 (3078)	3790 (5139)
Oil Field Dual Mode	600 (447)	550 (410)	1875 (2542)	1750 (2373)	3475 (4711)
Oil Field Stationary	675 (503)	625 (466)	2150 (2915)	1950 (2644)	3475 (4711)

Drop Box Model	Input Power hp (kW)		Input Torque lb-ft (N.m)		Turbine Torque lb -ft(N.m)
	Gross	Net	Gross	Net	Net
Hauling Applications	600 (447)	550 (410)	1875 (2542)	1750 (2373)	3475 (4711)
General	600 (447)	550 (410)	1875 (2542)	1750 (2373)	3475 (4711)
Oil Field General	600 (447)	550 (410)	1875 (2542)	1750 (2373)	3475 (4711)

DRIVETRAIN INTERFACE

Acceptable full load engine governed speed (max)	1900 - 2500 rpm
Minimum engine idle speed range (with transmission in drive)	550 rpm

MOUNTING

DIRECT

SAE No 1 automatic flywheel housing with flex plate drive. Cradle mounting using engine flywheel housing mounting pads and rear cover mounting pads(or drop box side pads if applicable) with 0.625-11 inch series bolts.

REMOTE

Side pads on transmission rear cover (or drop box side pads if applicable) plus front trunion mount.

TORQUE CONVERTER			MECHANICA RATIOS	
Type	Single stage, Three element , Polyphase		(Gear ratios do not include torque converter multiplication)	
Model	Stall Torque Ratio	Kp-Factor* at Stall	First	4.00: 1
TC - 580	2.89	62.2 (53.4)	Second	2.68: 1
TC - 680	2.08	54.6 (46.9)	Third	2.01: 1
TC - 682	1.77	43.7 (37.5)	Fourth	1.35: 1
TC - 683	1.85	35.1 (30.1)	Fifth	1.00: 1
Kp-Factor defines torque converter capacity			Sixth	0.67:1
Kp= the ratio of converter pump speed (rpm) divided by the square root of the pump torque [lb-ft (N.m)].			Reverse 1	-5.15:1
			Reverse 2	-3.46:1
			Ratio Coverage	
			Forward	5.97
			Dropbox, if applicable	1.00: 1

CONTROL SYSTEM

Electronic, Other Options available - Manual electric, Manual hydraulic.

SPEEDOMETER PROVISION MECHANICAL (OPTIONAL)		HYDRAULIC RETARDER PROVISION (OPTIONAL)	
Type	SAE5/32 Heavy Duty	Type	Coupling type rotor between fixed stator
Straight Thro' Models:	Output speed ratio 0.51:1	Torque	Power
Drop Box Models:	Output speed ratio 1:1	1500 lb-ft (2034N.m)	600hp(447Kw)
Electronic Speedo Meter Provision			
Description LS:	TTL Signal, 39 pulse per output shaft revolution		
Location:	Output signal from transmission TCM		

OPTIONAL ENGINE DRIVEN POWER TAKE OFF PROVISION

Side Mount		
Location	5 o'clock position as viewed from rear	
PTO drive gear rating	Intermittent	46 tooth drive gear, 149 kW (200 hp)
	Continuous	46 tooth drive gear, 93 kW (125 hp)

Top Mount		
Location	12 o'clock position as viewed from rear	
PTO drive gear rating	Intermittent	46 tooth drive gear, 149 kW (200 hp)
	Continuous	46 tooth drive gear, 93 kW (125 hp)

NOTE:

PTO ratings apply to both top and side. Combined total cannot exceed individual ratings.

SIZE:	Depth (below horizontal centerline)	STRAIGHT-THRU:		DROPBOX (with disconnect):	
		Basic	With Retarder	Basic	With Retarder
		17.0 in (433mm)		26.7 in (678mm)	
Length (direct mount)*		43.1 in (1095mm)	46.6 in (1182 mm)	46.7 in (1185 mm)	50.1 in (1273 mm)
Width		28.6 in (726 mm)	31.7 in (805 mm)	28.9 in (734 mm)	31.7 in (805 mm)
		Height	Dry Weight		
Basic model		31.0 in (788 mm)	2200 lb (988 kg)	40.7 in (1034 mm)	2750 lb (1247 kg)
With top engine driven PTO drive Gears			2230 lb (1012kg)		2780 lb (1261 kg)
With park Brake (12" x 5")			2260 lb (1025 kg)		2810 lb (1274 kg)
With Remote Mount			2255 lb (1023 kg)		2805 lb (1272 kg)
With Retarder			2365lb (1073 kg)		2915 lb (1322 kg)

*Length is approximate from engine/converter mounting surface to face of typical output flange.

For remote mounting add 10-11in (254-279mm), depending on flange selection.

OIL SYSTEM

Oil Type	Hydraulic Transmission Fluid, Type C-4 (Based on Ambient operating condition SAE oil grade needs to be selected)
Capacity excluding external circuit	18.0 gallons (68 litres)
Drop box	13.0 gallons (49 litres)
Main circuit Oil Filter	
Standard	Direct-Mount full-flow, remote mounted, replaceable element
Cooler circuit filter (optional)	Remote mounted, Replaceable element

*Information or specification subjected to change without notice or obligation.

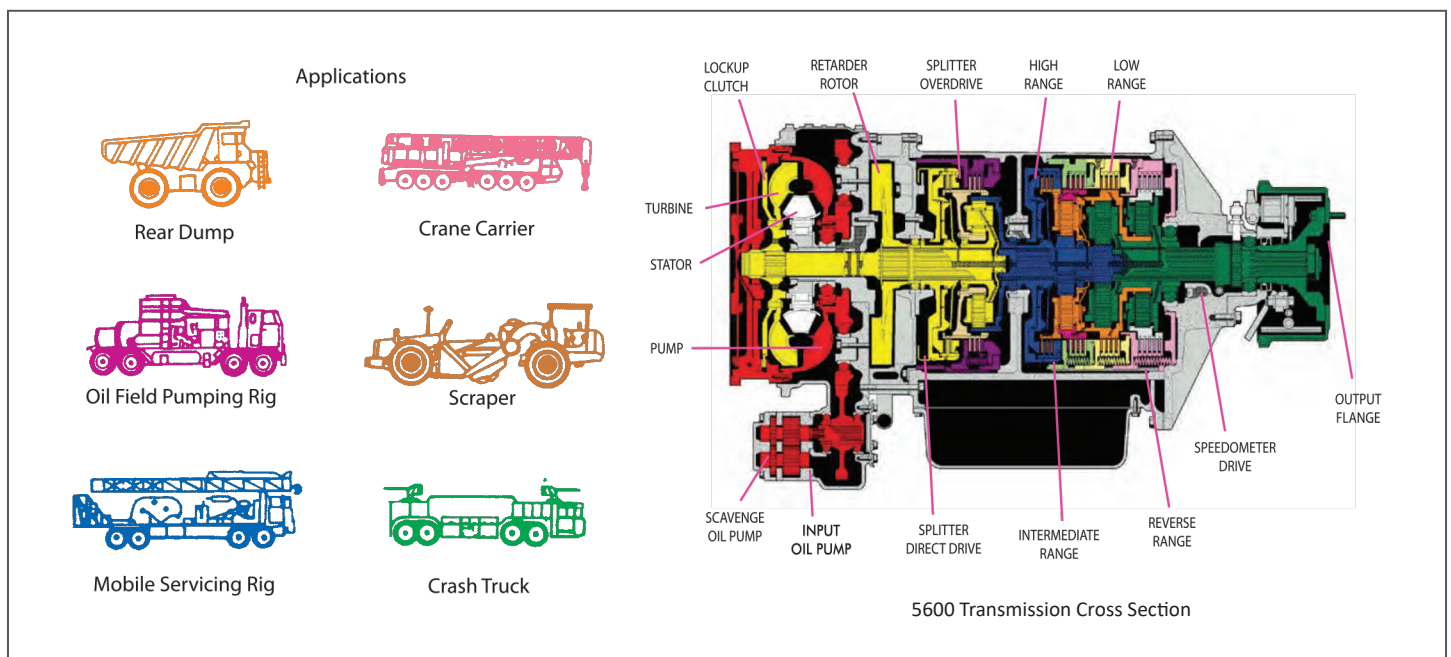
DESIGN FEATURES & BENEFITS

- Designed for use with diesel engines ranging between 550 nhp (410 kW) to 710 nhp (529 kW). Six forward ranges and a choice of two reverse ratios. This transmission is typically used in on/off highway applications.
- Clutches are multidisc design, oil-cooled, hydraulically- operated, spring released and self-compensating for normal wear. Spur-type planetary gears are designed for strength and long life.
- The three-element torque converter provides smooth, shock-free operation. A choice of converters permits matching the 5600 transmission to a wide variety of engines.
- Neutral & reverse signals available output drives available in three locations on the drop box. Optional disconnects may be used at any of the output drive locations.
- Electronic Controls provide: programmable features to perform vehicles and vocational requirements; built-in-diagnostics which constantly monitor operation and facilitate the detection of problems if they occur; improved fuel economy; specific vehicle and vocational needs.
- Manual hydraulic controls are available for use in oil field applications where electrical equipment use is prohibited.
- Manual electric controls are available for use in non-hauling applications and agricultural tractors.
- An optional parking brake (Bendix 12 x 5) is available.
- Main circuit oil filters are available with the transmission with remote mount provision. The remote mount configuration is a single element filter which can be mounted wherever convenient.
- A selection of optional driveline flanges is available.
- A speedometer drive is supplied with the transmission. The transmission output speed ratio is 051:1 for straight through models and 1:1 for drop box models.
- Electronic speedometer, neutral start and reverse signals are available with Electronic Controls.

SCAAN SPECIFICATION ASSISTANCE

To be sure that you get the most efficient engine transmission matching for your operation, with your preferred vehicle, AVTEC offers SCAAN.

SCAAN stands for System for Computerized Application ANalysis and helps eliminate guesswork from vehicle buying decisions. It can compute a wide variety of vehicle performance parameters. SCAAN will also check your powertrain specifications against AVTEC vocational experience to ensure satisfactory vehicle performance. SCAAN is user friendly. Interactive operation allows vehicle configurations to be quickly evaluated to ensure optimized powertrain selection.



CAPABILITY HIGHLIGHTS

- The only Indian player with the capability to design and Manufacture Complete Transmission Aggregates and spares for the Off Highway industry.
- The business operates out of its modern manufacturing facility at Hosur and Chennai in Tamil Nadu, India.
- Supplies complete Hauling and Cycling, Powertrain and Automatic Transmission Aggregates in 50-3300 HP range for mining, construction, material handling, railways and Defence Application.
- Serves a broad array of applications including Loaders, Dump trucks, forklifts, Railway OHE cars, Cranes and Oil rigs.
- Significant experience in exports especially intricate components like shafts, planetary systems and large housings.
- All plants are accredited with international quality certification such as TS 16949, ISO 9001, ISO 14001 and TPM excellence award.