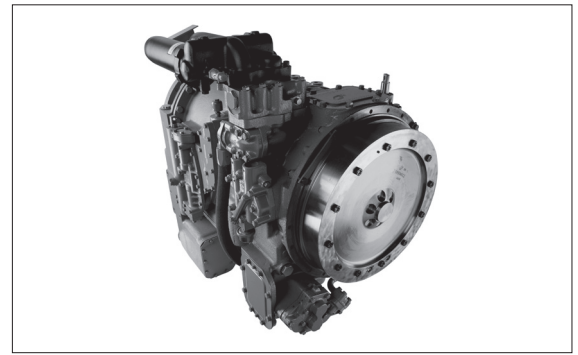




5600 Series



Off-Highway Series 5600

RATINGS

| Straight-Thru Model | | Gross Input Torque N•m (lb-ft) | Gross Input Power kW (hp) | Turbine Torque Net N•m (lb-ft) |
|---------------------|-------------------------------------------------------------------------|-----------------------------------|------------------------------|-----------------------------------|
| H5620 | Rear Dump Truck, Coal Hauler, Articulated Dump, Hauling Applications | 2542 (1875) | 447 (600) | 4711 (3475) |
| M5620 | General, Oil Field, Crane Carrier | 2542 (1875) | 447 (600) | 4711 (3475) |
| | Agricultural Tractor | 2237 (1650) | 373 (500) | 4230 (3120) |
| | Crash Truck (ARFF Vehicle) | 3390 (2500) | 559 (750) | 5139 (3790) |
| S5620 | General | 2542 (1875) | 447 (600) | 4711 (3475) |
| | Oil Field Equipment | 2915 (2150) | 503 (675) | 4711 (3475) |
| | Agricultural Tractor | 2237 (1650) | 373 (500) | 4230 (3120) |
| | Manual Shift (Non-Oil Field) | 2542 (1875) | 447 (600) | 4711 (3475) |
| Dropbox Model | | Gross Input Torque N•m (lb-ft) | Gross Input Power kW (hp) | Turbine Torque Net N•m (lb-ft) |
| H5620 | Rear Dump Truck, Coal Hauler, Articulated Dump, Hauling Applications | 2542 (1875) | 447 (600) | 4711 (3475) |
| M5620 | General, Oil Field, Crane Carrier | 2542 (1875) | 447 (600) | 4711 (3475) |
| | Crash Truck (ARFF Vehicle) | 2542 (1875) | 447 (600) | 4711 (3475) |
| S5620 | General | 2542 (1875) | 447 (600) | 4711 (3475) |
| | Oil Field Equipment | 2542 (1875) | 447 (600) | 4711 (3475) |

ENGINE INTERFACE

| | |
|--------------------------------------------------------------|-----------------|
| Acceptable full-load engine governed speed | 1900 – 2500 rpm |
| Minimum engine idle speed range (with transmission in Drive) | 550 rpm |

MOUNTING

| | |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Direct | SAE No.1 automatic flywheel housing with flexplate drive. Cradle mount using engine flywheel housing mounting pads and transmission rear cover mounting pads (or dropbox side pads, if applicable) with 0.625-11 inch series bolts |
| Remote | Side pads on transmission rear cover (or dropbox side pads, if applicable) plus front trunnion mount |

TORQUE CONVERTER

Type Single stage, three element, polyphase.

| Model | Stall Torque Ratio | Kp-Factor* at Stall |
|--------|--------------------|---------------------|
| TC-580 | 2.89 | 53.4 (62.2) |
| TC-680 | 2.08 | 46.9 (54.6) |
| TC-682 | 1.77 | 37.5 (43.7) |
| TC-683 | 1.85 | 30.1 (35.1) |

* Kp-Factor defines torque converter capacity. Kp = the ratio of converter pump speed [rpm] divided by the square root of the pump torque [N•m (lb-ft)]

MECHANICAL RATIOS (Gear ratios do not include torque converter multiplication)

| Range | |
|-----------|-----------|
| First | 4.00 : 1 |
| Second | 2.68 : 1 |
| Third | 2.01 : 1 |
| Fourth | 1.35 : 1 |
| Fifth | 1.00 : 1 |
| Sixth | 0.67 : 1 |
| Reverse 1 | -5.15 : 1 |
| Reverse 2 | -3.46 : 1 |

Ratio Coverage

| | |
|------------------------|--------|
| Forward | 5.97 |
| Dropbox, if applicable | 1.00:1 |

CONTROL SYSTEM

| | |
|-------------|---------------------------------------------------------|
| Description | Automatic electronic, manual electric, manual hydraulic |
|-------------|---------------------------------------------------------|

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) |

ELECTRONIC SPEEDOMETER PROVISION

| | |
|-------------|------------------------------------------------------|
| Description | LS-TTL signal, 39 pulses per output shaft revolution |
| Location | Output signal from transmission TCM |

OUTPUT RETARDER PROVISION (OPTION)

| | | |
|----------|-----------------------|-----------------|
| Type | Integral, hydraulic | |
| Capacity | Torque | Power |
| | 2034 N•m (1500 lb-ft) | 447 kW (600 hp) |

SIZE

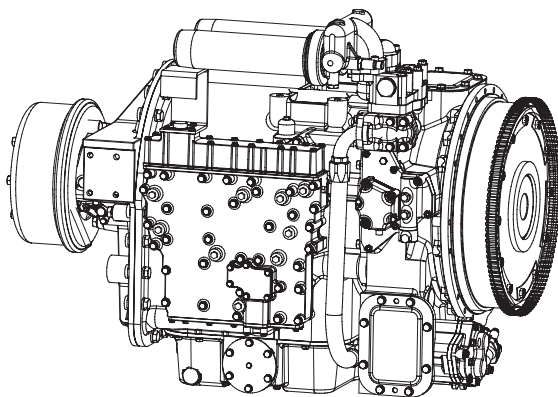
| Depth (below horizontal centerline) | STRAIGHT-THRU | | DROPBOX (with disconnects) | |
|---------------------------------------|-------------------|-------------------|----------------------------|-------------------|
| | Basic | With Retarder | Basic | With Retarder |
| | 433 mm (17.0 in) | | 678 mm (26.7 in) | |
| Length (direct mount) ^{2,3} | 1095 mm (43.1 in) | 1182 mm (46.6 in) | 1185 mm (46.7 in) | 1273 mm (50.1 in) |
| Width | 726 mm (28.6 in) | 805 mm (31.7 in) | 734 mm (28.9 in) | 805 mm (31.7 in) |
| | Height | Dry Weight | Height | Dry Weight |
| Basic model | 788 mm (31.0 in) | 998 kg (2200 lb) | 1034 mm (40.7 in) | 1247 kg (2750 lb) |
| With direct mount filters | 904 mm (35.6 in) | 998 kg (2200 lb) | 1150 mm (45.3 in) | 1247 kg (2750 lb) |
| With top engine-driven PTO drive gear | | 1012 kg (2230 lb) | | 1261 kg (2780 lb) |
| With park brake (12" x 5") | | 1025 kg (2260 lb) | | 1274 kg (2810 lb) |
| With remote mount | | 1023 kg (2255 lb) | | 1272 kg (2805 lb) |
| With retarder | | 1073 kg (2365 lb) | | 1322 kg (2915 lb) |

OIL SYSTEM

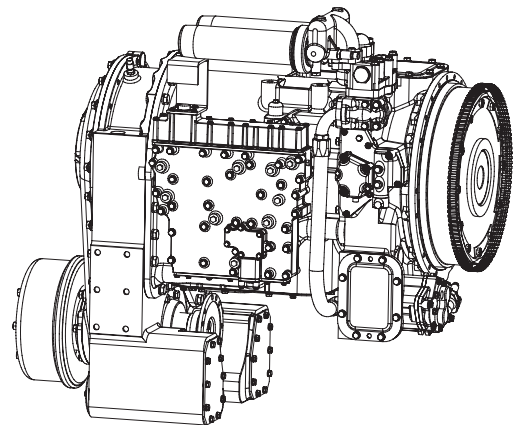
| | |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Oil type | TES 439 (see www.allisontransmission.com for approved list) |
| Capacity excluding external circuits | 68 litres (18.0 gallons) |
| Dropbox | 49 litres (13.0 gallons) |
| Main circuit oil filter | |
| Standard | Manifold for full-flow, remote mounted, replaceable element |
| Optional | Direct-mount full-flow, replaceable elements (2) |
| Cooler circuit oil filter (optional) | Replaceable element, remote-mounted |

1. PTO ratings apply to both top and side. Combined totals cannot exceed individual ratings. 2. For remote mounting, add 254–279 mm (10–11 in), depending on flange selection. 3. Length is approximate from engine/converter mounting surface to face of typical output flange.

5600 Series
Straight-Through Model



5600 Series
Dropbox Model



Information or specifications subject to change without notice or obligation.

