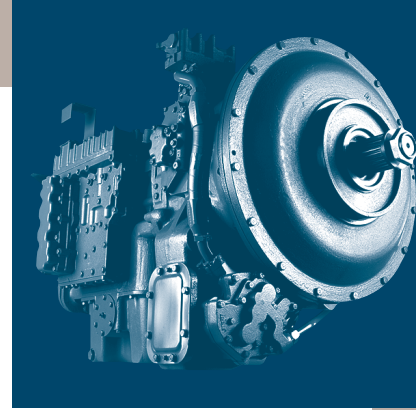


**S8610 (STATIONARY)**  
**M8610 (MOBILE)**  
**H8610 (HAULING)**

**UP TO 1104 HP (823 kW), 3300 LB-FT (4474 N•m)**



**SPECIFICATIONS**

**RATINGS**

|  | <b>Net Input Torque<br/>lb-ft<br/>(N•m)</b> | <b>Net Input Power<br/>hp<br/>(kW)</b> | <b>Turbine Torque<br/>lb-ft<br/>(N•m)</b> |
|--|---|--|---|
| Rear Dump Truck,<br>Coal Hauler, Auger     | 3300<br>(4474)                              | 975<br>(727)                           | 5640<br>(7647)                            |
| Oil Field Pumper,<br>Oil Field Service Rig | 3300<br>(4474)                              | 1104<br>(823)                          | 5966<br>(8089)                            |

**ENGINE INTERFACE**

|  |               |
|--|---------------|
| Acceptable full-load engine governed speed                   | 1800–2300 rpm |
| Minimum engine idle speed range (with transmission in Drive) | 550 rpm       |

**MOUNTING**

|        |   |
|--------|---|
| Direct | SAE No. 0 automatic flywheel housing with flexplate drive. Cradle mount using engine flywheel housing mounting pads and transmission rear cover mounting pads with 0.625-11 inch series bolts |
| Remote | Side pads on transmission rear cover, plus front trunnion mount   |

**TORQUE CONVERTER**

| Type    | Single stage, three element, polyphase |                            |
|---------|--|----------------------------|
|         | <b>Stall Torque Ratio</b>              | <b>Kp-Factor* at Stall</b> |
| TC-840  | 2.26                                   | 43.2 (37.1)                |
| TC-860  | 2.33                                   | 40.7 (35.0)                |
| TC-880  | 2.20                                   | 36.9 (31.7)                |
| TC-890  | 1.86                                   | 32.6 (28.0)                |
| TC-1060 | 1.86                                   | 39.1 (33.6)                |
| TC-1070 | 1.74                                   | 30.1 (25.9)                |

Includes standard integral damper which is operational in lockup

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

**MECHANICAL RATIOS\***

**Range**

|         |          |
|---------|----------|
| First   | 4.24:1   |
| Second  | 2.32:1   |
| Third   | 1.69:1   |
| Fourth  | 1.31:1   |
| Fifth   | 1.00:1   |
| Sixth   | 0.73:1   |
| Reverse | - 5.75:1 |

**Ratio coverage**

|         |      |
|---------|------|
| Forward | 5.81 |
|---------|------|

\*Gear ratios do not include torque converter multiplication.

**CONTROL SYSTEM**

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

**OPTIONAL ENGINE-DRIVEN POWER TAKEOFF PROVISION**

|                       |  |                                      |
|-----------------------|--|--------------------------------------|
| Side mount            |  |                                      |
| Location              | 5 o'clock position, as viewed from rear  |                                      |
| PTO drive gear rating | Intermittent                             | 59 tooth drive gear, 400 hp (298 kW) |
|                       | Continuous                               | 59 tooth drive gear, 300 hp (224 kW) |
| Top mount             |  |                                      |
| Location              | 12 o'clock position, as viewed from rear |                                      |
| PTO drive gear rating | Intermittent                             | 59 tooth drive gear, 400 hp (298 kW) |
|                       | Continuous                               | 59 tooth drive gear, 300 hp (224 kW) |

## SPEEDOMETER PROVISIONS

|             |  |
|-------------|--|
| Description | Mechanical Drive, SAE "Heavy Duty" 5/32-inch; Ratio = 1.00:1 |
| Location    | Transmission rear cover                                      |

## OPTIONAL RETARDER PROVISION

|          |                       |                   |
|----------|-----------------------|-------------------|
| Input    | Integral, hydraulic   |                   |
| Capacity | <b>Torque</b>         | <b>Power</b>      |
|          | 3451 lb-ft (4679 N•m) | 1380 hp (1029 kW) |

## SIZE

|                                       |                   |                    |
|---------------------------------------|-------------------|--------------------|
| Length (direct mount) <sup>1,2</sup>  | 57.0 in (1448 mm) |                    |
| Width                                 | 45.0 in (1143 mm) |                    |
| Depth (below horizontal centerline)   | 20.9 in (531 mm)  |                    |
|                                       | <b>Height</b>     | <b>Dry Weight</b>  |
| Basic model with retarder             | 35.3 in (897 mm)  | 3700 lbs (1678 kg) |
| With direct mount filters             | 39.9 in (1013 mm) | 3700 lbs (1678 kg) |
| With top engine driven PTO drive gear |                   | 3730 lbs (1692 kg) |
| With park brake                       |                   | 3850 lbs (1746 kg) |
| With remote mount                     |                   | 3780 lbs (1714 kg) |

## OIL SYSTEM

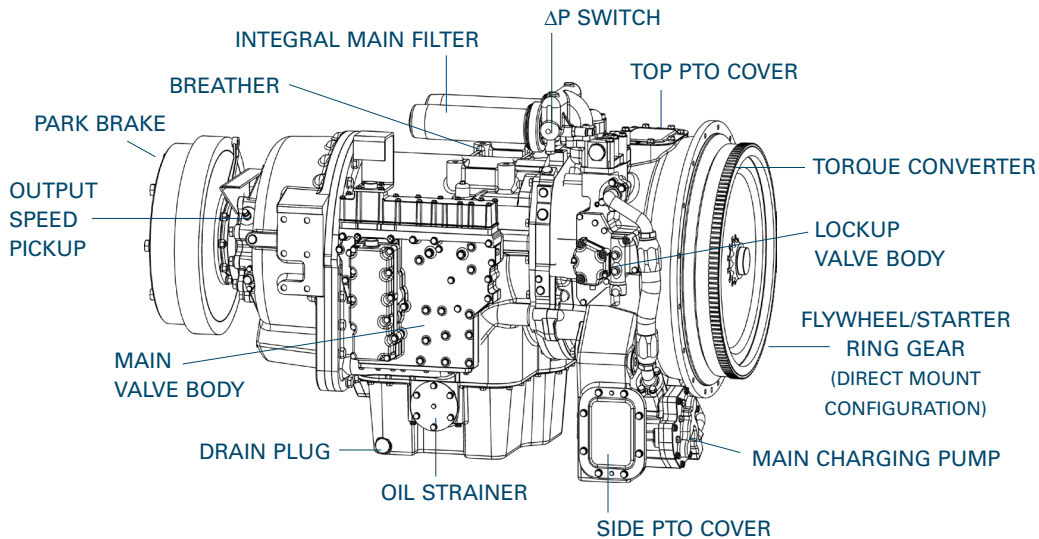
|                                       |   |  |
|---------------------------------------|---|--|
| Oil type                              | C-4, 15W40, or Transynd™ RD                                 |  |
| Capacity, excluding external circuits | 21.0 gallons (79 liters)                                    |  |
| 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 For remote mounting, add 11 inches (279 mm).

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

Today's engine and axle options have made specifying a truck more demanding. We can help. Whether you're looking for enhanced fuel economy, increased productivity or high performance, we have the tools to help you select an Allison Transmission that will match your specific application needs. You'll get the right transmission for your job. For more information, visit [www.allisontransmission.com](http://www.allisontransmission.com).

## DESIGN FEATURES



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