CX35-P800
Transmission with Optional Integral Pump Drives

Petroleum

SPECIFICATIONS

Gross Input Power ............  800 bhp (597 bkW)
Gross Peak Input Torque
  Gears 1F-3F ............ 2400 lb-ft (3254 N•m)
  Gears 4F-8F ............ 2700 lb-ft (3661 N•m)
Maximum Turbine Torque
  Gears 1F-3F ............ 2400 lb-ft (3254 N•m)
  Gears 4F-8F ............ 2700 lb-ft (3661 N•m)
Rated Input Speed ................... 2100 rpm
Maximum Input Speed ................... 2500 rpm
Minimum Input Speed .................... 600 rpm
Weight, Dry (approx)
  Side PTO ...................... 1410 lb (640 kg)
  Integral Pump Drive ............ 1540 lb (699 kg)
Electrical System ...................... 12V or 24V
Gears
  Type ............................ Planetary Spur
  Forward/Reverse ........................ 8F/1R
Transmission Speed Ratios

<table>
<thead>
<tr>
<th>Gear</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>5.73</td>
</tr>
<tr>
<td>2nd</td>
<td>3.57</td>
</tr>
<tr>
<td>3rd</td>
<td>2.72</td>
</tr>
<tr>
<td>4th</td>
<td>1.95</td>
</tr>
<tr>
<td>5th</td>
<td>1.43</td>
</tr>
<tr>
<td>6th</td>
<td>1.00</td>
</tr>
<tr>
<td>7th</td>
<td>0.74</td>
</tr>
<tr>
<td>8th</td>
<td>0.63</td>
</tr>
<tr>
<td>1R</td>
<td>-4.46</td>
</tr>
<tr>
<td>Overall</td>
<td>9.10</td>
</tr>
</tbody>
</table>

FEATURES

- CX35-P800 is the most advanced Cat® well service transmission and is designed specifically to meet the demands of this market.
- Lightweight with superior power-to-weight ratio
- Diagnostics via Cat Electronic Technician

BENEFITS

- Integral pump drives available
  - Allows for two SAE B pads and two SAE C pads to direct mount on transmission
  - Additional option for rear PTO
- Advanced software specifically designed for the well service market

- Integral options streamline service:
  - Same warranty for integral pump drives and rear PTO
  - One source supplier — one source service
- Rear PTO option increases application flexibility
- With more than 40 new well service software features, CX35-P800 is the most advanced transmission available. Features include multiple modes of operation:
  - Auto pumper
  - Manual pumper
  - Workover/drawworks

- Unmatched product support offered through worldwide Cat dealer network
  - More than 2,200 dealer outlets
  - Caterpillar factory-trained dealer technicians service every aspect of your petroleum engine-transmission package
  - Caterpillar parts and labor warranty
  - Preventive maintenance agreements available for repair-before-failure options
- Web site — for all your petroleum power requirements, visit www.catoilandgasinfo.com.
**CAT® ENGINE FOR OPTIMIZED POWERTRAIN**

C15 ACERT™, C18 ACERT, C27 ACERT (A ratings)

*Note: See Petroleum Transmissions Approved Applications Guide REHS4553 for more information.*

**TRANSMISSION ROTATION**

Input rotation — counterclockwise
Output rotation — counterclockwise
(as viewed from rear)

**TORQUE CONVERTER**

Lock-up clutch, torque converter drive and direct drive in all gears
Integral to transmission
Stall torque ratio — 1.962

**CLUTCHES**

Clutches — electro-hydraulic fully modulated, oil cooled, multidisc
Clutch modulation control — Cat Electronic Clutch Pressure Control (ECPC)

**INSTALLATION CONNECTIONS**

- 2 oil cooler lines
- 1 electrical connector

**OIL SYSTEM**

Cat Transmission/Drive Train Oil-4 (TDTO)
Sump oil temperatures
- Continuous — 194°F (90°C)
- Maximum Intermittent — 210°F (99°C)
Maximum converter outlet oil temperature — 250°F (121°C)
Hydraulic fill capacity — 9 gal (34 L), 16 gal (61 L)
initial fill
Filter type
- Direct mount — standard
- Remote mount — optional

**MOUNTINGS**

Input connection (flywheel) — direct SAE #1 dry flywheel housing
Side supports — two SAE #2 pads
Output connection — 1810 yoke, 1810 companion flange, SPL 250 yoke, ISO8667-T180 flange
Remote-mount ECU option
Remote-mount filter option

**POWER TAKE-OFF (Pump Auxiliary Drive)**

<table>
<thead>
<tr>
<th></th>
<th>PTO Drives (Basic)</th>
<th>Integral PTOs (Optional)</th>
<th>Rear PTO (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
<td>1 o’clock and 8 o’clock; as viewed from rear</td>
<td>1 o’clock and 11 o’clock; as viewed from rear</td>
<td>5 o’clock as viewed from rear</td>
</tr>
<tr>
<td><strong>Mounting Type</strong></td>
<td>10 bolt</td>
<td>Front: 2 SAE B Rear: 2 SAE C</td>
<td>8 bolt*</td>
</tr>
<tr>
<td><strong>Rated Torque</strong></td>
<td>Single: 700 lb-ft (950 N•m) Total: 1200 lb-ft (1630 N•m)</td>
<td>Single: 500 lb-ft (678 N•m) Total: 688 lb-ft (933 N•m)</td>
<td>1000 lb-ft (1360 N•m)</td>
</tr>
<tr>
<td><strong>Rotation</strong></td>
<td>Same as engine</td>
<td>Same as engine as viewed from rear</td>
<td>Opposite of engine</td>
</tr>
<tr>
<td><strong>Ratio</strong></td>
<td>1:1</td>
<td>1:1</td>
<td>1.25:1</td>
</tr>
</tbody>
</table>

*SAE pump adapters and drive flanges available from third party suppliers.
DIMENSIONS

Basic Configuration

- Weight (approx.): 1435 lbs (650 kg)
- Overall Height (A): 30.7 in (780 mm)
- Overall Width (B): 25.8 in (654 mm)
- Overall Length (C): 49.8 in (1265 mm)
- Length of Drive Train (D)*: 43 in (1092 mm)

*The length that is shown is with a standard 1810 companion flange.

Transmission with Integral Pump Drives

- Weight (approx.): 1612 lbs (731 kg)
- Overall Height (A): 34.4 in (872 mm)
- Overall Width (B): 25.8 in (654 mm)
- Overall Length (C): 49.8 in (1265 mm)
- Length of Drive Train (D)*: 43 in (1092 mm)

*The length that is shown is with a standard 1810 companion flange.

CX35-P800

Standard Configuration

CX35-P800

with Integral Pump Drives

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