



# TH55-E70 TH55-E90 Transmissions



Image shown may not reflect actual transmission

## Petroleum

### SPECIFICATIONS

Gross Input Power — kW (hp) . . . . .	2461 (3300)
Gross Input Torque —	
N•m (lb-ft) . . . . .	12,677 (9350)
Rated Input Speed — rpm . . . . .	1900
Maximum Input Speed — rpm . . . . .	1970
Weight, Dry (approx) — kg (lb)	
Transmission . . . . .	2917 (6430)
Engine/Transmission Coupling . . . . .	136 (300)
Gears — Forward/Reverse	
TH55-E70 . . . . .	7F/0R
TH55-E90 . . . . .	9F/0R

### Transmission Speed Ratios

TH55-E70		TH55-E90	
Gear . . . . .	Ratio	Gear . . . . .	Ratio
1F . . . . .	6.25	1F . . . . .	4.67
2F . . . . .	4.59	2F . . . . .	3.43
3F . . . . .	3.38	3F . . . . .	3.03
4F . . . . .	2.48	4F . . . . .	2.53
5F . . . . .	1.83	5F . . . . .	2.22
6F . . . . .	1.36	6F . . . . .	1.85
7F . . . . .	1.00	7F . . . . .	1.64
		8F . . . . .	1.36
		9F . . . . .	1.00

### STANDARD EQUIPMENT

- Electronic Control Unit (ECU)
- Electronic data link, SAE J1939
- Electrical system 24V
- Integral torque converter

### ENGINES FOR OPTIMIZED POWERTRAIN

Cat® 3512C HD and 3516D HD; Cummins QSK50, QSK60; MTU 12V4000, 16V4000

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

### TRANSMISSION ROTATION

- Input rotation — Counterclockwise
- Output rotation — Counterclockwise

### TORQUE CONVERTER

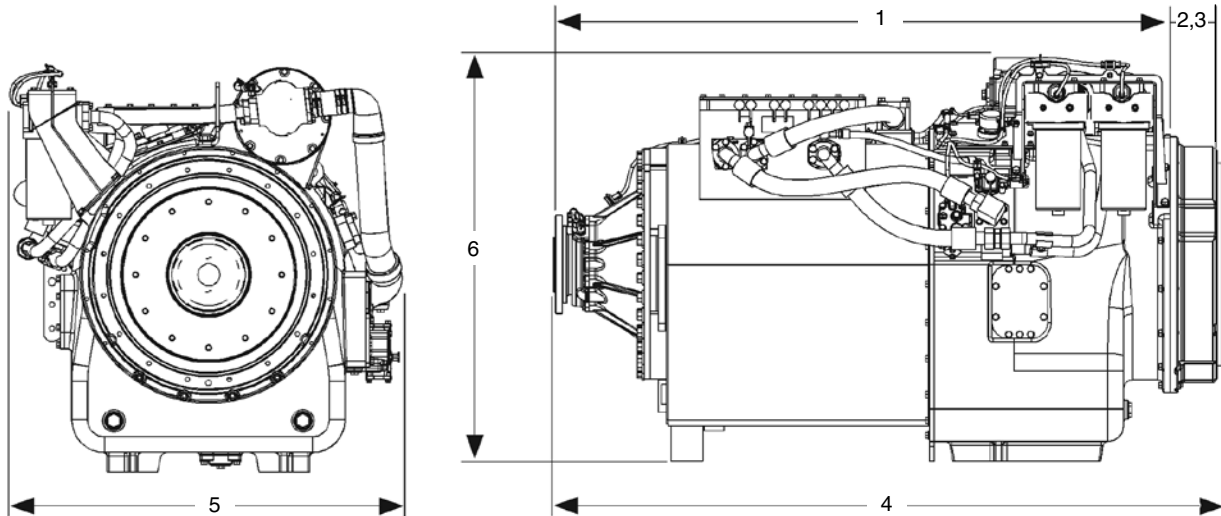
- Series — TC64442-ESLF
- Stall torque ratio — 2.23

### CLUTCHES

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

### INSTALLATION CONNECTIONS

- 1 cooler
- 1 pump
- 1 electrical

**DIMENSIONS**


Transmission Dimensions		
<b>(1) Length of Drive Train w/o adapter</b>	1961 mm	77 in
<b>(2) Length w/adapter 123-6905 – SAE 0</b>	150 mm	5.91 in
<b>(3) Length w/adapter 250-7056 – SAE 00</b>	145 mm	5.72 in
<b>(4) Overall Length</b>	2137 mm	84 in
<b>(5) Width</b>	1246 mm	49 in
<b>(6) Height</b>	1288 mm	51 in
<b>Installed Weight, dry (approx)</b>	3053 kg	6730 lb

**OIL SYSTEM**

Cat Transmission/Drive Train Oil-4 (TDTO)  
or equivalent

Oil Temperatures

Continuous — 90°C (195°F)

Maximum Operating — 99°C (210°F)

Hydraulic Fill Capacity — approx. 189 L (50 gal)  
actual capacity depends on installation,  
application, and slope capability

Filter Type — 6 micron synthetic, cartridge  
remote mount

**MOUNTINGS**

Structural application subject to Caterpillar  
approval

Input connection (flywheel) — SAE #0  
(when combined with required Caterpillar engine  
adapter)

Output connection (flange) — GWB 390.65  
>2500 hp:  
GWB 390.70

**POWER TAKE OFF (PUMP AUXILIARY DRIVE)**

Drive — engine driven

Location — 3 o'clock and 11 o'clock from rear

Mountings — SAE 8 bolt (J704) @ 3 o'clock\*  
SAE C-size (J744) @ 11 o'clock,  
2- and 4-bolt mount

Maximum PTO Power — 112 kW (150 hp) @  
1900 rpm

\*Pump drive subject to 15 kW (20 hp) @ 1900 rpm  
limitation until device is approved by Caterpillar