



TH48-E80 Transmission



Image shown may not reflect actual transmission

Petroleum

SPECIFICATIONS

Gross Input Power — kW (hp) 1715 2300 ()
 Gross Input Torque — N•m (lb-ft) 9024 (6656)
 Rated Input Speed — rpm 1900
 Maximum Input Speed — rpm 2100
 Weight, Dry (approx) — kg (lb)

Transmission 2028 (4468)
 Engine/Transmission Coupling 186 (410)

Gears

Type Straight spur planetary
 Forward/Reverse 8F/0R

Transmission Speed Ratios

Gear	Ratio
1F	3.34
2F	2.45
3F	2.20
4F	1.81
5F	1.62
6F	1.36
7F	1.19
8F*	1.00

***Warm-Up Mode Option** — provides torque converter stall for aiding powertrain warming during cold starts.

8F is unavailable on units configured with the warm-up mode option.

STANDARD EQUIPMENT

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

ENGINES FOR OPTIMIZED POWERTRAIN

Cat® 3512B and 3512C, Cummins QSK45 and QSK50

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

TRANSMISSION ROTATION

Input rotation — Counterclockwise
 Output rotation — Counterclockwise

TORQUE CONVERTER

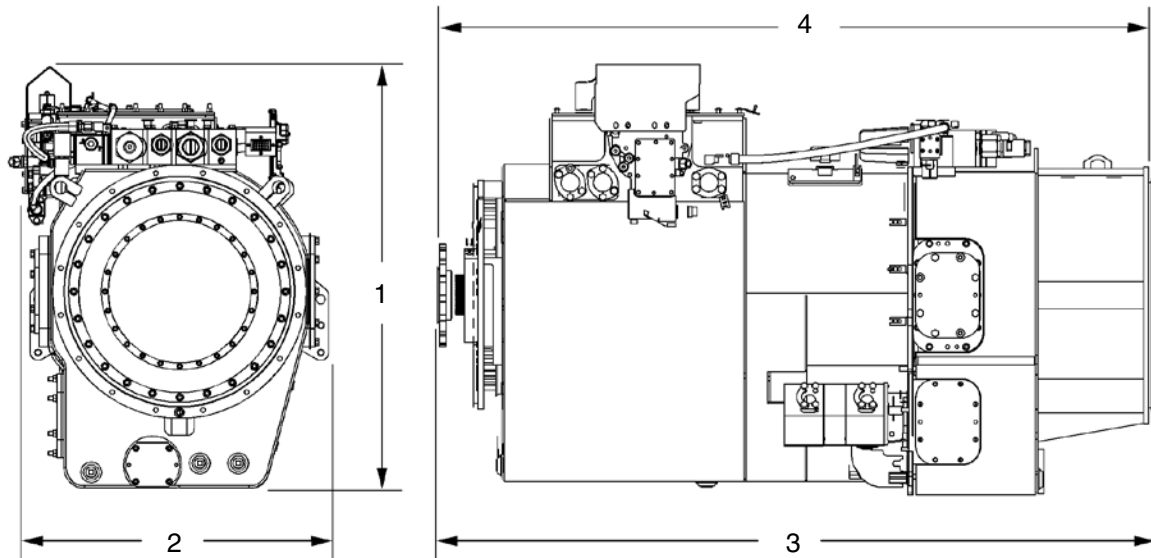
Series — TC58927-ESLF
 Stall torque ratio — 2.20

CLUTCHES

Clutches — electro-hydraulic fully modulated, oil cooled, multidisc
 Clutch modulation control — Individual Clutch Modulation (ICM)

INSTALLATION CONNECTIONS

2 cooler
 1 pump
 1 electrical

DIMENSIONS


Transmission Dimensions	
Weight, dry (approx)	2213 kg (4878 lb)
(1) Overall Height	1177.0 mm (46.34 in)
(2) Overall Width	859.9 mm (33.85 in)
(3) Overall Length	1984.4 mm (78.13 in)
(4) Length of Drive Train	1959.4 mm (77.14 in)

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. 152 L (40 gal)
subject to cooler size, lines, and installation —
initial fill may be greater

Filter type — 10 micron synthetic, cartridge
remote mount

MOUNTINGS

Structural application subject to Caterpillar
approval

Input connection (flywheel) — SAE #0

Output connection (yoke) — GWB 390.60/
GWB 390.65

POWER TAKE-OFF (PUMP AUXILIARY DRIVE)

Drive — engine-driven

Location — 3 positions (3 o'clock, 5 o'clock, and
9 o'clock from rear)

Rated power — 112 kW/150 hp continuous

Mountings — SAE 8 bolt (J704)

Pump drive subject to 20 hp @ 1900 rpm limitation
until device is approved by Caterpillar

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