



# Truck Components

Eaton Light, Medium and Medium Heavy Transmissions

FS(O) - 8309

- Designed for vehicles with engines up to 1250 Nm of torque.
- Rating to be used as a guide and not as an approval.
- For approval the application must conform to Form FUL-169M or complete vehicle specification must be submitted on form FUL-170.



# Eaton® Truck Components FS(O)-8309

## Specifications:

### Speeds:

- 8 forward (all synchronised), +
- 1 crawler (synchronizer optional),
- 1 reverse.

### Power Take-Off openings:

- Left side: two standard SAE openings, 6 bolt short length (horizontal mounting)
- Extended countershaft PTO standard.

### PTO of gear speeds (% of engine speed):

- Rear left side PTO's turn at 47% (Overdrive 62%) of engine speed.
- Front left side and extended countershaft PTO's: 76% (Overdrive 103%) of engine speed.

### Speedometer:

- Provision in rear bearing cover (standard magn. pick-up).

### Reverse light switch:

- Provision in Shift bar housing for installation of switch.

### Neutral switch:

- Provision available.

### Weight:

- Incl. output coupling, low remote control 154 kg (dry)

### Oil Capacity:

- 8.5 litres.

## Design features 8309

### New gearing components: Headset gears.

High contact ratio [picture 1 below]; improved tooth contact [see picture 2 below] enhanced gear mesh for quieter operation and longer life. This noise reduction is one of the aspects of the 8309 that helps it comply with the EURO 3 standards.

Picture 1; contact ratio.



Picture 2; tooth contact



### Range gearing:

Fine pitch; number of teeth of annulus, planet gear and sun gear has changed. Overall ratio is about the same (was 3.55, now 3.53)

## Ratios and Steps:

### GEAR RATIOS FS(O) - 8309 SERIES

Speed	FS-8309A	FSO-8309A
8	1.00	0.75
7	1.34	1.00
6	1.85	1.38
5	2.48	1.86
4	3.53	2.64
3	4.74	3.53
2	6.52	4.87
1	8.76	6.55
low	12.57	9.40
REV	13.19	9.83

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