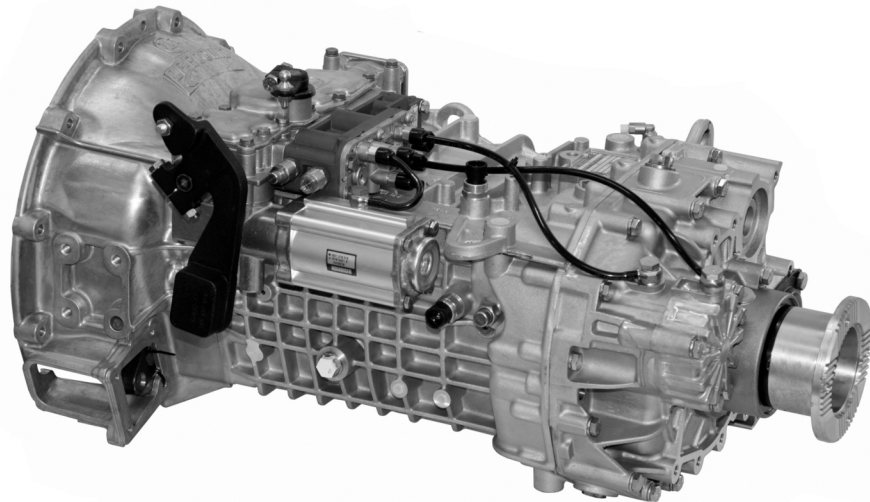


# 9 S 1310 TO ZF-Ecomid (Truck)

Synchromesh gearbox for mid-range trucks



- 9 S 1310 TO - Basic transmission
- 9 S 1311 TO - Transmission with Intarder
- 9 S 1315 TO - Transmission with clutch-dependent PTO

<b>Transmission type</b>	<b>9 S 1310 TO</b>
<b>Input torque</b>	max. 1300 Nm
<b>Weight</b> without auxiliaries	≈ 190 kg*
<b>Oil capacity</b> for initial filling	≈ 8.9 dm <sup>3</sup>
<b>Oil grade</b>	as specified in ZF List of Lubricants TE-ML 02
<b>Clutch bell housing</b>	SAE1 integrated / SAE2 optional
<b>Additional weight for ZF-Intarder</b>	≈ 71 kg
<b>Additional oil quantity for ZF-Intarder</b>	≈ 15 dm <sup>3</sup>

incl. bell housing

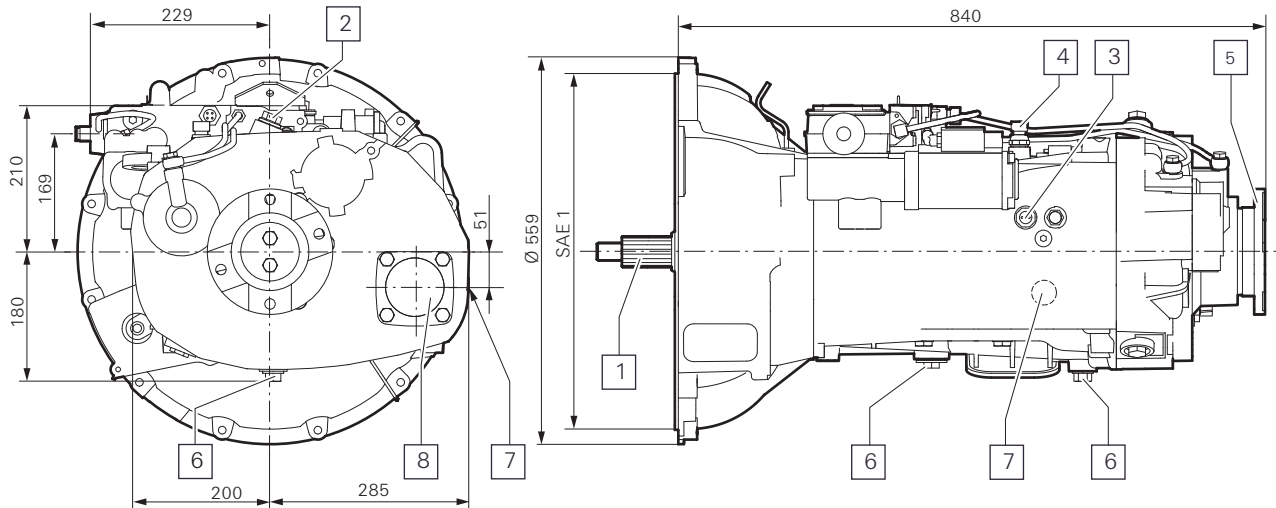
### Standard ratios in gears

Crawler	1	2	3	4	5	6	7	8	R
9.48	6.58	4.68	3.48	2.62	1.89	1.35	1.00	0.75	8.97

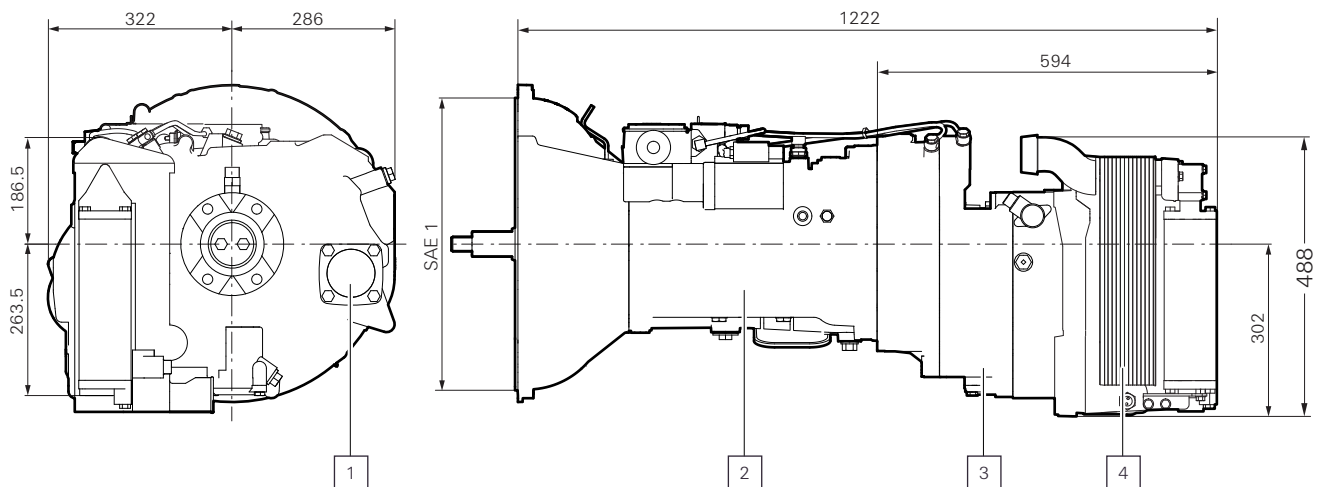
→ see also Data Sheet for Intarder: IT\_9S1110\_1310\_EN

# 9 S 1310 TO

## Installation dimensions



- |                                     |                                |
|-------------------------------------|--------------------------------|
| 1 Input                             | 5 Output                       |
| 2 "Neutral" signal transmitter      | 6 Oil drain                    |
| 3 "Range change" signal transmitter | 7 Oil fill and oil level check |
| 4 "Reverse gear" signal transmitter | 8 Connection for PTO           |



- |                          |                            |
|--------------------------|----------------------------|
| 1 Connection for PTO     | 3 ZF-Intarder unit         |
| 2 ZF-Ecomid transmission | 4 Oil/water heat exchanger |