



ZF in Diesel/Gas forklift Trucks and GSE/harbor applications

Material handling vehicles with combustion engine are real "allrounders". In outdoor application, for example, they must be able to quickly transport extremely heavy loads over long distances, but they must also be able to precisely maneuver their load and set it down in the tightest of spaces.

These widely varying functions make the highest demands on the driveline, especially the transmission. It must be designed for strong engines with a high input torque. Gear shifts must take place under full load, without interrupting the tractive effort and without jerking. In addition, the transmission must be space-saving and easy to install.

ZF offers a whole range of transmissions which have been specially designed for the requirements of lift trucks and other materials transport vehicles with combustion engines.

ERGOPOWER: Powershift technology

- Fully or semi-automatic gear shift control
- Powershift with proportional valves
- No tractive effort interruption
- Electronic controlled inching with software package ZF-Ergocontrol

Product and performance classes

Gross vehicle weight [t] up to	Gear selection	Lifting capacity [t] up to	Engine power [kW] up to	Transmission Short-drop version*	Transmission Long-drop version
Class up to 9 t	ES1C (CAN)	3.5	50	1WG40	-
Class up to 12 t	ES1C (CAN)	5	70	2WG50	-
Class up to 23 t	ES1C (CAN)	10	90	3WG94	3WG94
Class up to 36 t	ES1C (CAN)	16	130	WG131	WG130
Class up to 44 t	ES1C (CAN)	22	160	WG161	WG160
Class up to 72 t	ES1C (CAN)	32	180	WG171	-
Class up to 80 t	ES1C (CAN)	37	200	WG191	WG190
Class up to 98 t	ES1C (CAN)	42	240	WG211	WG210
Class up to 120 t		50	280	WG261	WG260
Class up to 140 t		60	330	WG311	WG310

* Especially developed for limited mounting space

