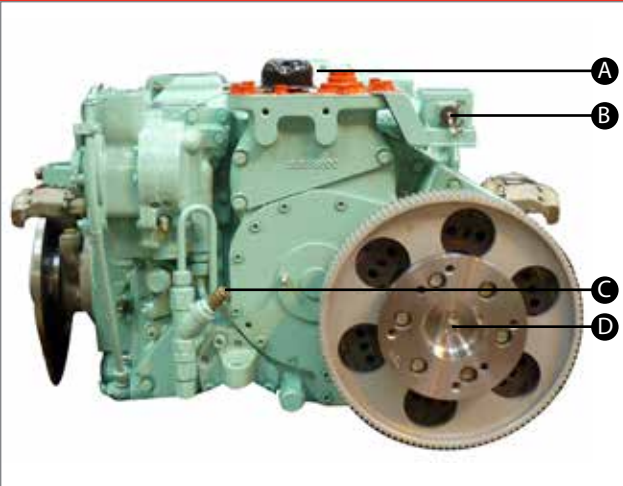


TN15E+ transmission family



- A – Forward/reverse mechanism
- B – Data port
- C – Oil strainer and test point
- D – Centrifugal clutch

Product description

The TN15E+ is the latest generation in a family of cross drive transmissions with integral steering system, suitable for tracked armoured personnel carriers and armoured fighting vehicles up to 235bhp.

The introduction of dieselisation and new materials throughout the transmission has helped in increasing the original TN15P from 195bhp up to 235bhp, with vehicle weight increased from 9 tonnes to 13 tonnes.

Key features

Rating: 235bhp at 2400rpm

Configuration: offset cross drive manual or fully automatic

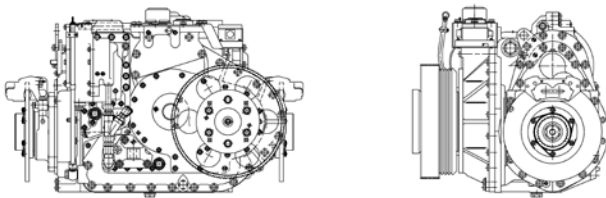
Speeds: 7 forward, 7 reverse

Arrangement:

- Three speed compound epicyclic gear set with low and high ranges. A further multiplate clutch is employed for seventh gear. Remote mounted or close coupled
- Manual or automatic gear selection, automatic achieved by replacing the mechanical selector with electro hydraulic valve block which sits in the same space envelope

Overall ratio speed: 19.4

Principle dimensions



Length: 627mm

Height: 573mm

Width: 891mm

Dry weight: 425kg

Rating

- Maximum input torque 800Nm at 1800rpm
- Maximum input power 235bhp at 2400rpm
- Typical maximum vehicle weight 13 tonnes

Steering

- Merritt-Brown regenerative system employing single disc brakes

Gearbox	Drive ratio (straight)	Steering (typical metres)	Min. radii (feet)
1 (Lx1)	16.10	1.71	5.6
2 (Lx2)	7.18	3.84	12.9
3 (Lx3)	5.15	5.33	17.5
4 (Hx1)	3.10	8.9	29.2
5 (Hx2)	1.72	16.06	52.7
6 (Hx3)	1.31	21.28	69.8
7 (Hx7)	0.83	33.22	109

Lubrication system

- Oil type OMD 90 transmission oil circulated by an integral mounted gear pump driven from the engine input. Pressure regulated by a pre-set integral mounted pressure relief valve
- Full flow filtration system on all E and E+ transmissions, with the main transmission filter mounted on the transmission or vehicle mounted if required

Brakes

- Main brakes and handbrake system are vehicle mounted
- **David Brown** can assist in the upgrade of existing brake systems or help in designing a complete new system

Control system

- Electro hydraulic fully automatic, electro hydraulic semi- automatic and mechanical hydraulic controllers
- Both the mechanical and the automatic selectors used fit in the same space envelope on the transmission
- Operation of the fully automatic system is by a simple gear selector and an electronic controller – both can be configured to suit individual customer requirements
- **David Brown** can supply harnesses, connections and assist in vehicle integration if required

Input

- Centrifugal clutch – requires larger capacity clutch if vehicle weight approaches 13 tonnes

Auxiliary drive (PTO)

- Belt from centrifugal clutch, if required

Mounting

- Trunnion mounted at the outputs with a reaction mount for remote location next to the input

Upgrades

- Upgrades are available - please contact **David Brown** for further information

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The information contained in this catalogue has been obtained through sources deemed reliable but cannot be guaranteed as to its accuracy. Any information of special interest should be obtained through independent verification and consulted with a **David Brown** representative.

In the interest of continuous development, **David Brown** reserves the right to alter designs and specifications without prior notice.

David Brown is certified to ISO9001:2008. Your **David Brown** representative should be consulted prior to product selection and use. 3X terms and conditions apply. Contact your local **David Brown** representative for details and to check eligibility.