

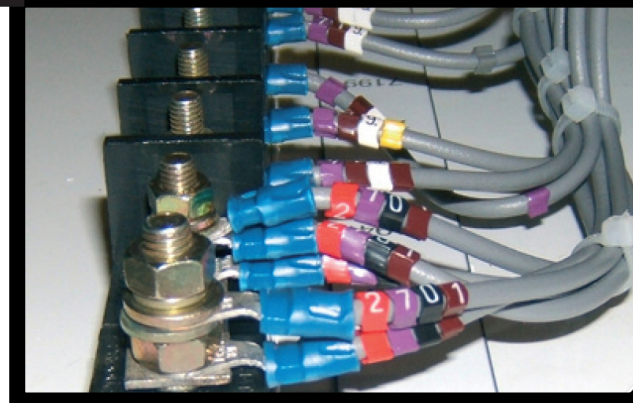


CLASS **15X**

GEAR BOX VALVE
MODULE

Northern Rail, Arriva Trains Wales.

Ongoing



OVERVIEW

Train Door Solutions (TDS) have designed and developed a valve module for the Voith turbo transmission that is used on all Class 15X rail cars with diesel engine drives.

The TDS gearbox valve module was designed as a direct replacement for the existing module, which suffers from poor reliability due to its susceptibility to air supply contamination. The new unit also offers improved spare part cost and availability.

Atkins Rail has independently reviewed the TDS gearbox valve module against mandatory requirements and has concluded that it does not impact group standards. The module is physically a direct replacement for the existing item, performs an identical function and is similar in performance and weight to the existing valve module.

TDS have currently manufactured and supplied gearbox valve modules to Arriva Trains Wales for their Class 153 fleet of rail cars. The units have been in service since 2003 without any reported failures. The unit is provided with a full 12 months warranty and no routine maintenance is required between C6 overhaul periods.



CLASS 15X

GEAR BOX VALVE MODULE

Northern Rail, Arriva Trains Wales.

Ongoing

TECHNICAL SPECIFICATION

The Train Door Solutions (TDS) gearbox module is supplied fully assembled and factory tested ready for installation to the Voith transmission.

VALVES: 5-station valve manifold fitted with 5 port, 2 position single solenoid pilot operated valves to provide the following functions:

- REVERSE / FORWARD
- UW PRIMARY INFLUENCE
- TRANSMISSION FILL

The electrical connections to the valve solenoids are by DIN plug connector. All wiring is 18 AWG Tri-rated cable.

All pneumatic connections are push-in quick release type.

PNEUMATIC CONNECTION: The outlets from the valve module are terminated in 8mm diameter nylon tube, which connect to the existing bulkhead inlets.

ELECTRICAL CONNECTION: Termate Ter-Mini M4 stud terminal rail.

MOUNTING: The valve manifold and terminal rail are mounted on a painted steel back plate, which has the same mounting interface as the existing module.

CONTROL	ELECTRO-PNEUMATIC
INPUT VOLTAGE	24 VDC
VOLTAGE RANGE	+/- 30% OF INPUT VOLTAGE
TEMPERATURE RANGE	-10°C TO +65°C

