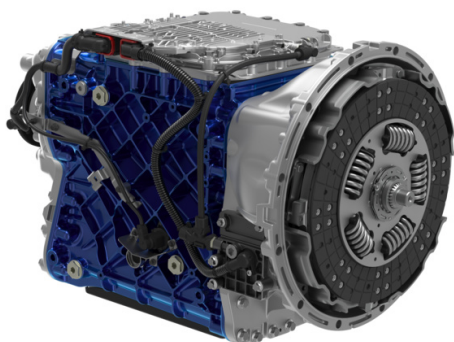


FACT SHEET

TRANSMISSION

ATO2612 I-Shift automated gearbox



I-Shift – 12-speed – automated gearbox.

I-Shift ATO2612 generation H is a 12-, 13- or 14-speed electronically controlled splitter and range-change over drive transmission designed for automatic gear changing, with the possibility of manual shifts. It is dimensioned for 2600 Nm of torque.

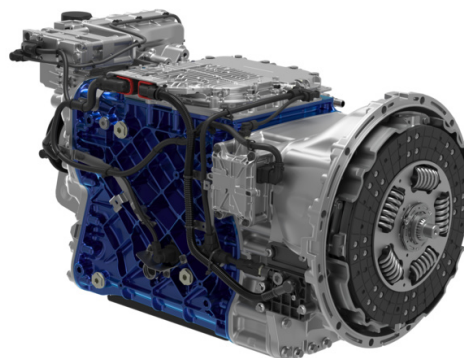
I-Shift is characterised by a fast and smooth gear-changing system featuring minimum interruption in torque delivery during gear changing.

The gearbox has advanced software with well-adapted gear change strategies. Because the gearbox has such a large ratio coverage, it has capacity for both high starting traction and high average speeds.

I-Shift ATO2612 is approved for engines with a torque level up to 2600 Nm. This transmission is suitable for long haul operations, heavy construction applications, regional and urban transportation duties.

Transmission oil cooler, power take-off, compact retarder and emergency power steering pump can be fitted to the transmission. With the selectable transmission oil cooler program, it is possible to adjust the cooling need to suit the operation conditions.

I-Shift ATO2612 has long intervals between oil changes, which promote low operating costs and less environmental impact.



I-Shift with crawler gears. It has an extension unit between the clutch and the gearbox - enabling 13 or 14 gear with the possibility of additional reverse gears. Includes options ASO-C/ASO-ULC/ARSO-MSR.

Sales variants

Aux Speed Operation

ASO-C Crawler gear

ASO-ULC Ultra-low crawler gear

Aux Reverse Speed Operation

ARSO-MSR Reverse multispeed



DRIVER APPEAL

- Automatic gear changes provide a smooth and comfortable driving experience.
- Seat or dashboard-mounted gear selector offers driver flexibility.
- Manual mode option enhances driver control and engagement.



ENERGY EFFICIENCY

- I-Shift optimizes gear shifts for fuel efficiency, reducing energy consumption.
- Overdrive gear exploits the engine's economy rev band, saving fuel.
- Lightweight aluminium housing contributes to lower fuel usage.

FACT SHEET

TRANSMISSION

ATO2612 I-Shift automated gearbox



PRODUCTIVITY

- Oil level sensor for pre-trip information.
- A fast gear-changing system minimizes torque interruption, enhancing efficiency.
- Crawler gear option allows low-speed manoeuvrability and startability.
- Advanced software adapts to transport conditions for optimal performance.

I-Shift is prepared for the future

In generation H, developed software gives an improved accuracy. The gearbox has a developed control unit with micro controller, sensors and actuators to enable an optimal control of gear shifting.

I-Shift is prepared for the future. The micro controller has increased computational capacity to support further functional growth.

Three main speeds, splitter, range and reverse gears

The main box has three base gears, an integrated splitter gear and a reverse gear. In the range housing, the range gear provides a high resp. low gear and is of planetary type.

All the shafts, bearings and gears are sturdy dimensioned for high operating reliability and long service life. All the gears are made of special steel that has been case-hardened to provide considerable strength. Helical gears in both the main box and range-change section mean that more gear surface is in mesh at any given time, promoting quiet operation and high reliability.

Fast gear-changing system with short torque interruption

I-Shift is a very flexible gear-changing system. In Auto mode, gears change automatically even with the cruise control engaged.

In sensitive driving conditions with a seat mounted gear selector, the driver can switch to the manual mode. In Manual mode the driver changes, gear manually using a button integrated into the gear lever. Since clutch operation is controlled by the gear-changing system, there is no clutch pedal.

I-Shift gear selector in seat or in dashboard

For I-Shift gearboxes, there is a choice between a seat mounted and a dashboard-mounted gear selector. The seat mounted is best suited for rough or complex driving while the dash-

board-mounted selector provides extra room in the cab. For more information, see the fact sheet "I-Shift gear selector".

I-Shift drive modes and for optimum efficiency

The I-Shift gearbox's functions are optimized with specially adapted drive modes, which make the gearbox even more practical and economical by adapting the gearshift functionality to the current transport conditions. For more information, see the fact sheet "I-Shift drive modes and software functions".



Shown on the display: 1. Drive mode 2. I-See symbol (Green = Working/Grey = Engaged "Ready to work") 3. Automatic gear shifts / Manual gear shifts 4. Selected gear 5. Aux Brakes engaged 6. Brake level in position automatic (A=Brake blend)

Reinforced gearbox application as an option

For I-Shift gearboxes transmission application, there is a choice between a basic gearbox application (TRAP-BAS) and a reinforced gearbox application (TRAP-HD). The choice of application depends on-road conditions and topography. For more information, see the fact sheet "Transmission application".

I-Shift with crawler gears

I-Shift with crawler gears has an extension unit between the clutch and the gearbox. The extension unit includes options ASO-C/ASO-ULC and ARSO-MSR.

ASO-C – Crawler gear

The ASO-C, crawler gear enabling a 13th gear, is for improved vehicle startability and low speed manoeuvring.

FACT SHEET

TRANSMISSION

ATO2612 I-Shift automated gearbox

ASO-ULC – ultra-low crawler gear

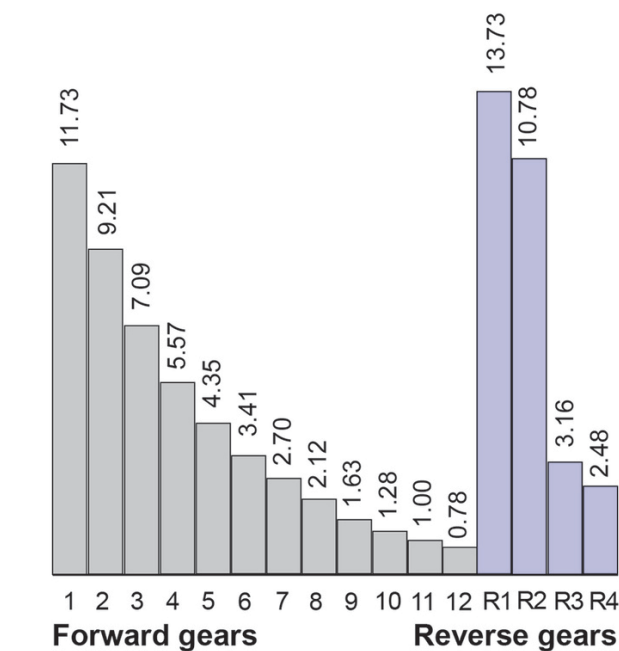
The ASO-ULC gives two extra crawler gears - enabling a 13th and a 14th gear. Ultra-low crawler gear and crawler gear. Ultra-low crawler gear is designed for very good startability and very low speed manoeuvring.

ARSO-MSR – Reverse multispeed

The ARSO-MSR function gives two extra reverse gears. The lowest reverse gear enables reverse in a very low speed, which gives more time for manoeuvring. ARSO-MSR requires ASO-C or ASO-ULC.

SPECIFICATION

Type designation.....	ATO2612
Generation.....	H
Type.....	Automatic splitter/range-change over drive transmission
Max incoming torque.....	2600 Nm
Number of forward gears.....	12, 13 or 14
Number of reverse gears.....	4 or 6
Weight without oil standard version.....	278 kg
Weight without oil crawler gears version.....	324 kg
Oil change volume, standard version.....	approx. 16 l
Oil change volume, standard version incl. oil cooler with normal capacity.....	approx. 16 l
Oil change volume, standard version incl. oil cooler with high capacity.....	approx. 17 l
Oil change volume, crawler gears version.....	approx. 17.6 l
Oil change volume, crawler gears version incl. oil cooler with normal capacity.....	approx. 17.6 l
Oil change volume, crawler gears version incl. oil cooler with high capacity.....	approx. 18.6 l

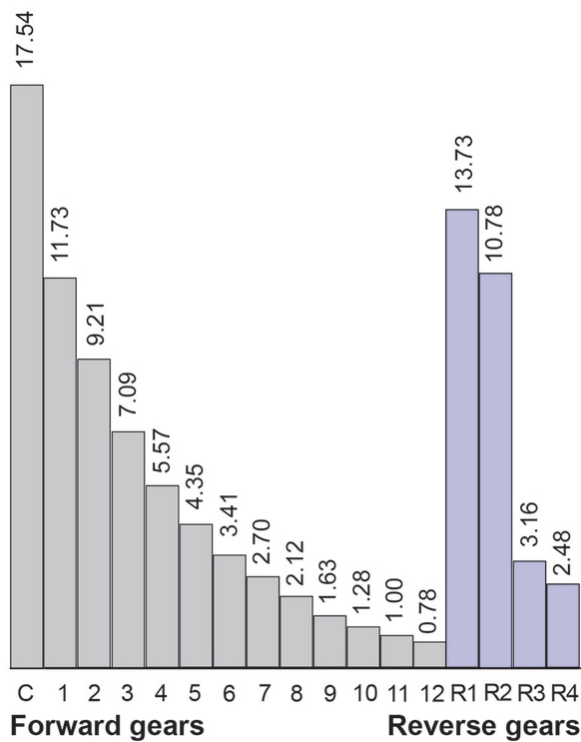


Ratios ATO2612

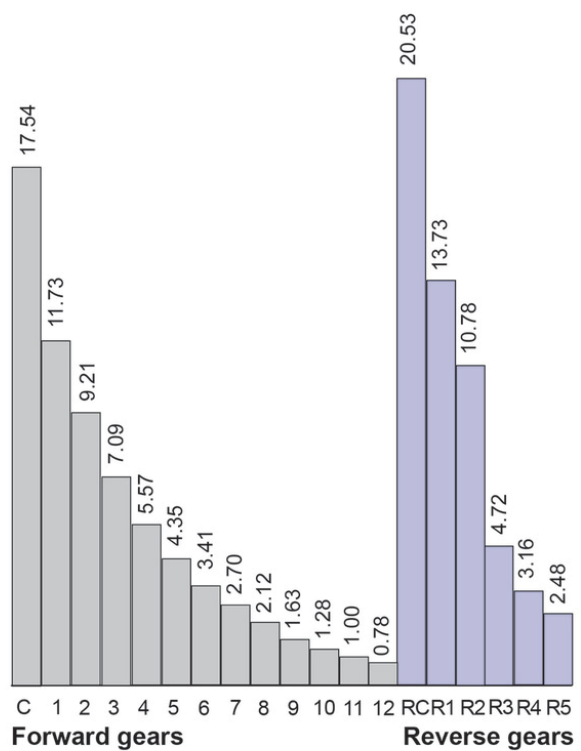
FACT SHEET

TRANSMISSION

ATO2612 I-Shift automated gearbox



Ratios ATO2612 with ASO-C

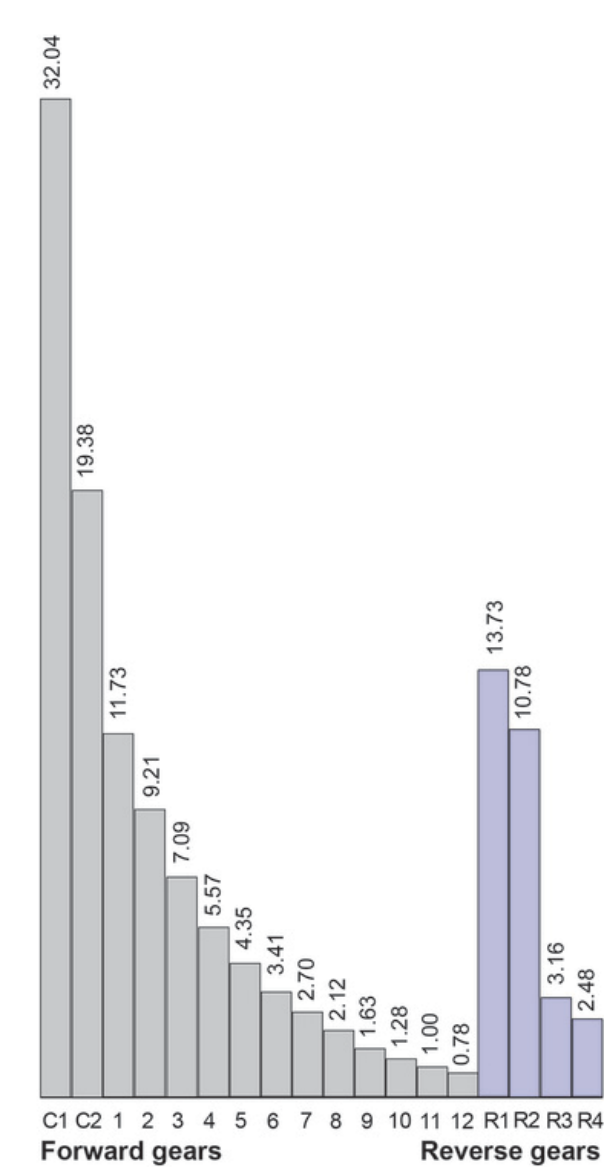


Ratios ATO2612 with ASO-C and ARSO-MSR

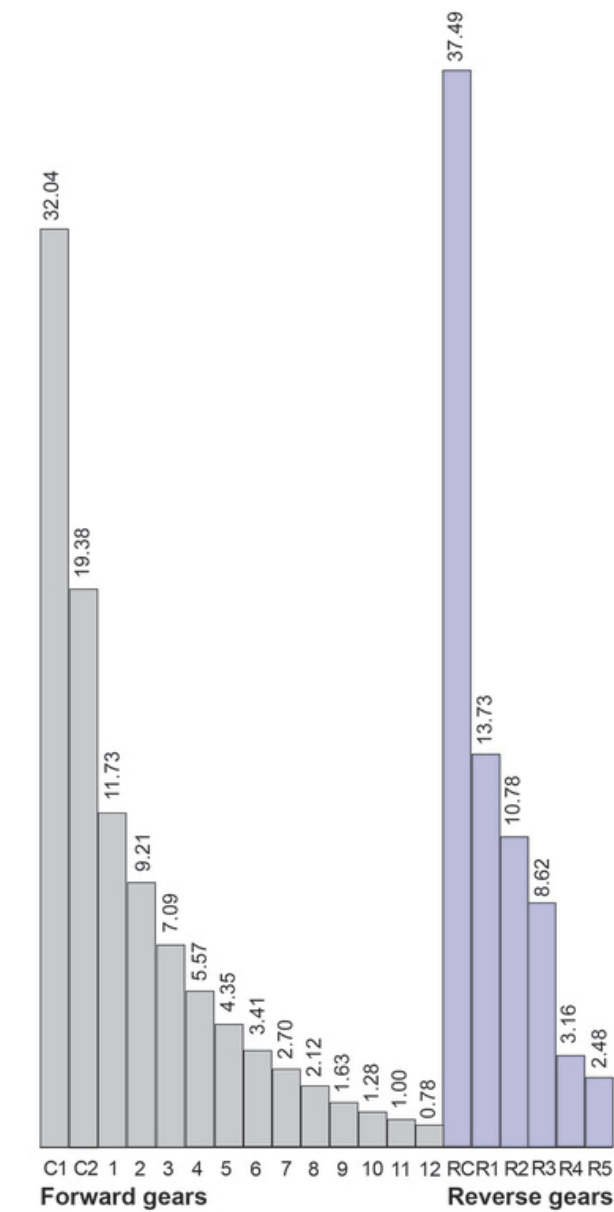
FACT SHEET

TRANSMISSION

ATO2612 I-Shift automated gearbox



Ratios ATO2612 with ASO-ULC



Ratios ATO2612 with ASO-ULC and ARSO-MSR