Intelligent Transmission Automation

Highly Efficient Automation Solutions for Commercial Vehicle Transmissions
Automated Manual Transmission Solutions

- Lowers required investment to become a player in AMT technology
- Great wealth of experience thanks to three decades of developing AMT technology
- Reduced time to market
- Transmission automation constitutes a step towards autonomous driving

Customer Value

WABCO: Providing a Comprehensive Range of Transmission Automation Solutions

1. Adaptive ECU Implementations
2. Intelligent Gearshift Automation
3. Intelligent Clutch Automation
4. Sensors & Auxiliary Components
5. AMT Software Services

The WABCO Difference

- Global market leading transmission automation supplier with over 4 million AMT systems sold globally
- Comprehensive transmission automation hardware, software and services adaptable to specific OEM requirements
- World class engineering expertise leveraging 30 years of close collaboration with OEM transmission designers
- Outstanding proximity with OEMs, thanks to extended regional presence and integrated global supply chain
### Adaptive Electronic Control Unit Implementations

#### Integrated in gearbox actuator
- ECU integrated into the gearbox actuator
- Absence of a wiring harness increases reliability
- Improved space utilization

#### Transmission mounted
- Standard transmission mounted ECU
- Absence of a wiring harness reduces costs
- Improved modularity

#### Standalone
- Standard cabin mounted ECU
- Flexibility in mounting location
- Cost efficient
- Option to choose design of shift lever unit

#### Integrated in WABCO shift lever unit
- Off-the-shelf shift lever unit with inbuilt cabin ECU
- Reduced time to market
- Low development effort
- Cost efficient

### Intelligent Gearshift Automation

#### Customized integrated actuator
- Actuator integrated into the transmission with customized hardware and software modules
- Best performance
- Developed to OEM’s specific requirements
- Shortened time to market

#### OptiDrive™ actuator
- Converts an existing manual transmission into an automated manual transmission
- Robust design for optimum cost
- Reduced time to market

### Intelligent Clutch Automation

#### Pneumatic Clutch Actuator (PCA)
- Electro-pneumatically controlled external clutch actuator
- Adaptable to multiple manual transmissions
- Easy access for better serviceability
- Reduced time to market

#### Concentric Pneumatic Clutch Actuator (CPCA)
- Concentrically mounted electro-pneumatic clutch actuator
- Reduced mechanical complexity improves shift performance
- Reduced weight of clutch system
- Robust design
High Quality Sensors & Auxiliary Components

Range and Split cylinders
Range & split cylinders for transmissions
- Customized solutions suitable for AMT transmissions
- High flexibility to adapt to gearbox design

Sensor portfolio
Extensive portfolio of gearbox automation sensors
- Distance sensors
- Speed sensors
- Inclination sensors
- Pressure sensors
- Temperature sensors

Pneumatic valve portfolio
Standardized pneumatic valves for transmissions
- Pressure reduction valves
- Transmission lock valves
- Valve blocks

Wiring harness
Transmission wiring harness for Automated Manual Transmission systems

Expert AMT Software Services

Software optimization
WABCO base software supports your own application software and parameters

Software consulting
Apply your own software and use WABCO’s expertise to validate and improve it on any AMT hardware

Software diagnostics & testing
WABCO can support you with end-of-line testing & diagnostics software, service station training and much more

WABCO software customization
Benefit from WABCO software and you can customize parameters for different vehicle applications and components

Complete WABCO software
Leverage the advantages of WABCO’s proven end-to-end AMT software for reduced time to market

Provided by WABCO
Provided by OEM