



PI 2229

For technical personnel only!

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# PRODUCT INFORMATION

## ACTIVE TPMS SENSORS

### FOR HEAVY-DUTY APPLICATIONS IN THE EU

Motorservice has expanded its product portfolio to include active tyre pressure monitoring system sensors, or TPMS sensors, for heavy-duty applications. With the TPMS sensors from Pierburg, Motorservice is offering proven quality that covers a broad range of buses and lorries.

#### YOUR ADVANTAGES

- OE quality
- Large market coverage
- Quick and easy sensor installation
- Ready to use right away, no programming required (plug-and-play)
- Meet the OE specifications in terms of form, function and vehicle use



#### CURRENTLY AVAILABLE SENSORS\*

Item no.	OEM	Ref. no.	Example applications
7.14060.36.0	Scania	2893726	G II G280 Plugin Hybrid; P II P410 Ethanol
7.14060.37.0	MAN, Neoplan	81.27421-0320	LION'S CITY Lions City Electric; Skyliner N 122 / 3 L
7.14060.38.0	Renault Trucks, Volvo	7424173845, 24173844	K 380P MEDIUM; 380P HEAVY; FH16 III 780 AERO
7.14060.39.0	Mercedes-Benz, Setra	A 012 542 63 18	ACTROS MP4 / MP5 1824 LS; Series 500 TopClass S 531 DT
7.14060.40.0	Heuliez, Iveco	5802458202, 5803401345	X-WAY AS440X46TP CNG+LNG; CROSSWAY LE 14.5M
7.14060.41.0	DAF	2344578, 2120641	CF FAN 460, FAG 460; XFC FTT 370

All content including pictures and diagrams is subject to change. For assignment and replacement, refer to the current catalogues or systems based on TecAlliance.

\* Names, descriptions and numbers of engines, vehicles, products, manufacturers etc. are mentioned solely for the purpose of comparison. The parts contained in the information are spare parts in guaranteed quality for the engines and vehicles listed.





## BACKGROUND INFORMATION ON TPMS

The tyre pressure monitoring system (TPMS) ensures that the tyres maintain the correct tyre pressure.

In the event of loss of pressure, the driver is alerted via the TPM warning lamp.

A distinction is made between active ("direct") and passive ("indirect") TPMS.

The TPMS sensors provide active TPM.

### ACTIVE ("DIRECT") TPMS

- One battery-operated sensor is fitted in each wheel rim, which constantly measures the air pressure and temperature inside the tyre.
- The data is sent wirelessly to the central electronics.
- Exact air pressure and temperature monitoring in real time for each individual tyre
- The sensor batteries have a durability of around seven to ten years. As the batteries cannot be replaced, the sensor must be replaced afterwards.



### NOTE

If one sensor battery is flat, the other three may also soon be flat. We therefore recommend switching all four sensors at once.



### PASSIVE ("INDIRECT") TPMS

- The system calculates the tyre air pressure using the wheel speed sensors ("ABS sensors") across the rolling circumference:  
When air escapes a tyre, the rolling circumference decreases and the wheel rotates more quickly.
- Passive TPMS uses components that are already present in the vehicle and only the software is expanded here.
- Depending on the vehicle and equipment, the system detects the loss of pressure, but not which tyre is affected.
- Similarly, the indirect TPMS cannot detect whether all four tyres are simultaneously experiencing a loss in tyre pressure.

### TPMS WARNING LAMP

- If there is no malfunction in the TPMS, the TPM warning lamp lights up when starting a vehicle and goes out again after a few seconds.
- If the TPM warning lamp lights up continuously, the air pressure in one or more tyres is too low. Some vehicles also provide a visual depiction of the tyre pressure.
- If the TPM warning lamp lights up and flashes for 60–90 seconds before it lights up continuously, this indicates a system malfunction (e.g. flat sensor battery, missing or defective sensor, incorrect sensor for the vehicle type).