Tyre pressure control system
Product overview

Description

Via radio, the system transmits the air pressure and temperature measured in the tyres to a control unit which is connected to a display mounted in the vehicle interior. Via the **display unit**, the user has **the facility to configure the system and to call up and acknowledge status messages**.
The system can monitor seven tyres (2 x front, 4 x rear, spare tyre) and clearly displays the status of the tyres on a multi-colour display with **seven different background colours**. The symbols of the display have been designed especially for **rapid recognition of the tyre state**.
The system is simply connected to the vehicle electric system and is **immediately ready for use after installation of the tyre sensors**. As the system is supplied with factory preset tyre positions, **no programming is necessary here**. The sensors are marked according to the programmed position, so that display of the individual tyre states is possible even without programming. **If a fault is present, it is therefore possible for the driver to receive a specific statement in relation to the tyre concerned**.
A specialist garage must be consulted for fitting the sensors, as the sensor is fitted instead of the normal valve in the rim. After balancing and inflation of the tyres, the wheels can be fitted again, and, via the control fields of the display, the system is programmed with the current pressure as a reference value (nominal pressure). After these steps, the system is ready for operation.

Part numbers and gross prices (incl. 19% VAT)

TC-400 tyre pressure control system	8XX 009 729-001	€299.00
Replacement/Additional sensor	6PK 166 919-001	€59.95

Technical data (extract)

Designation ..... Hella TC-400
Packaging ..... Designed aftermarket packaging
Scope of supply ..... Control unit, display unit, 4 valve sensors, harness, installation material

Sensors

Pressure range, gross ..... 0.00 ~ 5.37 bar
Pressure range, net ..... 0.00 ~ 3.50 bar
(excess pressure warning not applicable from a reference pressure of 3.5 bar)
Temperature range ..... -40 °C ~ 100 °C
Weight ..... 35 g
Housing material ..... Polyamide PA66 ZYTEL 101L
Resistant to lubricants, oils, fuels and brake fluids. Resistant to alkalis (can be used in batteries). Melting point 263 °C, deformation temperature 107 °C.
Usable rims ..... ETRTO-Norm, valve ∅ 11.3 mm, wall thickness 2.5–3.5 mm
Tested speed ..... 400 km/h
Breaking test: Maximum bending force ..... 754.52 N (75.4 kg)
Breaking test: Maximum deformation ..... 10.12 mm (at valve base)
Vibration stimulation test/Wide band random vibration test ..... VW Norm 801 01 Point 8.2, Status April 2001
Passenger car alloy rim shock test ..... 515 kg weight from a height of 230 mm: no damage

Test results (extracts)

Constant temperature at different pressures.
Four sensors were fitted to a wheel. The accuracy of the pressure measurement was checked by TÜV Automotive in Garching at a temperature of 18 °C using a calibrated reference-pressure measuring device.

WIKA Pressure-measuring device	Display on the tyre pressure control system			
	Sensor 1	Sensor 2	Sensor 3	Sensor 4
0.5	0.45	0.45	0.43	0.45
0.7	0.65	0.63	0.63	0.65
1.0	0.95	0.90	0.93	0.93
1.5	1.48	1.43	1.43	1.45
2.0	1.95	1.95	1.95	1.95
2.5	2.45	2.45	2.43	2.43
3.0	2.95	2.93	2.93	2.93
3.5	3.45	3.40	3.40	3.40
4.0	3.93	3.90	3.88	3.90
5.0	4.93	4.88	4.88	4.88