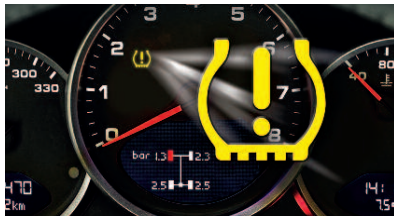


## Huf TPMS-Guideline



### Legislation in Europe

In Europe, regulation ECE-R 64 specifies that all vehicles registered from November 2014 onwards must be equipped with tire pressure monitoring systems.

**Note:** Since 2014 new vehicles are equipped with tire pressure monitoring systems by car manufacturers.



### Direct and indirect measurement systems

**Direct measurement tire pressure monitoring systems** record the tire pressure and tire temperature in every wheel. Both are transmitted to a control unit. Direct systems can detect slow losses as well as rapid loss of pressure. Data can be displayed directly in the driver information system depending on the automotive manufacturer's concept.

**Indirect measurement tire pressure monitoring systems** do not record the tire pressure, but evaluate the signals of the wheel speed sensors. This system is less comfortable for the user and no sensors are needed.

**Note:** Two thirds of the new registered vehicles are equipped with a direct measurement tire pressure monitoring system



### RDE-sensor (OE-sensor)

On the OE-sensor the car specific protocol is already installed. There is no need to configure the sensors, because the OE-sensors already fit to the specified vehicle. (e.g. RDE027 fits to BMW 1, 2, 3 ...) Please check the re-learn procedure for your specific vehicle.



### Universal sensor (IntelliSens)

Universal sensors convince with the best coverage on the market.

The Huf "IntelliSens" universal sensor is equipped with a multitude of protocols and has only to be configured, which is faster than programming a sensor.

**Create ID:** The sensor will be activated for the specific car with a diagnostic tool. The sensors have to be re-learned to the control unit of the vehicle.

**Copy or clone ID:** With a diagnostic tool the protocol and the sensor ID will be transferred to the universal sensor. No re-learn procedure is needed.

**Note:** The Huf "IntelliSens" universal sensor is "made in Germany".



### Re-learn procedure (depends on car model not on the sensor)

Whether you use an OE-sensor (RDE-sensor) or the Huf "IntelliSens" universal sensor you need to check the re-learn procedure for your specific vehicle.

**Automatic re-learn procedure:** The sensors are recognised by the vehicle automatically.

**OBDII:** The re-learn procedure for the sensors with the diagnostic tool can also be done by OBDII plug.

**Manual re-learn procedure:** The parking vehicle has to be transferred to re-learn mode. By command the sensors were re-learned to the control unit. Partly a diagnostic tool is needed.



### Service/mounting process

1. Check whether the vehicle has a direct TPMS
2. Create an initial customer report (check sensors and valves)
3. Ensure that the wheel positions of the old and new sensors match
4. Sensors/valves mounted professional  
 Note: Between 1.5 Nm and 3.3 Nm (13-29 in-lbs) you will notice a sluggish movement until the shear collar breaks free. Turn further until the final torque moment of 4 Nm (35 in-lbs) is reached. Then you have mounted the sensor and valve correctly.
5. Configure universal sensors/clone OE-sensors
6. Finish with re-learn procedure

**Note:** The Huf "IntelliSens" universal sensor mounted on to the rim with 4 Nm (35 in-lbs)



### Diagnostic tool

- check through the tire wall if sensors are installed (create a protocol)
- technical information (part no., tightening torque, re-learn procedure)
- OBDII connection for re-learn procedure
- configure/program universal sensor



### IntelliSens App – HC1000

- all-in-one solution
- automatic update for new vehicle models
- easy and intuitive usage
- coverage of current OE-sensors, Huf "IntelliSens" universal sensors and other sensors
- quick data readout saves time
- data base with re-learn procedure available
- data base history
- protocol print out over WLAN or PDF
- menu in 11 languages available
- saves the data over tool memory or cloud

### The most important order numbers at a glance (extract of Huf product range)

Description	Order Number	Type	Car manufacturer	Models (examples)
UVS4030	43.048.000	Uni	e.g. BMW, Ford, Hyundai, Mercedes, Opel	3er, Focus, ix35, C-Class, Astra
RDE024	73.901.024	OE	Dacia, Renault	Duster, Clio, Kangoo, Twingo
RDE027	73.901.027	OE	BMW	1, 2, 3, 4, X1
RDE031	43.470.000	OE	Ford	B-MAX, C-MAX, Mondeo
RDE036	43.475.000	OE	Mercedes	A-, B-, C-, E-Class, ML, V-Class
IntelliSens App	73.906.500			

The daily updated vehicle coverage is available at your distributor, in our TPMS reverence list or in the Huf Product Finder at [www.products.intellisens.com](http://www.products.intellisens.com)

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