Český metrologický institut

Type Approval Certificate

No. 0111-CS-A014-24

Czech Metrology Institute in accordance with the Law of metrology No. 505/1990 Coll. as amended

approved

Tyre pressure measuring instrument
type BMC11

under observation of technical data referred to in Annex of this Certificate.

Type approval mark: **TCM 174/24 - 5983**

Applicant: **TATSUNO EUROPE a.s.**
Pražská 2325/68
678 01 Blansko
Czech Republic
ID: 26221454

Manufacturer: **TATSUNO EUROPE a.s.**
Czech Republic

Valid until: **30 September 2034**

Information on judicial remedies:
The judicial remedies against this decision are available to the applicant through Czech Metrology Institute to Czech Office for Standardization, Metrology and Testing within 15 days since the receipt of this Certificate.

Description:
Essential characteristic, approved conditions special conditions, examination results including technical drawings and schemas are set out in the technical test report appertaining to this certificate. The certificate comprises the front page and the technical test report. Certificate has 7 pages.

Český metrologický institut

Brno, 30 September 2024

Ing. František Staněk, PhD.
Deputy Director for Legal Metrology

Test report

1 Description of the measuring instrument

These are tyre pressure measuring instruments for motor vehicles, designed as a fixed device with a bourdon tube pressure gauge as the measuring element.

The tyre pressure measuring instrument type BMC11 consists of the following parts:

- Lockable steel case (frame, cover plates)
- Pressure medium source (compressor unit with a pressure vessel or pressure hose for connecting the pressure medium source)
- Bourdon tube pressure gauge WIKA, type 211
- Control panel with pneumatic elements (buttons "+" and "−") for adjusting the tyre pressure
- Pressure hose with a fitting for connecting to the tyre.

Measuring instruments of this type are intended as legal measuring instruments for the measurement of the tyre pressure of road motor vehicles.

2 Basic Technical and Metrological Characteristics

Table 1: Basic technical parameters of the device

Device Type	**BMC11**
Height[mm]	**1 520**
Width [mm]	**700**
Length [mm]	**520**
Pressure Measurement Range [bar]	**0 to 10**

Table 2: Basic parameters of the pressure measuring gauge

Kind of measuring element	**Bourdon tube pressure gauge**
Manufacturer	**WIKA**
Model designation	**211.00**
Measurement range [bar]	**0 to 10**
Scale division [bar]	**0.1**
Nominal diameter [mm]	**160**
Temperature range [°C]	**-10 to 40**

Table 3: Maximum permissible errors

Measured pressure p	**Maximum permissible errors [bar]**
$p \leq 4$ bar	0,08
4 bar $< p \leq 10$ bar	0,16

2.1 Basic functions of the measuring instruments

1. Checking the tyres pressure of road vehicles

   After connecting the hose to the tyre valve, the current pressure value of the tyre pressure is automatically measured.

2. Adjusting the tyres pressure of road vehicles

   After connecting the hose to the tyre valve, the current pressure value of the tyre pressure is automatically measured. By pressing the "+" button (increase pressure) or the "−" button (decrease pressure), the tyre pressure can be adjusted as required.

3 Inscriptions and marking

The dial plate of the bourdon tube gauge shall visibly display the following information:

- symbol of the measured quantity: p_e,
- symbol of the unit of measurement: **bar**.

Additionally, the device shall bear following information:

- Manufacturer's identification,
- Device identification (model or serial label),
- Type approval mark.

The set of information placed on the device fulfils the requirements of the general measure No. 0111-OOP-C021.

4 Type approval

A shortened testing based on the results and of the type approval No. 3.13-12512/87 dated 21 November 1988 and its revision No. PTB-3.33-4071362 dated 8 December 2014 was carried out in accordance with the general measure No. 0111-OOP-C021. The results of the performed tests are stored at the tester's office at the CMI RI Brno, department of primary metrology of pressure, vacuum and low mass flow.

Conclusion of the Technical Tests:

Tyre pressure measuring instruments of this type meet all required metrological parameters and comply with the requirements of the general measure No. 0111-OOP-C021-17. When following the manufacturer's instructions specified in the manual, the instruments are capable of fulfilling their intended function.

5 Verification

Only the measuring instruments that conform to the requirements of the type approval can be verified.

During verification, the technical and metrological requirements specified in the general measure No. 0111-OOP-C021 shall be met.

Tyre pressure measuring instruments for motor vehicles that pass the prescribed tests shall be marked with a self-adhesive verification mark on the dial cover, ensuring that all information remains legible.

An additional verification mark shall be placed on the manufacturer's label. Information on the number, type, and location of verifications marks is provided in Appendix 2.

6 Validity period of the verification

The validity period of the verification is determined by the Ministry of Industry and Trade decree.

7 Appendices:

Appendix 1: Tyre pressure measuring instrument, type BMC11
Appendix 2: Location of the type approval mark and verification marks

Appendix 1: Tyre pressure measuring instrument, type BMC11

Figure 1: Tyre pressure measuring instrument, type BMC11

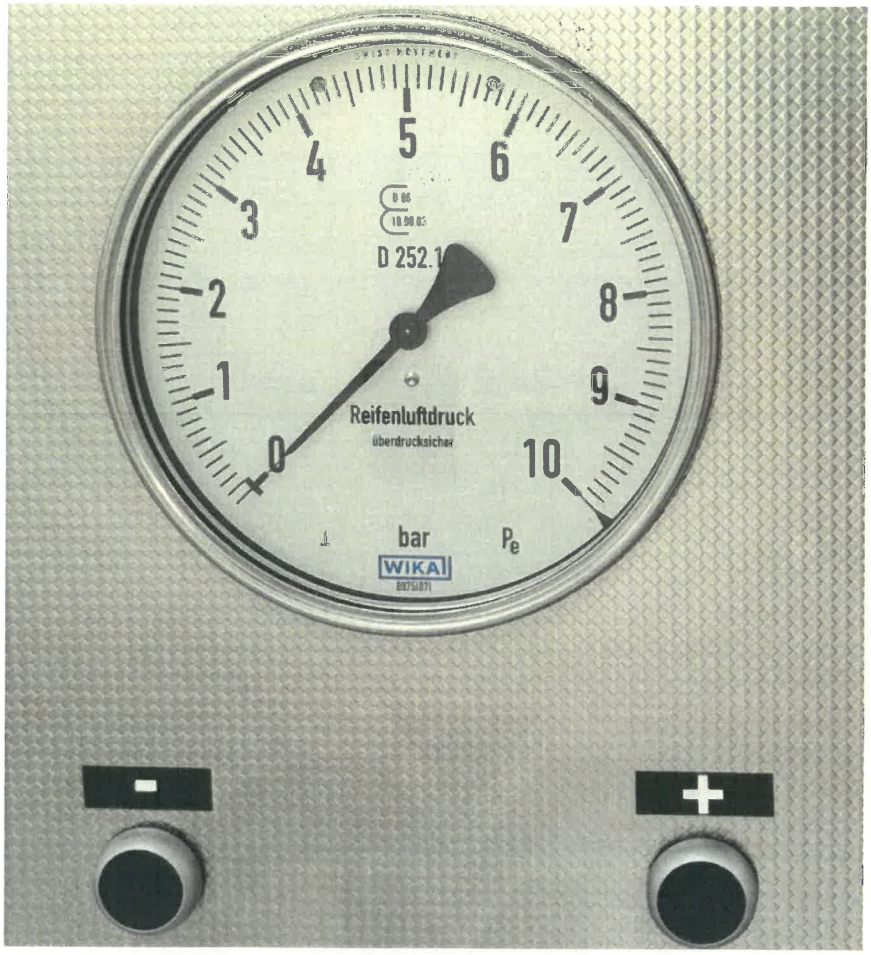

Figure 2: Front panel with control elements and measuring element

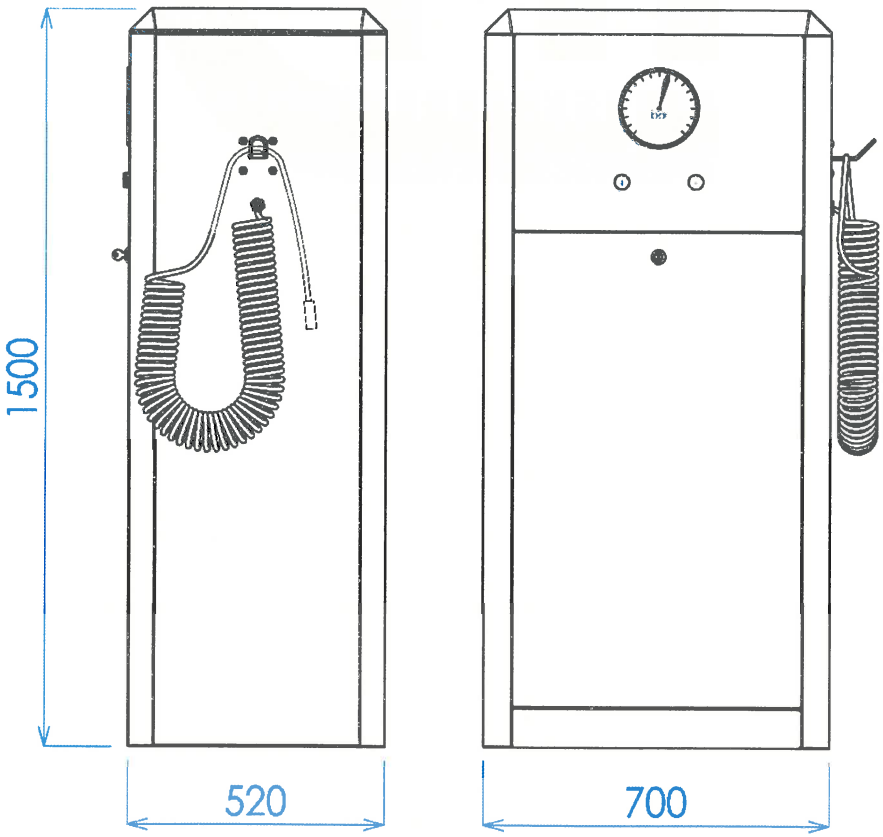

Figure 3: Basic dimensions of the measuring instrument

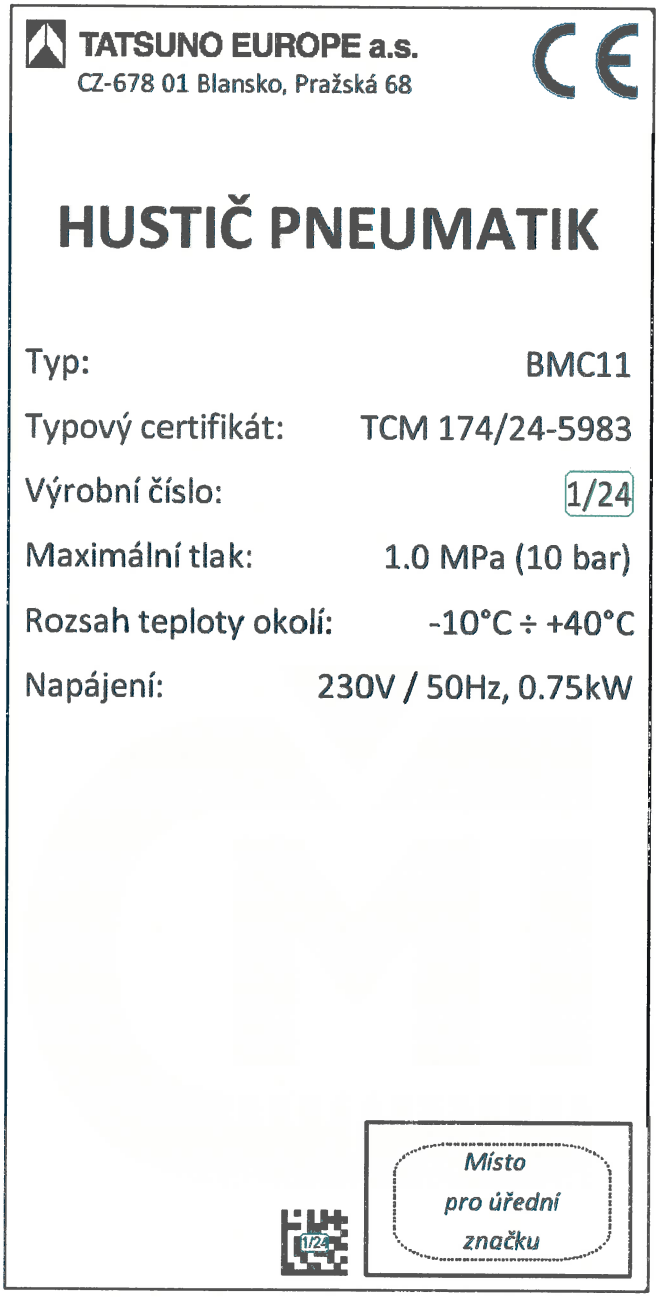

Figure 4: Production plate example

Appendix 2: Location of the type approval mark and verification marks

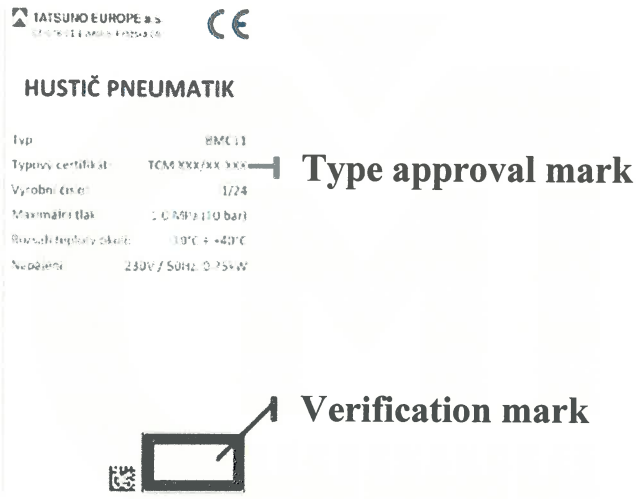

Figure 5: Location of the type approval mark and verification marks

Location of type approval marks:

1 × type approval mark on the production plate

Location of verification marks:

1 × verification mark on the dial cover of the bourdon gauge

1 × verification mark on the production plate