# Passenger cars - Braking device - Dynamometer test procedure

# 1. Scope

This standard specifies the test procedures for the dynamometer performance of normally operated service brake devices used in passenger cars.

Test procedures for two-wheeled vehicles are not included in this standard.

#### 2. Normative reference

The following standards, when referred to in this standard, constitute a part of the specifications of this standard. As required, the most recently updated version of the standard (including addenda) shall be applied.

JIS D0210 General rules of brake test method for automobiles and motor cycles

## 3. Definitions

Definitions of main terms used in this standard shall be based on the definitions given in **Section 2** of **JIS D0210**. It should be noted that, when multiple brake devices are being tested simultaneously, the highest initial brake temperature before braking of the brake devices being tested shall be used as a representative value.

#### 4. Test conditions

## 4.1 Vehicle classifications

The test vehicles shall be classified into the following categories (P1, P2, P3, and P4) in accordance with the nominal maximum speed categories specified in **JIS D0210**.

Category P1 Vehicles with a nominal maximum speed exceeding 140 km/h
Category P2 Vehicles with a nominal maximum speed exceeding 110 km/h and up to 140 km/h
Category P3 Vehicles with a nominal maximum speed exceeding 90 km/h and up to 110 km/h
Category P4 Vehicles with a nominal maximum speed of 90 km/h or less

#### 4.2 Condition of brake parts

The condition of each part of the brake devices used in testing shall conform to **Section 4.3** of **JIS D0210** (Condition of Brake Parts).

## 4.3 Inertia

The inertia shall be calculated in accordance with the following calculation formula, and the nearest value shall be set.

$$I = m \cdot r^2 = \frac{W \cdot r^2}{g}$$