

Council Directive 93/14/EEC of 5 April 1993 on the
braking of two or three-wheel motor vehicles (repealed)

Article 1
Article 2
Article 3
Article 4
Article 5
Article 6

ANNEX

1. DEFINITIONS
 - 1.1. Type of vehicle with respect to its braking:
 - 1.1.1.
 - 1.1.2.
 - 1.1.3.
 - 1.1.4.
 - 1.1.5.
 - 1.1.6.
 - 1.1.7.
 - 1.1.8.
 - 1.1.8a.
 - 1.1.9.
 - 1.2. Braking device:
 - 1.3. Control:
 - 1.4. Transmission:
 - 1.5. Brake:
 - 1.6. Different types of braking devices:
 - 1.6.1.
 - 1.6.2.
 - 1.6.3.
 - 1.7. Component(s) of a braking device:
 - 1.8. Combined braking system means:
 - 1.8.1.
 - 1.8.2.
 - 1.8.3.
 - 1.9. Progressive and graduated braking:
 - 1.9.1.
 - 1.9.2.
 - 1.9.3.
 - 1.10. Maximum design speed:
 - 1.11. Laden vehicle:
 - 1.12. Unladen vehicle:
 - 1.13. Maximum mass:
 - 1.14. Wet brake:

2. CONSTRUCTION AND FITTING REQUIREMENTS

- 2.1. General
 - 2.1.1. Braking device
 - 2.1.1.1.
 - 2.1.1.2.
 - 2.1.1.3.
 - 2.1.2. Functions of the braking device
 - 2.1.2.1. Service braking
 - 2.1.2.2. Secondary (emergency) braking (where applicable)
 - 2.1.2.3. Parking brake (if fitted)
- 2.2. Characteristics of braking devices
 - 2.2.1.
 - 2.2.1.1.
 - 2.2.1.2.
 - 2.2.2.
 - 2.2.3.
 - 2.2.3.1.
 - 2.2.3.2.
 - 2.2.3.3.
 - 2.2.4.
 - 2.2.4.1.
 - 2.2.4.2.
 - 2.2.5.
 - 2.2.6.
 - 2.2.7.
 - 2.2.7.1.
 - 2.2.7.2.
 - 2.2.7.3.
 - 2.2.8. In braking devices where the transmission is hydraulic, the receptables...

Appendix 1

Braking tests and performance of braking devices

1. BRAKING TESTS

- 1.1. General
 - 1.1.1.
 - 1.1.2. The stopping distance shall be the distance covered by the...
 - 1.1.3.
 - 1.1.3.1.
 - 1.1.3.2.
 - 1.1.3.3.
 - 1.1.3.4.
 - 1.1.4. Test conditions
 - 1.1.4.1.
 - 1.1.4.1.1.
 - 1.1.4.1.2.
 - 1.1.4.1.3.
 - 1.1.4.1.4.
 - 1.1.4.1.5.
 - 1.1.4.1.6.

- 1.2. Type-0 test (performance test with brakes cold)
 - 1.2.1. General
 - 1.2.1.1.
 - 1.2.2. Type-0 test with engine disconnected
 - 1.2.2.1. The test must be carried out at the speed prescribed...
 - 1.2.2.1.1.
 - 1.2.2.1.2.
 - 1.2.3. Type-0 test with engine connected for motorcycles (with or without...
 - 1.2.3.1. Tests must be carried out in the unladen condition at...
 - 1.2.4. Type-0 test with engine disconnected: with wet brakes
 - 1.2.4.1.
 - 1.3. Special provisions relating to testing with wet brakes
 - 1.3.1.
 - 1.3.2.
 - 1.3.3.
 - 1.3.4.
 - 1.3.4.1.
 - 1.3.4.2.
 - 1.3.4.3.
 - 1.3.5.
 - 1.3.6.
 - 1.3.7.
 - 1.3.8.
 - 1.3.9. To ensure the correct wetting of the brake(s), the vehicle...
 - 1.3.10.
 - 1.4. Type-I test (fade test)
 - 1.4.1. Special provisions
 - 1.4.1.1.
 - 1.4.1.2.
 - 1.4.1.2.1.
 - 1.4.1.2.2.
 - 1.4.1.2.3.
 - 1.4.2. Test conditions
 - 1.4.2.1.
 - 1.4.2.2.
 - 1.4.2.2.1.
 - 1.4.2.2.2.
 - 1.4.2.2.3.
 - 1.4.2.3.
 - 1.4.2.4.
 - 1.4.2.4. In the case of a vehicle with a manual gearbox...
 - 1.4.2.4. In the case of a vehicle with a fully automatic...
 - 1.4.2.5.
 - 1.4.2.6.
 - 1.4.3. Residual performance
 - 1.4.3.1.
 - 1.4.3.2.
 - 1.4.3.2. If expressed as a deceleration, less than 60 % of...
 - 1.4.3.2. If expressed as a stopping distance, more than the stopping...
- 2. PERFORMANCE OF BRAKING DEVICES
 - 2.1. Provisions relating to tests of vehicles with braking devices operating...
 - 2.1.1. Test speed $V = 40$ km/h for mopeds.

- 2.1.2. Braking performance with the vehicle laden
 - 2.1.2.1.
 - 2.1.2.2. Braking with the front brake only
 - 2.1.2.3. Braking with the rear brake only
- 2.1.3. Braking performance with the vehicle unladen
 - 2.1.3.1. A practical test of the vehicle driven by the driver...
- 2.2. Provisions relating to tests of vehicles of which (at least)...
 - 2.2.1.
 - 2.2.2. Test speed $V = 40$ km/h for mopeds.
 - 2.2.3.
 - 2.2.3.1. Braking with the combined braking system only
 - 2.2.3.2. Braking with the second service or the secondary (emergency) braking...
- 2.3. Braking performance with the parking braking device (if applicable)
 - 2.3.1.
- 2.4. Provisions relating to forces applied to brake controls
 - 2.4.1. Forces applied to service brake controls
 - 2.4.2. Forces applied of the parking brake control (if applicable)
 - 2.4.3.
- 2.5. Performance levels (minimum and maximum) to be attained with wet...
 - 2.5.1.
 - 2.5.2.
 - 2.5.3.

Appendix 2

Requirements applicable to two-wheel mopeds, two-wheel motorcycles and tricycles equipped with anti-lock devices

- 1. GENERAL
 - 1.1.
 - 1.2.
- 2. DEFINITIONS
 - 2.1. Anti-lock device
 - 2.2. Sensor
 - 2.3. Controller
 - 2.4. Modulator
- 3. NATURE AND CHARACTERISTICS OF THE SYSTEM
 - 3.1.
 - 3.2.
 - 3.3.
 - 3.4.
 - 3.5.
- 4. UTILIZATION OF ADHESION
 - 4.1. General
 - 4.1.1. In the case of two-wheel motorcycles and tricycles, braking systems...
 - 4.1.2.
 - 4.1.3.
 - 4.1.4.

5. ADDITIONAL CHECKS

- 5.1.
- 5.1.1.
- 5.1.2.
- 5.1.3.
- 5.1.4.
- 5.1.5.

Addendum

1. DETERMINATION OF THE COEFFICIENT OF ADHESION (K)

- 1.1.
- 1.2.
- 1.3.
- 1.4. The braking rate (Z) shall be determined by reference to...

2. DETERMINATION OF THE ADHESION UTILIZATION (ϵ).

- 2.1.
- 2.2.
- 2.3. The adhesion utilized is given by the formula

Appendix 3

Appendix 4