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Road vehicles — Elastomeric seals for hydraulic disc brake cylinders using a non-petroleum base hydraulic brake fluid (Service temperature 120 °C max.)

Véhicules routiers — Joints en caoutchouc pour cylindres de freins hydrauliques à disque utilisant un liquide de frein à base non pétrolière (Température maximale d'utilisation: 120 °C)

Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 6119 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 2, *Braking systems and equipment*.

This second edition cancels and replaces the first edition (ISO 6119:1980), which has been technically revised.

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Road vehicles — Elastomeric seals for hydraulic disc brake cylinders using a non-petroleum base hydraulic brake fluid (Service temperature 120 °C max.)

1 Scope

This International Standard specifies the performance test methods and requirements for elastomeric seals used in road vehicle disc brake cylinders.

It is applicable to solid section type seals (square, rectangular, “O”-ring), mounted stationary in the cylinder bore or on the movable piston of disc brakes.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 48, *Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD*

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 1817, *Rubber, vulcanized — Determination of the effect of liquids*

ISO 4926, *Road vehicles — Hydraulic brake systems — Non-petroleum base reference fluids*

ISO 4928, *Road vehicles — Elastomeric cups and seals for cylinders for hydraulic braking systems using a non-petroleum base hydraulic brake fluid (Service temperature 120 °C max.)*

3 Product requirements

Seals shall conform to the pertinent drawing in all respects and shall be free from blisters, pin-holes, cracks, protuberances, embedded foreign material, or other physical defects which can be detected by thorough inspection.

These elastomeric seals shall be suitable for operation in a temperature range of –40 °C to +120 °C.

4 Brake test fluid

The test fluid for all tests except the test prescribed in Clause 14 shall be compatibility fluid as defined in ISO 4926. The fluid specified in Clause 14 shall be ISO fluid for storage corrosion test as defined in ISO 4926, or the fluid agreed by the parties concerned.

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