

Full-flow lubricating oil filters for internal combustion engines —

**Part 5: Method of test for cold start
simulation and hydraulic pulse
durability**

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the General Mechanical Engineering Standards Policy Committee (GME/-) to Technical Committee GME/14, upon which the following bodies were represented:

- British Compressed Air Society
- Engineering Equipment and Materials Users' Association
- Motor Industry Research Association
- Society of Environmental Engineers
- Society of Motor Manufacturers and Traders Ltd.

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National foreword

This British Standard has been prepared under the direction of the General Mechanical Engineering Standards Policy Committee. It is identical with ISO 4548-5:1990 “*Methods of test for full-flow lubricating oil filters for internal combustion engines — Part 5: Cold start simulation and hydraulic pulse durability test*”, published by the International Organization for Standardization (ISO).

BS 7403 will consist of a number of Parts, as follows.

- *Part 1: Method of test for pressure drop/flow characteristics¹⁾*;
- *Part 2: Method of test for element by-pass component characteristics¹⁾*;
- *Part 3: Method of test for resistance to high pressure drop and to elevated temperature¹⁾*;
- *Part 4: Method of test for initial particle retention efficiency, life and cumulative efficiency (gravimetric method)¹⁾*;
- *Part 5: Method of test for cold start simulation and hydraulic pulse durability*;
- *Part 6: Method of test for static burst pressure*;
- *Part 7: Method of test for vibration fatigue*;
- *Part 8: Method of test for inlet anti-drain valves*;
- *Part 9: Method of test for inlet and outlet anti-drain valves¹⁾*;
- *Part 10: Method of test for life and cumulative efficiency in the presence of water in oil¹⁾*;
- *Part 11: Method of test for self-cleaning filters¹⁾*;
- *Part 12: Method of test for particle retention ability and contaminant holding capacity using particle counting¹⁾*;
- *Part 13: Specification for dimensions of spin-on filters.*

The International Standard has an introduction which is as follows.

“ISO 4548 establishes standard test procedures for measuring the performance of full-flow lubricating oil filters for internal combustion engines. It has been prepared in separate parts, each part relating to a particular performance characteristic.

Together the tests provide the information necessary to assess the characteristics of a filter, but if agreed between the purchaser and the manufacturer, the tests may be conducted separately.”

Cross-references

International Standard	Corresponding British Standard
ISO 1219:1976	BS 2917:1977 <i>Specification for graphical symbols used on diagrams for fluid power systems and components</i> (Identical) BS 7403 <i>Full-flow lubricating oil filters for internal combustion engines</i>
ISO 4548-1:1982	Part 1:1991 <i>Method of test for pressure drop/flow characteristics^a</i> (Identical)

^a In preparation.

¹⁾ In preparation.

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Summary of pages

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This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.