

Road vehicles and internal combustion engines — Filter vocabulary —

Part 1: Definitions of filters and filter components

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This British Standard reproduces verbatim ISO 11841-1:2000 and implements it as the UK national standard.

The UK participation in its preparation was entrusted by Technical Committee MCE/21, Filters for gases and liquids, to Subcommittee MCE/21/2, Filters for air supply to IC engines and compressors other than on aircraft, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

This document comprises a front cover, an inside front cover, the ISO title page, pages ii to iv, pages 1 to 18, an inside back cover and a back cover.

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**Road vehicles and internal combustion
engines — Filter vocabulary —**

Part 1:
Definitions of filters and filter components

**Véhicules routiers et moteurs à combustion
interne — Vocabulaire relatif aux filtres —**

Partie 1:
**Définitions des filtres et de leurs
composants**



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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 3.

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 part of ISO 11841 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 11841-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 7, *Injection equipment and filters for use on road vehicles*.

ISO 11841 consists of the following parts, under the general title *Road vehicles and internal combustion engines — Filter vocabulary*:

- *Part 1: Definitions of filters and filter components*
- *Part 2: Definitions of characteristics of filters and their components*

Avant-propos

L'ISO (Organisation internationale de normalisation) est une fédération mondiale d'organismes nationaux de normalisation (comités membres de l'ISO). L'élaboration des Normes internationales est en général confiée aux comités techniques de l'ISO. Chaque comité membre intéressé par une étude a le droit de faire partie du comité technique créé à cet effet. Les organisations internationales, gouvernementales et non gouvernementales, en liaison avec l'ISO participent également aux travaux. L'ISO collabore étroitement avec la Commission électrotechnique internationale (CEI) en ce qui concerne la normalisation électrotechnique.

Les Normes internationales sont rédigées conformément aux règles données dans les Directives ISO/CEI, Partie 3.

Les projets de Normes internationales adoptés par les comités techniques sont soumis aux comités membres pour vote. Leur publication comme Normes internationales requiert l'approbation de 75 % au moins des comités membres votants.

L'attention est appelée sur le fait que certains des éléments de la présente partie de l'ISO 11841 peuvent faire l'objet de droits de propriété intellectuelle ou de droits analogues. L'ISO ne saurait être tenue pour responsable de ne pas avoir identifié de tels droits de propriété et averti de leur existence.

La Norme internationale ISO 11841-1 a été élaborée par le comité technique ISO/TC 22, *Véhicules routiers*, sous-comité SC 7, *Équipements d'injection et filtres pour application aux véhicules routiers*.

L'ISO 11841 comprend les parties suivantes, présentées sous le titre général *Véhicules routiers et moteurs à combustion interne — Vocabulaire relatif aux filtres*:

- *Partie 1: Définitions des filtres et de leurs composants*
- *Partie 2: Définitions des caractéristiques des filtres et de leurs composants*

Road vehicles and internal combustion engines — Filter vocabulary —

Part 1: Definitions of filters and filter components

1 Scope

This part of ISO 11841 defines terms for filters and components used in road vehicles and internal combustion engines for general use (e.g. marine engines, stationary engines).

The purpose of ISO 11841 is to standardize definitions, to facilitate their understanding, and to create the basis of a uniform translation into foreign languages.

It is also recommended that this International Standard be used when establishing other technical documents.

2 Classification of filters

Filters are classified according to six criteria as shown in Figure 1.

Véhicules routiers et moteurs à combustion interne — Vocabulaire relatif aux filtres —

Partie 1: Définitions des filtres et de leurs composants

1 Domaine d'application

La présente partie de l'ISO 11841 définit des termes pour les filtres et composants de filtres utilisés dans les véhicules routiers et les moteurs à combustion interne à usage général (par exemple moteurs marins, moteurs stationnaires).

L'objet de l'ISO 11841 est de normaliser les définitions, de faciliter leur compréhension et de constituer la base pour une traduction uniforme en langues étrangères.

Il est également recommandé d'utiliser la présente Norme internationale pour la rédaction d'autres documents techniques.

2 Classification des filtres

Les filtres sont classés selon six critères montrés à la Figure 1.

Filters					
1) Filtered fluid (see 3.2)	2) Number and combination of filtration stages (see 3.3)	3) Arrangement in the system (see 3.4)	4) Filtering material (see 3.5)	5) Type of filtration (see 3.6)	6) Type of maintenance (see 3.7)
		– Full flow filter – Bypass filter – In-line filter – Tank-mounted filter – Suction filter – Pressure filter – Return line filter – Prefilter – Main filter – Secondary filter			– Spin-on filter – Housing filter – Duplex filter – Back-flushing filter – Automatic filter
	– Single-stage filter – Two-stage filter – Multi-stage filter	– Crankcase ventilation filter – Closed crankcase ventilation filter	– Fibre filter	– Surface type filter – Depth type filter – Centrifugal cleaner	
– Air cleaner – Cabin filter – Dry air cleaner – Wet air cleaner – Oil-bath air cleaner – Silencer cleaner	– Parallel filter – Combined filter		– Felt filter – Felt plate filter – Felt tube filter – Pleated (star-type) felt filter		
– Exhaust-gas filter – Fuel filter – Diesel fuel filter – Petrol filter			– Paper filter – Pleated (star-type) paper filter – Paper wound filter		
– Lubricating oil filter – Hydraulic filter – Coolant filter			– Strainer filter – Strainer tube filter – Pleated (star-type) strainer filter – Strainer disc filter – Pocket type filter – Strainer multi-tube filter		
			– Gap filter – Plate gap filter – Laminated gap filter – Wire wound gap filter – Wire ring-on-tube gap filter		
			– Sintered filter		
			– Activated carbon filter		

Figure 1 — Filter classification