

Rubber hose assemblies for oil suction and discharge services — Specification for the assemblies

The European Standard EN 1765 : 1997 has the status of a
British Standard

ICS 75.200; 83.140.40

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National foreword

This British Standard is the English language version of EN 1765 : 1997 published by the European Committee for Standardization (CEN). It supersedes BS 1435 : Part 1 : 1987 which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee PRI/66, Rubber and plastics tubing, hoses and hose assemblies, to Subcommittee PRI/66/1, Industrial, chemical and petrochemical applications, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible 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.

In the ‘Introduction’ to the European Standard, the first paragraph implies that only ‘wire reinforced’ hoses are covered. This is not the situation as ‘Type L’ hoses, identified in the standard, can be either textile or fine wire reinforced.

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

Cross-references

The British Standards which implement international or European 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 EN title page, pages 2 to 12, an inside back cover and a back cover.

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English version

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Flexibles en caoutchouc pour chargement et
déchargement des produits pétroliers —
Spécifications

Gummischlauchleitungen für das Ansaugen und
Fördern von Öl —
Anforderungen an die Schlauchleitung

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CEN

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 218, Rubber and plastic hoses and hose assemblies, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 1998, and conflicting national standards shall be withdrawn at the latest by March 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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Introduction

This European Standard specifies minimum requirements for the satisfactory performance of wire reinforced rubber hose assemblies of both smooth and rough bore types for oil suction and discharge services. The hoses are commonly used for transferring crude oil and liquid petroleum products, other than liquefied petroleum gas and natural gas, to and from tanker and bunkering vessels or for similar duties ashore.

Specific details of the construction of hoses are not rigidly defined in this standard since it is felt that this could restrict the introduction of improved methods of construction. It should be noted that no reference is made to the hose assembly working pressure. Instead, the hose assemblies have been classified in terms of service pressure, which includes an allowance for surge pressure and which equates with the factory test pressure. It is the responsibility of the user to determine the appropriate working pressure, which will depend on the severity of the user's operating conditions and on the service life that is expected of the hose assembly.

It is necessary for the purchaser to provide certain information about the hose assembly and its intended use at the time of enquiry and/or order; this information is listed in annex A (informative). Recommendations concerning packaging and transportation are given in annex B (informative) and expected masses of hoses, in kilograms per metre of free length, are given in annex C (informative).

1 Scope

This European Standard specifies the characteristics of four types of oil suction and discharge hose assemblies used for the conveyance of petroleum, including crude oils and other liquid petroleum products containing a maximum aromatics content of 40 % (v/v). It is not suitable for liquified petroleum gas and natural gas.

Hose assemblies to this European Standard can be used in the temperature range -20 °C to 82 °C.

The hoses specified are in the size range of nominal bore 50 to 500 and may be smooth bore, rough bore or armoured rough bore. Rough bore hoses are not suitable for use with aviation fuels.

NOTE. Hoses for use with petroleum products having an aromatic content greater than 40 % (v/v) are outside the scope of this European Standard but the requirements may be used as a basis for such hoses on request to the manufacturer.

2 Normative references

This European Standard incorporates, by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of these publications apply to the European Standard only when incorporated in it by amendments or revision. For undated references the latest edition of the publication referred to applies.

EN 288-3 : 1992	<i>Specification and approval of welding procedures for metallic materials</i> <i>Part 3: Welding procedure tests for arc welding of steels</i>
EN 22063 : 1994	<i>Metallic and other inorganic coatings — Thermal spraying — Zinc, aluminium and their alloys</i> (ISO 2063 : 1991)
EN 28031 : 1993	<i>Rubber and plastics hoses and hose assemblies — Determination of electrical resistance</i> (ISO 8031 : 1987)
EN ISO 1402 : 1995	<i>Rubber and plastics hoses and hose assemblies — Hydrostatic testing</i> (ISO 1402 : 1994)
EN ISO 7233 : 1995	<i>Rubber and plastics hoses and hose assemblies — Determination of suction resistance</i> (ISO 7233 : 1991)
ISO 1431-1 : 1989	<i>Rubber, vulcanized or thermoplastic — Resistance to ozone cracking — Part 1: Static strain test</i>
ISO 1459 : 1973	<i>Metallic coatings — Projection against corrosion by hot dip galvanizing — Guiding principles</i>
ISO 1460 : 1992	<i>Metallic coatings — Hot dip galvanized coatings on ferrous materials — Gravimetric determination of the mass per unit area</i>
ISO 1461 : 1973	<i>Metallic coatings — Hot dip galvanized coatings on fabricated ferrous products — Requirements</i>
ISO 1817 : 1985	<i>Rubber, vulcanized — Determination of effect of liquids</i>
ISO 4649 : 1985	<i>Rubber — Determination of abrasion resistance using a rotating cylindrical drum device</i>
ISO 7005-1 : 1992	<i>Metallic flanges — Part 1: Steel flanges</i>
ISO/TR 8330	<i>Rubber and plastics — Glossary of terms used by the hose industry</i>
ASME B.1.20 : 1993	<i>Pipe threads, general purposes (inch)</i>
BS 3592-1	<i>Steel wire for hose reinforcement — Part 1: Specification for coated round and flat steel wire for rubber hose reinforcement</i>