Kummivoolikud ja voolikukomplektid. Punutud traadiga sarrustatud kompaktne tüüp hüdraulilisteks rakendusteks. Tehnilised nõuded

Rubber hoses and hose assemblies - Wire braid reinforced compact type for hydraulic applications - Specification



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

| Käesolev Eesti standard EVS-EN |
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| 857:1999 sisaldab Euroopa standardi EN |
| 857:1996 ingliskeelset teksti. |

Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 857:1999 consists of the English text of the European standard EN 857:1996.

This document is endorsed on 12.12.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

Käesolev standard esitab nõuded selliste kaht tüüpi punutud traadiga sarrustatud kompaktsete voolikute ja voolikukomplektide jaoks, mille ava nimisuurus on 6 kuni 26. Standard ei sisalda nõudeid otsarmatuuri kohta. Standardi ulatus on piiratud voolikute ja voolikukomplektide funktsioneerimisega.

Scope:

ICS 23.100.40

Võtmesõnad: ankrud, hüdraulilised süsteemid, hüdraulilised vedelikud, kummivoolikud, mõõtmed, mõõtmetolerantsid, märgistus, tehnilised andmed, testimine, traat, voolikud

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 857

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ICS 23.040.70

Descriptors: Hydraulic systems, rubber, hoses, requirements.

English version

Rubber hoses and hose assemblies

Wire braid reinforced compact type for hydraulic applications
Specification

Tuyaux et flexibles en caoutchouc – Type hydraulique compact avec armature de fils métalliques – Spécification Gummischläuche und -schlauchleitungen – Kompakthydraulikschläuche mit Drahtgeflechteinlage – Spezifikation

This European Standard was approved by CEN on 1996-09-19.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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CEN

European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 218 "Rubber and plastics 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 April 1997, and conflicting national standards shall be withdrawn at the latest by April 1997.

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

1 Scope

This European Standard specifies requirements for two types of wire braid reinforced compact hoses and hose assemblies of nominal bore from 6 to 25.

They are suitable for use with:

- hydraulic fluids in accordance with ISO 6743-4 with the exception of HFD R, HFD S and HFD T at temperatures ranging from -40 °C +100 °C;
- water based fluids at temperatures ranging from -40 $^{\circ}$ C to +70 $^{\circ}$ C;
 - water at temperatures ranging from 0 °C to +70 °C.

The Standard does not include requirements for end fittings. It is limited to the performance of hoses and hose assemblies.

- NOTE 1: The hoses are not suitable for use with castor oil based nor ester based fluids.
- NOTE 2: Hoses and hose assemblies should not be operated outside the limits of this standard.
- NOTE 3: Requirements for hydraulic hoses for underground mining are standardised in separate standards.

2 Normative references

This European Standard incorporates by dated or undated reference, 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 any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 24671

Rubber and plastics hose and hose assemblies - Methods of measurement of dimensions (ISO 4671:1984)

| Page 4 EN 857:1996 | |
|-----------------------|---|
| EN 24672 | Rubber and plastics hoses - Sub-ambient temperature flexibility tests (ISO 4672:1988) |
| EN 27326 | Rubber and plastics hoses - Assessment of ozone resistance under static conditions (ISO 7326:1991) |
| EN 28033 : 1993 | Rubber and plastics hoses - Determination of adhesion between components (ISO 8033:1991) |
| EN ISO 1402 | Rubber and plastics hoses and hose assemblies - Hydrostatic testing (ISO 1402:1994) |
| EN ISO 6945 | Rubber hoses - Determination of abrasion resistance of the outer cover (ISO 6945:1991) |
| EN ISO 7233 | Rubber and plastics hoses and hose assemblies - Determination of suction resistance (ISO 7233:1991) |
| ISO 1817 | Rubber vulcanized - Determination of the effect of liquids |
| ISO 6743-4 | Lubricants, industrial oils and related products (Class L) - Classification - Part 4 : Family H (Hydraulic systems) |

Rubber and plastics hoses and hose assemblies - Hydraulic pressure impulse test without

3 Types of hoses

ISO 6803

Two types of hoses are specified:

 Type 1SC - hoses with a single braid of wire reinforcement;

flexing

- Type 2SC - hoses with two braids of wire reinforcement.

4 Materials and construction

4.1 Hoses

Hoses shall consist of an oil and water resistant synthetic rubber lining, one or two layers of high tensile steel wire and an oil and weather resistant synthetic rubber cover.

4.2 Hose assemblies

Hose assemblies shall only be manufactured with those hose fittings whose functionality has been verified in all tests according to this standard.