



SLOVENSKI STANDARD
SIST EN 14424:2005

01-marec-2005

7 Yj b] Z]h]b[]'n'j]'U b]a]'di ýUa]

Hose fittings with screwed ferrules

Schlaucharmaturen mit Schraubhülsen

Raccords pour flexibles avec bague vissée

Ta slovenski standard je istoveten z: EN 14424:2004

[SIST EN 14424:2005](https://standards.iteh.ai/catalog/standards/sist/c4a5778d-fl e5-443b-b2a9-5d9fe70ba1c6/sist-en-14424-2005)

<https://standards.iteh.ai/catalog/standards/sist/c4a5778d-fl e5-443b-b2a9-5d9fe70ba1c6/sist-en-14424-2005>

ICS:

23.040.70 Gumene cevi in armature Hoses and hose assemblies

SIST EN 14424:2005

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 14424:2005](#)

<https://standards.iteh.ai/catalog/standards/sist/c4a5778d-f1e5-443b-b2a9-5d9fe70ba1c6/sist-en-14424-2005>

EUROPEAN STANDARD

EN 14424

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2004

ICS 23.040.70

English version

Hose fittings with screwed ferrules

Raccords pour flexibles avec bague vissée

Schlaucharmaturen mit Schraubhülsen

This European Standard was approved by CEN on 30 September 2004.

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.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

(standards.iteh.ai)

SIST EN 14424:2005

<https://standards.iteh.ai/catalog/standards/sist/c4a5778d-fl e5-443b-b2a9-5d9fe70ba1 c6/sist-en-14424-2005>



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

	page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Requirements	4
5 Dimensions and designation.....	5
6 Materials	13
7 Marking	13
8 Type approval testing and quality control	13
9 Mounting of hose fittings.....	14
Bibliography	15

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 14424:2005](#)

<https://standards.iteh.ai/catalog/standards/sist/c4a5778d-f1e5-443b-b2a9-5d9fe70ba1c6/sist-en-14424-2005>

Foreword

This document (EN 14424:2004) 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 May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

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

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 14424:2005](https://standards.iteh.ai/catalog/standards/sist/c4a5778d-fl e5-443b-b2a9-5d9fe70ba1 c6/sist-en-14424-2005)

<https://standards.iteh.ai/catalog/standards/sist/c4a5778d-fl e5-443b-b2a9-5d9fe70ba1 c6/sist-en-14424-2005>

EN 14424:2004 (E)**1 Scope**

This document specifies the design, materials and dimensions of hose fittings with screwed ferrules for rubber and thermoplastics hoses for use with flammable and non-flammable liquids or gases, e.g. fuel dispensing hoses, liquid natural gas (LPG) hoses, tank truck hoses and hoses for liquid and chemical chemicals. The nominal sizes covered are DN 13 to DN 40.

The maximum working pressure is 16 bar and the maximum working temperature is 65 °C.

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.

EN 10088-1, *Stainless steels — Part 1: List of stainless steels*

EN 10226-1, *Pipe threads where pressure tight joints are made on the threads — Part 1: Taper external threads and parallel internal threads - Dimensions, tolerances and designation*

EN 12164, *Copper and copper alloys — Rod for free machining purposes*

EN 12420, *Copper and copper alloys — Forgings*

EN 14420-5, *Hose fittings with clamp units — Part 5: Threaded connections*

EN ISO 228-1:., *Pipe threads where pressure tight joints are not made on the threads — Part 1:Dimensions, tolerances and designation (ISO 228-1:2000)*

EN ISO 6708, *Pipework components — Definition and selection of DN (nominal size) (ISO 6708:1995)*

<https://standards.iteh.ai/catalog/standards/sist/c4a5778d-fl e5-443b-b2a9-5d9fe70ba1 c6/sist-en-14424-2005>

3 Terms and definitions

For the purposes of this document, the following term and definition applies.

3.1**DN**

see EN ISO 6708

4 Requirements**4.1 General**

Hose fittings shall withstand the mechanical, thermal and chemical loads to be expected and shall be impermeable and resistant to flammable and non-flammable fluids and vapours.

Hose fittings shall be designed such that they comply with the requirements of this document when attached correctly and establish a frictional and positive-locking tight connection on the hose.

Hose fittings shall be designed such that when fitted to hoses the hose is destroyed first before being torn out from the fitting, if overstress occurs.

Hose side fitting components shall not cause any dangerous notch or shear stresses on the hose.

4.2 Resistance of the fitting materials to the fluid

The user and/or the purchaser shall give consideration to the potential hazard caused by the medium and the operating conditions when selecting the type of connection.

In individual cases, other concentrations and additions to the medium as well as increase of temperature can reduce the resistance of the metallic materials. In these cases details shall be agreed between purchaser and manufacturer.

If data are not available, individual tests are necessary.

The fitting components may be surface protected, e.g. nickel-plated, zinc-plated, chrome-plated or polymer coating. Details to be agreed between purchaser and manufacturer.

The pairing of fittings from different material groups shall be avoided, if the presence of electrolytes is expected (contact corrosion).

4.3 Maximum working pressures and temperatures

All hose fittings shall be capable of operating the working pressure range – 0,8 bar up to 16 bar.

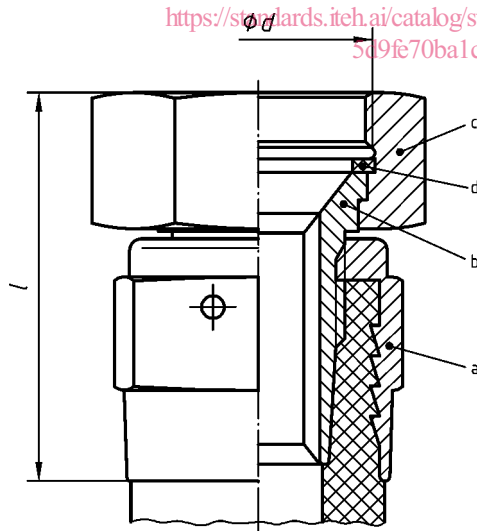
Unless otherwise specified, a working temperature range of – 20 °C to + 65 °C shall apply.

NOTE Permissible pressures and temperatures of hose assemblies are limited by the hoses and gaskets used.

5 Dimensions and designation

5.1 Survey

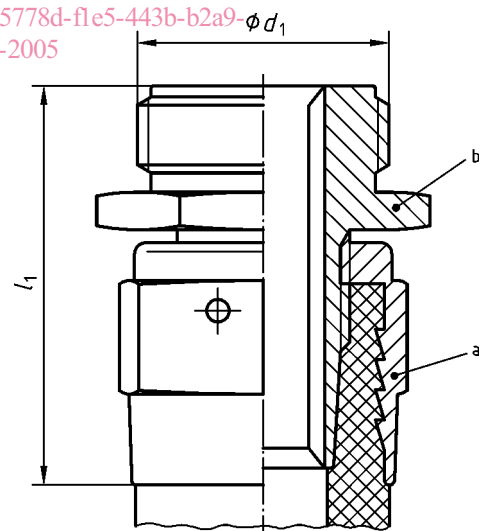
The Figures 1 to 8 are diagrammatic only. Details not specified shall be chosen by the manufacturer suitably.



Key

- a Ferrule
- b Female connecting part
- c Union nut
- d Gasket

Figure 1 — Ferrule fitting Type G
(internal thread)



Key

- a Ferrule
- b Male connecting part

Figure 2 — Ferrule fitting Type GA
(outside thread)

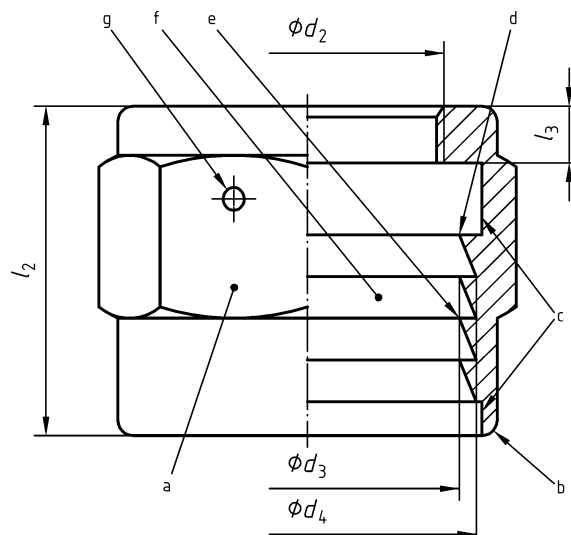
Table 1 — Dimensions for ferrule fittings Type G and GA

Nominal size DN	hose internal diameter	<i>d</i> connecting thread	<i>d</i> ₁ connecting thread	<i>l</i> min. mm	<i>l</i> ₁ min. mm
13	13	G ½	G ½ A EN ISO 228-1	49	51
		G ¾	R ½ EN 10226-1/NPT		55
		G 1			
15	16	G ¾	G ¾ A EN ISO 228-1	49	53
		G 1	R ¾ EN 10226-1/NPT		54
		—	G 1 A EN ISO 228-1	—	54
19	19	G ¾	R ¾ EN 10226-1/NPT	50	54
		G 1	G 1 A EN ISO 228-1	52	55
21	21	G ¾	—	51	—
		G 1	—	52	—
25	25	G 1	G 1 A EN ISO 228-1	55	59
		G 1 ¼	R 1 EN 10226-1/NPT	58	65
32	32	G 1 ¼	G 1 ¼ A EN ISO 228-1	64	65
40	38	G 1 ½	G 1 ½ A EN ISO 228-1	67	71

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 14424:2005](https://standards.iteh.ai/catalog/standards/sist/c4a5778d-fl e5-443b-b2a9-5d9fe70ba1 c6/sist-en-14424-2005)

<https://standards.iteh.ai/catalog/standards/sist/c4a5778d-fl e5-443b-b2a9-5d9fe70ba1 c6/sist-en-14424-2005>

**Key**

- a s = width across flats, hexagonal or octagonal
- b rounded
- c Dimension $\geq d_4$
- d Dimension $\geq d_3$
- e Profile corners chamfered
- f Inner profile at the discretion of the manufacturer
- g inspection orifice location at the discretion of the manufacturer

iTech STANDARD PREVIEW
(standards.itech.ai)

Figure 3 — Ferrule

Table 2 — Dimensions for ferrule

<https://standards.itech.ai/catalog/standards/sist/c4a5778d-fl e5-443b-b2a9-5d9fe70ba1c6/sist-en-14424-2005> Dimensions in millimetres

Nominal size DN	d_2	d_3	d_4	l_2 min.	l_3 min.	s min.
		$\pm 0,5$	$\pm 0,5$			
13	M 16 × 1	21	23,5	32	6	27
15	M 19 × 1,0	24	27	33		30
20 (19)	M 22 × 1,5	29	31,5	34		36
20 (21)	M 26 × 1,5	29,5	32	37		41
25	M 28 × 1,5	35	38	43	7	50
32	M 36 × 1,5	40	44,5	44	7,5	60
40	M 42 × 1,5	48	52			