

BS ISO 16964:2015



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Gas cylinders — Flexible hoses assemblies — Specification and testing

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National foreword

This British Standard is the UK implementation of ISO 16964:2015.

The UK participation in its preparation was entrusted to Technical Committee PVE/3/1, Gas containers - Valve fittings for gas containers.

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

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 58, *Gas cylinders*, Subcommittee SC 2, *Cylinder fittings*.

Introduction

Flexible hose assemblies are used to transfer industrial and medical gases into cylinders, bundles and trailers and also to supply such gases to user equipment.

There is a range of existing International Standards to be used for specific applications or hose construction:

- ISO 14113 which covers hoses made with internal rubber or plastics tubing and used to supply gases to customers for welding applications;
- ISO 21969 which covers hoses with an internal corrugated metallic liner and used to supply medical gases to customers;
- ISO 10380 which covers hoses with internal corrugated metallic liner for all applications including non-industrial and medical gases.

ISO 14113 and ISO 21969 cover only specific customer applications and are intended to be used accordingly, while ISO 10380 is general in its approach.

The purposes of this International Standard are:

- to provide the specification and testing requirements for high pressure flexible hose assemblies intended to be connected at filling pressure to cylinders, cylinder bundles or trailers for use when filling and emptying gas at production sites and also where the customer is connecting directly to the cylinder valve, e.g. a cylinder to manifold connection
- to cover the applications not described by the above International Standards, (flexible hose assemblies for filling centres, flexible hose assemblies for all customer applications),
- to specify a new range of testing requirements which will more effectively evaluate the ability of flexible hose assemblies to remain safe in operation. These test requirements replace the traditional reliance on having a high ratio between rated pressure and burst pressure.

