

Specification for

Catheter mounts (flexible adaptors) for use with medical breathing systems

ICS 11.040.10

Committees responsible for this British Standard

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- Association of Anaesthetists of Great Britain and Ireland
- Association of Veterinary Anaesthetists of Great Britain and Ireland
- British Anaesthetic and Respiratory Equipment Manufacturers' Association
- British Association of Otolaryngologists
- British Health-Care Trade and Industry Council
- British Paediatric Association
- British Rubber Manufacturers' Association
- British Surgical Trades Association Incorporated
- Department of Health
- Medical Sterile Products Association

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Foreword

This British Standard has been prepared under the direction of the Health Care Standards Policy Committee.

BS EN 1782, BS EN 1282-1 and BS EN 1282-2 specify requirements for tracheal and tracheostomy tube connectors and are predominantly concerned with connectors having a 15 mm male conical connector, complying with BS EN 1281-1, which can mate directly with the patient connection port of the breathing system of an anaesthetic machine or lung ventilator.

This direct method of connection, although widely applicable, may be less satisfactory in certain circumstances, for example, for operations on the face, or when the patient is in the prone position, or during prolonged ventilation in an intensive care unit. In these instances it is often preferable to interpose a short length of flexible tubing (known as a catheter mount) between the patient connection port and the tracheal or tracheostomy tube connector. This indirect method of connection has the additional merit that the flexible tubing helps to absorb the strains caused by inadvertent movement of the patient's head or the breathing system, and thus reduces the likelihood of accidental disconnections.

Accordingly, this British Standard specifies dimensional requirements for the patient end of catheter mounts to accommodate components of size range 12 mm to 14 mm as well as specifying catheter mounts with a 15 mm female conical connector at the patient end (see 3.2).

Provision is also made in this British Standard for detailed variations in design of the catheter mounts and, in accordance with international agreement, for three types of connector at the machine end. However, experience in the UK has led to a preference for using the 22 mm female conical connector at the machine end.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

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1 Scope

This British Standard specifies requirements for catheter mounts (flexible adaptors) intended to connect anaesthetic or ventilator breathing systems to tracheal or tracheostomy tube connectors. It does not specify requirements for tracheal and tracheostomy tube connectors, these being given in BS EN 1782, BS EN 1282-1 and BS EN 1282-2.

Typical examples of catheter mounts covered by this British Standard are shown in Figure 1.

NOTE 1 Recommendations for materials are given in Appendix A.

NOTE 2 The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this British Standard, the following definitions apply.

2.1

catheter mount

a flexible adaptor for joining or connecting the patient connection port of a breathing system to a tracheal or tracheostomy tube connector

2.2

tracheal tube connector

a tubular component that fits directly into the tracheal tube

2.3

machine end of a catheter mount

that end of the catheter mount intended to be connected to the patient connection port of the breathing system

2.4

patient end of a catheter mount

that end of the catheter mount intended to be connected to a tracheal tube connector

2.5

patient connection port

that opening at the patient end of a breathing system intended for connection, for example, to a tracheal or tracheostomy tube connector or adaptor, a face mask or a face mask angle-piece

3 Design

3.1 Machine end

The machine end of the catheter mount shall have an inside diameter of not less than 11 mm and its connector shall be one of the following.

- a) A 22 mm female conical connector complying with BS EN 1281-1.
- b) A non-conical elastomeric connector of 22 mm axial length and 18 ± 0.5 mm inside diameter, when measured in the unstretched condition, which, when tested as described in Appendix B, shall not become disengaged from the 22 mm male conical connector.
- c) A 15 mm male conical connector complying with BS 1281-1.

3.2 Patient end

The patient end of the catheter mount shall either be a non-conical elastomeric connector having a minimum length of 13 mm and an inside diameter of 9.5 ± 0.5 mm, when measured in the unstretched condition, or be fitted with a 15 mm female conical connector complying with BS 1281-1.

3.3 Intermediate section

The length of the intermediate section shall be not greater than 200 mm. The inside diameter shall be between 11 mm and 19 mm.