

---

---

**Optics and photonics — Medical  
endoscopes and endotherapy devices —**

**Part 6:  
Vocabulary**

*Optique et photonique — Endoscopes médicaux et dispositifs  
d'endothérapie —*

*Partie 6: Vocabulaire*



**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview generated by EVS

© ISO 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 8600-6 was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 5, *Microscopes and endoscopes*.

ISO 8600 consists of the following parts, under the general title *Optics and photonics — Medical endoscopes and endotherapy devices*:

- *Part 1: General requirements*
- *Part 2: Particular requirements for rigid bronchoscopes*
- *Part 3: Determination of field of view and direction of view of endoscopes with optics*
- *Part 4: Determination of maximum width of insertion portion*
- *Part 5: Determination of optical resolution of rigid endoscopes with optics*
- *Part 6: Vocabulary*

This document is a preview generated by EVS

# Optics and photonics — Medical endoscopes and endotherapy devices —

## Part 6: Vocabulary

### Scope

This part of ISO 8600 defines terms for endoscopes and endotherapy devices commonly used in the endoscopic area.

### 1 Types of endoscopes

#### 1.1

##### **endoscope**

medical instrument having viewing means, with or without optics, introduced into a body cavity through a natural or surgically-created body opening for examination, diagnosis or therapy

NOTE 1 Endoscopes may be of rigid or flexible type; all types may have different image pick-up systems (e.g. via lenses or ultrasonic sensors) and different image-transmitting systems (e.g. optical, via lenses or fibre bundles, or electrical).

NOTE 2 IEC 60601-2-18 deals with electrical safety aspects of endoscopic systems and therefore the endoscope is regarded as an applied part of medical electrical equipment introduced into a patient. In IEC 60601-2-18:1996, the endoscope is defined as the “applied part of medical electrical equipment introduced into a patient to provide an internal view or image for examination, diagnosis and/or therapy”.

#### 1.2

##### **fiberscope**

**endoscope** (1.1) in which the image is transmitted via a fibre bundle

#### 1.3

##### **rigid endoscope [endotherapy device]**

**endoscope** (1.1) [**endotherapy device** (4.1)] whose insertion portion is intended to be unyielding to natural or surgically-created body cavities or instrument channels

#### 1.4

##### **flexible endoscope [endotherapy device]**

**endoscope** (1.1) [**endotherapy device** (4.1)] whose insertion portion is intended to conform to natural or surgically-created body cavities or instrument channels

#### 1.5

##### **video endoscope**

**endoscope** (1.1) in which the image is transmitted by a solid state imaging device

#### 1.6

##### **ultrasonic endoscope**

ultrasound endoscope

**endoscope** (1.1) with an electro-acoustical image pick-up system

1.7

**telescope**

rigid optical device for endoscopic imaging

1.8

**rigid bronchoscope**

open straight tube-type **rigid endoscope** (1.3) fitted with a means of illumination through the distal end and intended to be introduced into the tracheobronchial airway, having an internal lumen sufficiently large to permit free respiration of the patient

[ISO 8600-2:2002]

1.9

**rigid ventilation bronchoscope**

**rigid bronchoscope** (1.8) fitted with a removable end-cap at the proximal end of the open straight tube and having an internal lumen sufficiently large to permit ventilation of the patient through an integral ventilation connector

[ISO 8600-2:2002]

1.10

**rigid jet-ventilation bronchoscope**

**rigid bronchoscope** (1.8) provided with a jet-injector

[ISO 8600-2:2002]

**2 Optical specifications**

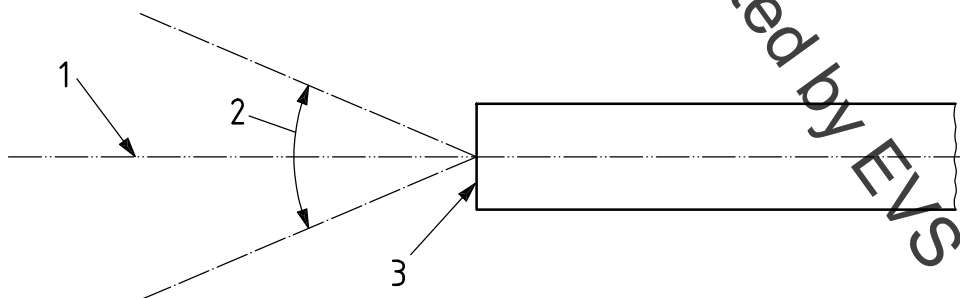
2.1

**field of view**

size of the object field viewed through an optical **endoscope** (1.1), expressed as the vertex angle (in degrees) of the cone whose vertex is at the distal window surface of the endoscope

See Figure 1.

NOTE The field of view is not appropriate when the endoscope is intended to be in contact with the object.



**Key**

- 1 central axis of field of view
- 2 field of view
- 3 distal window surface of endoscope

**Figure 1 — Field of view**