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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
ORGANISATION INTERNATIONALE DE NORMALISATION
МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Photography — Front lens barrels up to 127 mm — Dimensions important to the connection of auxiliaries

*Photographie — Partie frontale des montures d'objectifs, jusqu'à 127 mm — Dimensions
conditionnant la fixation d'accessoires*

(standards.iteh.ai)

ISO 1948:1987

<https://standards.iteh.ai/catalog/standards/sist/a0ae3877-040d-4ef8-99b7-80d592ec1787/iso-1948-1987>

Reference number
ISO 1948 : 1987 (E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 1948 was prepared by Technical Committee ISO/TC 42
Photography.

This second edition cancels and replaces the first edition (ISO 1948 : 1973), clause 2 of which has been technically revised.

This revision of ISO 1948 : 1973 increases the number of screw sizes that were specified in the previous standard. Notes have been added to more completely describe the tolerances of the threads. A dimension, L_4 , has been added to avoid contact between the glass filter and the lens vertex.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Photography — Front lens barrels up to 127 mm — Dimensions important to the connection of auxiliaries

1 Scope and field of application

This International Standard specifies a standard series of diameter sizes for the front part of a lens barrel (dimension *B* in the figure) and a standard series of thread sizes (dimension *A* in the figure) for the same front barrel. It is applicable to camera lenses and lenses for enlargers and similar equipment. It is mainly intended that these standard sizes will simplify the production and storage of such auxiliaries as screw-in filters.

2 Dimensions

The dimensions shall be as shown in the figure and given in the table.

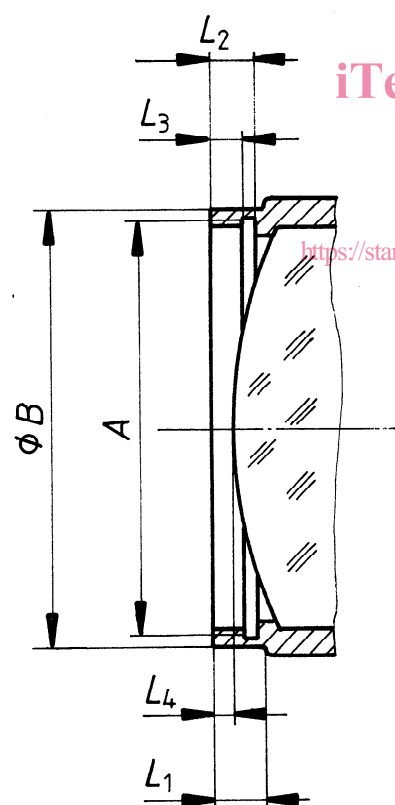


Figure — Typical front lens barrel

Table — Important dimensions

Values in millimetres

| Screw thread <i>A</i> major diameter × pitch | Outside diameter of the barrel <i>B</i> basic size | Tolerance h12 | | <i>L</i> ₁ min. | <i>L</i> ₂ min. | <i>L</i> ₃ min. | <i>L</i> ₄ min. |
|--|---|-----------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | | upper deviation | lower deviation | | | | |
| | | 13,5 × 0,5 | 15 | | | | |
| 16,5 × 0,5 | 18 | 0 | -0,18 | 2,0 | 1,8 | 1,2 | 1,2 |
| 19,5 × 0,5 | 21 | 0 | -0,21 | 2,5 | 2,2 | 1,5 | 1,2 |
| 22,5 × 0,5 | 24 | 0 | -0,21 | 2,5 | 2,2 | 1,5 | 1,2 |
| 25,5 × 0,5 | 27 | 0 | -0,21 | 2,5 | 2,2 | 1,5 | 1,2 |
| 30,5 × 0,5 | 32 | 0 | -0,25 | 2,5 | 2,2 | 1,5 | 1,2 |
| 35,5 × 0,5 | 37 | 0 | -0,25 | 2,5 | 2,2 | 1,5 | 1,2 |
| 40,5 × 0,5 | 42 | 0 | -0,25 | 3,0 | 2,5 | 1,8 | 1,4 |
| 43 × 0,75 | 45 | 0 | -0,25 | 3,0 | 2,5 | 1,8 | 1,4 |
| 46 × 0,75 | 48 | 0 | -0,25 | 3,5 | 3,0 | 2,0 | 1,4 |
| 49 × 0,75 | 51 | 0 | -0,30 | 3,5 | 3,0 | 2,0 | 1,4 |
| 52 × 0,75 | 54 | 0 | -0,30 | 3,5 | 3,0 | 2,0 | 1,4 |
| 55 × 0,75 | 57 | 0 | -0,30 | 3,5 | 3,0 | 2,0 | 1,4 |
| 58 × 0,75 | 60 | 0 | -0,30 | 4,0 | 3,0 | 2,0 | 1,4 |
| 60 × 0,75 | 62 | 0 | -0,30 | 4,0 | 3,0 | 2,0 | 1,4 |
| 62 × 0,75 | 65 | 0 | -0,30 | 4,0 | 3,0 | 2,0 | 1,4 |
| 67 × 0,75 | 70 | 0 | -0,30 | 4,5 | 3,5 | 2,5 | 1,7 |
| 72 × 0,75 | 75 | 0 | -0,30 | 4,5 | 3,5 | 2,5 | 1,7 |
| 77 × 0,75 | 80 | 0 | -0,30 | 5,0 | 3,5 | 2,5 | 1,7 |
| 82 × 0,75 | 85 | 0 | -0,35 | 5,0 | 3,5 | 2,5 | 1,7 |
| 86 × 1,0 | 90 | 0 | -0,35 | 6,0 | 4,5 | 3,0 | 2,2 |
| 95 × 1,0 | 100 | 0 | -0,35 | 6,0 | 4,5 | 3,0 | 2,2 |
| 100 × 1,0 | 105 | 0 | -0,35 | 6,0 | 5,0 | 3,5 | 2,2 |
| 112 × 1,0 | 117 | 0 | -0,35 | 6,0 | 5,0 | 3,5 | 2,2 |
| 122 × 1,0 | 127 | 0 | -0,35 | 6,0 | 5,5 | 4,0 | 2,2 |

NOTES

- 1 The profile of the screw thread is in accordance with ISO 68, *ISO general purpose screw threads — Basic profile*.
- 2 Dimension *B* includes the finish. The tolerance h12 is in accordance with ISO 286-1, *ISO system of limits and fits — Part 1 : General, tolerances and deviations*.
- 3 Tolerance of screw threads shall be 6H in accordance with ISO 965-1, *ISO general purpose metric screw threads — Tolerances — Part 1 : Principles and basic data*.
- 4 *L*₄ is the dimension for avoiding interference between glass of screw-in filter and lens vertex.

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Price based on 1 page
