

DIN ISO 10110-1:2020-09 (E)

Optics and photonics - Preparation of drawings for optical elements and systems - Part 1: General (ISO 10110-1:2019)

| Contents | | Page |
|---|---|-------------|
| National foreword | | 3 |
| National Annex NA (informative) Bibliography | | 5 |
| Foreword | | 7 |
| 1 | Scope | 8 |
| 2 | Normative references | 8 |
| 3 | Terms and definitions | 8 |
| 4 | Fundamental stipulations | 9 |
| 5 | Presentation and dimensioning | 10 |
| 5.1 | Drawing format | 10 |
| 5.1.1 | General | 10 |
| 5.1.2 | Drawing field | 10 |
| 5.1.3 | Table field | 10 |
| 5.1.4 | Title field | 12 |
| 5.1.5 | Alternative drawing layout | 12 |
| 5.1.6 | Examples | 12 |
| 5.2 | Views | 13 |
| 5.3 | Global and Local Coordinate Systems | 15 |
| 5.4 | Axes | 16 |
| 5.5 | Leader lines | 17 |
| 5.6 | Test regions | 17 |
| 5.7 | Test fields | 18 |
| 5.8 | Test volumes | 18 |
| 5.9 | Dimensioning | 20 |
| 5.9.1 | General | 20 |
| 5.9.2 | Radius of curvature | 20 |
| 5.9.3 | Thickness | 21 |
| 5.9.4 | Diameter | 22 |
| 5.9.5 | Presentation of shapes of edges, bevels and chamfers | 22 |
| 5.9.6 | Linear dimensions | 24 |
| 5.9.7 | Angles | 25 |
| 5.9.8 | Special surfaces | 26 |
| 5.10 | Material specification | 27 |
| 5.10.1 | General | 27 |
| 5.10.2 | Crystallographic axes | 27 |
| 5.11 | Indication of optical tolerances and various properties | 27 |
| 5.11.1 | Tolerances for the position of the local coordinate systems | 27 |
| 5.11.2 | Optical properties and tolerances | 27 |
| 5.11.3 | Optical subassembly | 28 |
| 6 | Additional indications for optical layout drawings | 29 |
| 6.1 | General | 29 |
| 6.2 | Axial separations | 32 |
| 6.2.1 | General | 32 |
| 6.2.2 | Fixed axial separations | 32 |
| 6.2.3 | Adjustable axial separations | 32 |
| 6.2.4 | Variable axial separations | 33 |
| 6.3 | Images, pupils, field stops and other apertures | 33 |
| Annex A (informative) Examples of drawings of optical elements | | 35 |
| Bibliography | | 52 |