

RETICLES

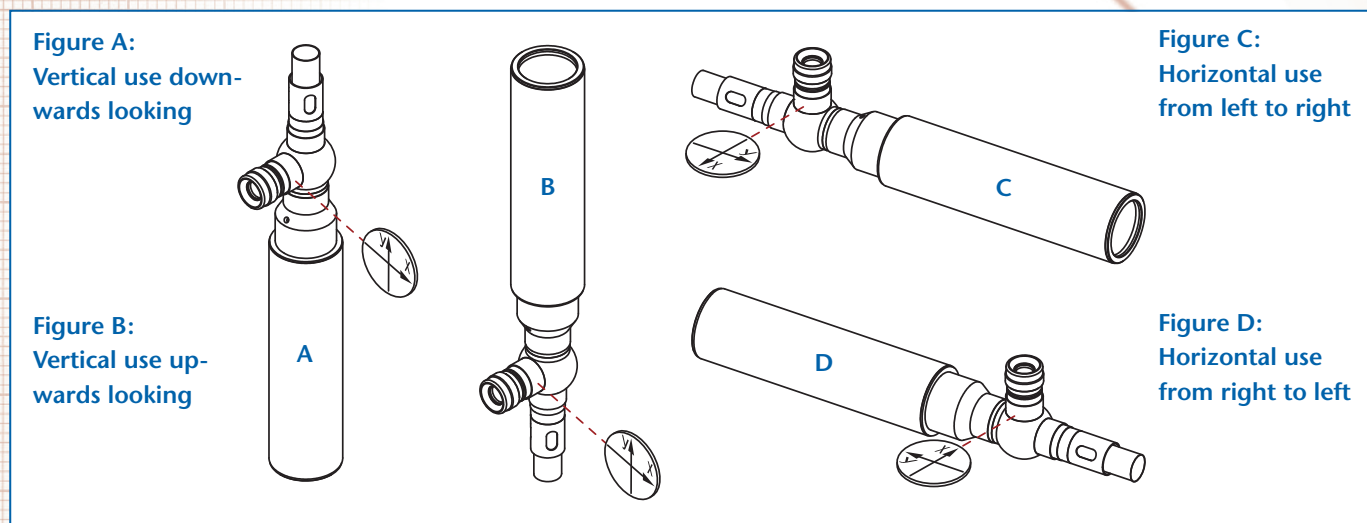
INTRODUCTION

Reticles:

Reticles are a part of collimators, testing telescopes and autocollimators. All reticles have a diameter of 12 mm and a thickness of 1 mm. The free aperture of a reticle used at the illuminated side of an autocollimator is 6 mm and at the eyepiece side 10 mm. The free aperture of reticles used in collimators and telescopes is 10 mm.

General selection criteria:

- For focal lengths more than 300 mm or extensive stopping down (for example when using mirrors with small diameter) reticles with bigger line thickness are recommended.
- When using autocollimators or testing telescopes with 90°-viewing and reticles with lettering (e.g. coordinate division etc.) please specify the direction of use (see figure A, B, C, D)



Examples for reticle combinations

(the reticle combinations are valid for autocollimators as well as for combinations testing telescope/collimator):

- **Determination of the wedge error of optical components:**
 Collimator reticles: Diaphragms 208 740...208 759
 Eyepiece reticles: Crossline (208 111...208 115)
 or
 Collimator reticles: Crossline (208 111...208 118)
 Eyepiece reticle: mm-scale (208 304)
- **Fast angle measurement**
 Collimator reticles: Polar coordinate reticle (208 241, 208 860)
 or mm-scale (208 401)
 Eyepiece reticles: Crossline (208 111... 208 115)
- **Adjustment for sharpness of optical systems and testing for resolution**
 Collimator reticles: Siemens star (208 201, 208 202)
 or resolution test (208 211...208 217)
 Eyepiece reticles: Crossline (208 111...208 115)
- **Adjustment of an autocollimator to a mirror or of a collimator to a telescope**
 Collimator reticles: Crossline (208 111...208 118)
 Eyepiece reticles: Double crossline (208 123, 208 125, 208 127)
 The reticle should be chosen so that, in symmetry adjustment, a bright gap appears between the double crossline and single crossline.
- **Angle measurement (Determination of angle deviations)**
 Collimator reticles: Crossline (208 111... 208 118)
 Eyepiece reticles: Arc minute graduations (208 411...208 431)
 or line-division (208 436 ... 208 443)
 For use in autocollimators/collimators with reticle turret
 Collimator reticles: Arc minute graduations (208 811... 208 815)
 Eyepiece reticles: Crossline (208 111...208 115)