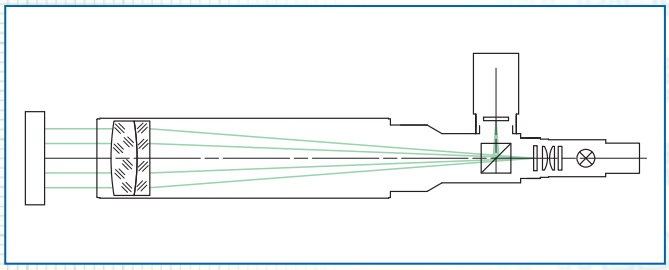
AUTOCOLLIMATORS
WITH CCD-CAMERA MOUNT

Description:
For a general description of the principle of functioning see page 42.

The principle, function and layout resemble the autocollimator with 90°-viewing (see page 46). The eyepiece and the eyepiece reticle are replaced by a mount for a CCD-camera and the autocollimation image is directly imaged on the camera chip when the camera is mounted. With no eyepiece reticle the displacement of the return image is measured on a video monitor or using a computer, frame grabber and software (see page 106).



Application areas:
- Measurement of angular tilt
- Measurement of parallelism of plane plates
- Adjustment of optical elements
- Qualitative testing of the imaging properties of optical elements and systems

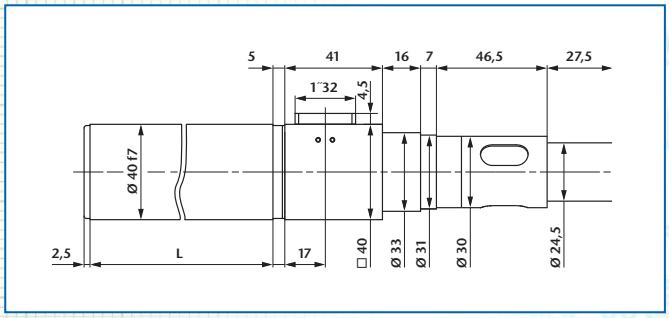
Notes on ordering:
- One Reticle and 6V/5W illumination w/cord are included.

More notes on ordering:
- **CCD-camera and computer hardware/software are NOT included.**
- As this type of autocollimator does not have an eyepiece reticle a direct measurement of the reticle displacement is impossible. Additional computer with software and frame grabber is needed.
- For angular measurement the autocollimator should be equipped with a negative crosshair reticle (see page 83). For testing of imaging quality use resolution target or Siemens Star (see page 87).
- If not specified otherwise, the autocollimator is adjusted to infinity at 546 nm wavelength. Adjustment to other distances or wavelengths is also possible on demand.
- The nomenclature of the autocollimators with CCD-camera mount is as follows:

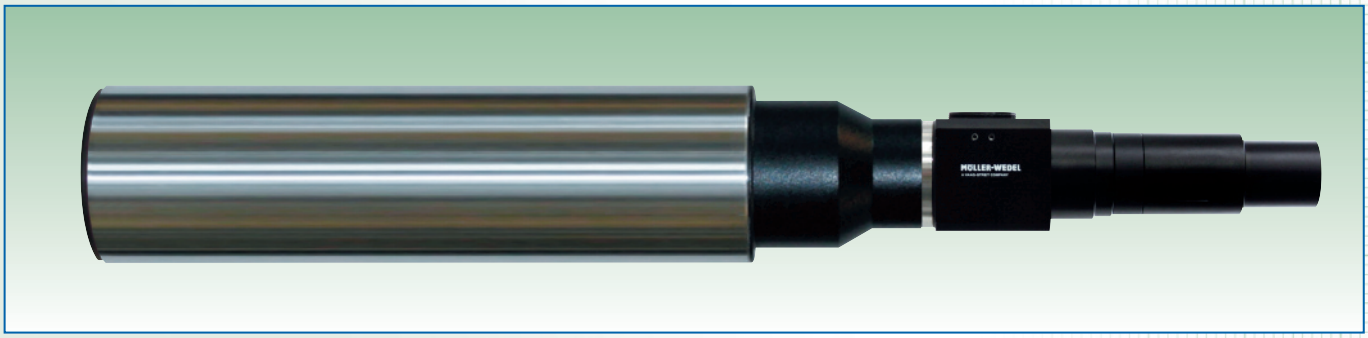
Example: AK R 50/ 40/ CCD

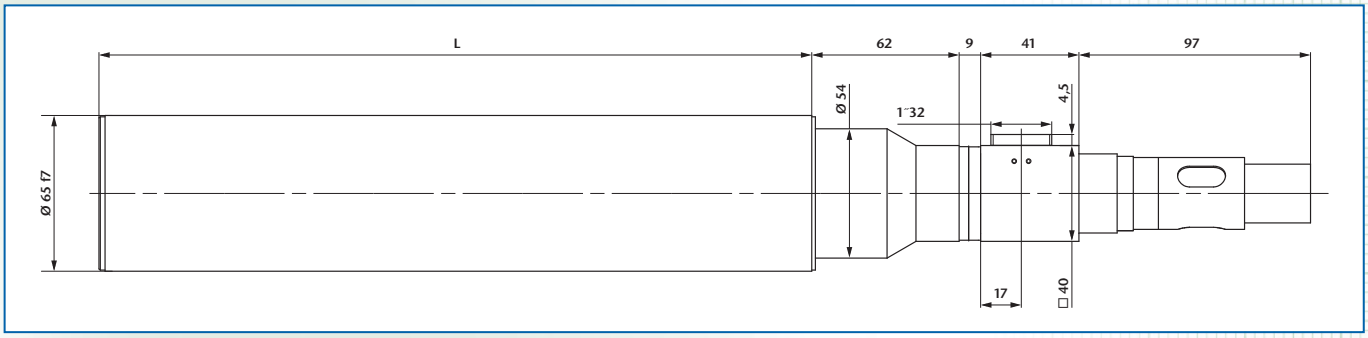
- AK – Autocollimator
- R – 90° viewing
- 50/ – Focal length
- 40/ – Tube diameter
- CCD – CCD-Camera mount

Important:
Please specify collimator reticle (see page 82) as well as illumination (LED-, bulb- or cold light, see page 81) when ordering.

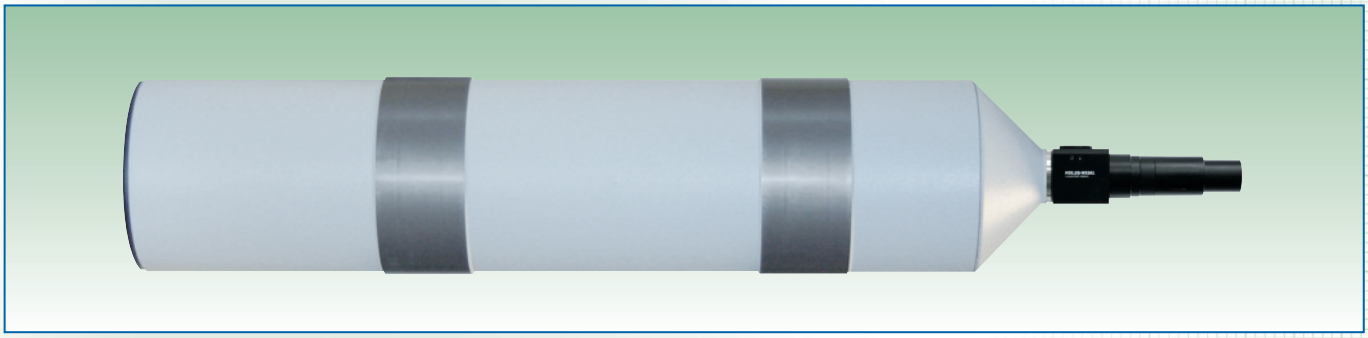


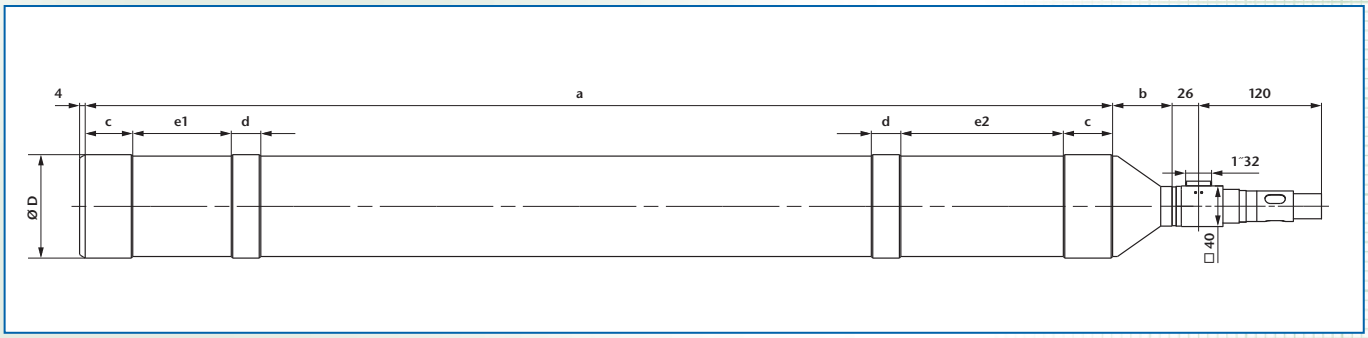
Ord.-No.	Description	Focal length	Free aperture	Meas. range*	L
229 421	AKR 50/40/CCD	50	10	x:4,50° y:3,20°	65
229 422	AKR 90/40/CCD	90	16	x:2,50° y:1,80°	65
229 423	AKR 140/40/CCD	140	28	x:1,60° y:1,20°	118
229 424	AKR 200/40/CCD	200	28	x:1,10° y:0,80°	173
229 425	AKR 300/40/CCD	300	28	x:0,75° y:0,60°	274
229 426	AKR 500/40/CCD	500	28	x:0,45° y:0,30°	474





Ord.-No.	Description	Focal length	Free aperture	Meas. range*	L
229 427	AKR 300/65/CCD	300	50	x:0,75° y:0,60°	233
229 428	AKR 500/65/CCD	500	50	x:0,45° y:0,30°	415
229 429	AKR 500T/65/CCD	500	50	x:0,45° y:0,30°	233





Ord.-No.	Description	Focal length	Free aperture	Meas. range*	D	a	b	c	d	e1	e2
229 432	AKR 600/128/CCD	600	100	x:0,35° y:0,25°	Ø 128 f7	530	46	–	58	154	78
229 433	AKR 1100/105/CCD	1100	78	x:0,20° y:0,15°	Ø 105 f7	1045	66	50	30	165	100

* with 2/3″ CCD-Kamera