

TESTING TELESCOPES

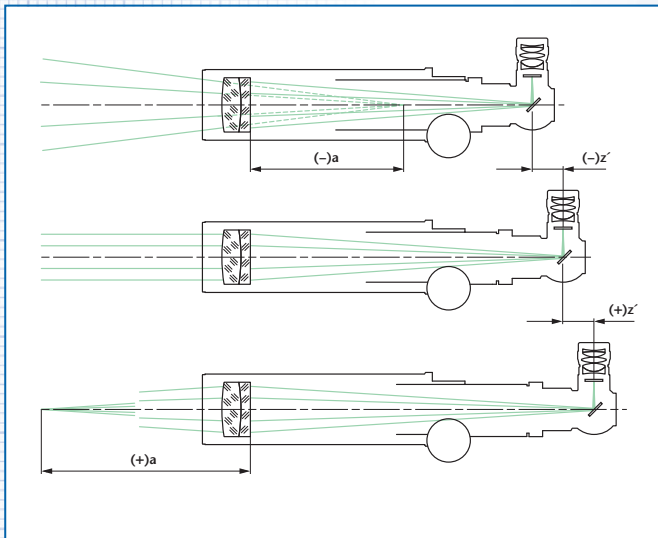
FOCUS ADJUSTABLE – WITH 90°-VIEWING

Description:

For a general description of the operating principle of testing telescopes see page 20.

An adjustable focus telescope allows the distance between reticle and telescope objective to be adjusted for measurements made at other than infinity. Additionally, infinity can be set for different wavelengths of light.

The following figure shows the set-up of a focusable telescope with 90° viewing. In contrast to a telescope with straight viewing the image appears upright and laterally reversed.



Application examples:

- Adjustment of optical and mechanical systems
- Qualitative testing of image quality of optical elements and systems (additional collimator required)
- Testing at different wavelengths of light

Notes on ordering:

- Telescope eyepiece is commonly $f=14,7$ mm but can be equipped with eyepieces $f=25$ mm or $f=10$ mm on request.
- One reticle and one eyepiece are included in the instrument.
- The nomenclature of the focus adjustable testing telescopes with 90°-viewing is as follows:

Example:

F R V 90/ 40/ 14,7 ±6

Testing telescope

90° viewing

Variable

Focal length

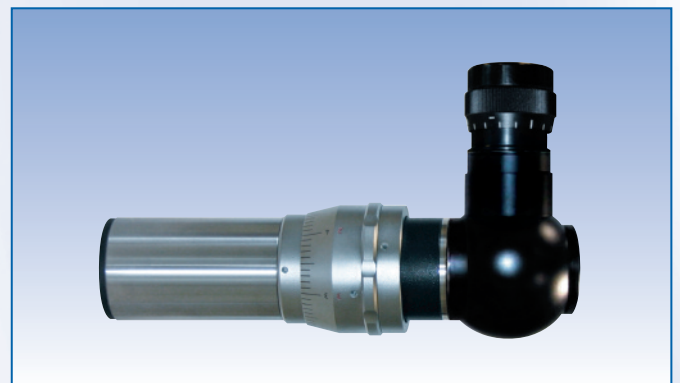
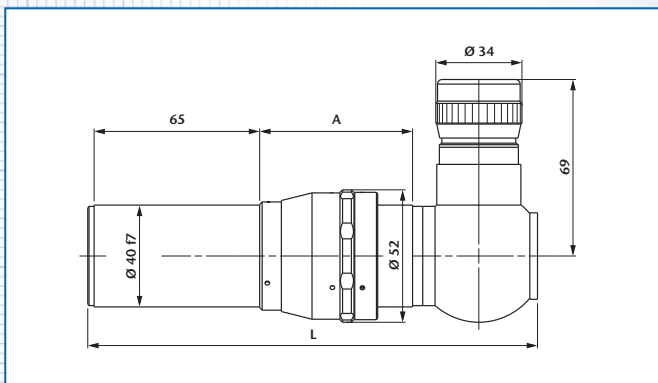
Tube diameter

Eyepiece focal length

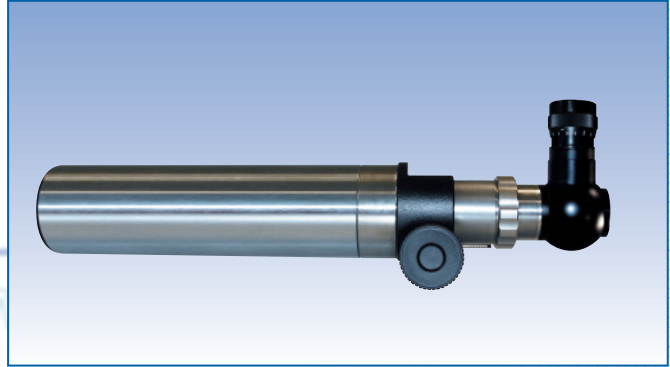
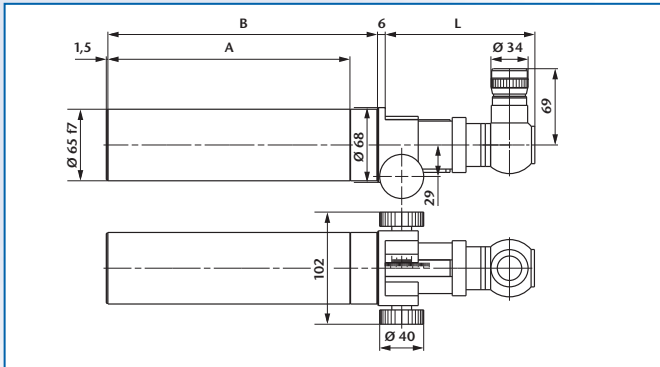
Tube extension in mm

Important:

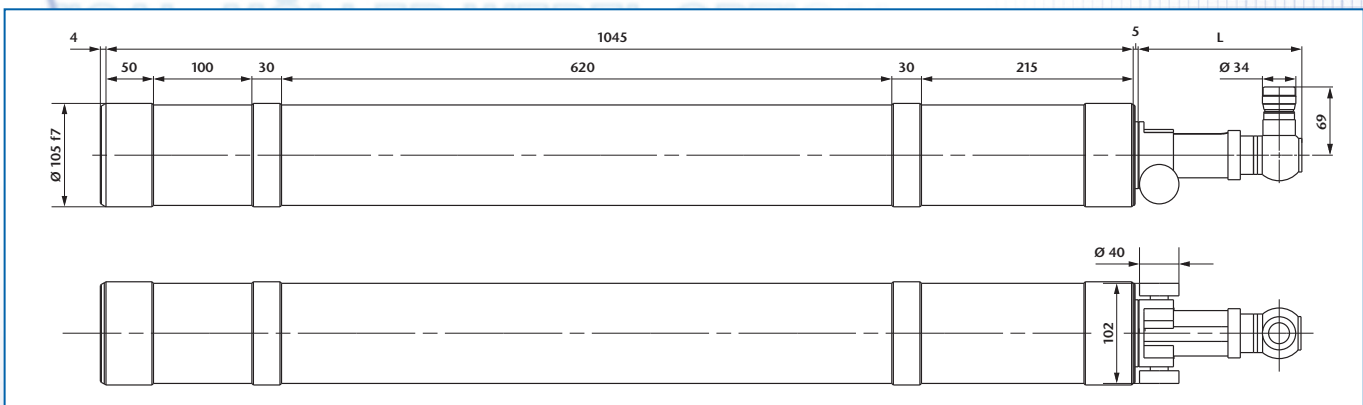
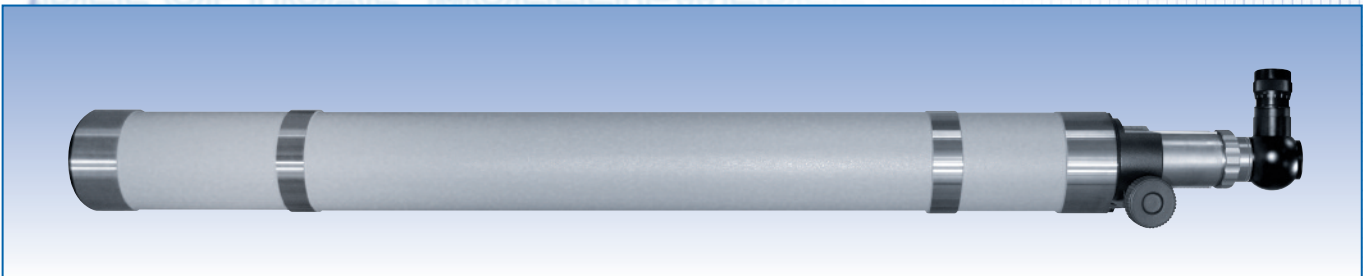
Please specify reticle (see page 82) when ordering.
Please specify direction of use if reticles with lettering are used so that the lettering will be right-side-up.



Ord.-No.	Description	Focal length	Free aperture	Tube extension	Field of view	Distance range	A	L
227 541	FRV 90/40/14,7/±6	90	16	±6	6,0°	-∞...-1,25 m 1,40 m...+∞	60±6	176,5±6
227 542	FRV 90/40/14,7/+12	90	16	+12	6,0°	0,80 m...+∞	54 ⁺¹²	170,5 ⁺¹²
227 543	FRV 90/40/14,7/-12	90	16	-12	6,0°	-∞...-0,60 m	66 ⁻¹²	182,5 ⁻¹²
227 544	FRV 140/40/14,7/±6	140	28	±6	4,0°	-∞...-3,10 m 3,30 m...+∞	60±6	176,5±6
227 545	FRV 140/40/14,7/+12	140	28	+12	4,0°	1,70 m...+∞	54 ⁺¹²	170,5 ⁺¹²
227 546	FRV 140/40/14,7/-12	140	28	-12	4,0°	-∞...-1,40 m	66 ⁻¹²	182,5 ⁻¹²



Ord.-No.	Description	Focal length	Free aperture	Tube extension	Field of view	Distance range	A	B	L
227 547	FRV 300/65/14,7/±25	300	50	±25	2,0°	-∞...-3,4 m 3,8 m...+∞	220	245	140±25
227 548	FRV 300/65/14,7/+50	300	50	+50	2,0°	2,1 m...+∞	220	270	115 ⁺⁵⁰
227 549	FRV 300/65/14,7/-50	300	50	-50	2,0°	-∞...-1,5 m	220	220	165 ₋₅₀
227 550	FRV 500/65/14,7/±50	500	50	±50	1,0°	-∞...-4,5 m 5,4 m...+∞	310	360	165±50
227 551	FRV 500/65/14,7/+100	500	50	+100	1,0°	3,0 m...+∞	310	410	115 ⁺¹⁰⁰
227 552	FRV 500/65/14,7/-100	500	50	-100	1,0°	-∞...-1,5 m	310	310	215 ₋₁₀₀



Ord.-No.	Description	Focal length	Free aperture	Tube extension	Field of view	Distance range	L
227 556	FRV 1100/105/14,7/±50	1100	78	±50	0,5°	-∞...-23,70m 25,80 m...+∞	161±50
227 557	FRV 1100/105/14,7/+100	1100	78	+100	0,5°	13,20 m...+∞	161 ⁺¹⁰⁰
227 558	FRV 1100/105/14,7/-100	1100	78	-100	0,5°	-∞...-12,00 m	161 ₋₁₀₀