

Collimation: Autoreflex and CamCollimator. Measuring at ∞



Universal CamCollimator with the optional second sliding plate for quick camera check



Autoreflex Collimator, measuring with a Siemens star

Two types are available.

For daily use in film and video equipment rentals and service, the **CamCollimator** preferable because the user is not dependent of the individual observation and delivers objective, precise measurement values quickly and simply. With this time-proven process, the sharpness of the picture is no longer the adjustment criteria, but rather the symmetrical position of a simple beam between a double bar.



too little sharpness is lying in front of image plane



back focal length correct



too much sharpness is lying behind image plane

The **Universal CamCollimator** is available now in a **new** compact version. Optionally it can come with a second sliding platform for checking cameras without conversions. The base unit comes with one platform which holds a lens or a camera. The autocollimator holder can swivel and is mounted on self stopping **spindle drives for side- and height-adjustment*** to quickly measure the back focal length on cameras and lenses.

The set up (1000 mm only) is much more compact in structure then the previous optical bench, offers a significant reduction in weight, space needs and results in an optimal price/performance ratio.

A LED illumination, colour selector for green and white, camera, LCD monitor and plane glass are included. Lens mount adaptors are selected as required.

The classical **Autoreflex Collimator** with eyepiece and Siemens star is recommended if there is a limited budget and measurements must only be taken occasionally. As using the same optical bench with height adjustability cameras can also be measured in addition to lenses.

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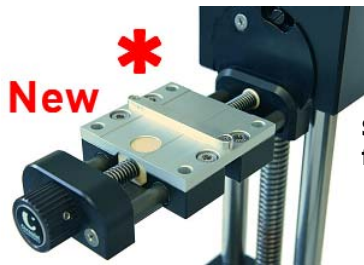
Beam Converter

For F 4-19 mm wide angle check (2/3" HDTV format). It amplifies the light by 15 times for a crisp image on the monitor.



Focal length comparison:

B4 [mm]	>>	PL [mm]
4		10
6		13
19		42
50		109
100		218



Spindle table for collimation unit

Collimation Unit and fibre optics of the CamCollimator



Components	Article no.
<p>Universal CamCollimator Reading accuracy of the micrometer: 0.001mm</p> <ul style="list-style-type: none"> • Collimation unit Mark III 45S, mounted on an adjustable carrier • Focal length range: 6-300mm • cold light source with high power LED (7x3.5W, 380lm, 50,000h) and fibre optics. Power supply 90 – 260 V, 47-63 Hz • Steel rods, stainless steel, L=1.0m • 1 sliding platform with the lens gauge block including digital micrometer • Hight adjustable, sliding lens support • LCD monitor mounted with an articulated arm • CCD-camera (black / white) with C-mount • Combined power supply for camera and monitor (100 – 240 V, 50 – 60 Hz) • Eyepiece, for visual observation • Plane glass in a case • Pupil with 53 mm thread for the amplifier – beam converter • Option: 2. platform C-LCC-P2 with integrated lens support 	C-LCC
<p>Autoreflex Collimator, The reading accuracy of the micrometer: 0.001mm. Focal length range 5mm-300mm. Includes: Siemens star as a reticule plate; collimating telescope F300, \varnothing 65mm, Measurement range 2° (Option: collimating telescope F140, \varnothing 40mm, Measurement range 4°; adapter \varnothing 65 to 40mm); Illuminator with power supply 110 - 240V; Steel rods, stainless steel, L=1m; sliding platform for camera or with the gauge mounting block incl. digital micrometer; sliding lens support.</p>	C-CTB
<p>Mountings for photo, film and video formats can be found on the overview page 75</p>	

Lens mountings for collimation & projection.

A variety of mountings are available ex stock, others can be produced according to the customer's requirements.

Mountings for collimation and projection				
Components Cine			Article no.	
Mount for Aaton			C-AAA	
Mount for Arriflex PL			C-APL	
Mount for Arriflex standard - bayonet			C-ASTB	
Mount for Panavision			C-APA	
Mount for BNCR connection			C-ABNCR	
Mount for C connection			C-ACM	
Components Video SD				
	Chip	bfl mm		
Ikegami mount with glass way - B4 mount with glass way (Sony, Hitachi, JVC, Panasonic, Thomson, etc.)	2/3"	76.94	P-VMI	
Sony mount with glass way	2/3"	65.24	P-VMS	
BTS mount with glass way	1/2"	52.71	P-VMS12	
	1/2"	50.45	P-VMBTS12	
Components Video HD				
	Chip	bfl mm		
B4 mount with glass way (Sony, Hitachi, JVC, Panasonic, Thomson, etc.)	2/3"	65.03	P-VMHD	
B4 mount with glass way for Zeiss	2/3"	65.06	P-VMZ	
Mount with glass way	1/3"	41.99	P-VM13	
Components Photo KB (35mm still photography)				
Mount for Canon EF			P-FMCEF	
Mount for Leica M & R			P-FMLM/R	
Mount for Nikon			P-FMN	
Mount for Olympus			P-FMO	
Measurement cylinder ($\pm 3\mu\text{m}$) with gauge (scale gradations 10μm)				
Measurement cylinder for	ENG SD	2/3"	65.24mm	C-MBENG
Measurement cylinder for	Sony SD	1/2"	52.71mm	C-MBS12
Measurement cylinder for	BTS SD	1/2"	50.45mm	C-MBBTS12
Measurement cylinder for	HDTV	2/3"	65.03mm	C-MBHHD
Measurement cylinder for	HDTV	1/3"	41.99mm	C-MB13



Measurement cylinder for	PL	52.00 mm	C-MBAPL
Measurement cylinder for	Canon EF	44.00 mm	C-MBEF
Measurement cylinder for	Nikon F	46.50 mm	C-MBNF

Selected accessories for the CamCollimator		Article no.
Beam Converter, light amplifier for the measurement of wide-angle lenses 4-19mm		C-BCWA
Adapter for Beam Converter on older collimators		C-BCWA-01
2-metre converter, for measurements at a distance of 2 m		C-ATT2m
Selected spare parts for the CamCollimator		
CCD-camera MT 012 B/W, incl. power supply and C-mount		CCD-LCTB
Plane glass in the case for all collimators (\varnothing 63mm)		C-PPG

bfl = back focal length