

### The Hasselblad TCC system is a new, integral part of the comprehensive Hasselblad system

The system overview above shows the flexibility of the Hasselblad 205TCC – a new series of lenses, film magazines, extension tubes and other accessories have been designed for this camera, while retaining the greatest possible Hasselblad compatibility.

The main accessories in the inner square are electronically integrated for the exposure measurement functions of the camera. They are easily recognizable by the double blue line. The accessories in the next square are suitable for both the 205TCC and for other Hasselblad cameras.

The accessories in the outer square can be used with the 205TCC, but with some limitation in the use of its exposure measurement function. The TCC accessories in this catalog are listed under the main Hasselblad system groups, but are easily identified by the double blue line.

## A new Hasselblad camera

The Hasselblad system is developing steadily as new products give the photographer impetus and ideas for creative pictures. It is seldom that such an extensive range of interesting products is presented in a new catalog as this year.

HASSELBLAD 205TCC is the biggest news for 1991. It is a camera in the true Hasselblad tradition with modular construction and also the first camera in our system to incorporate a built-in TTL spot meter, choice of different exposure modes and, of course, OTF dedicated flash. Hasselblad compatibility has been assured as much as possible with just a few exceptions.

ZEISS Sonnar CF f/4 180 mm A compact lens with a focal length of special interest for demanding portrait photographic work at a comfortable distance from the model (page 7).

ZEISS PC-Mutar  $1.4 \times$  shift converter A unique design which eliminates distorted lines. The PC-Mutar allows you to off-set the perspective by as much as  $\pm 16$  mm (page 10).

HASSELBLAD Proflash 4504 The only professional flash with builtin Hasselblad flash dedication. Can be dedicated to other cameras via the SCA 300 System (page 19).

The new Acute-Matte focusing screen with grid and split-image is one more in the long line of Acute-Matte focusing screens – four times as bright as traditional screens (page 15).

For more information and to find out where your nearest Hasselblad dealer is located, contact our distributors (list in the back of this catalog).

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The Hasselblad 205TCC is the most advanced model in the Hasselblad system. It combines a traditional construction with an exclusive exposure metering system. A precision spot metering system supported by modern digital computer technology controls the operation of the focal plane shutter at speeds of between 16s and 1/ 2000 s. The metering zone of the spot meter represents 1% of the image area and the metering cell is completely protected from interference from extraneous light. The metering system has a range of 20 EV steps.

The Hasselblad 205TCC offers the user a choice of modes, some of which can be individually pre-programmed. Three modes - Automatic, Differential and Zone work with aperture preselection and automatic shutter speed. A fourth mode, Manual, is connected directly to the meter. Data concerning the exposure and mode being used is conveniently presented as a Liquid Crystal Display (LCD) in the viewfinder without interfering with the image itself. The Acute-Matte\* focusing screen shows the spot meter's metering zone and gives a viewfinder image of unsurpassed brilliance and definition.

Replace the winding crank with a winder and the 205TCC is transformed into a motorized camera for shooting sequences of up to 1.3 frames/s.

The Hasselblad 205TCC also gives full control of flash units adapted to SCA 300 or SCA 500 flash systems. It measures the light reflected from the film plane (TTL/ OTF) when using a flash and interrupts the flash when the right exposure level has been reached. The camera body is marked with a double blue line on the left-hand side. All accessories similarly marked may be combined with the 205TCC making full use of all the camera's automatic functions. Most of the other accessories in the system can also be used with the 205TCC, but they may not allow full use of the camera's automatic functions.

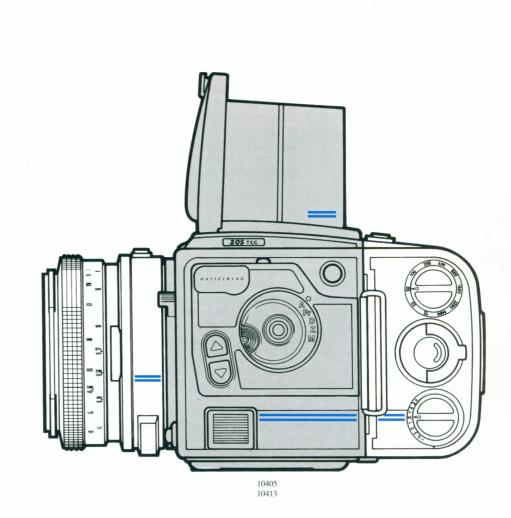
The metering system operates on a 6 V PX28 battery in a battery cassette built into the camera body. An external battery cassette for four 1.5 V AA-type (LR6) alkaline batteries is available for use when working in particularly difficult conditions.

The camera body, lenses and film magazines are delivered separately.

The Hasselblad 205TCC camera body with automatic spot meter exposure and choice of operating modes. Automatic or manual focal plane shutter with manual setting of shutter speeds B, 1 s- 1/2000 s with half-stops and C mode; automatic, continuously variable shutter speeds 16 s - 1/2000 s, interchangeable viewfinders and focusing screens, interchangeable winding crank. Tripod plate with 1/4" tripod thread.

\* Acute-Matte designed by MINOLTA

## Hasselblad 205TCC

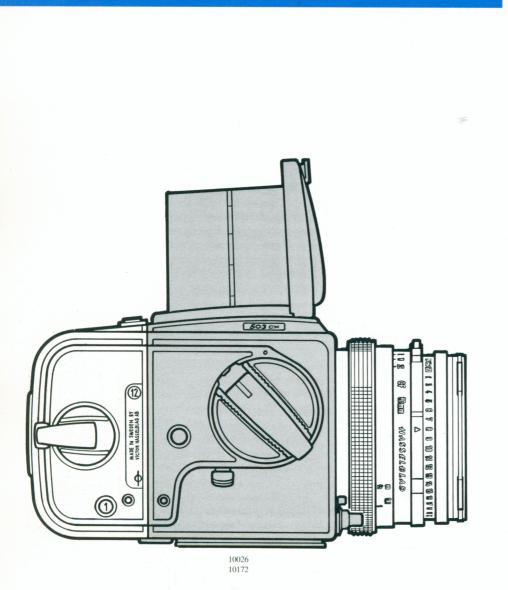


#### HASSELBLAD 205TCC CAMERA BODY

The camera body is available with chrome or black trim, and comes without lens or film magazine. Weight: 1 lb 10 oz (750 g). (Battery not included)

- 10405 205TCC camera body, chrome, 10413 205TCC camera body, black, supplied with the following equipment:
- 44083 Winding crank TCC
- 42317 Focusing hood TCC, chrome
- 42167 Acute-Matte\* Focusing screen TCC
- 59110 Standard strap
- 51438 Front protective cover
- 51063 Rear protective cover

supplied with the same equipment as the 10405, but with the blacktrim focusing hood TCC, 42325.



The Hasselblad 503CX single-lens reflex camera is a further step in the development of the basic 500C camera around which the Hasselblad system has been built.

The Hasselblad 503CX is a mechanical camera, with one exception – a dedicated flash sensor system (TTL/OTF) which automatically controls the flash by measuring the light reflected from the film plane. The result is perfect flash pictures regardless of the lens, filter, extension tube or bellows combination used. The sensor system is powered by the flash batteries and requires no internal battery. The working range of the sensor is ISO 16 through ISO 1000. The Hasselblad Proflash (see page 19) has been developed for the camera's flash metering system. Other flash units can be dedicated to the camera using an adapter for either the SCA 300 or SCA 500 flash system.

The camera body is coated internally with light-absorbing Palpas, which effectively prevents extraneous light from reaching the negative and reducing its contrast values.

The viewfinder and focusing screens are interchangeable. The Acute-Matte focusing screen is standard equipment and provides a superbly sharp and bright image.

The camera body, lenses and film magazines are delivered separately.

The Hasselblad 503CX camera body has interchangeable viewfinders and focusing screens and an interchangeable winding crank for film advance and shutter cocking. It incorporates a system to prevent unintentional double exposure. It also has a prerelease mode, a rail for accessories such as the spirit level, and a quick-coupling plate with a 1/4" tripod thread for attachment of the camera to a tripod.

#### HASSELBLAD 503CX CAMERA BODY

The camera body is available with chrome or black trim and is supplied without a lens or film magazine. Weight: 1 lb 5 oz (610 g)

**10026 503CX camera body, chrome,** supplied with the following equipment:

- 44040 Winding crank 142315 Focusing hood, chrome
- 42165 Acute-Matte focusing screen
- 59110 Standard strap
- 51438 Front protective cover
- 51063 Rear protective cover

#### 10172 503CX camera body, black,

supplied with the same equipment as the 10026, but with a black-trim focusing hood, 42323. The Hasselblad 553ELX is a single-lens reflex camera. Its built-in motor advances the film automatically and cocks the shutter after each exposure, making it possible to take as many as 1.2 pictures/s. The camera can be fitted with release cords in different designs and lengths. The camera operates on five AA type (LR6) batteries, either nickel-cadmium batteries for approx. 1,000 exposures per charge, or 1.5 V alkaline batteries for up to about 4,000 exposures before replacement is necessary. There is a built-in, two-level battery power indicator.

The Hasselblad 553ELX has a built-in dedicated flash sensor system (TTL/ OTF) which automatically controls the flash by measuring the light reflected from the film plane. The result is perfect flash pictures regardless of the lens, filter, extension tube or bellows used. The working range of the sensor is ISO 16 through ISO 1000.

The flash unit connection is the same as for the 503CX.

The camera's mirror is entirely nonvignetting with all lenses. The Acute-Matte focusing screen is standard equipment and provides an especially bright viewfinder image with high resolution. The camera body, interchangeable lenses and film magazines are delivered separately.

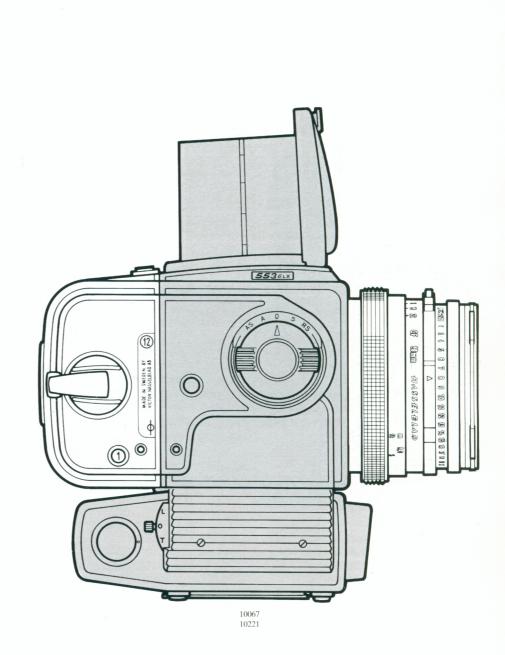
The Hasselblad 553ELX camera body has interchangeable viewfinders and focusing screens. There is an accessory rail and release sockets for attachment of special accessories to the camera body. A quick-coupling plate with a 1/4" tripod thread for attachment of the camera to a tripod.

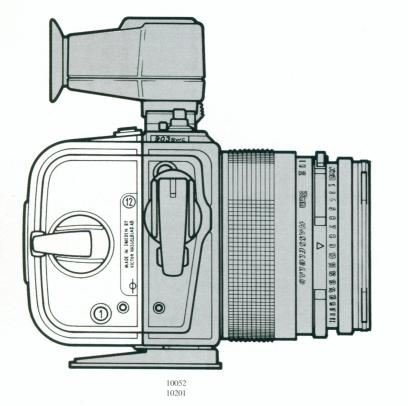
#### HASSELBLAD 553ELX CAMERA BODY

The camera body is available with chrome or black trim, and is supplied without a lens or film magazine. Weight (incl. 5 batteries): 2 lbs 12 oz (1240 g). (Camera supplied without batteries)

- **10067 553ELX camera body, chrome,** supplied with the following equipment:
- 42315 Focusing hood, chrome
- 42165 Acute-Matte focusing screen
- 51438 Front protective cover
- 51063 Rear protective cover
- 46140 Carrying strap
- 56111 Fuses (2)
- 46175 Socket cap
- 46345 Release plate
- 46043 Release cord FK 30
- **10221 553ELX camera body, black,** supplied with the same equipment as the 10067 but with a black-trim focusing hood, 42323.

## Hasselblad 553ELX





The Hasselblad 903SWC, a specialized camera, differs from the other cameras in the Hasselblad system in that the lens is a permanently attached, wide-angle 38 mm f/4.5 Zeiss Biogon CF with a 90° diagonal angle of view.

Characteristic of the Biogon lens is its high resolution and the possibility of practically distortion free enlargements. The uncompromising design, with a comparatively short distance between the lens and the film plane, calls for an optical viewfinder attached to the top of the camera body. A spirit level visible in the

camera body. A spirit level, visible in the viewfinder screen, is invaluable for wideangle photography. The spirit level is also visible from the exterior. The lens scales can be read in an

exterior. The lens scales can be read in an enlarged section of the viewfinder image. The camera body, and film magazines are sold separately.

The Hasselblad 903SWC camera body with permanently attached lens has an optical viewfinder with a spirit level, a shutter release on top of the camera body, and a crank for film advance and shutter cocking. A quick-coupling plate with a 1/4" tripod thread facilitates attachment of the camera to a tripod.

#### HASSELBLAD 903SWC CAMERA BODY

The camera body is supplied with a fixed lens and a viewfinder, but without a film magazine. Available with chrome or black trim. Weight: 2 lb 2 oz (970 g).

**10052 903SWC camera body, chrome,** supplied with the following equipment:

- 52036 Viewfinder SWC
- 59110 Standard strap
- 51643 Front lens cap Ø 60

51063 Rear protective cover

**10201 903SWC camera body, black,** supplied with the same equipment as the 10052.

#### Zeiss 38 mm Biogon CF f/4.5

Max. aperture	f/1:4.5
Focal length	38 mm
Diaphragm	f/4.5-22
Angle of view diagonal	90°
horizontal	72°
No. of elements	8 T*
Focusing range 11 3/4" (0	).3 m) -∞

The Hasselblad 500Classic is a single-lens reflex camera which, in its basic form, consists of the 500C/M camera body, a Planar CF 80 normal lens and an A12  $2 1/4 \times 2 1/4$ " (6×6 cm) format film magazine. The camera is supplied complete.

The 500Classic incorporates a focusing screen with grid and microprism, and a collapsible focusing hood with a finefocus magnifier which enlarges the image 5 times. Other features are an interchangeable winding crank which advances the film and cocks the shutter simultaneously, a warning system to prevent unintentional double exposure, a pre-release mode and an accessory rail. A quickcoupling plate with a 3/8" tripod thread facilitates attachment of the camera to a tripod.

Most of the accessories in the comprehensive Hasselblad system may be used with the Hasselblad 500Classic.

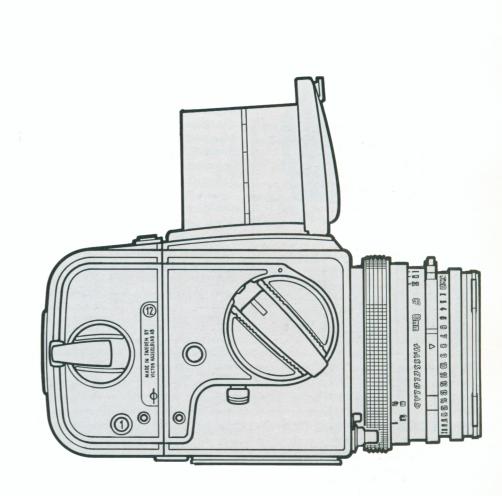
This is a rugged and durable, fully mechanical camera. Reliable, easy to use and with the Hasselblad system guarantee of non-obsolescence, it is the ideal introduction to the entire Hasselblad system.

#### **HASSELBLAD 500Classic**

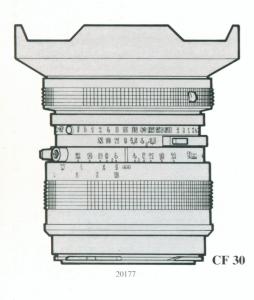
The Hasselblad 500Classic is available with chrome or black trim, and is supplied complete with a lens and film magazine. Weight: 3lbs 5 oz (1494 g).

- **10022 500C/M camera body, chrome,** incl. 42315 focusing hood, chrome, 42250 focusing screen with grid and microprism, 44040 winding crank, and 59110 standard strap.
- 20029 Zeiss Planar CF f/2.8 80 mm
- 30074 Film magazine A12, chrome
- 51643 Front lens cap
- **10170 500C/M camera body, black,** incl. 42323 focusing hood, black, 42250 focusing screen with grid and microprism, 44040 winding crank, and 59110 standard strap.
- 20029 Zeiss Planar CF f/2.8 80 mm
- **30147** Film magazine A12, black
- 51643 Front lens cap

### Hasselblad 500Classic



### 6 CF Lenses















A basic camera is often fitted with a normal 80 mm f/2.8 Planar lens. However, the Hasselblad photographer has a choice of 16 different focal lengths from 30 to 500 mm. By using the Hasselblad teleconverter, which doubles the focal length of the lens, the range is increased to 1000 mm. The newly developed Hasselblad shift converter can adjust the lens perspective  $\pm 16$  mm, to avoid vertical distortion. With the exception of the zoom lens, Hasselblad lenses are made exclusively by Carl Zeiss of Germany.

All Hasselblad lenses are quality controlled and scrutinized by state-of-the-art testing equipment. Lens data sheets are available from Hasselblad distributors. The test results report on the measurements of three vital factors for lens performance: resolution (MTF diagram), distortion, and light fall-off across the image field. Hasselblad lenses are manufactured with a precision usually reserved for scientific instruments.

There are two Hasselblad lens series. The main series, the CF lenses, incorporates integral leaf shutters.

The other series is the F/TCC lenses characterized by their high lens speeds. These lenses have no shutter and are compatible with the Hasselblad 205TCC, with its builtin focal plane shutter. F/TCC lenses may also be used with earlier models from the Hasselblad 2000 series, although the electronics built into the lenses can not be used in that case.

In addition to normal, wide-angle, and telephoto lenses, there are also lenses for close-up photography, lenses with extremely high correction levels, and a lens for ultraviolet photography. Hasselblad CF lenses have comfortable, ergonomically designed grip rings and controls. The lenses are treated with up to six layers of T\* anti-reflex coating. The built-in leaf shutters in this series are synchronized for electronic flash at all shutter speeds, 1– 1/500 s. The CF lens also features a manual and automatic diaphragm stop down, a distance scale in feet and meters, a depth-of-field scale and an exposure value scale. The shutter speed and aperture rings operate independently but can be cross-coupled with a button.

#### CF 30-60mm Wide-angle lenses

Distagon lenses with angles of view ranging from the extreme 180° "fish-eye" lens to a lens with a 66° diagonal angle of view, which possesses many of the characteristics of a standard lens.

#### 20177 Zeiss Distagon CF f/3.5 30 mm

This Hasselblad "fish-eye" lens covers the entire  $21/4 \times 21/4$ " field with corner-to-corner sharpness, even with the lens wide open. Supplied in a leather case with four filters, a yellow 50636, an orange 50644, a conversion filter for using daylight-type film in artificial light 50652 and a neutral glass 50660.

#### 20037 Zeiss Distagon CF f/4 40 mm (FLE)

This optic has an extreme wide-angle effect with an 88° diagonal angle of view. It has a compact design and a floating lens element (FLE) for optimum quality in the close-up focusing range. The Ø 93 lens shade also serves as a filter holder.

#### 20046 Zeiss Distagon CF f/4 50 mm (FLE)

A modern wide-angle lens with a floating lens element (FLE) for superbly sharp images even in close-up work. The 75° diagonal angle of view gives a moderate wide-angle effect.

	Distagon CF 30	Distagon CF 40 (FLE)	Distagon CF 50 (FLE)	Distagon CF 60	Planar CF 80
Max.aperture	3,5	4	4	3,5	2,8
Focal length	30 mm	40 mm	50 mm	60 mm	80 mm
Diaphragm	3.5-22	4-22	4-32	3.5-22	2.8-22
Angle of view, diag./horizontal	180°/112°	88°/67°	75°/57°	66°/50°	52°/38°
No. of elements	9 T*	11 T*	9 T*	7 T*	7 T*
Focusing range	1 ft-∞	1 ft 7 in–∞	1 ft 7 in–∞	2 ft-∞	3 ft-∞
	(0.3 m)	(0.5 m)	(0.5 m)	(0.6 m)	(0.9 m)
Weight	3 lbs 14 oz	2 lbs 1/4 oz	1 lb 12 oz	1 lb 8 oz	1 lb 2 oz
	(1365 g)	(915 g)	(800 g)	(680 g)	(510 g)
Length	4 5/8 in	4 in	3 3/4 in	3 1/4 in	2 9/16 in
	(117.5 mm)	(102 mm)	(95 mm)	(83 mm)	(65 mm)
Accessories included	1)	2)			
Front lens cap	51659	51654	51643	51643	51643
Rear lens cap	50377	50377	50377	50377	50377
Lens pouch		58432	58416	58416	58408
Filters	Ø 26 <sup>1</sup> )	Ø 93	Ø 60	Ø 60	Ø60
Close-up lenses (Proxars)		-	Ø 60	Ø 60	Ø 60
Lens shades Professional lens shades		40693 <sup>2</sup> ) 40738/40726	40668 40738/40676	40668 40738/40676	40670 40738/40676

<sup>1</sup>)Supplied in case 58157 and with all Ø 26 filters. <sup>2</sup>) Supplied with lens shade Ø 93/40 40693

#### 20207 Zeiss Distagon CF f/3.5 60 mm

This optic has the advantages of the wideangle lens – short lens-to-subject distance and wide depth of field, without its 66° diagonal angle of view yielding a marked wide-angle effect.

#### CF 80 and 100 mm Normal lenses

All-purpose lenses with normal focal lengths. The Planar lenses combine relatively large apertures and high resolution with compact design and low weight.

#### 20029 Zeiss Planar CF f/2.8 80 mm

The normal Hasselblad lens. A classic lens design yielding outstanding performance. The f/ 2.8 facilitates photography in poor light and ensures a bright viewfinder image.

#### 20126 Zeiss Planar CF f/3.5 100 mm

This lens, specially designed for Hasselblad, provides an optimum relationship between lens speed and focal length in a top-performance lens.

Superb distortion correction makes this lens ideal for architectural, copying and similar applications.

#### CF 150-500 mm Telephoto lenses

The Sonnar and Tessar lenses combine long focal length with compact design. Superbly balanced lenses, light enough to be used hand-held at fast shutter speeds.

#### 20061 Zeiss Sonnar CF f/4 150 mm

A lens with a moderate but still unmistakable telephoto effect – shallow depth of field and compressed perspective. A popular lens for portraits and much more.

#### 20072 Zeiss Sonnar CF f/4 180 mm

A new Hasselblad lens with a focal length suitable for demanding portrait work or commercial photography. The compact lens with its relatively long focal length, has remarkable qualities over the entire focusing range – even at maximum aperture.

#### 20080 Zeiss Sonnar CF f/5.6 250 mm

True telephoto effect combined with compact design for ease of handling. Excellent for tightly framed shots without crowding the subject. Its shallow depth of field can be used to throw an extraneous background out of focus.

#### 20185 Zeiss Tele-Tessar CF f/5.6 350 mm

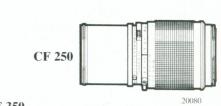
In relation to its focal length, a light weight, compact telephoto lens. The nature photographer's favorite lens for hand-held work. Supplied in a leather case with a shoulder strap.

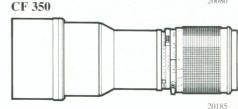
#### 20088 Zeiss Tele-Apotessar CF f/8 500 mm

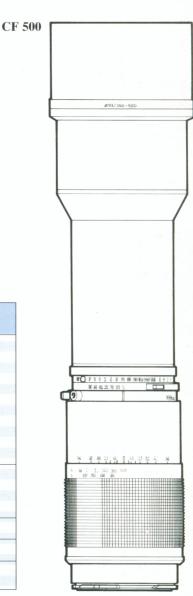
The ideal lens for long distance work. The Tele-Apotessar has superior correction for chromatic aberrations. Its internal focusing system allows the lens to focus to the shortest lens-to-subject distance (5 m) without the length of the lens or the center of gravity changing. It features a rail for tripod connection. Supplied in a leather case with a shoulder strap.

Planar CF 100	Sonnar CF 150	Sonnar CF 180	Sonnar CF 250	Tele-Tessar CF 350	Tele-Apotessar CF 500
3.5	4	4	5.6	5.6	8
100 mm	150 mm	180 mm	250 mm	350 mm	500 mm
3.5-22	4-32	4-32	5.6-45	5.6-45	8-64
42°/30°	30°/21°	24°/17°	17°/12°	12.8°/9.0°	9.0°/6.4°
5 T*	5 T*	5 T*	4 T*	4 T*	5 T*
3 ft-∞	4 ft 6 in-∞	5 ft-∞	8 ft 6 in–∞	15 ft-∞	16 ft 5 in-∞
(0.9  m)	(1.4 m)	(1.55 m)	(2.5 m)	(4.5 m)	(5 m)
1  lb 5 1/4  oz	1 lb 11 1/4 oz	$2 \text{ lbs } 5 \frac{3}{4} \text{ oz}$	2 lbs 3 1/4 oz	$2 \text{ lbs } 15 \frac{1}{2} \text{ oz}$	3 lbs 15 3/4 oz
(605 g)	(785 g)	(1075 g)	(1000 g)	(1350 g)	(1810 g)
2 15/16 in	4 in	5 1/16 in	6 3/16 in	8 15/16 in	12 15/16 in
(75 mm)	(101 mm)	(128 mm)	(164 mm)	(227 mm)	(329 mm)
(75 mm)	(101)	(120 mm)		(227)	(025 mm)
		GREEK WARRAN	Internet and the second se	1)	2)
51643	51643	51643	51643	51654	51654
50377	50377	50377	50377	50377	50377
58408	58416	58424	58424	50577	50511
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40673	40673	40673	40673	407031)	40703 <sup>2</sup> )
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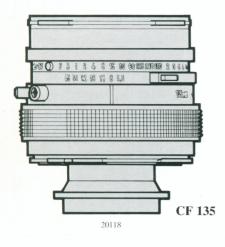




<sup>1</sup>) Supplied with case 58378 and with lens shade Ø 93/350– 500 40703  $^{-2}$ ) Supplied with case 58351 and with lens shade Ø 93/350– 500 40703

7

### 8 CF Lenses







CF 250

20193

#### **CF Special-purpose lenses**

The special-purpose Makro-Planar lenses are designed for optimum performance during close-up photography. The UV-Sonnar lens is designed for photography in the ultraviolet part of the spectrum.

#### 20134 Zeiss UV-Sonnar CF f/4.3 105 mm

A special-purpose lens for photography within the ultraviolet part of the spectrum. It is sensitive to radiation from 215 nm to 700 nm (2150-7000 Å) – from short-wave ultraviolet through visible light to the initial part of the infrared range. The lens can be pre-focused for ultraviolet in normal light without requiring refocusing for use in the UV-range.

#### 20053 Zeiss Makro-Planar CF f/4 120 mm

A special-purpose lens for close-up photography. Its relatively large maximum aperture is important when the lens is used at long extensions, where light fall-off would otherwise make it difficult to focus the lens.

#### 20118 Zeiss Makro-Planar CF f/5.6 135 mm

A special-purpose lens used in conjunction with a Hasselblad automatic bellows or a variable extension tube. It cannot be attached directly to any camera. Primarily a close-up lens, it also has many other applications. At the longest bellows extension of 8" (202 mm) the lens gives a 1:1 scale of reproduction. The shortest extension of 2.5" (63.5 mm) focuses to infinity.

#### UV-Sonnar Makro-Planar Makro-Planar Sonnar CF 105 CF 120 CF 250 Sa CF 135 Max.aperture 4.3 4 5.6 5.6 Focal length 105 mm 120 mm 135 mm 250 mm Diaphragm 4 3-32 4-32 5.6-45 5.6-45 Angle of view, diag./horizontal 37°/25° 40°/29° 32°/23° 17°/12° No. of elements 7 6 T\* 7 T\* 6 2 ft 7 in-∞ Focusing range 10 ft-∞ (1.8 m) (0.8 m) (3 m)1 lb 10 1/2 oz Weight 1 lb 8 1/2 oz 1 lb 6 oz 2 lbs 2 1/4 oz (750 g) (695 g) (625 g) (985 g) Length 3 9/16 in 3 7/8 in 3 7/16 in 6 1/4 in (91 mm) (99 mm) (87 mm) (158 mm) Accessories included Front lens cap 51643 51643 51643 51643 Rear lens cap 50377 50377 50571 50377 Lens pouch 58416 58416 58416 58424 Filters Ø 60 Ø 60 Ø 60 Ø 60 Close-up lenses (Proxars) Ø 60 Ø 60 Ø 60 Ø 60 Lens shades 40673 40673 40673 40673 Professional lens shades 40738/40676 40738/40676 40738/40676 40738/40676

#### 20193 Zeiss Sonnar CF Superachromat (Sa) f/5.6 250 mm

A special purpose lens with unique design gives perfect chromatic correction without sacrificing correction for distortion or other aberrations. An ideal lens for scientific applications, especially multi-spectral photography, it is also useful in many other fields. Spectral range of 400 nm to 1000 nm.

#### **F/TCC LENSES**

The interactive electronics in Hasselblad F/TCC lenses for the 205TCC connect automatically to the camera's exposure metering system via a databus connection. These are high-speed lenses, which, unlike the CF lenses, do not have their own leaf shutter, and are intended for Hasselblad cameras with a built-in focal plane shutter. F/TCC lenses are distinguishable from an earlier F lens series (see below) by the double blue line on the left-hand side of the f-stop ring, and by the 4-contacts on the bayonet plate.

These lenses can also be used with earlier models from the 2000 series, but camera cannot utilize the potential of the metering system electronics.

#### 20516 Zeiss Distagon F f/2.8 50 TCC (FLE)

A wide-angle lens with floating elements (FLE) for outstanding performance across its entire focusing range. The shortest lens-tosubject distance is just 12.8" (0.32 m), opening up exciting possibilities for close-up pictures with interesting perspectives.

#### 20508 Zeiss Planar F f/2.8 80 TCC

The classic Planar design is the standard lens for the Hasselblad 205TCC. A new design has produced more convenient focusing and a close range limit of only 23.6" (0.6 m).

#### 20524 Zeiss Planar F f/2 110 TCC

An excellent alternative to the Planar F/TCC f/2.8 80 mm. The large maximum aperture can be used for shallow depth of field in order to create unfocused background or make use of fast shutter speeds.

#### 20532 Zeiss Sonnar F f/2.8 150 TCC

A short telephoto lens with a faster speed than its CF counterpart. A popular choice for portrait photography.

#### 20540 Zeiss Tele-Tessar F f/4 250 TCC

A telephoto lens with an unusually high speed for its focal length. An advantage in hand-held shots, allowing work with faster shutter speeds. An ideal lens for sports, nature, and portrait photography.

#### 20559 Zeiss Tele-Tessar F f/4 350TCC

A telephoto lens which is very fast for its focal length. Internal focusing for convenience and unusually short lens-to-subject distance. A quick-coupling plate with a 1/4" tripod

thread facilitates attachment to a tripod. It is supplied in a leather case with a shoulder strap.

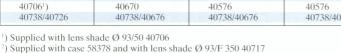
#### **F LENSES**

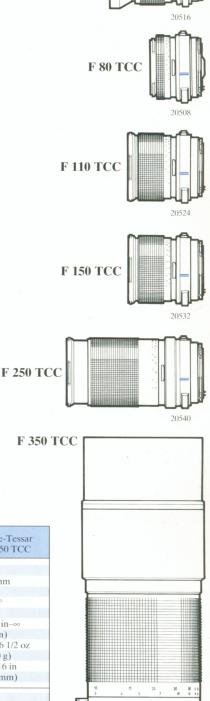
The earlier series of Flenses for the Hasselblad 2003FCW and earlier models in the 2000 series will be successively discontinued. Optically and mechanically these lenses are identical to the F/TCC lenses. They may be used with the 205TCC, but, since they lack integral electronic functions, exposure metering will be slightly limited.

#### Hasselblad F lenses:

- 20427 Zeiss Distagon F f/2.8 50 mm (FLE)
- 20419 Zeiss Planar F f/2 110 mm
- 20435 Zeiss Sonnar F f/2.8 150 mm
- 20478 Zeiss Tele-Tessar F f/4 250 mm
- 20486 Zeiss Tele-Tessar F f/4 350 mm

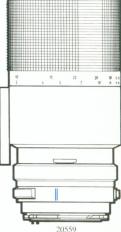
Distagon F 50 TCC (FLE)	Planar F 80 TCC	Planar F 110 TCC	Sonnar F 150 TCC	Tele-Tessar F 250 TCC	Tele-Tessar F 350 TCC
2.8	2.8	2	2.8	4	4
50 mm	80 mm	110 mm	150 mm	250 mm	350 mm
2.8-22	2.8-22	2-16	2.8-22	4-32	4-32
75°/56°	52°/38°	39°/28°	29°/21°	18°/13°	13°/9°
9 (1 floating) T*	7 T*	7 T*	5 T*	5 T*	8 T*
12 1/2 in→∞	2 ft-∞	2 ft 6 in-∞	4 ft 6 in–∞	8 ft 3 in–∞	6 ft 3 in–∞
(0.32 m)	(0.6  m)	(0.8 m)	(1.4 m)	(2.5 m)	(1.9 m)
2 lbs 11 3/4 oz	15 1/8 oz	1 lb 10 3/4 oz	1 lb 9 oz	2 lbs 1/2 oz	4 lbs 6 1/2 oz
(1240 g)	(430 g)	(760 g)	(710 g)	(920 g)	(2000 g)
4 7/16 in	2 1/2 in	3 7/16 in	3 7/16 in	6 3/16 in	10 5/16 in
(112 mm)	(64 mm)	(87 mm)	(87 mm)	(157 mm)	(262 mm)
1)					2)
51654	51643	51648	51648	51648	51654
50377	50377	50377	50377	50377	50377
58432	58408	58416	58416	58424	50577
Ø 93	Ø 60	Ø 70	Ø 70	Ø 70	Ø 93
	Ø 60				
40706 <sup>1</sup> )	40670	40576	40576	40576	40717 <sup>2</sup> )
40738/40726	40738/40676	40738/40676	40738/40676	40738/40676	40738



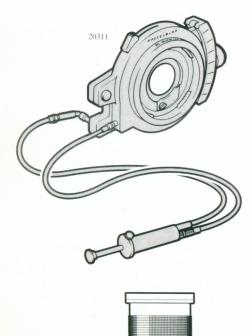


F/TCC Lenses

**F 50 TCC** 



# 10 Converters and zoom-lens



20303



20311 Zeiss PC-Mutar 1.4× Shift Converter

An accessory which solves the familiar problem of vertical distortion in, for example, architectural photography, making it possible to adjust the vertical perspective  $\pm$  16 mm.

The PC-Mutar is placed between the camera and any lens of your choice that has a focal length of between 40 and 100 mm. The designation  $1.4 \times$  indicates that the focal length of the lens being used is 1.4 times larger. This means that, in the neutral position, the PC-Mutar can serve as a converter. A double cable release is included to synchronize triggering of both camera and lens.

Suitable for all Hasselblad cameras with interchangeable F, CF and Clenses. It is not advisable to use lenses with longer focal lengths as this will cause vignetting. When using the PC-Mutar with the 553ELX or earlier EL series models, you will need to fix the cable release adapter 46213 between the cable release and the camera body. (See page 20 for details.)

The PC-Mutar is supplied complete with:

- 40751 Double cable release
- 50776 Open-L connector
- 51438 Front protective cover
- 50377 Rear lens cap
- 58459 Protective pouch

#### 20303 Zeiss Mutar $2 \times$ Teleconverter

The extraordinary quality of Hasselblad lenses has made it possible for Zeiss to design a teleconverter which, when combined with any Hasselblad lens, gives excellent results at even the largest apertures.

The converter doubles the focal length of the lens and reduces the aperture two f/stops. The close-up focus limit of the lens is not affected. Compatible with Hasselblad F, CF and C lenses. A Makro-Planar type lens can also be used in macro applications.\*

By using the Mutar  $2 \times$  the photographer can double his available range of focal length options.

#### 20215 Schneider Variogon CF f/5.6 140–280 mm

The Hasselblad zoom lens has a continuously variable 140-280 mm focal length and a fully synchronized built-in leaf shutter.

The Variogon offers the Hasselblad photographer many new and exciting opportunities for creative photography.

A quick-coupling plate with a 3/8" tripod thread facilitates attachment of the camera to a tripod. It is supplied in a leather case with a shoulder strap.

\* As always, a Makro-Planar 135 mm lens must be used with either the Hasselblad automatic bellows or a variable extension tube.

	PC-Mutar1,4× Shift converter	Mutar2× Teleconverter	Variogon CF 140-280
Max.aperture	1)	2)	5.6
Focal length			140–280 mm
Diaphragm			5.6-45
Angle of view, diag./hor.			16-30°/11-22°
No. of elements	5 T*	7 T*	17 (multicoating)
Focusing range			8 ft 3 in (2.5 m)-∞ + Macro
Weight	1 lb 1 oz	14 3/4 oz	4 lbs 1 1/4 oz
in eight	(480 g)	(420 g)	(1850 g)
Length	1 1/2 in	(420 g) 3 1/8 in	9 7/16 in
Dongti	(39 mm)	(80 mm)	(240 mm)
Accessories included			3)
Front lens cap	51438	51438	51462
Rear lens cap	50377	50377	50377
Lens pouch	58459	58408	50511
Filters			Ø 93
Lens shades			51470 <sup>3</sup> )
Professional lens shades			40738

<sup>1</sup>) Reduces the maximum aperture of the lens used by one f /stop. <sup>2</sup>) Reduces the maximum aperture of the lens used by two f /stops. <sup>3</sup>) Supplied with case 58378 and with lens shade 51470

Hasselblad filters are available for both black/white and color photography.

Filters for color photography are used to balance color temperature and are referred to as light balance filters. These filters can be employed to correct color quality, as well as making it possible to use tungsten film in daylight and vice versa.

Linear polarization filters can be used with black/white or color film to reduce or eliminate reflections, effectively increasing color saturation in subjects such as sea and sky.

Haze filters absorb ultraviolet rays without affecting colors in any way. At the same time they offer practical protection for the front element of your lens.

Softar diffusion filters can be used with both black/white and color film and are available in three strengths. They provide controlled image softening. The three filter strengths can be combined. Neutral density filters (gray filters) can be used to make extremely long exposures without over-exposing the film.

Hasselblad original filters are supplied in different diameters to fit the lens accessory mounts. Step-up rings make it possible to use  $\emptyset$  60 –  $\emptyset$  70 filters with lenses with smaller lens accessory mounts.

The filters are engraved with data indicating diameter, filter factor, color, and exposure value reduction, in that order. See the table below.

For example: " $\emptyset$  60 1.5 × Y-0.5 (4)" means that the filter has a 60 mm diameter, a filter factor of 1.5, is yellow, and requires an exposure value reduction of 0.5. The Ø 60 filters are marked with Kodak Wratten designation in brackets (4) and have multi-coating.

#### 41645 Polarization filter Ø 93

A new polarization filter for lenses with a Ø 93 front diameter. Particularly suitable for use with the Proshade 6093. The filter is easily accessible and can be rotated when the lens shade is in place on the lens.

#### 41648 Polarization filter adapter F350

Used for attaching the Polarization filter Ø 93 (41645) to the Tele-Tessar F 350 lens.

#### 51705 Gelatin filter mount 6093/75 mm 51708 Gelatin filter mount 6093/100 mm

Mounts for using gelatin filters in the Hasselblad Proshade filter slot. See Proshade 6093 on page 13. For improved durability, the gelatin filter should be permanently fitted into these mounts. The slot holds four complete filter mounts. Supplied in packs of 5 for two different gelatin filter formats,  $75 \times 75$  mm and  $100 \times 100$  mm.

#### Filter adapter rings:

51638 Filter adapter ring Ø 60 – Ø 63

Enables 63 mm diameter filters (series 8) to be used on lenses with 60 mm front mounts.

#### 41530 Filter adapter Ø 60/67 mm

Enables standard 67 mm filters available on the market to be used on lenses with 60 mm front mounts.

#### 41548 Filter adapter Ø 70/77 mm

Enables standard 77 mm filters available on the market to be used on lenses with 70 mm front mounts.

#### Filter Ø 26

These filters are intended for use with the 30 mm Distagon CF lens. Engraved data indicates filter factor, color, wavelength limit and exposure value reduction.

50636	yellow	$1.5 \times Y 50 - 0.5$
50644	orange	$3 \times Or 57 - 1.5$
50652	conversion filter*	2×B11-1
50660	neutral glass	

All four filters Ø 26 are supplied with the 30 mm CF lens.

\* for using daylight-type film in artificial light

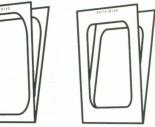
Filter type	Designation		Ø 60	Ø 70	Ø 93
	1.5xY-0.5	Yellow	51586/41586	51306	51365
Colored filters	3xG-1.5	Green	51592/41592	- 51314	51373
	4xO-2	Orange	51594/41594	51322	51381
	6xR-2.5	Red <sup>1</sup> )	51597/41597	51330	51403
	1xHZ-0	Haze <sup>2</sup> )	41608	51349	51411
Special-purpose filters	8xGr-3	Gray	51606/41606		196.00 2000
	2xPola-1	Pola	51603	51578	41645/514224
	1xCR1.5-0	CR1.5	51614/41614	51357	51420
	1xCR3-0	CR3	51616/41616	- Filler Coll 10	
	- 1,4xCR6-0.5	CR6	-51619/41619		
Light balance filters	1xCB1.5-0	CB1.5	51622/41622		
	1.4xCB3-0.5	CB3	51624/41624		
	2xCB6-1	CB6	51627/41627		
	2xCR12-1	CR12	51630/41630		
	3.5xCB12-1.5	CB12	51632/41632		
		Ι	51670	51527	
Softars		II	51673	51535	
		III	51675	51543	

<sup>1</sup>) Red filter Ø 60 has designation 8xR-3. <sup>2</sup>) Haze filter Ø 60 has designation UV-SKY. <sup>3</sup>) Filters Ø 60 (except for polarizing filter) will eventually replace the first number in the code number from 5 till 4. 4) Does not fit Tele-Tessar F 350.

## Hasselblad original filters

11



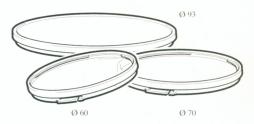


51708









## 12 Lens shades

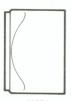


40670

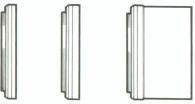




40673



40576



40693

40703



40706

40714

Lens shades shield the lens from extraneous light and give practical protection to the front lens element. The system includes lens shades for a fixed focal length range and the professional lens shades with adjustable compendiums to suit a wide range of lens focal lengths.

#### **LENS SHADES FOR CF LENSES**

#### 40668 Lens shade Ø 60/38-60

For wide-angle lenses from 38 to 60 mm. Bayonet mount.

#### 40670 Lens shade Ø 60/80

For the normal 80 mm CF and 80 mm F/TCC lenses. Bayonet mount.

#### 40673 Lens shade Ø 60/100–250

For CF lenses with focal lengths from 100 to 250 mm. Bayonet mount.

#### 40693 Lens shade Ø 93/40

For the 40 mm Distagon CF. Supplied with the lens. Also used as a holder for Ø 93 filters.

#### 40703 Lens shade Ø 93/350-500

For the 350 mm Tele-Tessar CF and 500 mm Tele-Apotessar CF. Supplied with these lenses. Also used as a holder for  $\emptyset$  93 filters. Threaded mount. It also fits the 350 mm and 500 mm Tele-Tessar C lenses and makes it possible to use Ø 93 filters with these lenses instead of Ø 86 filters which have been phased out.

#### **LENS SHADES FOR F/TCC LENSES**

#### 40670 Lens shade Ø 60/80

For the normal Planar F/TCC and CF lenses with an 80 mm focal length. Also suitable for earlier 80 mm F lenses used together with 40711 step-up ring Ø 50-Ø 60. Bayonet mount.

#### 40706 Lens shade Ø 93/50

For the 50 mm Distagon F/TCC. Threaded mount. Supplied with the lens. Also serves as filter holder for Ø 93 filters.

#### 40576 Lens shade Ø 70/110-250

For F lenses in focal lengths from 110 mm to 250 mm. Bayonet mount.

#### 40717 Lens shades Ø 93/F 350

For the 350 mm Tele-Tessar F/TCC. Supplied with the lens. Also used as a filter holder for Ø 93 filters. External threaded mount.

#### **STEP-UP RINGS**

Lens shades and filters for lenses with Ø 60 -Ø 70 accessory mounts may also be used on lenses with a smaller accessory mount simply by fitting step-up and filter adapter rings.

#### 40711 Step-up ring Ø 50–Ø 60

For attaching Ø 60 filters and lens shades to lenses with a Ø 50 lens accessory mount (earlier C lenses).

#### 40714 Step-up ring Ø 60–Ø 70

For attaching Ø 70 filters and lens shades to lenses with a Ø 60 lens accessory mount.

See p.11 for filter adapter rings.

#### **PROFESSIONAL LENS SHADES**

An adjustable bellows lens shade with engravings for various focal lengths. Provides highly efficient protection against extraneous light. The collapsible construction saves space in your equipment case.

#### **40738 Proshade 6093** (available 1991)

Hasselblad's new, professional lens shade fits all lenses apart from the 30 mm "fish-eye". The compact design makes the shade easy to use and it folds flat to save space. The Proshade extends approx. 90 mm and has easy-toread scales. Versatile filter options for glass, gelatin and plastic filters. The slot for gelatin and plastic filters folds down for easy filter changes or when a viewfinder image is required without a filter. Supplied complete with mask 40312 for the Sonnar CF 250 lens and L-connector 50776 for use with cable release.

#### 40741 Proshade adapter 6093/Ø 60

For fitting Proshade 6093 to lenses with a Ø 60 front mount. The adapter ring has space for two glass filters fixed to the front bayonet mount of the lens. May also be used for C lenses ( $\emptyset$  50) when used with step-up ring Ø 50–Ø 60 (40711).

#### 40744 Proshade adapter 6093/Ø 70

For fitting Proshade 6093 to lenses with a Ø 70 front mount.

#### 40746 Proshade adapter 6093/Ø 93

For fitting Proshade 6093 to lenses with a Ø 93 front mount.

Ø 93 Polarizing filter and special gelatin filter mounts are available for use with Proshade 6093. (See p. 11)

#### 40676 Professional lens shade Ø 50-Ø 70 (to be discontinued)

For Ø 50, Ø 60, Ø 63 and Ø 70 front lens mounts. Extension of approximately 80 mm. For longer focal lengths use one of the following masks (supplied with the shade): Mask 40304 for the 120, 135, and 150 mm CF lenses and the 250 mm F lens. Mask 40312 for the 250 mm CF lens. An L connector 50776 is supplied for use with

a cable release.

#### 40726 Professional lens shade Ø 93 (to be discontinued)

For use with Ø 93 lenses. It has an 80 mm extension. Delivered with mask 40304 for the 500 mm CF lens and L connector 50776.

#### LENS MOUNTING RINGS

For the professional lens shade  $\emptyset$  50 –  $\emptyset$  70, lens shades for the automatic bellows extension, and the macro flash equipment when connecting to CF, F and C lenses with front diameter Ø 50–Ø 70 (see the figure on right). The rings have slots for gelatin filter holder Ø 50-Ø 70.

#### 40679 Lens mounting ring Ø 50

For C and F lenses with Ø 50 front mounts.

#### 40681 Lens mounting ring Ø 60

For CF lenses with Ø 60 front mounts and for F/TCC 80 mm lenses.

#### 40684 Lens mounting ring Ø 63

For C lenses with Ø 63 front mounts.

#### 40687 Lens mounting ring Ø 70

For F lenses with Ø 70 front mounts.

#### 40690 Gelatin filter holder Ø 50–Ø 70

For use with 75x75 mm gelatin filters. Inserted into the slot in the lens mounting ring. Supplied with transparent storage cover.

#### For professional lens shade Ø 93:

#### 40720 Lens mounting ring Ø 93

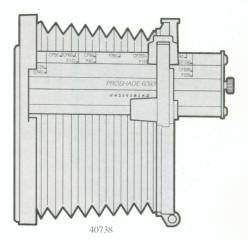
For CF lenses with Ø 93 front mounts. The ring has a slot for a gelatin filter holder Ø 93.

#### 40709 Gelatin filter holder Ø 93

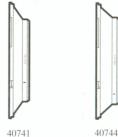
For use with gelatin filter 100x100 mm. Fits into lens mounting ring Ø 93 40720. Supplied with transparent storage cover.

#### 40729 Guide bracket for Distagon F/TCC 50/ professional lens shade Ø 93

The front of this lens rotates during focusing. To prevent the lens shade from rotating and vignetting, a guide bracket is attached between the camera and the lens shade.

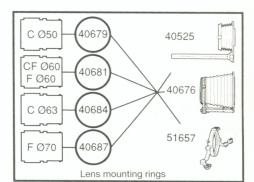


Lens shades





13



### 14 Film magazines



30074



## TCC Film magazines



30309





30341

30325



 $2 1/4 \times 2 1/4$ " (6×6 cm)

Hasselblad film magazines can be switched in seconds without losing a single frame, giving freedom to vary the format, length and type of film.

Magazines are available for 120 and 220 roll film, 70 mm perforated film, Polaroid film and sheet film.

TCC magazines for the Hasselblad 205TCC automatically connect to the camera's exposure metering system. Film speed and contrast simulation are programmed on the magazines.

TCC magazines are easily identifiable by the double blue line on their left-hand side.

#### **ROLL FILM MAGAZINES**

30074 Film magazine A12 (chrome)
30147 Film magazine A12 (black)
30309 Film magazine A12 TCC (chrome)
30317 Film magazine A12 TCC (black)

A magazine for  $21/4 \times 21/4$ " ( $6 \times 6$  cm) format 120 film, with 12 frames per roll. This is the standard Hasselblad film magazine. Each exposure is indicated by a signal. This also shows that the film has advanced to the next frame.

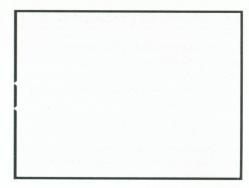
A film counter indicates the number of exposures and is automatically reset to zero when the magazine is reloaded. The film type and speed can be set on the film indicator. Available with chrome or black trim and supplied with magazine slide 41068.

Weight: 14 oz (400 g).

(TCC-magazines: 14.5 oz/425 g.)

```
30104 Film magazine A24 (chrome)
30171 Film magazine A24 (black)
30341 Film magazine A24 TCC (chrome)
30350 Film magazine A24 TCC (black)
```

A magazine for  $21/4 \times 21/4$ " ( $6 \times 6$  cm) format 220 film, with 24 frames per roll. Same functions as the A12 magazines. Supplied complete with magazine slide 41068. Weight: 14 oz (400 g). (TCC magazines: 14.5 oz/425 g.)



2 1/4×1 5/8" (6×4.5 cm)

# 30082 Film magazine A16 (645) (chrome) 30155 Film magazine A16 (645) (black) 30325 Film magazine A16 TCC (chrome) 30333 Film magazine A16 TCC (black)

A magazine for  $21/4 \times 15/8$ " ( $6 \times 4.5$  cm)(horizontal) format 120 film, with 16 frames per roll. Same functions as the A12 magazines. Supplied with mask 42146, marked for this format, and magazine slide 41068. Weight: 14 oz (400 g). (TCC magazines: 14.5 oz/425 g.)

## 30066Film magazine 70 (chrome)30139Film magazine 70 (black)

A magazine for  $21/4 \times 21/4$ " ( $6 \times 6$  cm) format type II 70 mm perforated film, with 70 frames per cassette. Film cassettes can be loaded with up to 4.7 meters of 70 mm film sold in rolls of 30 to 100 meters, and are especially useful when used with motorized Hasselblad cameras.

The magazine is supplied with an empty cassette 51039 and magazine slide 41068. Weight: 1 lb 2.5 oz (530 g).

#### 51039 Film cassette for magazine 70

The cassette may be loaded with perforated 70 mm film in lengths of up to 4.7 meters, with approx. 70 frames per cassette.

Magazines other than TCC models can still be used with the Hasselblad 205TCC. The magazines then work purely mechanically. Film speed is then programmed manually with the aid of the camera's adjustment buttons.

TCC film magazines can also be used on Hasselblad cameras without an exposure metering system. The magazines then work purely mechanically as any other Hasselblad magazine.

#### **MAGAZINE FOR POLAROID FILM**

#### 30198 Hasselblad magazine 100 for Polaroid film

A  $21/4 \times 21/4$ " (6×6 cm) format magazine for Polaroid film types 107, 108, 665, 667, 668 and 669.

The magazine is mounted and dismounted as easily as the roll film magazines. Very practical for fast checks on exposure, lighting and composition, since any errors are immediately detected. Supplied with magazine slide 41122.

#### SHEET FILM ADAPTER

#### 41017 Sheet film adapter

For photographers interested in utilizing the wide range of sheet film. The adapter is mounted and dismounted as easily as the roll film magazines. The film loads in the 51012 interchangeable sheet film holder.

#### 51012 Sheet film holder

For sheet film, trimmed down to  $21/2 \times 21/2$ " (6.5×6.5cm).

## 

The interchangeable viewfinders and focusing screens in the Hasselblad system were developed to cover the individual needs of photographers working under widely varying conditions. Viewfinders and focusing screens can quickly and easily be changed.

#### FOCUSING SCREENS

#### 42165 Acute-Matte focusing screen

The Acute-Matte focusing screen combines extreme brightness with excellent focusing characteristics. The Fresnel lens is cut with such high precision that the rings cannot be seen through the viewfinder. There is a reference cross in the middle of the screen. This screen is compatible with all Hasselblad lenses and viewfinders.

#### 42167 Acute-Matte focusing screen TCC

A bright focusing screen for the Hasselblad 205TCC. It has the same characteristics as screen 42165, plus a 6 mm diameter ring corresponding to the metering zone for the camera's spot metering system.

## 42170 Acute-Matte focusing screen with grid and split-image rangefinder

A new, bright Acute-Matte focusing screen with split-image rangefinder 6 mm\* in diameter and a grid with 10.25 mm parting for excellent focusing characteristics and image handling.

Field markings for  $21/4 \times 15/8$ " (6×4.5 cm) and  $15/8 \times 15/8$ " (4×4 cm) formats.

## 42188 Focusing screen with split-image rangefinder<sup>1</sup>)

Bright focusing screen with a split-image rangefinder, 7.5 mm, for faster focusing. For lenses with 30-150 mm focal lengths.

#### 42218 Focusing screen with microprism and split-image rangefinder<sup>1</sup>)

Diagonal split-image rangefinder, 5 mm, with a 14 mm central microprism grid.

## 42250 Focusing screen with grid and microprism<sup>1</sup>)

A focusing screen with a grid combined with a central microprism, 15 mm in diameter. For accurate horizontal and vertical alignment with applications in architectural photography and copying work.

#### 42200 Plain glass screen<sup>1</sup>)

A bright focusing screen facilitating photomicrography and macro work. Plain glass with reference cross and Fresnel lens.

## SPECIAL ACCESSORIES FOR THE 903SWC

#### 41025 Focusing screen adapter

Used for checking picture composition and depth-of-field, this accessory attaches to the camera in the same way as the film magazines. Extraneous light is effectively blocked out by using the magnifying hood, focusing hood, or a prism or reflex viewfinder. Can also be used on all 500 and 2000 series cameras, and the 205TCC.

#### **Focusing screens**







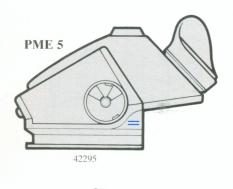


42250



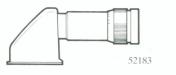
<sup>\*)</sup> Corresponds to the metering zone for the 205TCC spot metering system.

## 16 Viewfinders

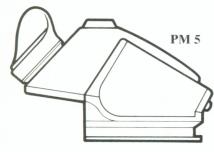




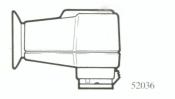








42308





Hasselblad viewfinders are available with different viewing angles. They produce a clear, magnified focusing screen image facilitating focusing, composition and checking depth-of-field. Viewfinders for 205TCC are marked with double blue lines.

#### VIEWFINDERS

# 42315 Focusing hood, chrome42323 Focusing hood, black42317 Focusing hood TCC, chrome42325 Focusing hood TCC, black

Hasselblad focusing hoods effectively shield the focusing screen image from extraneous light. Even with the camera at hip level, the entire image is visible. A folding, fine-focus magnifier enlarges the image 5 times. The following interchangeable magnifiers are available to compensate for imperfect vision:

42331	neutral	42374	-1 diopter
42340	-4 diopters	42382	+1 diopter
42358	-3 diopters	42390	+2 diopters
42366	-2 diopters	42404	+3 diopters

Focusing hoods 42315 and 42323 are included with the 500 series camera bodies. They do not fit the 205TCC, but can be used with earlier camera bodies in the 2000 series. Supplied as standard with magnifier 42331 (neutral). Focusing hoods 42317 TCC and 42325 TCC are included with the 205TCC camera body. These hoods fit all Hasselblad camera bodies, both current and earlier ones of the single lens reflex models. They are supplied with magnifier 42374 to compensate for the shorter viewing distance to the 205TCC viewfinder display than to viewfinder image. In order to determine the correct magnifier. users with imperfect vision might need to test various magnifiers.

#### 52096 Magnifying hood 52094 Magnifying hood (52094 discontin-

ued. Not for use with the 205TCC.)

Effectively blocks extraneous light and enlarges the focusing screen image 3 1/2 times. Adjustable from +3.5 to -2.5 diopters to suit the user's vision.

#### 42295 Meter prism viewfinder PME5 42294 Meter prism viewfinder PME3

(42294 discontinued. Not for use with the 205TCC.)

Features center-weighted metering using a silicon cell with a fast response even at low light levels. Values are indicated by red diodes on an exposure value scale (EV 2-19). The meter automatically shuts off after approx. 10 s. Battery check. Battery type PX28 (not included). Unreversed screen im-

age magnified 3 times, 45° viewing angle. Supplied with turnable, removable rubber eyecup. Corrective interchangeable eyepieces are available for users with imperfect vision. Protective cover.

#### 42308 Prism viewfinder PM5

**42307 Prism viewfinder PM** (42307 discontinued. Not for use with the 205TCC)

Yields an unreversed image 3 times larger than the focusing screen image. Viewing angle 45°. Optically identical to PME5/PME3 above. Supplied with turnable, removable eyecup. The eyepiece may be replaced with a corrective one for users with imperfect vision. Protective cover.

## Replacement eyepieces for prism viewfinders 42295/42294 and 42308/42307.

The lenses in these replacement eyepieces have anti-reflex coating and are available in a range of diopter strengths.

42412	neutral	42423	-1 diopter
42415	– 4 diopters	42426	+1 diopter
42418	- 3 diopters	42429	+1 diopter +2 diopters
42420	1		1
42420	<ul> <li>– 2 diopters</li> </ul>	42432	+3 diopters

#### 52183 Reflex viewfinder RM-2

(Not for use with the 205TCC.)

This reflex viewfinder has been developed for use with film magazine 70. It yields an unreversed image 3 times larger than the focusing screen. The viewing angle is 90°. The eyepiece is focusable  $\pm 5$  diopters and has turnable, tiltable eyecup. The location and large size of the exit pupil permits the entire focusing screen image to be viewed, even if the photographer is wearing glasses. Protective cover.

#### Protective covers for viewfinders:

52191 for finders 42295 and 42308

- 42064 for finders 42294, 42307 and 52183
- Masks for focusing screens:
- 42146 Transparent mask

**42145 Transparent mask** (42145 discontinued. Not for use with 205TCC.)

Field markings for 2  $1/4 \times 15/8$ " (6×4.5 cm) and 1  $5/8 \times 15/8$ " (4×4 cm) formats.

#### 52036 Viewfinder SWC

Optical viewfinder with built-in spirit level. The lens distance scale and the spirit level can be checked directly in the viewfinder. Field markings for  $21/4 \times 15/8$ " ( $6 \times 4.5$  cm) and  $15/8 \times 15/8$ " ( $4 \times 4$  cm) formats. The finder locks securely into place on the camera. This viewfinder may also be used with earlier SWC and SW models, but will give no scale readings when used with C type lenses.

The Hasselblad photographer has a choice of carefully balanced, anatomically designed grips providing support for hand-held shots or quick-coupling tripod attachments. Unless otherwise noted, the accessories can be used with the earlier 500 and 2000 series as well.

#### 45072 Flashgun bracket 1 46330 Flashgun bracket 2

These anatomically shaped brackets are attached and locked onto the camera's quickcoupling plate. An adjustable leather strap gives an even firmer grip. The camera is triggered via the flashgun bracket, which is also provided with a reversible 1/4" or 3/8" thread bolt and an accessory shoe for a flash.

Flashgun bracket 1 may be used with 503CX, 500Classic and 205TCC cameras, and with earlier models from the 500 and 2000 series (except for the EL version.)

Flashgun bracket 2 fits the 553ELX and earlier EL models.

#### 45129 Tripod quick-coupling

Used on a tripod to facilitate quick attachment and removal of the camera. The quickcoupling can be attached to a tripod with either a 3/8" or a 1/4" thread.

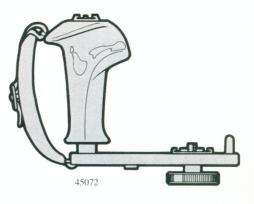
#### 51700 Quick-focusing handle 1/CF 40-80

For quick and precise focusing. Ideal for sport and journalistic work. Screws directly to the focusing ring of the CF lenses. The handle folds down flat beside the lens, saving space in a lens or equipment case. For the 40, 50 and 60 mm Distagon CF and the 80 mm Planar CF lenses.

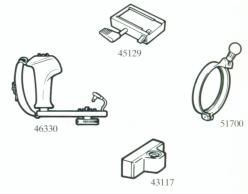
#### 43117 Spirit level

The spirit level is particularly useful in wideangle photography. It attaches to the accessory rail on the left-hand side of the camera and can be used with all models except the 205TCC and the 903SWC.

## Grips



17



Hasselblad accessories for film advance and shutter cocking include products for both manual and automatic operation.

#### 44069 Winder TCC

The Hasselblad winder is a separate motorized unit for the 205TCC. Like the winding crank, the winder is simple to attach and remove. It enables sequences to be shot at speeds of up to 1.3 frames/s. The winder's powerful motor ensures rapid, distinct starts, smooth film advance and shutter cocking. For up to 1,000 exposures the motor is powered by 5 rechargeable nickel-cadmium batteries. Five 1.5 V AA type (LR6) alkaline batteries give up to 4,000 exposures (Batteries not included).

Hasselblad winder 44067 for 2003FCW and 2000FCW cameras has been discontinued. Winder 44069 may be used with these models, but with certain limitations.

#### 44040 Winding crank 1 44075 Winding crank 2 44083 Winding crank TCC

Interchangeable cranks for manual shutter cocking and film advance.

Winding crank 1 supplied with 503CX and 500C/M (500Classic) camera bodies. Also suitable for earlier 500C models.

Winding crank 2 suitable for use with 2003FCW and 2000FCW cameras.

Winding crank TCC supplied with 205TCC camera body.

#### 54011 Knob with exposure meter

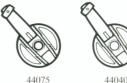
The winding crank 44040 on the 503CX and 500C/M can easily be replaced by this knob with a built-in, selenium cell powered exposure meter. No battery is needed. The metering knob can easily be removed from the camera for taking measurements close to the subject. It is marked from 6-1600 ASA (ISO) (9-33° DIN) and the readings are indicated as exposure values (EV). The knob has a diffuser for light readings direct into the light source.

Designed for the 503CX and 500C/M and the earlier 500C model.

## Winding accessories



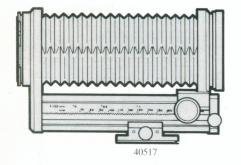


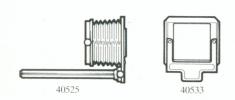




44075

## 18 Close-up accessories









649 4054

40659

40541



40570



40543



51691



The Hasselblad system includes close-up accessories such as close-up lenses, extension tubes, an automatic bellows and accessories for copying work.

## 51662 Proxar 0.5 Ø 60 51665 Proxar 1.0 Ø 60 51667 Proxar 2.0 Ø 60

Close-up lenses are available in three focal lengths and can be combined. They are multi-coated and fit CF lenses with Ø 60 accessory mounts.

#### Hasselblad extension tubes

The extension tubes can be combined to provide a variety of extensions. The Hasselblad system includes two different series. Special TCC extension tubes should be used with the 205TCC in order to utilize the full potential of the camera electronics.

40649	Extension	tube	8
40541	Extension	tube	16
40568	Extension	tube	32
40657	Extension	tube	56

A complete series of extension tubes covers the range up to the shortest bellows extension. The tubes connect to the lens and camera mechanisms to utilize the camera's automatic functions fully. The extension tubes can be attached in different combinations.

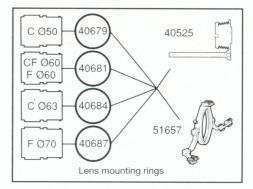
Extension tube 8 cannot be connected directly to camera bodies fitted with a shutter speed ring.

## 40543Extension tube 16 TCC40570Extension tube 32 TCC40659Extension tube 56 TCC

TCC extension tubes combine both the electronic and mechanical functions of the camera body and the lens to enable maximum use to be made of the 205TCC's automatic features. TCC extension tubes, identified by the double blue line, can be connected in various combinations.

#### 51691 Variable extension tube 64-85\*

With continuously variable extension from 63.5 to 85 mm, this extension tube makes a flexible, compact and easy-to-handle closeup accessory. It can be used together with other extension tubes and the automatic bellows from the Hasselblad system. In addition to being used for changing the extension and level of magnification, the variable extension tube can also be used for focusing. It is ideal for use in combination with the 135 mm Makro-Planar CF f/5.6, providing a focus range from infinity down to 1.15 m.



#### 40517 Automatic bellows extension\*

The bellows extension interconnects camera body and lens mechanisms. This means that the CF, F, and C lenses are used in the same way as when the lens is directly connected to the camera. The bellows extension is easily altered with adjusting knobs. The automatic bellows combined with the 135 mm Makro-Planar CF f/5.6 enables work from infinity down to 1:1.

## 40525 Lens shade for automatic bellows extension

Fully adjustable extension with flanges to take the Hasselblad Transparency copyholder. Lens mounting rings, with slot for gelatin filter holders, are required to adapt the lens front mount.

The rings are sold separately. *See the figure above and page 13.* 

#### 40037 Lens mount adapter

Intended for attaching special-purpose lenses, such as for photomicrography, to the camera. The auxiliary shutter in the camera body, the microscope shutter, or the focal plane shutter in the Hasselblad 205TCC and 2000 models can be used.

#### 40533 Transparency copyholder II

Attaches to flanges on the lens shade for the automatic bellows extension and is used in the copying and reproduction of transparencies and negatives. Electronic flash is recommended as the light source.

Also fits the earlier bellows extension 40223.

The Hasselblad system includes a dedicated professional flash, different types of release accessories and flash adapters for the 503CX, 553ELX, 500ELX and 205TCC.

#### 55034 Hasselblad Proflash 4504

The Hasselblad Proflash 4504 is a dedicated electronic flash unit with two separate reflectors. It has been specially developed for Hasselblad by Metz of Germany and gives full TTL/OTF functions when connected directly to the 205TCC, 503CX, 500ELX and 553ELX cameras. Using a synchronization cord, the Proflash can be used with other Hasselblad models, and it can be connected to any other camera using either an SCA adapter or a synchronization cord. The Proflash has four different modes - TTL, Auto, Manual and Winder; three different camera connection options - Hasselblad TTL, SCA and a standard synchronization cord; and a choice of three different power sources - rechargeable nickel-cadmium batteries, standard 1.5 VAA type (LR6) alkaline batteries, or the Metz mains connector. The mode selector also serves as an aperture/ distance calculator. The main reflector can be orientated horizontally or vertically and rotates through a full 360°. The additional fillin reflector is fixed. Proflash is supplied complete with nickel-cadmium batteries, recharger, AA battery holder, synchronization cables, camera mount, wide-angle diffusers and reduction filters for an additional flash.

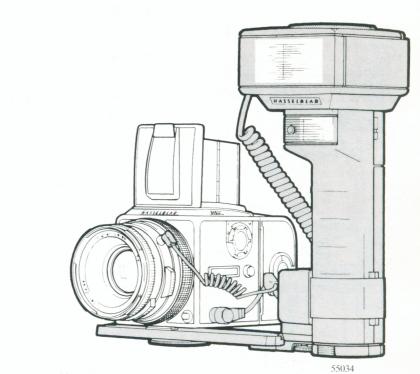
#### 51697 Macro flash unit (51678 and 51657)

A practical, versatile close-up flash unit consisting of a macro flash and flash bracket. Developed in cooperation with the German flash equipment manufacturer Metz. Used in conjunction with the bracket, the flash provides a highly flexible method of varying and customizing the light on the subject. *The units may also be ordered separately: use the relevant article number.* 

#### 51678 Macro flash

The Hasselblad macro flash consists of a control unit and two light sources for simultaneous or individual flash. A variety of lighting effects can be obtained using wide-angle and gray screens. The TTL/OTF circuitry in the Hasselblad 503CX, 553ELX and 205TCC can be utilized by using the Flash Adapter SCA 390. This provides automatic control of the light produced. The two light sources are placed on the Hasselblad macro flash bracket. The guide number at ISO 100 is 28 (m).

Supplied with the following equipment: 2 wide-angle screens 2 different gray screens Flash shoe with 3/8" and 1/4" fasteners Synchronization cord 240 mm Standard adapter SCA 301 Coiled cord Double flash outlet



#### 51657 Macro flash bracket Ø 50-Ø 70

The bracket has three mounting shoes. The two arms are articulated at three points and rotatable 360°. The bracket is attached to the lens accessory mount with separate lens mounting rings which also have a slot for a gelatin filter holder.

The rings are not included with the Macro flash bracket. See page 13.

#### 51681 Flash adapter SCA 390

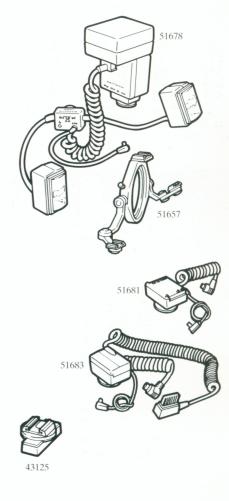
For connecting flash attachments that are compatible with the SCA 300 system to the 503CX, 553ELX and 205TCC cameras. Provides automatic TTL/OTF control of the amount of light. Signals indicating that the flash attachment is ready to fire and has discharged the right amount of light are visible in the camera's viewfinder. Can be attached to the flash shoe on prism viewfinders, to the flashgun bracket, or the camera's accessory rail. (Metz SCA 300A is also required when using SCA 390.)

#### 51683 Flash adapter SCA 590

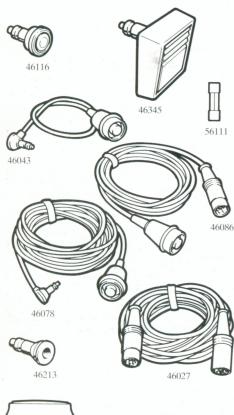
For connecting flash attachments that are compatible with the SCA 500 system (e.g. Metz 45 CT5 or 60 CT2) to 503CX, 553ELX and 205TCC cameras.

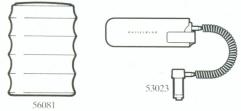
#### 43125 Adjustable flash shoe

The flash shoe slides onto the accessory rail on the left side of the camera. Small electronic flash units can be placed in the turnable flash shoe.

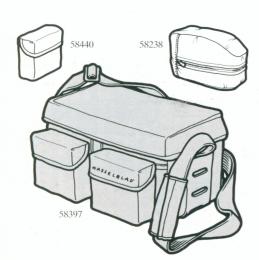


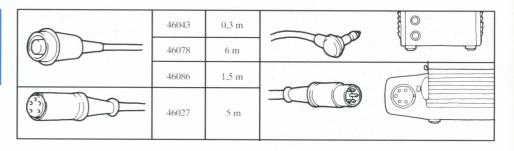
## 20 Special accessories





## **Original** cases





#### **553ELX and earlier EL models**

#### 46116 Release button

The release button is used in one of the front sockets on the 553ELX and 500ELX, and is especially convenient when the other socket is used for a release cord.

#### 46345 Release plate

An easily accessible release plate that has long been a standard feature on Hasselblad space cameras. It is standard on the 553ELX, but is also compatible with earlier EL models.

#### 56111 Fuse

A 1.6 amp (5x20 mm) medium-slow fuse is used in the 553ELX. Supplied with the 553ELX camera body. Also used for Hasselblad Winder TCC 44069.

For the 553ELX front socket 46043 Release cord FK 30 46078 Release cord FK 600

For the 553ELX side socket 46027 Connecting cord LK 500 46086 Release cord SK 150

#### 46213 Release adapter

For the 553ELX and other EL models when using the PC-Mutar  $1.4 \times .$ 

The case assortment includes soft, easily accessible camera cases, including hand or shoulder types, as well as larger trunks. All are specially designed for Hasselblad cameras and accessories. They are handmade from top quality materials. The camera cases, equipment cases and the shoulder straps also fit all previous Hasselblad models.

#### CASES

#### 58238 Camera case 507

A protective case in soft leather-like material, provided with a zipper and slits for carrying strap. Designed for use with all cameras in the 500 and 2000 series and the 205TCC, with the prism viewfinder (except EL models). It is large enough for a camera fitted with A12 magazine and lens/lens shade up to 240 mm. Dimensions( $L \times W \times H$ ):

approx.  $94/9 \times 33/4 \times 34/5$ " ( $240 \times 95 \times 150$  mm)

#### **500ELX and earlier EL models**

#### 56081 Battery 1

Rechargeable battery for the 500ELX and earlier EL models. Type Varta 5/600 DKZ or equivalent battery (nickel-cadmium battery,  $13/8 \times 2$ ").

#### **Recharge unit I**

For recharging batteries in the 500ELX. Connects to the side socket of the camera. Supplied with a permanent plug. 56023 110 Volt AC American plug 56024 110–240 Volt AC European plug

#### **205TCC**

#### 53023 External battery cassette

This is an alternative source of power for the 205TCC to be used under demanding conditions, such as extreme cold. Batteries with greater capacity than those used in the normal cassette can be used. Use four 1.5 V AA type (LR6) alkaline batteries. Protected against electro-static discharge. Strap/velcro type fasteners allow the cassette to be carried with ease or fixed to the camera strap or tripod.

#### 58397 Case 540

A soft shoulder bag made of durable, blue Cordura material. Suitable for a mediumsized selection of Hasselblad equipment. Because of its removable interior partitions and lens protectors it is extremely flexible. There are two, roomy pockets on the front of the case. Storage space can be further increased using two add-on pockets (available separately, see below). The shoulder and hip straps have rubber, non-slip inserts. The shoulder strap can also be used as a carrying handle.

Dimensions  $(L \times W \times H)$ :

approx.  $141/2 \times 73/4 \times 9$ " (370 × 200 × 230 mm)

#### 58440 Magazine pocket

Pockets for spare Hasselblad film magazines and film rolls. Can be fitted to the ends of case 540 or used as pouches to be worn on a belt.

#### 58270 Case 712

A functional and spacious case for a very large selection of Hasselblad equipment. The internal arrangement, both in the lid and the case itself, is flexible which makes it possible to store cameras and accessories in a large number of different combinations. All the lenses, except the longest telephoto lenses, can be stored in an upright position. A protective rubber strip around the opening provides a weathertight seal and shields contents from dust and rain. Ideal for desert and tropical climates. Weight: 10 lb 13 oz (4.9 kg).

External dimensions (L×W×H): approx.18×151/4×7" (455×390×180mm). Internal dimensions (L×W×H): approx.161/4×121/2×6" (410×320×150mm).

#### 58386 Case 522

An elegant and practical cowhide carrying case for a medium-sized equipment array. The flexible internal arrangement with movable partitions provides space for many different combinations of cameras, lenses, film magazines and accessories. The case has a combination lock and a plate on which the owner's name can be engraved.

External dimensions (L×W×H): approx.  $151/4 \times 111/2 \times 51/4$ " (390×290×135 mm). Internal dimensions (LxWxH): approx.141/4×9×41/2" (360×230×115 mm)

#### LENS POUCHES

Protective pouches of soft, leather-like material. The lens type can be written on special labels. Supplied with most of the Hasselblad lenses.

#### 58408 Lens pouch 1

For 80 mm CF/F/TCC as well as 100 mm CF lenses and the Mutar 2X teleconverter.

#### 58416 Lens pouch 2

For 50 mm CF/F/TCC, 60 mm CF, 105 mm CF, 120 mm CF, 135 mm CF, 150 mm CF/F/TCC and 110 mm F/TCC lenses.

#### 58424 Lens pouch 3

For 180 mm CF lenses and 250 mm CF/F/TCC lenses.

#### 58432 Lens pouch 4

For CF 40 and F/TCC 50 mm lenses.

#### STRAPS

#### 59110 Standard strap

Black polyester camera strap with rubber underside to prevent slipping. Width: 1" (25 mm). Length (approx): max 59", min 35" (1500/900 mm).

Supplied with 205TCC, 503CX and 903SWC camera bodies, and the 500Classic camera.

#### 49018 Neck strap (To be discontinued)

A long, adjustable black leather strap to be attached to the camera's strap buttons. Length: approx. max 53", min 29" (1350/750 mm).

#### 46140 Carrying strap

A short, black leather strap with a rubber insert to be attached to the camera's strap buttons. Supplied with the 553ELX camera body. Length: 13" (325 mm)

#### 59080 Wide camera strap

A long, adjustable 1 1/2" (40 mm) wide strap made of black polyester. The rubber underside of the strap prevents it from slipping off the shoulder. Length: approx. max 59", min 35" (1500/890 mm).

#### 59099 Contoured shoulder strap

A camera strap contoured for the shoulder giving a comfortable, non-slip, well-balanced grip. Width: approx. 1 1/4" (30 mm). Length: approx. max 50", min 38" (1280/980 mm).

#### **PROTECTIVE COVERS**

#### 51438 Front protective cover

Attaches to the lens mounting in the camera body (and in the front of the Mutar  $2 \times$  teleconverter or the PC Mutar  $1.4 \times$  shift converter).

#### 51063 Rear protective cover

Protects the rear of the camera when no film magazine is attached.

#### 51643 Front lens cap Ø 60

Attached to the inner lens bayonet mount.

#### 51648 Front lens cap Ø 70

Attached to the inner lens bayonet mount.

#### 51462 Front lens cap Variogon

Friction-fit attachment. Fits the 140-280 mm Variogon CF, C and F lenses.

#### 51654 Front lens cap Ø 93–100

Friction-fit attachment. Fits CF and F lenses with a Ø 93 front mount when a lens shade is attached.

#### 51659 Front lens cap for the 30 mm Distagon CF

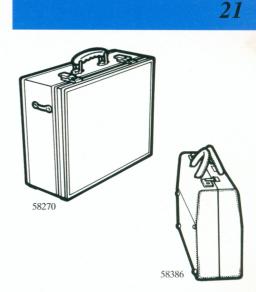
Friction-fit attachment.

#### 50377 Rear lens cap

Bayonet mount. Fits all Hasselblad lenses, except the 135 mm Planar.

#### 50571 Rear lens cap 135

Bayonet mount. Fits the 135 mm Makro-Planar CF and the 135 mm S-Planar C.









58416

58424



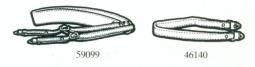


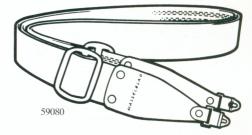
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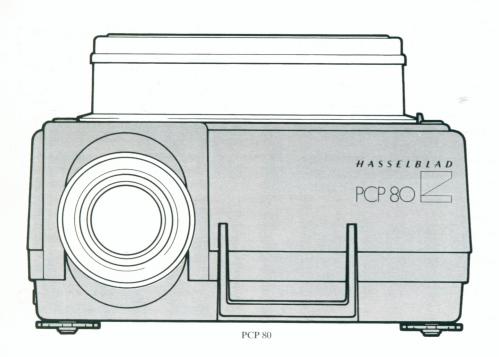




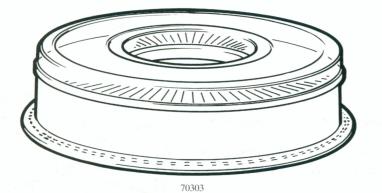




## 22 Hasselblad PCP80 Projector







The Hasselblad PCP80 is a professional projector for 2 1/4x2 1/4" (6x6 cm) transparencies. Built-in perspective control, superb Zeiss lenses, a rotary slide magazine and a number of unique features put the PCP80 in a class of its own. The designation "PCP80" stands for Perspective Control Projector with an 80-slide capacity.

#### **Perspective control**

Images produced by a projector that is tilted upwards or downwards appear distorted (wedge-shaped) on the screen. The perspective control function of the PCP80, however, enables you to move the lens up or down, raising or lowering the screen image without any distortion. As a result, a square slide always produces a square screen image.

#### Lens and condenser

The optical system is specially tailored to each lens. Lenses have their own matched condensor lens, which is replaced whenever the lens is replaced.

A dichroic mirror system makes it unnecessary to fit a light-stealing heat absorption filter on the PCP80.

#### Automatic lamp replacement

A reserve bulb clicks immediately into place if the projector bulb fails, and a warning light on the projector's control panel indicates that an automatic replacement has been made. The lamp housing can be removed to adjust the filament orientation outside the projector without turning the lamp on. The same also applies to the reserve lamp.

#### **Unparalleled** reliability

For unbeatable operational reliability the PCP80 has separate, quiet motors for slide change, fan operation and focusing. The cooling system uses pressurized, filtered air to prevent any dust build-up from affecting the performance of the mechanism or the optical system.

The PCP80 has two fuse circuits. One protects the electronic system in the event of power surges. The other monitors the temperature near the transparency and switches off the projector lamp long before any risk of heat damaging the slide.

#### **Rotary slide magazine**

The rotary magazine holds 80 transparencies. (Detachable without re-setting).

#### **Control systems**

The Hasselblad PCP80 has 3 different connector inputs for external control systems. In addition to a standard 6-pin socket, the projector has 8 and 12-pin sockets for controlling the lamp with or without the builtin TRIAC. Different connectors for most other professional control systems are available as accessories.

#### **PCP80 PROJECTOR &** ACCESSORIES

The Hasselblad PCP80 projector is supplied as separate components.

#### 70101 Hasselblad PCP80 projector body

With power cord but without lens or rotary slide magazine. Can be switched to 110/130/ 220/240 V 50-60 Hz. Front protective cover PCP80 70532 supplied. Weight 31 lbs (14 kg).

#### 70104 Hasselblad PCP80 projector body

A special version for 120 V 50-60 Hz mains voltage (USA).

#### 70107 Hasselblad PCP80 projector body

A special version for 100 V 50-60 Hz mains voltage (Japan).

#### 70205 Zeiss P-Planar f/3.5 150 mm projector lens

Standard projector lens. Supplied with matching condensor lens and front lens cap 75/150 (70526). Allows full utilization of perspective control.

#### 70214 Zeiss P-Distagon f/3.5 75 mm projector lens

Lens for short projection distances (e.g. backprojection). Supplied with matching condensor lens and front lens cap 75/150 (70526). Allows limited utilization of perspective control.

#### 70210 Zeiss P-Sonnar f/4 250 mm projector lens

Lens for long projection distances. Supplied with matching condensor lens and front lens cap Ø 93-100 (51654). Allows for full utilization of perspective control.

#### 70303 Rotary slide magazine

Holds 80 transparencies in  $23/4 \times 23/4$ " (7  $\times$  7 cm) mounts.

#### Accessories:

#### 70507 Remote cable control unit

For manual slide change and focusing. Cable length: 4 m (approx 13 ft).

#### 70517 Projector rack, basic unit

For twin projector set-ups.

#### 70518 Supplementary unit for projector rack

Add-on unit to permit stacking.

#### 70511 Registration slide mounts $(21/4 \times 21/4")(6 \times 6 \text{ cm})$

Slide mounts with special guide pins to simplify perfect image positioning in multi-vision programs.

Box of 40 mounts.

#### 70512 Registration slide mounts $(21/4 \times 15/8")$ (6×4.5 cm)

Mounts as 70511 above, but with rectangular image format.

#### 70520 Alignment slide

For precise adjustment of projectors in a multi-projector set-up.

#### 70535 PCP80 projector case

A sturdy plywood frame with aluminium and steel reinforcements. Foam plastic interior. Holds the PCP80 projector body. **Dimensions:**  $approx 17 \times 20 \times 11" (430 \times 510 \times 285 \text{ mm}).$ 

#### 70526 Front lens cap 75/150

Protects the front lens element of the 75 mm P-Distagon and 150 mm P-Planar lenses. Supplied with the lens.

#### 51654 Front lens cap 250

Protects the front lens element of the 250 mm P-Sonnar lens. Supplied with the lens.

#### 70532 PCP80 front protective cover

To protect the projector when no lens is attached. Supplied with the projector body.

#### 70547 PCP80 dust cover

Soft dust cover to protect the projector when not in use.

#### 70538 Power cord

European plug. Length: 2.5 m (approx 8 ft). Supplied with the projector body.

#### 70539 Power cord

American plug. Length: 2.5 m (approx 8 ft). Supplied with the projector body.

#### 70541 Air filter

Replacement air filter (1 filter supplied with the projector body).

#### **AV** connectors:

Please contact your Hasselblad agent for information about which connector to use with the various control systems.

#### 70523 12-pin AV connector

70524 12-pin AV connector/Adapter AA

#### 70525 7-pin AV connector/Adapter AA

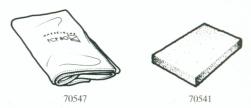
For connecting certain control systems with US-type connectors.















### 24 Hasselblad Service Department



A Hasselblad camera could have up to a thousand different components, all of which are manufactured to minutely small tolerances and must match perfectly to produce a reliable camera. Before leaving the factory each Hasselblad camera is adjusted and focused to within 1/100 millimeter's precision. The shutter is finely tuned to a tolerance of within a fraction of a millisecond.

Even if it is built to cope with demanding professional duties, a Hasselblad camera is a precision instrument. And like all precision instruments, it needs care and maintenance. How often depends on how much it is used. Victor Hasselblad AB has a network of authorized service centers, where you can have your camera examined and serviced. Always hand in your camera at an authorized service center. The sign "Hasselblad Authorized Service Center" is your guarantee of quality and professional care.

You can read more about servicing Hasselblad products in the folder "Guarantee & Authorized Service". This includes information about recommended service intervals and a service card, plus the addresses of all authorized service centers.

Pick up a folder at a photographic shop or order one from any Hasselblad distributor.

### Hasselblad Electronic Imaging AB



Hasselblad Electronic Imaging AB manufactures equipment for digitization, transmission and management of electronic images. The portable DIXEL<sup>™</sup> 2000 wirephoto transmitter is used widely by the majority of newspapers and picture agencies in Sweden and is also enjoying considerable success abroad. DIXEL can transmit analog or digital images from all types of 35 mm film (black/ white and color, positive and negative) via the public telephone system.

At the receiving end, the company can now offer a complete "Electronic Picture Desk", comprising an ImageBasket<sup>TM</sup> store and forward station, and an ImageTuner<sup>TM</sup> color work station.

ImageBasket<sup>™</sup> can receive pictures from up to six transmitters at a time. Selected pictures can either be printed or transferred to the ImageTuner<sup>™</sup> for such steps as adjustment of color and contrast and cropping. The company has several new products, including the ImageServer<sup>TM</sup> digital image archive, which, in principle, has unlimited storage capacity, and the MACSIE 35, highresolution scanner for, among other applications, "Desktop Publishing".

For further information, please contact:

 Hasselblad Electronic Imaging AB

 Box 220

 S-401 23 Göteborg

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 Tel.
 +46 31-10 26 56

 Fax
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Denmark \*James Polack ApS Blokken 38 3460 BIRKERØD

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Send in the coupon to the Hasselblad distributor in your country (see address list above). Since

\* Hasselblad distributors with in-house service facilities.

## Subscribe to Hasselblad Forum!

Hasselblad Forum is a quarterly magazine distributed by Victor Hasselblad AB. It is available in three languages, English, German and Swedish. Its 36 pages present pictures in color and black/white, informative texts by leading photographers and ambitious amateurs, as well as the latest news about the Hasselblad system. Subscribe by sending the coupon below to the Hasselblad distributor in your country.

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## Hasselblad Forum

Hasselblad Forum is a magazine read by photography enthusiasts all over the world. The magazine was first published in 1965. It is a quarterly magazine with 36 pages, published in English, German and Swedish. As its title suggests, Hasselblad Forum is a forum for photographers working with Hasselblad cameras and accessories.

Amateur and professional photographers get together in Hasselblad Forum, giving their innermost viewpoints about photography. Contacts are established between photographers and purchasers of photographs, books are reviewed, news about the Hasselblad system is presented and technical queries are answered.

**Subscribe to Hasselblad Forum** by sending the attached coupon to the Hasselblad distributor in your country.

#### Contribute to Hasselblad Forum

During the course of a year, we have the opportunity to publish contributions from fifty or so photographers. This means we are constantly on the look-out for new co-workers who wish to share their pictures, their techniques and their experiences using the Hasselblad system.

Send your unmounted pictures, be they slides or prints in either color or black/white, to the address below. Remember to write a few lines about the pictures. The address is: Hasselblad Forum, Box 220, S-401 23 Göteborg, Sweden.

## Hasselblad Boutique

Hasselblad Boutique items are both practical and beautiful. As well as the products below, there is also a large umbrella with the Hasselblad design, an exclusive pen set, ball point pen, key ring and a Hasselblad lapel pin.

#### **Crystal camera**

A Hasselblad camera sculpted in glass. A life size Classic, from the Lindshammars Glassworks, Sweden. Each statuette is signed by the artist, Christer Sjögren.

#### Wrist-watch

A modern design, quartz wrist-watch with leather strap. The battery should not need changing for at least one year.

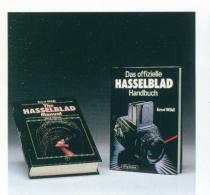
#### The Hasselblad Manual

A richly illustrated manual in the art of using your Hasselblad equipment to the full. Honorary Professor of Photography, Ernst Wildi, from the USA shares his unique knowledge with us. The book is available in English and German.

#### Flight bag

A sturdy flight bag made of cotton/rayon with both handle and adjustable shoulder strap. Two large compartments and an outside pocket, all with zip fasteners.







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Victor Hasselblad Aktiebolag Box 220, S-401 23 Göteborg, Sweden

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