

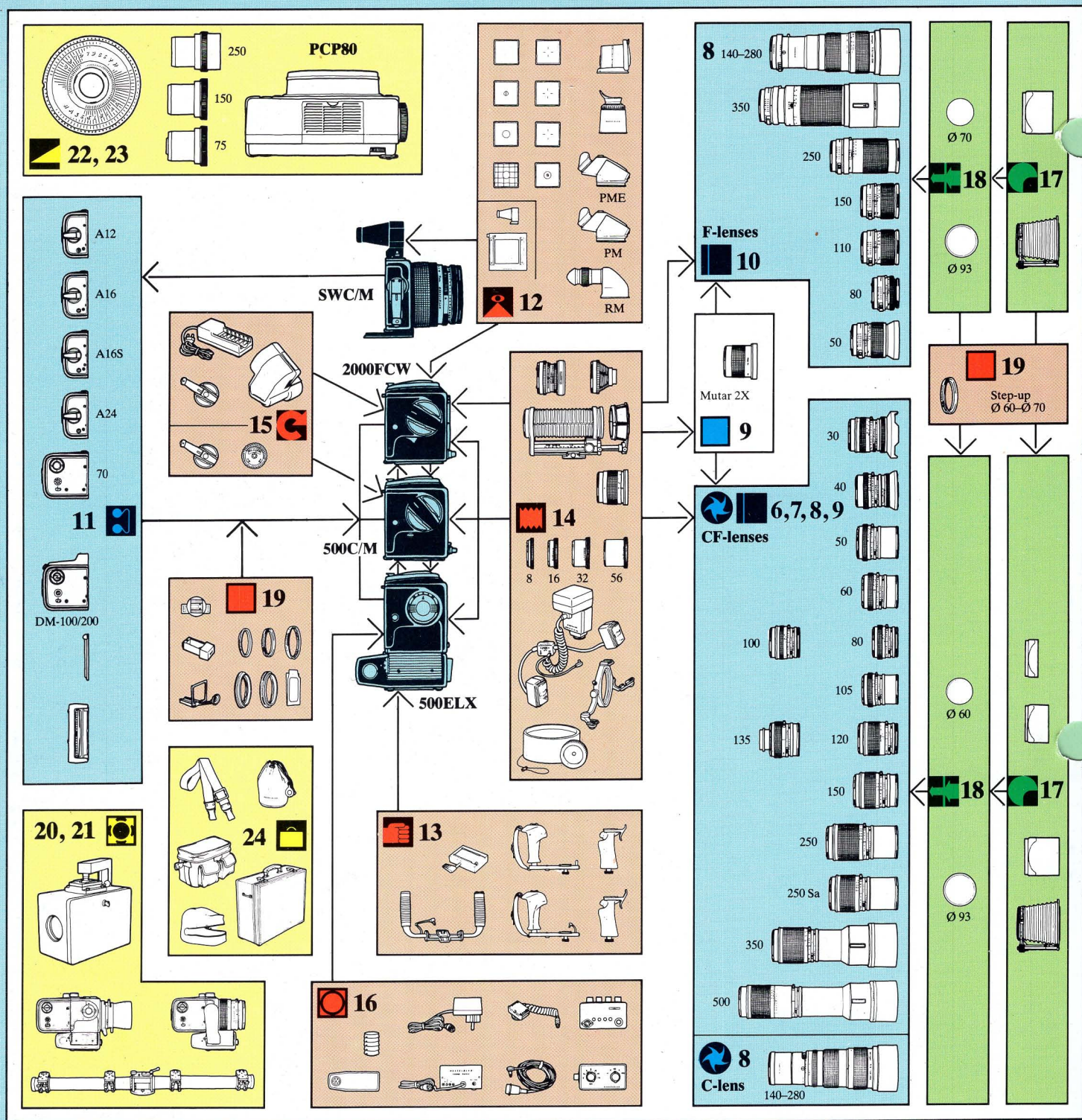
H A S S E L B L A D[®]

Product

catalog

1985/86





The catalog's table of contents follows the grouping of Hasselblad cameras, projector, and accessories. The products are arrayed in groups with symbols, and relationships are designated with arrows. The

main groups are color-coded, both in the overview above and inside the catalog. Blue is for the components which jointly form a complete camera, green is for lens accessories, red is for other interchangeable

able accessories, and yellow is for special-purpose products. A detailed table of contents is to be found on the backside of the adjoining flap.

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The Hasselblad System

Behind the development of the Hasselblad camera and projector system lies a resolute desire to provide the finest equipment for achieving superlative photography.

With more than 300 components to choose from, the system offers the photographer options for tackling every conceivable photographic situation.

Maximum interchangeability, continuity, and superior quality are the pillars of Hasselblad's product philosophy. Almost without exception, this means that a Hasselblad camera or projector owner is able to complement his existing equipment with new products and accessories. Therefore, purchasing a Hasselblad is an investment in the future.

Through their adaptability to the system, several new products presented in this catalog make the Hasselblad system even more versatile.

*The **Hasselblad 2000FCW** is a further development of the 2000FC/M. The camera operates completely independent of its battery when used with CF lenses that have built-in shutters. New electronically controlled features have been added and the camera can now be equipped with a winder.*

*The **Winder for the Hasselblad 2000FCW** is driven by a powerful motor and has a capacity of 1.3 film frames per second.*

*The **Hasselblad 500ELX** is based upon the 500EL/M. During flash photography, the camera's electronics control flash operation by measuring the amount of light that is reflected from the film plane during an exposure. In addition, the 500ELX has been equipped with a new, non-vignetting mirror.*

*The classic **Hasselblad 500C/M** is now supplied with a winding crank and like the other cameras equipped with a new focusing hood.*

*The new **Focusing Hood** can be rapidly folded by one hand and the magnifier can be replaced by correction magnifiers.*

*In the **Hasselblad Opto Fiber Screen** nearly 100 million light guides build up a bright viewfinder image.*

*The **Hasselblad Data Recording System** allows for the programming of 32 alpha-numerical figures that are directly exposed onto the film.*

*The **Hasselblad Variable Extension Tube 64-85** has continuous variable extension and is also very compact in its design. It can also be used for focusing with the 135mm Makro Planar lens.*

***Hasselblad's first teleconverter** doubles the focal length of the lens. It is manufactured by Carl Zeiss.*

*The **Hasselblad Macro Flash** provides great versatility for light setting in close-up photography.*

***New projector lenses** have enlarged the Hasselblad PCP80 projector system.*

The catalog presents Hasselblad's extensive camera and projector system. In addition to these products, Hasselblad also manufactures special equipment for space photography, photogrammetry, surveillance, digital image transmission, etc. Hasselblad also modifies cameras and other equipment in exact accordance with the customer's specifications.

For further information about the products in this catalog, please contact the Hasselblad distributor in your country (see the list at the end of this catalog) or refer directly to:

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



500C/M



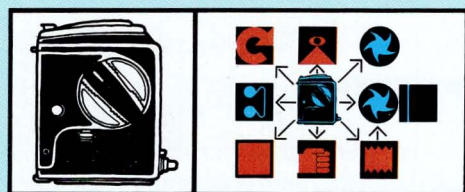
500C/M 10022



500C/M 10170



Hasselblad 500C/M



The Hasselblad 500C/M is the cornerstone of the system. It is a $2\frac{1}{4} \times 2\frac{1}{4}$ single-lens reflex camera with a unique mechanical design. An all-round camera renowned for its rugged, workhorse reliability, even under demanding conditions.

The camera body, an interchangeable lens, and a film magazine jointly form a complete camera. These main components are sold separately.

The Hasselblad 500C/M camera body accepts interchangeable viewfinders and focusing screens and has an interchangeable crank for film advance and shutter cocking. It incorporates a system to prevent unintentional double exposure. It also has a pre-release mode and an accessory rail for, e.g. a sports viewfinder or a spirit level. A tripod plate with a $\frac{3}{8}$ " tripod thread facilitates attachment of the camera to a tripod.

HASSELBLAD 500C/M CAMERA BODY

The camera body is available with chrome or black trim and supplied without a lens or film magazine. Weight: 1 lb 5 oz (600 g).

10022 500C/M camera body, chrome, is supplied with the following equipment:

- 44040 Rapid-winding crank 500C/M
- 42315 Standard focusing hood, chrome
- 42161 Standard focusing screen
- 49018 Neck strap
- 51438 Front protective cover
- 51063 Rear protective cover

10170 500C/M camera body, black, is supplied with the same equipment as the 10022 above, but with a black-trim version of the standard focusing hood 42323.

Put together a Hasselblad 500C/M system to suit your photographic requirements. The camera accepts the following lenses, film magazines, and other accessories. These items are described in further detail elsewhere in this catalog under their respective headings and symbols.



CF LENSES

- 20177 30mm Distagon CF f/3.5
- 20037 40mm Distagon CF f/4
- 20045 50mm Distagon CF f/4
- 20207 60mm Distagon CF f/3.5
- 20029 80mm Planar CF f/2.8
- 20126 100mm Planar CF f/3.5
- 20134 105mm UV-Sonnar CF f/4.3
- 20053 120mm Makro-Planar CF f/4
- 20118 135mm Makro-Planar CF f/5.6
- 20061 150mm Sonnar CF f/4
- 20080 250mm Sonnar CF f/5.6
- 20193 250mm Sonnar CF Superachromat f/5.6
- 20185 350mm Tele-Tessar CF f/5.6
- 20088 500mm Tele-Apotessar CF f/8
- 20303 Mutar 2X Teleconverter



C LENSES

- 20214 140–280mm Variogon C f/5.6
- (The 500C/M is also compatible with the older C lens series.)



FILM MAGAZINES

- 30074 Film magazine A12 (chrome)
- 30147 Film magazine A12 (black)
- 30082 Film magazine A16 (chrome)
- 30155 Film magazine A16 (black)
- 30090 Film magazine A16S (chrome)
- 30163 Film magazine A16S (black)
- 30104 Film magazine A24 (chrome)
- 30171 Film magazine A24 (black)
- 30066 Film magazine 70 (chrome)
- 30139 Film magazine 70 (black)
- 30236 Data recording magazine DM-100/200
- 30198 Magazine 100 for Polaroid film
- 41017 Sheet film adapter



VIEWFINDERS AND FOCUSING SCREENS

- 42293 Meter prism finder PME
- 42307 Prism viewfinder PM
- 52086 Reflex viewfinder RM
- 52094 Magnifying hood

- 42188 Focusing screen with split-image rangefinder
- 42234 Focusing screen with central grid
- 42218 Focusing screen with central grid and split-image rangefinder
- 42250 Checked focusing screen with central grid
- 42285 Fine-line focusing screen
- 42200 Plain glass screen
- 42221 Opto fiber screen



GRIPS AND SUPPORTS

- 45071 Flashgun bracket for 500C/M, 2000FCW and 2000FC/M
- 45047 Pistol grip for 500C/M, 2000FCW and 2000FC/M
- 45128 Tripod quick-coupling



CLOSE-UP AND COPYING ACCESSORIES

- 40649 Extension tube 8
- 40541 Extension tube 16
- 40568 Extension tube 32
- 40657 Extension tube 56
- 51691 Variable extension tube 64–85
- 40517 Automatic bellows extension
- 51678 Macro flash unit
- 51657 Macro flash bracket, Ø 50–Ø 70
- 40185 Linear mirror unit
- 40045 Microscope adapter



WINDING ACCESSORY

- 54011 Knob with exposure meter



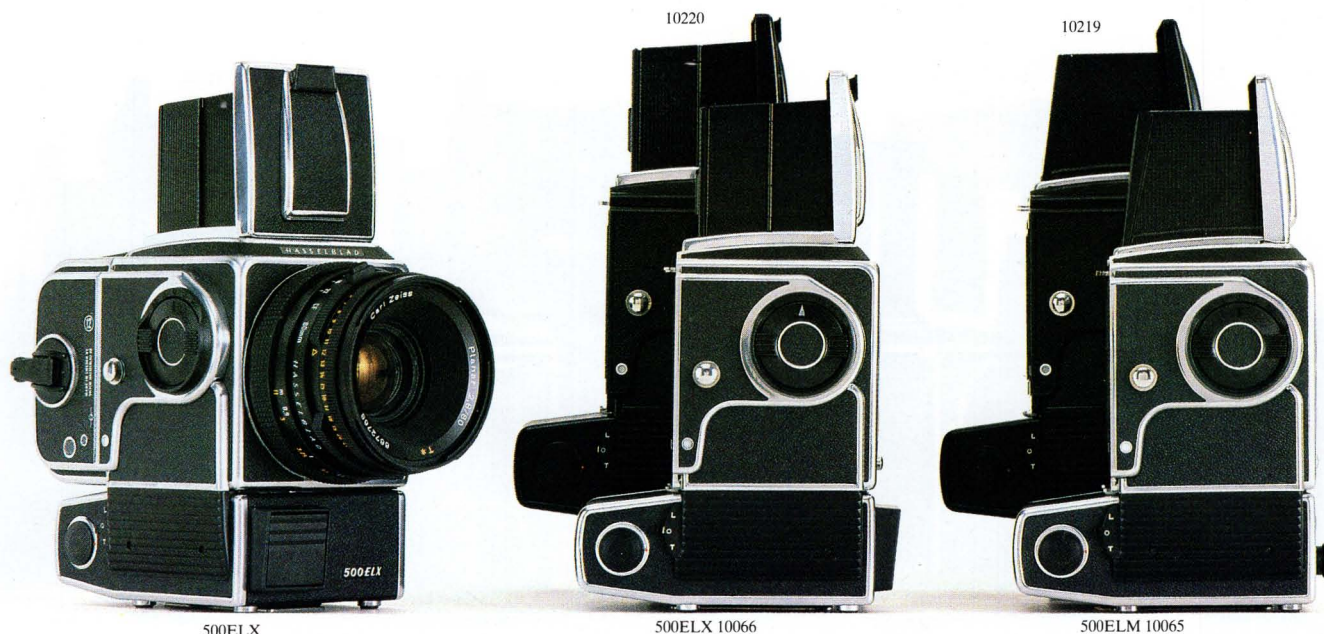
CASES AND STRAPS

- 46140 Carrying strap
- 59080 Wide camera strap
- 59099 Contoured shoulder strap
- Camera and equipment cases



MISCELLANEOUS ACCESSORIES

- 43028 Sports viewfinder
- 43125 Adjustable flash-shoe
- 43117 Spirit level



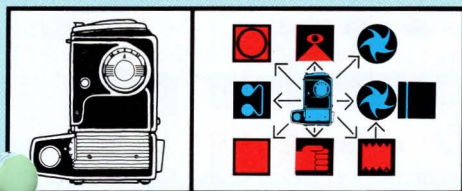
500ELX

500ELX 10066

500ELM 10065



Hasselblad 500ELX and 500EL/M



The Hasselblad 500ELX and 500EL/M are the motorized cameras in the system. Both are single-lens reflex cameras with built-in motors. The film is automatically advanced, the shutter cocked, the mirror flipped down, and the mirror image restored after each exposure.

The Hasselblad 500ELX is a further development of the 500EL/M and can measure the amount of light that is reflected from the film plane during flash photography. This new feature is signified by the X in the camera's designation. The result of this measurement regulates the discharge time of the flash attachment. The final result is correctly exposed flash pictures that are independent of the aperture setting and shutter speed that are used. Exposure is determined by the film speed, aperture opening, the existing light and the flash attachment. CF and C lenses allow for flash synchronization at any shutter speed. This makes it possible to set the balance between flashlight and existing light by programming the camera's flash sensor. The sensor's range extends from ISO 15 to ISO 1000.

All of the flash attachments that are compatible with the European SCA 300 system can be connected to the 500ELX with the Hasselblad flash adapter SCA 390. A glowing light under the left edge of the focusing screen indicates that the flash attachment is ready to be fired. After an exposure has been made a blinking signal shows that the flash attachment has discharged the right amount of light.

The non-vignetting mirror in the 500ELX insures that the entire viewfinder image is reproduced even when using lenses with long focal lengths and long extensions for close-up work.

A common feature for both the 500ELX and the 500EL/M is convenient remote control operation. Either camera body with an interchangeable lens and a film magazine jointly form a complete camera. These main components are sold separately.

The Hasselblad 500ELX and 500EL/M camera bodies accept interchangeable viewfinders and focusing screens. There is an accessory rail and re-

lease sockets for attachment of special accessories on both of the camera bodies. The motor for each camera is powered by one or two rechargeable batteries, each of which is good for about 1,000 exposures. A battery and recharger are included. A tripod plate with a $\frac{3}{8}$ " tripod thread facilitates attachment of the camera to a tripod.

HASSELBLAD 500ELX AND 500EL/M CAMERA BODIES

The camera bodies are available with chrome or black trim and are supplied without a lens or film magazine. Weight (including battery): 500ELX, 2 lb 10 oz (1200 g); 500EL/M, 2 lb 8 oz (1140 g).

10066 500ELX camera body, chrome, is supplied with the following equipment:

- 42315 Standard focusing hood, chrome
- 42161 Standard focusing screen
- 56022 Recharge unit
- 56081 Battery (1)
- 51438 Front protective cover
- 51063 Rear protective cover
- 46140 Carrying strap
- 56111 Fuses (2)
- 46159 Key disc
- 46175 Socket cap
- 46345 Release plate
- 46043 Release cord FK 30

10220 500ELX camera body, black, is supplied with the same equipment as the 10066 above but with a black-trim version of the standard focusing hood 42323.

10065 500EL/M camera body, chrome, is supplied with the same equipment as the 10066 500ELX above but is equipped with the older version of the standard focusing hood 42021 and release button 46116.

10219 500EL/M camera body, black, is supplied with the same equipment as the 10220 500ELX above but is equipped with the older version of the standard focusing hood 42277 and release button 46116.

Put together a Hasselblad 500ELX and 500EL/M camera system to suit your photographic requirements. The cameras accept the following lenses, film magazines, and other accessories. These items are described in further detail elsewhere in this catalog under their respective headings and symbols.



CF LENSES

The 500ELX and 500EL/M accept the same CF lenses that are compatible with the 500C/M (see page 2).



C LENSES

20214 140–280 mm Variogon C f/5.6
(The 500ELX and 500EL/M are also compatible with the older C lens series.)



FILM MAGAZINES

The 500ELX and 500EL/M accept the same film magazines that are compatible with the 500C/M (see page 2).



VIEWFINDERS AND FOCUSING SCREENS

The 500ELX and 500EL/M accept the same viewfinders and focusing screens that are compatible with the 500C/M (see page 2).



GRIPS AND SUPPORTS

- 46329 Flashgun bracket for 500ELX, 500EL/M
- 46221 Pistol grip for 500ELX and 500EL/M
- 46132 Double handgrip for 500ELX and 500EL/M
- 45128 Tripod quick-coupling



CLOSE-UP AND COPYING ACCESSORIES

The 500ELX and 500EL/M accept the same close-up and copying accessories that are compatible with the 500C/M (see page 2).



SPECIAL ACCESSORIES FOR THE 500ELX AND 500EL/M

- 51681 Flash adapter SCA 390 (500ELX)
- 46337 Battery compartment 3
- 46302/46310 Power supply unit
- 46272 Intervalometer III
- 56138 Command unit



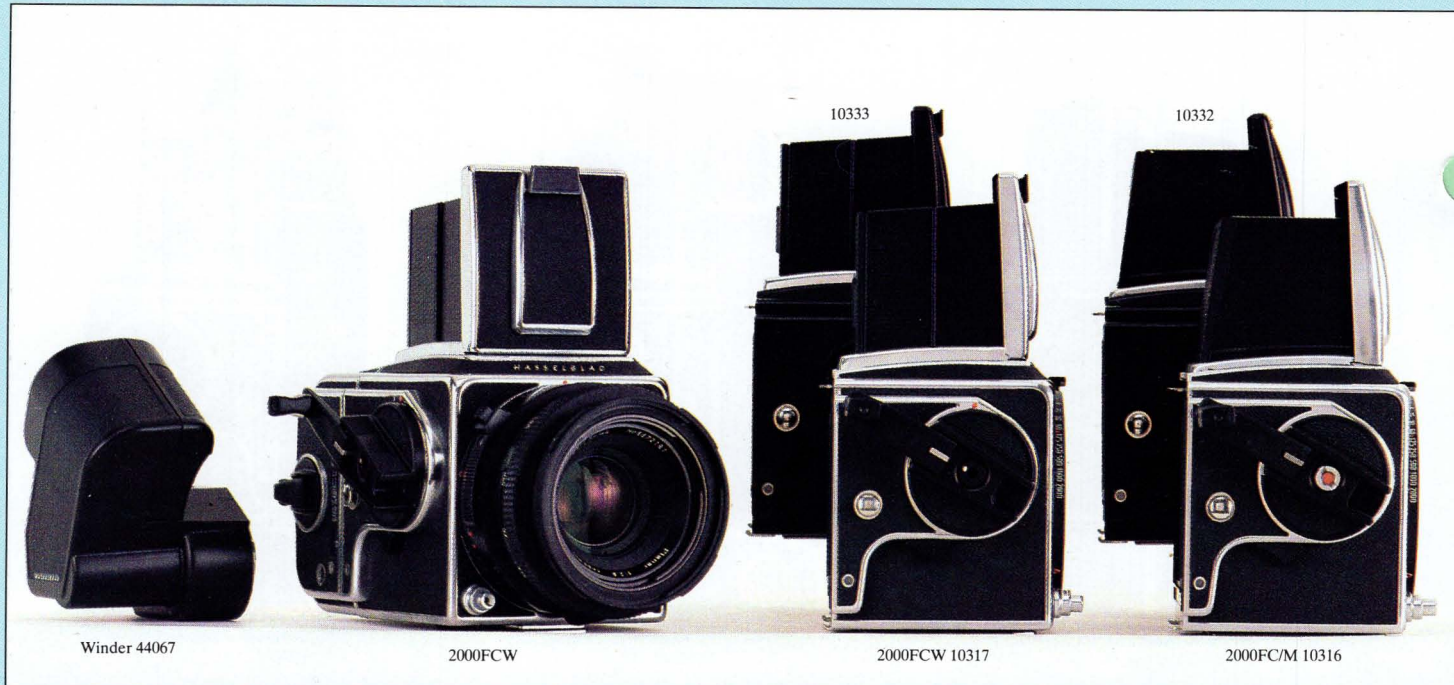
CASES AND STRAPS

- 59080 Wide camera strap
- 59099 Contoured shoulder strap
- Camera and equipment cases



MISCELLANEOUS ACCESSORIES

- 43028 Sports viewfinder
- 43125 Adjustable flash-shoe
- 43117 Spirit level



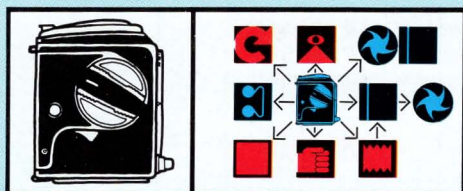
Winder 44067

2000FCW

2000FCW 10317

2000FC/M 10316

Hasselblad 2000FCW and 2000FC/M



The Hasselblad 2000FCW and 2000FC/M are $2\frac{1}{4} \times 2\frac{1}{4}$ single-lens reflex cameras. An electronically controlled focal plane shutter with speeds from 1 to 1/2000 s makes them the fastest medium-format cameras in the world.

The Hasselblad 2000FCW is a further development of the 2000FC/M and can be equipped with a winder. This new feature is signified by a W in the camera's designation. The winder provides automatic film advance and shutter cocking. The rapid-winding crank which is standard equipment on the camera can be replaced with the Hasselblad winder quickly and easily. The winder has a powerful motor that provides fast, distinct starts and smooth advance and cocking (the Hasselblad winder is described in greater detail on page 15).

Several mechanical features have been redesigned and a number of new electronically controlled features have been added. When using C and CF lenses with their built-in leaf shutters, the 2000FCW works mechanically, entirely independent of the battery in the camera. When the focal plane shutter is used, it is controlled by the camera's electronics which is powered by a battery. The retracting feature that protects the focal plane shutter when the film magazine is removed is completely automatic on the 2000FCW when the winder is attached.

One common feature that both the 2000FCW and 2000FC/M share is the freedom to choose between using fast F lenses that utilize the camera's focal plane shutter (synchronized for flash down to 1/90 s) or the CF and C lenses with their built-in leaf shutters (synchronized for flash down to 1/500 s). Either camera body with an interchangeable lens and a film magazine jointly form a complete camera. These main components are sold separately.

The Hasselblad 2000FCW camera body can be equipped with a winder and like the 2000FC/M accepts interchangeable viewfinders and focusing screens. A pre-release latch and an accessory rail for, e.g. a sports viewfinder or a spirit level are other features. A tripod plate with a $\frac{3}{8}$ " tripod

thread facilitates attachment of the camera to a tripod. Battery type: PX28.

HASSELBLAD 2000FCW AND 2000FC/M CAMERA BODIES

The camera bodies are available with chrome or black trim and are supplied without a lens or film magazine. Weight: 2000FCW, 1 lb 10 oz (730 g); 2000FC/M, 1 lb 8 oz (680 g).

10317 2000FCW camera body, chrome, is supplied with the following equipment:

- 44075 Rapid-winding crank 2000FCW
- 42315 Standard focusing hood, chrome
- 42161 Standard focusing screen
- 49018 Neck strap
- 51438 Front protective cover
- 51063 Rear protective cover

10333 2000FCW camera body, black, is supplied with the same equipment as the 10317 above, but with the black-trim version of the standard focusing hood 42323.

10316 2000FC/M camera body, chrome, is supplied with the same equipment as the 10317 2000FCW above, but has a permanently attached winding crank and is equipped with the older version of the standard focusing hood 42021.

10332 2000FC/M camera body, black, is supplied with the same equipment as the 10333 2000FCW above, but with a permanently attached winding crank and is equipped with the older version of the standard focusing hood 42277.

Put together a Hasselblad 2000FCW or 2000FC/M camera system to suit your photographic requirements. The cameras accept the following lenses, film magazines, and other accessories. These items are described in further detail elsewhere in this catalog under their respective headings and symbols.

F LENSES

- 20427 50mm Distagon F f/2.8
- 20400 80mm Planar F f/2.8
- 20419 110mm Planar F f/2
- 20435 150mm Sonnar F f/2.8
- 20478 250mm Tele-Tessar F f/4
- 20486 350mm Tele-Tessar F f/4
- 20443 140-280mm Variogon F f/5.6
- 20303 Mutar 2X Teleconverter

CF LENSES

The 2000FCW and 2000FC/M accept the same CF lenses that are compatible with the 500C/M (see page 2).

C LENSES

20214 140-280mm Variogon C f/5.6
(The 2000FCW and 2000FC/M are also compatible with the C lens series.)

FILM MAGAZINES

The 2000FCW and 2000FC/M accept the same film magazines that are compatible with the 500C/M (see page 2).

VIEWFINDERS AND FOCUSING SCREENS

The 2000FCW and 2000FC/M accept the same viewfinders and focusing screens that are compatible with the 500C/M (see page 2).

GRIPS AND SUPPORTS

- 45071 Flashgun bracket for 500C/M, 2000FCW and 2000FC/M
- 45047 Pistol grip for 500C/M, 2000FCW and 2000FC/M
- 45128 Tripod quick-coupling

CLOSE-UP AND COPYING ACCESSORIES

The 2000FCW and 2000FC/M accept the same close-up and copying accessories that are compatible with the 500C/M (see page 2).

WINDING ACCESSORY

- 44067 Winder 2000FCW (see page 15)

CASES AND STRAPS

- 46140 Carrying strap
- 59080 Wide camera strap
- 59099 Contoured shoulder strap
- Camera and equipment cases

MISCELLANEOUS ACCESSORIES

- 43028 Sports viewfinder
- 43125 Adjustable flash-shoe
- 43117 Spirit level
- 43176 Shutter speed multiplier for 2000FCW and 2000FC/M



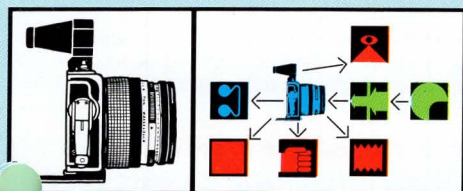
SWC/M

SWC/M 10050

SWC/M 10198



Hasselblad SWC/M



The Hasselblad SWC/M is a wide-angle camera which differs from the other cameras in the Hasselblad system by having a permanently attached lens and an optical viewfinder with a built-in spirit level.

The uncompromising design of the 38mm f/4.5 Zeiss Biogon CF yields a 90° diagonal angle of view and displays exceptional distortion correction. The lens has been equipped with comfortable grip rings, a focusing scale in feet and meters, and independently operating shutter and diaphragm rings that can be cross-coupled with a button. The lens has the same Ø 60 accessory mount as most of the other CF lenses.

The camera body with permanently attached lens plus a film magazine jointly form a complete camera. These two main components are sold separately.

The Hasselblad SWC/M camera body with its 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 tripod plate with a 3/8" tripod thread facilitates attachment of the camera to a tripod.

Zeiss 38mm Biogon CF f/4.5 T*

| | |
|-------------------------|-----------------------|
| Max. aperture | f/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 in (0.3 m) – ∞ |

HASSELBLAD SWC/M CAMERA BODY

The SWC/M camera body is delivered with a fixed lens and a viewfinder, but without a film magazine. Available with chrome or black trim. Weight: 2 lb 2 oz (960 g).

10050 SWC/M camera body, chrome, is supplied with the following equipment:

- 52035 Viewfinder SWC/M
- 49018 Neck strap
- 51643 Front lens cap, Ø 60
- 51063 Rear protective cover

10198 SWC/M camera body, black, is supplied with the same equipment as the 10050 above.

Put together a Hasselblad SWC/M to suit your photographic requirements. The camera accepts the following film magazines and other accessories. These items are described in further detail elsewhere in the catalog under their respective headings and symbols.



FILM MAGAZINES

- 30074 Film magazine A12 (chrome)
- 30147 Film magazine A12 (black)
- 30082 Film magazine A16 (chrome)
- 30155 Film magazine A16 (black)
- 30090 Film magazine A16S (chrome)
- 30163 Film magazine A16S (black)
- 30104 Film magazine A24 (chrome)
- 30171 Film magazine A24 (black)
- 30066 Film magazine 70 (chrome)
- 30139 Film magazine 70 (black)
- 30236 Data recording magazine DM-100/200
- 30198 Magazine 100 for Polaroid film
- 41017 Sheet film adapter



VIEWFINDERS AND FOCUSING SCREENS

- 41025 Focusing screen adapter



GRIPS AND SUPPORTS

- 45128 Tripod quick-coupling



CLOSE-UP AND COPYING ACCESSORIES

- 51678 Macro flash unit
- 51657 Macro flash bracket, Ø 50–Ø 70



LENS SHADES

- 40668 Lens shade Ø 60/38–60
- 40676 Professional lens shade, Ø 50–Ø 70



FILTERS

- Ø 60



CASES AND STRAPS

- 46140 Carrying strap
- 59080 Wide camera strap
- 59099 Contoured shoulder strap
- Camera and equipment cases



MISCELLANEOUS ACCESSORIES

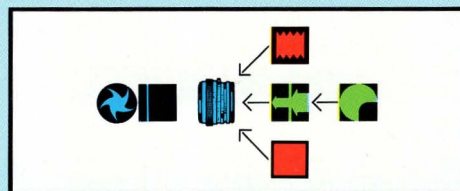
- 40681 Lens mounting ring, Ø 60
- 40690 Gelatin filter holder, Ø 50–Ø 70
- 40714 Step-up ring, Ø 60–Ø 70
- 51638 Filter adapter ring, Ø 60–Ø 63



Lenses



CF Normal Lenses



Hasselblad CF lenses for the 500C/M, 500ELX, 500EL/M, 2000FCW, and 2000FC/M have comfortable ergonomically designed grip rings and controls. The elements have six-layer T* multicoating. The built-in leaf shutter in this series is synchronized for electronic flash at all shutter speeds, 1–1/500 s. The CF lens also features a manual and automatic diaphragm, a distance scale in feet and meters, a depth-of-field scale and an exposure value scale. The shutter speed and diaphragm rings operate independently but can be cross-coupled with a button.

CF 80 and 100mm normal lenses

All-round lenses with normal focal lengths. The compact, light Planar lenses combine relatively fast speeds and high resolution with compact design and low weight.

20029 Zeiss Planar CF f/2.8 80 mm T*

The normal Hasselblad lens. A classic lens design yielding outstanding performance. The relatively fast maximum aperture of f/2.8 facilitates photography in poor lighting and results in a bright viewfinder image.

20126 Zeiss Planar CF f/3.5 100 mm T*

This lens was especially designed for Hasselblad, and designed to provide an optimum relationship between lens speed and focal length in a top-performance lens. A suitable lens for use when linear geometry is of great significance, i.e. in architectural photography and copying.

Lenses are one of the main components in the Hasselblad system. The normal 80mm focal length, i.e. the f/2.8 Planar, is the lens usually selected for a basic camera, but the Hasselblad photographer has a choice of 15 different focal lengths from 30 to 500 mm. By using the Hasselblad teleconverter which doubles the focal length of the lens, this focal length range is increased to 1000 mm. All of the Hasselblad lenses, except two, are made by Carl Zeiss, West Germany.

All of the Hasselblad lenses are quality-controlled having thoroughly undergone inspection by state-of-the-art testing equipment. Lens Data sheets are available from your Hasselblad dealer. The test results report on the measurements of three vital factors for lens performance: resolution (MTF diagram), distortion, and light fall-off at the corners of the field. Hasselblad lenses are manufactured with the kind of care and attention that is usually reserved for high-precision scientific instruments.

There are two series of Hasselblad lenses. The CF lenses, that incorporate a built-in leaf shutter, constitute the main series. These lenses are compatible with the Hasselblad 500C/M, 500ELX, 500EL/M, 2000FCW, and 2000FC/M. With the latter two, it is possible to use the built-in shutter in the lens as well as the focal plane shutter in the cameras. The Hasselblad SWC/M has a permanently attached CF lens. In the Hasselblad assortment of lenses, only the Variogon C zoom lens remains of the older C series lenses that were the predecessors of the CF lenses.

The F lenses are characterized by their fast speeds. They have no shutter and are only intended for use with the Hasselblad 2000FCW and 2000FC/M with built-in focal plane shutters.

In addition to normal, wide-angle, and telephoto lenses, there are also lenses for close-up photography, a lens with extremely high distortion correction, and a lens for ultraviolet photography.

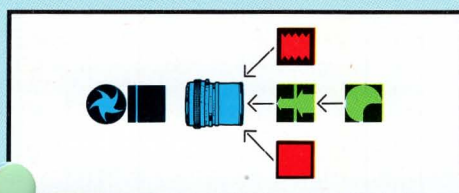
Accessories such as filters, lens shades, close-up lenses, step-up rings, and lens caps are available for the lenses. These accessories are described in greater detail elsewhere in this catalog under their respective headings and symbols.

During 1985, lens pouches of a soft, durable material will be available for most Hasselblad lenses.

| CF Normal lenses | 80mm Planar CF | 100mm Planar CF |
|------------------------------------|-------------------|--------------------|
| Max. aperture | f/2.8 | f/3.5 |
| Focal length | 80 mm | 100 mm |
| Diaphragm | f/2.8–22 | f/3.5–22 |
| Angle of view, diagonal/horizontal | 52°/38° | 42°/30° |
| No. of elements | 7 T* | 5 T* |
| Focusing range | 3 ft (0.9 m)–∞ | 3 ft (0.9 m)–∞ |
| Weight | 1 lb 2 oz (510 g) | 1 lb 5¼ oz (605 g) |
| Length | 2⅞ in (65 mm) | 2⅞ in (75 mm) |
| Accessories included | | |
| Front lens cap | 51643 | 51643 |
| Rear lens cap | 50377 | 50377 |
| Lens pouch | 58408 | 58408 |
| Filters | Ø 60 | Ø 60 |
| Close-up lenses (Proxars) | Ø 60 | Ø 60 |
| Lens shades | 40670 | 40673 |
| Professional lens shade | 40676 | 40676 |
| Miscellaneous accessories | | |
| Lens mounting ring | 40681 | 40681 |
| Holder for gelatin filters | 40690 | 40690 |
| Step-up ring | 40714 | 40714 |



CF Wide-Angle Lenses



CF 30–60mm wide-angle lenses

These short focal length Distagon lenses have angular fields from an extreme 180° ("fish-eye") to 66°, close to the field covered by the normal lens.

20177 Zeiss Distagon CF f/3.5 30 mm T*

This Hasselblad "fish-eye" lens covers the entire $2\frac{1}{4} \times 2\frac{1}{4}$ format with corner-to-corner sharpness, even with the lens wide open. Supplied in a leather case with three 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 T*

This optic has a powerful wide-angle effect with an 88° diagonal angle of view. It is much lighter and shorter than its predecessor, the 40mm Distagon C, and features floating element design. It is supplied with a Ø 93 lens shade, which also serves as a filter holder, and front and rear lens caps which can be used with or without an attached lens shade.

20045 Zeiss Distagon CF f/4 50 mm T*

This moderate wide-angle lens has a 75° diagonal angle of view. The design is extremely compact and the lens displays high resolution, contrast, and field illumination.

20207 Zeiss Distagon CF f/3.5 60 mm T*

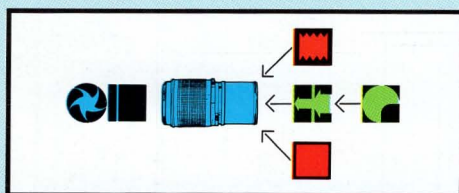
This optic has the advantages of the wide-angle lens, i.e. the short lens-to-subject distance and the wide depth of field, without its 66° diagonal angle of view yielding a marked wide-angle effect.

| CF Wide-angle lenses | 30mm Distagon CF | 40mm Distagon CF | 50mm Distagon CF | 60mm Distagon CF |
|------------------------------------|---------------------|---------------------|--------------------|-------------------|
| Max. aperture | f/3.5 | f/4 | f/4 | f/3.5 |
| Focal length | 30 mm | 40 mm | 50 mm | 60 mm |
| Diaphragm | f/3.5–22 | f/4–22 | f/4–22 | f/3.5–22 |
| Angle of view, diagonal/horizontal | 180°/112° | 88°/67° | 75°/57° | 66°/50° |
| No. of elements | 9 T* | 11 T* | 7 T* | 7 T* |
| Focusing range | 12 in (0.3 m)–∞ | 19 in (0.5 m)–∞ | 19 in (0.5 m)–∞ | 24 in (0.6 m)–∞ |
| Weight | 3 lb 14 oz (1365 g) | 2 lb 1/4 oz (915 g) | 1 lb 12 oz (795 g) | 1 lb 8 oz (680 g) |
| Length | 4 7/8 in (117.5 mm) | 4 in (102 mm) | 3 7/8 in (98 mm) | 3 1/4 (83 mm) |
| Accessories included | 1) | 2) | | |
| Front lens cap | 51659 | 51651/51654 | 51643 | 51643 |
| Rear lens cap | 50377 | 50377 | 50377 | 50377 |
| Lens pouch | | 58432 | 58416 | 58416 |
| Filters | Ø 26 ¹⁾ | Ø 93 | Ø 60 | Ø 60 |
| Close-up lenses (Proxars) | | | Ø 60 | Ø 60 |
| Lens shades | | 40693 ²⁾ | 40668 | 40668 |
| Professional lens shade | | | 40676 | 40676 |
| Miscellaneous accessories | | | | |
| Lens mounting ring | | | 40681 | 40681 |
| Holder for gelatin filters | | | 40690 | 40690 |
| Step-up ring | | | 40714 | 40714 |

¹⁾ Delivered in case 58157 and with all Ø 26 filters ²⁾ Supplied with lens shade Ø 93/40 40693



CF Telephoto Lenses



CF 150–500mm Telephoto lenses

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

20061 Zeiss Sonnar CF f/4 150 mm T*

This lens yields a moderate but still unmistakable telephoto effect, i.e. shallow depth of field and compressed perspective. A popular lens for portraits and many other applications.

20080 Zeiss Sonnar CF f/5.6 250 mm T*

This lens has a pronounced telephoto effect, is easy to work with and remains compact. It is excellent for tightly framed shots—without crowding the subject—and 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 T*

A telephoto lens of modest dimensions and weight for its focal length. A handy favorite of nature photographers who often use it without a tripod. Supplied in a leather case with a shoulder strap.

20088 Zeiss Tele-Apottessar CF f/8 500 mm T*

This optic has a very pronounced telephoto effect. The Tele-Apottessar is a refinement of the 500mm Tele-Tessar C. It has superior correction for chromatic aberrations, better resolution, and internal focusing. This means that the length of the lens and its center of gravity do not change when the lens is focused. It features a rail for tripod connection and an attachment for viewfinders. It is supplied in a leather case with a shoulder strap.

Zoom Lenses

20443 Schneider Variogon F f/5.6 140–280 mm

20214 Schneider Variogon C f/5.6 140–280 mm

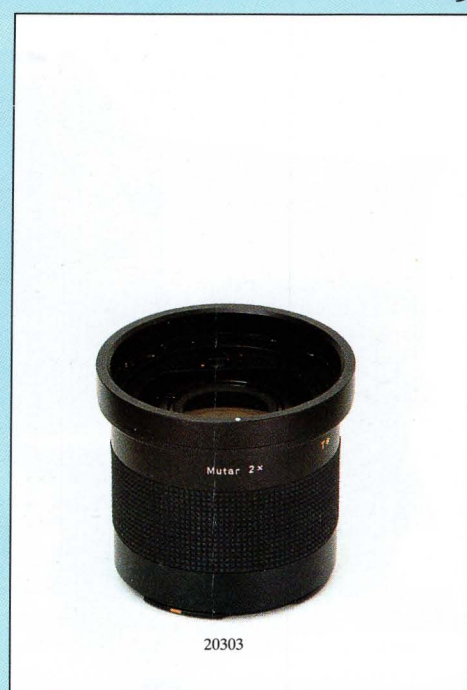
The 140–280mm Variogon F/5.6 is a zoom lens with continuously variable focal length from 140–280 mm. The Variogon C is the first zoom lens with a completely synchronized built-in leaf shutter for 2 1/4 × 2 1/4 single-lens reflex cameras. The Variogon F, like other F lenses, has no shutter.

The Variogon is a “real” zoom lens, meaning that when it is focused sharply on a subject, the focal length can be altered freely (with no focus shift) until the desired framing is obtained.

The Variogon offers the Hasselblad photographer a multitude of new and exciting opportunities for creative photography. It is supplied in a leather case with a shoulder strap.

| CF Telephoto lenses | 150mm Sonnar CF | 250mm Sonnar CF | 350mm Tele-Tessar CF | 500mm Tele-Apottessar CF | 140–280mm Variogon |
|------------------------------------|------------------------|------------------------|-------------------------|--------------------------|------------------------|
| Max. aperture | f/4 | f/5.6 | f/5.6 | f/8 | f/5.6 |
| Focal length | 150 mm | 250 mm | 350 mm | 500 mm | 140–280 mm |
| Diaphragm | f/4–32 | f/5.6–45 | f/5.6–45 | f/8–64 | f/5.6–32 ³⁾ |
| Angle of view, diagonal/horizontal | 28°/20° | 17°/12° | 12.8°/9° | 9°/6.4° | 16–30°/11–22° |
| No. of elements | 5 T* | 4 T* | 4 T* | 5 T* | 17 (multicoating) |
| Focusing range | 4.5 ft (1.4 m)–∞ | 8.5 ft (2.5 m)–∞ | 15 ft (4.5 m)–∞ | 28 ft (8.5 m)–∞ | 8 1/4 ft (2.5 m)–∞ |
| Weight | 1 lb 11 3/4 oz (785 g) | 2 lb 3 1/4 oz (1000 g) | 2 lb 15 1/2 oz (1350 g) | 3 lb 15 3/4 oz (1810 g) | 4 lb 1 1/4 oz (1850 g) |
| Length | 4 in (101 mm) | 6 3/16 in (164 mm) | 8 15/16 in (227 mm) | 12 15/16 in (329 mm) | 9 7/16 in (240 mm) |
| Accessories included | | | ¹⁾ | ²⁾ | ⁴⁾ |
| Front lens cap | 51643 | 51643 | 51654 | 51654 | 51462 |
| Rear lens cap | 50377 | 50377 | 50377 | 50377 | 50377 |
| Lens pouch | 58416 | 58424 | | | |
| Filters | Ø 60 | Ø 60 | Ø 93 | Ø 93 | Ø 93 |
| Close-up lenses (Proxars) | Ø 60 | Ø 60 | | | |
| Lens shades | 40673 | 40673 | 40703 ¹⁾ | 40703 ²⁾ | 51470 ⁴⁾ |
| Professional lens shade | 40676 | 40676 | | | |
| Miscellaneous accessories | | | | | |
| Lens mounting ring | 40681 | 40681 | | | |
| Holder for gelatin filters | 40690 | 40690 | | | |
| Step-up ring | 40714 | 40714 | | | |

¹⁾ Delivered in case 58378 and with lens shade Ø 93/350–500 40703 ²⁾ Delivered in case 58351 and with lens shade Ø 93/350–500 40703 ³⁾ 140–280mm Variogon C, diaphragm f/5.6–45



CF Special-Purpose Lenses

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

20053 Zeiss Makro-Planar CF f/4 120 mm T*

A special-purpose lens especially suitable for close-up photography. Its maximum aperture is f/4, a full stop faster than its predecessor, the 120mm S-Planar C. This is important when the lens is used with long extension, and light fall-off may make it difficult to focus the lens.

20118 Zeiss Makro-Planar CF f/5.6 135 mm T*

A special-purpose lens which cannot be directly attached to the camera body and must be used in conjunction with a Hasselblad automatic bellows or a variable extension tube. It is primarily a close-up lens, but is excellent for all applications. A 1:1 scale of reproduction is obtained at the longest bellows extension of 8 in (202 mm). Distances out to infinity are accessible at the shortest bellows extension of 2.5 in (63.5 mm).

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

This special-purpose lens was designed to yield perfect color rendition. This was achieved without sacrificing any correction of distortion or other aberrations. An ideal lens for scientific applications, especially multispectral photography, it is also useful in many other fields thanks to its extraordinary correction of lens defects. It works within a spectral range of 400 nm to 1000 nm.

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), i.e. from short-wave ultraviolet via visible light to the initial part of the infrared range. The lens can be focused for ultraviolet in visible light without any loss of sharpness.

Teleconverter

20303 Zeiss Mutar 2X T* Teleconverter

This converter has a high level of correction and can even be used when the lens is wide open. The converter doubles the focal length of the lens and is compatible with Hasselblad F, CF, and C lenses. The Mutar teleconverter is especially suitable for telephoto lenses but can also be used on lenses with focal lengths down to 60 mm and still achieve excellent results. It is not as suitable for the Makro-Planar lenses.

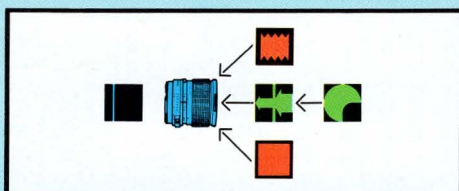
The Hasselblad teleconverter is a compact piece of equipment that provides a high level of preparedness for long photographic distances.

| CF Special-purpose lenses | 120mm Makro-Planar CF | 135mm Makro-Planar CF | 250mm Sonnar CF Sa | 105mm UV-Sonnar CF | Mutar 2X |
|------------------------------------|-----------------------|-----------------------|-----------------------|------------------------|-------------------|
| Max. aperture | f/4 | f/5.6 | f/5.6 | f/4.3 | 1) |
| Focal length | 120 mm | 135 mm | 250 mm | 105 mm | |
| Diaphragm | f/4–32 | f/5.6–45 | f/5.6–45 | f/4.3–32 | |
| Angle of view, diagonal/horizontal | 37°/25° | 32°/23° | 17°/12° | 40°/29° | |
| No. of elements | 6 T* | 7 T* | 6 | 7 | 7 T* |
| Focusing range | 2.6 ft (0.8 m)–∞ | — | 10 ft (3 m)–∞ | 6 ft (1.8 m)–∞ | |
| Weight | 1 lb 8 1/2 oz (695 g) | 1 lb 6 oz (625 g) | 2 lb 2 3/4 oz (985 g) | 1 lb 10 1/2 oz (750 g) | 14 3/4 oz (420 g) |
| Length | 3 7/8 in (99 mm) | 3 7/16 in (87 mm) | 6 1/4 in (158 mm) | 3 9/16 in (91 mm) | 3 1/8 in (80 mm) |
| Accessories included | | | | | |
| Front lens cap | 51643 | 51643 | 51643 | 51643 | 51438 |
| Rear lens cap | 50377 | 50571 | 50377 | 50377 | 50377 |
| Lens pouch | 58416 | 58416 | 58424 | 58416 | 58408 |
| 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 shade | 40676 | 40676 | 40676 | 40676 | |
| Miscellaneous accessories | | | | | |
| Lens mounting ring | 40681 | 40681 | 40681 | 40681 | |
| Holder for gelatin filters | 40690 | 40690 | 40690 | 40690 | |
| Step-up ring | 40714 | 40714 | 40714 | 40714 | |

1) Reduces the maximum aperture of the lens used by 2 f/stops.



F Lenses for the 2000FCW and the 2000FC/M



F wide-angle, normal, and telephoto lenses

Hasselblad F lenses are designed for the Hasselblad 2000FCW and 2000FC/M. In contrast to CF lenses, the F lenses have no built-in leaf shutters. The F lenses have many external features in common with the CF lenses, features such as ergonomically designed grip rings and controls. High speed and long extension are distinctive features of the F lenses.

20427 Zeiss Distagon F f/2.8 50 mm T*

A wide-angle lens with a floating element design that provides outstanding performance across its entire focusing range. The closest focusing point is only 12.8 in (0.32 m), opening exciting possibilities for pictures with interesting perspectives. Its fast speed provides a bright viewfinder image.

20400 Zeiss Planar F f/2.8 80 mm T*

The normal lens for the Hasselblad 2000FCW and 2000FC/M. Because it does not have a built-in shutter, the designers were able to reduce the closest focusing point to only 2 ft (0.6 m).

20419 Zeiss Planar F f/2 110 mm T*

A great alternative to the normal lens. Its maximum aperture of f/2 makes it the fastest Hasselblad lens and delivers a viewfinder image twice as bright as the f/2.8 of the 80mm Planar F.

20435 Zeiss Sonnar F f/2.8 150 mm T*

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

20478 Zeiss Tele-Tessar F f/4 250 mm T*

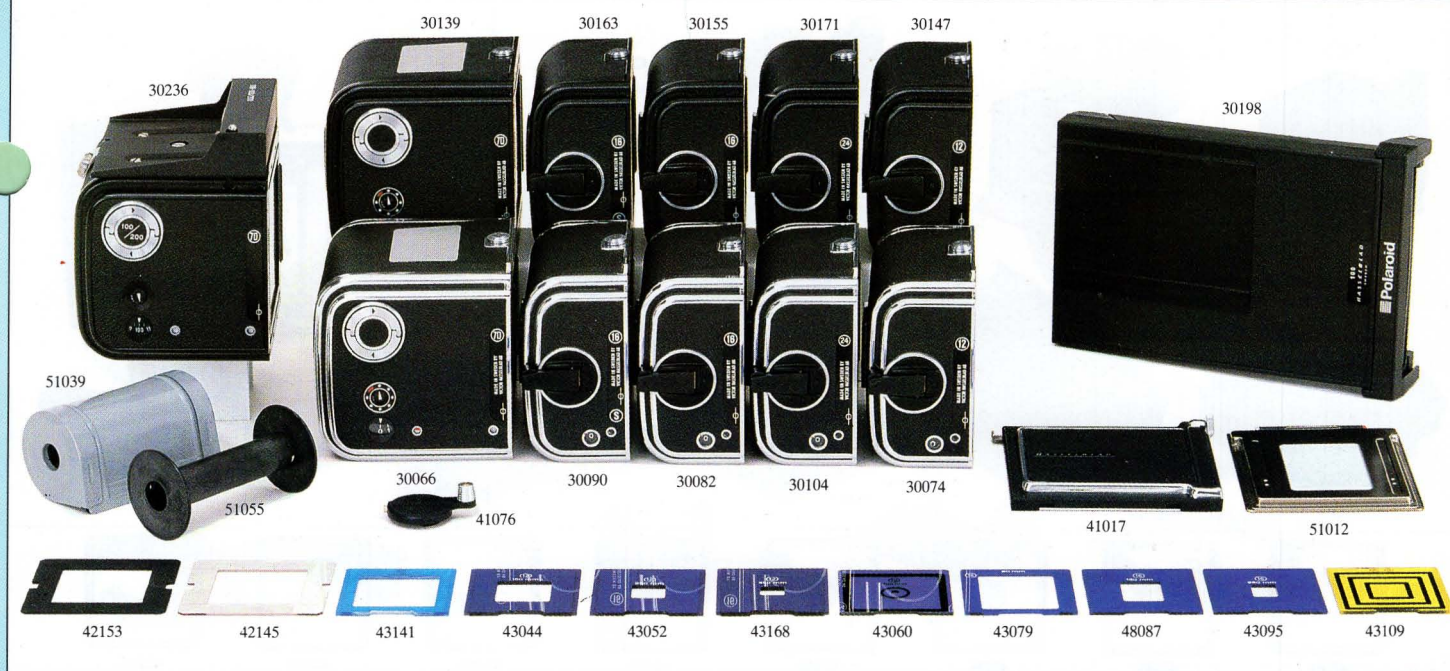
A telephoto lens with an unusually high speed for its focal length. An advantage in hand-held shooting since it enables you to work with faster shutter speeds. An ideal lens for sports, nature, and portrait photography.

20486 Zeiss Tele-Tessar F f/4 350 mm T*

A fast telephoto lens for its focal length. Internal focusing makes focusing easy. Because of its optimum optical design, it makes an excellent 700 mm lens when used in conjunction with the Mutar 2X teleconverter.

| F-lenses | 50mm Distagon F | 80mm Planar F | 110mm Planar F | 150mm Sonnar F | 250mm Tele-Tessar F | 350mm Tele-Tessar F |
|------------------------------------|----------------------|---------------------|---------------------|-------------------|---------------------|---------------------|
| Max. aperture | f/2.8 | f/2.8 | f/2 | f/2.8 | f/4 | f/4 |
| Focal length | 50 mm | 80 mm | 110 mm | 150 mm | 250 mm | 350 mm |
| Diaphragm | f/2.8–22 | f/2.8–22 | f/2–16 | f/2.8–22 | f/4–32 | f/4–32 |
| Angle of view, diagonal/horizontal | 74°/56° | 51°/37° | 39°/28° | 30°/21° | 18°/13° | 13°/9° |
| No. of elements | 9, 1 floating T* | 7 T* | 7 T* | 5 T* | 5 T* | 8 T* |
| Focusing range | 12½ in (0.32 m)–∞ | 2 ft (0.6 m)–∞ | 2½ ft (0.8 m)–∞ | 4½ ft (1.4 m)–∞ | 8¼ ft (2.5 m)–∞ | 1.9 m–∞ |
| Weight | 2 lb 11¾ oz (1240 g) | 15 oz (425 g) | 1 lb 10¾ oz (760 g) | 1 lb 9 oz (710 g) | 2 lb ½ oz (920 g) | 4 lb 6½ oz (2000 g) |
| Length | 4⅞ in (112 mm) | 2⅝ in (60 mm) | 3⅞ in (87 mm) | 3⅞ in (87 mm) | 6⅜ in (157 mm) | 10⅝ in (262 mm) |
| Accessories included | ¹⁾ | ²⁾ | | | | ³⁾ |
| Front lens cap | 51651/51654 | 51640/51643 | 51648 | 51648 | 51648 | 51654 |
| Rear lens cap | 50377 | 50377 | 50377 | 50377 | 50377 | 50377 |
| Lens pouch | 58432 | 58408 | 58416 | 58416 | 58424 | |
| Filters | Ø 93 | Ø 50/Ø 60 | Ø 70 | Ø 70 | Ø 70 | Ø 93 |
| Close-up lenses (Proxars) | | Ø 50/Ø 60 | | | | |
| Lens shades | 40706 ¹⁾ | 40118/40670 | 40576 | 40576 | 40576 | 40717 ³⁾ |
| Professional lens shade | | 40676 | 40676 | 40676 | 40676 | |
| Miscellaneous accessories | | | | | | |
| Lens mounting ring | | 40679/40681 | 40687 | 40687 | 40687 | |
| Holder for gelatin filters | | 40690 | 40690 | 40690 | 40690 | |
| Step-up ring | | 40711 ²⁾ | | | | |

¹⁾ Supplied with lens shade Ø 93/50 40706 ²⁾ Delivered with step-up ring 40711 ³⁾ Delivered in case 58360 and with lens shade Ø 93/F 350 40717



Film Magazines

The interchangeable film magazines represent the third main component in the Hasselblad system. Magazines can be switched in seconds and provide a wide freedom of choice with regard to film formats, film loads, and film types. There are roll film magazines for 120, 220, and 70mm perforated film and Polaroid film, as well as sheet film holders.

30174 Film magazine A12 (chrome)

30147 Film magazine A12 (black)

The normal Hasselblad magazine holds 12 $2\frac{1}{4} \times 2\frac{1}{4}$ frames on 120 roll film. After loading, the film is conveniently wound to the first frame with a film winding crank. A signal system indicates when an exposure has been made and whether or not the film has been advanced to the next frame. A film counter shows how many frames have been exposed and is automatically reset to zero when the magazine is reloaded. The film speed can be set on the film indicator. Available in versions with chrome trim or black trim. Supplied with a magazine slide 41068. Weight: 14 oz (400 g).

30104 Film magazine A24 (chrome)

30171 Film magazine A24 (black)

This magazine has the same functions as the magazine A12 but holds twice as many $2\frac{1}{4} \times 2\frac{1}{4}$ frames (24) on 220 roll film. Supplied with magazine slide 41068. Weight: 14 oz (400 g).

30082 Film magazine A16 (chrome)

30155 Film magazine A16 (black)

This magazine has the same functions as the preceding magazines but delivers 16 $1\frac{5}{8} \times 2\frac{1}{4}$ frames on 120 roll film. Supplied with focusing screen mask 42145, which delineates this format, and magazine slide 41068. Weight: 14 oz (400 g).

30090 Film magazine A16S (chrome)

30163 Film magazine A16S (black)

This magazine has the same functions as the preceding magazines but delivers 16 $1\frac{5}{8} \times 1\frac{5}{8}$ frames on 120 roll film, suitable for projection in an ordinary 35mm projector. Supplied with focusing screen mask 42145, which delineates this format, and magazine slide 41068. Weight: 14 oz (400 g).

30066 Film magazine 70 (chrome)

30139 Film magazine 70 (black)

This is a large-capacity magazine, intended for 70mm film loaded in cassettes and holding 70 $2\frac{1}{4} \times 2\frac{1}{4}$ exposures. Magazine cassettes can be loaded with up to 15 ft (4.7 m) of 70mm film sold in 30m and 100m bulk loads. The magazine is available in versions with chrome or black trim and supplied with a 51039 empty cassette and magazine slide 41068. Weight: 1 lb 3 oz (530 g).

51039 Film cassette for magazine 70

The cassette is loaded with perforated 70mm film in lengths up to 15 ft (4.7 m).

30236 Data recording magazine DM-100/200

This magazine is a special version of the film magazine 70 equipped for data recording and with large film capacity. The film is loaded directly onto the magazine spool and the loaded spool is inserted into the magazine without any cassette. This results in a greater capacity per load. Standard 70mm film gives approximately 100 frames per load. Special, extra-thin base (0.12–0.07 mm), 70mm film will give up to 200 frames per load. The magazine must be loaded in a darkroom.

Together with the programming adapter and a control unit (see page 20), the magazine can be programmed for registering data within a framework of 32 alpha-numerical figures on the edge of each film frame. The data can consist of different combinations of information, e.g. the time, the date, or a name.

The magazine is available in a black-trim version with two 51055 spools and magazine slide 41068. Weight 1 lb 5½ oz (610 g).

51055 Spool for magazine DM-100/200

This spool is loaded with perforated 70mm film; either standard film in lengths up to 21 ft (6.5 m) or extra thin-base film in lengths up to 42 ft (13 m).

41076 Quick-winding crank for film magazines

For the old 12, 16, 16S, and 24 Hasselblad magazine models, and for the 70 and DM-100/200 magazines.

Masks for format delineation

For viewfinders with focusing screens:

42145 Transparent focusing screen mask

Field markings for the $1\frac{5}{8} \times 2\frac{1}{4}$ and $1\frac{5}{8} \times 1\frac{5}{8}$ formats.

42153 Black focusing screen mask

This mask effectively masks the focusing screen down to the $1\frac{5}{8} \times 1\frac{5}{8}$ format.

Masks for the sports viewfinder 43028 (see p. 19):

Masks for film magazines A12 and A24.

| | |
|------------------|------------------|
| 43141/100mm lens | 43168/350mm lens |
| 43044/150mm lens | 43060/500mm lens |
| 43052/250mm lens | |

Masks for film magazine A16.

| | |
|------------------|------------------|
| 43079/80mm lens | 43095/250mm lens |
| 43087/150mm lens | |

Mask for film magazine A16S.

43109 with fields marked for the 60, 80, and 150mm lenses.

30198 Hasselblad magazine 100 for Polaroid film

For immediate information on exposure, lighting, and composition. Any errors are easily detected. For Polaroid film type 107, 108, 665, 667, and 668. The image format is $2\frac{1}{4} \times 2\frac{1}{4}$. Supplied with magazine slide 41122.

41017 Sheet film adapter

For photographers interested in utilizing the wide range of sheet film on the market. The film is loaded in the 51012 interchangeable sheet film holder.

51012 Sheet film holder

For $2\frac{1}{2} \times 3\frac{1}{2}$ (6.5×9 cm), trimmed down to $2\frac{1}{2} \times 2\frac{1}{2}$ (6.5×6.5 cm).



Viewfinders and Focusing Screens

The 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 be quickly and easily changed.

The viewfinders have been made for photography in every conceivable situation and deliver a magnified focusing screen image. The large focusing screens provide bright, clear images to aid composition and for checking the depth of field at different f/stops.

VIEWFINDERS

42315 Standard focusing hood (chrome)

42323 Standard focusing hood (black)

Hasselblad's new focusing hoods provide efficient screening of the focusing screen image. The entire image is visible even when viewed from the hip. A folding fine-focus magnifier enlarges the image 2½ times. The standard magnifier 42331 can be easily exchanged for a correction magnifier for compensating faulty vision. The collapsed hood makes the camera very compact. Standard equipment on the 500C/M, 500ELX and 2000FCW.

Correction magnifiers for focusing hoods

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

52094 Magnifying hood

Effectively blocks extraneous light and enlarges the focusing screen image 2½ times. Adjustable from +3.5 to -2.5 diopters to suit individual eyesight requirements.

42293 Meter prism finder PME

Features center-weighted metering by means of a silicon cell with a fast response even at low light levels. Values are read on an exposure value scale (EV 2-19) and indicated by red diodes. The meter automatically shuts off after approx. 10 s. Battery check. Battery type PX28. The sighting angle is 45° and the screen image is magnified three times. Can be fitted with correction lenses for compensation of faulty vision. Supplied with protective cover 42064.

42307 Prism viewfinder PM

Yields an unreversed image three times larger than the focusing screen image. The sighting angle is 45°. Can be fitted with correction lenses for compensation of faulty vision. Delivered with protective cover 42064.

52086 Reflex viewfinder RM

Yields an unreversed image three times larger than the focusing screen image. The sighting angle is 90°. The ocular is focusable ±5 diopters. Delivered with protective cover 42064.

The prism viewfinders, reflex viewfinder, and magnifying hood above can be used with the 500C/M, 500ELX, 500EL/M, 2000FCW, 2000FC/M, and with the focusing screen adapter 41025 as well as with the SWC/M.

Correction lenses for prism viewfinders 42293 and 42307

The correction lenses have anti-reflection coating and are available in diopter strengths from -4 to +3. Supplied with instructions for attachment.

| | |
|-------------------|-------------------|
| 52116 -4 diopters | 52159 +1 diopter |
| 52124 -3 diopters | 52167 +2 diopters |
| 52132 -2 diopters | 52175 +3 diopters |
| 52140 -1 diopter | |

FOCUSING SCREENS

42161 Standard focusing screen

Interchangeable focusing screen with a reference cross. Standard equipment on the 500C/M, 500ELX, 500EL/M, 2000FCW, and 2000FC/M.

42188 Interchangeable focusing screen with split-image rangefinder

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

42234 Interchangeable focusing screen with central grid

A central grid, 15 mm in diameter, provides a sharp image of part of the subject for focusing.

42218 Interchangeable focusing screen with central grid and split-image rangefinder

A diagonal split-image rangefinder, 5 mm in diameter, combined with a 14mm central grid.

42250 Interchangeable checked focusing screen with central grid

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

42285 Interchangeable fine-line focusing screen

A focusing screen with more closely spaced Fresnel lines (13.3/mm) than the standard focusing screen (8/mm).

42200 Interchangeable plain glass screen

A bright focusing screen facilitating photomicrography and macro work. Consists of a plain glass screen with a reference cross and a Fresnel lens.

42221 Opto fiber screen

Focusing screen that consists of nearly 100 million light guides. Delivers an image with strong contrast without disturbing patterns.

SPECIAL ACCESSORIES FOR THE SWC/M

52035 Viewfinder SWC/M

An optical viewfinder showing the image area while simultaneously giving the possibility of checking the camera's spirit level through a built-in prism. Comes with the SWC/M camera body.

Masks for viewfinder 52035

| |
|---|
| 42048 Image area for an A16 film magazine. |
| 42056 Image area for an A16S film magazine. |

41025 Focusing screen adapter

For checking on picture composition and depth of field. Attached to the camera in the same way as film magazines. Extraneous light is effectively blocked out by using the magnifying hood 52094, the standard focusing hood 42315/42323, a prism viewfinder, or the reflex viewfinder. Can also be used on the 500C/M, 500ELX, 500EL/M, the 2000FCW, and the 2000FC/M.



Grips and Supports

The Hasselblad photographer has a choice of carefully balanced, anatomically designed grips providing solid support for hand-held shots or quick-couplings for fast tripod attachment.

45071 Flashgun bracket 500C/M, 2000FCW and 2000FC/M

46329 Flashgun bracket 500ELX, 500EL/M

These flashgun brackets are attached and locked onto the camera's tripod plate. They are anatomically molded to fit the left hand. An adjustable leather strap makes for a much steadier grip. The camera is triggered via the flashgun bracket which is also supplied with an accessory shoe for a flash unit, an extension arm 45098, or an adjustable flash holder 45039.

46132 Double handgrip 500ELX, 500EL/M

The handgrip is attached and locked onto the camera's tripod plate. Gives a steady and comfortable grip. A release button is built into the right-hand grip. The grips and the camera attachment are adjustable to provide good balance when working with combinations of different centers of gravity.

45098 Extension arm

The extension arm is attached to the flashgun brackets 45071 and 46329 or the double handgrip 46132. It can be swiveled so that light can be aimed in the desired direction.

45039 Adjustable flash holder

For the flashgun brackets 45071 and 46329. The flash holder is fitted with an accessory shoe and a flash holder clamp. It can be swiveled so that light can be aimed in the desired direction.

45047 Pistol grip 500C/M, 2000FCW, 2000FC/M

46221 Pistol grip 500ELX, 500EL/M

The pistol grips are attached and locked onto the camera's tripod plate. They are anatomically molded to fit the left hand. Exposure is made by pressing the trigger in the grip.

45128 Tripod quick-coupling

Used on a tripod to facilitate quick attachment and removal of the camera. The quick-coupling is attached to the tripod with both a $\frac{3}{8}$ " and a $\frac{1}{4}$ " thread.

50962 Tripod attachment for the Variogon

Attached to the lens with a ring fastener. Tripod plate with a $\frac{3}{8}$ " tripod tap.

40061 Quick-focusing handle 1/C

This handle makes focusing especially fast and simple. It is pressed onto the focusing ring on C lenses. Ideal for sports and press photography. For the 50mm and 60mm Distagon C and the 80mm and 100mm Planar C lenses.

40088 Quick-focusing handle 2/C

For the 120mm S-Planar C and the 150mm and 250mm Sonnar C lenses.

NOTE: The quick-focusing handles can be used only with the older C lenses.



Close-up and Copying Accessories

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

51662 Proxar 0.5 Ø 60 T* **50296 Proxar 0.5 Ø 50**
51665 Proxar 1.0 Ø 60 T* **50318 Proxar 1.0 Ø 50**
51667 Proxar 2.0 Ø 60 T* **50326 Proxar 2.0 Ø 50**

Close-up lenses are available in three focal lengths and can be combined. The Ø 60 size is multicoated and fits CF lenses with Ø 60 (60mm) accessory mounts. The Ø 50 close-up lenses are for C lenses with Ø 50 (50mm) accessory mounts.

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

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

* Extension tube 8 cannot be directly connected to the 2000FCW or 2000FC/M camera bodies.

51691 Variable extension tube 64-85

This extension tube has continuous variable extension from 63.5 to 85 mm and is a flexible close-up accessory that is easy to handle and compact. 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 135mm Makro-Planar CF f/5.6, providing a range of focus from infinity down to 1.15 m.

40517 Automatic bellows extension

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

40525 Lens shade for automatic bellows extension

This lens shade has adjustable extension and is fitted with flanges for the Hasselblad transparency copyholder. Adapted to the lens front mount with separate lens mounting rings which also have a slot for a gelatin filter holder. *Rings are not supplied with the lens shade. See the figure to the right, and "Miscellaneous accessories," p. 19.*

51678 Macro Flash Unit

This flash unit contains two light sources that can be fired simultaneously or one at a time. It is even possible to change the light with wide-angle and glass screens. Through attachment to the Hasselblad 500ELX via the flash adapter SCA 390 (see page 16), it is possible to achieve automatic control of the volume of flash light (TTL). The two light sources can be positioned advantageously with the help of the Hasselblad macro flash bracket.

The guide number at ISO 100 is 28/92 (m/ft).

The unit is supplied with the following equipment:

2 wide-angle screens
 2 different gray screens
 Flash shoe with a 3/8" and 1/4" tripod plate
 Cable 240 mm
 Standard adapter SCA 301

51657 Macro flash bracket Ø 50-Ø 70

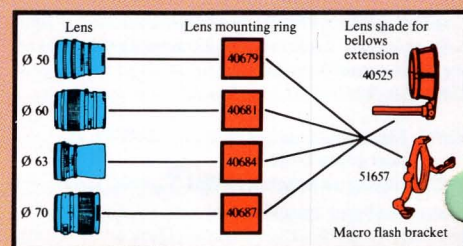
The bracket has three mounting shoes. The two arms are articulated at three points and rotatable 360°. The bracket is attached to the lens accessory mount with separate lens mounting rings which also have a slot for a gelatin filter holder. *Rings are not included with the macro flash bracket. See the figure above right and "Miscellaneous accessories" on p. 19.*

40533 Transparency copyholder II

Attached to flanges on the lens shade for the automatic bellows extension and used in the copying and reproduction of transparencies and negatives. Electronic flash is recommended as the light source. Also fits the older bellows extension 40223.

40630 Extension ring

When the lens shade extension is insufficient in the copying of transparencies, the ring can increase the extension by 3/4 in (82 mm).



40622 Lens support rod 296

This longer support rod is used when the standard lens shade support rod 216 is insufficient.

40185 Linear mirror unit

Used in photocopying to obtain a parallel alignment between film plane and copy less than two minutes of arc ($\approx 2/60^\circ$). The unit consists of a lens flange mirror 40193 which is attached to the camera in place of the lens, and a reflecting mirror 40207 placed at the object plane.

40045 Microscope adapter

Provides a light-tight and vibration-free connection between the camera and the microscope ocular. For oculars 25 mm in diameter.

40169 Microscope shutter

Attached to the camera, extension tube, or bellows. Cocked and tripped in the same way as a lens. The shutter is fully synchronized for B and 1-1/500 s. Front mount for microscope adapter 40045.

40037 Lens mount adapter

Intended for attaching special-purpose lenses, such as lenses for photomicrography, to the camera. The auxiliary shutter in the camera body, the microscope shutter, or the focal plane shutter in the 2000FCW or 2000FC/M can be used.



54038



44067



54011



44040



44075

Winding Accessories

Hasselblad accessories for film advance and shutter cocking that include products for manual and automatic operation. The insert in the picture above displays the Hasselblad winder attached to the 2000FCW.

44067 Winder 2000FCW

The Hasselblad winder is a separate motorized unit for the 2000FCW camera. The winder is attached and removed with the same degree of ease as the winding crank and provides the ability to take sequential pictures at a speed of 1.3 frames/s. The winder's powerful motor provides fast, distinct starts and smooth advance and cocking. The winder's motor is powered by 5 nickel-cadmium batteries with a combined force of 6 volts or by 5 alkaline batteries. Fully charged, the batteries have adequate power for about 1,000 exposures. The winder automatically rewinds the focal plane shutter in the 2000FCW.

44075 Rapid-winding crank 2000FCW

An interchangeable winding crank for film advance and shutter cocking that is standard equipment on the 2000FCW and intended for use *only* with this camera.

44040 Rapid-winding crank 500C/M

Interchangeable winding crank for shutter cocking and film advance; standard equipment on the 500C/M.

54011 Knob with exposure meter

The rapid-winding crank 44040 on the 500C/M can easily be replaced by this knob with a built-in exposure meter with a selenium cell. No battery is needed. The metering knob can easily be removed from the camera for taking measurements close to the subject. It is graduated from 6–1600 ASA (9–33 DIN) and the readings are indicated as exposure values (EV). The knob has a diffuser for incident light readings. Can also be used on all Hasselblad cameras, when fitted to the attachment for exposure meter 40266 (see p. 17) on the lens shade.

54038 Recharge unit R6

For recharging nickel-cadmium batteries type R6 or designated AA, UM3, and KR15/51. The recharge unit can recharge up to 6 batteries in 14 hours. Available for 220 volts AC (European plug) and supplied with 2 meter connecting cord. Intended for recharging batteries that are used in the Hasselblad winder and macro flash unit.

Size: $2 \times 2\frac{3}{4} \times 7$ in (52×67×176 mm).



Special Accessories for 500ELX and 500EL/M

56022 Recharge unit I

For recharging of batteries in the 500ELX and 500EL/M or in battery compartments 46337 and 43133. Connected to the side socket of the camera. The unit is made in a 110 volt AC American version, or a 110-240 volt AC European version, or a 220 volt AC version (in conformance with Scandinavian safety standards). Comes with the 500ELX or 500EL/M camera bodies.

46337 Battery compartment 3

For recharging of 56081 nickel-cadmium batteries with recharge unit I removed from the 500ELX or 500EL/M camera bodies. The compartment has room for two batteries which can be charged simultaneously. The 500ELX and 500EL/M can also be powered from battery compartment 3 if the camera's motor housing panel is replaced by motor housing panel 46280 or 46299, which is included in the power supply unit. Attachment is made with the 46019 LK 150 connecting cord.

46302 Power supply unit (incl. chrome trim panel 46280)

46310 Power supply unit (incl. black trim panel 46299)

Makes the 500ELX and 500EL/M independent of batteries when it is set up for stationary use. Consists of an adapter and a motor housing panel in black or chrome trim which replaces the standard battery cover on the camera. The fixed cord to the camera can be extended with a type LK connecting cord. Available in models for 110 volts AC (American plug) or 220 volts AC (European plug). The motor housing panels can be ordered separately.

46345 Release plate

An easily accessible release plate that has been a standard feature on Hasselblad space cameras for some time now. It is standard equipment on the 500ELX but is also compatible with the 500EL/M.

| | | | |
|-------|--|-------|--|
| 46043 | | 0,3 m | |
| 46051 | | 3 m | |
| 46078 | | 6 m | |
| 46086 | | 1,5 m | |
| 46019 | | 1,5 m | |
| 46027 | | 5 m | |
| 46035 | | 30 m | |

For the 500ELX and 500EL/M side sockets

- 46019 Connecting cord LK 150**
- 46027 Connecting cord LK 500**
- 46035 Connecting cord DK 3000**
- 46086 Release cord SK 150**

For the 500ELX and 500EL/M front sockets

- 46043 Release cord FK 30**
- 46051 Release cord FK 300**
- 46078 Release cord FK 600**
- 46116 Release button**

The release button is placed in one of the front sockets on the 500ELX or 500EL/M, and is especially convenient when, for example, the other socket is used for a release cord.

46124 Amplifier

For cable release from a distance longer than 100 ft (30 m).

46272 Intervalometer III

Provides the 500EL/M with exposure impulses at intervals from 2 s to 14 min. powered by the camera's battery. To be used with a type LK connecting cord.

56138 Command unit

For simultaneous triggering of two to four 500ELX or 500EL/M cameras, all released by the same trigger placed directly on the command unit, by a cord, or an intervalometer. Warning lights indicate exposure failure in one or more of the connected cameras, e.g. due to the film running out. Simultaneous exposure of more than four cameras can be obtained by interconnecting several command units.

56081 Battery 1

For the 500ELX and 500EL/M. Type Varta 5/600 DKZ or an equivalent type battery (nickel-cadmium battery, 1 3/8 x 2 in). Comes with the 500ELX and 500EL/M camera bodies.

56111 Fuse

A 1.6 amps (3/16 x 3/4 in) slow blow fuse is used in 500EL/M and 500ELX. Supplied with the 500EL and 500EL/M camera bodies.

Automatic diaphragm control unit

This unit can be used when it is impossible to make manual adjustments in lens settings, e.g. in cases of remote control release. The unit is available as an assembly kit for four different C lenses.

40401 Basic kit (not pictured)

This assembly kit must be supplemented with one of the sets below for the respective lens. Supplied with front lens cap 40509.

- 40428 Assembly kit 80 for the 80mm Planar C
- 40436 Assembly kit 100 for the 100mm Planar C
- 40444 Assembly kit 150 for the 150mm Sonnar C
- 40452 Assembly kit 250 for the 250mm Sonnar C

46264 Multiple connector (not pictured)

This connector is used to permit two simultaneous connections when the side socket on the 500EL/M is used for the diaphragm control unit.

43133 Battery compartment 2 (not pictured)

For battery 55026 powering the diaphragm control unit when this is used with the 500C/M, 2000FCW, or the 2000FC/M. This battery can also be charged in the battery compartment using a Hasselblad recharge unit.

55026 Battery 2 (not pictured)

For battery compartment 2. Type Varta 5/225 DKZ or an equivalent type battery (1 x 1 3/4 in).

51681 Flash adapter SCA 390

For connecting flash attachments that are compatible with the European SCA 300 system to 500ELX camera. Provides automatic control of volume of flash light (TTL). Furthermore, makes it possible to utilize the camera's indicator, which signals when the flash attachment is ready to be fired and if it discharges the right amount of light. Can be attached to the flash-shoe on prism viewfinders, flashgun bracket, or the camera's accessory rail.



Lens Shades and Accessories

Lens shades shield the lens from extraneous light but they also provide protection of the front lens element. The system includes lens shades designed for a fixed focal length range and the professional lens shade, adaptable to CF, F, and C lenses, which features an adjustable compendium 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 80mm CF and F lenses (older 80mm F lenses can be used together with 40711 step-up ring Ø 50–Ø 60).

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

40703 Lens shade Ø 93/350–500

For the 350mm Tele-Tessar CF and 500mm Tele-Apotessar CF. Supplied with these lenses. Also used as a holder for Ø 93 filters. Screw mount. It also fits the 350mm and 500mm Tele-Tessar C lenses and makes it possible to use Ø 93 filters with these lenses instead of Ø 86 filters that will be phased out.

LENS SHADES FOR F LENSES

40706 Lens shade Ø 93/50

For the 50mm Distagon F. Screw mount. Now supplied with the lens. Can be ordered for previously bought lenses, thus making it possible to use Ø 93 filters with these lenses instead of Ø 86 filters that will be phased out.

40118 Lens shade Ø 50/80

For the 80mm Planar F without step-up ring 40711 Ø 50–Ø 60.

40576 Lens shade Ø 70/110–250

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

40717 Lens shade Ø 93/F 350 (not pictured)

For the 350mm Tele-Tessar F. Can also be used as a filter holder Ø 93. Screw mount.

LENS SHADES FOR C LENSES

40282 Lens shade Ø 63/38

For the 38mm Biogon C. (For the old SWC/M camera models 10049/10197.) Screw mount.

40290 Lens shade Ø 104/40

For the 40mm Distagon C. Bayonet mount.

40274 Lens shade Ø 63/50–60

For the 50mm and 60mm Distagon C. Screw mount.

40118 Lens shade Ø 50/80

For the 80mm Planar C. Bayonet mount.

40126 Lens shade Ø 50/100–250

For C lenses in focal lengths from 100 to 250 mm. Bayonet mount.

40215 Frame viewfinder

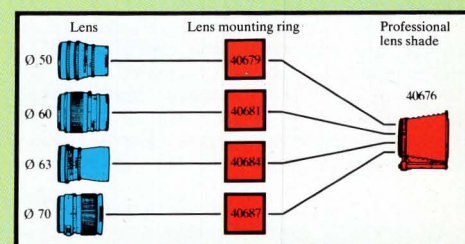
Outlines the image field for 150mm, 250mm, 350mm, and 500mm focal length lenses and film magazines for the 2¼ format. Placed on the lens shade for the 150mm and 250mm lenses and on the frame viewfinder attachment below for the 350mm and 500mm lenses.

40665 Frame viewfinder attachment

Makes it possible to use the frame viewfinder 40215 on CF and C lenses with 350mm and 500mm lens focal lengths.

40266 Attachment for knob with exposure meter

Attached to lens shades to hold the knob with exposure meter. Fits lens shades Ø 50, Ø 60, and Ø 70.



40258 Attachment for flash

Attached to lens shades to hold small flash bulbs and electronic flash units in a swivel-type accessory shoe. Fits lens shades Ø 50, Ø 60, and Ø 70.

PROFESSIONAL LENS SHADE

40676 Professional lens shade Ø 50–Ø 70

The compendium design of this lens shade provides highly efficient protection against extraneous light. It has an extension of about 3¼ in (80mm) with markings for the various focal length settings and interchangeable masks for the longer focal length lenses. When collapsed, it takes up very little space in an equipment case. Supplied with mask 40304 for the 120, 135*, and 150mm C/CF lenses and the 250mm F lens, mask 40312 for the 250mm C/CF lenses and an L connector 50776 (used with a cable release).

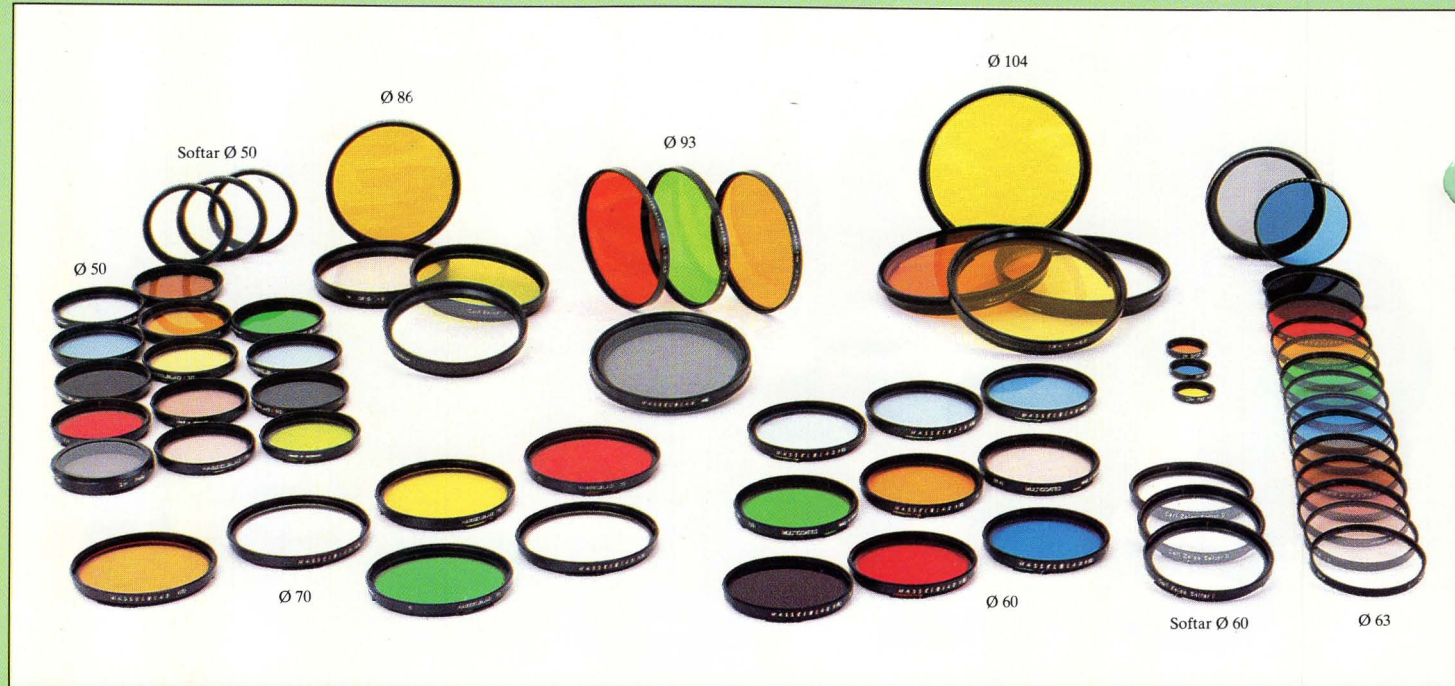
It is attached to the lens accessory mount with one of the lens mounting rings which also have a slot for a gelatin filter holder. *The rings are not supplied with the lens shade. See the figure above and "Miscellaneous accessories" on p. 19.*

* Note: The rail on the automatic bellows interferes with the Professional lens shade while focusing at long lens-to-subject distances.

Accessories for the older version of the professional lens shade 40231

40344 Adapter ring Ø 60

40495 Holder for gelatin filters



Hasselblad Original Filters

The Hasselblad line includes filters 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 eliminate unsightly color casts. Moreover, tungsten-type film can be used in daylight and vice versa.

Polarization filters can be used with black & white or color film to eliminate reflections in different objects, thereby creating greater color saturation in e.g. sky and water.

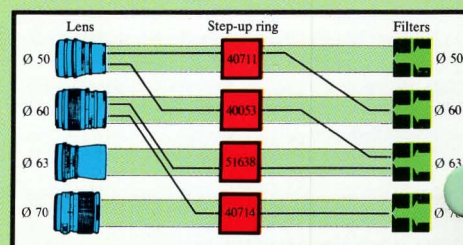
Softars can be used with both black & white and color and are available in three strengths. They provide controlled softening of the otherwise razor-sharp images. The three strengths can be combined.

Neutral density filters can be used to create special effects with black & white or color film, e.g. when there is a need to make extremely long exposures without over-exposing the film. They are available in two densities.

A range of colored filters which block out various parts of the spectrum are available for black & white photography. Glassless filter mounts are available in different diameters for rimless filters.

Hasselblad original filters are supplied in different diameters to fit the different lens accessory mounts. Step-up rings make it possible to use Ø 60-Ø 70 filters with lenses with smaller lens accessory mounts as well. See the figure to the right and "Miscellaneous Accessories," p. 19.

The filters have engraved designations indicating diameter, filter factor, color, and exposure value reduction, in that order. See the table below. For example: "50 1.5×Y-0.5" means that the filter has a 50mm diameter, requires a filter factor of 1.5, is yellow, and requires an exposure value reduction of 0.5. The Ø 60 filters feature multicasting and the corresponding "Kodak Wratten" designation.



Filters Ø 26

These filters are intended for the 30mm Distagon CF and C lenses. They have designations indicating filter factor, color, wavelength limit, and exposure value reduction.

50636 Yellow 1.5×Y50-0.5
50644 Orange 3 ×Or57-1.5
50652 Conversion filter* 2 ×B11-1
50660 Neutral glass

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

*For using daylight-type film in artificial light.

| Ø | Colored filters | | | | | Special-purpose filters | | | | Glassless filter mounts | Multi-prism lens Six prisms |
|-----|-----------------|--------------|---------|--------|---------|-------------------------|--------|---------|---------------------|-------------------------|--------------------------------|
| | 1.5×Y-0.5 | 2×YG-1 | 3×G-1.5 | 4×O-2 | 6×R-2.5 | 1×HZ-0 | 8×Gr-3 | 64×Gr-6 | 2×Pola-1 | | |
| | Yellow | Yellow-green | Green | Orange | Red | Haze | Gray | Gray | Polarizing | | |
| 50 | 50016 | 50024 | 50032 | 50040 | 50059 | 50067 | 50784 | 50717 | 50075 | 50598 | 50695 |
| 60 | 51586 | | 51592 | 51594 | 51597 | 51608 ¹⁾ | 51606 | | 51603 | 51635 | |
| 63 | 50105 | | 50113 | 50121 | 50148 | 50156 | 50792 | 50768 | 50482 ²⁾ | | |
| 70 | 51306 | | 51314 | 51322 | 51330 | 51349 | | | 51578 ²⁾ | 51551 | |
| 86 | 50741 | | 50911 | 50172 | | 50180 | | | | 50601 | |
| 93 | 51365 | | 51373 | 51381 | 51403 | 51411 | | | 51422 | | |
| 104 | 50547 | 50555 | | 50725 | | 50733 | | | | 50628 | |

| Ø | Light balance filters | | | | | | | | Soft-focus Softars | | |
|-----|-----------------------|---------|-------------|-----------|-------------|---------|----------|--------------|--------------------|-------|-------|
| | 1×CR1.5-0 | 1×CR3-0 | 1.4×CR6-0.5 | 1×CB1.5-0 | 1.4×CB3-0.5 | 2×CB6-1 | 2×CR12-1 | 3.5×CB12-1.5 | I | II | III |
| | CR1.5 | CR3 | CR6 | CB1.5 | CB3 | CB6 | CR12 | CB12 | | | |
| 50 | 50202 | 50210 | 50229 | 50237 | 50245 | 50253 | 50261 | 50288 | 50212 | 50520 | 50539 |
| 60 | 51614 | 51616 | 51619 | 51622 | 51624 | 51627 | 51630 | 51632 | 51670 | 51673 | 51675 |
| 63 | 50822 | 50830 | 50849 | 50857 | 50865 | 50873 | 50881 | 50903 | | | |
| 70 | 51357 | | | | | | | | 51527 | 51535 | 51543 |
| 86 | 50938 | | | | | | | | | | |
| 93 | 51420 | | | | | | | | | | |
| 104 | | | | | | | | | | | |

¹⁾ Filter designation UV-SKY ²⁾ Delivered in pouch 58130



Miscellaneous Accessories

43028 Sports viewfinder

Features parallax compensation. The frame outlines the image field for 80mm focal length lenses and film magazines for the $2\frac{1}{4} \times 2\frac{1}{4}$ format, or a 50mm lens and a $1\frac{5}{8} \times 1\frac{5}{8}$ film magazine. Interchangeable masks are available for the sports viewfinder. (For masks, see "Film magazines," p. 11.)

43125 Adjustable flash-shoe

The flash-shoe should be slid onto the accessory shoe on the left side of the camera. Small flash bulbs and electronic flash units are placed in a swivel-type flash shoe.

43117 Spirit level

Attached to the accessory shoe on the left side of the camera. The spirit level is particularly useful in wide-angle photography.

43176 Shutter speed multiplier 2000FCW-FC/M

Multiplies the shutter speeds by a factor of 60, i.e. a setting of, for example, $1/30$ s yields an exposure time of 2 s and a setting of 1 s becomes 60 s. The multiplier is inserted in the battery compartment receptacle instead of the battery cassette.

40177 Lens flange (not pictured)

Designed for attaching Hasselblad lenses to enlargers. The flange is a semi-finished product which can be easily adapted to fit most enlargers.

LENS MOUNTING RINGS

For the professional lens shade, lens shades for the automatic bellows extension, and the macro flash bracket when connecting CF, F, and C lenses with different accessory mounts. The rings have slots for gelatin filters.

40679 Lens mounting ring Ø 50

For lenses with a Ø 50 lens accessory mount.

40681 Lens mounting ring Ø 60

For lenses with a Ø 60 lens accessory mount.

40684 Lens mounting ring Ø 63

For lenses with a Ø 63 lens accessory mount.

40687 Lens mounting ring Ø 70

For lenses with a Ø 70 lens accessory mount.

40690 Gelatin filter holder Ø 50-Ø 70

For use with 3×3 in (75×75 mm) gelatin filters. It is inserted into a slot in the lens mounting ring. Comes in a transparent pocket suitable for storing gelatin filters.

STEP-UP RINGS

Filters and lens shades for lenses with Ø 60-Ø 70 accessory mounts can also be used on lenses with a smaller accessory mount with the aid of step-up 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.

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.

40053 Filter adapter ring Ø 50-Ø 63

For attaching Ø 63 filters to lenses with a Ø 50 accessory mount.

51638 Filter adapter ring Ø 60-Ø 63

For attaching Ø 63 filters to lenses with a Ø 60 lens accessory mount.

PROTECTIVE COVERS

51438 Front protective cover

Attached to the camera's lens and the Mutar 2X converter's bayonet mount.

51063 Rear protective cover

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

51640 Front lens cap Ø 50

Attached to the inner lens bayonet mount. Fits lenses with a Ø 50 front mount.

51643 Front lens cap Ø 60

Attached to the inner lens bayonet mount. Fits lenses with a Ø 60 front mount.

50385 Front lens cap Ø 63

Friction-fit attachment. Fits lenses with a Ø 63 front mount.

51648 Front lens cap Ø 70

Bayonet mount. Fits lenses with a Ø 70 front mount.

50393 Front lens cap Ø 86

Friction-fit attachment. Fits the 350 and 500mm Tele-Tessar C lenses.

51462 Front lens cap for the Variogon

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

51651 Front lens cap Ø 93

Friction-fit attachment. Fits CF and F lenses with a Ø 93 front mount.

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 30mm Distagon CF

50709 Front lens cap for the 30mm Distagon C

Friction-fit attachment. Different lens caps to be used on the 30mm Distagon CF and the 30mm Distagon C.

50563 Front lens cap Ø 104

Bayonet mount. Fits the 40mm Distagon C.

50377 Rear lens cap

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

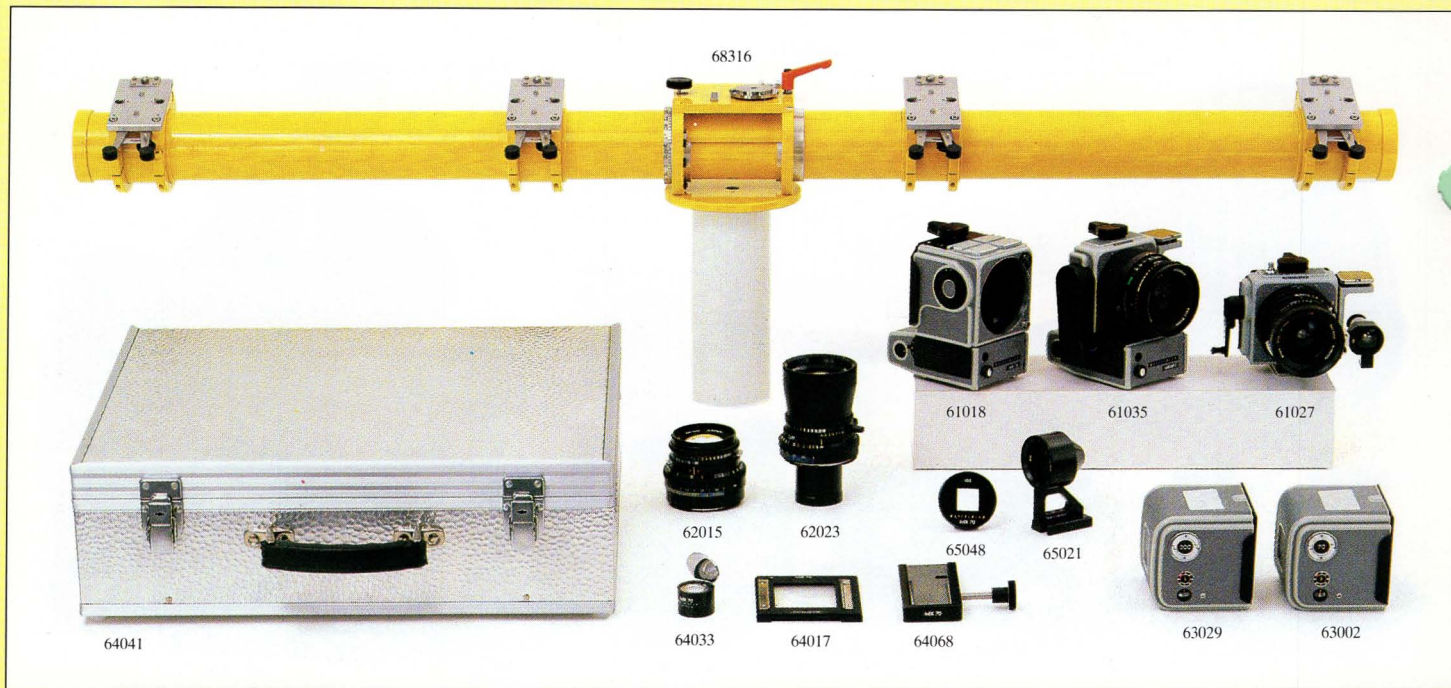
50571 Rear lens cap 135

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

FILM STORAGE

59064 File 120/220/70 mm

For storage of 120 and 220 roll film and 70mm film. The sheet can hold 12 film frames and is delivered in 50-sheet cartons. Sheet size: $10\frac{1}{2} \times 10\frac{3}{4}$ in (265×275 mm).



Special Applications

In addition to our wide range of standard products capable of dealing with virtually any photographic situation, Hasselblad also offers a number of products for what we refer to as "Special Applications." We also undertake custom work covering things like special accessories for the Hasselblad camera or special camera installations.

These two pages show some examples of special-purpose products and of the custom equipment we have made. Since these items are all special, we cannot expect photo dealers to be familiar with them. So if you desire further information, we suggest you get in touch with Victor Hasselblad AB or our distributor in your country.

PHOTOGRAMMETRY

The Hasselblad MK70 and MKW photogrammetric cameras were designed for close-range photogrammetry. But the MK70 has also proved to be very useful for low altitude aerial photogrammetry. The external shape of these cameras and their mechanical components have much in common with the standard 500ELX, 500EL/M and SWC/M respectively. However, the internal designs of the camera bodies differ considerably. One major difference is the presence of a Réseau plate in the photogrammetric camera in front of the film plane. The surface of this glass plate, whose optical quality is equal to that of lens elements, has a pattern of hairline crosses which are reproduced on the film as reference points. Each photogrammetric camera and special lens is supplied with a calibration report containing an exact definition of the camera's internal geometry, the location of the crosses on the plate, and the lens distortion. Special film magazines and a number of other accessories are available for the photogrammetric camera.

61018 MK70 camera body

Motorized in the same way as the Hasselblad 500ELX and 500EL/M. It is used with the 60mm Biogon or 100mm Planar MK lenses. (See below.)

62015 Zeiss Planar CF f/3.5 100 mm MK

In principle, this is the same lens as the regular Zeiss Planar CF 100 mm f/3.5 with its exceptionally low distortion, but corrected for use in conjunction with a Réseau plate.

62023 Zeiss Biogon CF f/5.6 60 mm MK

A symmetrical lens of exceptionally high performance. Especially designed for the MK70.

61027 MKW wide-angle photogrammetric camera

The permanently attached lens is the highly corrected 38mm f/4.5 Zeiss Biogon CF lens with a 90° angle of view. This makes the camera ideal for architectural and archeological applications, etc.

61035 MKW/E motorized wide-angle photogrammetric camera

This camera has the same camera body and excellent 38mm f/4.5 Zeiss Biogon lens as the MKW but is motorized like the MK70 for remote control and sequential shooting.

63002 Film magazine MK70/70

In principle, this is the same magazine as the regular magazine 70 (see p. 11), but modified for the photogrammetric camera's stronger magazine locking mechanism.

63029 Film magazine MK70/200

In principle, this is the same magazine as the regular magazine (see p. 11), but modified in the same way as the MK70/70 magazine.

65021 Viewfinder MK70

An optical viewfinder for the MK70 with the same angular field as the 60mm Biogon. This viewfinder or the focusing screen adapter 64017 are required since the MK70 camera body does not have a mirror reflex viewing system.

65048 Viewfinder mask 100 for MK70 viewfinder

Used in conjunction with the optical viewfinder 65021 to show a field equivalent to that of the 100mm Planar.

64017 Focusing screen adapter MK

For the MK70 and MKW. It replaces the magazine when exact focusing is desired.

64033 Spirit level MK

Attached with the aid of a built-in magnet on the photogrammetric camera's accurately adjusted accessory plate.

64068 Quick-coupling MK

For fast and solid camera attachment with good position repeatability.

64041 Case MK

An aluminum case with special fittings to accommodate a complete MK70 rig.

68316 SB 40/120 Universal stereo base bar

A base bar made of composite material (Kevlar/glass fiber laminated epoxy) for photogrammetric applications. It is light-weight, extremely rigid with minimal longitudinal alteration within a temperature range from -20° to +50°C (-4° to +122°F). The bar has four camera holders spaced at 16 in (40 cm) central distance intervals providing three alternative base distances: 16, 32, 64 in (40, 80 and 120 cm).

Parallelism between the camera holders lies within $\pm 4^\circ$ (± 0.6 mr). Common ω adjustable 0-400°.

68318 SB 120 Fixed stereo base bar

The same as the SB40/120 but with only a 64 in (120 cm) base distance. Fixed ω .

68319 SB 40 Fixed stereo base bar

The same as the the SB 120 but with a 16 in (40 cm) base distance.

Data recording system for data recording magazine DM-100/200

A further development of the data recording system based upon earlier designs produced through a joint development project involving Victor Hasselblad AB, NASA, and the U.S. Air Force.

The system allows for data recording of up to 32 alpha-numerical figures on the edge of the film.

Recording can take place in three different modes: Mode 1: 6 figures for date information, 6 figures for time notation, 14 figures for personal information and 3 figures for the exposure number (e.g., 841017 154305 HASSELBLAD --- 009).

Mode 2: 28 figures for personal information, 3 figures for the exposure number (e.g., HASSELBLAD DATA RECORDING SYS 475).

Mode 3: 32 figures for personal information (e.g., HASSELBLAD DATA RECORDING SYSTEM).

The system hardware consists of three parts: standard data recording magazine DM-100/200 (30236, page 11), an electronic module DE-32, and a programming unit DA-1 adapter for a Epson HX 20 personal computer.



The data recording magazine DM-100/200 is equipped with optics and display functions for data recording and a sensor for film advance.

64076 DE-32 Electronic module contains the electronics for determining the date and time, exposure number, figure selection and the exposure of figures in connection with film advance. The time, date and exposure number are up-dated automatically.

64084 DA-1 Adapter matches the DE-32 with the Epson HX 20 that is used for programming in the system. The DA-1 includes software for programming the Mode, Date, Time, Text, and Exposure Number.

The DE-32 is normally connected to the DA-1/HX 20 during programming and to the data recording magazine DM-100/200 while making exposures. Nevertheless, an alternative is available that allows for permanent connection of the DE-32 to the DA-1/HX 20. The data recording magazine DM-100/200 is then connected via a relay cord.

SURVEILLANCE

The primary purpose for installing a surveillance camera is its ability to provide positive identification of suspects. It can also be used to record instrument readouts or check the condition of unmanned machinery. In these situations, Hasselblad's optical precision and large image size guarantee superb pictures.

A typical surveillance system could consist of one or two Hasselblad 500ELX or 500EL/M cameras mounted in individually protected, sound-proof housings; an electronic control unit, and a slave unit for the second camera.

The central unit is connected to the alarm system being used, for example a robbery alarm in a bank or a burglar alarm. Different alarm signals can initiate different exposure programs, e.g. a three-shot sequence on each occasion or continuous exposures. Should the cable to a camera be cut, then it would automatically start taking pictures until no film was left. Magazines with a capacity of up to 100 exposures can be used.

65056 Sound-proof enclosure

Includes a mounting rack and ball-and-socket joint for rotation in any desired direction. The left side of the enclosure can be opened fully for maximum accessibility. The lid is locked with a key.

65064 Central unit

The cameras are triggered with this unit which is connected to the alarm system. Two inputs for the two different exposure programs. A warning signal lights when there is a camera malfunction or whenever the alarm is triggered.

65072 Slave unit

Accessory electronics required when a second camera is connected to the central unit.

PATIENT DOCUMENTATION

The $2\frac{1}{4} \times 2\frac{1}{4}$ format is ideal for pictorial documentation in medical records. The picture is big enough for direct observation but does not take up too much storage space. The Hasselblad Padoc system is intended for this application. Hasselblad's Padoc sheets have six pre-punched windows that are opened with light finger pressure. The opening in the front side of the sheet measures $2\frac{1}{8} \times 2\frac{1}{8}$ in (54×54 mm). The opening in the back of the sheet (the protective cover) is $2\frac{7}{16} \times 2\frac{7}{16}$ in (62×62 mm). This exposes an adhesive frame 4 mm wide, on the back, onto which the picture can be attached. The sheet has a pre-printed text facilitating the entry of patient data, phototechnical information, and data on the lighting used.

Each sheet measures $7\frac{7}{8} \times 11\frac{1}{2}$ in (201×292 mm), i.e. somewhat less than the standard European A4 format ($8\frac{1}{4} \times 11\frac{3}{4}$ in=210×297 mm). Each sheet can easily be put into an A4 plastic file.

68004 Padoc sheet as above

Supplied in 250-sheet packages.

68012 Padoc sheet, blank

Format and use as above, but without any pre-printed text.

SPECIAL ORDERS

A few examples of the products developed as the result of direct contacts between customer and factory are listed below, just to give you some idea of the range of special services Victor Hasselblad AB can offer.

The MK70 built into the wall of a vacuum chamber¹⁾

ESTEC (the European Space Research and Technology Center) in Holland built a large vac-

uum chamber to study the physical changes in objects destined for space. These changes were to be measured photogrammetrically, and for this purpose, ESTEC and Victor Hasselblad AB collaborated in the construction of mountings for two MK70 cameras and special-glass windows which were built into the walls of the vacuum chamber. A specially designed device was also included for taking Polaroid test shots.

Motorized SWC²⁾

Not available in stock but can be made on order. It has the same camera body as the SWC/M and is equipped for motorized operation like the 500ELX or 500EL/M. Note that the magazine 100 for Polaroid film cannot be used.

Space probe equipment³⁾

A modified Hasselblad 500EL/M with a film magazine 70/100–200 was delivered to the Smithsonian Institution in Cambridge, Mass. in the U.S. The equipment will be used with a specially designed lens and launched into space to an orbit approx. 200 miles above the earth in a Black Brant rocket to photograph soft X-ray emissions. The camera has been reinforced in order to handle vibrations of ± 30 g and 60 g shocks.

Special film magazine⁴⁾

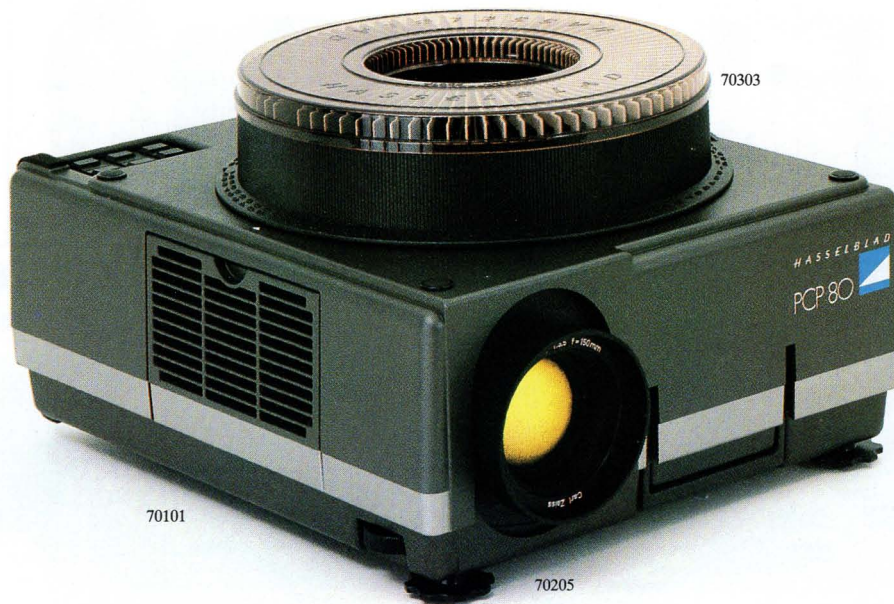
Several different modifications have been made on Hasselblad film magazines for type 120, 220, 70 mm and 35 mm film.

Double handgrip⁵⁾

This handgrip is specially designed for use in conjunction with long focal lengths like the 350mm Tele-Tessar C and CF f/5.6, the 500mm Tele-Tessar C f/8, the 500mm Tele-Apottessar CF f/8, and the 140–280mm Variogon C f/5.6. The handgrip can be used in conjunction with a 150mm Sonnar f/4 when the front support is removed and the forward grip is shifted.

Re. sales and service on **HASSELBLAD UNDERWATER** equipment, housings for the 500EL/M and underwater photogrammetry we refer to:

CALMARINE AB
Mårdväg, 26,
S-433 70 Partille, Sweden
Telephone: Int +46-31-2657 90
Telex: 20120 FOTEX S, Attn: CALMARINE



70101

70303

70205

The Hasselblad PCP80 Projector

The Hasselblad PCP80 is a slide projector for the 2 1/4 x 2 1/4 format. Built-in perspective control, superb Zeiss lenses, a rotary slide magazine, and a number of other features make the PCP80 one of the most advanced projectors ever built. This professional projector is designed for both large and small slide shows. Its innovative electronics tailor it to the demands of today and prepare it for future developments in the field of control equipment. The designation "PCP80" stands for Hasselblad Perspective Control Projector for 80-slide trays.

Perspective control

Images projected by a projector that is tilted backward are wedge-shaped on the screen, i.e. they taper off towards the bottom. The opposite occurs when the projector is tilted forward. The screen and slide must be parallel to one another for rectilinear projection. Tilting a projector upwards or downwards produces images with a keystone effect. To produce keystone-free images, the screen and slide must be parallel to one another.

With the Hasselblad PCP80 it is possible to shift the lens in a parallel fashion upwards or downwards, raising or lowering the screen image without altering its keystone-free form. As a result, a square slide image always remains square on the screen. Because the lamp and condenser system can be shifted simultaneously to a correct position in relation to the lens, the screen image can be shifted without reducing illumination.

Lens and condenser

Pictures taken with Zeiss lenses should be projected with Zeiss lenses. Lenses for the PCP80 projector have been designed and manufactured in the same exacting way as the camera lenses and also feature anti-reflection coating. The projector lens is only one component in the projector's optical system. The light rays emitted by the lamp and reflector pass through the slide via the condenser system and continue on through the lens to form an image on the screen. The specifications of every component in this system must be just right and manufacturing and assembly must be flawless to enable the superlative Zeiss lenses to deliver a sharp, evenly illuminated image on the screen.

The optical system in the PCP80 is uncompromising and specially tailored to each lens. So each lens has its own matched condenser lens which is replaced whenever the lens is replaced.

Automatic lamp replacement

The projector has two lamps (one primary, one auxiliary). Whenever the primary lamp burns out, the auxiliary lamp is automatically switched on within a fraction of a second. A warning lamp on the projector's control panel indicates when a lamp has burned out.

Outstanding light output

The highly efficient optical system delivers outstanding brightness and extremely uniform corner-to-corner illumination. Positioning the lamp (and the filament) in relation to the spherical mirror is easily accomplished from the outside of the projector.

A uniquely angled condenser system with dichroic mirrors makes it unnecessary to use a light-stealing heat absorption filter on the PCP80.

Since each projector lens has its own matched condenser lens, the light can be utilized optimally without compromises.

Unparalleled reliability

The Hasselblad PCP80 has a double fuse system. One fuse is triggered if the main transformer overheats, e.g. because of excess voltage. The other fuse system monitors the temperature near the transparency and switches off the projector lamp long before there is any risk of heat damage to the slide.

Separate, quiet motors for slide advance, fan operation, and focusing result in an uncompromising drive system and unparalleled reliability. The slide changing mechanism operates gently by means of gravity. A mechanical safeguard is triggered instantly if an improperly mounted slide jams during a change. If the jam lasts more than a few seconds, the power to the motor, one task of which is to return the slide to the magazine, is cut off. The cooling fan, driven by its own separate motor, keeps operating the whole time.

The cooling system is based on the use of pressurized, filtered air. The fan operates at a remarkably low noise level. Air is drawn in through an efficient filter and then distributed at hyperbaric pressure to all parts of the projector. If the filter is kept clean, no dust will accumulate in the projector. Maintaining a clean filter will keep dust, which has a harmful effect on the projector mechanism and optical system, from accumulating in the projector.

Rotary slide magazine

The PCP80 projector utilizes a rotary slide magazine, a prerequisite for professional projection systems. This is the only type of magazine acceptable for professional applications. It is equally efficient for conventional shows and for continuous projection using one or more timer-controlled projectors, as for advanced multivision shows.

The slide magazine can be detached at any time, irrespective of its position, and without being reset. The slides are protected by a transparent plastic lid which is locked in position with a bayonet mount. The magazine has a patented device making it impossible for a slide to fall out of a detached magazine. The patented lock opens only when a magazine is attached to the projector and is automatically locked when the magazine is detached. The magazine cannot be detached when there is a slide in the slide gate. This safeguard makes it impossible to leave a slide in the gate and prevents slide collisions when a new tray is attached.

Control systems

The Hasselblad PCP80 is equipped with three different outlets and offers the greatest amount of freedom with regard to choice of control systems. One outlet is the ordinary 6-pole connector found on most projectors. Functions such as forward and reverse slide changes and focusing can be operated via this outlet. The Hasselblad remote cable control unit (70507) can be plugged into this outlet. The lamp can be controlled via signals without the use of external TRIAC through the 8-pole outlet. The third outlet is for a standard 12 pin AV contact and the lamp can be controlled with the use of external TRIAC. A connector is provided as an accessory for connecting the most common control systems developed for other types of projectors.



MULTIVISION—MULTIPROJECTOR SLIDE SHOWS

The Hasselblad PCP80 was designed for use in advanced multiprojector set-ups.

Perspective control makes for perfect frame alignment in dissolves. Since the transparency's geometry—square or rectangular—is reproduced unchanged on the screen, there are no gaps or overlapping images.

Hasselblad registration slide mounts with guide pins make it possible to obtain extremely exact slide mounting.

The automatic lamp replacement capability now found in the Hasselblad PCP80 has long been an understandable feature desired by multivision producers. One of many safeguards in the PCP80 is an indicator showing which of the two lamps is in operation. This indication can also be displayed on a central control panel.

Hasselblad PCP80 projector, delivered as separate components: Projector body, lenses, rotary slide magazine, and other accessories.

70101 Hasselblad PCP80 projector body, with a power cord but without a lens or rotary slide magazine. Supplied with front protective cover PCP80 70532. Weight: 30 lb 15 oz (14 kg).

70205 Zeiss P-Planar f/3.5 150mm projector lens
Normal projector lens with a matching condenser lens. Supplied with front lens cap 75/150 (70526). Allows for full utilization of perspective control.

70214 Zeiss P-Distagon f/3.5 75mm projector lens
Lens for shorter projector distances. Supplied with a matching condenser lens and front lens cap 75/150 (70526). Allows for limited utilization of perspective control.

70210 Zeiss P-Sonnar f/4 250mm projector lens
Lens for long projection distances. Supplied with a matching condenser lens and front lens cap Ø 93–100 (51654). Allows full utilization of perspective control.

70303 PCP80 Rotary slide magazine
For 80 transparencies in $2\frac{3}{4} \times 2\frac{3}{4}$ (70×70mm) mounts. Supplied in a specially designed box which can be used to store filled magazines. Labels included.

Accessories:

70507 Remote cable control unit
Focusing and forward/reverse slide changes are cable-operated with this unit. Cable length: 13 ft (4 m).

70523 12-pin AV-connector
For adapting certain control systems to the Hasselblad PCP80 projector. Replaces the lid at the rear of the projector.

70524 12-pin AV-connector/adaptor AA
For adapting control systems that cannot use the 70523 12-pin AV-connector. Replaces the lid at the rear of the projector.

70525 7-pin AV-connector/adaptor AA
Standard American AV-connector.

70517 Projector rack, basic unit
For two projector set-ups, e.g. for shows with slide dissolves.

70518 Supplementary unit for projector rack
When combined with the basic projector rack, this unit allows several projectors to be stacked on top of each other.

70511 Hasselblad registration slide mounts
Slide mounts with special guide pins to simplify perfect image registration in multivision programs. Box of 40 mounts.

70520 Alignment slide
For precise adjustment of the projectors in a multiprojector set-up.

70535 Projector case PCP80
A rugged plywood frame with aluminum edging and steel reinforcements at the corners. The foam plastic interior holds the PCP80 projector body. Dimensions: Approx. 17×20×11 in (430×510×285 mm).

70526 Front lens cap 75/150
Protects the front lens element of the 75mm P-Distagon and 150mm P-Planar lenses. Supplied with the lens.

51654 Front lens cap Ø 93–100
Protects the front lens element of the 250 mm P-Sonnar. Supplied with the lens.

70532 Front protective cover PCP80
To protect the projector when no lens is attached. Supplied with the projector body.

70538 Power cord
Approx. 8 ft long (2.5 m). Supplied with the projector body.

70541 Air filter
Supplied with the projector body.



Hasselblad Original Cases and Straps

An assortment of soft, easily-accessible camera cases; cases that can be carried by hand or on your shoulder and large trunk-type cases. All the cases have been specially designed for Hasselblad cameras and accessories and carefully hand-made from materials of the highest quality.

CASES

58211 Camera case 506

A soft protective case for the Hasselblad 500C/M, 2000FCW and 2000FC/M, made of durable black leather and provided with a zipper.

The camera is conveniently carried by the camera strap and can quickly be prepared for shooting. The camera can be combined with different lenses and lens shades, e.g. a camera with a standard lens and lens shade, or CF and C lenses in focal lengths from 50 to 150 mm and the 110mm or 150mm F lenses without a lens shade.

Dimensions (L×W×H): approx. 9½×4¼×4½ in (240×110×115 mm).

58238 Camera case 507

Of the same type as case 506, although somewhat shorter but higher (no room for lens shades on CF lenses). Can hold a camera with a prism viewfinder or a meter prism finder. Can also be used as a protective case for the Hasselblad 500ELX and 500EL/M.

Dimensions (L×W×H): approx. 9×4¾×6 in (225×120×150 mm).

58025 Camera case 503

Of the same type as cases 506/507. Primarily intended for the Hasselblad SWC/M but can also be used for the 500C/M, 2000FCW and 2000FC/M with a standard lens.

Dimensions (L×W×H): approx. 7½×4×5 in (190×100×130 mm).

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: approx. 15¼×11½×5¼ in (390×290×135 mm).

Internal dimensions: approx. 14¼×9×4½ in (360×230×115 mm).

58394 Case 530

Soft shoulder bag made of leather. Holds medium-sized Hasselblad equipment. Flexible internal arrangement with movable partitions and protection for lenses. Supplied with two spacious pockets on the outside of the case and one on the inside of the lid. The case has a hip strap and a carrying strap.

Dimensions: approx. 14½×7¾×9¾ in (370×200×250 mm).

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 Hasselblad 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 rubber gasket around the opening provides a weathertight seal and protects the case contents against dust and rain. Ideal for desert and tropical climates. Weight: 10 lb 13 oz (4.9 kg).

External dimensions: approx. 18×15¼×7 in (455×390×180 mm).

Internal dimensions: approx. 16¼×12½×6 in (410×320×150 mm).

LENS POUCHES

Protective bags made of leather-soft material. The lens type can be written on a special bag label. Will be supplied with the majority of lenses in 1985.

58408 Lens pouch 1

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

58416 Lens pouch 2

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

58424 Lens pouch 3

For 250mm CF/C and F lenses.

58432 Lens pouch 4

For 40mm CF and 50mm F lenses.

STRAPS

46140 Carrying strap

A short, black leather strap with a rubber insert to be attached to the camera's strap buttons. Comes with the 500ELX and 500EL/M camera bodies. Length: 13 in (325 mm)

49018 Neck strap

A long, adjustable black leather strap to be attached to the camera's strap buttons. Comes with the 500C/M, 2000FCW, 2000FC/M, and SWC/M camera bodies. Length: approx. max 53 in, min 29 in (1350/750 mm).

59080 Wide camera strap

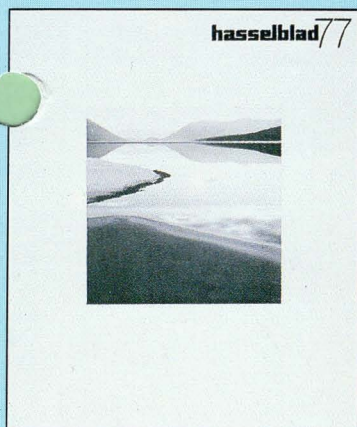
A long, adjustable 1½ in wide strap made of black polyester. The strap's underside has woven-in rubber fibers to prevent it from slipping off. Length: approx. max 59 in, min 35 in (1500/890 mm).

59099 Contoured shoulder strap

A contoured camera strap shaped for a comfortable, well-balanced grip. Width: approx. 1¼ in (30 mm). Length: approx. max 50 in, min 38 in (1280/980 mm).

Victor Hasselblad Aktiebolag reserves the right to make changes in or cease production of products in this catalog without prior notice.

Hasselblad Forum



The Hasselblad Forum is a magazine for Hasselblad photographers all over the world. It is published in four languages: Swedish, English, German, and French. In it, you will find the best work of leading photographers in full-page color and black and white. You will also find news of the

latest developments in the Hasselblad system, technical information, and tips from other Hasselblad owners. Altogether, 36 feature-packed pages four times a year—in your mailbox! A year's subscription costs Swedish Kronor 90 (or the equivalent in your own currency). Just fill in the coupon

and send it, together with payment, to the Hasselblad distributor in your country. You will find the address on the back of the coupon sheet opposite.

Hasselblad Boutique



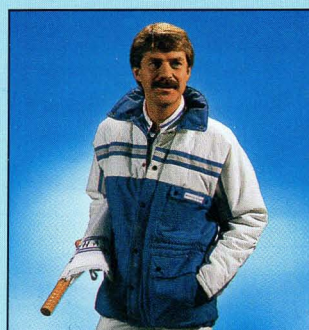
Body Warmer

A thick, Dacron-quilted vest in 65 % cotton and 35 % polyester. Waterproof and machine-washable.



T-shirt

Soft and roomy T-shirt of the newest cut. All in cotton with a round neck.



Sports Jacket

Of 65 % cotton and 35 % polyester. Filled with warm Dacron quilting. Waterproof and machine-washable.



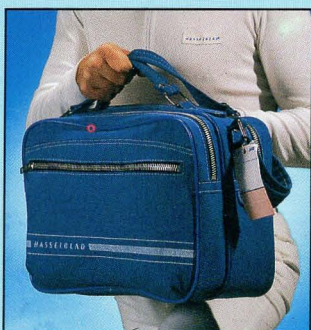
Windbreaker

Of 65 % cotton and 35 % polyester. A lightweight jacket with hood and high collar. Waterproof and machine-washable.



Crystal Camera

An exclusive model of the Hasselblad 500C/M camera in Swedish crystal. Life-size. Serial-numbered.



Flight Bag

A roomy bag of cotton and rayon with two large compartments and an outer pocket. With handle and adjustable shoulder-strap.



Umbrella

A generous-sized umbrella of sturdy metal construction. All nylon weave and with a firm handgrip.



Tie and Scarf

Elegant accessories of pure silk, in Hasselblad's special range of colors.

The Hasselblad Boutique also offers other practical and comfortable items of leisure-wear, such as sweaters, sports shirts, and shorts. The design combines white and blue with decorative detailing in gray. The collection was created exclusively for Hasselblad by designer Lars Westin and Craft of Sweden.

Besides clothing, the Boutique offers crystal, space photographs, pens, key-holders, etc.—all in the elegant Hasselblad design. Request our four-color, 16-page brochure "Hasselblad Boutique" from the Hasselblad distributor in your country or direct from

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

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

With the compliments of:

Exclusive U.S. distributor:
VICTOR HASSELBLAD INC.
10 Madison Road
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