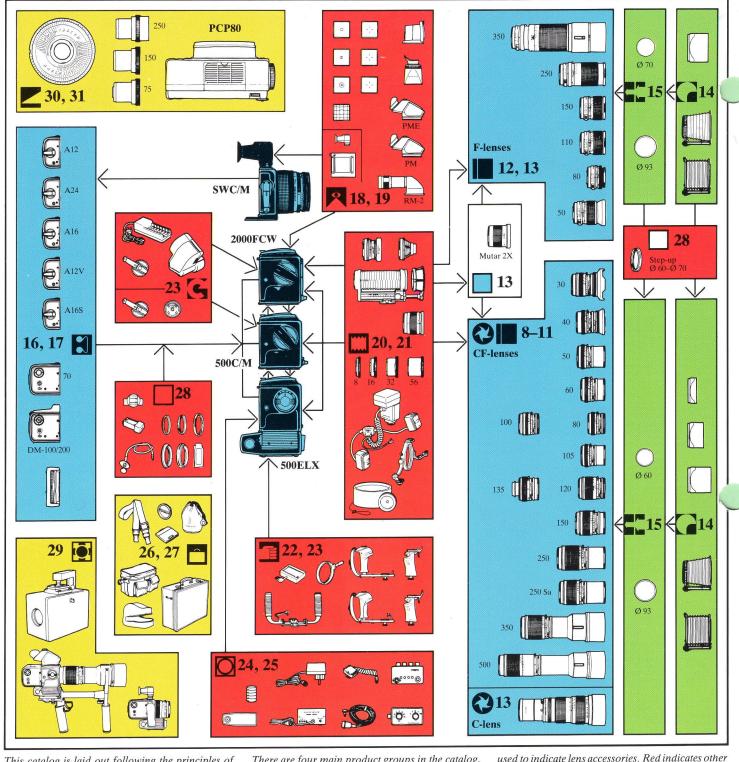
HASSELBLAD®





This catalog is laid out following the principles of the Hasselblad system itself. The schematic system overview above, provides a complete picture of how the various camera bodies, lenses and accessories relate to each other.

There are four main product groups in the catalog, each identified by a color, which are then subdivided, with each sub-group assigned a unique symbol. Accessories coded blue can be used to put together a complete Hasselblad camera. Green is

14

22, 23

used to indicate lens accessories. Red indicates other interchangeable accessories. Yellow is for special products within the system. A complete Table of



Lens shades Original Hasselblad filters Film magazines

Viewfinders and focusing screens Close-up and copying

accessories Grips and holders Contents can be found on the flap opposite this page. Winding accessories 23

Special accessories for 15 24, 25 the 500ELX Original Hasselblad cases,

16, 17 Straps and Protective covers 26, 27 28 Miscellaneous accessories 18, 19

29 Special applications 20, 21

Projector and accessories 30, 31

The Hasselblad System

Hasselblad is one of the world's most respected and admired cameras. And it has been that way for nearly forty years.

But Hasselblad is more than that. It's actually four different cameras that share the big format and high picture quality. But each of them has its own special characteristics, suited to different work and environments. Hasselblad is also a professional projector. Built to show big transparencies on screen with the same crispness and clarity of the original image. But Hasselblad is still more. It's a complete system for all photography that has high demands on picture quality and results.

It's also a system under continuous development. Today it has over 300 components and accessories, most of which are compatible with all the cameras, whatever model—even if it is ten or twenty years old.

All this means that a Hasselblad will never become obsolete. Adding to an original camera with new accessories allows a Hasselblad owner the freedom of matching his camera equipment to his ambitions, expertise and needs as a photographer. The system grows with you, not away from you.

In this catalog you will find several good examples of Hasselblad system developments. And a great deal more.

The new **Bright-matte Focusing Screen** increases the sharpness of the image in the viewfinder. (page 19)

The new, longer **Reflex Viewfinder** makes it easier to use the practical Film Magazine 70. (page 18)

A new Viewfinder for the Hasselblad SWC/M with a built-in spirit level. (pages 7 and 19)

The new Quick-focusing handle for CF lenses makes them even faster to focus. (page 23)

There is a new, **Professional lens shade Ø 93** with a holder for several gelatin filters. (page 14)

The new, soft equipment **Case** is made of strong, waterproof cloth and has double outside pockets. (page 26)

Everything is designed to make the photographer's work simpler, quicker and surer.

Enjoy reading the catalog. Make out a list of what you need to complete your own outfit. Think about the exciting possibilities twenty-one high-quality lenses from Carl Zeiss give your photography. Or how a film magazine for 70 pictures could change how you work. The directions are endless.

Be sure to save the catalog. Then, when you need to do a job in a new and exciting way, you will know where the equipment can be found.

For further information please contact our distributor in your country (see list at the end of this catalog), or write directly to

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

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Hasselblad 2000FCW

The Hasselblad 2000FCW is the most advanced camera in the Hasselblad system.

A 2'/₄×2'/₄ single-lens reflex camera. Its electronically controlled focal plane shutter with speeds up to 1/2000 s makes it the fastest medium-format camera in the world. The camera can be equipped with a winder which provides automatic film advance and shutter cocking. This feature is signified by a W in the camera's designation.

The winder, which is mounted in place of the removable rapid-winding crank, has a powerful motor that provides fast, distinct starts and smooth advance and cocking. (The Hasselblad winder is described in greater detail on

page 23.)

When using the 2000FCW, the photographer can choose between the fast F lenses that utilize the camera's focal plane shutter (synchronized for flash up to 1/90 s) or the CF and C lenses with built-in leaf shutters (synchronized for flash up to 1/500 s).

The CF and C lenses can be used either with the focal-plane shutter in the camera body or the lenses' integral leaf shutter. When the lens leaf shutters are used, the 2000FCW operates mechanically, entirely independent of the battery in the camera. The battery is only used to power the camera body's focal plane shutter. There is a safety feature which protects the focal plane shutter from mechanical damage when changing the film magazine. The camera's large mirror is entirely non-vignetting. Three mirror operation programs give the options of: mirror return when the camera is cocked, instant return after an exposure and locked in the up position. The film advance mechanism can be disengaged for multiple ex-

The camera body, interchangeable lenses and film magazines are sold as separate compo-

nents.

The Hasselblad 2000FCW camera body can be equipped with a winder and accepts interchangeable viewfinders and focusing screens. A pre-release latch and an accessory rail for using accessories like the sports viewfinder or 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 CAMERA BODY

The camera body is available with chrome or black trim and is supplied without a lens or a film magazine. Weight: 1 lb 11 oz. (730 g).

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

44075 Rapid-winding crank 2000FCW

42315 Standard focusing hood, chrome

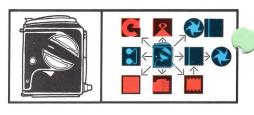
42161 Standard focusing screen

49018 Neck strap

51438 Front protective cover

51063 Rear protective cover

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

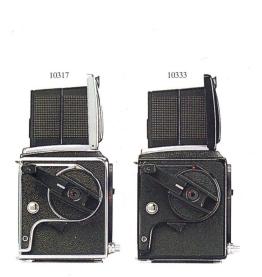


Put together a Hasselblad 2000FCW camera to suit your photographic requirements. The camera accepts the following lenses, film magazines, and other accessories. These items are described in further detail elsewhere in this catalog under their respective headings and symbols.

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





CF LENSES

0177 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

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

Teleconverter

20303 Mutar 2X Teleconverter

C LENSES

20214 140–280mm Variogon C f/5.6 (The 2000FCW is also compatible with the earlier C lens series.)

FILM MAGAZINES

30074 Film magazine A12 (chrome) 30147 Film magazine A12 (black) 30104 Film magazine A24 (chrome)

30171 Film magazine A24 (black) 30082 Film magazine A16 (chrome)

30155 Film magazine A16 (black)

30106 Film magazine A12V (chrome) 30180 Film magazine A12V (black)

30090 Film magazine A12 v (black) 30090 Film magazine A16S (chrome) 30163 Film magazine A16S (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

52183 Reflex viewfinder RM-2

52094 Magnifying hood 43028 Sports viewfinder

42226 Bright-matte focusing screen

42188 Focusing screen with split-image rangefinder

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

GRIPS AND SUPPORTS

45071 Flashgun bracket for 500C/M and 2000FCW

45047 Pistol grip for 500C/M and 2000FCW

45129 Tripod quick-coupling

40735 Quick-focusing handle 1/CF 40-80

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

40169 Microscope shutter

40045 Microscope adapter

S WINDING ACCESSORY

44067 Winder 2000FCW (see page 23)

CASES AND STRAPS

46140 Carrying strap

59080 Wide camera strap

59099 Contoured shoulder strap Camera and equipment cases

MISCELLANEOUS ACCESSORIES

51694 Cable release

43125 Adjustable flash-shoe

43117 Spirit level

43176 Shutter speed multiplier for 2000FCW



Hasselblad 2000FCW camera with optional motorized winder, meter prism finder PME and fast 110 mm Planar F f/2 lens The **Hasselblad 500ELX** is a $2^{1}/_{4} \times 2^{1}/_{4}$ singlelens reflex camera. Its built-in motor advances the film automatically and cocks the shutter to make it possible to take rapid picture sequences.

The flash sensor system automatically controls the flash light by measuring the light reflected from the film plane. Correct flash discharge time is automatically determined by setting the film speed knob, and by the aperture opening and existing light. Hasselblad adaptors are available for the SCA 300 and SCA 500 systems.

Because the 500ELX uses CF and C lenses with flash synchronization at shutter speeds up to 1/500 s, it is possible to balance flash light against existing light on a very broad scale. The sensor's range extends from ISO 16 to ISO 1000.

The sensor system includes a control function inside the camera's viewfinder. A glowing light under the left edge of the focusing screen indicates that the flash is ready to be fired. After an exposure has been made, a blinking signal shows that the correct amount of light has been discharged.

The mirror in the 500ELX is different from the earlier 500EL/M model in that it is entirely non-vignetting, even for lenses with long focal lengths

The built-in motor makes remote control possible, using one of the various types of release cords. The camera is recocked immediately after each exposure and ready for the next picture.

The camera body, interchangeable lenses and film magazine are sold as separate components.

The Hasselblad 500ELX camera body has interchangeable viewfinders and focusing screens. There is an accessory rail and release sockets for attachment of special accessories on the camera body. The motor is powered by one or two rechargeable batteries, each of which is sufficient for about 1,000 exposures. A battery and recharger are included. A tripod plate with a ³/₈" tripod thread facilitates attachment of the camera to a tripod.

HASSELBLAD 500ELX CAMERA BODY

The camera body is available with chrome or black trim and is supplied without a lens or film magazine. Weight (including battery): 2 lb 10 oz (1200 g).

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

42315 Standard focusing hood, chrome

42161 Standard focusing screen

56022 Recharge unit I

56081 Battery (1)

51438 Front protective cover

51063 Rear protective cover

46140 Carrying strap

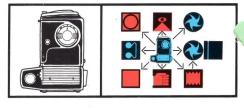
56111 Fuses (2)

46159 Key disc

46175 Socket cap

46345 Release plate

46043 Release cord FK 30



Put together a Hasselblad 500ELX camera 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

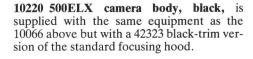
20061 150mm Sonnar CF f/4

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









Teleconverter

9303 Mutar 2X Teleconverter

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CLENSES

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

FILM MAGAZINES

30074 Film magazine A12 (chrome) 30147 Film magazine A12 (black) 30104 Film magazine A24 (chrome) 30171 Film magazine A24 (black) 30082 Film magazine A16 (chrome)

30155 Film magazine A16 (black) 30106 Film magazine A12V (chrome) 30180 Film magazine A12V (black)

30090 Film magazine A16S (chrome) 30163 Film magazine A16S (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

52183 Reflex viewfinder RM-2

52094 Magnifying hood 43028 Sports viewfinder

42226 Bright-matte focusing screen

42188 Focusing screen with split-image rangefinder

42218 Focusing screen with central grid and split-image rangefinder

42250 Checked focusing screen with central

42285 Fine-line focusing screen

42200 Plain glass screen

GRIPS AND SUPPORTS

46329 Flashgun bracket for 500ELX

46221 Pistol grip for 500ELX

46132 Double handgrip for 500ELX

45129 Tripod quick-coupling

40735 Quick-focusing handle 1/CF 40-80

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

40169 Microscope shutter

40045 Microscope adapter

SPECIAL ACCESSORIES FOR THE 500ELX

51681 Flash adapter SCA390

51683 Flash adapter SCA590

46337 Battery compartment 3

46302/46310 Power supply unit

46272 Intervalometer III

56138 Command unit Connecting cords Release cords

CASES AND STRAPS

59080 Wide camera strap

59099 Contoured shoulder strap Camera and equipment cases

MISCELLANEOUS ACCESSORIES

43125 Adjustable flash-shoe

43117 Spirit level



The Hasselblad 500C/M is the basic camera in the Hasselblad system. It is a manual, $2^1/_4 \times 2^1/_4$ single-lens reflex camera of unique mechanical design. Thanks to its rugged reliability, the 500C/M has become a classic among professionals and amateurs alike.

The camera body, interchangeable lenses and film magazines are sold as separate components.

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 using such accessories as the sports viewfinder or a spirit level. A tripod plate with a 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 is 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

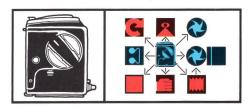
42161 Standard focusing screen

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 camera 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

The 500C/M is compatible with the same CF lenses as the 2000FCW and the 500ELX (For descriptions see pages 3 or 5).

C LENSES

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

FILM MAGAZINES

The 500C/M is compatible with the same film magazines as the 2000FCW, the 500ELX and the SWC/M (For descriptions see pages 3, 5 or 7).

VIEWFINDERS AND FOCUSING SCREENS

The 500C/M is compatible with the same viewfinders and focusing screens as the 2000FCW and the 500ELX (For descriptions see pages 3 or 5).

GRIPS AND SUPPORTS

45071 Flashgun bracket for 500C/M and 2000FCW

45047 Pistol grip for 500C/M and 2000FCW

45129 Tripod quick- coupling

40735 Quick-focusing handle 1/CF 40-80

CLOSE-UP AND COPYING ACCESSORIES

The 500C/M is compatible with the same close-up and copying accessories as the 2000FCW and the 500ELX (For descriptions see pages 3 or 5).

S WINDING ACCESSORY

54011 Knob with exposure meter

CASES AND STRAPS

46140 Carrying strap

59080 Wide camera strap

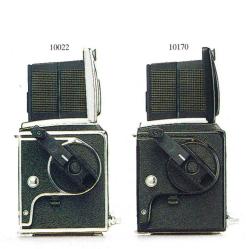
59099 Contoured shoulder strap Camera and equipment cases

MISCELLANEOUS ACCESSORIES

51694 Cable release

43125 Adjustable flash-shoe

43117 Spirit level





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

The uncompromising design of the 38 mm f/4.5 Zeiss Biogon CF lens yields a 90° diagonal angle of view with a minimum of distortion. The lens has been equipped with comfortable grip rings, a focusing scale in both feet and meters, and independently operating shutter speed and aperture rings that can be cross-coupled to give all possible exposure and lens aperture combinations at the same exposure value (EV). The lens has the same \emptyset 60 accessory mount as most of the other CF

A new viewfinder with built-in spirit level has made using the SWC/M even simpler. Both the focusing scale and the spirit level can be read in the viewfinder without looking away from the subject.

The components of an SWC/M camera are: the camera body with permanently attached lens and a viewfinder, together with interchangeable film magazines which are sold separately.

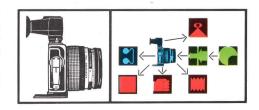
The Hasselblad SWC/M camera body with permanently attached lens has an optical viewfinder with a spirit level, a shutter release on top of the camera body, and a crank for film advance and shutter cocking. A tripod plate with a 3/8" tripod thread facilitates ttachment of the camera to a tripod.

Zeiss 38 mm Biogon CF f/4.5 T*

Max. aperture Focal length Diaphragm f/4.5-22 90° Angle of view, diagonal horizontal 72°

No. of elements

 $11^{3}/_{4}''(0.3 \text{ m})-\infty$ Focusing range



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).

10051 SWC/M camera body, chrome, is supplied with the following equipment:

52036 Viewfinder SWC/M

49018 Neck strap

51643 Front lens cap Ø 60

51063 Rear protective cover

10199 SWC/M camera body, black, is supplied with the same equipment as the 10051 above.

Put together a Hasselblad SWC/M camera 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)

30104 Film magazine A24 (chrome)

30171 Film magazine A24 (black)

30082 Film magazine A16 (chrome)

30155 Film magazine A16 (black)

30106 Film magazine A12V (chrome)

30180 Film magazine A12V (black)

30090 Film magazine A16S (chrome)

30163 Film magazine A16S (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

45129 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

51694 Cable release





CF Normal Lenses



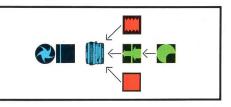
The normal 80mm focal length, i.e. the f/2.8 Planar, is the lens usually selected as basic equipment, but the Hasselblad photographer has a choice of 15 different focal lengths from 30 to 500 mm. By using the Hasselblad teleconverter which doubles the focal length of the lens, this focal length range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

All of the Hasselblad lenses are quality controlled having undergone thorough 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 and 2000FCW. With the 2000FCW it is possible to use either the leaf shutter built into the lens or the camera's focal plane shutter. The Hasselblad SWC/M has a permanently attached CF lens.

The F lenses are characterized by their large apertures. They have no shutter and can only be used with the Hasselblad 2000FCW with built-in focal plane shutter. In addition to normal, wide-angle, and telephoto lenses, there are also lenses for close-up photography, lenses with extremely high correction, and a lens for ultraviolet photography.



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

CF 80 and 100 mm Normal lenses

All-purpose lenses with normal focal lengths. The lightweight 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 ensures a bright viewfinder image.

20126 Zeiss Planar CF f/3.5 100 mm T*

This lens was specially designed for Hasselblad, and provides an optimum relationship between lens speed and focal length in a top-performance lens. Superb distortion correction makes this lens ideal for architectural, copying and similar applications.

| CF 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) | $1 \text{ lb } 5^{1}/_{4} \text{ oz } (605 \text{ g})$ |
| Length | 2 ⁹ / ₁₆ in (65 mm) | 2 ¹⁵ / ₁₆ 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 |





58408

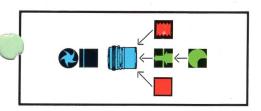




20126



CF Wide-Angle Lenses



CF 30-60mm Wide-angle lenses

Short focal length Distagon lenses that range from the extreme 180° "fish-eye" lens to a 66° wide angle lens with many of the characteristics of a standard lens.

20177 Zeiss Distagon CF f/3.5 30 mm T*

This Hasselblad "fish-eye" lens covers the entire $2^{1/4} \times 2^{1/4}$ field 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 an extreme wide-angle effect with an 88° diagonal angle of view. It has a compact design and features a floating lens element for maximum quality in the close focusing range. Supplied with a Ø 93 lens shade, which also serves as a filter holder, and two front lens caps which can be used with or without a lens shade attached.

20045 Zeiss Distagon CF f/4 50 mm T*

This moderate wide-angle lens has a 75° diagonal angle of view. The design is 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 wideangle lens, i.e. the short lens-to-subject distance and a 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 | | |
| 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 | 9T* | 11 T* | 7T* | 7T* | |
| Focusing range | $12 \text{ in } (0.3 \text{ m}) - \infty$ | 19 in (0.5 m)-∞ | 19 in (0.5 m)-∞ | 24 in (0.6 m)−∞ | |
| Weight | 3 lb 14 oz (1365 g) | $2 lb \frac{1}{4} oz (915 g)$ | 1 lb 12 oz (795 g) | 1 lb 8 oz (680 g) | |
| Length | 4 ⁵ / ₈ in (117.5 mm) | 4 in (102 mm) | 3 ⁷ / ₈ in (98 mm) | 3 ¹ / ₄ in (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 26¹) | Ø 93 | Ø 60 | Ø 60 | |
| Close-up lenses (Proxars) | | | Ø 60 | Ø 60 | |
| Lens shades | | 406932) | 40668 | 40668 | |
| Professional lens shade | | 40726 | 40676 | 40676 | |
| Miscellaneous accessories | | | | | |
| Lens mounting ring | | 40720 | 40681 | 40681 | |
| Holder for gelatin filters | | 40709 | 40690 | 40690 | |
| Step-up ring | | | 40714 | 40714 | |

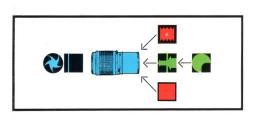
¹⁾ Delivered in case 58157 and with all \emptyset 26 filters 2) Supplied with lens shade \emptyset 93/40 40693











CF 150-500mm Telephoto lenses

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

20061 Zeiss Sonnar CF f/4 150 mm T*

A lens with 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*

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

20185 Zeiss Tele-Tessar CF f/5.6 350 mm T*

Optically true telephoto lens of extremely light weight and compact design for its focal length. The nature photographer's favourite lens for hand-held work. Supplied in a leather case with a shoulder strap.

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

The ideal lens for long distance work. The Tele-Apotessar has superior correction for chromatic aberrations. Its internal focusing system 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. Supplied in a leather case with a shoulder strap.

| CF Telephoto lenses | 150mm Sonnar CF | 250mm Sonnar CF | 350mmTele-Tessar CF | 500mm Tele-Apotessar CF | |
|------------------------------------|---|--|---|--|--|
| Max. aperture | f/4 | f/5.6 | f/5.6 | f/8 | |
| Focal length | 150 mm | 250 mm | 350 mm | 500 mm | |
| Diaphragm | f/4-32 | f/5.6-45 | f/5.6-45 | f/8-64 | |
| Angle of view, diagonal/horizontal | 28°/20° | 17°/12° | 12.8°/9° | 9°/6.4° | |
| No. of elements | 5 T* | 4 T* | 4 T* | 5 T* | |
| Focusing range | $4.5 \text{ft} (1.4 \text{m}) - \infty$ | $8.5 \text{ft} (2.5 \text{m}) - \infty$ | 15 ft (4.5 m)-∞ | 28 ft (8.5 m)-∞ | |
| Weight | $1 \text{ lb } 11^3/_4 \text{ oz } (785 \text{ g})$ | $21b 3\frac{1}{4} \text{oz} (1000 \text{g})$ | $2 lb 15 \frac{1}{2} oz (1350 g)$ | $3 lb 15^{3}/_{4} oz (1810 g)$ | |
| Length | 4 in (101 mm) | 6 ³ / ₁₆ in (164 mm) | 8 ¹⁵ / ₁₆ in (227 mm) | 12 ¹⁵ / ₁₆ in (329 mm) | |
| Accessories included | | | 1) | 2) | |
| Front lens cap | 51643 | 51643 | 51654 | 51654 | |
| Rear lens cap | 50377 | 50377 | 50377 | 50377 | |
| Lens pouch | 58416 | 58424 | | | |
| Filters | Ø 60 | Ø 60 | Ø 93 | Ø 93 | |
| Close-up lenses (Proxars) | Ø 60 | Ø 60 | | | |
| Lens shades | 40673 | 40673 | 407031) | 40703²) | |
| Professional lens shade | 40676 | 40676 | 40726 | 40726 | |
| Miscellaneous accessories | | | | | |
| Lens mounting ring | 40681 | 40681 | 40720 | 40720 | |
| Holder for gelatin filters | 40690 | 40690 | 40709 | 40709 | |
| 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



CF Special-Purpose Lenses

CF Special-purpose lenses

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

20134 Zeiss UV-Sonnar CF f/4.3 105 mm

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

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

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

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

A special-purpose lens which cannot be directly attached to a camera body without a Hasselblad automatic bellows or a variable extension tube. It is primarily a close-up lens, but can be used in many other applications. At the longest bellows extension (8"–202 mm) the lens gives a 1:1 scale of reproduc-

tion. The shortest extension (2.5"-63.5 mm) focuses to infinity.

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

A special purpose lens of unique design with perfect chromatic correction without sacrificing correction for 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 factors. Spectral range of 400 nm to 1000 nm.

| CF Special-purpose lenses | 105mm UV-Sonnar CF | 120mm Makro-Planar CF | 135mm Makro-Planar CF | 250mm Sonnar CF Sa | |
|------------------------------------|--|---|---|---|--|
| Max. aperture | f/4.3 | f/4 | f/5.6 | f/5.6 | |
| Focal length | 105 mm | 120 mm | 135 mm | 250 mm | |
| Diaphragm | f/4.3-32 | f/4-32 | f/5.6-45 | f/5.6-45 | |
| Angle of view, diagonal/horizontal | 40°/29° | 37°/25° | 32°/23° | 17°/12° | |
| No. of elements | 7 | 6T* | 7 T* | 6 | |
| Focusing range | 6 ft (1.8 m)-∞ | $2.6 \text{ft} (0.8 \text{m}) - \infty$ | _ | 10 ft (3 m)-∞ | |
| Weight | $1 \text{ lb } 10 \frac{1}{2} \text{ oz } (750 \text{ g})$ | $1 \text{ lb } 8^{1/2} \text{ oz } (695 \text{ g})$ | 1 lb 6 oz (625 g) | $2 lb 2^{1}/_{4} oz (985 g)$ | |
| Length | 3 ⁹ / ₁₆ in (91 mm) | 3 ⁷ / ₈ in (99 mm) | 3 ⁷ / ₁₆ in (87 mm) | 6 ¹ / ₄ in (158 mm) | |
| Accessories included | | | | | |
| Front lens cap | 51643 | 51643 | 51643 | 51643 | |
| Rear lens cap | 50377 | 50377 | 50571 | 50377 | |
| Lens pouch | 58416 | 58416 | 58416 | 58424 | |
| Filters | Ø 60 | Ø 60 | Ø 60 | Ø 60 | |
| Close-up lenses (Proxars) | Ø 60 | Ø 60 | Ø 60 | Ø 60 | |
| Lens shades | 40673 | 40673 | 40673 | 40673 | |
| Professional lens 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 | |

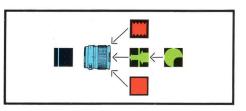








F Lenses for the 2000FCW



F wide-angle, normal, and telephoto lenses

Hasselblad F lenses are designed for the Hasselblad 2000FCW. Unlike the CF lenses, the F lenses have no built-in leaf shutter. The F lenses have many external features in common with the CF lenses, such as ergonomically designed grip rings. High speed and the ability to focus at very close range are distinctive features of the F lenses. The F lenses fit all earlier camera models in the 2000 series.

20427 Zeiss Distagon F f/2.8 50 mm T*

A wide-angle lens with floating elements for outstanding performance across its entire focusing range. The shortest lens-to-subject distance is just 12.8" (0.32 m), opening up exciting possibilities for close-up pictures with interesting perspectives. Its fast speed provides a bright viewfinder image.

20400 Zeiss Planar F f/2.8 80 mm T*

The normal focal length for the $2^{1}/_{4} \times 2^{1}/_{4}$ format is 80 mm. Because F lenses do not have a built-in shutter, the designers were able to reduce the shortest lens-to-subject distance to 2 ft (0.6 m).

20419 Zeiss Planar F f/2 110 mm T*

The Planar F 110 is chosen as standard lens by many photographers for the 2000FCW. The high maximum aperture of f/2 gives it an extremely brilliant viewfinder image.

20435 Zeiss Sonnar F f/2.8 150 mm T*

A short telephoto lens with a faster speed than its CF counterpart. 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 shots since it enables you to work with faster shutter speeds. An ideal lens for sports, nature, and portrait photography.

| F-lenses | es 50mm Distagon F 80mm | | 80mm Planar F 110mm Planar F | | 250mm Tele-Tessar F | |
|------------------------------------|--|-------------------------|---|---|--|--|
| Max. aperture | f/2.8 | f/2.8 | f/2 | f/2.8 | f/4 | |
| Focal length | 50 mm | 80 mm | 110 mm | 150 mm | 250 mm | |
| Diaphragm | f/2.8–22 | f/2.8-22 | f/2-16 | f/2.8-22 | f/4-32 | |
| Angle of view, diagonal/horizontal | 74°/56° | 51°/37° | 39°/28° | 30°/21° | 18°/13° | |
| No. of elements | 9, 1 floating T* | 7 T* | 7 T* | 5 T* | 5T* | |
| Focusing range | $12^{1/2}$ in $(0.32 \text{ m})-\infty$ | 2 ft (0.6 m)-∞ | $2^{1/2}$ ft $(0.8 \text{ m})-\infty$ | $4^{1/2}$ ft $(1.4 \text{ m})-\infty$ | $8^{1}/_{4}$ ft (2.5 m) $-\infty$ | |
| Weight | $2 lb 11^{3}/_{4} oz (1240 g)$ | 15 oz (425 g) | $1 \text{ lb } 10^3/_4 \text{ oz } (760 \text{ g})$ | 1 lb 9 oz (710 g) | 2 lb ½ oz (920 g) | |
| Length | 4 ⁷ / ₁₆ in (112 mm) | $2^{3}/_{8}$ in (60 mm) | 3 ⁷ / ₁₆ in (87 mm) | 3 ⁷ / ₁₆ in (87 mm) | 6 ³ / ₁₆ in (157 mm) | |
| Accessories included | 1) | 2) | | | | |
| Front lens cap | 51651/51654 | 51640/51643 | 51648 | 51648 | 51648 | |
| Rear lens cap | 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 | |
| Close-up lenses (Proxars) | | Ø 50/Ø 60 | | | | |
| Lens shades | 407061) | 40118/40670 | 40576 | 40576 | 40576 | |
| Professional lens shade | 40726 | 40676 | 40676 | 40676 | 40676 | |
| Miscellaneous accessories | | | | | | |
| Lens mounting ring | 40720 | 40679/40681 | 40687 | 40687 | 40687 | |
| Holder for gelatin filters | 40709 | 40690 | 40690 | 40690 | 40690 | |
| Step-up ring | | 407112) | | | | |

¹⁾ Supplied with lens shade Ø 93/50 40706 2) Delivered with step-up ring 40711







Teleconverter

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

fast telephoto lens for its focal length. Inernal focusing for convenience and unusually short lens-to-subject distance.

20303 Zeiss Mutar 2X T* Teleconverter

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

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

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

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

| | 350mm Tele-Tessar F |
|--------------------------------|---|
| Max. aperture | f/4 |
| Focal length | 350 mm |
| Diaphragm | f/4-32 |
| Angle of view, diagonal/horiz. | 13°/9° |
| No. of elements | 8T* |
| Focusing range | 1.9 m−∞ |
| Weight | $4 lb 6^{1/2} oz (2000 g)$ |
| Length | 10 ^s / ₁₆ in (262 mm) |
| Accessories included | 1) |
| Front lens cap | 51654 |
| Rear lens cap | 50377 |
| Lens pouch | |
| Filters | Ø 93 |
| Close-up lenses (Proxars) | |
| Lens shades | 40717') |
| Professional lens shade | 15.5.7 |
| Miscellaneous accessories | |
| Lens mounting ring | |
| Holder for gelatin filters | |
| Step-up ring | |

¹⁾ Delivered in case 58378 and with lens shade Ø 93/F 350 40717

| Mutar 2X | |
|---|--|
| 1) | |
| | |
| | |
| 7 T* | |
| 14 ³ / ₄ oz (420 g) 3 ¹ / ₈ in (80 mm) | |
| 3 ¹ / ₈ in (80 mm) | |
| | |
| 51438 50377 | |
| 58408 | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

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

20214 Schneider Variogon C f/5.6 140-280 mm

Zoom Lens

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

The Variogon is a "true" zoom lens. The image stays in focus while zooming and aperture remains unchanged throughout the entire zoom range. This is a great advantage over Vario focus lenses which require refocusing every time the focal length is changed.

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.

20443 Schneider Variogon F f/5.6 140–280 mm (without shutter). This lens has been phased out of the Hasselblad system.

| 140-280mm Variogon C | |
|--|--|
| f/5.6 | |
| 140–280 mm | |
| f/5.6–45 | |
| 16-30°/11-22° | |
| 17 (multicoating) | |
| $8^{1}/_{4}$ ft (2.5 m) $-\infty$ | |
| 4 lb 1 ¹ / ₄ oz (1850 g) | |
| 9 ⁷ / ₁₆ in (240 mm) | |
| 1) | |
| 51462 | |
| 50377 | |
| | |
| | |
| Ø 93 | |
| | |
| | |
| 514701) | |
| 31470) | |
| | |
| | |
| 40720 | |
| 40709 | |
| | |

1) Delivered in case 58181 and with lens shade 51470.







Lens shades are used to shield the lens from extraneous light and provide a practical way of safeguarding the front lens element. The system includes lens shades designed for a fixed focal length range and the professional lens shades which feature adjustable compendiums to suit a wide range of lens focal lengths.

LENS SHADES FOR CF LENSES

40668 Lens shade Ø 60/38-60

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

40670 Lens shade Ø 60/80

For the normal 80 mm CF and F lenses (older 80 mm 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 40 mm Distagon CF. Supplied with the lens. Also used as a holder for \emptyset 93 filters.

40703 Lens shade Ø 93/350-500

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

LENS SHADES FOR F LENSES

40706 Lens shade Ø 93/50

For the $50\,\mathrm{mm}$ Distagon F. Threaded mount.

Now supplied with the lens. Can be ordered for previously bought lenses, thus making it possible to use \emptyset 93 filters with these lenses instead of \emptyset 86 filters which will be phased out.

40118 Lens shade Ø 50/80 (not shown)

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

40576 Lens shade Ø 70/110-250

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

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

For the 350 mm Tele-Tessar F. Supplied with the lens. Also incorporates a filter holder Ø 93. External threaded mount.

LENS SHADES FOR CLENSES (not shown)

40282 Lens shade Ø 63/38. Threaded mount

40290 Lens shade Ø 104/40. Bayonet mount

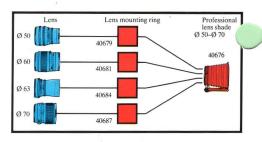
40274 Lens shade Ø 63/50–60. Threaded

40118 Lens shade Ø 50/80. Bayonet mount.

40126 Lens shade Ø 50/100–250. Bayonet mount.

PROFESSIONAL LENS SHADES

An adjustable bellows lens shade with engravings for various focal lengths providing highly efficient protection against extraneous light. When the shade is used on a 120 mm or longer lens, different masks are added. Because it is collapsible, it takes up very little space in an equipment case.



40676 Professional lens shade Ø 50–Ø 70

For Ø 50, Ø 60, Ø 63 and Ø 70 front lens mounts. It has an extension of approximately 80 mm. For longer focal lengths one of the following masks (supplied with the shade) is added:

Mask 40304 for the 120, 135*, and 150 mm CF lenses and the 250 mm F lens.

Mask 40312 for the 250 mm CF lens.

An L connector 50776 is supplied for use with a cable release.

The lens shade is attached to the lens accessory mount with separate lens mounting rings which also have a slot for a gelatin filter holder. The rings are not supplied with the lens shade. See the figure above and "Miscellaneous accessories" on page 28.

40726 Professional lens shade Ø 93

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

Accessories for the older version of the professional lens shade 40231 (not shown) 40344 Adapter ring Ø 60 40495 Holder for gelatin filters

* Note: The rail on the automatic bellows limits the use of the professional lens shade while focusing at long lens-to-subject distances.



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

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

Polarization filters can be used with black & white or color film to reduce or eliminate reflections thus increasing color saturation in subjects such as sea and sky.

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

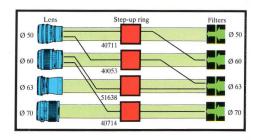
Neutral density filters (gray filters) can be used to make extremely long exposures without over-exposing the film.

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 lens accessory mounts. Step-up rings make it possible to use Ø 60–Ø 70 filters with lenses with smaller lens accessory mounts. See the figure to the right and "Miscellaneous Accessories", page 28.

The filters are engraved with data indicating diameter, filter factor, color, and exposure value reduction, in that order. See the table below. For example: "Ø 60 1.5×Y-0.5 (4)" means that the filter has a 60 mm diameter, a filter factor of 1.5, is yellow, and requires an exposure value reduction of 0.5. The Ø 60 filters are marked with Kodak Wratten designation in brackets (4) and are multicoated.



Filters Ø 26

These filters are intended for the 30 mm Distagon CF lens. Engraved data indicates 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 \emptyset 26 filters are supplied with the 30 mm CF lens.

* For using daylight-type film in artificial light.

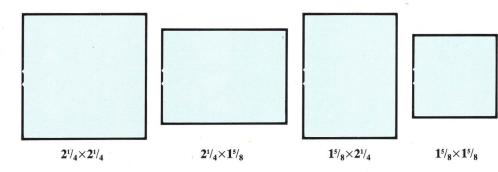
| | | Colored filters Special-purpose filters | | | | | | Promise Proposition | | Classics | Multi- |
|------------|-------------|---|--------------|--|-------------|-------------|-------------|---------------------|------------|---------------------|---------------|
| Ø | 1.5×Y-0.5 | 2×YG-1 | 3×G-1.5 | 4×0-2 | 6×R-2.5 | 1×HZ-0 | 8×Gr-3 | 64×Gr-6 | 2×Pola-1 | Glassless filter | prism lens |
| | Yellow | ellow Yellow-green | Green Orange | Red ¹) Haze ²) | Gray | Gray | Polarizing | mounts | Six prisms | | |
| 50 | 50016 | 50024 | 50032 | 50040 | 50059 | 50067 | 50784 | 50717 | 50075 | 50598 | |
| 60^{3}) | 51586/41586 | | 51592/41592 | 51594/41594 | 51597/41597 | 51608/41608 | 51606/41606 | | 51603 | 51635/41635 | |
| 63 | 50105 | | 50113 | 50121 | 50148 | 50156 | 50792 | 50768 | 50482 | | 50695 |
| 70 | 51306 | | 51314 | 51322 | 51330 | 51349 | N=-7 1.6 H | | 51578 | 51551 | |
| 86 | | | | 50172 | | 50180 | | | | 50601 | |
| 93 | 51365 | | 51373 | 51381 | 51403 | 51411 | | | 51422 | | |
| 104 | 50547 | 50555 | | 50725 | | 50733 | | | | 50628 | |

| | | Light balance filters | | | | | | | Soft-focus | | |
|-----|-------------|-----------------------|-----------------------|-------------------|---|--|---|-------------|------------|-------|-------|
| Ø | 1×CR1.5-0 | 1×CR3-0 | 1.4×CR6-0.5 1×CB1.5-0 | CR3-0 1.4×CR6-0.5 | 6-0.5 1×CB1.5-0 1.4×CB3-0.5 2×CB6-1 2×CR12-1 3.5×CB12-1.5 | $1 \times \text{CB}1.5 - 0$ $1.4 \times \text{CB}3 - 0.5$ $2 \times$ | 0.5 2×CB6-1 2×CR12-1 3.5×CB12-1.5 Softars | | | | |
| | CR1.5 | CR3 | CR6 | CB1.5 | CB3 | СВ6 | CR12 | CB12 | I | п | III |
| 50 | 50202 | 50210 | 50229 | 50237 | 50245 | 50253 | 50261 | 50288 | 50512 | 50520 | 50539 |
| 60 | 51614/41614 | 51616/41616 | 51619/41619 | 51622/41622 | 51624/41624 | 51627/41627 | 51630/41630 | 51632/41632 | 51670 | 51673 | 51675 |
| 63 | 50822 | 50830 | 50849 | 50857 | 50865 | 50873 | 50881 | 50903 | | | |
| 70 | 51357 | | | | | | | | 51527 | 51535 | 51543 |
| 86 | 50938 | | | | | | | | | | |
| 93 | 51420 | | | | | | | | | | |
| 104 | | | | | | | | | | | |

1). Red filter Ø 60 has designation 8×R-3. 2). Haze filter Ø 60 has designation UV-SKY.

3). Filters Ø 60 (except polarizing filter) will eventually replace the first number in the code number from 5 to 4, as indicated.





Hasselblad film magazines are interchangeable and are compatible with all Hasselblad cameras. Magazines can be switched in seconds without loss of picture frames 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 70 mm perforated film as well as a magazine for Polaroid film, and sheet film holders.

ROLL FILM MAGAZINES

30074 Film magazine A12 (chrome) 30147 Film magazine A12 (black)

A magazine for the $2^{1}/_{4} \times 2^{1}/_{4}$ format for 120 film giving 12 frames on a roll. 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 or black trim. Supplied with magazine slide 41068. Weight: 14 oz (400 g).

30104 Film magazine A24 (chrome) 30171 Film magazine A24 (black)

A magazine for the $2^{1}/_{4} \times 2^{1}/_{4}$ format for 220 film giving 24 frames on a roll. Apart from giving double the capacity this magazine is identical with the magazine A12. Supplied with magazine slide 41068. Weight: 14 oz (400 g).

30082 Film magazine A16 645 (chrome) 30155 Film magazine A16 645 (black)

A magazine for the $2^{1/4} \times 1^{5/8}$ format (horizontal) for 120 film giving 16 frames on a roll. This magazine has the same functions as magazine A12. Supplied with focusing screen mask 42145, marked for this format, and magazine slide 41068. Weight: 14 oz (400 g).

30106 Film magazine A12V (chrome) 30180 Film magazine A12V (black)

A magazine for the $1^5/_8 \times 2^{1/}_4$ format (vertical) for 120 film giving 12 frames on a roll. This magazine has the same functions as magazine A12. Supplied with focusing screen mask, marked for this format, and magazine slide 41068. Weight: 14 oz (400 g).

30090 Film magazine A16S (chrome) 30163 Film magazine A16S (black)

A magazine for the $1^5/_8 \times 1^5/_8$ format for 120 film giving 16 frames on a roll. This magazine has the same functions as magazine A12. The $1^5/_8 \times 1^5/_8$ format is suitable for projection in most 35 mm projectors. Supplied with focusing screen mask 42145, marked for this format, and magazine slide 41068. Weight: 14 oz (400 g).

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

A large capacity magazine for the $2^{1}/_{4}\times 2^{1}/_{4}$ format for 70 mm perforated film. The magazine gives 70 frames from a loaded cassette. Magazine cassettes can be loaded with up to 15 ft (4.7 m) of 70 mm film sold in 30m (100 ft) bulk loads and are specially useful when used with motorized Hasselblad cameras. 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 can be loaded with perforated 70 mm film in lengths up to 15 ft (4.7 m).



DATA RECORDING SYSTEM

0236 Data recording magazine DM-100/200

A large capacity magazine for the $2^{1}/_{4} \times 2^{1}/_{4}$ format for use with 70 mm perforated film. A development of the magazine 70 equipped for data recording. The film is loaded directly onto the magazine spool and the loaded spool is inserted into the magazine without any cassette. Standard 70 mm film gives approximately 100 frames per load. Special, extrathin base (0.12-0.07 mm), 70 mm film will yield up to 200 frames per load. The magazine must be loaded in a darkroom. Together with the programming accessories the magazine can be programmed for registering 32 alpha-numerical figures between the edge of the frame and the film perforation. The data can consist of different combinations of information such as time, date, or programmable alpha-numerical symbols.

The magazine is available in a black trim version and is supplied with two 51055 spools and magazine slide 41068. Weight 1 lb $5^{1}/_{2}$ oz (610 g).

41130 Electronic unit DE-32

Contains the data recording electronics for data magazine DM-100/200. In addition to keeping track of date, time, frame count and symbol generation, it enters them on the film. The clock, calendar and counter are automatically updated.

41149 Adapter DA-1

This unit interfaces the DE-32 unit described above to an Epson HX 20 PC for programming purposes. User-friendly program software for the Epson HX 20 to run the DA-1 mode, calendar, clock, text and counter applications is included. For programming, the DE-32 is normally mounted on the DA-1/HX 20; for use with the camera, it is mounted on the magazine DM-100/200. It is possible, however, to mount the DE-32 unit permanently on the computer in case there is need for frequent programming. The unit is then connected to the magazine with a cord.

51055 Spool for magazine DM-100/200

This spool is loaded with perforated 70 mm 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). A storage canister is supplied with the spool.

41076 Quick-winding crank for film magazines (not shown)

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

MAGAZINE FOR POLAROID FILM

30198 Hasselblad magazine 100 for Polaroid film

A 2¹/₄×2¹/₄ format magazine for Polaroid film types 107, 108, 665, 667, 668 and 669. The magazine is mounted and dismounted as easily as the roll film magazines. Very practical to have on hand for making fast checks on exposure, lighting, and composition, since any errors are immediately detected. Supplied with magazine slide 41122.

SHEET FILM ADAPTER

41017 Sheet film adapter

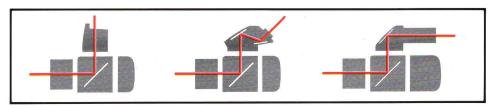
For photographers interested in utilizing the wide range of sheet film on the market. The adapter is mounted and dismounted as easily as the roll film magazines. The film is loaded in the 51012 interchangeable sheet film holder.

51012 Sheet film holder

For sheet film, trimmed down to $2^{1}/_{2} \times 2^{1}/_{2}$ (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 quickly and easily be 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 focusing, composition and for checking the depth of field. Also available are frame and sports viewfinders as well as the viewfinder for the SWC/M.

VIEWFINDERS

42315 Standard focusing hood (chrome) 42323 Standard focusing hood (black)

Hasselblad focusing hoods provide efficient viewing of the focusing screen image. The entire image is visible even when viewed with the camera at hip level. A folding fine-focus magnifier enlarges the image five 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

| COLLEGE HINGS | | |
|-------------------|-------|-------------|
| 42340 –4 diopters | 42382 | +1 diopter |
| 42358 –3 diopters | | +2 diopters |
| 42366 –2 diopters | 42404 | +3 diopters |
| 42374 –1 diopter | | |

52094 Magnifying hood

Effectively blocks extraneous light and enlarges the focusing screen image 3¹/₂ 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. Unreversed screen image magnified three times, 45° sighting angle. Supplied with a turnable and removable rubber eyecup. 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°. Supplied with a removable rubber eyecup. It can be fitted with correction lenses for compensation of faulty vision. Supplied with protective cover 42064.

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

52183 Reflex viewfinder RM-2

This viewfinder was developed to be used in combination with magazine 70 and the data recording magazine. It yields an unreversed image three times larger than the focusing screen image. The sighting angle is 90°. The ocular is focusable ±5 diopters and it has a rubber eyepiece which is large enough and placed so that the entire focusing screen image can be seen, even if the photographer is wearing eye glasses. Supplied with protective cover 42064.

The prism viewfinders, reflex viewfinder, and magnifying hood above can be used with the 500C/M, 500ELX, 2000FCW and the earlier models in the 500C, EL and 2000 series. Together with the focusing screen adapter 41025 the viewfinders can also be used with the SWC/M.

Masks for focusing screens: 42145 Transparent focusing screen mask

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

42153 Black focusing screen mask

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



40215 Frame viewfinder

utlines the image field for 150 mm, 250 mm, 50 mm, and 500 mm focal length lenses and film magazines for the $2^{1}/_{4} \times 2^{1}/_{4}$ format. Placed on the lens shade for the 150 mm and 250 mm lenses and on the frame viewfinder attachment 40665 for the 350 mm and 500 mm lenses (see page 22).

43028 Sports viewfinder

Features parallax compensation. The frame outlines the image field for 80 mm focal length lenses and film magazines for the $2^{1}/_{4} \times 2^{1}/_{4}$ format, or a 50 mm lens and a film magazine for the $1^{5}/_{8} \times 1^{5}/_{8}$ format. Interchangeable masks are available for the sports viewfinder.

Masks for $2^{1}/_{4} \times 2^{1}/_{4}$ format.

43141/100 mm lens

43044/150 mm lens

43052/250 mm lens

43168/350 mm lens

43060/500 mm lens

Masks for $2^{1}/_{4} \times 1^{5}/_{8}$ format.

43079/80 mm lens

43087/150 mm lens

43095/250 mm lens

Mask for $1^5/_8 \times 1^5/_8$ format.

43109 with fields marked for the 60, 80, and 50 mm lenses.

SPECIAL ACCESSORIES FOR SWC/M

52036 Viewfinder SWC/M

An optical viewfinder which has a built-in spirit level. Since both the lens distance scale and the spirit level can be checked directly in the viewfinder there is less distraction while

concentrating on a subject. The finder field is marked to show the limits of the $2^{1}/_{4} \times 1^{5}/_{8}$, and $1^{5}/_{8} \times 1^{5}/_{8}$ film formats. The viewfinder is securely locked onto the camera frame.

Can be used with the earlier SWC and SW camera models, but no range scale is visible with the C lens used on these models. (This viewfinder will gradually replace the earlier model 52035 and is included with the SWC/M camera body.)

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.

Masks for viewfinder 52035

42048 $2^{1}/_{4} \times 1^{5}/_{8}$ format for the A16 film magazine.

42056 $1^{5}/_{8} \times 1^{5}/_{8}$ format for the 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 and the 2000FCW, as well as the earlier models in the 500C, EL and 2000 series.

FOCUSING SCREENS

42161 Standard focusing screen

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

42226 Bright-matte focusing screen

An extremely bright, sharp screen for quick and exact focusing. The Fresnel lines are cut with such high precision they cannot be perceived through the viewfinder. There is a reference ring in the center of the screen. It is compatible with all Hasselblad lenses and focusing screen viewfinders.

42188 Focusing screen with split-image rangefinder

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

42218 Focusing screen with central grid and split-image rangefinder

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

42250 Checked focusing screen with central grid

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

42285 Fine-line focusing screen

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

42200 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.



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.

When you are choosing equipment for closeup work, the Hasselblad Close-up Calculator is an invaluable aid.

59102 Close-up Calculator

Designed on the principle of a slide rule. From a starting point of the size of the subject or the degree of magnification desired, the calculator can be set to provide an instant guide to which close-up accessories are needed for the various focal lengths.

Data showing extension, lens-to-subject distance, EV reduction and depth of field is displayed simultaneously.

The calculator also includes an EV guide to convert EV values to corresponding shutter speed/aperture combinations and vice versa.

The Close-up Calculator is delivered in a protective cover with instructions in six languages. Size: 200×115 mm.

51662 Proxar 0.5 Ø 60 T*

51665 Proxar 1.0 Ø 60 T*

51667 Proxar 2.0 Ø 60 T*

50296 Proxar 0.5 Ø 50

50318 Proxar 1.0 Ø 50

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 (60 mm) accessory mounts.

The Ø 50 close-up lenses are for Clenses with Ø 50 (50 mm) accessory mounts.

40649 Extension tube 8*

40541 Extension tube 16

40568 Extension tube 32

40657 Extension tube 56

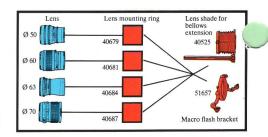
A complete series of extension tubes that covers the range up to the shortest bellows extension; the tubes connect to the lens and camera mechanisms so that all of the camera's automatic functions can be fully utilized. The extension tubes can be attached in different combinations.

Extension tube 8 cannot be directly connected to the 2000FCW camera body.

51691 Variable extension tube 64-85

With continuously variable extension from 63.5 to 85 mm the variable extension tube makes a flexible close-up accessory that is compact and easy to handle. It can be used together with other extension tubes and the automatic bellows from the Hasselblad sys-

In addition to being used for changing the extension and level of magnification, the variable extension tube can also be used for focusing. It is ideal for use in combination with the 135 mm Makro-Planar CF f/5.6, providing a range of focus from infinity down to 1.15 m.

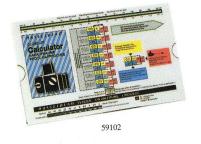


40517 Automatic bellows extension

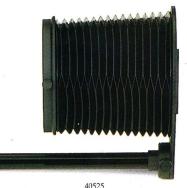
The bellows extension interconnects camera body and lens mechanisms. This means that you can work in the same way with CF, F, and C lenses as you do when the lens is directly connected to the camera. The bellows extension is easily altered with adjusting knobs. The automatic bellows combined with the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

40525 Lens shade for automatic bellows extension

Fully adjustable extension with flanges to take the Hasselblad Transparency copyholder. Lens mounting rings, with slot for gelatin filter holders, are required to adapt the lens front mount. These are sold separately. See the figure above, and "Miscellaneous accessories," page 28.









40045



40169

40037



40517













40649

40541

40568

40045 Microscope adapter

Provides a light-tight and vibration-free conection 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 Hasselblad 2000FCW can be used.

40533 Transparency copyholder II

Attaches to flanges on the lens shade for the automatic bellows extension and is used in the copying and reproduction of transparencies and negatives. Electronic flash is recommended as the light source. Also fits the 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 31/4 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 (= $2/60^{\circ}$). 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.

51678 Macro flash unit

Consists of a control unit and two light sources that can be fired simultaneously or individually. A variety of lighting effects can be obtained using wide-angle and gray screens. The TTL circuitry in the Hasselblad 500ELX can be made available by using Flash Adapter SCA 390 or SCA 590 (see page 25). This provides automatic control of the amount of light produced. Used with the Hasselblad Macro flash bracket, the light sources offer a highly flexible method of directing flash light on the subject.

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" mounting bracket
Cord 240 mm
Standard adapter SCA 301
Coiled cord
Double flash outlet

51657 Macro flash bracket Ø 50-Ø 70

The bracket has three mounting shoes. The two arms are articulated at three points and rotatable 360°. The bracket is attached to the lens accessory mount with separate lens mounting rings which also have a slot for a gelatin filter holder. The rings are not included with the Macro flash bracket. See figure above left and "Miscellaneous accessories" on page 28.









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 attach-

45071 Flashgun bracket for 500C/M and 2000FCW

46329 Flashgun bracket for 500ELX

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 and can be fitted with an extension arm 45098, or an adjustable flash holder 45039. Also suitable for use with earlier camera models in the 500C, EL and 2000 series.

45039 Adjustable flash holder

For the flashgun brackets 45071 and 46329 and double handgrip 46132. 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.

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.

40665 Frame viewfinder attachment

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

45047 Pistol grip 500C/M and 2000FCW 46221 Pistol grip 500ELX

The pistol grips are attached and locked onto the camera's tripod plate. They are anatomically molded to fit the left hand. The camera is operated by pressing the trigger in the grip. Can also be used with earlier models in the 500C, EL and 2000 series.

45129 Tripod quick-coupling

Used on a tripod to facilitate quick attachment and removal of the camera. The quick coupling can be attached to a tripod with either a $\frac{3}{8}$ " or 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.

46132 Double handgrip 500ELX

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 and the accessory shoe for flash, extension arm 45098 or adjustable flash holder 45039 is on the left-hand grip. The grips and the camera attachment are adjustable to provide good balance when working with accessory combinations that vary the center of gravity.

Also suitable for use with earlier models in the EL series.



40735 Quick-focusing handle 1/CF 40-80

For quick and precise focusing. Ideal for ort and journalistic photo work. Attaches directly to the focusing ring of the CF lenses. Since the handle folds down flat beside the lens, it takes no extra space in a lens or equipment case.

For the 40, 50 and 60 mm Distagon CF and the 80 mm Planar CF lenses.

40061 Ouick-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 50 mm and 60 mm Distagon C and the 80 mm and 100 mm Planar C lenses.

40088 Quick-focusing handle 2/C

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

NOTE: The quick-focusing handles 40061 and 40088 can only be used with the older C lenses.

Hasselblad accessories for film advance and shutter cocking include products for both manual and automatic operation. The insert in the picture below shows the Hasselblad winder attached to a 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, smooth advance and cocking. The winder's 6 volt motor is powered by 5 rechargeable nickel-cadmium or 5 standard alkaline batteries. Fully charged, the batteries have adequate power for about 1,000 exposures.

The winder automatically resets the focal plane shutter in the 2000FCW after it has been retracted when changing a magazine.

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 only 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: $2 \times 2 \ 3/4 \times 7''$ ($52 \times 67 \times 176 \ mm$).

44075 Rapid-winding crank 2000FCW

An interchangeable winding crank for film advance and shutter cocking.

Note! This is standard equipment on the 2000FCW, but does not fit the older models in the 2000 series with permanently attached crank.

44040 Rapid-winding crank 500C/M

Interchangeable winding crank for shutter cocking and film advance; standard equipment on the 500C/M. It also fits the older 500C model, but not the cameras in the 2000, EL or SWC model series.

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 be simply removed from the camera for taking measurements close to the subject. It is marked from 6–1600 ASA (ISO)(9–33° DIN) and the readings are indicated as exposure values (EV). The knob has a diffuser for incident light readings.

Designed for the 500C/M and the older 500C model.



Special Accessories for 500ELX

These include NC-battery rechargers, triggering accessories for the 500ELX and flash adapters. Unless otherwise noted, these accessories are all compatible with the older models in the EL series.

56022 Recharge unit I

For recharging batteries in the 500ELX or in battery compartment 46337. Connects to the side socket of the camera. The unit is supplied in a 110 volt AC American version or a 110–240 volt AC European version. Supplied with the 500ELX camera body.

56081 Battery 1

For the 500ELX. Type Varta 5/600 DKZ or an equivalent type battery (nickel-cadmium battery, $1\frac{3}{8}\times2''$). Supplied with the 500ELX camera body.

56111 Fuse

A 1.6 amps $(^{3}/_{16} \times ^{3}/_{4}'')$ slow blow fuse is used in the 500ELX. Supplied with the 500ELX camera body.

Also used in the Hasselblad winder 44067 for the 2000FCW.

46337 Battery compartment 3

For recharging of 56081 nickel-cadmium batteries with recharge unit I with the batteries removed from the 500ELX camera body. The compartment has room for two batteries which can be charged simultaneously. The 500ELX 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.

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

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

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

Makes the 500ELX independent of batteries in static applications. Consists of an adapter and a motor housing panel in chrome or black 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.

For the 500ELX 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 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 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 a00 ft (30 m).

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 earlier EL models.

46272 Intervalometer III

Provides the 500ELX with time-lapse exposure 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 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 inter-connecting several command units.

51681 Flash adapter SCA 390

For connecting flash attachments that are compatible with the SCA 300 system to the 500ELX camera. Provides automatic control of the amount of light (OTF/TTL). The adapter makes it possible to utilize the camera's indicator visible at the left edge of the focusing screen, which indicates when the flash attachment is ready to be fired and if it has discharged the right amount of light. Can be attached to the flash-shoe on prism viewfinders, flashgun bracket, or the camera's accessory rail. Fits only the 500ELX.

51683 Flash adapter SCA 590

For connecting flash attachments that are compatible with the SCA 500 system to the 500ELX camera only (i.e. Metz 45 CT5 or 60 CT2).



Hasselblad Original Cases, Straps and Covers

The case assortment includes 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. The camera cases, equipment cases and the shoulder straps can all be used for the most earlier Hasselblad models.

CASES

58270 Case 712

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

External dimensions (L×W×H): approx. $18\times15^{1}/_{4}\times7''$ (455×390×180 mm). Internal dimensions (L×W×H): approx. $16^{1}/_{4}\times12^{1}/_{2}\times6''$ (410×320×150 mm).

58394 Case 530

Soft shoulder bag made of leather. Holds a large amount of 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 which can be used both as a shoulder strap and as a carrying handle.

58397 Case 540

A soft shoulder bag made of durable, blue Cordura material. Suitable for a medium-size selection of Hasselblad equipment. Because of its removable interior partitions and lens protectors it is extremely flexible. There are two, roomy pockets on the front of the case. Storage space can be further increased using two add-on pockets 58440, one at each end of the case (available separately, see below). The shoulder and hip straps have rubber, non-slip inserts. The shoulder strap can also be used as a carrying handle.

Dimensions (L×W×H): approx. $14^{1}/_{2}\times7^{3}/_{4}\times9$ (370×200×230 mm)

58440 Magazine pocket (not shown)

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

58386 Case 522

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

External dimensions (L×W×H): approx. $15\frac{1}{4}\times11\frac{1}{2}\times5\frac{1}{4}$ " (390×290×135 mm). Internal dimensions (L×W×H): approx. $14\frac{1}{4}\times9\times4\frac{1}{2}$ " (360×230×115 mm).

58211 Camera case **506**

Protective case for the Hasselblad 500C/M and 2000FCW. Soft leather-like material zipper closing with slits for a carrying strap, allowing instant accessibility and comfortable transport. The case has sufficient volume to take a camera and lens up to 150 mm. With the 80 mm lens there is also room for a lens shade.

Dimensions (L×W×H): approx. $9^{1/4} \times 3^{3/4} \times 3^{1/2}$ " (235×95×90 mm).

58238 Camera case 507

Of the same type as case 506, but slightly taller (does not provide 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.

Dimensions (L×W×H): approx. $9\times3^{3}/_{4}\times6''$ (225×95×150 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 and 2000FCW with a standard lens.

Dimensions (L×W×H): approx. $7^{5}/_{8}\times3^{3}/_{4}\times5''$ (200×95×130 mm).



LENS POUCHES

rotective pouches made of leather-soft material. The lens type can be written on special labels. The lens pouches are supplied with most of the Hasselblad lenses.

58408 Lens pouch 1

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

58416 Lens pouch 2

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

58424 Lens pouch **3**

For 250 mm CF/C and F lenses.

58432 Lens pouch 4

For 40 mm CF and 50 mm F lenses.

STRAPS

46140 Carrying strap

A short, black leather strap with a rubber insert to be attached to the camera's strap buttons. Supplied with the 500ELX camera body. Length: 13" (325 mm)

49018 Neck strap

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

59080 Wide camera strap

A long, adjustable $1^{1}/2^{"}$ (40 mm) wide strap made of black polyester. The strap's underside is rubberized to prevent it from slipping off the shoulder. Length: approx. max 59", min 35" (1500/890 mm).

59099 Contoured shoulder strap

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

PROTECTIVE COVERS

51438 Front protective cover

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.

51643 Front lens cap Ø 60

Attached to the inner lens bayonet mount.

50385 Front lens cap Ø 63

Friction-fit attachment.

51648 Front lens cap Ø 70

Attached to the inner lens bayonet mount.

50393 Front lens cap Ø 86

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

51462 Front lens cap for the Variogon

Friction-fit attachment. Fits the 140–280 mm 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 \emptyset 93 front mount when *a lens shade* is attached.

51659 Front lens cap for the 30 mm Distagon CF

50709 Front lens cap for the 30 mm Distagon C

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

50563 Front lens cap Ø 104

Bayonet mount. Fits the 40 mm Distagon C.

50377 Rear lens cap

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

50571 Rear lens cap 135

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

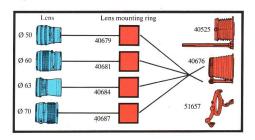
FILM STORAGE

59064 File 120/220/70 mm

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



Miscellaneous Accessories



51694 Cable release

Approximately 20" (50 cm) long. Can be connected to the Hasselblad 500C/M, 2000FCW and SWC/M.

43125 Adjustable flash shoe

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

43117 Spirit level

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

43176 Shutter speed multiplier 2000FCW

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 instead of the battery cassette. Can also be used with earlier models in the 2000 series.

40177 Lens flange

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 \emptyset 50– \emptyset 70, lens shades for the automatic bellows extension, and the macro flash bracket when connecting CF, F, and C lenses with accessory mounts \emptyset 50– \emptyset 70. (See the figure to the left.) The rings have slots for gelatin filter holder \emptyset 50– \emptyset 70.

40679 Lens mounting ring Ø 50

For C and F lenses.

40681 Lens mounting ring Ø 60 For CF lenses.

40684 Lens mounting ring Ø 63

For Clenses.

40687 Lens mounting ring Ø 70

For F lenses.

40690 Gelatin filter holder Ø 50-Ø 70

For use with $3\times3''$ (75×75 mm) gelatin filters. Inserted into the slot in the lens mounting ring. Supplied with a transparent storage cover.

For professional lens shade Ø 93:

40720 Lens mounting ring Ø 93

For CF and F lenses. The ring has a slot for gelatin filter holder Ø 93.

40709 Gelatin filter holder Ø 93

For use with $4\times4''$ (100×100 mm) gelatin filters. For use with lens mounting ring Ø 93 (40720).

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 \emptyset 60 filters and lens shades to lenses with a \emptyset 50 lens accessory mount.

40714 Step-up ring Ø 60-Ø 70

For attaching \emptyset 70 filters and lens shades to lenses with a \emptyset 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 \emptyset 63 filters to lenses with a \emptyset 60 lens accessory mount.

* With the exception of the polarizing filters and multi-prism lens.



The Hasselblad Special Applications Department exists to provide those products not alady available within the Hasselblad system. The department gives clients the opportunity to order camera or photographic equipment designed with their special needs in mind. This may take the form of cameras built into a specially designed housing or the production of an entirely new piece of equipment that need not necessarily be directly related to photography or the technology it involves.

The only reservation we make before undertaking a design and construction commission is that the project has to lie within those areas of technical competence for which Hasselblad is renowned. That is to say precision engineering combined with optics and electronics.

On this page are some examples of special purpose products which can be ordered directly from Victor Hasselblad or through one of our distributors.

61085 SWCE (black)

The same camera body as the SWC/M with a Zeiss 38 mm Biogon CF f/4.5 lens. It has the same built-in motor as the EL series. Note! The Polaroid film magazine (30198) is not compatible with the SWCE.

Hasselblad projector PCP80RA (not shown)
This is the same as 70101, 70104 or 70107,
Hasselblad PCP80 with a random access
generator added. This makes it possible to
ontrol the projector through an external device such as a PC and to choose one or a series
of pictures from the slide magazine, without
having to place the slides in any particular
order first.

SPECIAL FILM MAGAZINES

63064 Film magazine A32 (black)

Produces $32 \frac{2^{1}}{4} \times 1^{5}$ /₈ frames on 220 film.

63073 Film magazine A2035 (black)

Produces at least 19, $1 \times 2^{1}/_{8}$ (24×55 mm) frames on 135–36 film.

63091 Film magazine 70-456 (black)

Produces at least 90 $2^{1}/_{4} \times 1^{5}/_{8}$ frames on 70 mm film.

All magazines are delivered with a focusing screen mask and magazine slide.

PATIENT DOCUMENTATION

(not shown)

The Hasselblad Padoc system offers a simple but effective method for storing pictures of patients with their records. The entire record sheet is prepared in the same way as a regular self-adhesive label. Hasselblad's Padoc sheets have six pre-punched windows which are opened with light finger pressure. The opening in the sheet measures $2^{1}/_{8} \times 2^{1}/_{8}''$ (54×54 mm).

The sheet has a pre-printed text facilitating the entry of patient data and phototechnical information.

68004 Padoc sheet, *Pre-printed* Supplied in 250-sheet packages.

68012 Padoc sheet, Blank

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

AIRBORNE EQUIPMENT

64157 Special grip

This grip has been developed for use with the long focal length lenses involved in helicopter photography.

SURVEILLANCE (1)

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

The system is presently used by several banks and provides excellent identification possibilities because of the large picture format. The system can also be used for process control.

SPECIAL ORDERS (2)

The picture below will give you some idea of the range of special services Victor Hasselblad AB can offer. It shows a product which resulted from a direct customer contact.

The picture shows an equipment package for a Projector PCP80RA, including a mirror arrangement and a plasma-display for superimposing information on to the slides.

The package was developed with and built at the request of Ericsson Radio Systems AB.

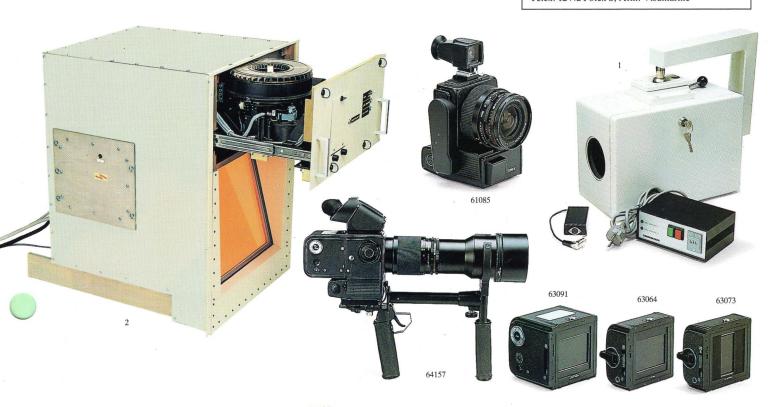
Hasselblad underwater housing

(not shown)

For sales and service of Hasselblad's underwater equipment, please contact:

Visumarine AB

Mårdvägen 26 S-433 70 Partille, Sweden Telephone: Int +46-31-26 57 90 Telex: 12442 Fotex S, Attn: Visumarine



Hasselblad PCP80 Projector

The Hasselblad PCP80 is a slide projector for the 2'/₄×2'/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. With the Hasselblad PCP80 it is possible to shift the lens 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 are 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. The lenses for the PCP80 projector are designed and manufactured to the same exacting standards as the camera lenses and like them, also have an anti-reflection coating.

The optical system in the PCP80 is uncompromising and specially tailored to each lens in order to deliver an absolutely sharp and evenly illuminated image on the screen. So

each lens has its own matched condenser lens which is replaced whenever the lens is replaced.

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

Automatic lamp replacement

The projector has two lamps (one primary, one in reserve). Should one lamp burn out, its replacement swings into position automatically within a fraction of a second. A warning lamp on the projector's control panel indicates lamp replacement.

Positioning the lamp (and the filament) in relation to the spherical mirror is easily accomplished from the outside of the projector and without turning the lamp on. This is also true of the built-in extra lamp.

Unparalleled reliability

The Hasselblad PCP80 has multiple safety systems. A fuse is triggered if the main transformer overheats because of voltage surge. Another system monitors the temperature near the transparency and switches off the projector lamp long before there is any risk of heat damaging the slide.

Separate, quiet motors for slide advance, fan operation, and focusing result in an uncompromising drive system and unparalleled reliability. A gravity-operated system ensures gentle treatment of the slides and a mechanical safeguard is triggered should an improperly mounted slide jam. If the jam lasts more than a few seconds power is cut off before the mechanism attempts to return the slide to the magazine. The cooling fan with its independent motor is in operation continuously.

The cooling system uses pressurized, filtered air with an ultra-low noise level fan. After passing through the highly efficient filter, air

is distributed at hyperbaric pressure to all parts of the projector. Thus cleaning the filter is the only action required to ensure the elimination of dust build-up, which would otherwise affect the performance of the projector mechanism and optical system.

Rotary slide magazine

The PCP80 projector utilizes a rotary slide magazine which can be detached at any time, regardless 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 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. The projector's edit function allows a slide in the gate to be returned to the magazine without the magazine advancing to the next slide.

Control systems

The Hasselblad PCP80 is equipped with three different connector inputs, to give the widest possible choice of compatible external control systems.

A standard six-pin socket provides forward and reverse slide changes and focusing functions. The Hasselblad remote cable control unit (70507) uses this socket.

The eight-pin socket gives the option of cortrolling the lamp without external TRIAC. For controlling the lamp with external TRIAC the European standard twelve-pin socket must be used. Different connectors are provided as accessories for connecting most control systems developed for other types of projectors.



PCP80 PROJECTOR & ACCESSORIES

he Hasselblad PCP80 projector is 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. Can be switched to 110/130/220/240 V 50–60 Hz mains voltage. Weight: 30 lb 15 oz (14 kg) (Not for USA).

70104 Hasselblad PCP80 projector body

A special version of the PCP80 for 120 V 50–60 Hz mains voltage (U.S.A.).

70107 Hasselblad PCP80 projector body

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

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

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 75 mm projector lens

Lens for shorter projector distances. upplied with a matching condensor lens and ront lens cap 75/150 (70526). Allows for limited utilization of perspective control.

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

Lens for long projection distances. Supplied with a matching condenser lens and front lens cap \emptyset 93–100 (51654). Allows full utilization of perspective control.

70303 PCP80 Rotary slide magazine

For 80 transparencies in $2^{3}/_{4} \times 2^{3}/_{4}$ " (70×70 mm) 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 door at the rear of the projector.

70524 12- pin AV-connector/adapter AA

For adapting certain control systems that cannot use the 70523 12-pin AV-connector. Replaces the rear projector door.

70525 7-pin AV-connector/adapter AA

For adapting certain control systems with standard American AV-connector. Replaces the door at the rear of the projector.

70517 Projector rack, basic unit

For twin projector set-ups, e.g. 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. (not shown)

70511 Registration slide mounts $(2^{1}/_{4} \times 2^{1}/_{4})$

Slide mounts with special guide pins to simplify perfect image positioning in multivision programs. Box of 40 mounts.

70512 Registration slide mounts $(2^{1}/_{4} \times 1^{5}/_{8})$

Mounts as 70511 above, but for rectangular image format.

70520 Alignment slide (not shown)

For precise adjustment of the projectors in a multi-projector 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. $17 \times 20 \times 11''$ ($430 \times 510 \times 285$ mm).

70526 Front lens cap 75/150

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

51654 Front lens cap 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.

70547 Protective cover PCP80

Dust cover to protect the projector when it is not being used.

70538 Power cord

Approx. 8 ft long (2.5 m). Supplied with the projector body. For European plugs.

70539 Power cord

Like the 70538 power cord above, but for American plugs.

70541 Air filter

Supplied with the projector body.



Hasselblad DIXEL™ 2000 **CCD** Wirephoto Transmitter

Hasselblad Electronic Imaging AB is a subsidiary with products in electronic imaging technology

The DIXEL 2000 is a portable scanner for digitizing images direct from 35 mm negatives or transparencies (color or black & white) and transmitting them over a normal telephone line.

The maximum resolution of 2048×1365 pixels and digital technology ensure exceptional picture quality and reliable transmission. Prior to transmission the scanned image is displayed on a built-in monitor for exposure and contrast control as well as cropping. Text can be typed in using the integral keyboard and is transmitted with the image. The DIXEL 2000 is of modular design. Modules can be added or interchanged for high rate data compression, color separation, analog transmission or parallel interface. The DIXEL 2000 is economical. It is easy to handle and ends the need for darkroom work in the field.

Weight: approx. 12 kg (25 lbs).

For more information, contact:

Hasselblad Electronic Imaging AB

Box 220 S-401 23 Göteborg Sweden Tel: +46-31-102400



Photogrammetric Surveying Systems

VIMATEK AB is a partially owned subsidiary within the Hasselblad Group. The company markets complete photogrammetric surveying systems, including both hardware and software, in a 35 or 70 mm format. It also does custom work in this field.

There are two analytical surveying systems:

- SEAGLE 30, a mono-line system, and
- IDAC 70, a stereo system.

Both use MS.DOS as an operative system. The cameras used are the Hasselblad MK70. with 60 or 100 mm lenses, or the Hasselblad MKWE with a 38 mm lens. These cameras were specially developed for close-up photogrammetry, but can also be used for picture interpretation or aerial surveying from light aircraft.

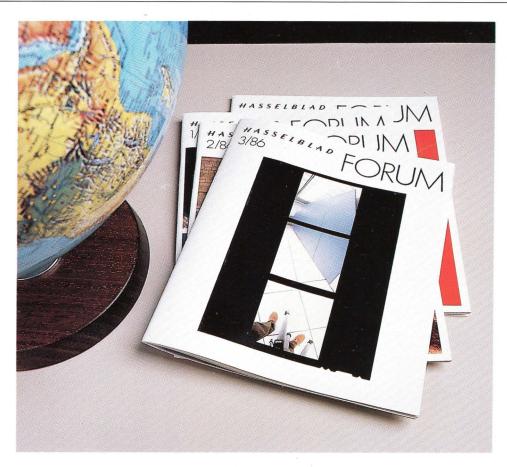
The MK70 and MKWE are quite different from standard Hasselblad cameras internally. One major difference is the Reseau plate on the MK70. Cross-shaped reference marks vacuum evaporated onto the plate are recorded on the film and used when measurements are made from the images.

Standard Hasselblad camera accessories are compatible with the MK70 and MKWE. This includes the close-up lenses (Proxar lenses). Only film magazine type MK70 can be used with these surveying cameras.



Hasselblad Forum

Hasselblad Forum is the quarterly magazine published in English, German and Swedish in Hasselblad photographers around the world. Among other things it contains the best work of leading photographers in full color and black and white, as well as news of the latest Hasselblad system developments and tips from other Hasselblad owners. Thirty-six feature-packed pages four times a year—in your mailbox! A year's subscription costs Skr. 100 (or the equivalent in your own currency). To order Forum just fill in the coupon and send it to the Hasselblad distributor in your country—the address is on the back of the coupon sheet opposite.



Hasselblad Boutique

Hasselblad Boutique leisure-wear together with windbreakers, sports jackets and sports shirts, offers a complete Hasselblad range of practical, comfortable clothing from top designers. They all carry the distinctive *Hasselblad* logo.

The Hasselblad Boutique line also includes crystal glasses, space photographs, pens and key-rings—all with the Hasselblad logo. Send for our "Hasselblad Boutique" brochure (in full color). Available from the Hasselblad distributor in your country or direct from:

Victor Hasselblad AB

Box 220 S-401 23 Göteborg Sweden.

- 1 Body warmer Quilted with a bolt cut. Warm Dacron filling. Water repellent. Machine washable.
- 2 Sweater Knitted crew-neck pullover. Gray with blue trim. Material: 50% wool, 50% ac-
- Umbrella A large, rugged umbrella, big enough for two. Sturdy metal design, robust wooden handle and 100% nylon fabric.
- 4 Flight bag A popular flight bag with both handle and adjustable shoulder strap. Two large compartments and an outside pocket.

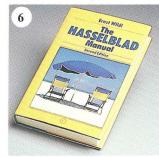












5 Crystal camera A Hasselblad 500C/M camera sculptured in pure crystal glass, from Lindshammars Glassworks, Sweden. Each crystal camera is numbered and signed by the artist.

6 The Hasselblad Manual By Ernst Wildi, Honorary Professor of Photography, East Texas State Univerity, U.S.A. A complete and comprehensive source of reference for all Hasselblad users. (English only).

HASSELBLAD®

