Zenza BRONICA®

ETR-C

Instructions

Congratulations on your choice of the Zenza Bronica ETR-C single lens reflex camera which should offer you high quality performance, handling convenience and versatility required for professional-class use. The Zenza Bronica ETR-C has been developed as a "system" camera, with a high degree of interchangeability in lenses, finders and focusing screens. At the same time, it is also backed up by a full range of valuable accessories which permit its use in many other day-to-day assignments which require a fast-handling camera with complete exposure automation.

To get best results from your camera, may we suggest that you read this instruction manual carefully, before you even touch the camera. Thoroughly familiarize yourself with its working parts, before loading your first roll of film, and your pleasure in using the Zenza Bronica ETR-C will be even greater.

NOTICE

The ETR-C system allows the photographer to build up a system which suits his needs. Therefore, the choice of finder is also left to the user's discretion. (However, instructions following are based on the use of the Waist-Level Finder.)

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Specifications of the ZENZA BRONICA ETR-C

Type	4.5cm x 6cm format lens shutter single lens reflex camera, with interchangeable lens, film holder, finder and focusing screen systems.
Frame size	42.5mm x 55.1mm (side/length ratio of 1:1.29 closely matches standard paper and reproduction sizes)
Film	120 roll film (15 exposures)
Standard lens	Zenzanon E 75mm F2.8 lens; interchangeable type; 5 elements in 4 groups; multi-layer anti-reflection coated; 50° angle of view, F22 minimum aperture, helical focusing from inf. to 60cm (2 ft.).
Filter size	58mm diameter screw mount on 75mm lens; 62mm diameter screw mount on lenses from 40mm to 250mm focal lengths.
Lens mount	Exclusive four-claw Bronica bayonet mount.
Lens diaphragm	Fully automatic instant reopening lens diaphragm action; equal-distant aperture scale graduations; depth of field previewing.
Shutter:	Electronic control SEIKO #0 between-lens leaf shutter; shutter speeds 8 sec. to 1/500 sec. plus T (time exposures); mechanical control setting 1/500 sec.
Multiple exposure	Multiple exposures possible with lever on body.
Film holder	Interchangeable type, exclusive film holders for 120 (15 exposures) and 220 (30 exposures) roll films. (Supplied with 120 roll film holder.)

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Finder system	Interchangeable finder system, with choice of four optional finders, waist-level finder, AE (automatic exposure) finder, rotary viewfinder and prism finder. (No standard finder is supplied and therefore a suitable one must be ordered separately.)
Focusing screen	Interchangeable type; standard type has split-image rangefinder spot surrounded by microprism ring; matte center with full area fresnel lens type and grid lines with super-slide type available.
Flash synchronization	X-setting (up to 1/500 sec.)
Battery checking	Battery check button plus green-colored LED light on top of body.
Battery	Single 6-volt silver oxide battery (Eveready No. 544, UCAR No. 544 or Mallory No. PX-28).
Dimensions	110mm (4½") wide x 106mm (4¼") high x 157mm (6¼") long (with standard lens and waist-level finder).
Weight	1,330 grams (2.9 lbs): ETR-C camera with waist-level finder and Zenzanon 75mm lens 803 grams (1.7 lbs): ETR-C camera (with battery) only 417 grams (14.6 oz.): Zenzanon 75mm f2.8 lens only 110 grams (3.8 oz.): Waist-level finder only

Parts of the ZENZA BRONICA ETR-C





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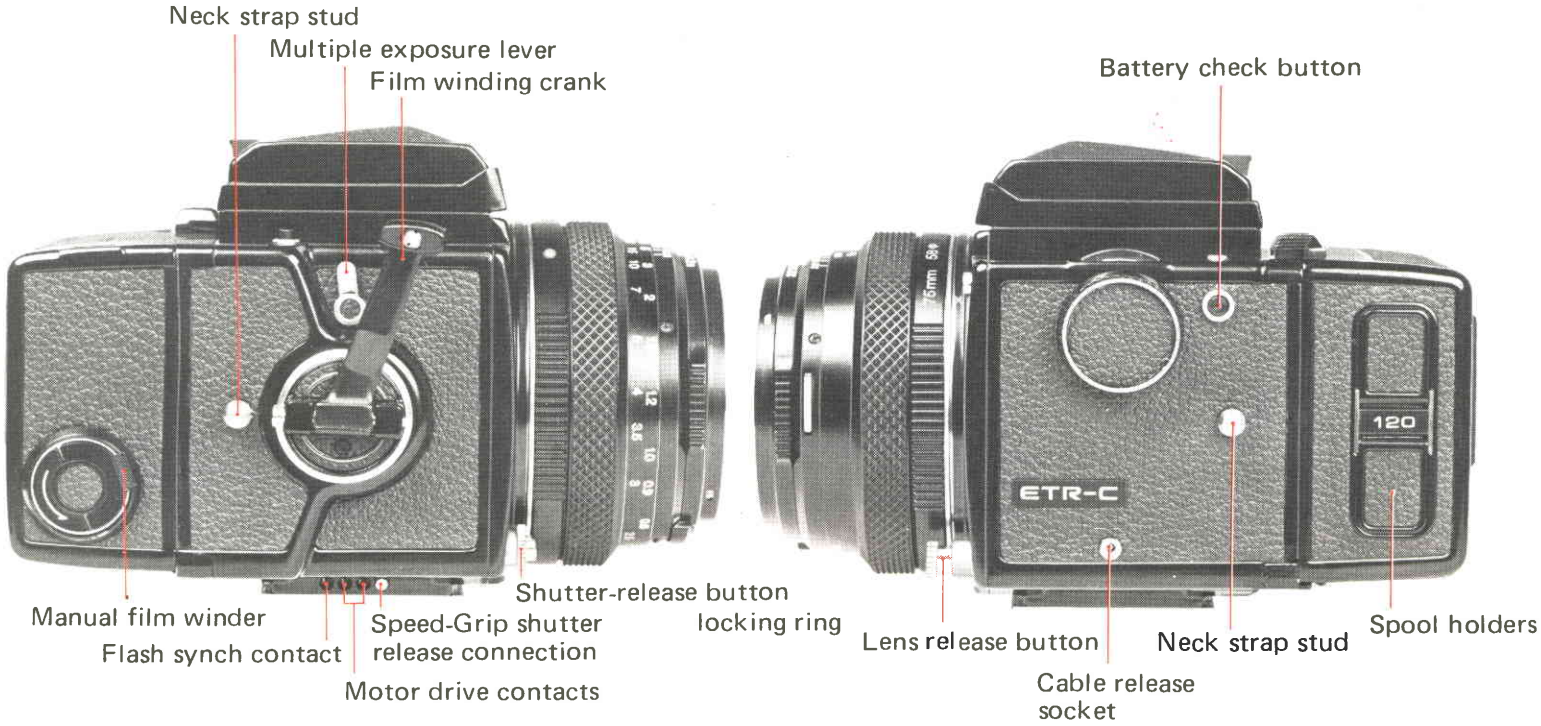
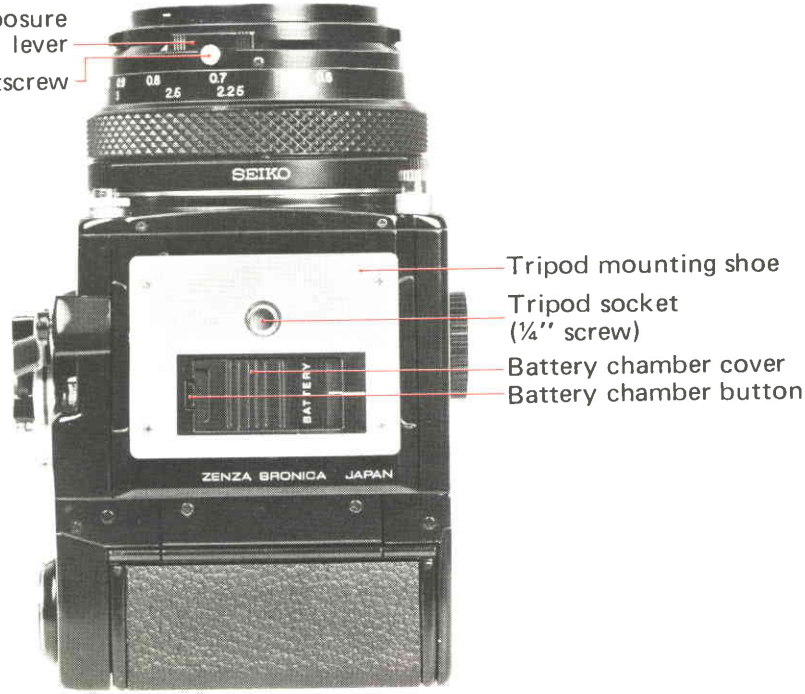
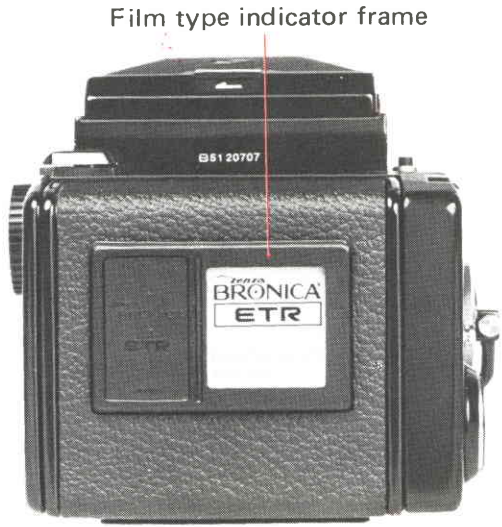

Neck strap stud
Multiple exposure lever
Film winding crank
Battery check button
Manual film winder
Flash synch contact
Speed-Grip shutter release connection
Motor drive contacts
Shutter-release button locking ring
Lens release button
Cable release socket
Neck strap stud
Spool holders
ETR-C
120





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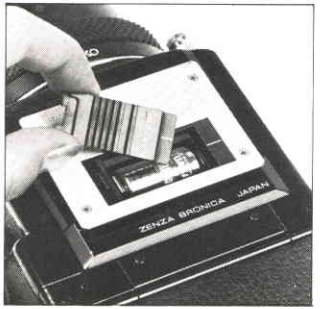
1 Loading the Battery



A. The electronically-controlled shutter will not work without loading the battery.
The shutter will be mechanically-controlled when the battery is not loaded or when it is loaded with its polarity marks reversed. It will then be released at 1/500 sec., regardless of the setting on the shutter speed dial.
Use one silver oxide battery (EVEREADY No. 544 or equivalent).

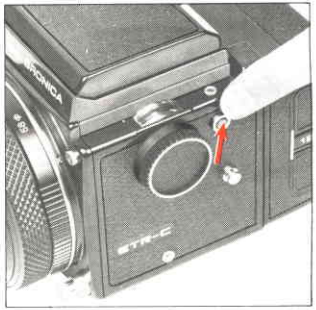


B. Depress the battery chamber button with your finger and, at the same time, move the battery chamber cover in the arrow-indicated direction. The cover will come off easily.



C. Coincide the plus (+) and minus (—) marks on the battery with similar polarity indications in the battery chamber. Then, push in the negative end of the battery first and follow with the positive end.
Insert the BATTERY end of the battery chamber cover which also has a mark coinciding to that on the body. Then move the cover in the other direction (opposite to the arrow indication) until it locks in place.

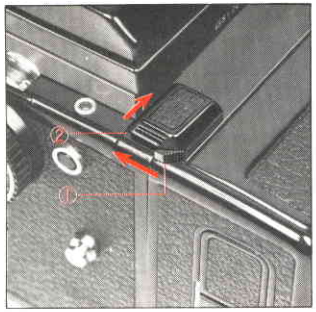
2 Battery Checking



If the green-colored battery check lamp lights up when the battery check button is depressed, the battery is loaded properly and there is sufficient power for electronically-controlled operations.

* If the lamp does not light up, (1) the battery is not loaded properly or (2) the battery is completely drained and should be exchanged.

3 Film Loading



A. To open the back cover, first, press the spring-loaded safety lock of the back cover release button and then push the release button in the arrow-indicated direction.

The safety lock protrudes from the bottom edge of the release button and prevents accidental openings of the back cover. Simply press it towards the lens to unlock.



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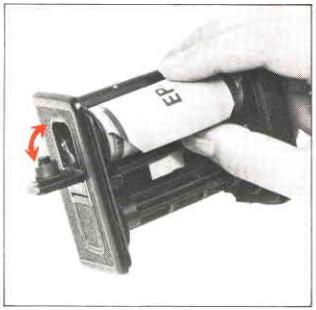
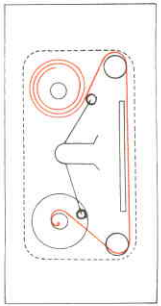
B. Opening the back cover discloses the film holder which can be taken out for film loading.
The film holder has an insert or frame for loading film, as well as a built-in film winding mechanism. Exclusive film holders are available for 120 and 220 roll films.



C. There are two spool holders on the film holder, with the top for the fresh film spool and the bottom for the empty take-up spool. The left-side shafts of both spool holders open outwards, as illustrated, for easy insertion of the spools. In other words, insert the right-side first and then close the left-side holder (shaft) which will engage the spool.

* The spool holders on the left side are locked securely when the back cover is closed.



D. After loading the fresh film spool properly, draw out the leading end of the film and turn it across the film pressure plate (as illustrated). Run it down and turn it over to the take-up spool. Insert the leading end into the slit of the take-up spool and wind slightly until securely engaged.
* The inside of the leader paper must face out when running across the film pressure plate.



E. Unfold the manual film winder on the right side of the film holder and rotate in the arrow-indicated direction, while checking the advancing film. When the starting point, or arrow mark, is aligned with the triangular ▼ start-mark on the top left side of the film holder, stop rotation.



F. The film can be loaded in the film holder without taking it out. It is loaded in the same manner as for the detached film holder. However, the starting point, or arrow mark, should be aligned to the start-mark by advancing the film with the film winding crank on the camera body.

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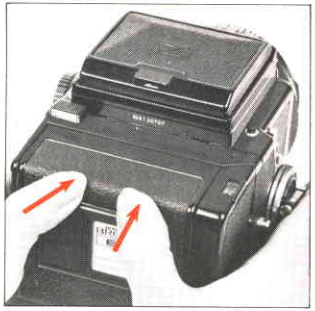
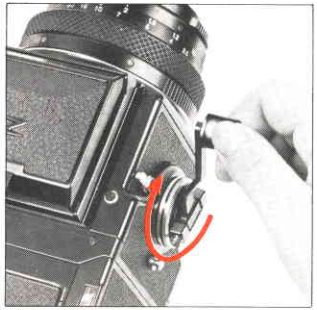
* If the film is not advanced when the film winding crank is rotated, the film holder is not inserted properly and/or the camera body may be set for multiple exposures. In the latter case, return the multiple exposure lever to an upright or vertical position.

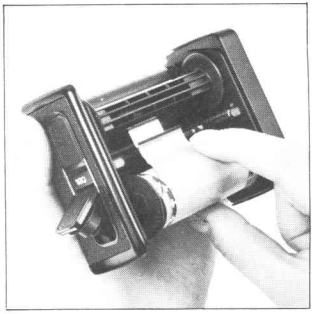


G. Close the back cover, by simply pressing it firmly against the camera body. The back cover will automatically lock and close, with the safety lock also locking the back cover release button.



H. Upon closing the back cover, after loading fresh film, rotate the film winding crank until it stops to place the first frame into place for taking the picture. The exposure counter will also change from "S" to "1" while the shutter will also be cocked.

4 Film Unloading



A. After the 15th exposure of the 120 roll film (30th exposure of the 220 roll film), the film winding crank will turn freely with further rotations. Therefore, continue rotating the film winding crank until the remaining film and all the leader paper is wound up on the take-up spool.
Open the back cover when winding action becomes very light.

B. Remove the film holder and, while preventing the loose film from unwinding, take out the take-up spool. Seal the exposed film and return it to its original box until development.
* Load and unload film away from direct sunlight and/or strong illumination.

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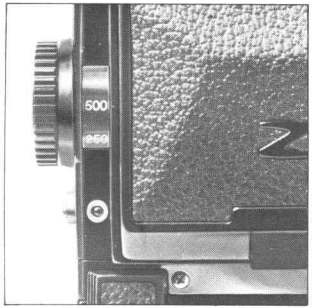
5 Setting the Shutter Speed Dial



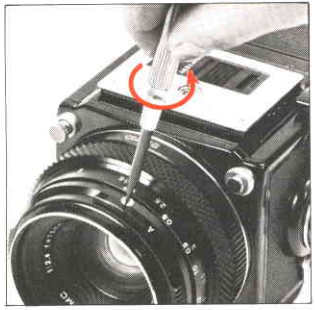
A. The shutter speed scale is viewed in its window over the shutter speed dial. The numbers on the scale are shutter speed settings, with numbers 1 to 8S full numbers and numbers 2 to 500 fractions of a second. For example, "8S" is 8 sec., "2S" is 2 sec. and "500" is 1/500 sec.
* The shutter is released at 1/500 sec., regardless of the setting when the battery is not loaded or is completely drained.

B. The numbers on the scale are color-coded in red and white. Red-colored numbers are full number settings of 1 second and longer while white-colored numbers are settings from 1/2 to 1/500 second. There is no B (bulb) setting.
See the following page for time (T) exposures.
The shutter speed dial cannot be rotated beyond the settings for 1/500 sec. and 8 sec., at both ends of the scale.

500	White
250	
125	
60	
30	
15	
8	
4	
2	
1	Red
2S	
4S	
8S	

6 Time (T) Exposures

A. Time exposures are made with the time exposure lever on the lens, regardless of the setting on the shutter speed scale. However, the lever is locked to prevent accidental movement and must be unlocked for use. Unscrew the setscrew on the time exposure lever until further revolution is not possible, which will permit the lever to be moved freely.



B. Next, cock the shutter with the film winding crank and then shift the time exposure lever to the left (looking from the body towards the lens) which will expose a red-colored "T" on the barrel. The shutter will stay open when the shutter release button is depressed in this condition.
The shutter is closed by shifting the time exposure lever in the opposite direction and exposing the letter "A" once more.



* Except for time exposures, always shift the time exposure lever so that "A" is visible on the lens barrel and keep it locked with the setscrew to prevent accidental movement.

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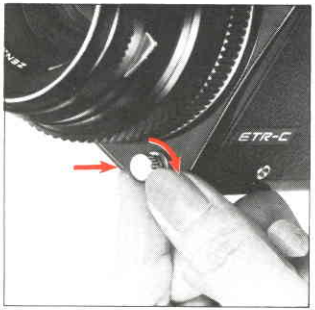
7 Exchanging Lenses



A. The lens cannot be detached or attached unless the shutter is cocked.
Therefore, first, rotate the film winding crank and cock the lens shutter. Then, rotate the lens release button 45° in the clockwise direction and depress it at this position. Next, while keeping the lens release button depressed, rotate the lens in the clockwise direction until it stops, at which point it can be detached. The lens release button will automatically return to "lock" when the user's finger is lifted from it.



Next, while keeping the lens release button depressed, rotate the lens in the clockwise direction, too, until it makes a full stop, at which point it can be detached.
The locking ring on the lens release button will automatically return to "lock" when pressure is released from the lens release button.

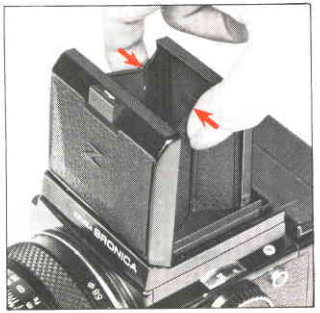


B. To attach the lens to the body, first, align the red dots on the lens and body and then insert the lens fully into its mount. Rotate in the counter-clockwise direction until it stops, with an audible click which will indicate that it is securely locked.
* The lens cannot be attached, unless the film is advanced and the shutter cocked on the body.

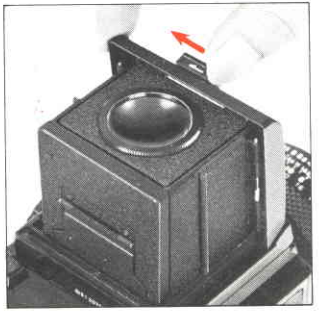
8 Waist-Level Finder



A. The focusing hood of the waist-level finder is opened by pushing or pulling up on the focusing hood/magnifier catch at the rear end of the folded waist level finder.
* As noted, there is no standard finder for the Bronica ETR and the user has a choice of several finders. Instructions are made on the basis of the waist-level finder because of its popularity.



B. To close the focusing hood, first, push down the magnifier (if it is flipped up). Next, press in both side frames, as illustrated, and, at the same time, press the front frame back towards the rear end. The focusing hood will automatically be folded down.



C. The magnifier can be flipped up into viewing position, by simply sliding the focusing hood/magnifier catch in the arrow-indicated direction (to the left). To return the magnifier to its storage position, simply push it down until it catches.
* The magnifier is interchangeable with one matching the eyesight of the user. See "18 Exchanging Finders."

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9 Setting the Aperture



A. The aperture ring is rotated, in either direction, to set the required f/number opposite the white index dot. The aperture ring click-stops at the numbered settings. Intermediate settings are also possible.
* Intermediate settings cannot be used when the AE (automatic exposure) Finder is used.



B. All Bronica interchangeable lenses for the ETR-C have fully automatic lens diaphragms which means that the focusing screen is always viewed at the full aperture, with the brightest possible image. However, depressing the depth of field preview lever will stop the lens diaphragm down to the pre-selected lens opening (aperture), permitting the photographer to check the depth of field effect on the focusing screen.

* The aperture ring must not be adjusted while the depth of field preview lever is being depressed.



A. The lens is focused on the subject, by rotating the focusing ring in either direction, while checking the effect on the microprism/split-image rangefinder spot in the center of the focusing screen (standard type).



B. The central split-image spot splits the image diagonally, with the upper and lower halves being separated diagonally when the lens is out of focus. When in focus, however, the two halves will coincide with the diagonal displacement disappearing. The microprism ring surrounding the central spot can also be used for checking the sharpness of the focused image, since the image will glitter when the lens is not focused.



The full-area matte surface surrounding the central focusing aids can also be used for checking image sharpness.

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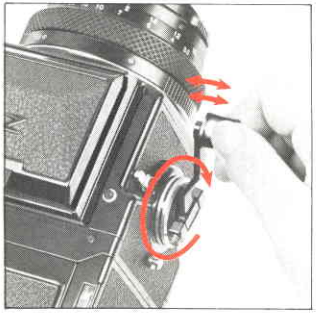
11 Film Advance and Shutter Cocking



Rotating the film winding crank completely one time, in the forward direction, will advance the film one frame and, at the same time, cock the shutter, with the winding action stopping automatically. On the other hand, short, rapid strokes, up to an accumulated full rotation, will also do the job.

12 Exposure Counter



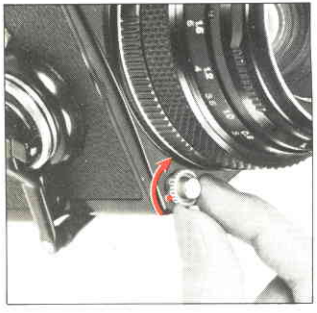


The exposure counter shows the number of frames exposed or, in other words, is an additive type. Starting from "S", the odd numbers 1, 3, 5, etc., up to 15, are indicated in actual numbers while the even numbers are indicated with dots, coupled with the film winding crank action. The letter "S" and number "15" are orange-colored while the other numbers and dots are white.

13 Shutter Release Button



A. Depress the shutter release button with the ball of the finger. Use a smooth and gentle action and press all the way in. There is no need for great strength or jerky action, which will effect the sharpness of the picture.



B. Safety Lock
The shutter release button can be locked to prevent accidental operations, by simply rotating the locking ring 55° in the clockwise direction. This will place a red dot on the side, indicating that it is locked.
To release the safety lock, rotate the locking ring in the counterclockwise direction, which will place the dot diagonally lower.
The shutter cannot be released, in the following cases:—

1. The shutter release button is locked with the locking ring.
2. The film winding crank has not been rotated fully. (The same is the case when the exposure counter is still between "S" and "1".)
3. The shutter is not cocked.
4. The lens is not properly attached. (The same is the case with extension tubes and bellows.)
5. The lens release button is being depressed.
6. All available frames (15 frames on the 120 roll film and 30 frames on the 220 roll film) have been exposed.

C. If the film winding crank is rotated while the shutter release button is being depressed, the shutter will be released at the instant the winding action is completed.
D. A cable release or self-timer can be screwed into the cable release socket on the left side of the camera body.

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14 Distance Scale and Depth of Field Scale



A. Distance scales on the Bronica lenses for the ETR-C can be used for setting the focus on the required distance or finding the distance actually focused. Simply rotate the focusing ring and set the required distance opposite the green-colored index, which will adjust the lens for the required distance.



B. There is an apparent zone of sharpness, both in front and back of the focused subject, which is known as the depth of field. The depth of field scale shows the zone of apparent sharpness at any lens opening or distance and can be utilized for quickly and simply ascertaining the depth of field. The depth of field scale is next to the distance scales and is made up of identical pairs of apertures on both sides of the green-colored distance index. These identical pairs of apertures indicate the distance that will be in focus at these lens openings. For example, if the 75mm lens is focused at a distance of 1.5m, it can be seen from the depth of field scale that the zone will extend from about 1.2 to 2.1 meters (4 ft. to 7 ft.), when a lens opening of F22 is used.

15 Infrared Photography



In infrared photography, some adjustment must be made in the focus in order to retain sharpness on the film, because the invisible infrared rays are longer in wave length than the visible rays used for focusing. For infrared photography —

1. Use a R filter or equivalent with an infrared (black-and-white) film.
2. The red-colored line, next to the green-colored distance index, is the infrared index.
3. After focusing in the normal manner, re-set the distance indicated by the green-colored distance index to the infrared index, by shifting the distance ring.
4. Follow instructions enclosed with the infrared film and filter and, to be on the safe side, make several bracketing shots. In general, more exposure rather than less seems to be a safe guide.

16 Flash Photography

Light Sources \ Shutter Speed	Red				White								
	T	8s	4s	2s	1	2	4	8	15	30	60	125	250	500
X contact														
F bulb														
M bulb														

A. The lens shutter of the Zenza Bronica ETR-C has a X-setting for flash synchronization, which means that electronic flash units will synchronize at all shutter speed settings, up to the fastest 1/500 second. Thus, it is very convenient for taking shots in daylight which require flash fill-in, too.

When using Class M and Class F flash bulbs, they will synchronize at the shutter speed settings indicated in the above table.

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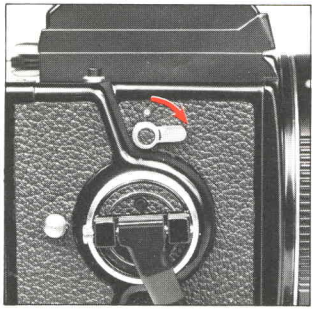
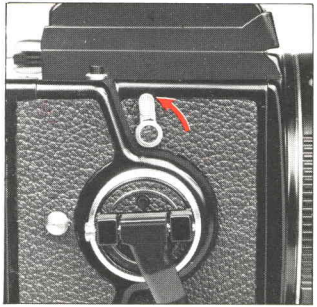
B. Always use flash cords with a standard PC type plug.

17 Multiple Exposures

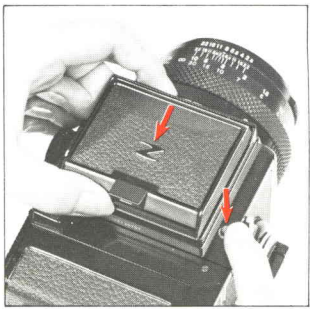


A. To make multiple exposure, rotate the film winding crank (to advance the film and cock the shutter) and then turn the multiple exposure lever in the clockwise or arrow-indicated direction, which will expose a red mark, When set in this manner, the shutter can be released and cocked any number of times, without advancing the film.

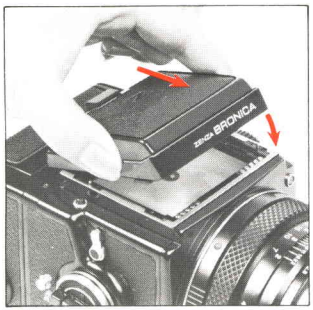


B. Upon taking the multiple-exposed picture, be sure to return the multiple exposure lever back to its vertical position and cover the red mark. Otherwise, there will be additional multiple exposures on the same frame.

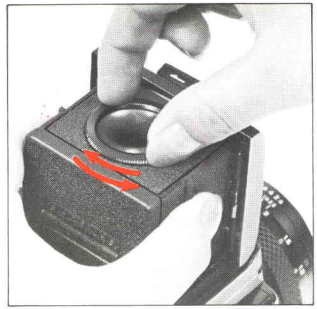
18 Interchanging Finders and Magnifiers



A. The waist-level finder can be exchanged with other optional finders, to match shooting operations to photographic conditions. To detach the finder, simply depress the finder release button, while, at the same time, sliding the finder backwards where it can be detached.



B. To attach the finder on the body, first, simply place protrusions on the bottom of the finder into corresponding openings in the finder frame and then, slide the finder forward where it will lock.



C. The standard magnifier supplied with the waist-level finder has a power of –1.50 diopters, which can be exchanged for others with powers of +1.50, +0.50, –0.50, –2.50, –3.50 and –4.50 diopters. These optional accessories should be purchased to suit the user's eyesight, if necessary.
Simply rotate the magnifier frame in the counter-clockwise direction to unscrew.
Attach in the reverse manner.

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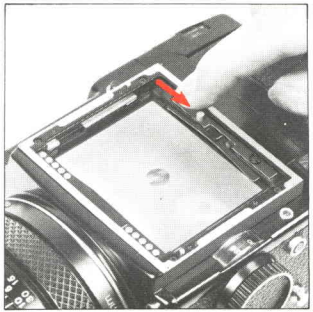
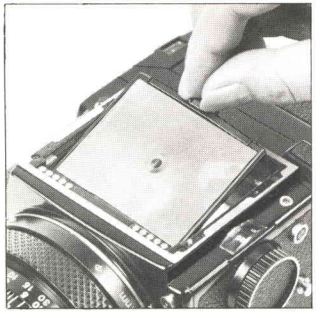
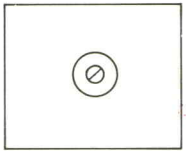
19 Interchanging Focusing Screens



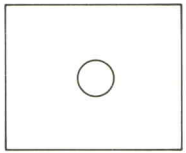
A. The focusing screen can be exchanged, depending on the type of photographic work being undertaken.
First, remove the finder attached to the camera body. Then, move the screen removal lever in the arrow-indicated direction, as illustrated. Finally, lift it up by the lever.



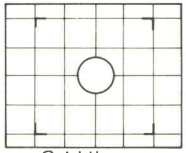
B. To install the focusing screen, insert the protrusions at the forward end of the focusing screen frame into corresponding openings in the focusing screen frame of the body. Then, drop the rear end of the focusing screen and slide the screen removal lever to the right.



Split-image microprism
Standard



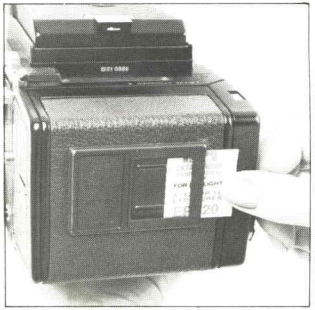
Full matte



Grid lines
w/super-slide frame

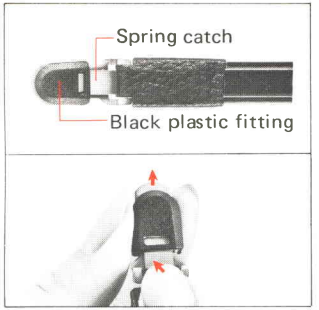
C. The standard focusing screen has a split-image rangefinder spot, with the split oriented at 45 diagonal, which is surrounded by a microprism ring and, finally, a full-area matte screen plus fresnel lens. Focusing screens with matte center plus full-area fresnel lens outside the center spot, and grid lines with super-slide frame indicated are also available.

20 Film Type Indicator Frame

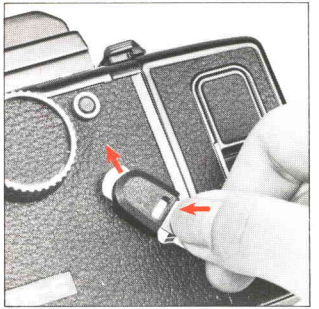


Upon loading the film, tear off the end flap from the empty film package and insert it in the film type indicator frame. This will help you keep track of the film loaded in the camera and should prove useful when two or more types of films are being used in a shooting session.

21 Attaching and Removing the Neck Strap



A. Attaching the Strap
As illustrated, press the spring catch and, at the same time, move the black plastic fitting back towards the neck strap, which will expose an opening on the opposite side. Place the opening over the neck strap stud on the camera body and then pull strongly on the strap, which will lock the fitting to the stud.



B. Detaching the Strap
Hold the neck strap, as illustrated, and depress the spring catch while, at the same time, pushing the metal fitting forward, as far as it will go. Then, lift the fitting up from the stud.

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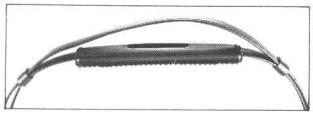


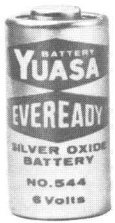
C. The shoulder pad is supplied separately from the neck strap and should be used in the following manner. First, adjust the neck strap to a suitable length and then fix the shoulder pad on the inside of the neck strap, at the point where it will rub against the shoulder.

22 Facts about the Battery

The battery supplies power for the various electronic control mechanisms incorporated in the Zenza Bronica ETR-C. When used incorrectly, there is a possibility of the wrong exposure being set to the camera and/or the camera not operating.
Be sure to use and store the battery correctly for obtaining optimum performance from it at all times.

* Take the battery out of the battery chamber when storing the camera.
* Leaving the battery in the camera for a long time, without using it, can lead to leakage problems and result in poor contact.
Discard a battery with leakage or corrosion and thoroughly clean out the battery chamber, before inserting a new battery.
* Clean the contacts of the battery chamber and battery with a soft cloth. Don't use sandpaper or emery cloth.
* Don't throw the battery into fire, or hit it strongly, as there is danger of explosion.
* The silver oxide battery has very good cold weather resistance. However, there is a tendency for performance to drop when the temperature falls below 0°C (32°F). Therefore make it a rule to use a new battery and/or keep replacement batteries on hand for shooting out-

6-volt silver oxide battery



doors in such freezing weather. Keep the battery (and camera) under cover, next to the body, and load just before beginning the session.

23 Pointers on Shooting with the Zenza Bronica ETR-C

You will be able to use the Zenza Bronica ETR-C to your entire satisfaction and, thus, get better results from it, if you will take the trouble to thoroughly familiarize yourself with the operations of the camera and fully understand the extent of its superior specifications.

* The shutter cannot be cocked when film is not loaded in the film holder. The use of the multiple exposure lever will, however, permit you to cock the shutter, in such instances. This feature is, of course, very convenient for familializing yourself with the camera and for testing the shutter in flash photography. (See "17. Multiple Exposures".)
* Battery power is not consumed when time exposures are made or when the ETR-C is used with the mechanically-controlled 1/500 sec. setting.
* The voltage will drop when the camera is used for long shooting sessions in freezing weather. Insert a new battery or keep a spare on hand, for such occasions. Furthermore, keep such batteries in an inside pocket.
* The focusing screen is detachable, for exchanging with other types. Do not place trimming masks or tapes on the bottom surface of the screen, as this will lead to inaccurate focusing.

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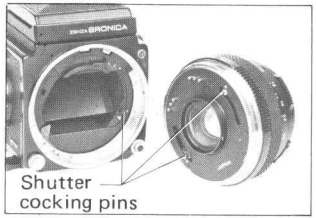
* Restrict cleaning of the reflex mirror to blowing or brushing with the blower brush or a soft camel hair brush. Don't touch the surface with your fingers or a cloth.
* Clean the plastic focusing screen in the same manner. Don't touch the surface as you may leave fingerprints.
* Protect your camera from temperature changes which can result in moisture condensation, frost, etc., inside the body, leading to rusting of metallic parts and troubles.
* Protect your camera from impact and vibrations, too.
* Always protect the lens with its cover, when carrying the camera.
* Clean the camera and lens very carefully after using it outdoors in wet weather or at the seashore.
* Wipe the camera carefully with a well-wrung damp cloth, using fresh water, if the exterior is effected by salty air. Then, wipe it dry with a soft, dry cloth. If necessary, send it out for a quick inspection at an authorized repair station.
* If the equipment is not being used for a long period, store everything in tin-lined containers, with plenty of disiccant, such as silica gel. Finally, store the equipment in a cool, dry and well-ventilated (but not windy) place.
* Do not thread too strongly, when using a longer-than-standard tripod screw, as you may damage the body.
* Both camera body and lens must be in the "cocked" condition to attach or remove the lens. In other words, cocking the lens shutter sets the cocking pins of both lens and body to a green-colored dot.

The cocking pin of the detached lens can be set to the dot by moving it manually. On the other hand, simply revolve the film winding crank to set the cocking pin of the body mount.



* Don't throw the battery into a fire or hit it strongly, as there is danger of it exploding.

* When shooting with the optional AE Finder E, remember to readjust the film speed dial of the finder when a film of different speed is loaded in the camera.

25 Accessories for Increasing the Versatility of the ETR-C



AE Finder E

Attaching the exclusive AE Finder E converts the ETR-C to automatic exposure operations of the aperture-preferred type, with accurate metering through the lens. The finder shows an eye-level laterally-correct upright image, as well as a LED readout display of shutter speed settings and over and under-exposure warnings below the screen area, for highly accurate exposure controls.



Prism Finder E

The Prism Viewfinder E is a very compact, lightweight finder, showing an eye-level laterally-correct and upright image which is ideal for following fast-breaking actions.
The accessory shows a very bright image of high magnification, which makes picture-taking very easy in both horizontal and vertical formats, and thus is ideal for normal everyday uses. The area viewed in the finder is 40.6 mm x 51.6mm (or 96% by 94%) in the horizontal format while the magnification is 0.82x with the standard 75mm lens.

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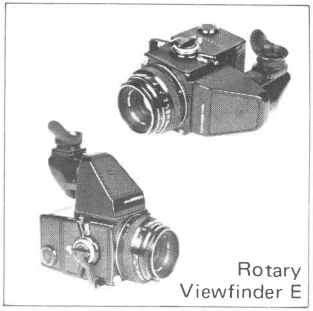
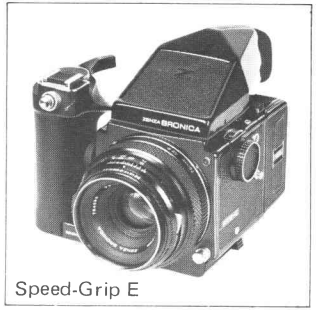


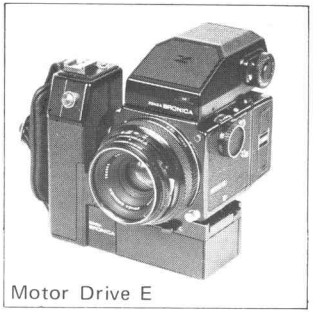
Rotary Viewfinder E

The Rotary Viewfinder E on the ETR-C makes reflex view-focusing very easy, as the eyepiece section can be rotated 90° to the left or right (or up to 180°) for view-focusing a very bright and distinct upright image, moving in the same direction as the lens. The accessory is, therefore, ideal for eye-level view-focusing from the side, or reflex viewing from above, as well as being ideal for reflex viewing of low-angle moving subjects.



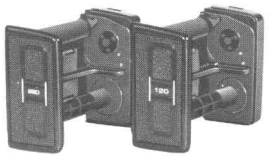
Speed-Grip E

Attaching the exclusive Speed-Grip E to the ETR-C converts the camera for fast operations similar to the 35mm SLR, in both horizontal and vertical formats, without any changes in gripping action. Thumb-stroke speed-lever action advances the film and cocks the shutter while the built-in shutter release button is automatically connected to the body's release system upon attachment. A built-in hot shoe also permits use of a cordless electronic flash unit.



Motor Drive E

The Motor Drive E provides completely motorized film winding and shutter cocking operations, when attached, and leaves the user free to concentrate on the finder view. Can be used for single frame exposures, as well as continuous shooting at the rate of about one frame per second, which makes it highly convenient for sports photography, remote control photography and other uses requiring speedy shooting or absolute concentration.
When used in combination with the AE Finder E, there is also automatic exposure control for even greater convenience.

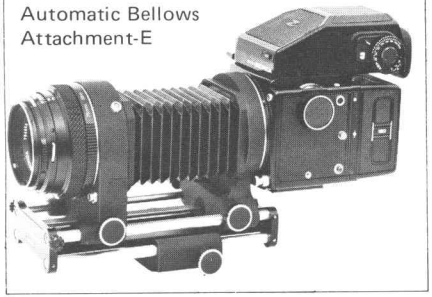


Film Holder-E

One of the important features of the Zenza Bronica ETR-C camera is the film holder interchangeability system. When film holders are carried with films already preloaded, it will be possible to make immediate and speedy exchanges when films are completely exposed, for continuing shooting sessions with practically no interruptions. Exclusive hard carrying cases are provided for protecting the film holder, as well as to prevent unravelling of the loaded film.

Film Holder-E 120
For 120 roll film (15 exposures)
Film Holder-E 220
For 220 roll film (30 exposures)

Automatic Bellows Attachment-E



The accessory provides variable lens extensions continuously, with automatic coupling of the lens shutter and lens diaphragm actions, when used between the Zenza Bronica ETR-C camera body and Zenzanon-E lenses (40 mm to 250mm), and thus makes possible extreme close-ups.

There is no change in operations, even when the accessory is inserted between camera body and lens, and, furthermore, full exposure automation is possible when the AE Finder-E is also used.

Magnifications are 1.38x to 4.03 x with the 40mm, 1.1x to 3.24x with the 50mm, 0.71x to 2.18x with the 75mm, 0.37x to 1.16x with the 150mm and 0.22x to 0.7x with the 250mm lenses.

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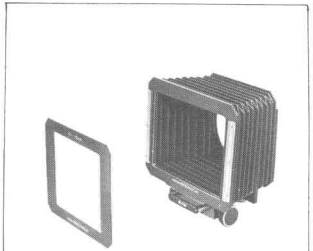
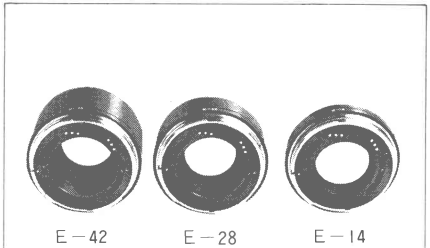


Professional Lens Hood-E

The bellows type Professional Lens Hood-E can be used with all Zenzanon-E lenses from 40mm to 250mm, as well as with 35mm format single lens reflexes with an optional adapter ring. Distracting glare and reflections can be eliminated very effectively, while checking the subject view on the finder screen, by adjusting the bellows with its extension knob.

Maximum bellows extension
46mm

Gelatin filter size
75mm x 75mm



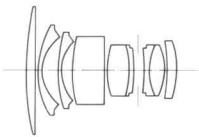
Automatic Extension Tube-E

Three types of Automatic Extension Tubes, or E-14, E-28 and E-42, are available for use with the Zenza Bronica ETR-C and provide very simple close-up shooting action when inserted between the ETR-C camera body and Zenzanon-E lenses (40mm to 250mm).

Operation is very simple because lens shutter and lens diaphragm are automatically coupled when the accessory is inserted and, furthermore, the AE Finder-E can also be used for full exposure automation.

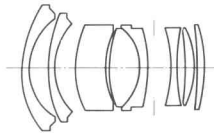
Magnifications, with the E-42 at maximum extension, are 1.2x with the 40mm, 0.98x with the 50mm, 0.72x with the 75mm, 0.41x with the 150mm and 0.25x with the 250mm lenses.





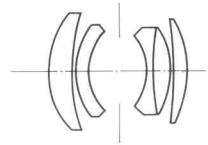
Zenzanon E 40mm F4
Lens construction: 9 elements 7 groups
Angle of view: 82° 30'
F/numbers: 4 to 22
Diaphragm: Fully automatic
Minimum focus: 40cm (1.3 ft.)
Electronic leaf shutter: Seiko #0
Shutter speeds: 8 sec. to 1/500 sec.
plus T (time exposure)
Filter size: 62mm screw-in type
Length: 62mm
Weight: 478 grams (1.04 lbs.)
Equivalent 35mm focal length: 25mm





Zenzanon E 50mm F2.8
Lens construction: 8 elements 7 groups
Angle of view: 70°
F/numbers: 2.8 to 22
Diaphragm: Fully automatic
Minimum focus: 50cm (1.6 ft.)
Electronic leaf shutter: Seiko #0
Shutter speeds: 8 sec. to 1/500 sec.
plus T (time exposure)
Filter size: 62mm screw-in type.
Length: 62.5mm
Weight: 464 grams (1.01 lbs.)
Equivalent 35mm focal length: 30mm





Zenzanon E 75mm F2.8
Lens construction: 5 elements 4 groups
Angle of view: 50°
F/numbers: 2.8 to 22
Diaphragm: Fully automatic
Minimum focus: 60cm (2ft.)
Electronic leaf shutter: Seiko #0
Shutter speeds: 8 sec. to 1/500 sec.
plus T (time exposure)
Filter size: 58mm screw-in type
Length: 54.3mm
Weight: 417 grams (1.2 lbs.)
Equivalent 35mm focal length: 46mm

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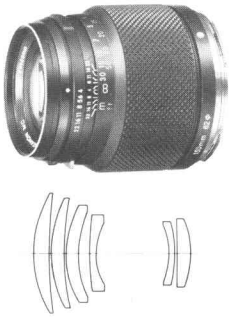
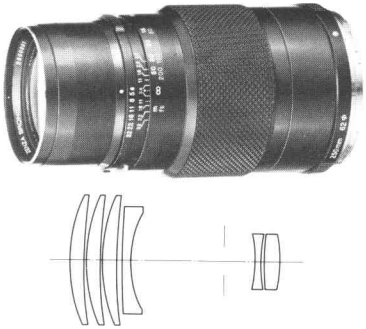


Zenzanon E 150mm F4
Lens construction: 6 elements 6 groups
Angle of view: 26° 30'
F/numbers: 4 to 22
Diaphragm: Fully automatic
Minimum focus: 1.5m (4.9 ft.)
Electronic leaf shutter: Seiko #0
Shutter speeds: 8 sec. to 1/500 sec.
plus T (time exposure)
Filter size: 62mm screw-in type
Length: 86mm
Weight: 605 grams (1.3 lbs.)
Equivalent 35mm focal length: 90mm



Zenzanon E 250mm F5.6
Lens construction: 6 elements 6 groups
Angle of view: 16°
F/numbers: 5.6 to 22
Diaphragm: Fully automatic
Minimum focus: 3.5m (11.5 ft.)
Electronic leaf shutter: Seiko #0
Shutter speeds: 8 sec. to 1/500 sec.
plus T (time exposure)
Filter size: 62mm screw-in type
Length: 148mm
Weight: 820 grams (1.8 lbs.)
Equivalent 35mm focal length: 150mm

● ZENZANON-E 75mm F2.8

F/numbers	Distance (feet)											
	∞	30	15	10	7	5	4	3.5	3	2.5	2.25	2
2.8	∞	40.0	17.1	10.9	7.40	5.19	4.11	3.58	3.06	2.54	2.28	2.02
	118	24.0	13.4	9.27	6.65	4.83	3.89	3.42	2.94	2.46	2.22	1.98
4	∞	46.7	18.2	11.3	7.58	5.27	4.17	3.62	3.09	2.55	2.29	2.03
	82.8	22.2	12.8	8.99	6.51	4.76	3.85	3.39	2.92	2.45	2.21	1.97
5. 6	∞	60.2	19.9	11.9	7.84	5.39	4.24	3.67	3.12	2.58	2.31	2.04
	59.3	20.1	12.1	8.65	6.33	4.66	3.79	3.34	2.89	2.43	2.19	1.96
8	∞	107	23.1	12.9	8.27	5.58	4.35	3.75	3.18	2.61	2.34	2.06
	41.6	17.6	11.2	8.18	6.08	4.53	3.71	3.28	2.85	2.40	2.17	1.94
11	∞	5093	29.1	14.6	8.89	5.85	4.50	3.86	3.25	2.66	2.37	2.09
	30.4	15.3	10.2	7.67	5.80	4.39	3.61	3.21	2.79	2.36	2.14	1.92
16	∞	∞	51.7	18.6	10.2	6.34	4.77	4.06	3.38	2.74	2.43	2.13
	21.1	12.6	8.94	6.94	5.40	4.16	3.46	3.09	2.71	2.31	2.10	1.89
22	∞	∞	1005	27.7	12.3	7.08	5.16	4.32	3.55	2.84	2.51	2.19
	15.4	10.4	7.80	6.25	4.98	3.92	3.30	2.97	2.62	2.24	2.05	1.85

F/numbers	Distance (meter)											
	∞	10	5	3	2	1.5	1.2	1	0.9	0.8	0.7	0.6
2.8	∞	13.8	5.77	3.25	2.10	1.56	1.23	1.02	0.92	0.81	0.71	0.61
	36.0	7.86	4.41	2.79	1.91	1.45	1.17	0.98	0.88	0.79	0.69	0.59
4	∞	16.5	6.18	3.38	2.15	1.58	1.25	1.03	0.93	0.82	0.71	0.61
	25.2	7.21	4.20	2.70	1.87	1.43	1.16	0.97	0.88	0.78	0.69	0.59
5.6	∞	22.2	6.84	3.56	2.22	1.62	1.27	1.05	0.94	0.83	0.72	0.61
	18.0	6.49	3.95	2.60	1.82	1.40	1.14	0.96	0.87	0.78	0.68	0.59
8	∞	47.4	8.13	3.87	2.33	1.67	1.30	1.07	0.95	0.84	0.73	0.62
	12.7	5.65	3.63	2.46	1.75	1.36	1.11	0.94	0.86	0.77	0.68	0.58
11	∞	∞	10.7	4.34	2.49	1.75	1.35	1.09	0.97	0.86	0.74	0.63
	9.27	4.87	3.30	2.31	1.68	1.32	1.09	0.92	0.84	0.75	0.67	0.58
16	∞	∞	22.7	5.49	2.82	1.89	1.43	1.14	1.01	0.88	0.76	0.64
	6.42	3.96	2.87	2.09	1.57	1.25	1.04	0.89	0.81	0.73	0.65	0.57
22	∞	∞	∞	8.08	3.34	2.11	1.54	1.21	1.06	0.92	0.78	0.66
	4.71	3.25	2.48	1.89	1.45	1.18	0.99	0.86	0.79	0.71	0.64	0.56

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Accessories for the Zenza Bronica ETR/ETR-C



* Film backs are only for the Bronica ETR model.