A complete guide to the Mamiya RZ67, part three: lenses, filters and accessories

Welcome back to part three of this guide. We've already covered a deep overview of the Mamiya RZ67 Professional system as well as a look at the system's film holder options. For part three, I'll be covering the lenses.

If you've read the previous two parts, you'll know that I'm a huge fan of the Mamiya RZ67's lenses. They are very sharp and they produce really fantastic images. The lens system ranges from the Mamiya-Sekor Z 37mm f/4.5W fisheye at the very wide end to the Mamiya-Sekor Z 500mm f/6.0 APO at the long end. In between, there is a zoom lens, plus specialist shift-tilt optics and all the focal lengths you could desire in between. 27 lenses in all, of which I own 12.

As I mentioned previous, I don't have all of the Mamiya lenses RZ67 lenses in my collection. Also, my collection is comprised of Mamiya's "normal" lenses, not the APO, ULD, or other ultra high-quality lenses that Mamiya made. This is mainly because of the high prices of the premium options but despite this, I am not disappointed with the quality of the lenses I have. They are all breathtaking.

Here's how this article breaks down (prepare yourself for a very long list).

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A quick word about lens quality

You can find much criticism about RZ lenses on dedicated websites and discussion forums, which will tell you that only the high-quality lenses are worth the investment. So it seems that everyone interested in the system starts from the premise that the other lenses are of lesser quality and ultimately bad. I can assure you that this is not the case at all, Mamiya's optics for the RZ are all absolutely incredible, even those which are not APO/ULD variants or utilise a floating lens system…

Mamiya manufactured lenses treated with their own proprietary multi-coating technology. Although this patented technology has been improved over time and of course, the evolved versions are better, even much better, there is no doubt. So if you can afford to buy them, do not hesitate to choose them. I did not make this choice, because I'd rather be able to buy more lenses and the quality of the ones I have is enough for me, anyway. I'm not saying that it's not worth it to buy the best quality lenses, like the APO, ULD, all lenses that Mamiya-Sekor have treated with their newer multi-coating process. If you want the best for your RZ, and your photography, choose them!

All but one of the Mamiya RZ67 system lenses are "prime" lenses. That is, they have a fixed focal length. The one and only zoom, although interesting, is not practical for use outdoors, at least in my experience. So, if you are used to shooting with zooms, you may have to change your point of view a little, along with your usage.

For my part, I do not take all of my lenses every time with me when I travel. With 12 of them, it would be quite hard! I select some, the ones I like, or the ones that can be used where I plan to go. In case I travel by car, I can take a large case that contains everything but it's quite heavy. If I travel by air, it is not possible to take everything, so I only take a few lenses that can serve me (making sure my selection is not too heavy.

Mamiya RZ67 lens system breakdown

As I noted above, there were 27 lenses made for the Mamiya RZ67 system from the 37mm f/4.5 fisheye to the 500mm f/6.0 APO. They cover almost every conceivable focal length a photographer may wish for and with the teleconverters and extension tubes on offer, can cover much more. Here they are in full:

Lens	Angle of view	Min. aperture	Min. focusing distance (from front lens)	35mm equivalent	Filter size	Dimensions (mm)	Weight (g)
Z37mm f/4.5W Fisheye	180°	f/32	6.4mm	18mm	40.5mm	112 x 100	1280
Z50mm f/4.5W	84°	f/32	45mm*	24mm	77mm	97 x 82	760
M50mm f4.0L-A ULD	82°	f/32	50mm	24mm	77mm	97 x 93	954
Z65mm f4.0W	69°	f/32	91mm	32mm	77mm	97 x 80	715
M65mm f/4.0L-A	68°	f/32	85mm	32mm	77mm	97 x 113	1060
Z75mm f/4.5W Shift	62°	f/32	114mm	36mm	105mm	108 x 152	1660
M75mm f/3,5 L	61°	f/32	380mm	36mm	77mm	96 x 97	980
Z90mm f/3.5W	53°	f/32	197mm	44mm	77mm	97 x 82	690
Z110mm f/2.8W	44°	f/32	313mm*	53mm	77mm	97 x 62	610
Z127mm f/3.5W	39°	f/32	408mm	62mm	77mm	81 x 97	810
Z127mm f/3.8	39	f/32	441mm	62mm	77mm	81 x 97	?
M140mm f4,5W	35°	f/32	516mm	68mm	77mm	97 x 84	810
M140mm f/4.5M/L-A	35°	f/32	502mm*	68mm	77mm	97 x 90	870

Macro							
Z150mm f/3.5W	33°	f/32	570mm*	73mm	77mm	97 x 83	825
Z180mm f/4.5W	28°	f/45	1100mm	87mm	77mm	119 x 87	900
Z180mm f/4.5W-N	28°	f/45	817mm*	87mm	77mm	97 x 119	900
M180mm F/4.0D/L Soft	28°	f/32	783mm	87mm	77mm	97 x 118	1039
Z210mm f4.5 APO	24°	f/45	1168mm	102mm	77mm	97 x 114	980
Z250mm f4.5W	20°	f/45	1540mm*	121mm	77mm	97 x 126	1080
Z250mm f/4.5 APO	20°	f/45	1564mm	121mm	77mm	97 x 145	1340
Z350mm f/5.6 APO	15°	f/45	3081mm	170mm	77mm	97 x 192	1455
Z360mm f/6.0W	14°	f/45	3300mm*	175mm	77mm	97 x 166	1110
Z500mm f/8.0W	10°	f/32	5100mm*	242mm	105mm	108 x 299	1960
Z500mm f/6.0 APO	10°	f/45	6064mm	242mm	105mm	108 x 280	2315
Z100-200 f/5.2W Zoom	48° - 25°	f/45	225 - 894mm	48 - 97mm	77mm	109 x 173	1620

M75mm f4.5L SB Tilt Shift	62°	f/32	302mm	36mm	105mm	108 x 125	1295
M180mm f4.5L SB Tilt Shift	28°	f/45	1859mm	87mm	77mm	97 x 92	808

* These were measured by me using my own lenses; other values come from Mamiya's own documentation.

A note on lens designations:

- "L-A" denotes lenses with a floating lens element system (FLE).
- "APO" (apochromatic) lenses are those that have been corrected for chromatic aberrations caused by different wavelengths of light. APO lenses are generally a lot more expensive.
- "W" denotes lenses with a wide aperture ring that has additional 1/2 stop markings.
- "N" denotes lenses that have a "new barrel" construction, which is a Tessar design with four elements in three groups. The only lens covered by this configuration in the Mamiya RZ lens collection is the 180mm f/4.5W-N.
- "SB" is for Short Barrel tilt-shift lenses that need an adapter to be used at infinity.
- "M" is for lenses initially made for the RB Pro SD system (KL type) and adapted for the RZ cameras.

Before adding the ½ value on the aperture ring (W lenses and newer), Mamiya manufactured all lenses with full aperture values. Non-W lenses are quite the same lenses optically as the W versions, which is why I don't present too much detail about them (except for the four I have).

At the beginning of the production of the RZ Pro (I), non-W lenses were the only versions available. Mamiya did not manufacture them for very long and quickly moved on to the W versions. Non-W lenses are not common on the second-hand market, but you can see them in the Mamiya documentation for the first model.

In the following sections, all the lenses titles appended with an asterisk – * -are lenses that I have and that I can talk about, as well as show you the results I get with them. The others, I do not have and my comments come from research on the internet, books, magazines and Mamiya documentation. They do not necessarily correspond to my personal point of view. However, I decided to put them in the list, adding information that may seem interesting.

Floating Lens Element system lenses

The Mamiya RZ67 system has some special lenses with floating lens elements. They are usually included in lenses that can focus very close, have a wide-angle field of view or were designed for macro applications. Floating elements help improve edge-to-edge sharpness and their use requires a "triple focus". Here's how they work: set the focus on the camera using the focusing knobs (and your

eyes), then read the distance on the camera body's right-hand side scale and use this distance to set the floating ring on the lens. After that, adjust focus slightly as needed on the camera using the focusing knob a little more. The section below covering the 140mm M/L-A Macro provides further details.

The floating lens elements effect of sharper corners is only visible when focusing at very close distances, everything further than 5-10 meters and above doesn't necessarily benefit from the arrangement.

Mamiya added this system of floating elements because, at the time, for short focusing distances, it was complicated to make a lens that would capture a perfectly focused and sharp image at all distances.

For “normal” cameras, it’s quite simple: use a helicoidal ring to provide focus and have a lens compensation system inside them to prevent blur problems in the corners. It’s easier on these lens designs because when you turn the focusing ring on the lens, you also move these elements internally.

The Mamiya RZ uses a bellows extension to focus (like large format cameras) and at the time, it was not possible to make a connection between the bellows extension and the lens elements. Not all Mamiya lenses use the FLE system, only the more recent versions. FLE lenses are generally more expensive too.

Changing Mamiya RZ67 lenses


Mamiya

In this position, the lens is correctly mounted and the camera ready to shoot. To remove the lens, you have to turn the big black collar on the rear of the lens so the white line (right) moves to face the red dot (center).

You may then remove the lens.


Mamiya

Note: Sometimes, the collar might seem to be “locked,” and you’re not able to turn it. In this case, before changing the lens, the RZ body has to be cocked and the mirror set to the “down” position. (with this done, you will be able to see a an image in the viewfinder.

If the mirror is up, fire and recock the RZ. If you can’t shoot, try again with the RM lever in the M position or change your battery. In many cases, it’s because the RZ is not cocked or the battery is out


Mamiya

There is no external lock/release button for the RZ's lenses. The system uses a breech mount and the black collar tightens the lens on the camera. There are safeguards, however. You can only change a lens when the RZ is "ready to shoot": cocked with the mirror in its lower position. Otherwise, the collar is locked thanks to an internal mechanical lock.

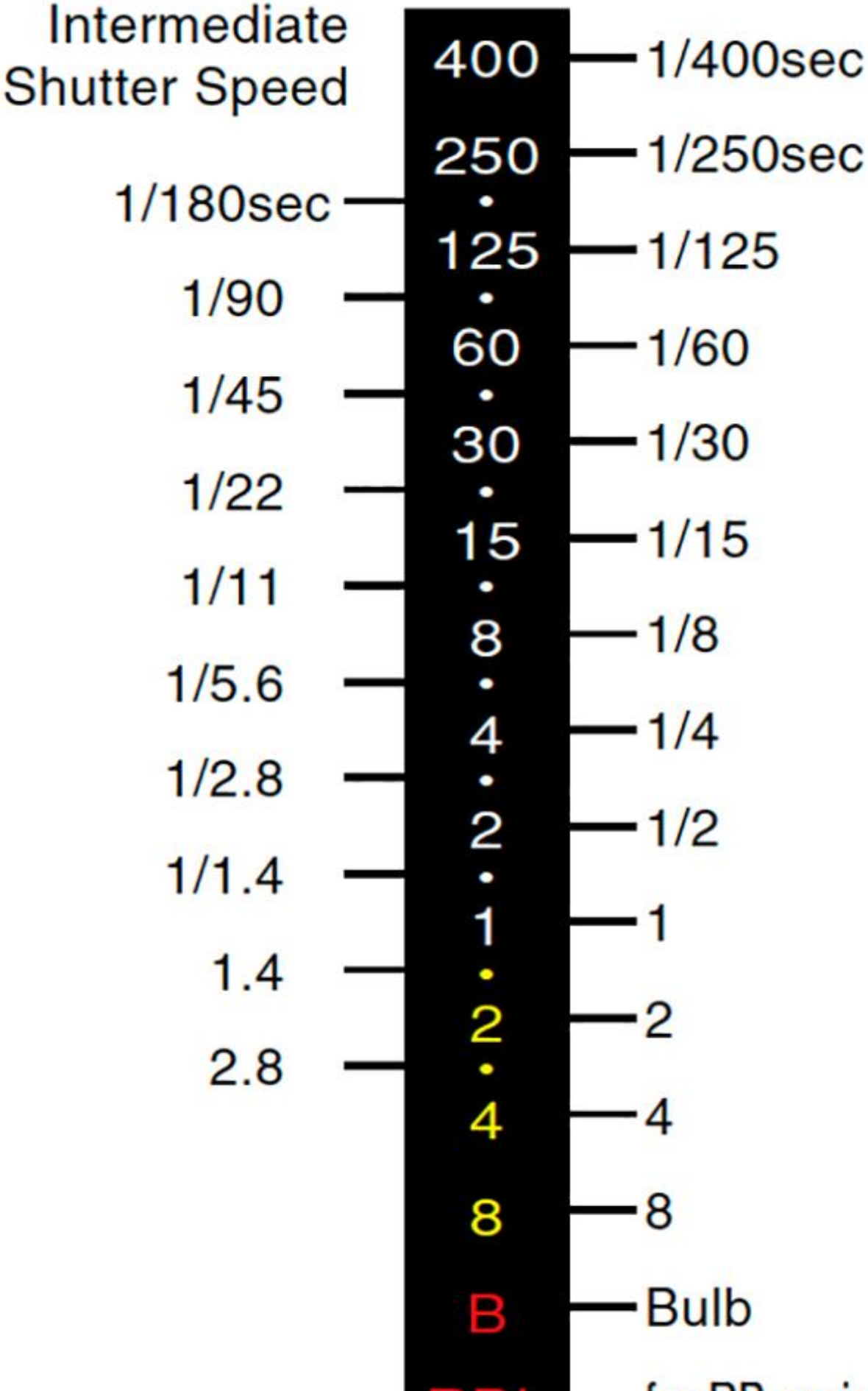
To install a lens, it's the exact opposite: check if the collar's white dot is aligned with the lens barrel's red line, put the lens on the camera, and turn the collar clockwise until it tightens. Be careful to not tighten the lens collar too much!

A word on shutter speeds

Each dedicated Mamiya RZ lens has a built-in electronic, quartz-controlled leaf shutter made by Seiko. The main interesting point about leaf shutters is that you can shoot using one or many flashes at any speed you want. You are limited only by the maximum speed of the shutter (1/400 sec).

Mamiya RZ67 lenses provide shutter speeds as follows (intermediate speeds are only applicable for Pro II/D):

Shutter Speed



Note 1: The RZ Pro (I) doesn't have an "RBL" position in its camera speed dial. It's an improvement made by Mamiya for the Pro II & D versions. In case you are using an RB lens with the RZ Pro (I), you have to set the speed with the shutter speed ring on the lens only. In this configuration, the setting of the camera body speed knob is inconsequential.

Note 2: The Pro (I) has a position on its speed setting for an AE prism finder, but it's not marked "AEF" as above. You can find instead, a spot mark between the B and the 400 position. The dial locks in this position.

Note 3: When you use the AE Prism, having two speed-dials could be confusing but it's simple: If you use the waist level viewfinder, you have only one speed-dial, it's on the left of the camera and it's the one you have to use. When you use the FE 701 prism, set the left speed dial on the camera on "AEF" and use the one on the top of the prism instead for most all your exposures (AE or manual) except however for slow exposures, as explained in the next section.

Slow exposures: B (bulb) mode and T (time) mode

For slow exposure and long exposures, the maximum speed allowed is 8 seconds (it's the same on the camera speed dial or the prism speed dial). If you want to shoot longer than 8 seconds, you have two options. First, for exposures under (around) 1 minute: use the "B" (Bulb) position of the left speed dial.

The prism speed dial doesn't have a "B" position, so if you want to use the B mode, even with the prism installed, you have to use the speed dial on the left of the camera:

The limitation of around 1 minute is because the camera uses energy from the battery when you shoot like this (to keep the shutter open). To avoid quickly draining the battery and further low power problems during a shoot, Mamiya limited the shooting time to around 1 minute.

If you need to shoot longer than 1 minute, you must use the RZ's mechanical "Time" system which has no time limit. This is how to set the "T" mode:


MAMIYA-SEKOR Z
32
16
8
2
1.5
1.2

In this image, the button is in its “normal” position (the green N is visible as shown above). To use the “T” mode, first install a release cable on the release button of the camera. It is not obligatory but highly recommended. If you fear vibrations due to the lifting of the mirror when using slow speeds, then use two cables or a double cable release. Also, use a stable tripod or something else to avoid vibration or movement during the shot, then set the button on the lens to the “T” position, dragging it up (towards the “N”) like this:

And you have that (the button is now locked):


MAMIYA-SEKOR Z
32
16
8
2
1.5
1.2


A-SEKOR
f=110mm
32 16 8 2.8 8 16 22
3 5 10 ∞ m
2.8
5.6 8 11 16 22 32

You can see two white “T”. At this moment, the camera has not yet exposed film, it is just ready for a long exposure. You still have to press the shutter button.

Take a stopwatch to count the time (you can use your smartphone), take care of the film reciprocity failure to find your real total exposure time. If your composition, aperture, and focus are ok, then you can shoot.

If you use two cables or the double cable release, first lift the mirror (using the cable release screwed on the lens), then push the release button to begin your long exposure. You can release it then, and the shutter stays open (no need to lock your cable release).

Don’t forget to start your stopwatch at the same time and take care of the time. During all the exposure time, the mirror is lifted up, and the shutter is open. This mode only uses a little bit of battery power at the beginning of the process but not after.


A-SEKOR
f=11
32 16 8
3 5 10 ∞ m
2.8 4 5.6 8 11 16 22
T

When your exposure is done, push the silver lock and the button very slowly to avoid vibrations, as shown in the image above. The shutter then closes, and your total exposure is finished.

In this mode, since the camera hardly uses the battery, you can shoot for as long as you want.

When you use “T” mode, the only way to close the shutter is by using the “T/N” button on the lens. Pushing the release button on the camera or on the cable do nothing. Also, remember to cock the camera after your shot.

Depth of Field management with the RZ

On each lens, you have a DoF (depth of field) preview button. When you focus, the aperture of the lens is always wide open, to help to focus. If you want to have a rough idea of the actual depth of field (DoF) you’re going to have with your aperture setting, push and slide this button as shown below:

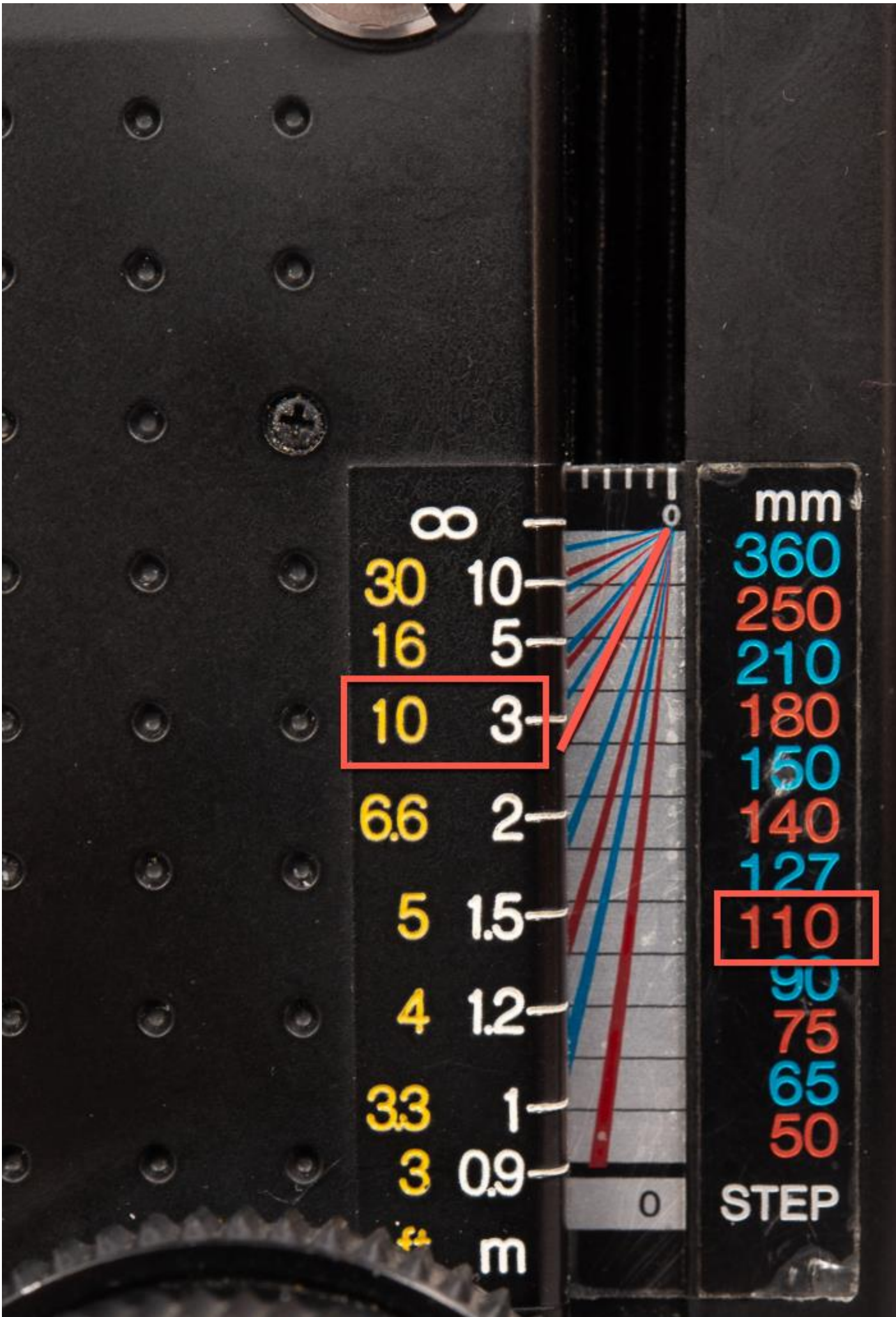

10
5
3
2
1.5
1.2
1
0.9
m
250
210
180
150
140
127
110
90
75
65
50
STEP

At the same time, take a look in the viewfinder, still pushing the DOF test button. The image you see in the viewer is darker, but you can see the focused zone you will have on your image. You can see if the subject is in focus from where you want to where you want.

This test button is useless when you shoot in low light conditions because the view is then too dark to see anything in the viewfinder. Especially if you test your DoF with a small aperture!

Another way to find the depth of field of your shot is to use the blue DoF collar on the lens this way:

- For this example, I am using the 110mm lens.
- Make the focus on your subject using the viewfinder, your eyes, and the focusing knob of the camera
- Set your exposure (aperture and shutter speed), using an external light meter or the prism FE701 AE. For example, you get 1/125s & f/16
- Once you have your aperture value, take a look at the diagram on the right side of the camera to find the focusing distance, aka the distance of your subject on which you made the focus:


∞
30
16
10
6.6
5
4
3.3
3
ft
10
5
3
2
1.5
1.2
1
0.9
m
0
mm
360
250
210
180
150
140
127
110
90
75
65
50
STEP

- I used the 110mm, and as you can see, it's the 5th focal length if you count from the bottom of the list (on the right). Try to find the 5th curve from the bottom too, in the diagram, and find on which distance this curve ends (on the left side). For this example, it's a little bit under 3m (or 10").
- Now, you have your aperture value (f/16), and the distance (almost 3m).
- Watch on the top of the lens: you have a blue collar with distances marked.
- Position your distance value in front of the red line, which is in the middle of the most open aperture value:


WAMIYA-SEKOR
32
16
1.2
1.5
2
2.8
4
5.6
8
T
N

You can copy your aperture value and then read the depth of field you can get with these settings: your image will be sharp from around 2.5m to almost 5m. The blue ring does nothing, it's just a calculator.

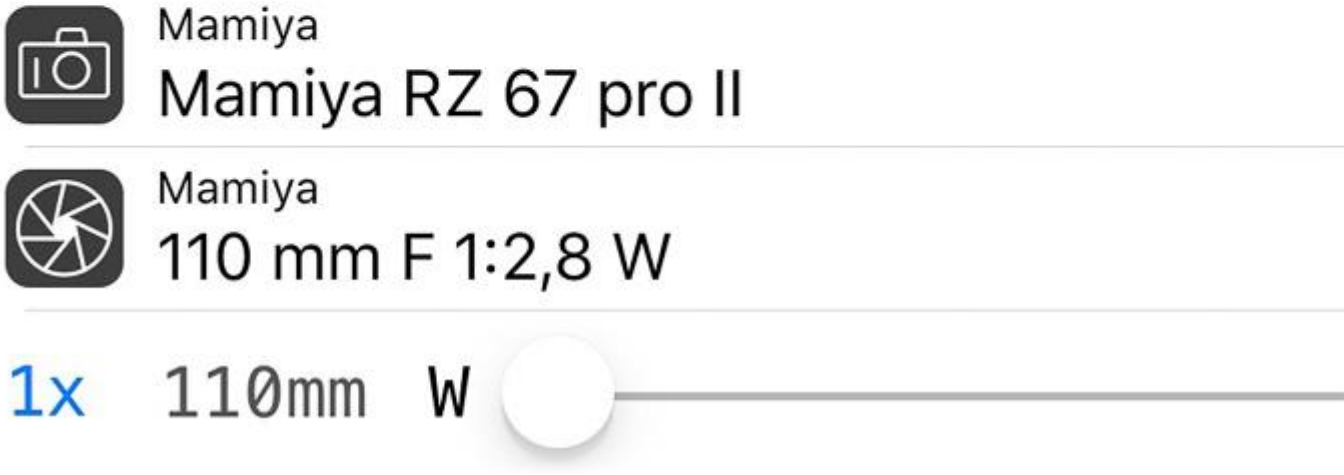
Note: Finding the real distance using the diagram is not simple and not really accurate.
If the depth of field you find is too great, open your aperture a bit to get shallower values. For example, with f/8, you'll get a depth of field from a bit under 3m and a bit above 3m.

Again, this method is not precise, the main problem being that the scale on the blue ring is not linear, but logarithmic. As you can see, you probably read, like me: "under 5m, maybe 4.7m?" on the lens scale. But the real value is 3.88m. Not 5! Remember that the real focusing distance we find using the scale on the right of the camera is a little bit under 3m and not 3m exactly. So I think this calculation method is not really accurate. And it's why I prefer to use an App (DoF Table) with my smartphone:

D

	f/6.3	f/7.1	f/8.0	f/9.0
1,5m	1,44m - 1,57m	1,43m - 1,58m	1,42m - 1,59m	1,41m - 1,60m
2m	1,89m - 2,13m	1,88m - 2,14m	1,86m - 2,16m	1,85m - 2,18m
3m	2,75m - 3,30m	2,72m - 3,34m	2,69m - 3,38m	2,66m - 3,44m
4m	3,57m - 4,55m	3,52m - 4,63m	3,47m - 4,72m	3,41m - 4,83m
5m	4,34m - 5,90m	4,27m - 6,03m	4,19m - 6,19m	4,11m - 6,38m

Equipment



In this sheet, you can find a lot of possibilities, to set precisely the depth of fields of your shot. If you think the one you choose initially is not what you want (too much or not enough DoF), you can set

another one, by changing your aperture and your shutter speed. Or with scrolling the screen to the right or left to find another.

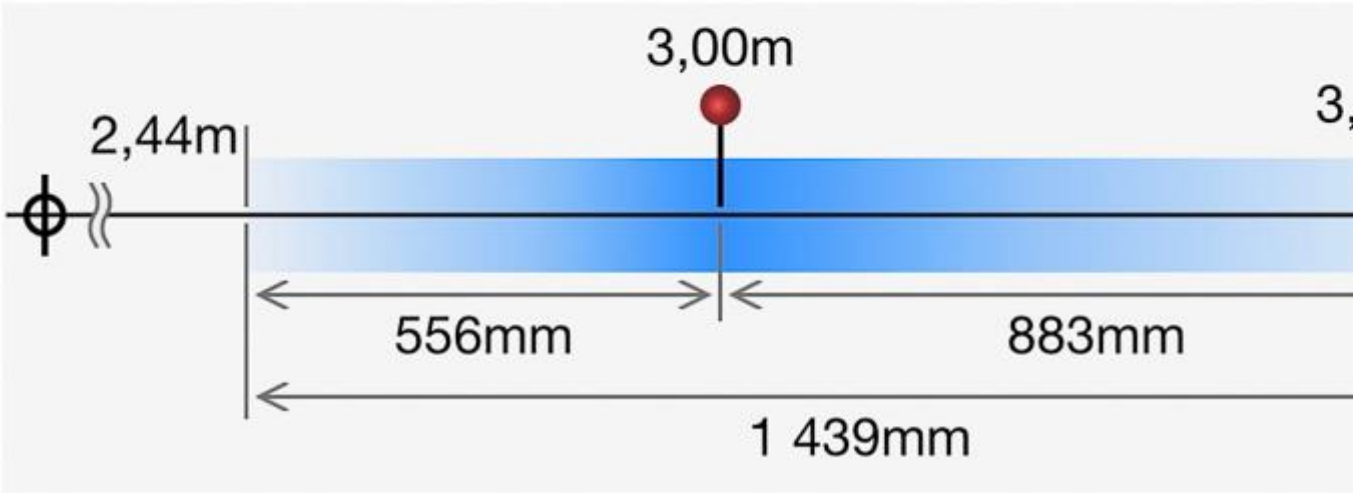
If you click on the box at the junction between f/16 and 3m (for example), you will find more interesting information:

Aperture: f/16

Focal Length: 110 mm

Focus Distance: 3 m

Depth of Field



Near Limit: 2,44m

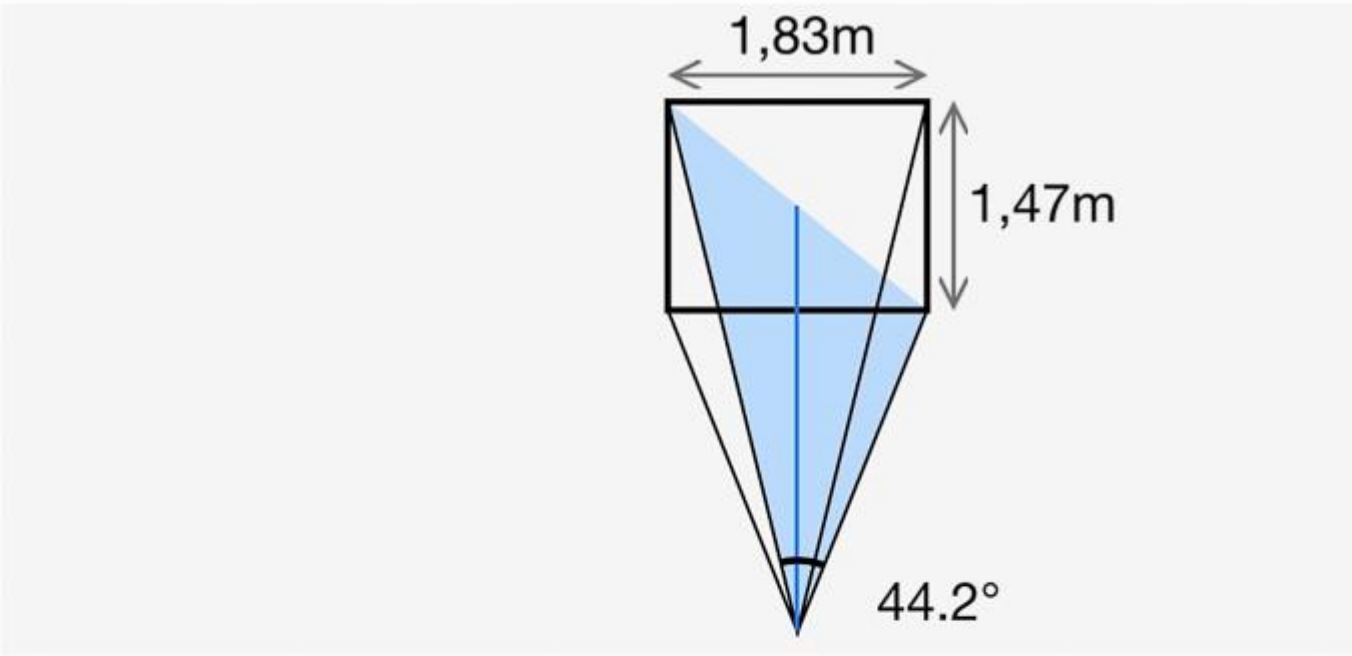
Far Limit: 3,88m

Total Depth of Field: 1,44m

Front Depth of Field: 556mm

Rear Depth of Field: 883mm

Field of View & Angle of View



Diagonal Field of View:	2,34m
Horizontal Field of View:	1,83m
Vertical Field of View:	1,47m
Diagonal Angle of View:	44,2°
Horizontal Angle of View:	35,1°
Vertical Angle of View:	28,6°
Aspect Ratio:	5:4

Miscellaneous

Magnification:	×0,038

This fabulous app by Suguru Yamamoto, is only available on IOS but I think you can find some others working for Android. Do not deprive yourself of using an app that allows you this kind of calculation. It's an indispensable and irreplaceable help.

The RZ doesn't exist as a default option in this app but you can create it yourself. You can also add all of your lenses – you only need the focal length, the max and min aperture of the lens, and the minimum focusing distance. Naturally, you may have to perform some tests of your own.

Infrared photography with the Mamiya RZ

IR films brighten, illuminate plants and everything that is lit by the sun/IR light, while darkening the sky that can become completely black. IR films also bring out the clouds as very white, against a background of dark or almost black sky. If you shoot landscapes, IR films "clean" the atmosphere, they remove haze and pollution, which contrasts and sharpens the distant areas in your images. To get this effect, you must use an IR filter in conjunction with an IR film.

The filter is specifically designed to block all wavelengths of light below the filter value, and the infrared film is intended to be sensitive to the wavelengths of light above the filter value. But with its own limit, which depends on the film used. Your IR film will record wavelengths in a window between the value of the filter and the one of the film.

Because the IR wavelengths are longer than the visible wavelengths, you can't use the same focus setting if you focus your lens using your eyes to get the sharpest images possible. This setting is not usable for IR photography to get a sharp image. Because human eyes are not sensible to IR wavelengths. You need to extend the RZ67's bellows to get a properly focused image when capturing IR photography. This phenomenon is especially problematic in case of small depth of field. The APO lenses are manufactured to eliminate the chromatic aberrations problem, so using these lenses when shooting IR photography minimize or eliminate the problem.

Most of the correction values are tiny and could be challenging to set precisely. For values of the order of 0.1 or 0.2mm, you can forget this shift, it will not change much, especially if you use smaller apertures from f/8 and smaller. For the other apertures, where sub-millimetre changes are required, I advance the bellows very slightly.

Lens	**Bellows extension (mm)**
Fish-eye Z 37mmf/4.5W	0.4
Z 50mm f/4.5W	0.4
M 65mm f/4L-A	0.24
M 75mm f/3.5L	0.27

Shift Z 75mm f4.5W	0.6
Z 90mm f3.5W	0.4
Z 110mm f2.8W	0.3
Z 127mm f/3.5	0.4
Macro M 140mm f/4.5M/L-A	0.23
Z 150 f/3,5W	0.4
Z 180mm f/4.5W-N	0.7
Z 210 f/4.5 APO/L	0.1
Z 250mm f/4.5W	0.6
Z 250mm f/4.5 APO/L	0.1
Z 350mm f5.6 APO/L	0.1
Z 360mm f/6W	1.0
Z 500mm f/6 APO/L	0
Z 500mm f/8W	1.0
Zoom Z 100-200mm f/5.2W	W:1.2 T:0.4
Teleconverter x1,4	0.4

If you use a teleconverter, you need to add both the value of the teleconverter (+0.4) and the one of the lens. For example, if you add the teleconverter to the 150mm, you have to extend the bellow for 0.8mm in total.

Obviously, if you are shooting close-ups and are already at your maximum bellows extension, you will need to move your camera a little backward from your subject, and adjust your camera focus again.

In most cases (in close-up photography), this method of photography can require a wide-open aperture, so it's more important to set the distance compensation with attention.

These three shots below were made using the Ilford SFX film at 200 ISO, with my Zomei 720nm filter screwed on the 50mm. The first exposure was 1/125 & f/22, and the final shot with the filter was exposed at 1/6 sec. & f/16. (+4.5 EI). For the final image presented below, I used the 37mm lens with the 720nm filter installed on the rear and used the AE mode with my FE701 prism, to check if it could be used. Not so bad!

The 100-200mm zoom lens has specific marks on it if you use the helicoid ring to focus this lens. The red one is for classic films. The yellow is for IR films when you are at 200 mm, the green for IR film when you are at 100 mm. Intermediates values are between yellow and green marks.

The main current IR films available are ILFORD SFX and Rollei Infrared 400. Both films are not sensitive to wavelengths over: 740nm (ILFORD) and 810nm (Rollei). So don't buy 950nm, or 850nm IR filters, they will not work, and you will get completely black images. The max possible filter usable in both cases is the 720nm – also known as an R72 – or below (Yellow, orange and red filters can be used with decreased IR effects). On average, with very deep red filters, the filter factor is 16 or more and you need to increase your exposure from 4 (to sometimes 6) stops. It's better to perform some tests for yourself because your filter's filter factor could vary a lot from one manufacturer to another. Other variables include light conditions, and the film used, etc.

PS: nm = nanometers. It's the standard ISO scale used for wavelengths. 1nm = 1×10-9 m, or 0.000000009m.

For example, I use 720nm Zomei filters, and I usually need to add +4 to +5 stops to my exposure without the filter. I also use the FE701 prism, which can set the exact exposure you need through its TTL system.

In case of any doubt, give yourself control with an external light meter if you have one.

IR film may be affected or veiled if it is not kept in good conditions. For example, the paper of the film 120 does not really protect this type of film at these wavelengths. So, always store your IR films in your fridge, always load and unload your film in and out the back in total darkness, otherwise, you may fog your film. (it's less problematic with ILFORD SFX)

If you want to shoot IR, please read a book about it before, IR photography is unique, and there is a huge of things to know to shoot lovely IR images. And it's not the subject of this review.

Mamiya RZ67 lenses in depth

With the background out of the way, it's time to take an in-depth look at the Mamiya RZ67's lenses. As noted above, lenses which I personally own are marked with an asterisk as per the Z 37mm f/4.5 below.

Mamiya-Sekor Z 37mm f/4.5*


MAMIYA-SEKOR FISHEYE Z
32
22
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22

Lens	Mamiya-Sekor Z 37mm f/4.5
Optical construction	9 elements / 6 groups
Max aperture	f/4.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	37mm
Equivalent 35mm focal length	18mm
Angle of view	180°
Min focusing dist.	6.4mm
Magnification	1.23x
Coverage	45 x 56mm
Filter size	40.5mm (rear)
Lens hood	None
Dimensions	112 x 100mm
Weight	1280g

I really love wide-angle lenses and the 37mm is fantastic, in my opinion. It's equivalent to an 18mm lens in full-frame 35mm terms, so it's a fisheye lens and the images taken with it have a lot of deformation but I love it anyway! Mine is not the "W" version, but it's the same.

Mamiya sold the lens with a kit of 4 filters (40.5mm size, screw-in), with one directly installed in the rear of this lens (a UV 30 filter):


SL-1B

Mamiya said that this lens was designed to be used with a filter in place. The initial kit is composed by a UV30 filter (installed on the lens back), a Y42 yellow filter, an R60 (deep red) filter, and an LB-A warm color conversion filter). This kit is on the left in this image:

Another kit (in the right of the above image) was sold separately with another LB-A, an LB-B and an SL1-B (Skylight) filter. The LB-A is a warm filter, the LB-B is a blue filter both to convert colors if you use a tungsten film in daylight or a daylight film in artificial light (Tungsten) conditions.

Filters absorb light, so this table shows you the compensations needed in you use the original Mamiya filters. Tests performed in my studio, using a continuous light (Fresnel):

Without Filter (ref)	**1/125**	**f/8**	**Comp**
UV Filter	1/125	f/8	0
Yellow Filter Y42	1/60 - 1/125	f/8	+½ IE
RED Filter R60	1/60	f/8	+1 IE
LB-A Filter	1/60 - 1/125	f/8	+½ IE
LB-B Filter	1/60 - 1/125	f/8	+½ IE
SL1-B Filter	1/125	f/8	0

You don't need to make any exposure compensation if you use the AE FE701 prism finder in AE mode, but in manual, set the compensation knob on the AE prism finder, or set your light meter as well.

UV Filter	Block some UV wavelengths (not all), supposed to enhance sky, and a little bit contrast & colors
Yellow Filter Y42	For B&W, enhance contrast (small effect, depends on the light conditions)
RED Filter R60	For B&W, enhance contrast strong effect depends, on the light conditions)
LB-A Filter (Warm)	If you use a tungsten film in daylight conditions. Same as a Wratten 81A. (It's not a FLD)
LB-B Filter (Blue)	If you use a daylight film in tungsten lighting conditions (nightlights). Same as a Wratten 82A.
SL1-B Filter (Skylight)	Reduce haze & absorb UV, supposed to enhance sky, sharpness, contrast and warm a little bit your images.

This table is provided for all purposes but only for the filters I have. And may not be transposable to those made by other brands. So, make tests with your own.

I used the Scantips calculator to get my results. They are precise and give us the ⅓ aperture values that the RZ is unable to use. It's because I used my light meter, and it was set to use ⅓ aperture values. I advise rounding the values to ½ values, the RZ Pro II (or Pro II D) can use them better.

The LB-A is interesting if you use film like Cinestill 800T during the day and wish to correct colors. You can use the LB-B if you shoot scenes in the evening or at night with artificial lights using a daylight film.

Note: the separate filter kit with the LB-B is not easy to find.

It's possible to find a lot of other filters in the market (ND, IR, etc.) Just bear in mind that the diameter for this lens is 40.5mm and it must be installed on the rear of the lens. The filters are part of the optical design of the lens and therefore one must be installed (either the colour filters, or the clear UV). I use the SL1-B Skylight filter instead of the UV filter.

The original Mamiya filter set contains only red and yellow filters. I also purchased some kits made for other modern cameras – neutral grey filters (ND2, ND4, and ND8), an FLD filter (pink fluorescent), a warming filter, and a polarizing filter (CPL) too. I also bought a 720nm filter as well for IR photography.

The prices of these kinds of kits are not high, because of the small size of each filter, and even if those filters are all made in China, they are not so bad in use. The ND filters are perfect for long exposures.

You can see that a CPL (circular polarizing) filter is usable, but it will be hard to adjust to find the best setting to get the desired polarizing effect because of its position at the rear of the lens (it's not possible to move it after installing it in the lens). Another problem is this particular filter and why I don't advise using one, is that it is made of 2 different glasses, with one that turns freely without a lock, which makes it hard to install and really complicated to remove. For the same reason, it can be challenging to use graduated filters.

The following images show you all of the 40.5mm filters I could find and I purchased for my Mamiya 37mm wide-angle lens:


Quality Camera Accessories
Quality Camera Accessories
Quality Camera Accessories
Quality Camera Accessories

Deep
Organi
Organi
Made in Israel. T
Hecho en Israel.
Fabriqué en Israe
www.STANLEYT
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Brand	Type	F/stop	Speed without	Speed with	Comp (+)
K&F concept	ND2	f/8	640	250	1 +1/3
K&F concept	ND4	f/8	640	160	2
K&F concept	ND8	f/8	400	40	3 +1/3
K&F concept	UV	f/8	320	320	0
K&F concept	CPL	f/8	500	200	1 +1/3
K&F concept	FLD	f/8	500	250	1
Polaroid	CPL	f/8	250	100	1 +1/3
Polaroid	Fluorescent	f/8	400	230	+2/3
Polaroid	UV	f/8	400	400	0
Polaroid	Warming	f/8	320	250	+1/3
VHBW	Orange	f/8	200	80	1 +1/3
VHBW	IR 720	f/8	200	5	5 +1/3

According to Mamiya, a lens hood is not required for this lens. Its 180° field of view and large front element would make it complicated to install one. Usually, a lens cap is provided with this lens (brand new, it was in the box):


22
16
8
4.5
0.8
0.7
0.8
1
1.5
3
∞
m

This 37mm is quite short but big and heavy: 1.3kg! (2.8lbs). So with the RZ and the prism, you have around 4kg in your hands… Ouch! It's not a macro lens, but you can focus at very short distances – around 6mm from the front lens element – and get sharp images!

According to Mamiya, this lens cannot be used with the extension tubes or the teleconverter x1.4.

Mamiya-Sekor Z 50mm f/4.5W*


MAMIYA-SEKOR Z
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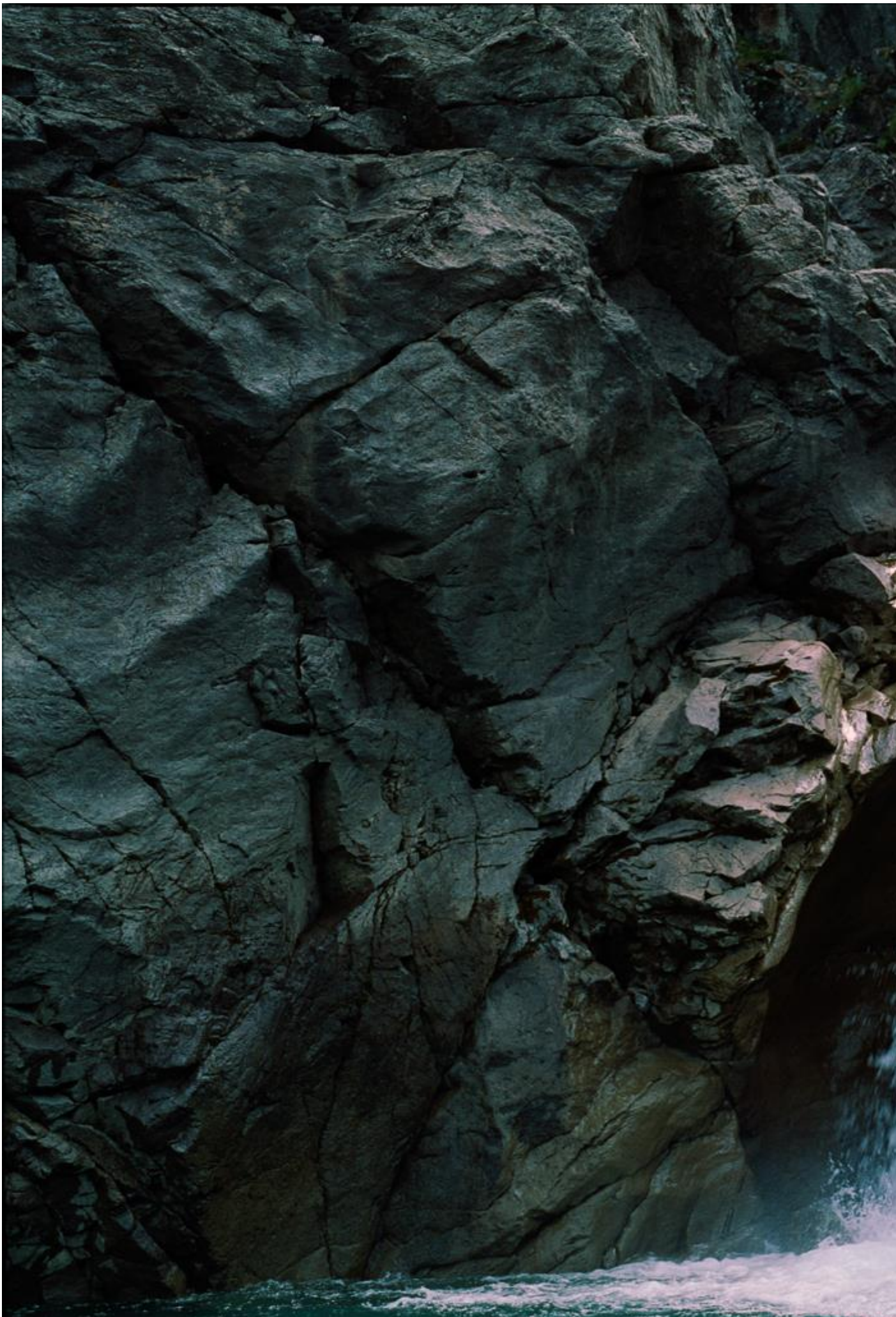
16
8
4.5
8
2
3
5
∞
m

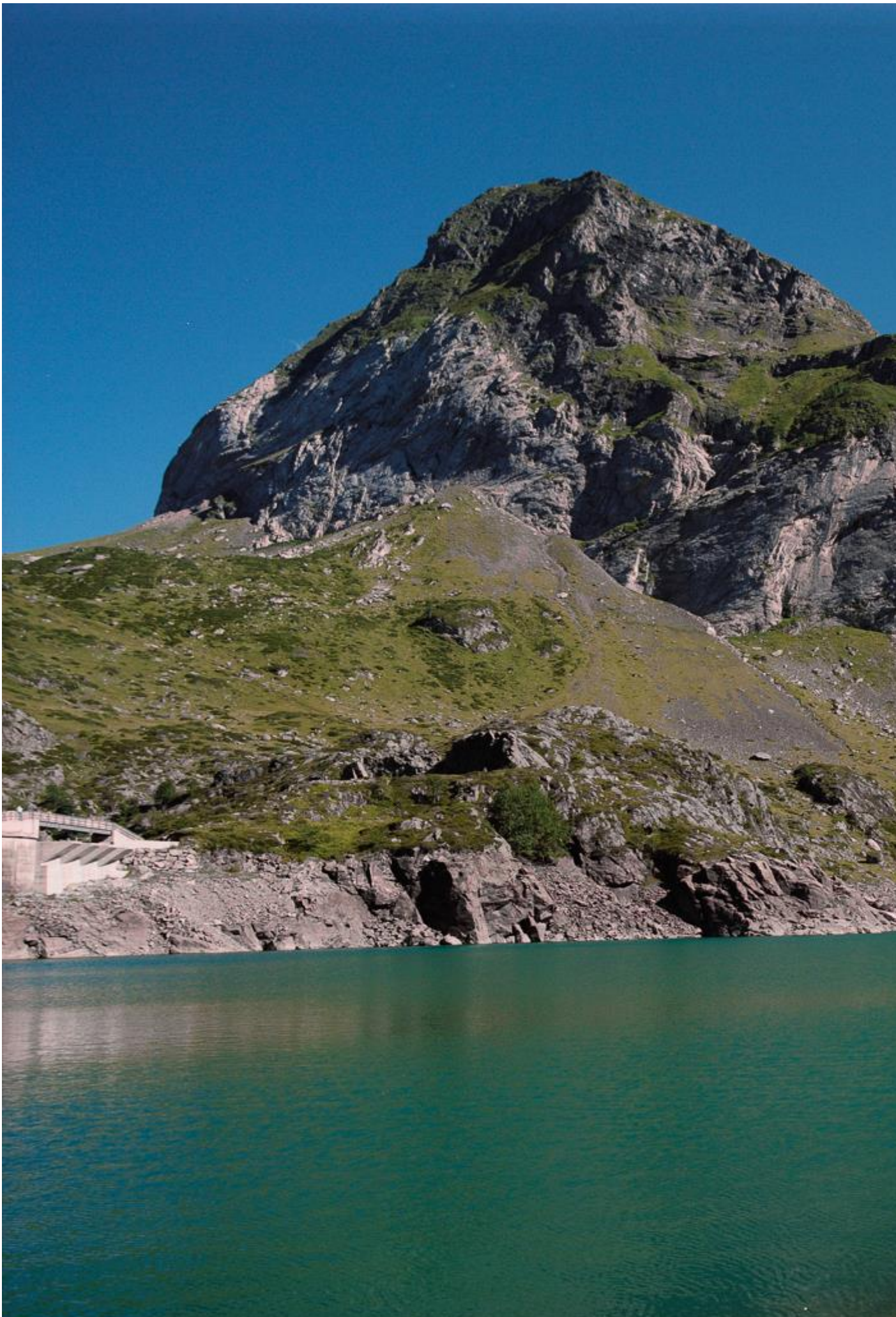
Lens	Mamiya-Sekor Z 50mm f/4.5 W
Optical construction	11 elements / 9 groups
Max aperture	f/4.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	50mm
Equivalent 35mm focal length	24mm
Angle of view	84°
Min focusing dist.	45mm
Magnification	0.9x
Coverage	62 x 77mm
Filter size	77mm
Lens hood	Slip-on
Dimensions	97 x 82mm
Weight	760g

I'm a big fan of wide angles lenses, and this one is perfect for me. The ULD version is technically better but a lot more expensive. I chose this version despite the criticism we can find on the Internet. The lens is awesome, and I love it! With this lens, you can focus on objects just 45mm from the front element (as measured by me). It's not really a macro lens but it can do the job. It's a perfect lens for street photography and landscapes too.

The equivalent focal in full frame 35mm format is 24mm. This lens is compensated for distortions which can occur in other brands with this type of wide-angle.

You can use the lens with the x1.4 teleconverter to give yourself a 70mm focal length. It's an incredible combo to make awesome images. Mamiya does not advise that configuration but it works very well, and the photos are of excellent quality. It's why I haven't yet purchased a 75mm for my RZ. I really love to have a 75mm focal length, but Mamiya made a shift version of this lens I'm not interested in.





Mamiya also made a Sekor M 75mm f/3.5 L, with floating elements, which I'll maybe buy one day. 20 years ago, I used the Nikon 35mm f/1.4 AI-S a lot with my Nikon F3, F4, and F5 (the Mamiya 75mm is 37mm equivalent in 135 format), and it was a lens I really loved. I shot a lot of fantastic portraits with it. Unfortunately, someone stole my Nikon equipment. This lens is too expensive to buy a new one at that time and still is! For the moment, I'm happy with this combo (50 + teleconverter x1.4 to get 70mm), and it's enough for me when I need to shoot with a 70mm.

To get the best quality of this Mamiya 50mm f/4.5W, you may use it alone without any teleconverter. I mainly use it in this configuration, the wide-angle of view is perfect for landscape and street photography, it has a very good construction that compensates for most of the distortion that is usually present with lenses of this kind of focal length.

No compendiums (bellows lens hood G2 or G3) can be used with this lens.

Mamiya-Sekor M 50mm f/4.5L ULD L (FLE)

This lens is known to be one of the best ever made by Mamiya, and it cost more than twice the price of the "normal" version. The ULD name means "Ultra-Low Dispersion" lens. It also has floating elements.

Lens	Mamiya-Sekor M 50mm f/4.5L ULD L (FLE)
Optical construction	15 elements / 11 groups
Min aperture	f/4
Max aperture	f/32
Diaphragm	Automatic
Focal length	50mm
Equivalent 35mm focal length	24mm
Angle of view	82°
Min focusing dist.	56mm
Magnification	0.88x

Coverage	63 x 78mm
Filter size	77mm
Lens hood	Slip-on
Dimensions	97 x 93mm
Weight	954g

Mamiya-Sekor Z 65mm f/4*


MAMIYA-SEKOR Z
65 mm
0.5
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0.8
0.9
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32
16
8
4
8

Lens	Mamiya-Sekor Z 65mm f/4
Optical construction	7 elements / 7 groups
Min aperture	f/4
Max aperture	f/32
Diaphragm	Automatic
Focal length	50mm
Equivalent 35mm focal length	32mm
Angle of view	69°
Min focusing dist.	56mm
Magnification	0.7x
Coverage	80 x 100mm
Filter size	77mm
Lens hood	Slip-on
Dimensions	97 x 80mm
Weight	715g

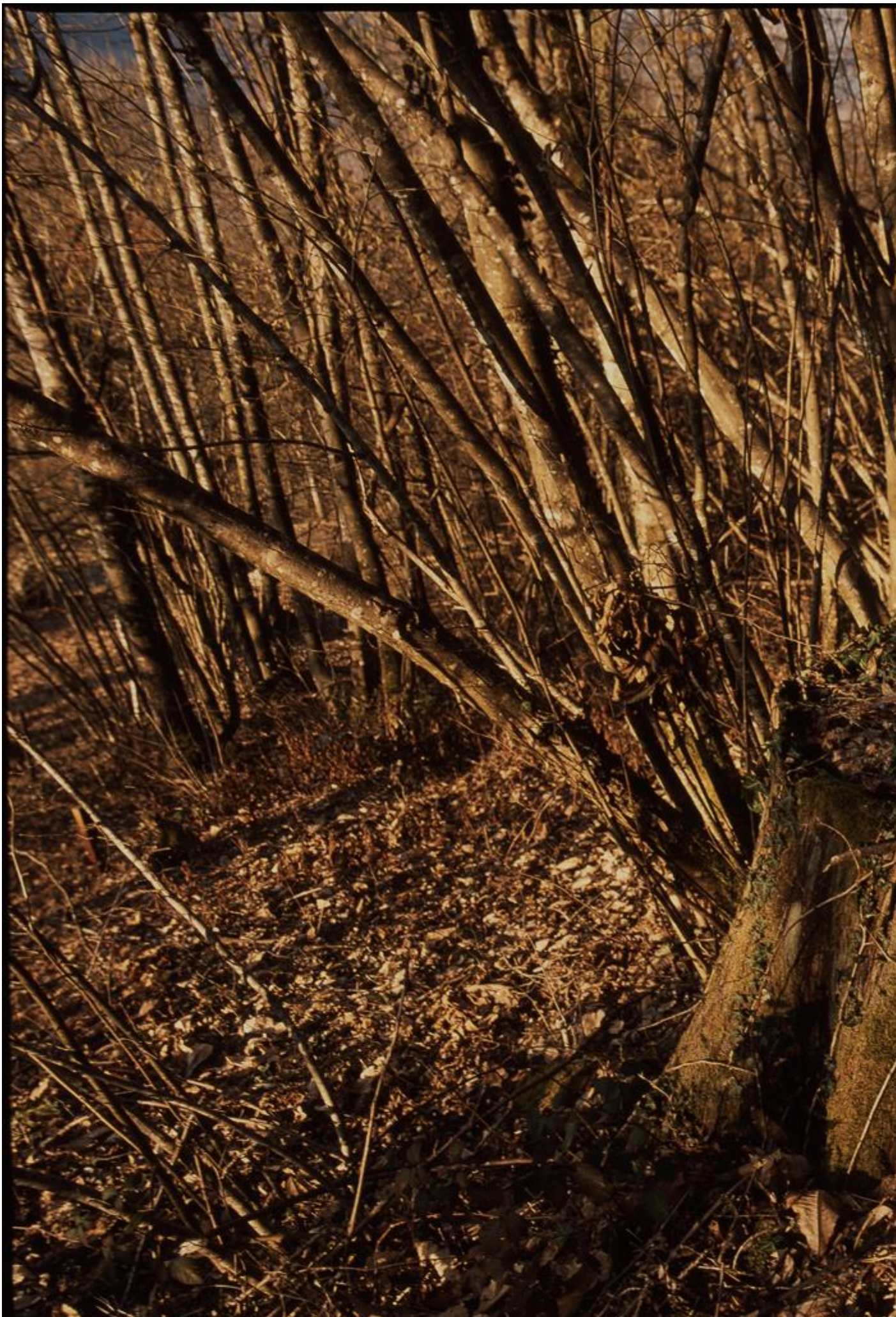
I found this lens entirely by chance during a trip in Paris, in a shop where I originally went to search a recessed lens board for another wide-angle lens (65mm) I wanted to use with my large format Horseman camera. I didn't *need* the Mamiya 65mm lens for my RZ, but, because of the relatively low price, I was tempted to try it.

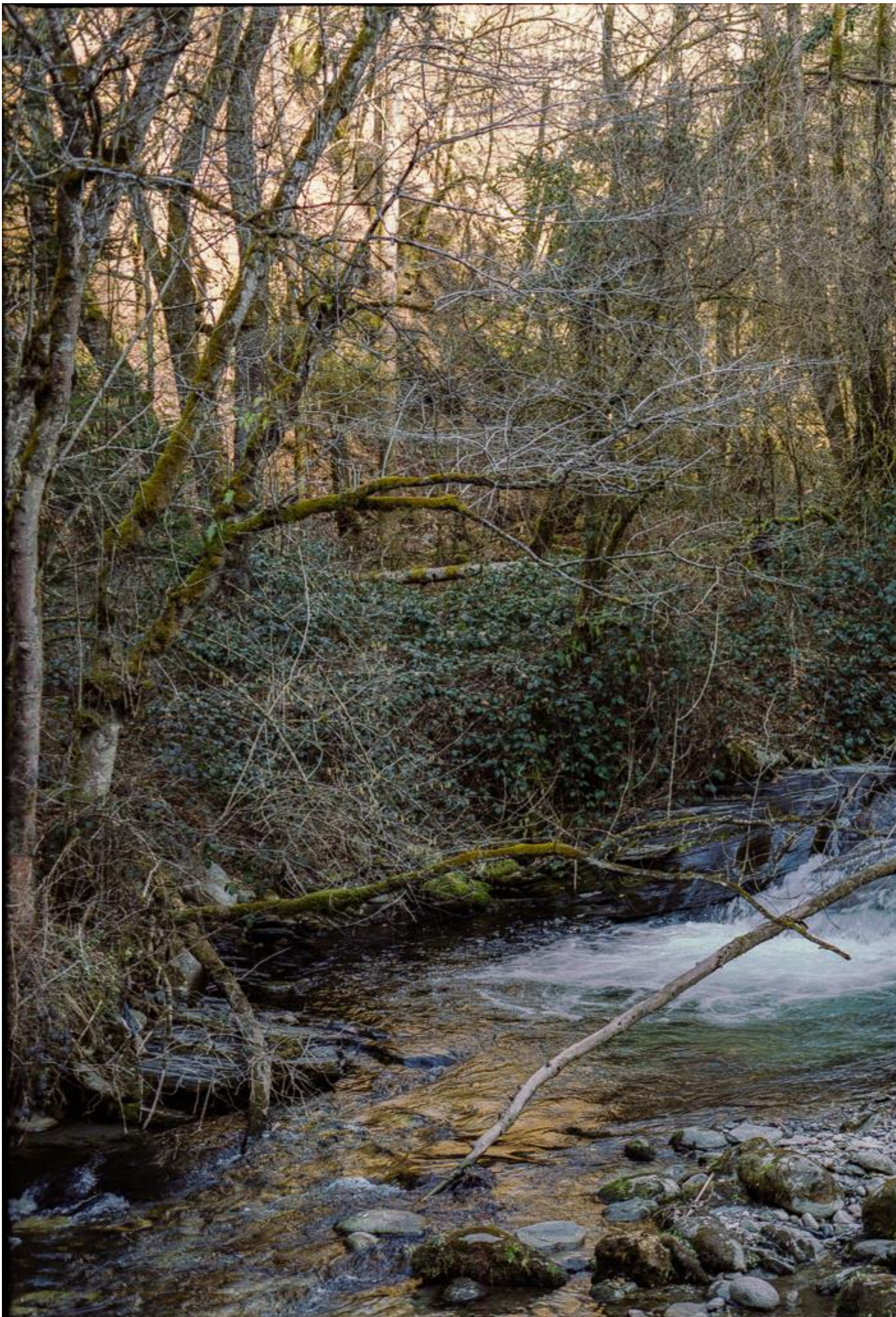
I was not disappointed: it's a great lens.

Like the 50mm above, there is another version with a floating lens system, made more recently by Mamiya and all users say that it's a better version with high quality. Contrary to the 50mm ULD, the

price of this better version is not really that much more, and since purchasing the original version presented here, I have seen the L-A version for about the same price online, so… If I had looked better before buying, I would have been better tempted by the latest version. My only problem was that this focal length didn't tempt me. And so I did not look or search for it…

Anyway, this lens is excellent in my opinion, very sharp too. Just look at the pictures made it below to see that it's not such a bad lens, quite the contrary in fact.





And finally, it is another reason for not searching for a 75mm to replace my beloved Nikon 35mm f/1.4 AI-S. After working with this 65mm a little, I rediscovered the framing required for this focal length and I really love it a lot. I think this lens will become my favorite in a short time.

It's fantastic for landscape, street photography and portraits. No distortion, a perfect universal lens. It also has the same dimensions as the 50mm f/4.5W and is a little lighter. My 65mm is not the "W" version but it's the same lens as the "65mm W". The difference is the f/stop ring which is graduated in half-stops on the W version.

It can be used with the compendium G3, but not with the G2. You can use it with the teleconverter x1.4, to obtain a 91mm focal length. The appropriate lens hood is the same as the 50mm.

Mamiya-Sekor M 65mm f/4.0 L-A (FLE)

An improved version of the older 65mm above. This version includes with floating elements and surprisingly, it can be found at almost the same price as the old one. So even if I do not have it myself, if you need a 65mm, I would suggest you choose this latest version.

Lens	Mamiya-Sekor M 65mm f/4.0 L-A (FLE)
Optical construction	9 elements / 8 groups
Max aperture	f/4
Min aperture	f/32
Diaphragm	Automatic
Focal length	65mm
Equivalent 35mm focal length	32mm
Angle of view	68°
Min focusing dist.	85mm
Magnification	0.7x
Coverage	80 x 100mm

Filter Sizs	77mm
Lens hood	Slip-on
Dimensions	97 x 113mm
Weight	1060g

Mamiya-Sekor M 75mm f/3.5 L (FLE)

This lens was made initially for the RB system and adapted to the RZ system. It has precisely the same characteristics as the Mamiya K/L 75mm f/3.5 manufactured for the RB.

Mamiya added electronic components internally and electric contacts at the rear to transmit f/stop and aperture values to make it compatible with RZ. It doesn't have the blue-collar like all other Mamiya lenses but does have a floating element ring. Maybe it will be the next lens I buy for my RZ.

Lens	Mamiya-Sekor M 75mm f/3.5 L (FLE)
Optical construction	9 elements / 7 groups
Max aperture	f/3.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	75mm
Equivalent 35mm focal length	36mm
Angle of view	61°
Min focusing dist.	38mm
Magnification	0.67x
Coverage	86 x 107mm

Filter size	77mm
Lens hood	Screw-in (n°1)
Dimensions	96 x 97mm
Weight	980g

Mamiya-Sekor Z 75mm f/4.5 W Shift

This lens has the capacity to be shifted on the horizontal plane, which can help if you shoot architecture or advertising of products. It's heavy, big, and although it is undoubtedly a very good lens, if you do not need the shift, buy the other version.

Lens	Mamiya-Sekor M 75mm f/4.5 W Shift
Optical construction	11 elements / 9 groups
Max aperture	f/4.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	75mm
Equivalent 35mm focal length	32mm
Angle of view	62°
Min focusing dist.	114mm
Magnification	0.6x
Coverage	93 x 115mm
Filter size	105mm

Lens hood	None
Dimensions	108 x 152mm
Weight	1660g

Mamiya-Sekor Z 90mm f/3.5 W

This lens has a focal length close to the “normal” human eye. Closer than the 110mm, which is considered the normal focal length of the Mamiya range.

Lens	Mamiya-Sekor Z 90mm f/3.5 W
Optical construction	6 elements / 6 groups
Max aperture	f/3.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	75mm
Equivalent 35mm focal length	32mm
Angle of view	53°
Min focusing dist.	197mm
Magnification	0.51x
Coverage	110 x 136mm
Filter size	77mm
Lens hood	Screw-in (n°1)

Dimensions	97 x 82mm
Weight	690g

Mamiya-Sekor Z 110mm f/2.8 W*


MAMIYA-SEKOR
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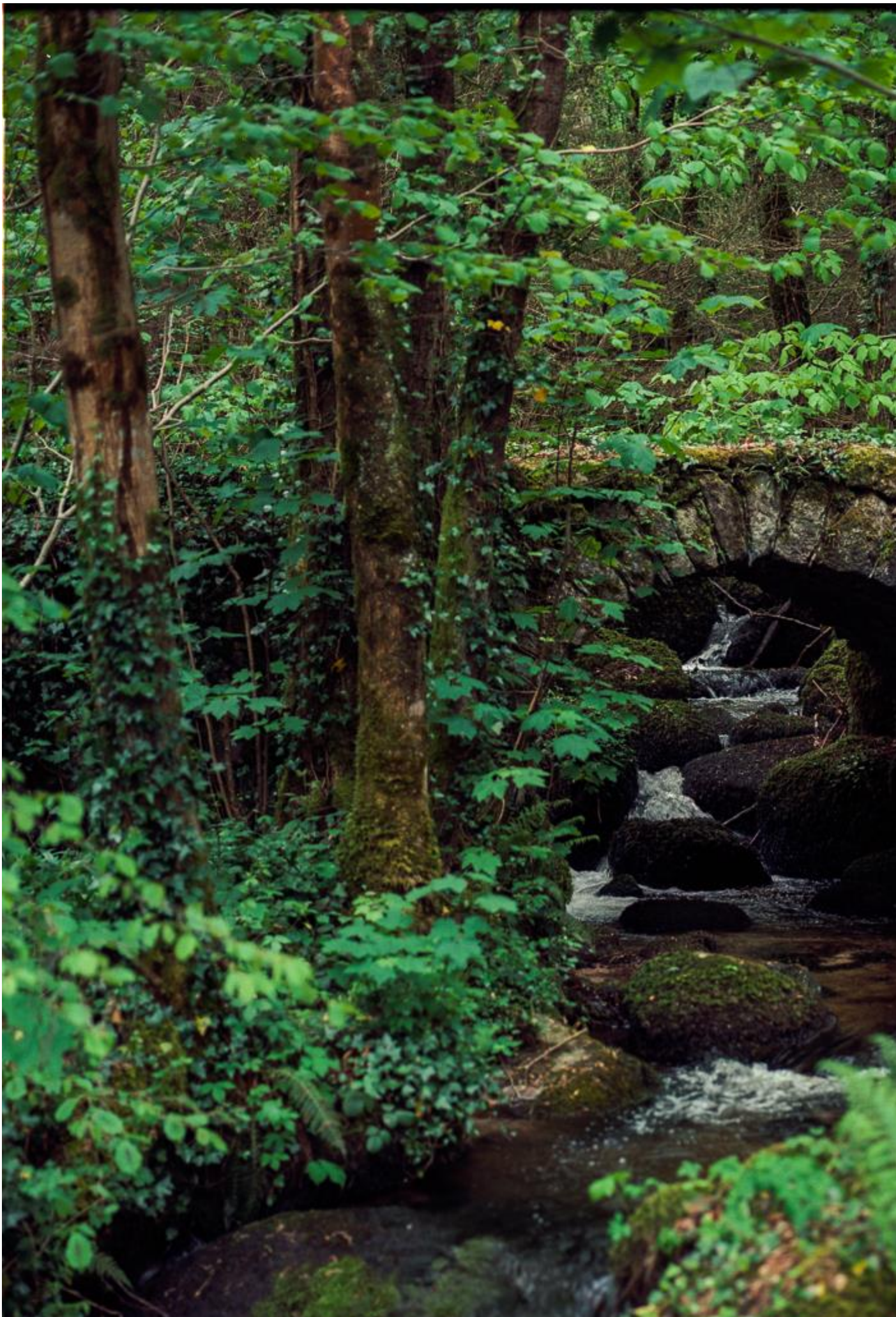
Lens	Mamiya-Sekor Z 110mm f/2.8 W
Optical construction	6 elements / 5 groups
Max aperture	f/2.8
Min aperture	f/32
Diaphragm	Automatic
Focal length	110mm
Equivalent 35mm focal length	32mm
Angle of view	44°
Min focusing dist.	313mm
Magnification	0.42x
Coverage	135 x 167mm
Filter size	77mm
Lens hood	Screw-in (n°1)
Dimensions	97 x 62mm
Weight	610g

Almost the “normal” or standard lens for 6×7 (quite the same as the 50mm in full frame 35mm format). It is the smallest and the lightest of all Mamiya RZ lenses and is a fantastic lens. It produces fantastic, sharp images of incredible quality. I use it for a lot of things, including portraits, landscapes, street photography, and a lot of other subjects.

I love its lightness, small size, ease of use (and quality). When you work with this lens installed on the RZ camera equipped with the waist viewfinder and a back, the weight is only 2.5kg. It’s is the lightest

possible configuration of the RZ. Personally, I'd rather like using the prism FE701, in which case, it weighs 3.4kg but it's not a real problem when you are used to this configuration.



My RZ is most often equipped with this lens, it's the most natural, the lightest and the smallest configuration, so when I put it in its suitcase, it's always with this lens too.

You can use both the compendium G3 and G2 shades. Adding the x1.4 teleconverter gives you a 154mm focal length and the appropriate lens hood is the screw in Type 1.

Mamiya-Sekor Z 127mm f/3.5 W

Lens	Mamiya-Sekor Z 127mm f/3.5 W
Optical construction	6 elements / 4 groups
Max aperture	f/3.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	127mm
Equivalent 35mm focal length	62mm
Angle of view	39°
Min focusing dist.	408mm
Magnification	0.36x
Coverage	155 x 192mm
Filter size	77mm
Lens hood	Screw-in (n°1)
Dimensions	97 x 81mm
Weight	810g

Mamiya-Sekor M 140mm f/4.5 Macro

Lens	Mamiya-Sekor M 140mm f/4.5 Macro
Optical construction	7 elements / 4 groups
Max aperture	f/4.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	140mm
Equivalent 35mm focal length	68mm
Angle of view	35°
Min focusing dist.	516mm
Magnification	0.33x
Coverage	169 x 210mm
Filter size	77mm
Lens hood	Screw-in (n°1)
Dimensions	97 x 84mm
Weight	810g

Mamiya-Sekor M 140mm f/4.5 M/L-A Macro (FLE)*


MACRO M 1:4.5 f=14
32 22 11 1 1 22 32
1.83
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+2
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1.84
1.86
0.57
1.25
30 20 10 0
No.1
40 30 20
4.5 5.6 8 11
N

Lens	Mamiya-Sekor M 140 mm f/4.5 M/L-A Macro (FLE)
Optical construction	7 elements / 4 groups
Max aperture	f/4.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	140mm
Equivalent 35mm focal length	69mm
Angle of view	35°
Min focusing dist.	516mm
Magnification	0.33x
Coverage	169 x 210mm
Filter size	77mm
Lens hood	Screw-in (n°1)
Dimensions	97 x 90mm
Weight	870g

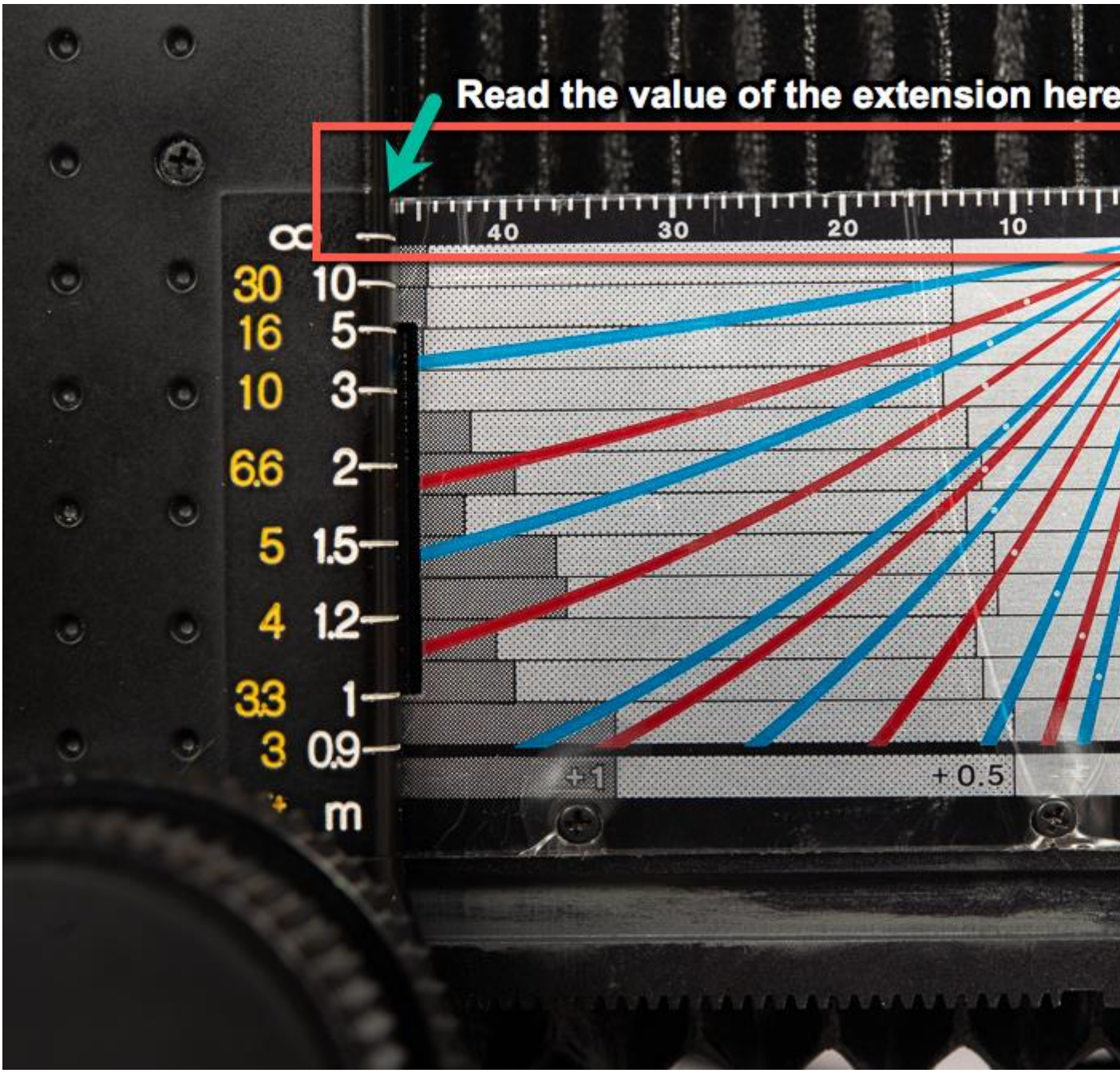
This lens is not really a macro lens, in my opinion. In the sense that this 140mm has nothing that helps to focus on close subjects. For this, we deploy the camera bellows.

The closest usable distance is around 76 cm (from the film plane to subject), and the magnification is quite the same as a “normal” (not macro) 140mm lens as long as you don’t use accessories like the extensions tubes. If you want to really shoot macro with this lens, you need to use the extension tubes: N°1, N°2 or both. These accessories are explained at the end of this chapter because you can use them with other Mamiya lenses.

The main difference between the different versions of the 140mm is the floating group (that's why it's named f4.5M/L-A, L-A is for "Floating Elements"). This additional group of lens elements is a system that allows you to have a better focus and contrast around the center, especially at the corners. Most of the users have some problems to use this system because it's not usual. So let's see the details:

You have another ring (the floating ring with "Floating System" written on it) in the middle of the lens (it's not the blue ring!). You can see four scales: a white one for general use (without extension tubes), a green one for the extension tube N°1, a second white one for the N°2 and the last red one for using both (N°1 + N°2).

When you focus precisely using the usual knobs on the camera, with close subjects in particular, the bellows of the RZ unfold, and at the right side of the camera a white scale appears:

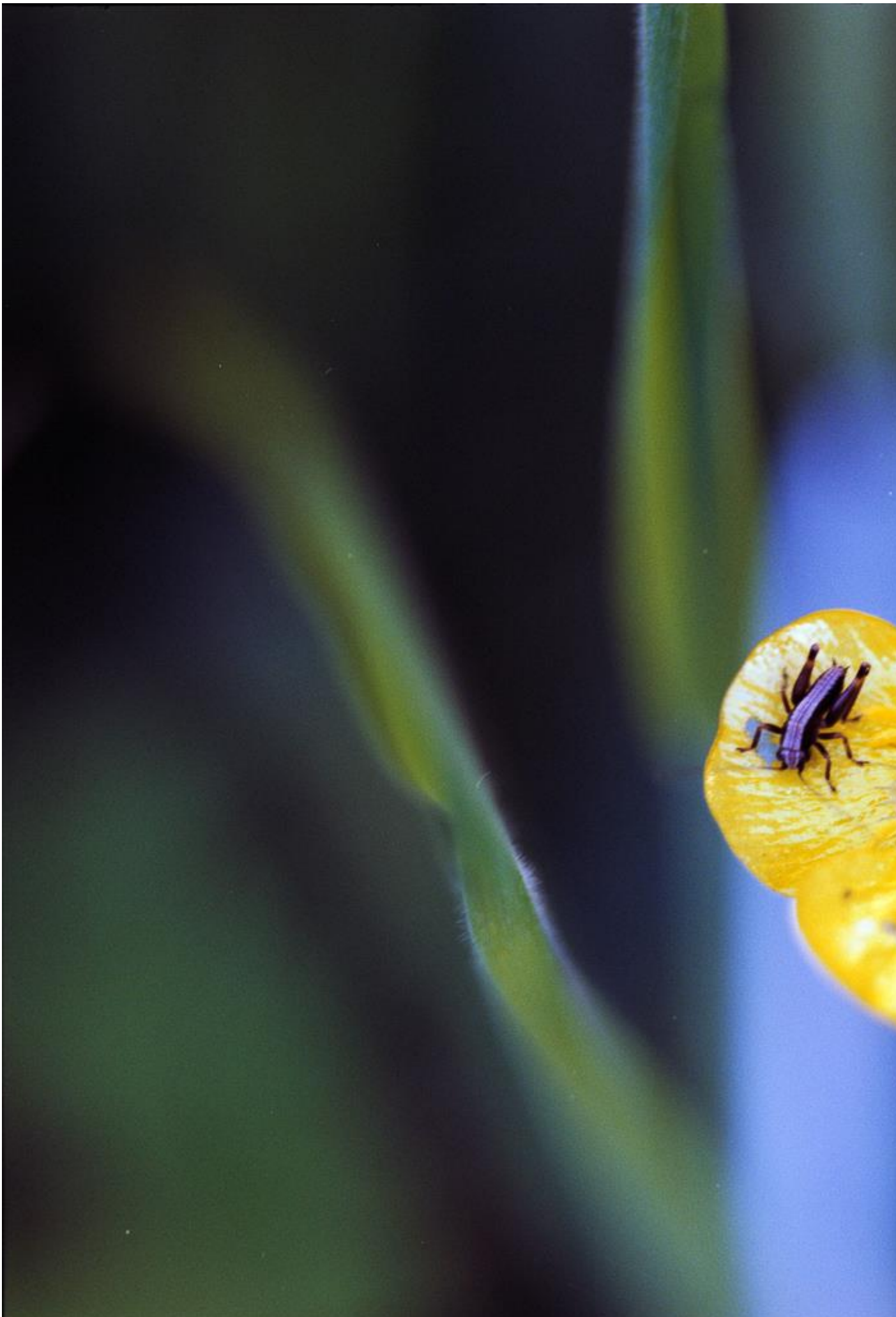


The value needed is the one at the top of this camera scale (the white one in mm), and depends only on the bellow extension (it's the bellow extension distance). After reading it, you need to set this value on the scale indicated on the floating group on the lens.

Using the scale you need: the white one if you are not using extension tubes or the green one if you use the N°1 extension tube, etc.

After setting this value in the lens using the floating ring (not the blue ring), always refocus the lens again after moving the floating ring and before shooting, using the usual knobs on the camera. That's it! Then you can shoot.

This lens is also one of the latest made by Mamiya. About the quality, this lens is really excellent!



Mamiya-Sekor Z 150mm f/3.5 W*


MAMIYA-SEKOR Z
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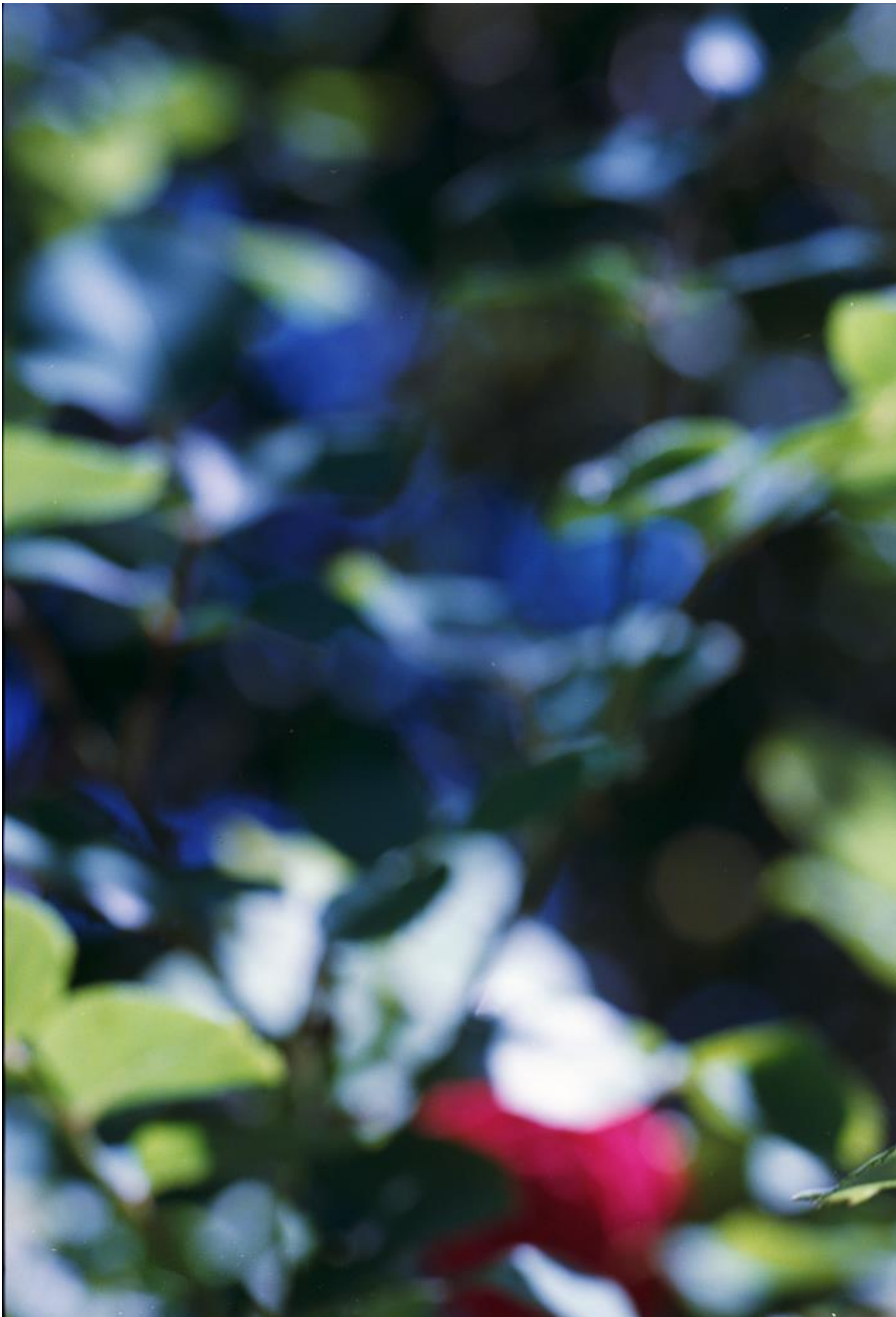
32 16 8 3.5
3.5 5.6 8 11 16 22
N

Lens	Mamiya-Sekor Z 150mm f/3.5 W
Optical construction	6 elements / 4 groups
Max aperture	f/3.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	150mm
Equivalent 35mm focal length	73mm
Angle of view	33°
Min focusing dist.	584mm
Magnification	0.31x
Coverage	183 x 227mm
Filter size	77mm
Lens hood	Screw-in (n°1)
Dimensions	97 x 83mm
Weight	825g

It's a great lens, sharp, and produces as quite all other Mamiya lenses, perfect quality images. I consider it as a general lens, usable in many conditions and situations: landscapes, street photography, and portraits. It's very good for all and is both small and light: you can bring it everywhere. That's what I do.

It's quite like an 80mm in full frame 35mm format (73mm in real terms), and if you use this focal length in the smaller format, you probably know what you can do with it.




LA CIOTAT
CNC

The minimum focusing distance is a little bit long, 60cm with the camera bellows fully extended, so it's not the ideal lens to shoot macro or for close subjects. However for portraits, it's perfect: it lets you shoot models picture framed down to the waist if you work in a little studio, like me. You can use the compendium G2 or G3, or the screw-in lens hood Type 1. With the teleconverter x1.4, you get a 210mm lens.

Mamiya-Sekor Z 180mm f/4.5 W

It's the original version of the 180mm for the RZ67 Pro (I) system. Mamiya stopped production after launching the W-N version below.

Lens	Mamiya Z 180mm f/4.5 W
Optical construction	6 elements / 4 groups
Max aperture	f/4.5
Min aperture	f/45
Diaphragm	Automatic
Focal length	180mm
Equivalent 35mm focal length	87mm
Angle of view	28°
Min focusing dist.	1100mm
Magnification	0.27x
Coverage	183 x 227mm
Filter size	77mm
Lens hood	Screw-in (n°2)
Dimensions	119 x 87mm

Weight	900g

Mamiya-Sekor Z 180mm f/4.5 W-N*


MAMIYA-SEKOR Z f=180mm
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10
20
∞
45 22 11 4.5 11 22 45
4.5 5.6 8 11 16 22 32 45
N
X

Lens	Mamiya-Sekor Z 180mm f/4.5 W-N
Optical construction	4 elements / 3 groups
Max aperture	f/4.5
Min aperture	f/45
Diaphragm	Automatic
Focal length	180mm
Equivalent 35mm focal length	87mm
Angle of view	28°
Min focusing dist.	819mm
Magnification	0.26x
Coverage	217 x 270mm
Filter size	77mm
Lens hood	Screw-in (n°2)
Dimensions	97 x 119mm
Weight	900g

I mostly use this lens to shoot portraits. It's perfect for this application and produces fantastic results. In some cases, portraits shot with it may be *too* sharp. If the results are too sharp for you, you can try the soft-focus version of this lens: the M 180 mm f/4.0D/L Soft described below. Regarding the 180mm f4.5 W-N, you can shoot everything with it. It's equivalent to a 90mm in 35mm format, the preferred focal length of portraitists.

This lens was designed to reproduce the construction of one of the most famous lenses manufactured by Zeiss around 1902. This 180mm has barrel construction and is a Tessar design with

four elements in three groups. That's why it's named "N." Moreover, it's the only one Mamiya made with this configuration.

I never tested an original Tessar lens from Zeiss, so it's not easy to tell if this Mamiya 180mm f4.5W-N shoots images like the original version made by Zeiss. Some said that the Tessar 50mm f/2.8 from Zeiss (for example) is one of the best lenses ever made. I don't know if the Mamiya 180mm f4.5 W-N approach this level of quality, but hey, it's still an excellent lens.

You can use the G2 and G3 compendium shades with it, I personally recommend the G3, the teleconverter x1.4 gives you a 252mm focal length, which is useless if you have a 250mm lens like me. The lens hood usable is the screw in Type 2. This lens is perfect to shoot portrait & fashion, street photography, and also landscapes.

About my studio, I created it little by little over a few years. Today, I use 400W GODOX flashes with lightboxes. I also try to make lights a little special, and I am equipped with Fresnels to test the portraits a “Paramount” style. The last lens I bought is the 180mm f/4,0D/L Soft (explained below) and I think it will help me for that.

But as I bought the 180mm Soft recently, so far, I made my portraits with the 110mm, the 150mm, the 180mm N or the 250mm.

Mamiya-Sekor M 180mm f/4 D/L Soft*

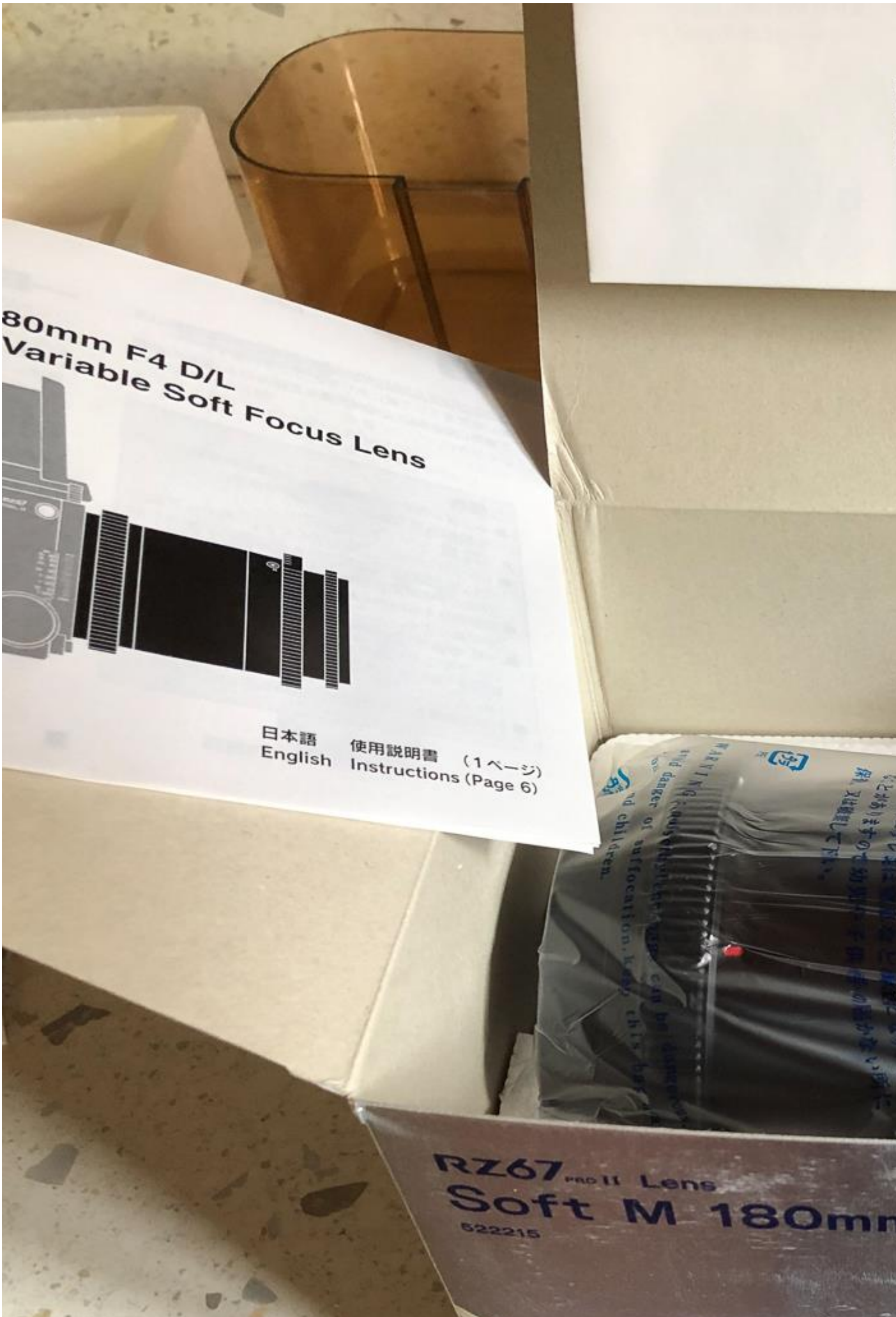

(VSF)
M
1:4
f=180mm
D/L
4 5.6 8 11 16 22 32
N
X
180mm soft

Lens	Mamiya-Sekor M 180mm f/4 D/L Soft
Optical construction	6 elements / 4 groups
Max aperture	f/4
Min aperture	f/32
Diaphragm	Automatic
Focal length	180mm
Equivalent 35mm focal length	87mm
Angle of view	28°
Min focusing dist.	783mm
Magnification	0.26x
Coverage	211 x 262
Filter size	77mm
Lens hood	Screw-in (n°2)
Dimensions	97 x 118mm
Weight	1039g

I purchased this lens totally brand new (and for a relatively low price). It's the first lens of my kit I ever get new in its original box with all accessories. I think it's interesting to know what an original box contains. So this is what I found in my brand new lens box:

- The lens
- A front and a back lens cap
- A hood (size No.2)

- A round box with three diffusion grids
- The manual in Japanese and English
- The “Mamiya-Sekor Z Interchangeable Lenses” catalog


80mm F4 D/L
Variable Soft Focus Lens
日本語 使用説明書 （1ページ）
English Instructions (Page 6)
RZ67 PRO II Lens
Soft M 180mm
522215

This 180mm f/4.0D/L Soft opens up a little more than the 180mm f/4.5W-N and doesn't have a blue collar like other RZ lenses.

You might be interested in...

A complete guide to the Mamiya RZ67, part five: conclusion and personal stories

A complete guide to the Mamiya RZ67, part four: maintenance and miscellaneous accessories

This 180 is special: it's a variable soft-focus lens and is provided with three different diffraction disks (grids), which you have to install in the barrel of the lens. It also has another soft effect without using the grids: a spherical aberration because this lens is not fully corrected on the edges of the frame. It's not a mistake, it's done on purpose, and is only visible with the aperture open between f/4 to f/8. So, even without using the grids, you have a "natural" soft or blur effect if you open your aperture more than f/8.0.

The three diffraction grids:


No.1(5)

To get the ethereal effect, you need to install one of them: first, the front part of the lens must be unscrewed as follows:


M
1:4

Next, the chosen grid must be installed:

Never try to insert the grid directly inside the lens barrel. You may put the grid on the wrong side and damage the glass inside the lens barrel during reassembly. Before reassembling the front part of the lens, take care to remove any dust.


M
1:4
f=180
180m

This lens was manufactured for use in portrait photography, but it can be used in many other ways. The soft effect is mainly obtained with wider apertures and depends on the diffusion grid used (1 to 3). When you use one of the grids – according to Mamiya – if you stop down this lens to f/8 or smaller, you get sharp images like a normal lens. I made a test with the 180mm Soft and the grid N°2:

You can see a difference between the two. The one taken at f/5.6 has a little soft ethereal effect, the other taken at f/11 is perfectly sharp, despite the presence of the grid N°2 inside the lens. Blurred areas in the background are because of the shallow DoF (it's a close-up! And close-ups always have a shallow DoF).

The 3 diffusion grids go from 1 (light effect), 2 (medium effect) or 3 (strong effect). And you have also the "0" effect without any grids if you set the f/stop between f/4 and f/8. I was surprised with this "0" effect, I thought first that my lens was dirty, but it's a real effect.

The effect obtained is "ethereal," and it's specific of this kind of lens configuration. You can probably do quite the same with a lot of hard (and long) post-treatment work if you don't have this lens. You can also use filters in front of any lens to try to get the same effect, but you will not obtain precisely the same results.

This configuration of a grid inside a lens has been employed in some old large format lenses in the past and can be summarized by a sharp image, surrounded by a softening effect around the edges (a stronger or weaker effect depends on the disc and aperture used). With a fully-open aperture, the center is also softened but less than the surrounding area.

It's important to know that each disc absorbs some part of the light traveling through the lens, so you need to open the aperture up a bit more (or use a slower speed) when using one of these discs. The AE prism (in AE mode) does the job of accurate metering but when manually metering, these corrections are mandatory:

Configuration	Original Stop	Final Stop	Compensation
No disc	f/4	f/4	0
With Disc No.1	f/4	f/5	+⅔ EI
With Disc No.2	f/4	f/5.6	+1 EI
With Disc No.3	f/4	f/6.3	+1 ⅓ EI

Set the compensation dial on the AE prism (in case you use it in manual mode) or on your light meter before taking a shot. No need if you use the FE 701 prism in AE mode.

Note: You can use only one grid at a time.

In use, this lens can be difficult or very hard to focus when used with the diffusion grids, or when you open the lens more than f/8. Using the DoF button helps but you'll lose the feeling of the actual DoF of the aperture used with your shot. Achieving accurate focus with this lens requires some practice, especially if you shoot portraits. A good focusing screen like the Type E can help a lot.

The magnifier FD701 used with one of the prisms also helps. If you use it installed on a stable tripod, I think it is possible to achieve focus without the grid and install the grid after focusing but before shooting. However, I have not tested this yet myself.

If you use the prism AE FE701 in AE mode, I advise to set it on the S (spot) metering position for light measurement or use an external light meter with the compensations above. This is because the ethereal effect may disturb the light cell of the FE701. If the prism is in the A (average metering) position, it will not set the best exposure for your shot. Especially for high contrast scenes. For example, shooting a close-up image of a flower lit by the sun with a dark background will give you an overexposed image of this flower (many more than usual for this type of images with an average exposure system). If you have an external light meter with spot measurement, use it!

The problem is the same for portraits. Don't forget to use the compensations if you use a light meter!

Mamiya-Sekor Z 210mm f/4.5 APO

Lens	Mamiya-Sekor Z 210mm f/4.5 APO
Optical construction	7 elements / 5 groups
Max aperture	f/4.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	210mm
Equivalent 35mm focal length	102mm
Angle of view	24°
Min focusing dist.	1168mm
Magnification	0.22x
Coverage	256 x 318mm
Filter size	77mm
Lens hood	Screw-in (n°2)

Dimensions	97 x 114mm
Weight	980g

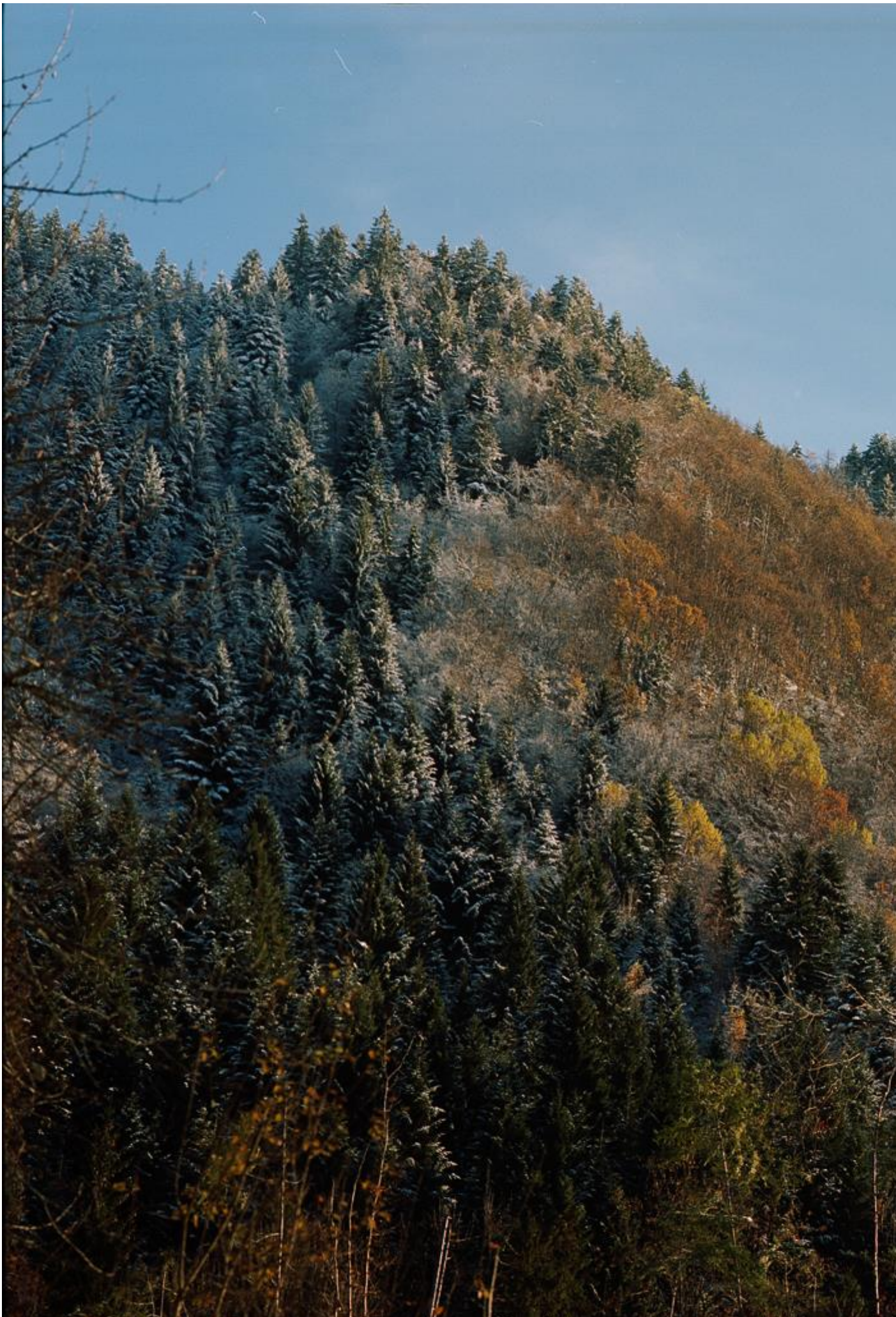
Mamiya-Sekor Z 250mm f/4.5 W*


MAMIYA-SEKOR Z f =25
4.5 5 6 7 10 15 30 ∞ m
45 22 11 4.5 11 22
4.5 5.6 8 11 16 22 32 45
N

Lens	Mamiya-Sekor Z 250mm f/4.5 W
Optical construction	5 elements / 4 groups
Max aperture	f/4.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	250mm
Equivalent 35mm focal length	121mm
Angle of view	20°
Min focusing dist.	1570mm
Magnification	0.19x
Coverage	297 x 369mm
Filter size	77mm
Lens hood	Screw-in (n°2)
Dimensions	97 x 126mm
Weight	1080g

This lens is very good and produces impressive results. It's a short telephoto (equal 120mm in full frame 35mm terms), easy to use and very good quality. I use it for a lot of things, landscapes, portraits, street, etc…

Most often, I take it without knowing what I'm going to shoot and then find myself needing it along the way to frame an image in a particular way. If I did not have it, I could not make this picture!



It’s a pleasure to use because it balances the RZ very well, whether I have it in the hand or with the strap around my neck. It doesn’t need a lens support bracket, even if you use the camera with this lens installed on a tripod. Mamiya didn’t manufacture any to go with it, so…

With this lens, you can use the compendium G3 or G2 shade, or the screw-in lens hood Type 2. With the teleconverter x1.4, you get a 350mm lens making the lens useless if you have the 350mm or the 360mm in your kit.

Mamiya-Sekor Z 250mm f/4.5 APO

An improved version of the previous 250mm, with apochromatic treated glass.

Lens	Mamiya-Sekor Z 250mm f/4.5 APO
Optical construction	7 elements / 5 groups
Max aperture	f/4.5
Min aperture	f/45
Diaphragm	Automatic
Focal length	250mm
Equivalent 35mm focal length	121mm
Angle of view	20°
Min focusing dist.	1564mm
Magnification	0.19x
Coverage	298 x 370mm
Filter size	77mm
Lens hood	Screw-in (n°2)
Dimensions	97 x 145mm

Weight	1340g

Mamiya-Sekor Z 360mm f/6.0*

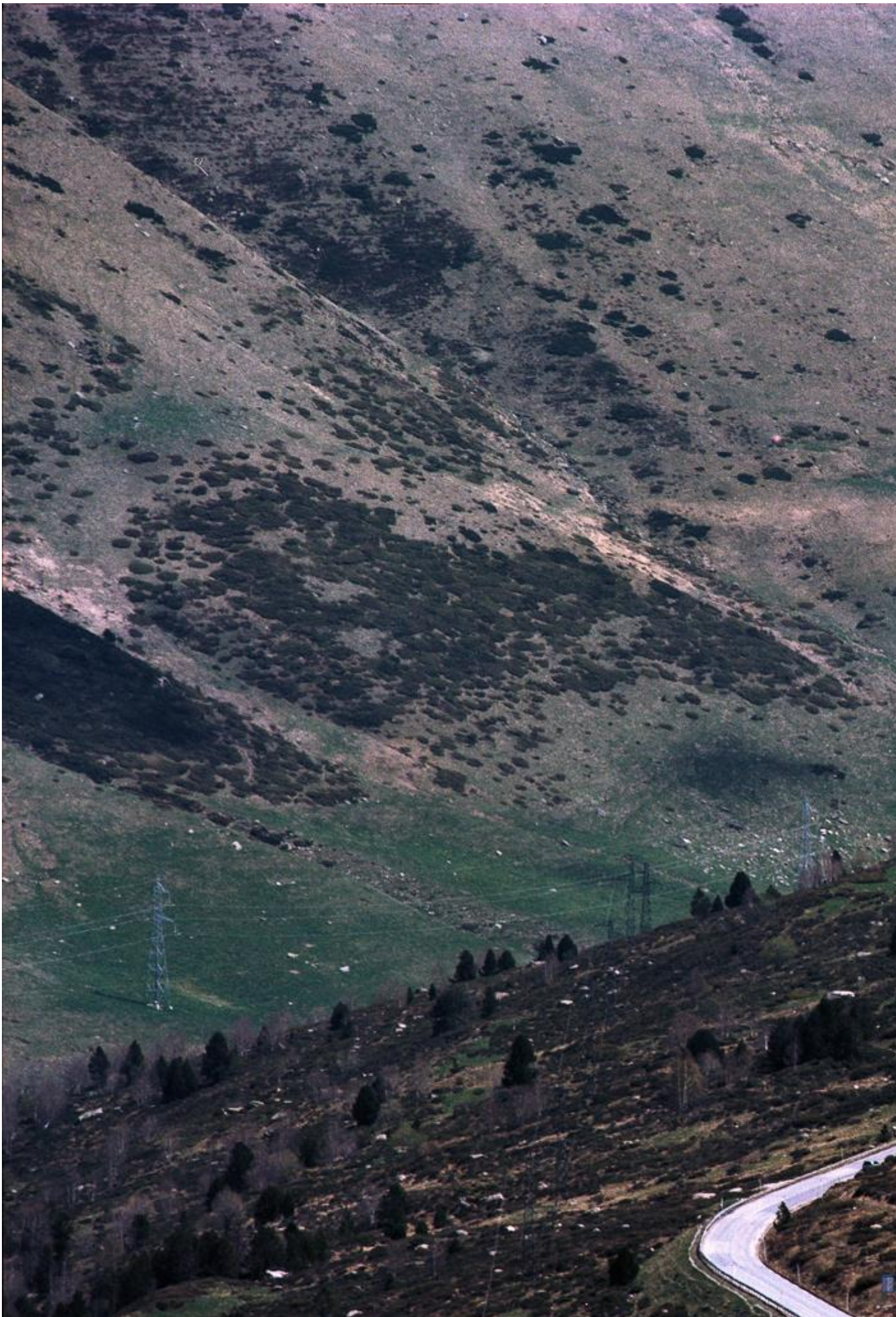

MIYA-SEKOR Z f=360mm 1:6
45 22 11 6 11 22 45
4.5 5 6 7 8 10 12 15 20 50 ∞
6 8 11 16 22 32 45
N
X

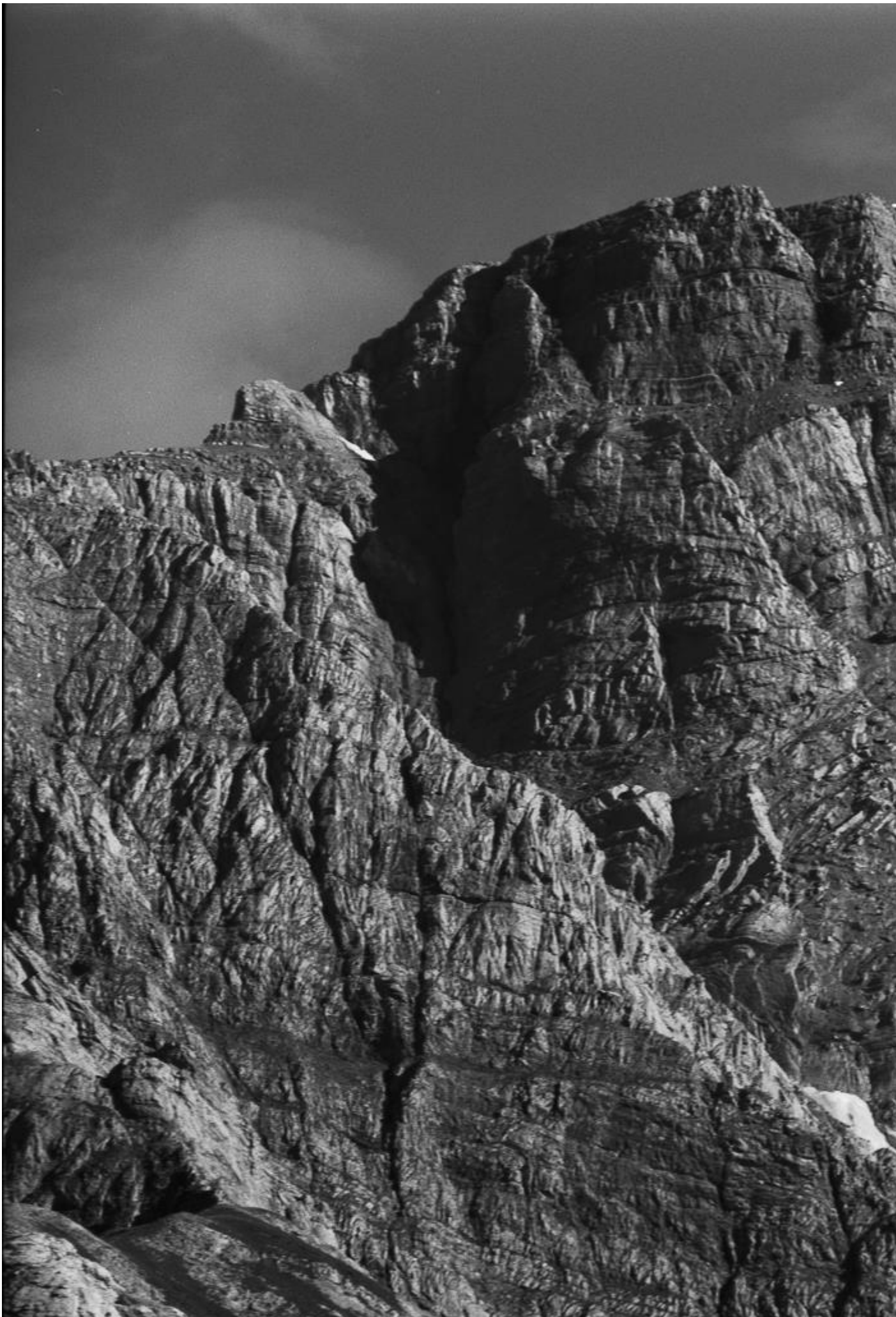
Lens	Mamiya-Sekor Z 360mm f/6.0
Optical construction	6 elements / 5 groups
Max aperture	f/6
Min aperture	f/45
Diaphragm	Automatic
Focal length	360mm
Equivalent 35mm focal length	175mm
Angle of view	14°
Min focusing dist.	3380mm
Magnification	0.13x
Coverage	432 x 536mm
Filter size	77mm
Lens hood	Screw-in (n°3)
Dimensions	97 x 166mm
Weight	1110g

The Z 360mm f/6.0 is a great lens. It is a little shorter than the 350mm APO, and that makes it troublesome to use the lens support bracket made by Mamiya for the 350/360 with it. I explain why a little later in this review. If you don't use the lens bracket, the 360mm is perfect, sharp and produces high-quality images.

To be honest, I first thought that the images made with this lens would not be awesome, or at least, not really great (it's not an APO lens…). As you can see from the images presented below, the quality

of the shots made with this lens are really incredible, and I was very impressed by the results. I use it a lot during my treks in the mountains around where I live because it’s lighter than the 500mm.





It’s a bit heavy but easy to use, and even “handy” with the RZ. The compendium G2 is a little short with this lens, (not advised for use by Mamiya) but I think it can be used anyway because it’s better than using nothing. If you use the teleconverter x1.4 with this 360mm, you get a 504mm equivalent…which is what I often do because it’s not as heavy as the 500mm and images I take with this set are still perfect.

Mamiya-Sekor Z 350mm f/5.6 APO

This is the APO version of the above 350mm. It opens a little more (f/5.6 instead of f/6.0). This APO improvement is very useful in color photography but quite useless for black and white.

I have never used it, but it must let you take images sharper than the non-APO 360 and it also costs a lot more.

Lens	Mamiya-Sekor Z 350mm f/5.6 APO
Optical construction	7 elements / 6 groups
Max aperture	f/5.6
Min aperture	f/45
Diaphragm	Automatic
Focal length	360mm
Equivalent 35mm focal length	121mm
Angle of view	15°
Min focusing dist.	3081mm
Magnification	0.13x
Coverage	420 x 521mm
Filter size	170mm
Lens hood	Screw-in (n°3)

Dimensions	97 x 192mm
Weight	1455g

Mamiya Z 500mm f/8*

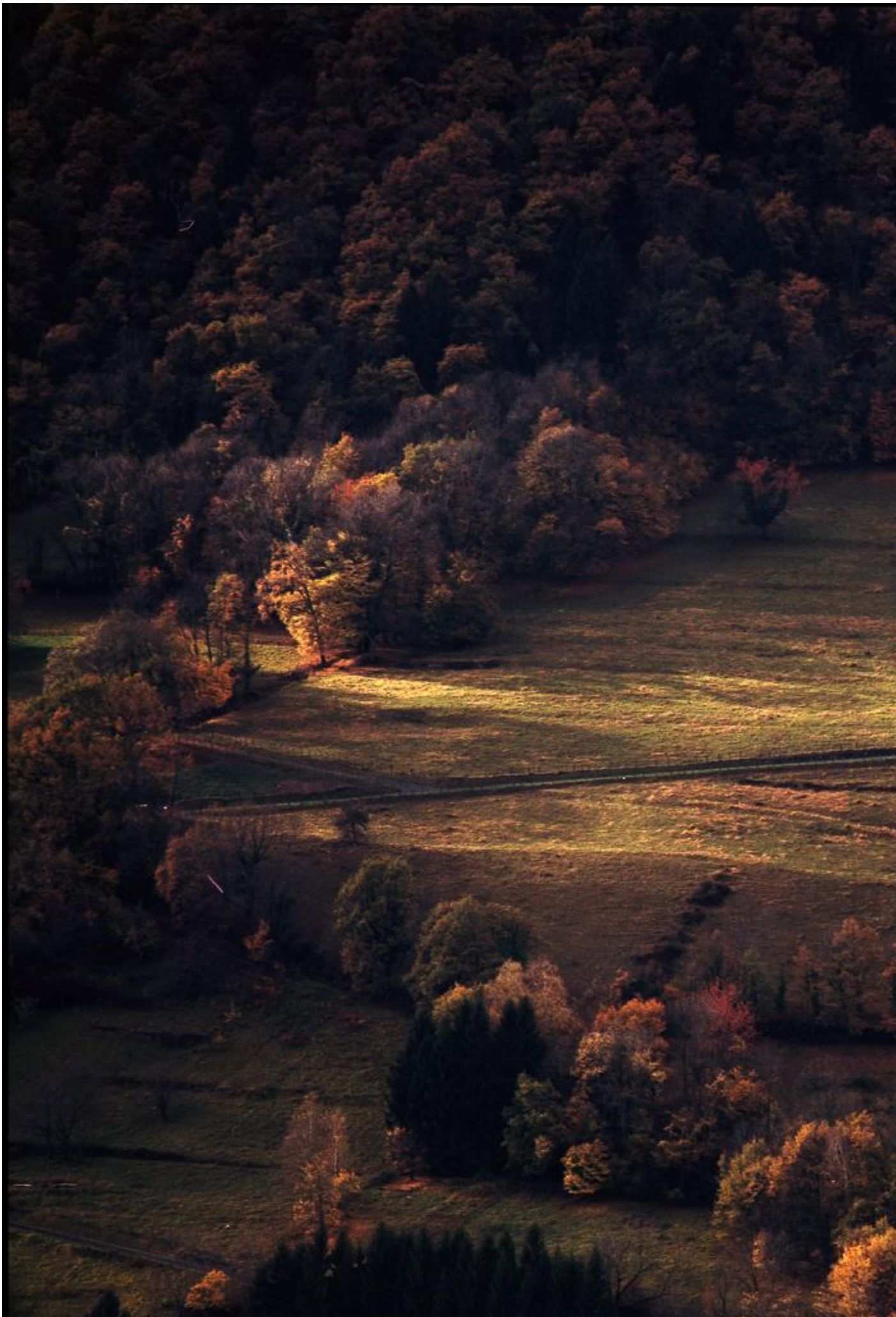
Lens	Mamiya-Sekor Z 500mm f/8
Optical construction	6 elements / 6 groups
Max aperture	f/8
Min aperture	f/45
Diaphragm	Automatic
Focal length	500mm
Equivalent 35mm focal length	242mm
Angle of view	10°
Min focusing dist.	6150mm
Magnification	0.09x
Coverage	597 x 740mm
Filter size	N/A
Lens hood	Slip-on
Dimensions	108 x 299mm
Weight	1960g

This lens is a real monument! Huge, heavy (2kg!) and cumbersome but produces incredible quality and sharp images. I use it a lot to shoot the mountains around where I live. It's perfect for this and although it's always a problem to carry it during a trek or a hike, the results worth it. And I must admit that focusing is not always easy.

This lens is provided in a little suitcase with a dedicated lens hood, a lens cap, and a lens support bracket. You can find this lens at a relatively low price in relation to its quality. The APO version costs

a *lot* more. I use a little suitcase especially to store it away from dust and damages at home, and I take it very rarely in my travels.

This lens needs the lens support to avoid damaging your RZ when you use it (see below) because of its weight. I use it all the same without, using my hands instead but with a lot of attention. It is necessary to avoid brutal movements in this case.



Unfortunately, and unlike other brands like Nikon, there is no possibility of mounting a filter on the rear of the lens and in addition, given the large diameter of the outer lens, no filter system can be mounted on it. The only possibility is to use gelatins with tape, as there is also no possibility of installing a compendium shade either.

Mamiya-Sekor Z 500mm f/6 APO

Lens	Mamiya-Sekor Z 500mm f/6 APO
Optical construction	7 elements / 7 groups
Max aperture	f/6
Min aperture	f/45
Diaphragm	Automatic
Focal length	500mm
Equivalent 35mm focal length	242mm
Angle of view	10°
Min focusing dist.	6064mm
Magnification	0.09x
Coverage	597 x 740mm
Filter size	77mm
Lens hood	Slip-on
Dimensions	97 x 280mm
Weight	2315g

This is the APO version of the 500mm. It opens a little bit more: f/6 instead of f/8 for the non-APO version. Because of the APO treatment of the lens, it corrects color problems much better and for

this reason, color images made with it may be sharper and with improved vivid color rendition. This problem is less troublesome with black and white. This lens is much more expensive than the non-APO version.

Mamiya-Sekor Zoom 100-200mm f/5.2 W*


MAMIYA-SEKOR ZOOM
12023
10
3
12
3.5
4
15
5
20
6
30
8
10
50
15
100
120
5.2
8
11
16
N

Lens	Mamiya-Sekor Zoom 100-200mm f/5.2 W
Optical construction	14 elements / 12 groups
Max aperture	f/5.2
Min aperture	f/45
Diaphragm	Automatic
Focal length	100-200mm
Equivalent 35mm focal length	49-97mm
Angle of view	W: 8° T: 25°
Min focusing dist.	W:225mm T: 894mm
Magnification	W: 0.45x T: 0.25x
Coverage	W: 126 x 126mm T: 237 x 370mm
Filter size	77mm
Lens hood	Slip-on (specific)
Dimensions	109 x 173mm
Weight	1620g

Purchasing this lens was not a simple operation for me. First, I don't like zooms in general, I prefer prime lenses. This is the cheapest of all RZ lenses on the second-hand market and the only zoom made by Mamiya for the RZ system. So I decided to buy one, practically on purpose for this review

but also with the idea to use it outside and have a variable focal length for some situations (between 100 and 200 mm). Well, that's what zooms are made for.

It's also the only Mamiya lens for the RZ system which has a focusing ring. All others use the bellows extension to achieve focus. So with the zoom, you have two ways to focus your images: using the ring or bellows extension. So, when photographing with the zoom from 3m to ∞, the bellows have to be totally retracted and you have to use the lens helicoid ring for focusing. When shooting close-ups within 3m, set the helicoid at ∞, and extend the body bellow for focusing.

First impression: it's a big lens and a weighty one (1.6kg!) When installed on the RZ, the combo is not easy to use hand-held. The focal length ring and the focusing ring are on the front of the lens, which causes a significant imbalance in the combo. Setting the desired focal length is not easy; the ring is not very soft (on mine, at least).


MAMIYA-S
10
12
15
3
3.5
4
5
100
120
5.2
8
11
16

The three marks you can see (red, yellow, green) are the marks for focusing. The red one is for classic films. You set the distance of the focusing ring on this mark. The yellow is for IR films when you are at 200 mm, the green for IR film when you are at 100 mm. You have to set the distance between the yellow and green marks when you use intermediate focal lengths (between 100 and 200 mm).

Mamiya made a specific slip-on hood for this lens and you need a particular screw-in adapter ring if you want to use the compendium G3 shade, because of the large diameter of the focusing ring in front of this lens. Also, this adapter is provided with a rotating collar and a rotation stopper to let the compendium G3 to work with this zoom. The G2 is not usable because Mamiya didn't make a similar adapter for it.

Unfortunately, the rotation stopper is rarely sold with the ring and very hard to find separately. The complete set (ring + stopper) is also scarce to find.


Mamiya RZ67
140
160
180
200
ft
m

With the G3 shade, you can use screw-in 77mm diameter filters (between the lens and the additional adapter ring); however, Mamiya advises to not use more than one filter at a time because of vignetting problems.

In this configuration (without the rotation stopper) when you turn the helicoidal focal ring on the lens, the front of the lens also rotates, and then the compendium G3 too. You have to replace the orientation of the hood (compendium) each time you change the focal length. Which is not very practical!

As this lens can be a real nightmare if you carry it during a walk or a trek to shoot landscape or street photography, it seems a better configuration for a studio to shoot portraits but only if you use it with a tripod. (not yet tested by me).


02760

Mamiya-Sekor SB Tilt-Shift Lenses (Short Barrel)

These two lenses were produced to work with a dedicated tilt-shift adapter and can be used to correct the geometry of your composition. They are very useful when shooting architecture or products to achieve excellent perspective control and sharpness. With them and the adapter, you can literally play with the depth of field.

If you wish to use these lenses as normal without any tilt-shift functionality, you can also use the Mamiya 27.2mm SB Auto spacer. The tilt-shift adapter is usually found at a high price in the second-hand market and it's technically possible to use these lenses without the adapter but you would need to take into account the additional spacing you will need to account for

The RZ with the tilt-shift adapter and the Mamiya-Sekor M 180mm f/4.5L SB (Short Barrel) Tilt-Shift lens:

Tilt Down

(All images come from Mamiya documentation).

Mamiya-Sekor M 75mm f/4.5L SB (Short Barrel) Tilt-Shift

Lens	Mamiya-Sekor M 75mm f/4.5L SB (short barrel) Tilt-Shift

Optical construction	11 elements / 9 groups
Max aperture	f/4.5
Min aperture	f/32
Diaphragm	Automatic
Focal length	75mm
Equivalent 35mm focal length	36mm
Angle of view	62°
Min focusing dist.	302mm
Magnification	0.24x
Coverage	231 x 286mm
Filter size	105mm
Lens hood	N/A
Dimensions	108 x 125mm
Weight	1295g

Mamiya-Sekor M 180mm f/4.5L SB (Short Barrel) Tilt-Shift

Lens	Mamiya M 180 mm f/4.5L SB (short barrel) Tilt-Shift
Optical construction	4 elements / 3 groups
Max aperture	f/4.5

Min aperture	f/32
Diaphragm	Automatic
Focal length	180mm
Equivalent 35mm focal length	87mm
Angle of view	28°
Min focusing dist.	1859mm
Magnification	0.10x
Coverage	540 x 671mm
Filter size	77mm
Lens hood	Screw-in (n°2)
Dimensions	97 x 92mm
Weight	808g

It's also possible to use the tilt-shift adapter with other non-SB lenses of the Mamiya catalog. Obviously, in these cases, you lose infinity focus, as you can see in the sheet below:

Lens	Min. to film plane	Min. to lens	Max. to film plane	Max. to lens
75mm f/4.5 SB	**397mm**	**68mm**	**infinity**	**infinity**
180mm f/4.5 SB	**868mm**	**572mm**	**infinity**	**infinity**
50mm f/4.5 W	284mm	24mm	298mm	84mm
50mm f/4.5 ULD	295mm	25mm	311mm	87mm

65mm f/4 L-A	340mm	50mm	395mm	151mm
75mm f/4.5 Shift	398mm	68mm	485mm	202mm
90mm f/3.5 W	391mm	131mm	532mm	318mm
110mm f/2.8 W	453mm	214mm	691mm	498mm
M140mm f/4.5 L-A	624mm	350mm	1042mm	814mm
150mm f/3.5 W	661mm	401mm	1137mm	923mm
180mm f/4.5 W	868mm	572mm	1559mm	1308mm
210mm f4.5 APO	1103mm	811mm	2077mm	1831mm
250mm f/4.5 W	1393mm	1090mm	2724mm	2466mm
250mm f/4.5 APO	1402mm	1080mm	2743mm	2466mm
M180mm f/4 Soft	836mm	540mm	1499mm	1250mm

(Data from Mamiya documentation)

A lot of advertising images you have probably seen in magazines have been made with some of these configurations.

The ultimate accessory for the SB lenses and tilt-shift adapter combination is the ground glass adapter SX701. It's like the ground glass you have on every large format camera, the glass is engraved with a grid and it allows you to compose your image very precisely. It helps to straighten vertical or horizontal lines. Or to settle the exact depth of field you want.

You install in the same manner as and instead of the usual film holder. The SX701 has a lock on the bottom as per a typical film holder and the image is reversed horizontally and vertically. Naturally, the mirror needs to be lifted-up to use this ground glass adapter (a cable release needs to be screwed on the lens side).

Ground Glass Adapte

Using Mamiya RB lenses with the Mamiya RZ

It’s possible to use RB lenses with an RZ camera, but you need to know some little things before: First of all, the bellow needs to be extended by 7mm to focus the lens at infinity due to the difference between the RZ and the RB’s flange focal distance. The lateral focusing/distance scale on the right of the camera can not be used but if you focus using your eyes on the focus screen, it’s not a problem. After that, you need to set the speed dial knob on the camera in the “RBL” position (RZ Pro II & D only) and set your speeds using the speed ring on the lens only.

This setting on the camera left speed dial knob doesn’t exist on the Pro (I) version but you have to set all your required speeds with the shutter speed ring on the lens only. This configuration is fully manual (no AE mode possible).

Mamiya made excellent lenses for the RB camera and many of them have even been adapted for the RZ. With these modified lenses you do not need to use the 7mm distance compensation.

Third-party lenses for the Mamiya RZ system

This section will be concise to write: no third party manufacturers have ever made any lenses for the Mamiya RZ system. Phase One, which is now the owner of Mamiya, provide their new cameras with Schneider high-quality lenses (and high expensive), specially made for their digital backs. None of these new lenses are compatible with the RZ and no third-party manufacturer made any lens for the RZ (or the RB before) cameras.

That said, it seems that the Mamiya lenses, whether those for the RB or the RZ, are very successful because there is an incredible number of adapters in the market to use these lenses with modern DSLR…

Lens hoods, bellows, filters and other macro accessories

Lens hoods

Type 2 for the 127
to the 250mm

Type 1 for the 90
to the 110 mm

There is also a type 3
for the 350/360mm

Lens hoods

Hoods and compendiums (bellows) are essential in photography, whether for outdoor landscapes or studio portraits to avoid light flares and maximize contrast. All lens have a screw-in diameter of 77mm for filters, hoods & compendiums, except:

- The 37mm lens has a 40.5mm screw-in type filter on the rear of the lens.
- The 50mm lens has a rectangular slip-on (magnetic) hood with an external diameter of 80mm, but you still can use a screw-in filter with a diameter of 77mm. Look out for vignetting problems that can occur, because the 50mm is a wide-angle focal length (equal to 24mm in 35mm full frame)
- The 75mm tilt/shift lens: 105mm screw-in type.
- The Zoom 100-200: dedicated slip-on hood and 77mm for filters.
- The 500mm lens: 105mm slip-on type hood.

These specific hoods were initially bundled or purchased separately with the lens, but are often missing when you buy a second-hand lens. Some could be difficult to find separately.

The G2 and G3 compendium shades are the best choices to avoid extraneous light and a decrease in contrast. Both models can be adjusted for lenses of different focal lengths by an adjustment knob that allows extending or shrinking the shade. The easiest way to see if you've extended too far, just take a look at the corners in the viewfinder while making adjustments. When you see a little darkening in the corners, shrink the shade a little and you'll be fine.

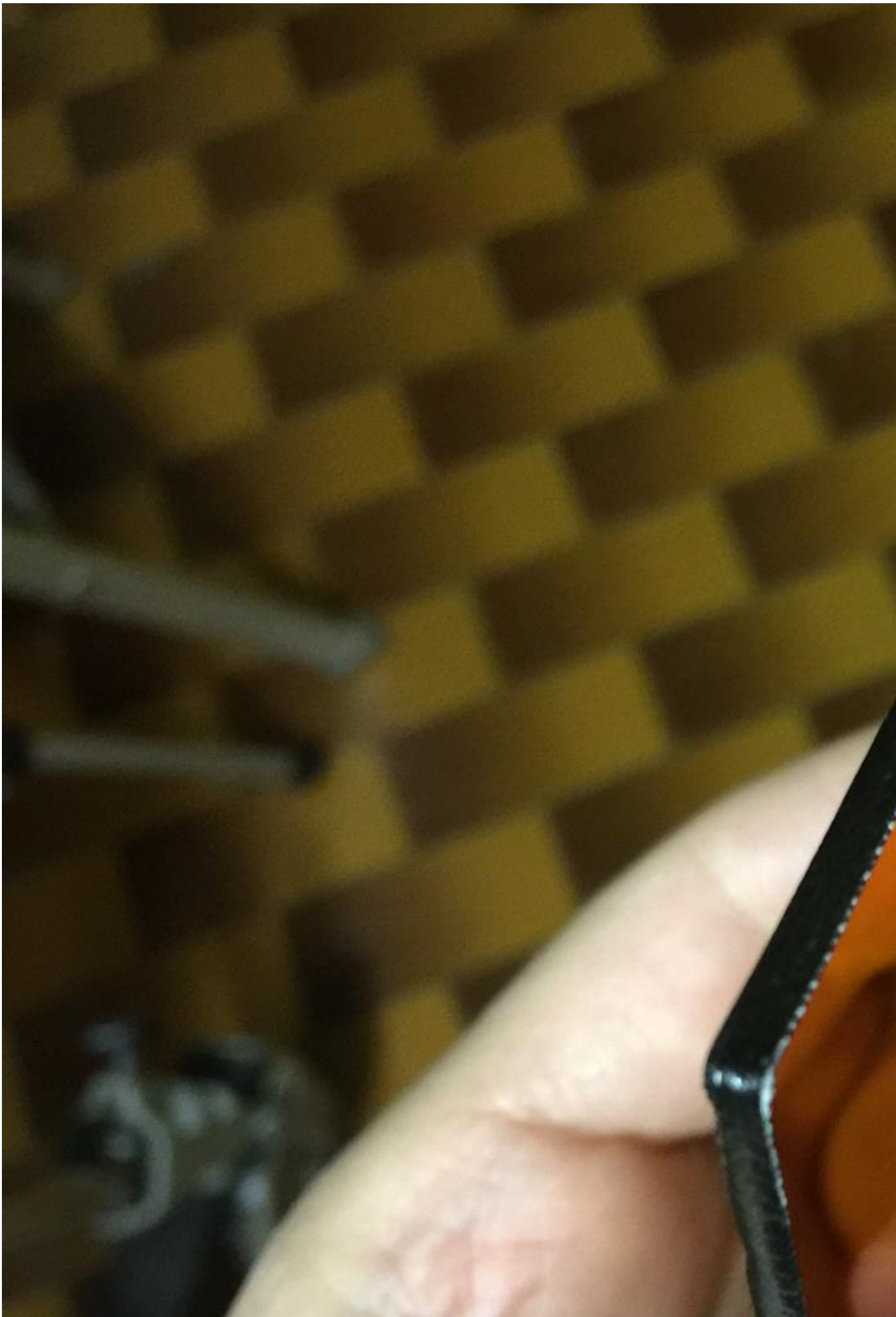
The G2 has a maximum extension of 105mm (4,2"), and it's perfect for lenses from 90mm to the 250mm. The G3 is larger than the G2 and has a maximum extension of 176mm (6,9") and can be used with lenses from 65mm to 360mm.

Neither the G2 or the G3 can be used with the 37mm, 50mm, 75mm or the 500mm. Only the G3 can be used with the 100-200mm zoom but needs a special adapter.

Both models have an insert for filters of 76.2mm (3”) on the lens side. The G2 accepts unmounted gelatin filters only because the insert is really thin. The G3 has two slots for filters on the lens side. They support filters with a maximum thickness of 2.3mm in slot A, and 4.7 mm in the slot B. Filters should be square, mounted or unmounted gelatin, plastic or glass. The G3 also has an additional filter frame that fits in slot A.


Mamiya
JAPAN

I use LEE Seven5 filters in my G3 in the slot B. They are quite perfect but a little too small (75mm vs 76.2mm) and a little too loose. Because of this, I add a little gaffer tape around the border of my filters to avoid losing it when I shoot:



One of the problems with these filter slots (both A and B) is that there is no lock once filters are inserted. It's not a problem when you use a tripod but it could be a big problem when you use the RZ hand-held. You can tinker with an attachment system to avoid dropping filters and yes, even plastic filters can break into pieces after falling on the ground (personally experienced!).

To solve the issue, I added a small strip of Velcro to hold the filter in its G3 compartment to stop it from falling out.

Both compendium shades also have an insert for larger filters at the front. however, only thin gelatin ones are accepted. The G2 accepts 102mm (4”) filters, while the G3 accepts 125mm (4.8”) filters.

Mamiya sold separate gelatin holder for the G3 just for this external slot but it’s hard to find. It’s easy to replicate/replace with a self-made one using some thin black cardboard or plastic. They also sold an additional Front Bellows Hood to extend the shade’s depth but as with many of Mamiya’s lesser-known accessories, it’s not easy to find.

Mamiya delivered the G3 with a ruler to help users understand how far to extend the shade for specific lenses. I never found this ruler very helpful, and I don’t use it, but it seems that it could be interesting for the zoom 100-200mm. I prefer using the view in the viewfinder to decide for myself.

The G3 compendium shade is for me, the best choice in the Mamiya system but it’s quite problematic if you want to use current (round, screw-in) filters. You can use only one filter of the LEE Seven5 system filters at a time (LEE seems to be the only one manufacturer to sell filters that are compatible with the insert of the G3), or gelatin filters that are not very easy to use, and do not offer many possibilities at the end.

Lens filters

Most of Mamiya RZ67 lenses provide a 77mm diameter screw-in front filter thread. This makes it easy to use 77mm round filters from many different brands and other systems with your RZ.


OC12
1.8
2
2.2
2.5
3
3.5
4


77×0.75
77×0.75

You can also use adapters for square filters like the 100mm system from LEE or Cokin. You only need a 77mm adapter ring, the filter holder itself (LEE 100 or Cokin Z) and filters that suit those systems (typically 100x100mm). Because of the 77mm diameter of the front of most of the lenses, it's not possible to use smaller systems such as the LEE Seven5 or Cokin P, although one LEE Seven5 filter can be used at a time with the compendium G3.

Note: LEE also offer different versions of lens hoods in its catalog, which are fully compatible with their 100mm system, and *much* more convenient to use with their filters. The Cokin system doesn't have a similar hood system in their catalog and it can be quite problematic to avoid light leaks.

Using these filter systems with wide angles lenses (50mm, 65mm) is not recommended. If you do, you will see the filter holder encroaching on the left and right of your photograph:

This shot was taken with the 50mm and the 100mm orange square filter from the Cokin Z system (all the genuine accessories). You can see the filter holder on the left and right side of the image. For the 50mm and the 65mm, I recommend using screw-in filters on the front only. But do not use too many, as there is also a risk of vignetting. Always check in the viewfinder if your filters cause vignetting.

I also know that Lee offers a 150mm filter system that could be great to use with the RZ wide-angle lenses (from the 50mm), probably without having this kind of problems. I still have to test this system!

It's not possible to use filters with the 500mm because of the large diameter of the front lens (105mm / 4,3") and Mamiya didn't add an insert or a screw thread for smaller or rear filters like Nikon does for their long focal length lenses, or like the one Mamiya made for the 37mm fisheye. The 500 has no possibilities to use any filter system, apart from gel filters in the front. But you have to use an external mounting plate for them or some tape.


AUTO A-S
AV S SP
Mamiya RZ67
PROFESSIONAL II

The main problem with the RZ's filter options is that you can't use a Mamiya compendium shade and a filter system Like the LEE 100 or the Cokin Z at the same time. You are limited to a single LEE Seven5and then only if you are using the G3. If you want to use many round filters with a compendium, you will be limited by vignetting problems, especially with "short" lenses (<150mm).

So, I think the LEE system is probably the best for the RZ because it has all the filters you would need *and* three models of compendium shades to avoid light leaks problems.

Mamiya lens support brackets

Mamiya made a lens support system to help the camera body bear the weight of heavy lenses like the 350/360mm, the zoom or the 500mm, especially when the camera is fixed on a tripod. I have found that Mamiya made different versions of each lens support bracket during the life of the RB and the RZ cameras. For example, my 350/360 lens holder version is not compatible with my 350mm without adding a filter ring. When I tried to find the one for the zoom, I saw two different versions of this lens support. Some versions were made for the RB system, others for the latest APO RZ lenses, and all are not compatibles with some configurations. So take care when you think to purchase and don't hesitate to ask the seller. If you can, try before buying. You can avoid the problems I had with mine.

There are three different kinds of lens holders versions. One for the zoom, one for the 350/360mm family, and one for the 500mm family

This accessory is essential to avoid damaging the front lens support plate. They are not necessary for use with lenses of focal lengths under 350mm. Below is the Mamiya RB67's built-in bellows/lens mount support system (highlighted in red) and lens support bracket (mounted to the tripod thread):


M
R
Mamiya RZ67
PROFESSIONAL II
∞
30
10
16
5
10
3
6.6
2
5
1.5
4
3
0.9
m

Mamiya Z 100-200mm lens support bracket

This lens support bracket was made specifically for the Zoom 100-200. It’s not as practical as others lens support bracket when shooting hand-held but it’s perfect when the zoom is mounted on a tripod:


Mamiya RZ67
PROFESSIONAL II
M
R
∞
30
16
10
6.6
5
4
3
10
5
3
2
1.5
1.2
1
0.9
m
mm
360
250
210
180
150
140
127
110
90
75
65
50
STEP

Note: I realized that the lens holder I purchased for my zoom was probably made for the RB system and is not suitable for the RZ. As you can see, once mounted, it is at an angle, which is not ideal. But don’t panic, there is a dedicated version made for the RZ zoom.

Since I did not want to buy another bracket, I built a shim made of a small rectangular piece of plastic to increase the thickness on the camera side.

The weight of the zoom is mainly at the front so you can damage the front mounting plate of your camera if you place your RZ on a tripod without using this lens support. Because you are supposed to use the focus ring on the lens instead of the bellows focusing system, Mamiya made this lens holder shorter than others.

I received my lens holder for the zoom with the front piece that supports the lens mounted as you can see in the previous image. I don’t think it was the best option but fortunately, the front piece which supports the lens can be rotated as per the image below:


Mamiya RZ67
PROFESSIONAL II
M
R
mm
360
250
210
180
150
140
127
110
90
75
65
50
STEP

I think it’s better to use this lens holder with the zoom this way.

You may have read that it’s possible to use this support bracket with other prime lenses like the 250 mm or the 350 mm, but I don’t advise this. Indeed, you can install this lens holder with the 350mm, but you lose the close focusing possibilities, as the bellow cannot be fully deployed. Also, it’s not possible to install it for use with shorter lenses without damaging the front mounting plate of the camera. Example of the support bracket in use with the 350mm:


Mamiya RZ67
Mamiya RZ67
PROFESSIONAL II
M
R
∞
30 10
16 5
10 3
6.6 2
5 1.5
4 1.2
33 1
3 0.9
ft m
mm
360
250
210
180
160
140
127
110
90
75
65
50
STEP

In this case, the front piece of the lens holder must be mounted this way. In addition, as you can see, my version is not on the same horizontal plane as the camera.

Note: This lens holder is normally provided inside the box of the zoom lens when new. The problem is that when you buy it secondhand, sellers often separate the items to make more money. It's a shame because you can see the problems in finding one on the second-hand market!

Mamiya Z 350 / Z 360 lens support bracket

My lens support bracket for the 350/360 is a little weird. I think when you use it with the 350mm APO, which is 192mm long, you won't have any problems. But with the 360mm lens, which is only 166mm long, the bracket is a little too long (with bellows fully retracted). It's not possible to install it differently.

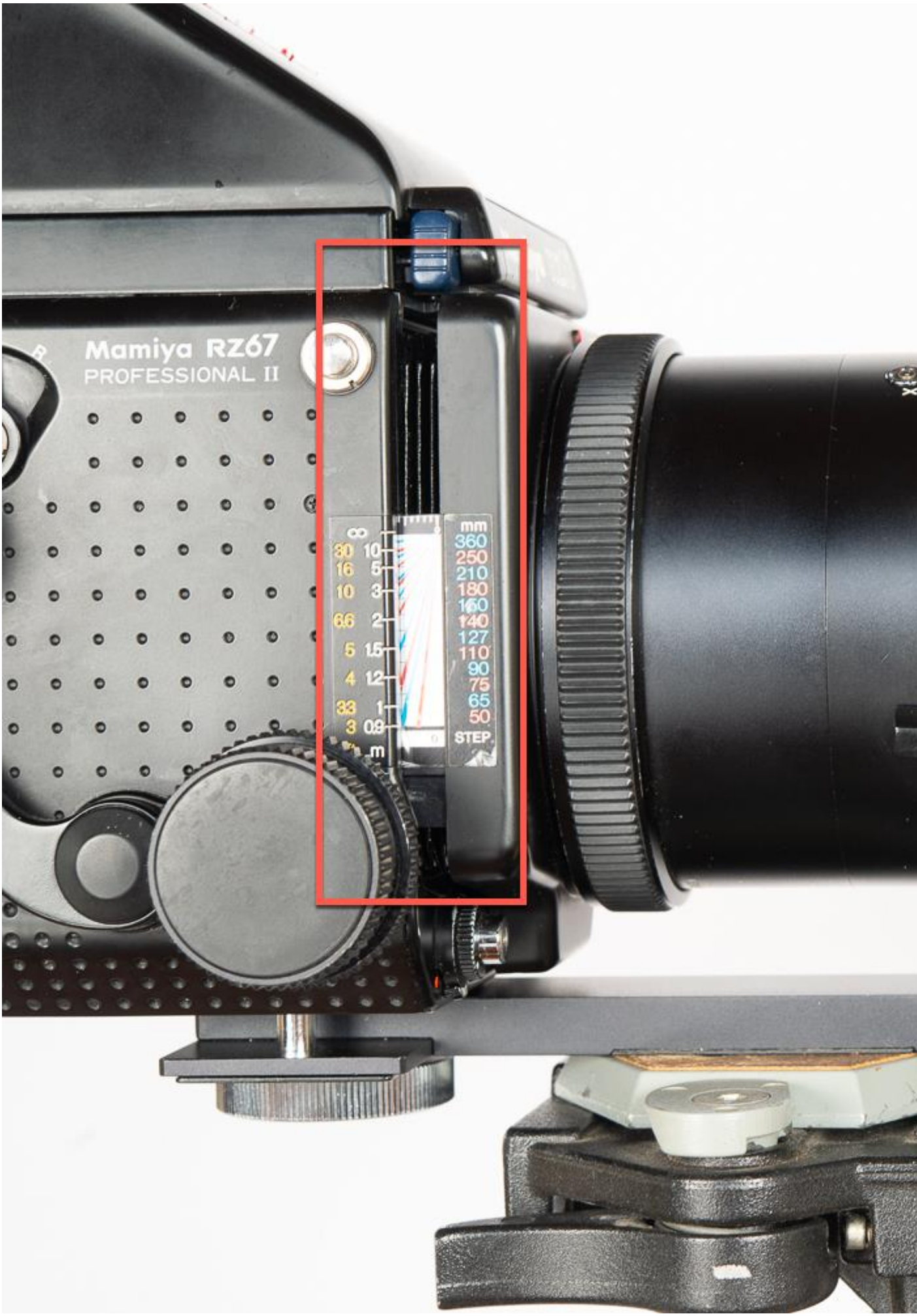

MAMIYA-SEK
11446


Mamiya RZ67
PROFESSIONAL II
mm
360
250
210
180
160
140
127
110
90
75
65
50
STEP
m
50 ∞ m
15
17
20

With the 360, it’s not possible to screw in a lens hood, because then, the bellows of the camera cannot be fully retracted. And you lose the infinity focus distance. I have resolved that by using a UV filter with the glass removed, (it’s only a ring now). I found a filter of the same diameter of the lens for a low price. (It’s an Amazon 77mm UV filter). It adds sufficient length to use a lens hood with this holder:


Mamiya RZ67
ROFESSIONAL II
∞
30 10
16 5
10 3
6.6 2
5 1.5
4 1.2
3.3 1
3 0.9
m
mm
360
250
210
180
160
140
127
110
90
75
65
50
STEP

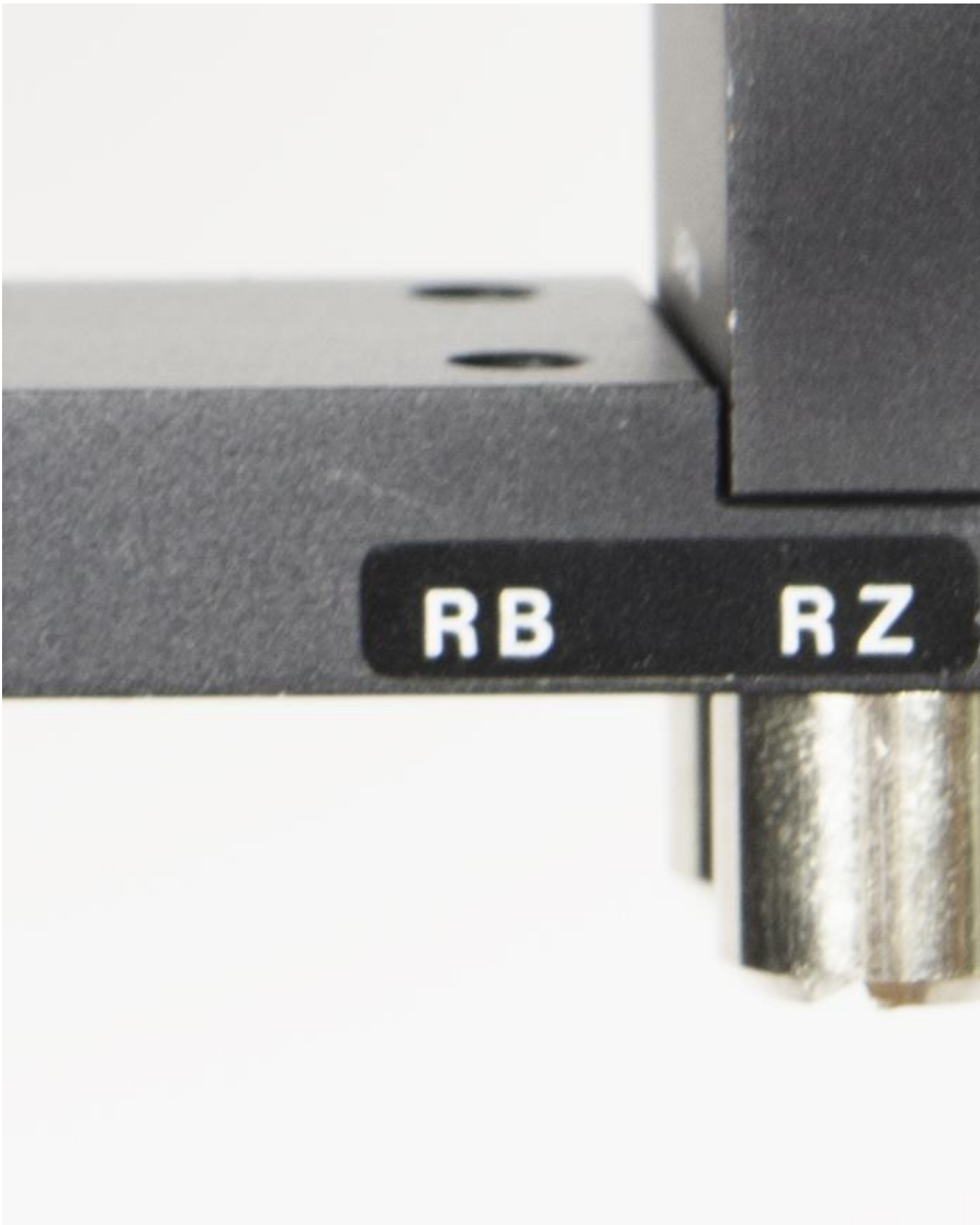
You can’t use the G3 compendium with this holder, unless you don’t need far/infinity focusing. You can see the minimum extension of the camera below when using the G3 compendium:


Mamiya RZ67
PROFESSIONAL II
∞
30 10
16 5
10 3
6.6 2
5 1.5
4 1.2
3.3 1
3 0.9
m
mm
360
250
210
180
160
140
127
110
90
75
65
50
STEP

With the G2 it's OK, but you must install it upside down (screws at the top). Unfortunately, the G2 is not supposed to work with the 350mm. You can use it, but if it is a little retracted, it is useless.

Because of the narrow angle of view of this lens, you can probably add more rings to add more length if needed to use the G3. I have to test that.

This particular has two positions, one to use RZ lenses, one for RB lenses.



Mamiya Z 500 lens support bracket

The lens support for this lens is provided in the case sold with the 500mm lens, which also contains the dedicated hood. If you purchase a second-hand 500mm, take care to make sure you have the complete kit, with all accessories provided.


f=500mm 1:8


AUTO A-S
AV
SP
Mamiya RZ67
PROFESSIONAL II
STEP

This lens holder is comprised of a long plate, a screw which comes for the camera, a ring for the lens, two screws to fix this ring on the plate and two extension rods in case you are using the winder, as shown in the picture below.

I add that this configuration (with the winder) is heavy as an anvil! You are obliged to use a tripod!

Nevertheless, I often shoot outside in the mountains around where I live, with my RZ and the 500mm. I don't use the lens support with the 500mm because I find it's unwieldy to shoot with it installed. I use one hand to support the camera and the other support the lens and I *always* have the strap around my neck. It's a little bit risky, I know, but it's easier to shoot without the lens holder. And I shoot mainly at infinity.

Mamiya macro extension tubes 1 and 2

As you will no doubt be aware, the RZ67 has a focusing system which uses bellows extension to focus the lens, just like view cameras. This system allows you to focus closer to the subject and to shoot at macro distances with most of the Mamiya lenses, even if they are not labelled "macro." The extension of the bellows is limited to the maximum of its possibilities and the minimum focusing distance then depends on each lens. If you want to take pictures closer than that, you need extension tubes. These two accessories enhance the possibilities much further.

Mamiya manufactured the extension tubes in 2 versions, which can be used separately or used in combination.

- Extension tube No.1: adds 45mm of length and 330g of weight.
- Extension tube No.1: adds 82mm of length and 420g of weight.
- Extension tube No.1+2: adds 127mm of length and 750g of weight.

Extension tubes allow you to focus very close and can magnify your subject, depending on the combination of tubes and lens used.

Both shutter and aperture couplings are fully transmitted using these accessories, and the lenses operate precisely as usual. And it's practical for close-up photography.

Mamiya advises the use of a cable release and lifting the mirror before exposure but in this case, you can't really focus using the focusing screen, so forget about it. In addition, you should use the smallest aperture possible (to increase the depth of field), and a tripod to help. And always make the focus before measuring for exposure. Mamiya also suggests that you cannot use the 50mm, the 37mm, the 75mm shift, the zoom 100-200mm and the 500mm with the extension tubes.

This is an example of the 140mm macro, the combination of both extension tubes *and* maximum extension of the bellows. As you might imagine, it's quite hard to shoot an image of a flying bug with that, especially when trying to keep it in focus.

The proof:

Example of a shot taken with the configuration above, to test it. I was holding the camera only with my hands. It's the sharpest image of the ten photos I took this day. Sorry, I was not able to make a more precise focus of this bee! Perhaps it would be better on a tripod!

Mamiya teleconverter 1.4x

This accessory is useful if you do not have a particular focal length lens on hand. It provides a pretty impressive image and multiplies the focal length of any lens used with it by x1.4:


Mamiya RZ6
TELECONVERTER

It works with almost all lenses except the 37mm, the 75mm Shift and the short barrel lenses (75mm & 180mm).

When you use a lens with this teleconverter, you get (in the 6×7 format) :

Original	**With teleconverter 1.4x**
50	70
65	91
90	127
110	156
127	178
140	198
150	210
180	255
210	294
250	350
350	490
360	504
500	700

The lenses in italics are not advised by Mamiya but work very well anyway.

Mamiya says that the 50mm is not usable either, but I tested it, and it works very well!

With the 500mm, you get a lot of vignetting on the corners (less if you use the 645 back). You must add +2 EI with this lens, even if you use the FE701 in AE mode:

You only have one setting on this teleconverter, and it's for the minimum aperture of the lens. If you use the 110mm, set 2.8, instead set 3.5-5.2.

The min aperture of the 500 mm is f/8, and f/6 with the 350mm, so I advise setting + 1 EI with the 350/360, and +2 EI with the 500mm even if you use the FE701 AE prism to compensate the exposure because the teleconverter only goes up to f/5.2 when you shoot in AE mode. I'm not sure how this works, but I see that my images taken with the 500mm and teleconverter are a little underexposed. If you're not convinced: make tests!

For lenses advised by Mamiya, this is a little sheet about the final aperture you get after mounting the teleconverter on them. All come from the Mamiya documentation:

Best suited lens	New effective focal length and aperture
90 mm f/3.5	127 mm f/5
110 mm f/2.8	156 mm f/4
140 mm f/4.5	198 mm f/6.4
180 mm f/4.5	255 mm f/6.4
100 - 200 mm f/4.5	141 - 283 mm f/7.4

The 75mm Shift is not usable because of vignetting problems when you shift this lens. The zoom is usable, but you will get vignetting on the corners of your frame, according to Mamiya.

The teleconverter also adds 430g at the weight of your system. If I use it with the 500, my camera begins to be really heavy. But I get then a 700mm (a 350 in full frame format), and it's perfect for my mountain photography.

Lens caps

Since the time I've been using my RZ, I always find the original lens cap to be not very practical. They don't lock very well and stand out all the time from the lens. So I finally found another system, really much, much, much, better:

I do not know who makes the new models, but since I use them, it's perfect. No more lens caps stand out from the lenses. You can find them with Amazon. They fit the lens perfectly.

Soft pouches

Mamiya sold a lot of pouches for lenses and other accessories. You have seen the pouch for the prism finder already in this series, but you also can find a pouch for the film holders and lenses.

For me, it’s incredibly convenient for the 645 back: I can store the mask with the back (my 645 mask is already protected by another thin pouch that slips in front of the back in this pouch).

And another one for the winder:

Mamiya also made other different pouches for the RZ system, depends on the lens used:

This comes from the 1999 MAC (Mamiya America Corporation) accessories catalog.

Onward to part four

I just introduced to you almost all the lens of the Mamiya range for the RZ. For those I have so far (I plan to complete my collection), I have added images made with each. They are not fine art pictures! Some are taken from my archives and for others, I went out with my camera and the lenses that I describe to show you the images that you can create with them. The weather was not always ideal but I tried to do my best. I do not know if my images will please you, they are not images intended to be presented in a gallery, they are just presented here to show you the performances of the optics I have.

A lot of the images presented are made around my home, not very far, and it's not because I was lazy, it's that I had a car accident at the time of writing this chapter on the lenses, and I am a little stuck in my movements. I know, excuses, excuses!

Parts one to three have covered the Mamiya RZ67 Professional system, film holders and lens system. For most, this may be enough but I have not finished yet! Part four will cover the remaining miscellaneous accessories for the Mamiya RZ67 system and I can tell you that there are a lot!

Until then,