

THE NEW COMPACT ZEISS SFL 8x30 AND 10x30 AND OTHER COMPACT BINOCULARS BY GPO, LEICA , VORTEX AND SWAROVSKI.

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Introduction.

Recently Zeiss announced a series of new compact binoculars indicated as Zeiss SFL binoculars . The SFL 8x40 and 10x40 were the first to arrive on the market: our test data of the SFL 8x40 in comparison with similar compact binoculars can be found on the WEB-site of House of Outdoor. The new 30 mm SFL's are now also available and we received the new 8x30 and 10x30 SFL binoculars from House of Outdoor for a short investigation.

Zeiss has chosen to have the SFL's made in Japan. That evokes some questions of course, since Zeiss originally considered their binocular line as “the outstanding flag” on its complete company. I quote here the director of the binocular section during my visit to Zeiss in Wetzlar a couple of years ago. Obviously this situation seems to have changed.

But this policy evokes also other questions: Zeiss certainly designed the SFL line and went with this design to Japan. Did Zeiss transfer apart from the design also facilities to the Japanese company like coating recipes and/or coating equipment (Zeiss has done that in the past)? And how can the overall process cut costs? Japan is not a low wage country and considering the prices of the top lines of the Japanese cameras labour seems not so much cheaper as it is in Europe. There is of course the possibility that the Japanese company working with Zeiss also has production facilities in China, so it can use these and assemble the SFL's in Japan. Speculations and interesting questions.

With its lower priced Terra binoculars “made in China” Zeiss had already before changed its policy to produce their top of the line binoculars in Germany.

We have added some photographs of the different investigated binoculars to give an impression of the differences in size and shape of the binoculars. We will also investigate the lower priced Vortex Diamondback 8x32 and the lower priced Zeiss Terra 8x32 ED.

Two 8x32 rangefinder binoculars are also investigated: the GPO Rangeguide 8x32 and the Leica Geovid Pro 8x32,



Photo 1. From left to right: Vortex Diamondback 8x32, Zeiss SFL 10x30, GPO Rangeguide 8x32, Leica Geovid Pro 8x32



Photo 2. From left to right: Swarovski CL Companion 8x30 (second edition), Zeiss SFL 10x30, Swarovski CL Companion 8x30 (first edition)



Photo 3. From left to right: Leica Ultravid 8x32 HD-plus, Zeiss SFL 10x30, Kite Lynx 8x30, Swarovski CL Companion 8x30 (first edition).

Photo 4.
From left to right:
Zeiss SFL 10x40,
Leica



Geovid Pro 8x32



Photo 5. From left to right: Zeiss Terra ED 8x32, Zeiss SFL 8x30, GPO rangefinder 8x32.

CONCLUSIONS.

- 1- With the new **SFL binocular range** Zeiss has supplied the binocular society with a series of beautiful compact binoculars. The **Zeiss SFL 8x30 and 10x30** investigated here are very attractive both for their compact body design, excellent handling properties and for their optical quality.
- 2- The **Vortex Diamondback 8x32** is very compact and offers for its price a good quality
- 3- The **Zeiss SFL 8x30 and 10x30** are compact binoculars with very good optical quality. Surprisingly Zeiss has chosen to not have it made in Germany, but having it made in Japan. Fortunately that country offers also top quality companies and Zeiss has made a good choice here.
- 4- The “**made in China**” **Zeiss Terra ED 8x32** performs well for its price and will be attractive for quite a few users.
- 5- The **GPO Rangeguide 8x32** has a well designed body structure: compact and with an acceptable weight. The strap lugs of the original preproduction sample were annoying in the palm of the hand. GPO has improved that construction and now it is next to a very well operating rangefinder binocular also an attractive binocular for normal use. The measured transmission spectrum is surprising with its pronounced minimum around 625-650 nm., but that can also found, although less pronounced in the Leica 8x32 rangefinder. GPO (and Leica) obviously have done that to avoid that red light of the distance meter laser enters the eye. We have did not observe that so strongly in any of the many transmission spectra of rangefinder binoculars we have measured. Fact is that it does not hamper the observation quality or color representation of the binocular. GPO has published a close focus distance of 8 m, we measured 7,5 meter in our sample. Apart from the very good operating facility of the built in distance metering system the GPO Rangeguide is a very attractive binocular for normal use, it delivers a good performance at an attractive price.
- 5- **The Leica Geovid Pro 8x32** is a solid feeling and heavy binocular. Very well built and with excellent optical performance, but for an impressive price. It works fine as a standard binocular but it is also a high quality, useful rangefinder binocular. Readability of the measured distance range is less well readable as it is in the GPO Rangefinder.

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**TABLE 1
BINOCULAR DATA**

Binocular	Zeiss SFL 10x30	Vortex Diamond Back 8x32	GPO Rangeguide 8x32 (left)	GPO Rangeguide 8x32 (right)	Leica Geovid Pro 8x32 (right)	Leica Geovid Pro 8x32 (left)
Weight	462 g	446 g	721g complete binocular	721 g complete binocular	827 g complete binocular	827 g complete binocular
Objective diameter	30,4 mm	32,4 mm	32,2 mm	32,2 mm	32,3 mm	32,3 mm
Exit pupil	3,1 mm	4,1mm	4,1mm	4,1 mm	4,2 mm	4,2 mm
Magnification	9,8x	7,9x	7,7x	7,7x	7,7x	7,7x
Eye relief	14 mm	12 mm	16 mm	16 mm	16 mm	16 mm
Field of view (m/1000m)	120m/10 00m	142 m/1000m	135 m/ 1000m	135m/1000 m	135m/1000m	135m/1000 m
Close focus (m)	1,2 m	1,3 m	GPO 8m, we measured 7,5m	GPO 8m, we measured: 7,5m	4,5 m	4,5 m
Transmission 500nm 550 nm	89,9% 90,5%	83,1% 85,1%	84,6% 86,6%	74,5,2% 82,5%	83,8% 86,5%	83% 83%
Color reproduction	Perfect	Slight pink color bias			Perfect	Perfect
Price (euro)	1575 euro	200-250 euro	996 euro	996 euro	2995 euro	2995 euro

TABLE 2
Performance of Zeiss SFL 8x30 and 10x30 compared with compact 30 mm Swarovski binoculars

Binocular	Zeiss SFL 8x30 (2023)	Zeiss SFL 10x30 (2023)	Swarovski CL Companion 8x30 (2011)	Swarovski CL Companion 8x30 (2017)	Swarovski CL Companion 10x30 (2011)	Swarovski CL Companion 10x30 (2017)
Weight (g)	464 g	462 g	503 g	477 g	524 g	485 g
Close focus (m)	1,33 m	1,2 m	2,7 m	2,7 m	2,9 m	2,7 m
Field of view (m/1000m)	120m/1000 m	120m/1000 m	124m/1000m	132 m/1000m	100m/1000m	108 m/1000m
Exit pupil (mm)	3,7 mm	3,1 mm	3,9 mm	3,9 mm	3,1 mm	3,1 mm
Objective diameter (mm)	30,4 mm	30,4 mm	30,4 mm	30,5 mm	30,32 mm	30,35 mm
Magnification	8,2x	9,8x	7,8x	7,8x	9,8x	9,8x
Eye relief (mm)	16 mm	14 mm	16mm	16 mm	14 mm	16 mm
Light transmission						
500 nm	89,3%	89,9%	90%	92%	88%	88,5%
550 nm	89,3%	90,5%	91%	92,5%	89,2%	90%
Price (euros)	euros	1575 euros	1100 euro?	1140 euros	1110 euros	1170 euros

TABLE 3
Performance of Zeiss SFL 8x30, SFL 10x30 and Zeiss Terra 8x32 ED compared with compact 30 mm Swarovski binoculars

Binocular	Zeiss SFL 8x30	Zeiss SFL 10x30	Zeiss Terra 8x32 ED	Swarovski CL Companion 8x30 (2017)	Swarovski CL Companion 10x30 (2011)	Swarovski CL Companion 10x30 (2017)
Weight (g)	464 g	462 g	502 g	477 g	524 g	485 g
Close focus (m)	1,33 m	1,2 m	1,65 m	2,7 m	2,9 m	2,7 m
Field of view (m/1000m)	120m/1000 m	120m/1000 m	135m/1000m	132 m/1000m	100m/1000m	108 m/1000m
Exit pupil (mm)	3,7 mm	3,1 mm	3,8 mm	3,9 mm	3,1 mm	3,1 mm
Objective diameter (mm)	30,4 mm	30,4 mm	31,95 mm	30,5 mm	30,32 mm	30,35 mm
Magnification	8,2x	9,8x	8,4x	7,8x	9,8x	9,8x
Eye relief (mm)	16 mm	14 mm	15 mm	16 mm	14 mm	16 mm
Light transmission						
500 nm	89,3%	89,9%	87,2%	92%	88%	88,5%
550 nm	89,3%	90,5%	89,3%	92,5%	89,2%	90%
Price (euros)	euros	1575 euros	510 euros	1140 euros	1110 euros	1170 euros











