

MINOX

VISIBLE INNOVATION



APO HG BINOCULARS



APOCHROMATIC
LENS DESIGN

GEN 2 DESIGN
APOCHROMATIC

MINOX



APO HG 10x43 BR asph.



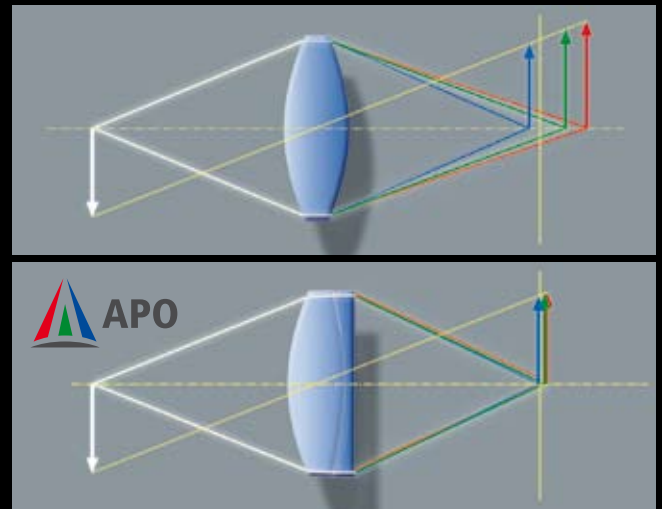
APO HG – the new top class

Outstanding optics based on apochromatic lens technology

Pin-sharp optics with natural color rendition puts the new APO HG binoculars from MINOX in a class of their own and first in the top league. The APO HG 8.5x43 BR and the APO HG 10x43 BR models impressively represent the latest technologies in binocular design. Featuring fluoride ED-glass lens elements from the German SCHOTT AG these apochromatically-corrected binoculars deliver a brilliant color-fringe-free image. The new type of MINOTEC multicoating, which is a nanotechnology application, helps to repel dust, water and soiling from the external glass surfaces.



In cooperation with MINOX the glass engineers of SCHOTT AG, which is based in the city of Mainz, designed the required glass composition for the APO technology. The high quality ED-glass (N-PK 52 A) awards the new HG binoculars apochromatic properties that deliver an exceptional optical performance. The APO HG optical system boasts natural color rendition, high contrast and also minimizes glare. Aspherical lenses inside the eyepieces guarantee consistent sharpness from the center right into the edges.



Simple lens element, not color corrected (top)

Two lens element using ED / Fluorid Glass with apochromatic color correction (bottom)



Outdoor use is greatly enhanced with the MINOTEC multicoating. Based on a modified objective-lens surface structure any adhering dust particles and other soiling components can be simply wiped off. Even water droplets pearl off with ease.



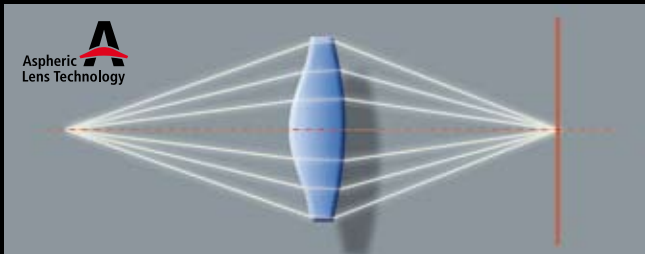
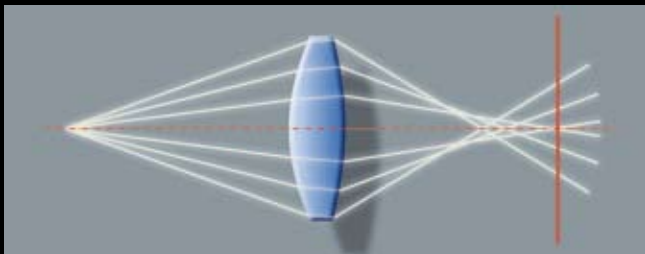
The APO binoculars also feature all the proven features of the HG line and deliver top class performance in every discipline. This includes among other things the M* multicoating of 21 layers and the silver-bearing Minobright reflection of the phase-corrected roof prisms. The handling of the binoculars has been optimized further with the Quick-Close-Focus (QCF) feature developed by MINOX. Just a single turn of the focus knob is all that is needed to adjust the APO HG binoculars from close-up to infinity, the user can also carry out a very fast adjustment in the near-focus range and precision focusing at greater distances. The distance scale on the central focusing wheel informs the user on the distance from the subject in view. The body, with its waisted design, is made of extremely robust and exceptionally light magnesium, and together with the protective rubber armoring



weighs in at an unbeatable 660 grams. The binocular body is watertight down to a depth of five meters. To ensure reliable, lasting protection against corrosion and fogging it is filled with argon gas.

The large focusing wheel is made of metal and boasts both an attractive and a functional design. It also features a cross knurl making it and the diopter-compensation ring extremely good to hold. To avoid light reflections both of these parts have an anodized gun-metal grey finish.

MINOX APO HG binoculars come in an exclusive wooden box together with an elegant leather case as well as a neoprene strap and lens cleaning set.



Focusing in marginal ranges with aspherical lenses

To eliminate a blurred view in marginal ranges, aspherical lenses are used inside of the oculars. This technology achieves a high contrast and optimizes focusing along the perimeter of the field of view. Additionally, the field of view is on one focal plane.

Path of rays through a spherical lens (top)

Path of rays through an aspherical lens – even the marginal rays are focused on a single focal point (bottom)



Guarantee for a long life: ARGON GAS INSIDE

A superior argon gas filler protects the inner glass surfaces against fogging and corrosion, because it does not react with the other materials. Due to its larger molecules, argon gas has a slower rate of diffusion than the conventional nitrogen, which guarantees that the super gas remains inside the binoculars for much longer than is the case with nitrogen.

Technical Data	APO HG 8.5x43 BR asph.	APO HG 10x43 BR asph.
Magnification	8.5x	10x
Objective lens diameter	43 mm / 1.69 inch	43 mm / 1.69 inch
Exit pupil	5.1 mm / 0.2 inch	4.3 mm / 0.17 inch
Field of view	6.1° (320.9 ft at 1,000 yds) 6.1° (106.4 m at 1,000 m)	6.1° (320.9 ft / 1,000 yds) 6.1° (106.4 m at 1,000 m)
Eye relief	0.71 inch / 18 mm	0.61 inch / 15.5 mm
Near focus	8.2 ft / 2.5 m	8.2 ft / 2.5 m
Over run (∞)	4 dpt	4 dpt
Diopter adjustment	± 2 dpt	± 2 dpt
Twilight factor	19.1	20.7
Relative brightness	26	18.5
Operating temperature	14° up to 122° F -10° up to +50° C	14° up to 122° F -10° up to +50° C
Waterproof	yes, down to 5 m	yes, down to 5 m
Dimensions (HxWxD)	5.71 x 5.04 x 1.97 inch 145 x 128 x 50 mm	5.71 x 5.04 x 1.97 inch 145 x 128 x 50 mm
Weight aprox.	23.3 oz / 660 g	23.3 oz / 660 g
Design by	VOLKSWAGEN DESIGN	VOLKSWAGEN DESIGN
Order number	62174 (meter) / 62175 (yards)	62176 (meter) / 62177 (yards)



Apochromatic lenses

Glass from SCHOTT, Germany



Aspherical lenses



MINOTEC nano lens coating



Magnesium body



Argon gas filling

MINOX Sport Optics
BrochureMINOX is official sponsor of the
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Design, features, supply and price are subject to change.