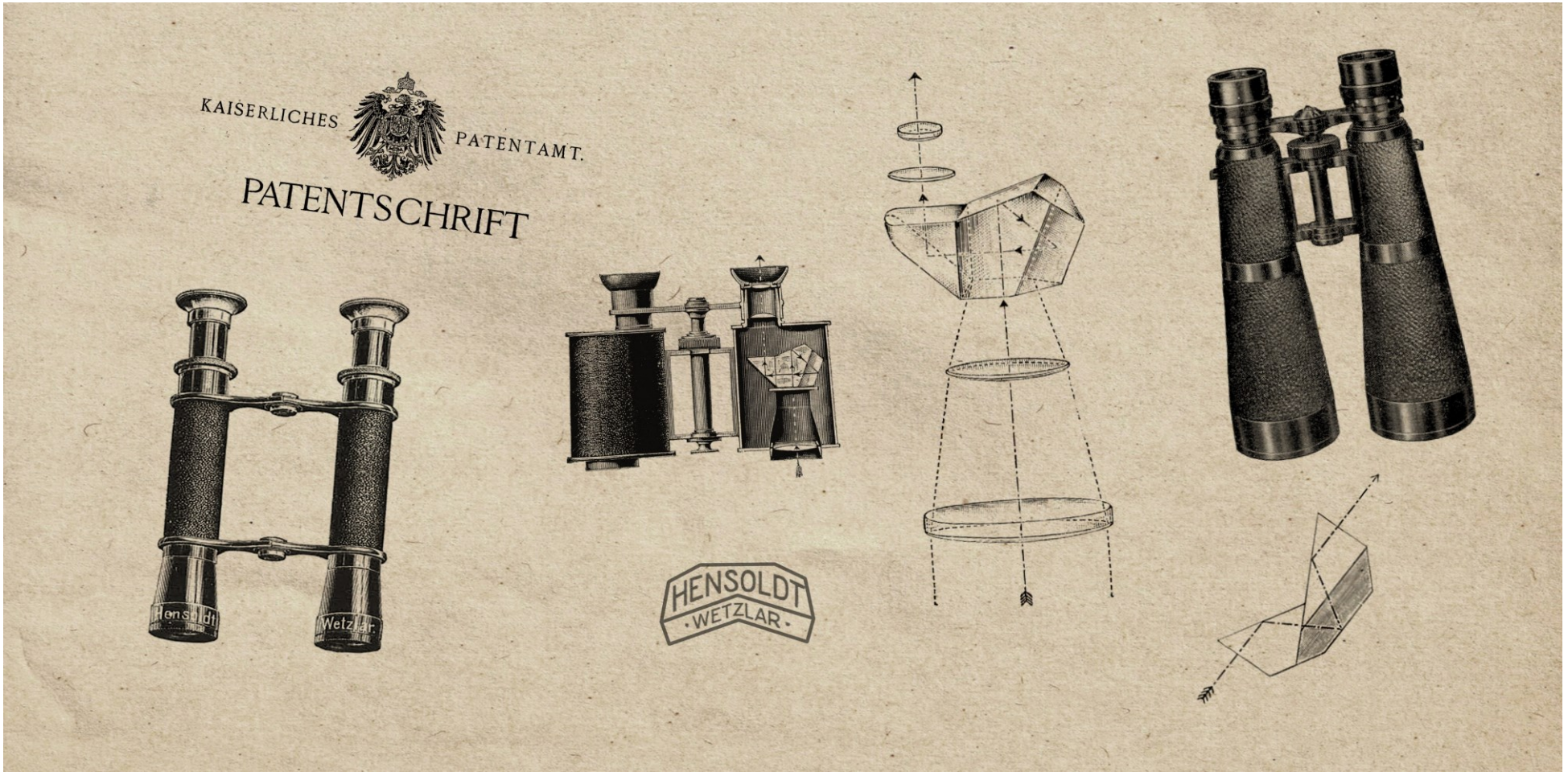
Binoculars from Moritz Hensoldt and Sons, Wetzlar

From the beginning until 1939

Walter J. Schwab | Hüttenberg



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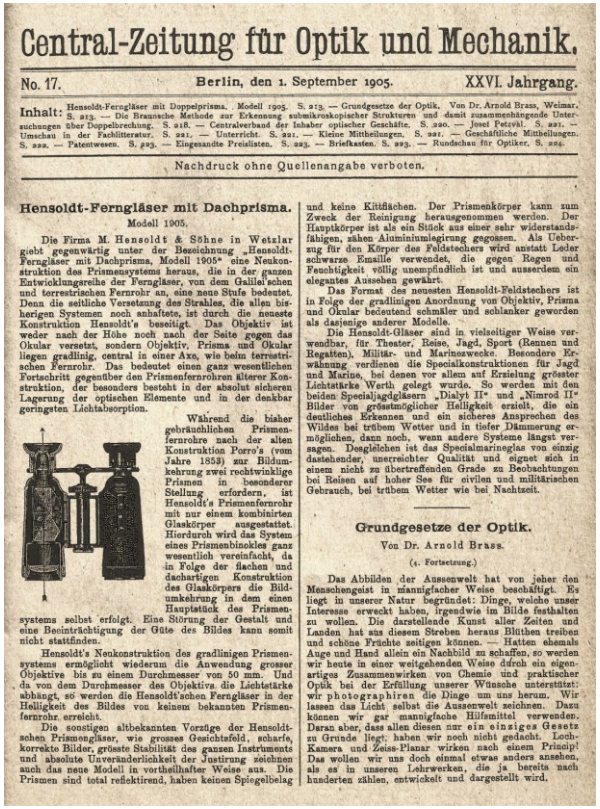
The HENSOLDT company started with telescopes and binoculars around 1892. The first products shown in 1897 were a 7x25 terrestrial binoculars with erecting lens system and a 7x29/30 roof pentaprism model. However, the latter leads to legal problems due to the extended lens distance due to the ZEISS patent DRP 77.086 from 1893 (valid until 1908), although the claims formulated therein clearly refer to Porro systems. The HENSOLDT patent application for roof pentaprism glasses was rejected in Germany, but was granted in 1898 abroad, e.g. in Great Britain as patent GB 15.806. The frequently mentioned HENSOLDT patent DRP 118.256 from 1900 only describes the prism attachment, not the basic construction of the binoculars. The patent dispute with ZEISS ends in a settlement.

In 1905, HENSOLDT received the DRP 180.644 for its new straight-sighted "Hensoldt roof prism", which, in contrast to the previous roof pentaprism system, managed without an offset axis and without light-absorbing mirroring. It is based on the DRP 130.508 (ZEISS, Albert König, 1901, with air gap), which follows the unpatented Abbe system with Amici and right-angled prisms. Curiously, ZEISS fails to extend this patent in time and it expires in 1906. At ZEISS in Jena, however, roof prism systems for normal binoculars are considered too expensive and difficult and not promising anyway. HENSOLDT, on the other hand, bets everything on this card, and with great success.

Roof prisms allow large objective diameters and bright images in an extremely slim and handy housing. However, due to the required accuracy of the 90° angle, the flatness of the roof surfaces and the design of the roof edge, the system places extremely high demands on production. Only a few are able to do this and "the first of these very few companies is M. Hensoldt & Söhne, Wetzlar" Hans Schmidt writes 1903 in the magazine "Der Mechaniker". HENSOLDT already has a lot of experience with roof prisms from the production of the range finder, which also has been equipped with such prisms since 1892.

In 1896, the sons Waldemar and Carl Hensoldt became partners of Moritz Hensoldt, who left the management some years later in 1899. He dies in 1903. The family-run HENSOLDT company becomes a stock corporation in 1922, with ZEISS taking a majority stake in 1928. What sounds like a "hostile takeover" is actually saving the Wetzlar company from impending insolvency.

The "Hensoldt roof prism" from 1905, later known as the "Abbe-König prism", is an important milestone in the history of binoculars and the company. For more than 100 years, this prism was synonymous with the extremely bright and slim Dialyt models. The name "Dialyte" - used by HENSOLDT for the first time in 1902 for a 5x35 pair of binoculars - has nothing to do with the prism, but stood for the dialytic = divided objective system of the binoculars mentioned, which by the way was still equipped with "old" pentaprisms.



Central-Zeitung für Optik und Mechanik.

No. 17. Berlin, den 1. September 1905. XXVI. Jahrgang.

Inhalt: Hensoldt-Ferngläser mit Doppelprisma. Modell 1905. S. 213. — Grundgesetze der Optik. Von Dr. Arnold Brass, Weimar. S. 213. — Die Braunsche Methode zur Erkennung submikroskopischer Strukturen und damit zusammenhängende Untersuchungen über Doppelbrechung. S. 218. — Centralverband der Inhaber optischer Geschäfte. S. 220. — Josef Petzval. S. 221. — Umschau in der Fachlitteratur. S. 221. — Unterricht. S. 221. — Kleine Mitteilungen. S. 221. — Geschäftliche Mitteilungen. S. 222. — Patentwesen. S. 223. — Eingesandte Preislisten. S. 223. — Briefkasten. S. 223. — Rundschau für Optiker. S. 224.

Nachdruck ohne Quellenangabe verboten.

Hensoldt-Ferngläser mit Dachprisma.

Modell 1905.

Die Firma M. Hensoldt & Söhne in Wetzlar giebt gegenwärtig unter der Bezeichnung „Hensoldt-Ferngläser mit Dachprisma, Modell 1905" eine Neukonstruktion des Prismensystems heraus, die in der ganzen Entwicklungsreihe der Ferngläser, von dem Galilei'schen und terrestrischen Fernrohr an, eine neue Stufe bedeutet. Denn die seitliche Versetzung des Strahles, die allen bisherigen Systemen noch anhaftete, ist durch die neueste Konstruktion Hensoldt's beseitigt. Das Objektiv ist weder nach der Höhe noch nach der Seite gegen das Okular versetzt, sondern Objektiv, Prisma und Okular liegen gradlinig, central in einer Axe, wie beim terrestrischen Fernrohr. Das bedeutet einen ganz wesentlichen Fortschritt gegenüber den Prismenfernrohren älterer Konstruktion, der besonders besteht in der absolut sicheren Lagerung der optischen Elemente und in der denkbar geringsten Lichtabsorption.

Während die bisher gebräuchlichen Prismenfernrohre nach der alten Konstruktion Porro's (vom Jahre 1853) zur Bildumkehrung zwei rechtwinklige Prismen in besonderer Stellung erfordern, ist Hensoldt's Prismenfernrohr mit nur einem kombinirten Glaskörper ausgestattet. Hierdurch wird das System eines Prismenbinokles ganz wesentlich vereinfacht, da in Folge der flachen und dachartigen Konstruktion des Glaskörpers die Bildumkehrung in dem einen Hauptstück des Prismensystems selbst erfolgt. Eine Störung der Gestalt und eine Beeinträchtigung der Güte des Bildes kann somit nicht stattfinden.

Hensoldt's Neukonstruktion des gradlinigen Prismensystems ermöglicht wiederum die Anwendung grosser Objektive bis zu einem Durchmesser von 50 mm. Und da von dem Durchmesser des Objektivs die Lichtstärke abhängt, so werden die Hensoldt'schen Ferngläser in der Helligkeit des Bildes von keinem bekannten Prismenfernrohr erreicht.

Die sonstigen altbekannten Vorzüge der Hensoldt'schen Prismengläser, wie grosses Gesichtsfeld, scharfe, korrekte Bilder, grösste Stabilität des ganzen Instrumentes und absolute Unveränderlichkeit der Justirung zeichnen auch das neue Modell in vortheilhafter Weise aus. Die Prismen sind total reflektirend, haben keinen Spiegelbelag und keine Kittflächen. Der Prismenkörper kann zum Zweck der Reinigung herausgenommen werden. Der Hauptkörper ist als ein Stück aus einer sehr widerstandsfähigen, zähen Aluminiumlegirung gegossen. Als Ueberzug für den Körper des Feldstechers wird anstatt Leder schwarze Emaille verwendet, die gegen Regen und Feuchtigkeit völlig unempfindlich ist und ausserdem ein elegantes Aussehen gewährt.

Das Format des neuesten Hensoldt-Feldstechers ist in Folge der gradlinigen Anordnung von Objektiv, Prisma und Okular bedeutend schmäler und schlanker geworden als dasjenige anderer Modelle.

Die Hensoldt-Gläser sind in vielseitiger Weise verwendbar, für Theater, Reise, Jagd, Sport (Rennen und Regatten), Militär- und Marinezwecke. Besondere Erwähnung verdienen die Specialkonstruktionen für Jagd und Marine, bei denen vor allem auf Erzielung grösster Lichtstärke Werth gelegt wurde. So werden mit den beiden Specialjagdgläsern „Dialyt II" und „Nimrod II" Bilder von grösstmöglicher Helligkeit erzielt, die ein deutliches Erkennen und ein sicheres Ansprechen des Wildes bei trübem Wetter und in tiefer Dämmerung ermöglichen, dann noch, wenn andere Systeme längst versagen. Desgleichen ist das Specialmarineglas von einzig dastehender, unerreichter Qualität und eignet sich in einem nicht zu übertreffenden Grade zu Beobachtungen bei Reisen auf hoher See für civilen und militärischen Gebrauch, bei trübem Wetter wie bei Nachtzeit.

Grundgesetze der Optik.

Von Dr. Arnold Brass.

(4. Fortsetzung.)

Das Abbilden der Aussenwelt hat von jeher den Menschengeist in mannigfacher Weise beschäftigt. Es liegt in unserer Natur begründet: Dinge, welche unser Interesse erweckt haben, irgendwie im Bilde festhalten zu wollen. Die darstellende Kunst aller Zeiten und Landen hat aus diesem Streben heraus Blüthen treiben und schöne Früchte zeitigen können. — Hatten ehemals Auge und Hand allein ein Nachbild zu schaffen, so werden wir heute in einer weitgehenden Weise durch ein eigenartiges Zusammenwirken von Chemie und praktischer Optik bei der Erfüllung unserer Wünsche unterstützt: wir photographiren die Dinge um uns herum. Wir lassen das Licht selbst die Aussenwelt zeichnen. Dazu können wir gar mannigfache Hilfsmittel verwenden. Daran aber, dass allen diesen nur ein einziges Gesetz zu Grunde liegt, haben wir noch nicht gedacht. Loch-Kamera und Zeiss-Planar wirken nach einem Princip! Das wollen wir uns doch einmal etwas anders ansehen, als es in unseren Lehrwerken, die ja bereits nach hunderten zählen, entwickelt und dargestellt wird.

*Many thanks to **Dr. Wolfgang Wimmer and to the ZEISS archive in Jena** for providing many informative and contemporary documents.*
And also many thanks to Wolfgang Kornmann (Steffenberg), Karsten Porezag (Wetzlar) and Hans Seeger (Hamburg), whose publications and works provided helpful hints.

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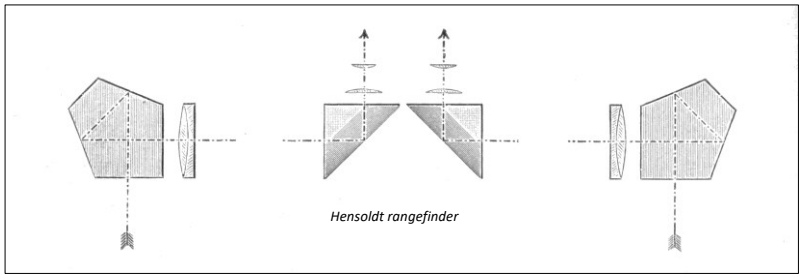
1892 The beginning — **Rangefinder with roof prisms - Terrestrial model with lens inverting system - Roof pentaprism binoculars.**

1892 - Rangefinder

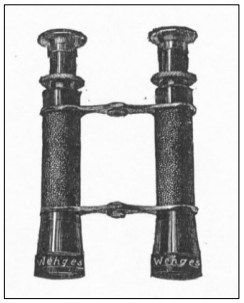
The optical design corresponds to a roof prism binoculars with an objective distance of 1 - 2 m.
Together with companies Beaulieu and Hahn. DRP 71739.



Hensoldt rangefinder

1897 - Stereo-Binocle 7x25
(Lens inverting system)

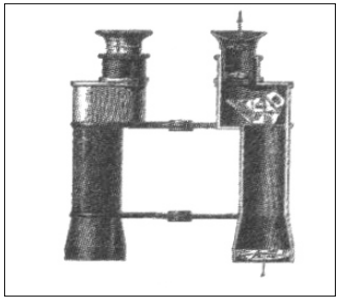
Lens system. The hinge has neither a central axis nor a locking screw. In England it is sold under the brand "Wehges" (Wetzlarer Handels-Gesellschaft).
It has 4-lens eyepiece, one cemented element each as inverting system and objective.
80 m FoV | 17 cm H | 350 g



Stereo Binocle 7x25.

1897 - Pentaprism Binocle 7x29/30
(Model I)

The first HENSOLDT **roof pentaprism binocle, based on the prisms from the rangefinder.**
The hinge has no central axis nor a locking screw.
96 m FoV | 13 cm H



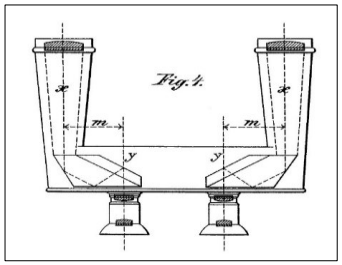
Pentaprism Binocle 7x29/30 (Model I).

1899 - Pentaprism Binocle / Wehges

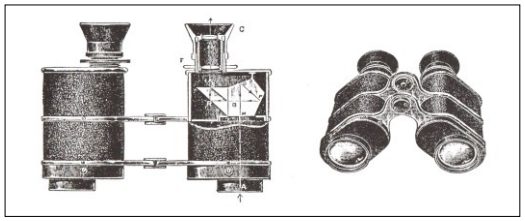
Only little information available. Two piece case along top hinge.
10 cm H. Also listed as **"Wehges".**

Hensoldt prism binoculars in the **Leman-Sprenger** design

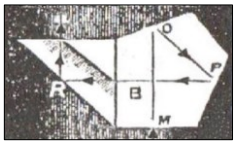
The binoculars with the **one-piece roof prism** does not appear in Hensoldt sales brochures.
The DRP 94450 from Sprenger only refers to the prism and an adjustment option to the interpupillary distance. Not on the basic design of the binoculars, which also causes problems with the ZEISS patent regarding the extended objective distance.



Drawing from Sprenger Patent 94450



1899: Pentaprism Binocle II (Wehges).



First pentaprism system:
The roof is part of the right-angle prism left side. These parts were available from the range finder and were taken over unchanged.

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1900 — World Exhibition in Paris; french brochure

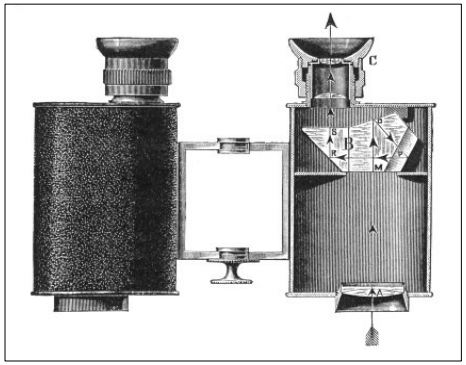
The two-part, cemented **pentaprism system is modified** so that only one instead of two surfaces has to be mirrored, which leads to more brightness.
In the new system, the entrance prism (pentaprism) contains the roof edge, previously the second prism (right-angle prism) was designed with the roof edge.
The pentaprism binocle is available with a **center focussing**, whereby the focussing ring is temporarily located between the hinges, later above it.

Catalogue "Welt-Ausstellung in Paris"

Hensoldt is represented with two binoculars, a compact pentagon goniometer and optical components such as objective and eyepiece assemblies.

Stereo-Binocle 7x25	With lens erecting system, presumably identical to the Wehges model.
Pentaprism Binocle 7x24	Very flat, single eyepiece focussing, no central axis but screw to fix the hinge. 97 m FoV | 395 g

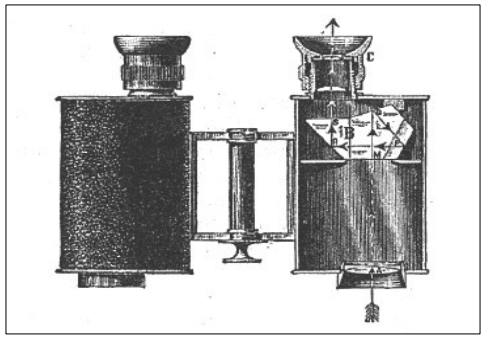
Terrestrial binoculars "Stereo Binocle" 7x25.



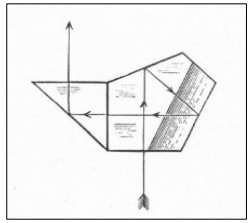
"Pentaprism Binocle" 7x24.

Brochure "Nouvelle lunette d'aproche a main"

Stereo-Binocle 6,5x	Lens erecting system, no screw to fix the hinge. 88 m FoV | 95 Mark	Stereo
Pentaprism Binocle 7x22,5	Hinge with central axis and screw to fix it, central focussing (MT) available. 93,5 m FoV | 140 Mark (150 Mark with MT)	Penta
Pentaprism opera glas 4x	164 m FoV | 125 Mark	Opera



Pentaprism Binocle mit single eyepiece focusing, central axis and screw to fix the hinge.



New prism system:
The roof edge is part of the pentaprism. Only one mirroring is necessary, instead of two before.

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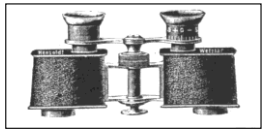
1901

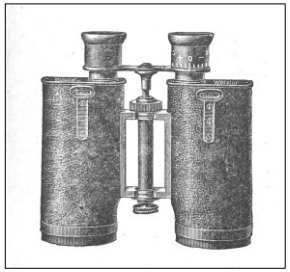
Catalogue no. 5 (March 1901);
Catalogue no. 6 (August 1901);
Catalogue no. 7 french (Oct. 1901)

A **new prism mount** (DRP 118.256 from 1900) allows easy adjustment and cleaning.
The binoculars have a central axis with a locking screw for the hinge, carrying strap holder, and screwed-on covers at the top and bottom.
MT (Mitteltrieb) = center focus ("double adjustment") or ET (Einzeltrieb) = single eyepiece focus. All models are also available as monoculars.
Important innovations are the **50 mm lenses.**

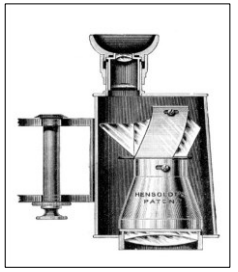
Leisure and hunting		
No. 1 - 4x18 Theaterglas	MT | 460 g | 8,5 cm H	Opera
No. 2 - 5x22,6 Jagdglas	MT | 500 g | 10,5 cm H	Jagdglas
No. 3 - 7x22,6 Feldstecher	MT | 530 g | 11,5 cm H	Penta
9x22,6 Feldstecher	MT | 520 g | 11,5 cm H | only in catalogue 5	Novies
No. 4 - 6x26 Pirschglas	MT | 623 g | 12,2 cm H	Diana
No. 5 - 7x26 Feldstecher	MT | 12 cm H	Feldstecher
No. 6 - 9x26 Feldstecher	MT | 12 cm H	Novies
No. 7 - 12x26 Feldstecher	MT | 600 g | 12 cm H	Duodecies
No. 13 - 10x50 Spezial Jagdglas	MT | 80 m FoV | 20 cm H | from 1902 as 12x too	Nimrod



4x18 theater glass with "extremely cute shape" (catalogue description).



Hunting glass 10x50 with center focussing

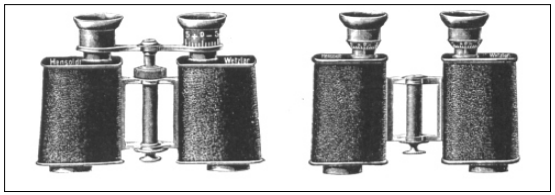


New prism mount due to DRP 118.256 (August 1900).

Military and marine		
7x22,6 Military glass	ET | 475 g | 11 cm H | only in catalogue 5	Militaria
9x22,6 Military glass	ET |480 g | 11 cm H | only in catalogue 5	Milesnovies
6x26 Marine glass	ET | 620 g | 12 cm H | nur im catalogue 5 gelistet	Marine
No. 8 - 6x26 Military glass	ET | 12 cm H	Sechs
No. 9 - 7x26 Military glass	ET | 12 cm H	Sieben
No. 10 - 9x26 Militär glass	ET | 12 cm H	Neun
No. 11 - 10x50 Marine and Artillery glass	ET | 20 cm H	Flotte
No. 12 - 12x50 Marine glass	ET | 20 cm H	Marine

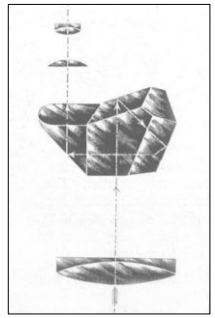
Left: Binoculars with center focussing (MT) and diopter adjustment.

Right: Military glass with single eyepiece focussing (ET).



Large 10/12x50 Marine glass with single eyepiece focussing.

Typical optical design: Eyepiece system, pentaprism, achromatic objective.



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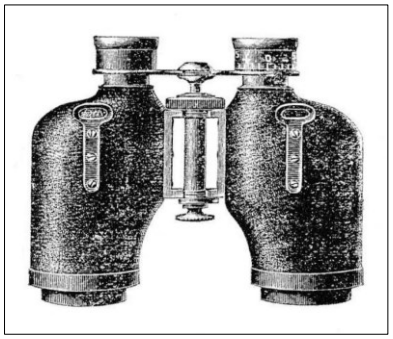
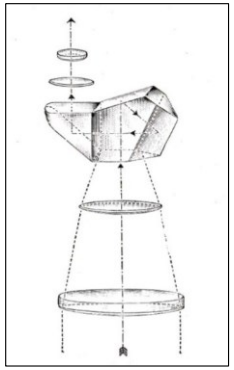
1903	Deutsche Jäger-Zeitung 12/1902	In November 1902, the "Deutsche Jäger-Zeitung" (No. 12 of November 9 / W. Holterbach) reports on the **DIALYT 5x35 binoculars** with a new lens system and a rounded housing. It still has the pentaprism system, but the "dialytic" (splited) objective system will give its name to many future binoculars.



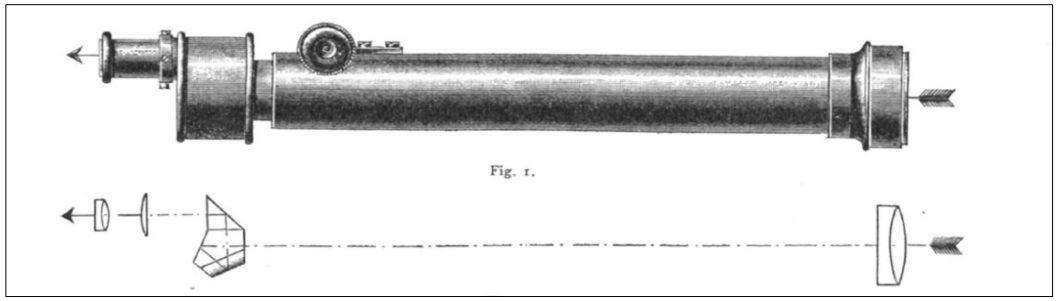
1902: The DIALYT 5x35 with dialytic lens, pentaprism and new, rounded housing according to DRGM No. 166.411: "Cover for prism telescopes with rounded corners."

The optical design of the new Dialyt binoculars with pentaprism and a two-piece, "dialytic" (= splitted) objective, which allows shorter designs with good correction and compact prisms.

Dialytic telescopes were first constructed by Plössl around 1830. Hensoldt mentioned it in an objective catalogue 1896.



1903	Central-Zeitung für Optik & Mechanik	In 1903 the Hensoldt company publishes an article in the "Central-Zeitung für Optik und Mechanik" about a new **terrestrial telescope with a pentaprism.**



1903: Terrestrial telescope with roof pentaprism, 27 cm long. Comparable lens model = 38 cm long.
DRGM No. 169.732: "Geodetic telescope provided with a prism system between astronomical eyepiece and lens."

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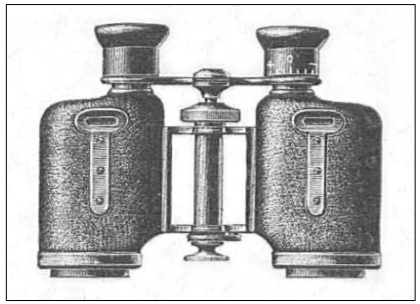
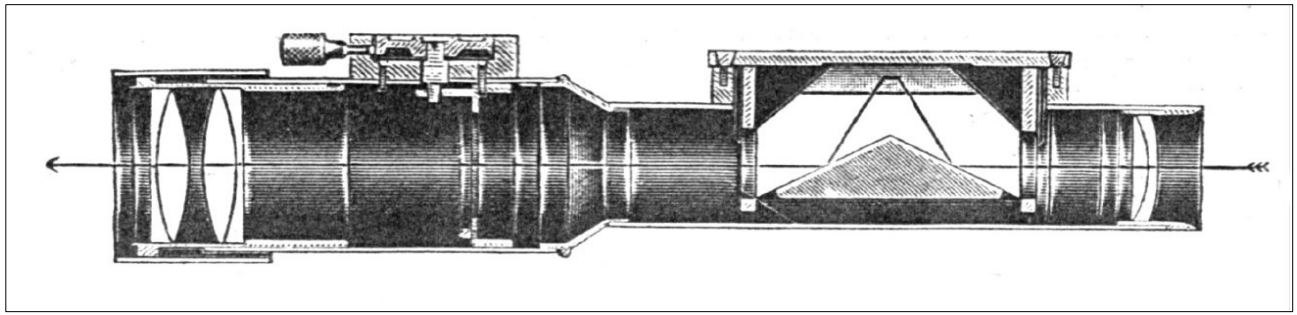
1904 Catalogue no. 9 (January 1904)

Rounded housing cast from one piece. Enamel cover instead of leather.
The lens can be unscrewed and the prism easily removed for cleaning. All models are also available as monoculars.
Also in 1904: The first **straight-sighted prism riflescope** is introduced and causes great attraction.

No. 1 - 4x18 Theaterglas	155 m FoV | 9,3 cm H	Opera
No. 2 - 5x22,6 Jagdglas	125 m FoV | 12,2 cm H	Jagdglas
No. 3 - 7x22,6 Feldstecher	99 m FoV | 12,2 cm H	Penta
No. 4 - 6x26 Pirschglas	105 m FoV | 12,2 cm H	Diana
No. 5 - 7x26 Feldstecher	99 m FoV | 12,2 cm H	Feldstecher
No. 6 - 9x26 Feldstecher	73 m FoV | 12,2 cm H	Novies
No. 7 - 12x26 Feldstecher	55 m FoV | 12,2 cm H	Duodecies
No. 12 - 12x50 Marineglas	58 m FoV | 19,5 cm H	Marine
No. 13 - 10x50 Spezial Jagdglas	70 m FoV | 19,5 cm H	Nimrod
Dialyt 5x35 Special hunting glass	120 m FoV | 15 cm H | dialyt. lens	Dialyt





Riflescope 2.5x20.5 with straight roof prism (DRGM No. 205.360?).

A.G.v.Herény writes in "The Shooting" (No. 12, Sept. 1904):
"Now in the spring of 1904 a new invention came like a bomb, which combined everything that I had expected in vain for years."

After the use in riflescopes, this straight lined prism system is adapted for binoculars.
Carl Hensoldt 1908: The successful use of the straight lined roof prism in Hensoldt's prism telescopic sights and the resulting straight and slender shape of the instruments, which differs little from terrestrial telescopes, prompted the company to consider its use for the construction of handheld binoculars / telescopes."

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From the beginning until 1939

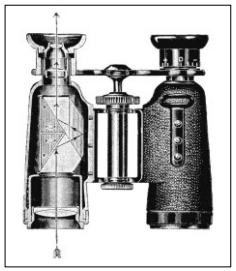
Walter J. Schwab | Hüttenberg

1905 Catalogue no. 10 (August 1905)

The new HENSOLDT ROOF PRISM replaces the pentaprism and gets DRP 180.644. Compared to the previous pentaprism, the new system needs **no mirroring** and shows **no axis offset.** According to the brochure, it is a one-piece system, i.e. cemented, in contrast to Albert König's ZEISS patent (with an air gap).
The prism body is kept very slim and can be removed from the objective side for cleaning.
The case is made of aluminum alloy with enamel coating. All models are also available as monoculars.

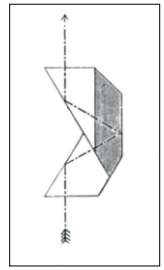
No. 1 - 3,5x15 Theaterglas (Mod. 1905)	172 m FoV | closed hinge | 9,3 cm H | 85 Mark	Opera
No. 2 - 6x26 Universalglas (Mod. 1905)	112 m FoV | 13,4 cm H | 125 Mark	Universal
No. 3 - 7x26 Feldstecher (Mod. 1905)	96 m FoV | 13,4cm H | 135 Mark	Feldstecher
No. 4 - 9x26 Reiseglas (Mod. 1905)	76 m FoV | 13,4 cm H | 145 Mark	Reiseglas
No. 5 - 12x26 Sportglas (Mod. 1905)	56 m FoV | 13,4 cm H | 160 Mark	Sportglas
No. 6 - 6x35 Dialyt II (Mod. 1905)	120 m FoV | 16 cm H | 150 Mark	Dialyt
No. 7 - 10x50 Nimrod II (Mod. 1905)	70 m FoV | 19 cm H | 240 Mark	Nimrod
No. 8 - 12x50 Marine (Mod. 1905)	58 m FoV | 19 cm H | 260 Mark	Marine

Opera



Universal glass, without dialytic lens.

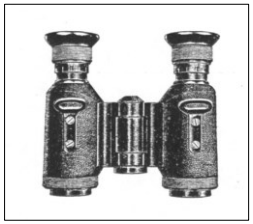
New DRP 180.644 straight lined Hensoldt roof prism, which goes back to Amici, Abbe and König. The (center) beam passage from prism 1 to 2 is perpendicular and this area is not used for reflection. It can be cemented or used with an air gap.



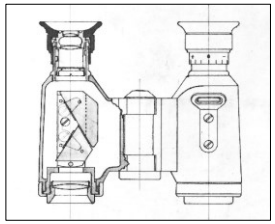
1907 Catalogue "Armeegläser 07"

The **army glasses** are also fitted with the straight "Hensoldt roof prism".
Easy cleaning possible. Single eyepiece focussing.

6x18 Infanterieglas	120 m SF | 340 g	J.G.07
6x26 Armeeglas	112 m SF | 355 g	A.G. 6x
7x26 Armeeglas	96 m SF | 355 g	A.G. 7x
10x50 Armeeglas	75 m SF | 955 g	A.G. 10x
6x35 Offizier-Jagdglas	120 m SF | 610 g	O.J. 6x
8x35 Offizier-Jagdglas	90 m SF | 610 g	O.J. 8x



Infanterie-Glas 6x18



1908 Carl Hensoldt: Das Hensoldt-Werk

New, **geodesic prism telescope** with straight Hensoldt roof prism.

Binoculars from Moritz Hensoldt and Sons, Wetzlar

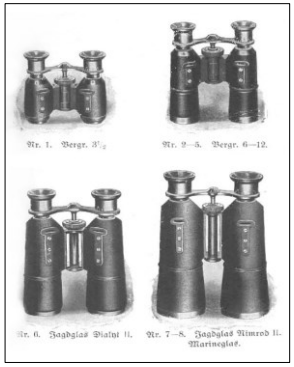
From the beginning until 1939

Walter J. Schwab | Hüttenberg

1908 Catalogue no. 11 (Autumn 1908)

New designation **WACHT** (= **WA**ldemar **C**arl **H**ensold**t** ?) for the roof prism glasses with new **Euryscope (Euroscope) eyepieces** and large fields of view as well as **WALKAR** for the "extra-light" hiking glasses. When comparing the values to catalogue No. 10 (1905), there are differences of between 10 % and 30 %.
Center focussing is standard, but all are also available with ET or monocular. Enamel coating. Strap eyelet screwed on. Lens barrel can be screwed off.

Roof prisms (Wacht)		
No. 1 - 3,5x15 Theaterglas	220 m FoV | 310 g | MT | 9,3 cm H | 100 Mark	Opera
No. 2 - 6x26 Universalglas	125 m FoV | 350 g | MT | 13 cm H | 125 Mark	Universal
No. 3|4 - 8x26 Reiseglas	100 m FoV | 350 g | MT | 13 cm H | 140 Mark	Reiseglas
No. 5 - 12x26 Sportglas	64 m FoV | 355 g | MT | 13,7 cm H | 160 Mark	Sportglas
No. 6 - 6x35 Dialyt II	148 m FoV | 610 g | MT | 15,6 cm H | 150 Mark	Dialyt
No. 7 - 10x50 Nimrod II	90 m FoV | 960 g | MT | 19,3 cm H | 240 Mark	Nimrod
No. 8 - 12x50 Marineglas	70 m FoV | 980 g | MT | 19,3 cm H | 260 M ark also 16x | 280 Mark oder 18x | 290 Mark	Marine



WACHT logo (from 1908 to 1920).

Another WACHT logo from 1908 for 3 - 4 years.

Roof prisms "Extra-light" (Walkar)		
No. 9 - 6x18 Walkar I	125 m FoV | 270 g | 10,2 cm H |"Extra light"	Walkaron
No. 10 - 8x26 Walkar II	100 m FoV | 290 g | 13 cm H | "Extralight"	Walkarto

„Extra-light". Trade Mark: „Walkar".

WALKAR appears first for extra-light roof prism glasses. Later the name is used for Galilean glasses, STEREO-WALKAR for Porro glasses.

1909 Military glasses

All models have the Hensoldt roof prism and a single eyepiece focussing ET. The black enamel coating can be made in field gray on request.
The carrying eyelet is already integrated in the housing for small glasses. All are also available as monoculars.

6x18 Kleines Infanterieglas 07	125 m FoV | 350 g | ET | 10 cm H | solid hinge
6x26 Armeeglas	125 m FoV | ET | 13 cm H | solid hinge
8x26 Armeeglas	100 m FoV | ET | 13 cm H | solid hinge
10x50 Artillerie- und Marineglas	90 m FoV | 950 g | ET
6x35 Armee-Dialyt	150 m FoV | ET | open hinge
8x35 Armee-Dialyt	100 m FoV | ET | open hinge

Kleines Infanterieglas *Armeeglas* *Armee-Dialyt*

Binoculars from Moritz Hensoldt and Sons, Wetzlar

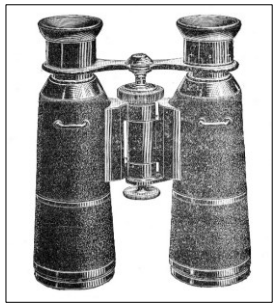
From the beginning until 1939

Walter J. Schwab | Hüttenberg

1911 Catalogue no. 12

PORRO binoculars appear for the first time. Their name is **STEREO WALKAR.**
The glasses have center focussing or with ET (20 g lighter) or as a monocular. The carrying eyelet is no longer screwed on, but part of the housing.

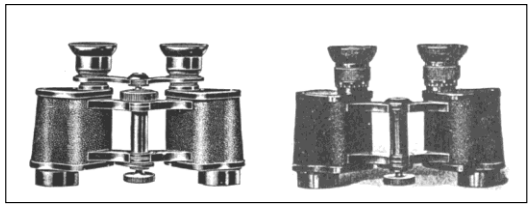
Roof prisms (Wacht)		
3,5x15 Theaterglas	220 m FoV | 320 g | 9,3 cm H | solid hinge	Opera
6x26 Universalglas	125 m FoV | 350 g | 13 cm H | solid hinge	Universal
8x26 Reiseglas	110 m FoV | 350 g | 13 cm H | solid hinge	Reiseglas
12x26 Sportglas	64 m FoV | 335 g | 13,7 cm H	Sportglas
6x36 Jagd-Dialyt	148 m FoV | 550 g | 15,6 cm H	Dialyt
8x50 Marine-Dialyt	110 m FoV | 920 g | 20 cm H	Marine
10x50 Nimrod	90 m FoV | 910 g | 19,3 cm H. Also available with 16x and 18x, 3 cm higher.	Nimrod



1910

1911

Porro prisms (Stereo-Walkar)	
6x24 Telsex	130 m FoV | 490 g | 10,7 cm H
8x24 Telacht	115 m FoV | 490 g | 10,7 cm H
6x30 Teljagd	150 m FoV | 610 g | 11,8 cm H
12x30 Telzwölf	65 m FoV | 610 g | 11,8 cm H



Stereo-Walkar x24 mm (MT and ET).

Stereo-Walkar

Name from 1911 for Porro binoculars.

1912 Flyer

Two **Galilean glasses** without an adjustable hinge are introduced as hunting and field glasses.

4x42 Hunting- and fieldglass A	135 m FoV | 340 g | 11 cm H | 50 M	Galivier
5x50 Hunting- and fieldglass B	100 m FoV | 395 g | 12,5 cm H | 60 M	Galifünf

Without adjustable hinge.

Binoculars from Moritz Hensoldt and Sons, Wetzlar

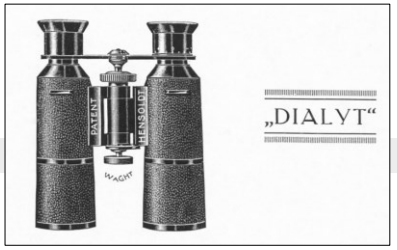
From the beginning until 1939

Walter J. Schwab | Hüttenberg

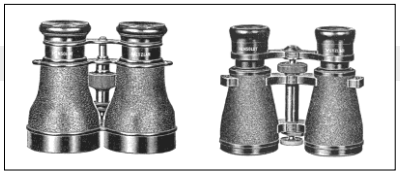
1914 Catalogue no. 13 (Hunting)

All roof prism binoculars are called **Dialyt and have improved 4-lens eyepieces** (DRP 270.274 from 1912).
New are a Porro model **STEREOR** (instead of Stereo-Walkar!) and (for a short time) four Galilean glasses **WALKAR** with fixed or variable hinges.

Roof prisms (Wacht)		
6x26 Universal-Dialyt	125 m FoV | 350 g | 13 cm H | MT + ET | 125 M	Universal | Sex
6x36 Jagd-Dialyt	150 m FoV | 600 g | 16 cm H | MT + ET | 160 M	Dialyt | Disex
8x50 Marine-Dialyt	110 m FoV | 950 g | 20 cm H | MT + ET | 240 M	Marilyt | Marine
10x50 Gebirgs-Dialyt (Nimrod)	90 m FoV | 950 g | 20 cm H | MT + ET | 240 M	Nimrod | Nimryt
Galilean (Walkar)		
3,5x42 Walkar Jagd- und Nachtglas	135 m FoV | 360 g | 9,5 cm H | 45 M | PD fest	Galidrei
5x52 Walkar Jagd- und Nachtglas	100 m FoV | 360 g | 12 cm H | 75 M | PD fest	Galifünf
4x43 Walkar Jagd- und Feldglas	110 m FoV | 520 g | 11,5 cm H | 55 M | PD variabel	Galivier
6x43 Walkar Jagd und Feldglas	75 m FoV | 520 g | 11,5 cm H | 60 M | PD variabel	Galisex
Porro prisms (Stereor)		
6x30 Teljagd	150 m FoV | 650 g | 12 cm H | MT + ET | 150 M	Teljagd



All roof prism binoculars are named DIALYT



Left: Walkar 3,5x and 5x with fixed hinge.
Right: Walkar 4x and 6x with adjustable hinge.

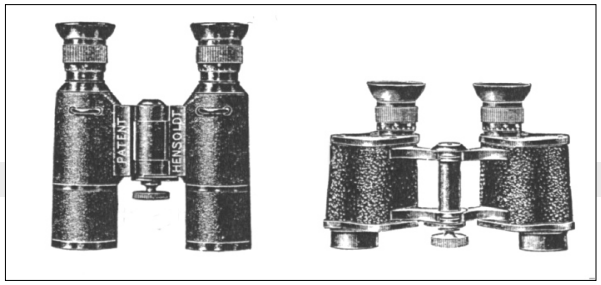
Logo STEREOR for Teljagd

1917 Military glasses
Price list 15.9.1917

All models with single eyepiece focussing (ET).

Roof prisms (Wacht)		
6x26 Armeeglas	125 m FoV | 300 g | 13 cm H	Sechs
8x26 Armeeglas	100 m FoV | 300 g | 13 cm H	Acht
6x36 Armee-Dialyt	150 m FoV | 550 g | 15 cm H | also 8x	Disex
8x50 Marineglas	110 m FoV | 950 g | 20 cm H	Marine
10x50 Artillerieglas	90 m FoV | 950 g | 20 cm H	Zehn
Porro prisms (Stereo-Walkar)		
6x24 Stereo-Walkar	130 m FoV | 465 g | 11 cm H	Telsexio / Nulldrei
8x24 Stereo-Walkar	115 m FoV | 465 g | 11 cm H	Telachtio / Achtmal
6x30 Marine Jagdglas (Stereo-Walkar)	150 m FoV | 580 g | 12 cm H	Teljagdio / Dreißig

Left: Armee-Dialyt (ET).
Right: Stereo Walkar (ET).



Binoculars from Moritz Hensoldt and Sons, Wetzlar

From the beginning until 1939

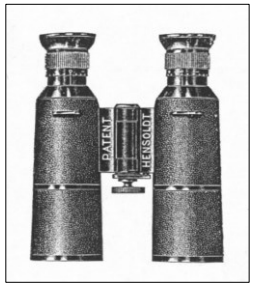
Walter J. Schwab | Hüttenberg

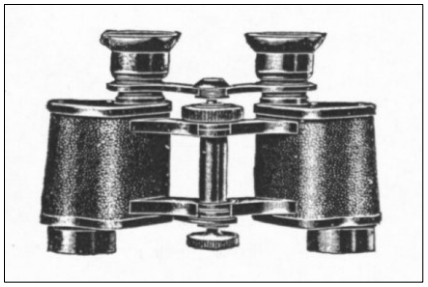
1919

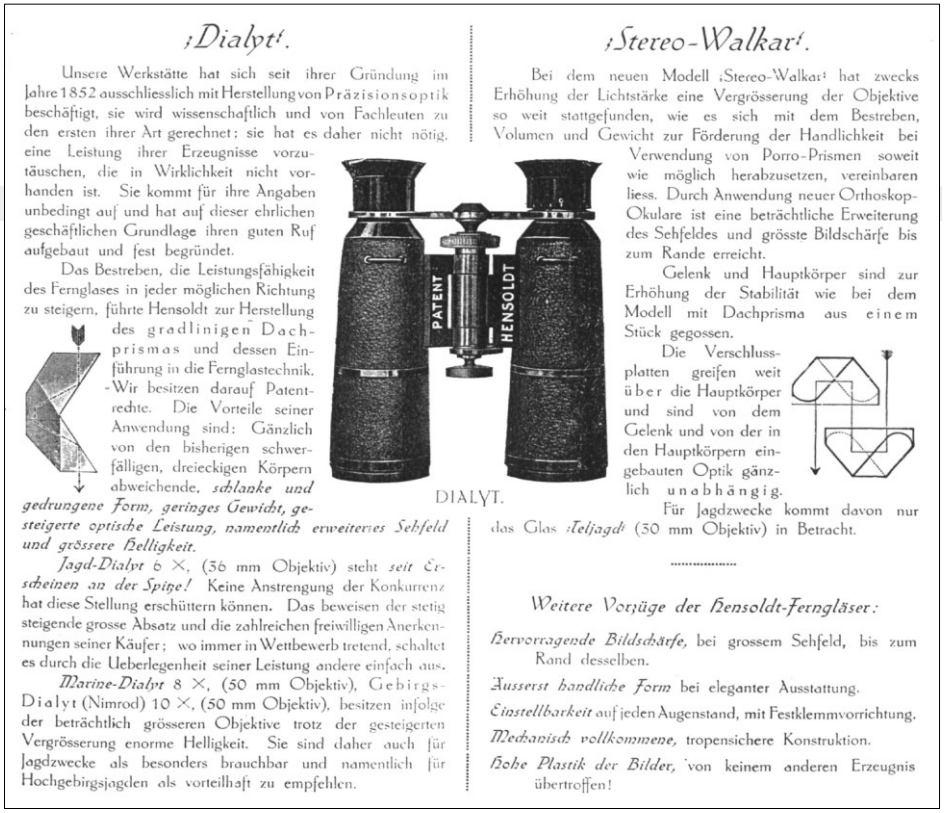
Cat. L.14.1.IV.19 (Hunting, Swiss);
Price list DE 20.5.1919

After the War, some of the heavy Dialyt glasses are launched, which are later referred to as **Hindenburg models.**
In addition, the porro glasses (Stereo Walkar) are available again with slightly different data. The prices are valid in Germany from May 20, 1919.

Roof prisms (Dialyt / Wacht)		
6x36 Jagd-Dialyt	160 m FoV | 750 g | 18 cm H | 425 Mark	Dialyt
8x50 Marine-Dialyt	120 m FoV | 1000 g | 21 cm H | 600 Mark	Marine
10x50 Gebirgs-Dialyt	95 m FoV | 1.100 g | 25 cm H | 600 Mark	Nimrod
16x50 Gebirgs-Dialyt (Tele Dialyt)	45 m FoV | 1.100 g | 25 cm H | 675 Mark	Sechzehn
18x50 Gebirgs-Dialyt (Astro Dialyt)	40 m FoV | 1.100 g | 25 cm H | 687,50 Mark	Achtzehn
Porro prisms (Stereo-Walkar)		
6x24 Telsex	120 m FoV | 500 g | 11 cm H | 300 Mark	Telsex
8x24 Telacht	100 m FoV | 500 g | 11 cm H | 325 Mark	Telacht
6x30 Teljagd	150 m FoV | 630 g | 12 cm H | 375 Mark	Teljagd







‚Dialyt'.

Unsere Werkstätte hat sich seit ihrer Gründung im Jahre 1852 ausschliesslich mit Herstellung von Präzisionsoptik beschäftigt, sie wird wissenschaftlich und von Fachleuten zu den ersten ihrer Art gerechnet; sie hat es daher nicht nötig, eine Leistung ihrer Erzeugnisse vorzutäuschen, die in Wirklichkeit nicht vorhanden ist. Sie kommt für ihre Angaben unbedingt auf und hat auf dieser ehrlichen geschäftlichen Grundlage ihren guten Ruf aufgebaut und fest begründet.

Das Bestreben, die Leistungsfähigkeit des Fernglases in jeder möglichen Richtung zu steigern, führte Hensoldt zur Herstellung des gradlinigen Dachprismas und dessen Einführung in die Fernglastechnik. Wir besitzen darauf Patentrechte. Die Vorteile seiner Anwendung sind: Gänzlich von den bisherigen schwerfälligen, dreieckigen Körpern abweichende, *schlanke und gedrungene Form, geringes Gewicht, gesteigerte optische Leistung, namentlich erweitertes Sehfeld und grössere Helligkeit.*

DIALYT.

Jagd-Dialyt 6 ×, (36 mm Objektiv) steht *seit Erscheinen an der Spitze!* Keine Anstrengung der Konkurrenz hat diese Stellung erschüttern können. Das beweisen der stetig steigende grosse Absatz und die zahlreichen freiwilligen Anerkennungen seiner Käufer; wo immer in Wettbewerb tretend, schaltet es durch die Ueberlegenheit seiner Leistung andere einfach aus.

Marine-Dialyt 8 ×, (50 mm Objektiv), Gebirgs-Dialyt (Nimrod) 10 ×, (50 mm Objektiv), besitzen infolge der beträchtlich grösseren Objektive trotz der gesteigerten Vergrösserung enorme Helligkeit. Sie sind daher auch für Jagdzwecke als besonders brauchbar und namentlich für Hochgebirgsjagden als vorteilhaft zu empfehlen.

‚Stereo-Walkar'.

Bei dem neuen Modell ‚Stereo-Walkar' hat zwecks Erhöhung der Lichtstärke eine Vergrösserung der Objektive so weit stattgefunden, wie es sich mit dem Bestreben, Volumen und Gewicht zur Förderung der Handlichkeit bei Verwendung von Porro-Prismen soweit wie möglich herabzusetzen, vereinbaren liess. Durch Anwendung neuer Orthoskop-Okulare ist eine beträchtliche Erweiterung des Sehfeldes und grösste Bildschärfe bis zum Rande erreicht.

Gelenk und Hauptkörper sind zur Erhöhung der Stabilität wie bei dem Modell mit Dachprisma aus einem Stück gegossen.

Die Verschlussplatten greifen weit über die Hauptkörper und sind von dem Gelenk und von der in den Hauptkörpern eingebauten Optik gänzlich unabhängig.

Für Jagdzwecke kommt davon nur das Glas *‚Teljagd'* (30 mm Objektiv) in Betracht.

.....

Weitere Vorzüge der Hensoldt-Ferngläser:

Hervorragende Bildschärfe, bei grossem Sehfeld, bis zum Rand desselben.

Äusserst handliche Form bei eleganter Ausstattung.

Einstellbarkeit auf jeden Augenstand, mit Festklemmvorrichtung.

Mechanisch vollkommene, tropensichere Konstruktion.

Hohe Plastik der Bilder, von keinem anderen Erzeugnis übertroffen!

Binoculars from Moritz Hensoldt and Sons, Wetzlar

From the beginning until 1939

Walter J. Schwab | Hüttenberg

1920 - 1924

Catalogues / Price lists
L.19.1.8.20; L.21.20.10.21;
L22.1.11.22; L22.E.1.4.23 (USA);
L.22.15.2.23; L.22.1.7.24

After 1920 the name **WACHT** is no longer used. From 1923, the Porro glasses were called **STEREOR-WALKAR** (instead of Stereo-Walkar).
Huge price increases followed from 1921. The 6x36 Hunting Dialyt cost exactly 2,000 Mark on October 20, 1921. One year later it is already 4,600 M and at the peak of inflation according to the price list of Febr. 15, 1923 almost half a million Mark (495,000 Mark).
In general the hunting catalogues (including rifle scopes) contain a smaller selection of Porro glasses compared to the pure binocular catalogues.

Dialyt roof prisms (in brackets the US names)		
3,5x15 Theaterglas (Gem Dialyt)	220 m FoV | 320 g | 10,3 cm H	Opera
6x26 Universal-Dialyt (Universal Dialyt)	125 m FoV | 350 g | 10,7 cm H	Universal
6x36 Jagd-Dialyt (Ideal Dialyt)	160 m FoV | 770 g | 18 cm H	Dialyt
8x50 Marine-Dialyt (Marine Dialyt)	120 m FoV | 1000 g | 21 cm H	Marine
10x50 Gebirgs-Dialyt (Mountain Dialyt)	95 m FoV | 1.100 g | 25 cm H	Nimrod
16x50 Gebirgs-Dialyt (Tele Dialyt)	45 m FoV | 1.100 g | 25 cm H	Sechzehn
18x50 Gebirgs-Dialyt (Astro Dialyt)	40 m FoV | 1.100 g | 25 cm H	Achtzehn

The new Hensoldt Wetzlar logo replaces the WACHT logo in 1920/21.

Theaterglas 3,5x15

Universal-Dialyt 6x26

Gebirgs-Dialyt 10x50. One of the heavy so called "Hindenburg" Dialyts.

Stereo-Walkar Porro prisms (from 1923 Stereor-Walkar)	
6x24 Telsex	120 m FoV | 500 g | 11 cm H
8x24 Telacht	100 m FoV | 500 g | 11 cm H
6x30 Teljagd	150 m FoV | 630 g | 12 cm H
8x30 Telachtar	110 m FoV | 640 g | 12 cm H
12x30 Telzwölf	65 m FoV | 650 g | 12 cm H

STEREOR-WALKAR

New name from 1923 instead former Stereo-Walkar

Telsex 6x24

1925

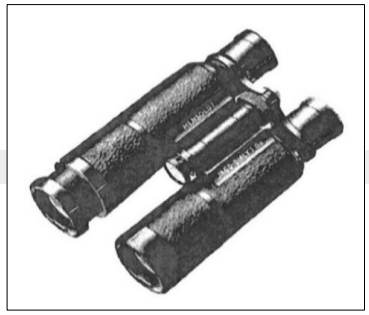
Catalogue L.23.VI.25 (Hunting)
Pricelist L.23.6.25

All binoculars from the above catalogues are still in the program.
The 6x26 Universal Dialyt and 6x36 Jagd Dialyt models are available with **magnifying function for very short distances.**

The Dialyt range is expanded to include:

6x26 Universal-Dialyt with magnifyer	The right lens can be pulled out by 15 mm on both models.
6x36 Jagd-Dialyt with magnifyer	
8x36 Grossfeld-Dialyt	150 m FoV | 850 g | 18 cm H | "Wide field" ocular

Jagd-Dialyt 6x36 with magnifyer.



Porro prisms (Stereor-Walkar)	The 8x30 Telgon with a very wide field of view replaces the previous Telachtar.
6x24 Telsex	120 m FoV | 500 g | 11 cm H
8x24 Telacht	100 m FoV | 500 g | 11 cm H
6x30 Teljagd	150 m FoV | 630 g | 12 cm H
8x30 Telgon	150 m FoV | 630 g | 12 cm H
12x30 Telzwölf	65 m FoV | 650 g | 12 cm H

Binoculars from Moritz Hensoldt and Sons, Wetzlar

From the beginning until 1939

Walter J. Schwab | Hüttenberg

1926
1927

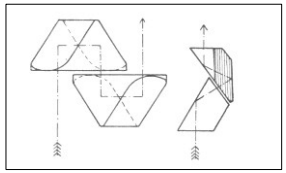
Dealer-Cat. Lustig & Co, Dresden;
Christmas-Catalogue L.27.XI.26;
Catalogue L.32.15.IV.27 (Hunting)

New and light **Dialyt models 1926** with revised prism system and **open hinge.**
These include new **Dialytes with a 42 mm lens diameter.**
New wide field eyepieces with 150 m FoV at 8x.
In addition to the Stereor-Walkar glasses, **"Special Glasses"** form a new Porro entry-level class from end of 1926.

Dialyt Model 1926 (open hinge)		
5x18 Reise-Dialyt Mod. 1926	130 m FoV | 300 g | 11 cm H	Reise
6x30 Universal-Dialyt Mod. 1926	125 m FoV | 390 g | 13,5 cm H	Welt
6x42 Jagd-Dialyt Mod. 1926	150 m FoV | 750 g | 18 cm H	Nacht | Jagd
8x42 Grossfeld-Dialyt Mod. 1926	150 m FoV | 750 g | 18 cm H | Large field ocular	
8x50 Hirsch-Dialyt Mod. 1926	120 m FoV | 850 g | 21 cm H	Hirsch

New models 1926:
Reise-Dialyt 5x18
Universal-Dialyt 6x30
Jagd-Dialyt 6x42
Hirsch-Dialyt 8x50

Dialyt (old models with solid hinge)		
3,5x15 Theaterglas	220 m FoV | 320 g | 10,3 cm H	Opera
6x26 Universal-Dialyt	125 m FoV | 350 g | 10,7 cm H	Universal
6x36 Jagd-Dialyt	150 m FoV | 770 g | 18 cm H	Dialyt
6x26 Universal-Dialyt mit Lupenfunktion	125 m FoV | 350 g | 10,7 cm H	
6x36 Jagd-Dialyt mit Lupenfunktion	150 m FoV | 770 g | 18 cm H	
8x36 Grossfeld-Dialyt	150 m FoV | 850 g | 18 cm H | Large field ocular	Motor
8x50 Marine-Dialyt	120 m FoV | 1000 g |21 cm H	
10x50 Gebirgs-Dialyt (Mountain Dialyt)	95 m FoV | 1100 g | 25 cm H	Nimrod
16x50 Gebirgs-Dialyt (Tele Dialyt)	45 m FoV | 1100 g | 25 cm H	Tele
18x50 Gebirgs-Dialyt (Astro Dialyt)	40 m FoV | 1100 g | 25 cm H	Astro

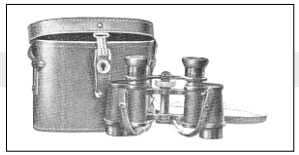


Size comparison of porro and new roof prism (with air gap) for a 30 mm objective system.

Old dialyt model Universal 6x26.

Porro (Stereor-Walkar)
Same products as 1925

Porro (Spezialglas, new entry level)		
8x24 Spezialglas	69 RM	



8x24 Spezialglas

Binoculars from Moritz Hensoldt and Sons, Wetzlar

From the beginning until 1939

Walter J. Schwab | Hüttenberg

1928 Catalogue L.38.X.28 (Hunting)

In 1928 the **Carl Zeiss Foundation** in Jena takes over the majority of shares in HENSOLDT in Wetzlar.
In the same year, the product **range is streamlined**. Only three new Dialyt models 1926 are in the program.
From now only **standard lens diameters of 30 mm, 42 mm and 50 mm** will be offered, additional 24 mm for Porro lenses. Exception: The later GALYT.

Roof prisms (Dialyt)	
6x30 Universal-Dialyt	125 m FoV | 390 g | 13,5 cm H | 135 RM
6x42 Jagd-Dialyt	150 m FoV | 750 g | 18 cm H | 180 RM
8x50 Hirsch-Dialyt	120 m FoV | 850 g | 21 cm H | 230 RM
Porro prisms	
6x24 Spezialglas	120 m FoV | 500 g | 11 cm H | 78 RM
8x24 Spezialglas	100 m FoV | 500 g | 11 cm H | 78 RM
6x30 Jagdglas	150 m FoV | 630 g | 12 cm H | 110 RM
6x30 Teljagd	150 m FoV | 630 g | 12 cm H | 135 RM

From about 1928 the "written" Hensoldt appeared up regularly.

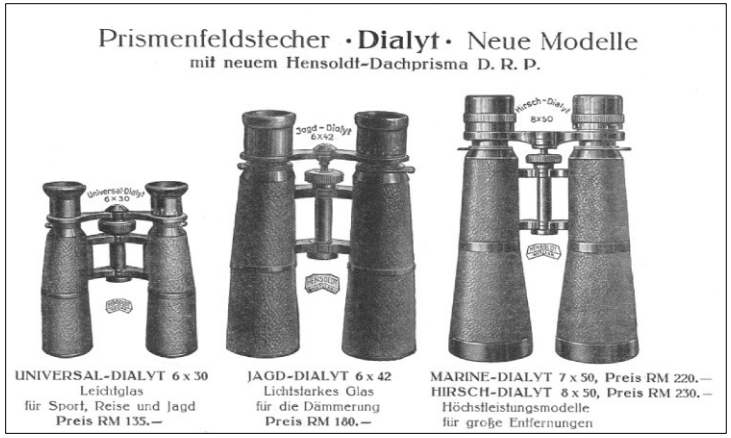
1929 Catalogue L.43.XII.29 (Hunting)

The Dialyt series is expanded by a **Dialyt 7x50** model.
The Galilean glass **GALYT** is added. This binoculars remain in the program in a total of three variants until 1961.

All 1928 models are available, plus two new models:

7x50 Marine-Dialyt	128 m FoV | 850 g | 21 cm H | 220 RM
4x40 Galyt (Version I)	150 m FoV | 330 g | 10 cm H | 60 RM.

Galyt Version I (1929 to 1934.
Narrow hinges, axle protrudes below.



Binoculars from Moritz Hensoldt and Sons, Wetzlar

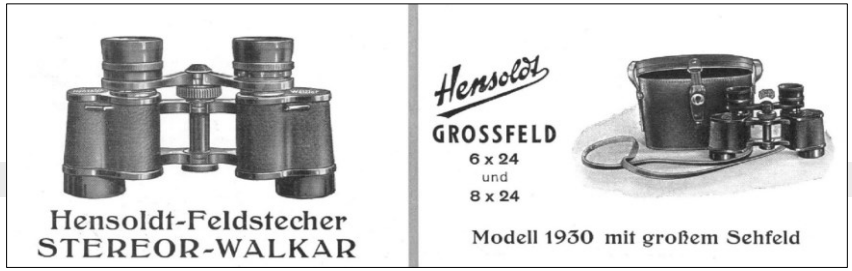
From the beginning until 1939

Walter J. Schwab | Hüttenberg

1930 Catalogue 46.V.30 (Binoculars)

There is **no change to the Dialyt models.**
The Porro glasses are split in high quality **Stereor-Walkar** and cheaper **Wide Field (Grossfeld) models** as successor to the "Special Glasses".
However, this distinction can be found only in the pure binocular catalogues, not in the hunting catalogues.

Roof prisms (Dialyt)		
6x30 Universal-Dialyt	125 m FoV | 390 g | 13,5 cm H | 135 RM	Universal
6x42 Jagd-Dialyt	150 m FoV | 750 g | 18 cm H | 180 RM	Jagd
7x50 Marine-Dialyt	128 m FoV | 850 g | 21 cm H | 220 RM	Marine
8x50 Hirsch-Dialyt	120 m FoV | 850 g | 21 cm H | 230 RM	Hirsch
Porro high-quality (Stereor-Walkar)		
6x24 Telsex	160 m FoV | 490 g | 10 cm H | 110 RM	Telsex
8x24 Telacht	150 m FoV | 490 g | 10 cm H | 120 RM	Telacht
6x30 Teljagd	150 m FoV | 630 g | 12 cm H | 130 RM	Teljagd
8x30 Telgon	150 m FoV | 640 g | 12 cm H | 140 RM	Telgon
Porro standard (Large field, Model 1930)		
6x24 Grossfeld	150 m FoV | 470 g | 11 cm H | 84 RM	
8x24 Grossfeld	145 m FoV | 470 g | 11 cm H | 84 RM	
Porro (other)		
6x30 Jagdglas	150 m FoV | 630 g | 16,5 cm H | 110 RM	
Galilean		
4x40 Galyt I	150 m FoV | 330 g | 10 cm H | 48 RM	Galyt



Binoculars from Moritz Hensoldt and Sons, Wetzlar

From the beginning until 1939

Walter J. Schwab | Hüttenberg

1931 Catalogue L.48.Nov.31 (Binoculars)

The new Dialyt serie will be expanded from four to seven types, plus two new Porro binoculars.
All binocular prices are for the MT (center focussing). Including leather case and strap. Each model is available as a monocular at half price.

Roof prisms (Dialyt)	
6x30 Universal-Dialyt	125 m FoV | 390 g | 13,5 cm H | 135 RM
8x30 Sport-Dialyt	110 m FoV | 390 g | 13,5 cm H | 140 RM
6x42 Jagd-Dialyt	150 m FoV | 750 g | 18 cm H | 180 RM
7x50 Marine-Dialyt	128 m FoV | 850 g | 21 cm H | 220 RM
8x50 Hirsch-Dialyt	120 m FoV | 850 g | 21 cm H | 230 RM
10x50 Gebirgs-Dialyt	95 m FoV | 890 g | 25 cm H | 240 RM
16x50 Tele-Dialyt	45 m FoV | 900 g | 25 cm H | 275 RM
Porro high-quality (Stereor-Walkar)	
6x24 Telsex	160 m FoV | 490 g | 10 cm H | 110 RM
8x24 Telacht	150 m FoV | 490 g | 10 cm H | 120 RM
6x30 Teljagd	150 m FoV | 630 g | 12 cm H | 130 RM
8x30 Telgon	150 m FoV | 640 g | 12 cm H | 140 RM
12x30 Telzwölf	65 m FoV | 640 g | 12 cm H | 160 RM
Porro standard	
6x24 Grossfeld	150 m FoV | 470 g | 11 cm H | 84 RM
8x24 Grossfeld	145 m FoV | 470 g | 11 cm H | 84 RM
6x30 Jagdglas (bis 1933)	150 m FoV | 630 g | 12 cm H | 110 RM
8x30 Sportglas (bis 1933)	150 m FoV | 640 g | 12 cm H | 120 RM
Galilean	
4x40 Galyt I	150 m FoV | 330 g | 10 cm H | 48 RM

Monoculars.

24 mm large field Porro.

Binoculars from Moritz Hensoldt and Sons, Wetzlar

From the beginning until 1939

Walter J. Schwab | Hüttenberg

1932

Catalogue L.50.June.32 (Hunting);
Deutsch. Jägerzeitung 2.12.1932

The revised **Dialyt models 1932** are a bit heavier, but they have a larger field of view due to the new Hensoldt roof prism.
On December 2, 1932, the "Deutsche Jägerzeitung" presents the new **NIGHT-DIALYT 7x56 and 8x56.**

Roof prisms (Dialyt)	
6x30 Universal-Dialyt (Model 1932)	145 m FoV | 450 g | 13,5 cm H | 120 RM
8x30 Sport-Dialyt (Model 1932)	125 m FoV | 450 g | 13,5 cm H | 126 RM
6x42 Jagd-Dialyt	150 m FoV | 750 g | 18 cm H | 162 RM
7x50 Marine-Dialyt	128 m FoV | 850 g | 21 cm H | 198 RM
8x50 Hirsch-Dialyt	120 m FoV | 850 g | 21 cm H | 207 RM
10x50 Gebirgs-Dialyt	95 m FoV | 890 g | 25 cm H | 216 RM
16x50 Tele-Dialyt	45 m FoV | 900 g | 25 cm H | 245 RM
7x56 Nacht-Dialyt	115 m FoV | 925 g | 22 cm H | 245 RM
8x56 Nacht-Dialyt	115 m FoV | 925 g | 22 cm H | 255 RM
Porro	
6x24 Grossfeld	150 m FoV | 470 g | 11 cm H | 75 RM
8x24 Grossfeld	145 m FoV | 470 g | 11 cm H | 75 RM
6x30 Jagdglas	150 m FoV | 630 g | 12 cm H | 99 RM
8x30 Sportglas	150 m FoV | 640 g | 12 cm H | 108 RM
6x30 Teljagd	150 m FoV | 630 g | 12 cm H | 117 RM
Galilean	
4x40 Galyt I	150 m FoV | 330 g | 10 cm H | 41 RM

Night-Dialyt 8x56.
It will be modified from time to time but remains in the production until 2016

1933

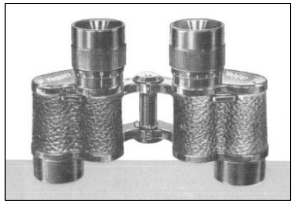
Cat. S.K.1.May.33 (Opt. Instr.);
Flyer W.S.I.Sept.33 (Wehrsport)

There is a new **Wehrsport 6x24 ET Porro binoculars** , which will be renamed **Geländesport** in the following year.
The fields of view of the Grossfeld (Large Field) Porro glasses become wider (Model 1933).

The roof prism models and the GALYT remain, the Porro line is as follows:

6x24 Wehrsport ET (Porro)	160 m FoV | 470 g | 10 cm H | 79 RM
6x24 Grossfeld (Model 1933)	160 m FoV | 490 g | 10 cm H | 84 RM
8x24 Grossfeld (Modell 1933)	150 m FoV | 490 g | 10 cm H | 84 RM
6x30 Jagdglas	150 m FoV | 630 g | 12 cm H | 99 RM
8x30 Sportglas	150 m FoV | 640 g | 12 cm H | 108 RM
8x30 Telgon	150 m FoV | 640 g | 12 cm H | 126 RM
12x30 Telzwölf	80 m FoV | 640 g | 12 cm H | 144 RM

Wehrsport 6x24 ET
(from 1934: Geländesport).



Binoculars from Moritz Hensoldt and Sons, Wetzlar

From the beginning until 1939

Walter J. Schwab | Hüttenberg

1934
1935

Cat. L.57.RM. Okt. 1934 (Binos);
Cat. L.57.RM. Apr. 1935 (Binos)

Clear rearrangement of the Porro glasses in **high-quality 30 mm Stereor-Walkar** and **standard 24 mm large field models.**
The Galyt has been modified.

Roof prisms (Dialyt)	
6x30 Universal-Dialyt	145 m FoV | 450 g | 13,5 cm H | 120 RM
8x30 Sport-Dialyt	125 m FoV | 450 g | 13,5 cm H | 126 RM
6x42 Jagd-Dialyt	150 m FoV | 750 g | 18 cm H | 162 RM
7x50 Marine-Dialyt	128 m FoV | 850 g | 21 cm H | 198 RM
8x50 Hirsch-Dialyt	120 m FoV | 850 g | 21 cm H | 207 RM
10x50 Gebirgs-Dialyt	95 m FoV | 890 g | 25 cm H | 216 RM
16x50 Tele-Dialyt	45 m FoV | 900 g | 25 cm H | 245 RM
7x56 Nacht-Dialyt	115 m FoV | 925 g | 22 cm H | 245 RM
8x56 Nacht-Dialyt	115 m FoV | 925 g | 22 cm H | 255 RM
Porro high quality 30 mm (Stereor-Walkar)	
6x30 Jagdglas	150 m FoV | 630 g | 12 cm H | 99 RM
8x30 Sportglas	150 m FoV | 640 g | 12 cm H | 108 RM
8x30 Telgon	150 m FoV | 640 g | 12 cm H | 126 RM
12x30 Telzwölf	80 m FoV | 640 g | 12 cm H | 144 RM
Porro standard 24 mm (large field)	
6x24 Grossfeld	160 m FoV | 490 g | 10 cm H | 84 RM
8x24 Grossfeld	150 m FoV | 490 g | 10 cm H | 84 RM
6x24 Geländesport ET - auch mit Strichplatte	160 m FoV | 470 g | 10 cm H | 79 RM
Galilean	
4x40 Galyt (Version II)	150 m FoV | 330 g | 10 cm H | 43 RM | wide hinge

Galyt Version II (1934)

Binoculars from Moritz Hensoldt and Sons, Wetzlar

From the beginning until 1939

Walter J. Schwab | Hüttenberg

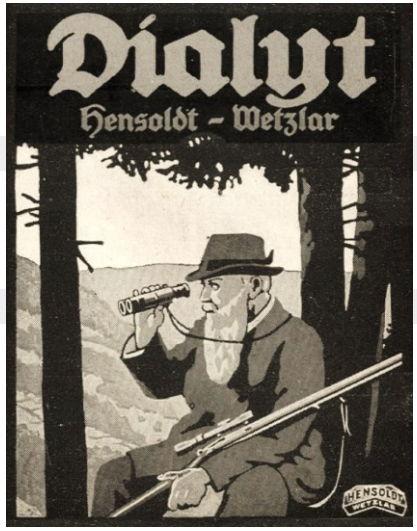
1936

Cat. L.60.RM.July 1936 (Binos);
Flyer Nachtdialyt L.52.VI.36

The **42 and 56 mm Dialyt binoculars** are delivered as **light metal models (LM)** and have a new, more solid carrying strap attachment.
The same goes for the two Stereo-Walkar models Jagdglas and Sportglas.
A new famous bino is added: the **Jagd-Dialyt 7x42.**

Roof prisms (Dialyt)	
6x30 Universal-Dialyt	145 m FoV | 400 g | 13,5 cm H | 120 RM
8x30 Sport-Dialyt	125 m FoV | 400 g | 13,5 cm H | 126 RM
6x42 Jagd-Dialyt (LM)	150 m FoV | 500 g | 18 cm H | 162 RM
7x42 Jagd-Dialyt (LM)	145 m FoV | 500 g | 18 cm H | 180 RM
7x50 Marine-Dialyt	128 m FoV | 800 g | 21 cm H | 198 RM
8x50 Hirsch-Dialyt	120 m FoV | 815 g | 21 cm H | 207 RM
10x50 Gebirgs-Dialyt	95 m FoV | 880 g | 25 cm H | 216 RM
16x50 Tele-Dialyt	50 m FoV | 890 g | 25 cm H | 245 RM
7x56 Nacht-Dialyt (LM)	115 m FoV | 700 g | 23 cm H | 245 RM
8x56 Nacht-Dialyt (LM)	115 m FoV | 700 g | 23 cm H | 255 RM
Porro high quality 30 mm (Stereor-Walkar)	
6x30 Jagdglas (LM)	150 m FoV | 410 g | 12 cm H | 99 RM
8x30 Sportglas (LM)	150 m FoV | 430 g | 12 cm H | 108 RM
8x30 Telgon	150 m FoV | 640 g | 12 cm H | 126 RM
12x30 Telzwölf	80 m FoV | 640 g | 12 cm H | 144 RM
Porro standard 24 mm (large field)	
6x24 Grossfeld	160 m FoV | 490 g | 10 cm H | 84 RM
8x24 Grossfeld	150 m FoV | 490 g | 10 cm H | 84 RM
6x24 Geländesport ET - also with reticle	160 m FoV | 470 g | 10 cm H | 79 RM
Galilean	
4x40 Galyt (Version II)	150 m FoV | 330 g | 10 cm H | 43 RM | wide hinge

Vier Dialyt Größen
42 mm
56 mm
50 mm
30 mm



Binoculars from Moritz Hensoldt and Sons, Wetzlar

From the beginning until 1939

Walter J. Schwab | Hüttenberg

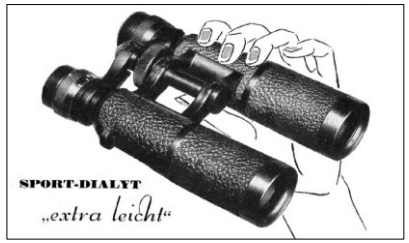
1937

Catalogue L.62. XI.37 (Binoculars);
Catalogue L.63.X.37 (Hunting)

All models are converted to light metal / alloy. The 6x30 is now also called Sport Dialyt instead of Universal Dialyt, like the 8x.
There are two new 56 Dialyt models with 10 and 16x magnification.
Carrying strap eyelets are modified. They are thicker and are no fixed directly on the housing.

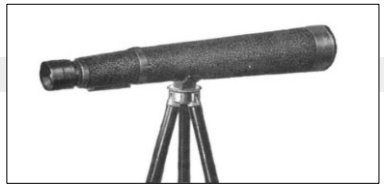
Roof prisms (Dialyt)	
6x30 Sport-Dialyt "extra leicht"	145 m FoV | 290 g | 14 cm H | 120 RM
8x30 Sport-Dialyt "extra leicht"	125 m FoV | 310 g | 15 cm H | 126 RM
6x42 Jagd-Dialyt	150 m FoV | 500 g | 17,5 cm H | 162 RM
7x42 Jagd-Dialyt	145 m FoV | 500 g | 17,5 cm H | 180 RM
7x50 Marine-Dialyt	128 m FoV | 610 g | 20,5 cm H | 198 RM
8x50 Hirsch-Dialyt	120 m FoV | 610 g | 21 cm H | 207 RM
10x50 Gebirgs-Dialyt	95 m FoV | 630 g | 25 cm H | 216 RM
16x50 Tele-Dialyt	50 m FoV | 640 g | 26 cm H | 245 RM
7x56 Nacht-Dialyt	115 m FoV | 685 g | 23 cm H | 245 RM
8x56 Nacht-Dialyt	115 m FoV | 685 g | 23 cm H | 255 RM
10x56 Nacht-Dialyt	100 m FoV | 685 g | 23 cm H | 260 RM
16x56 Nacht-Dialyt	62 m FoV | 685 g | 23 cm H | 265 RM
Porro standard 24 mm (Grossfeld)	
6x24 Grossfeld	160 m FoV | 400 g | 11 cm H | 84 RM
8x24 Grossfeld	150 m FoV | 400 g | 11 cm H | 84 RM
6x24 Geländesport ET - also with reticle	160 m FoV | 380 g | 11 cm H | 79 RM
Porro high quality 30 mm (Stereor-Walkar)	
6x30 Jagdglas	150 m FoV | 410 g | 12 cm H | 99 RM
8x30 Sportglas	150 m FoV | 430 g | 12 cm H | 108 RM
12x30 Telzwölf	80 m FoV | 410 g | 12 cm H | 144 RM
Galilean	
4x40 Galyt	140 m FoV | 300 g | 10 cm H | 43 RM
Spotting scope	
25x56 Monokular-Dialyt	30 m FoV | 660 g | 38 cm H | 130 RM

30 mm Sport-Dialyt "extra leicht".



24 mm Large Field Glass with straigth eyecups.

30 mm Stereor-Walkar with straigth eyecups.



Monokular-Dialyt 25x56

1938
1939

Catalogue L.62.7.39 (Binoculars);
Preisliste RM.4000.8.39 (Binoculars); No change since 1937.
Catalogue L.64.IV.39 (Hunting)

In total: Two 30 mm, two 42 mm, four 50 mm and four 56 mm Dialyt models.
Three 24 mm and three 30 mm Porro glasses, one Galilean GALYT and one monocular telescope

After 1939, probably no more civilian brochures were printed until the end of the war.

Binoculars from Moritz Hensoldt and Sons, Wetzlar

From the beginning until 1939

Walter J. Schwab | Hüttenberg

Only the civilian binoculars are listed here. For better identification, the fields of view at 1,000 m are also given.

The beginning(1897 - 1900)		
7x25 Stereo Binocle (Linsensystem)	80 m	1897 - 1900
6,5x Stereo Binocle (Linsensystem)	88 m	1900 - 1901
7x29 Pentaprisma Binocle "Mod. I"		1897 - 1899
Pentaprisma Binocle "Wehges"		1899 - 1901
7x24 Pentaprisma Binocle (Penta)	97 m	1900 - 1901
4x Pentaprisma Binocle (Opera)	164 m	1900 - 1901
Prismengläser nach Leman-Sprenger		?

Pentaprism binoculars (1900 - 1905)		
First models (1901 - 1904)		
4x18 Theaterglas (Opera)		1901 - 1904
5x22,6 Jagdglas (Jagd)		1901 - 1904
7x22,6 Feldstecher (Penta)		1901 - 1904
9x22,6 Feldstecher (Novies)		1901
6x26 Feldstecher (Diana)		1901 - 1904
7x26 Feldstecher (Feldstecher)		1901 - 1904
9x26 Feldstecher (Novies)		1901 - 1904
12x26 Feldstecher (Duodecies)		1901 - 1904
10x50 Spezial Jagdglas (Nimrod)	80 m	1901 - 1904
12x50 Spezial Jagdglas		1901 - 1904
Models with rounded housing (1904 - 1905)		
4x18 Theaterglas (Opera)	155 m	1904 - 1905
5x22,6 Jagdglas (Jagd)	125 m	1904 - 1905
5x35 Spezial Jagdglas (Dialyt)	120 m	1904 - 1905
7x22,6 Feldstecher (Penta)	99 m	1904 - 1905
6x26 Feldstecher (Diana)	105 m	1904 - 1905
7x26 Feldstecher (Feldstecher)	99 m	1904 - 1905
9x26 Feldstecher (Novies)	73 m	1904 - 1905
10x50 Spezial Jagdglas (Nimrod)	70 m	1904 - 1905
12x26 Feldstecher (Duodecies)	55 m	1904 - 1905
12x50 ET Marineglas (Marine)	58 m	1904 - 1905

Hensoldt roof prism binoculars (from 1905)		
First models (1905 - 1908)		
3,5x15 Theaterglas (1905)	172 m	1905 - 1908
6x26 Universalglas (1905)	112 m	1905 - 1908
7x26 Feldstecher (1905)	96 m	1905 - 1908
9x26 Reiseglas (1905)	76 m	1905 - 1908
12x26 Sportglas (1905)	56 m	1905 - 1908
6x35 Dialyt II (1905)	120 m	1905 - 1908
10x50 Nimrod II (1905)	70 m	1905 - 1908
12x50 Marine (1905)	58 m	1905 - 1908
WACHT with wider FoV (1908 - 1927)		
3,5x15 Theaterglas (1908)	220 m	1908 - 1927
6x26 Universalglas (1908)	125 m	1908 - 1927
6x26 Universal-Dialyt mit Lupenfunktion (1925)	125 m	1925 - 1927
8x26 Reiseglas (1908)	100 m	1908 - 1914
12x26 Sportglas (1908)	64 m	1908 - 1914
6x35 Dialyt II (1908)	148 m	1908 - 1919
6x36 Jagd-Dialyt (1919)	160 m	1919 - 1927
6x36 Jagd-Dialyt mit Lupenfunktion (1925)	160 m	1925 - 1927
8x36 Großfeld-Dialyt (1925)	150 m	1925 - 1927
8x50 Marine-Dialyt (1911)	110 m	1911 - 1927
10x50 Nimrod II (1908)	90 m	1908 - 1919
10x50 Gebirgs-Dialyt (1919)	95 m	1919 - 1927
12x50 Marineglas (1908)	70 m	1908 - 1911
16x50 Marineglas (1908)		1908 - 1911
16x50 Nimrod (1911)		1911 - 1919
16x50 Gebirgs-Dialyt (1919)	45 m	1919 - 1927
18x50 Marineglas (1908)		1908 - 1911
18x50 Nimrod (1911)		1911 - 1919
18x50 Gebirgs-Dialyt (1919)	40 m	1919 - 1927
Walkar models "Extraleicht" (1908 - 1912)		
6x18 Walkar I (1908)	125 m	1908 - 1912
8x26 Walkar II (1908)	100 m	1908 - 1912

Hensoldt roof prism binoculars (from 1905)		
New prisms and open hinge (1926 - 1937)		
5x18 Reise-Dialyt (1926)	130 m	1926 - 1928
6x30 Universal-Dialyt (1926)	125 m	1926 - 1932
6x30 Universal-Dialyt (1932)	145 m	1932 - 1937
8x30 Sport-Dialyt (1931)	110 m	1931 - 1932
8x30 Sport-Dialyt (1932)	125 m	1932 - 1937
6x42 Jagd-Dialyt (1926)	150 m	1926 - 1936
8x42 Großfeld-Dialyt (1926)	150 m	1926 - 1927
7x50 Marine-Dialyt (1928)	128 m	1928 - 1937
8x50 Hirsch-Dialyt (1926)	120 m	1926 - 1937
10x50 Gebirgs-Dialyt (1931)	95 m	1931 - 1937
16x50 Tele-Dialyt (1931)	45 m	1931 - 1937
7x56 Nacht-Dialyt (1933)	115 m	1933 - 1936
8x56 Nacht-Dialyt (1933)	115 m	1933 - 1936
Light metal housings (from 1936)		
6x30 Sport-Dialyt LM (1937)	145 m	from 1937
8x30 Sport-Dialyt LM (1937)	125 m	from 1937
6x42 Jagd-Dialyt LM (1936)	150 m	from 1936
7x42 Jagd-Dialyt LM (1936)	145 m	from 1936
7x50 Marine-Dialyt LM (1937)	128 m	from 1937
8x50 Hirsch-Dialyt LM (1937)	120 m	from 1937
10x50 Gebirgs-Dialyt LM (1937)	95 m	from 1937
16x50 Tele-Dialyt LM (1937)	45 m	from 1937
7x56 Nacht-Dialyt LM (1936)	115 m	from 1936
8x56 Nacht-Dialyt LM (1936)	115 m	from 1936
10x56 Nacht-Dialyt LM (1937)	100 m	from 1937
16x56 Nacht-Dialyt LM (1937)	62 m	from 1937

Galilean binoculars (from 1912)		
Fixed hinge (1912 - 1917)		
4x42 Hunting- and Field glas A	135 m	1912 - 1914
5x50 Hunting and Field glas B	100 m	1912 - 1914
3,5x42 Walkar	135 m	1914 - 1917
5x52 Walkar	100 m	1914 - 1917
Flexible hinge (1914 - 1917)		
4x43 Walkar	110 m	1914 - 1917
6x43 Walkar	75 m	1914 - 1917
Galyt models (from 1929)		
4x40 Galyt (Version I)	150 m	1929 - 1934
4x40 Galyt (Version II)	150 m	1934 - 1956

Porro binoculars (from 1911)		
6x24 models (from 1911)		
6x24 Stereo Walkar (1911)	130 m	1911 - 1919
6x24 Stereo/r Walkar (1919)	120 m	1919 - 1930
6x24 Stereor Walkar (1930)	160 m	1930 - 1937
6x24 Spezialglas (1928)	120 m	1928 - 1930
6x24 Grossfeld (1930)	150 m	1930 - 1933
6x24 Grossfeld (Modell 1933)	160 m	1933 - 1937
6x24 Grossfeld LM (1937)	160 m	1937 - 1939
6x24 ET Wehrsport (from 1934 Geländesport)	160 m	1933 - 1937
6x24 ET Geländesport LM	160 m	1937 - 1939
8x24 models (from 1911)		
8x24 Stereo Walkar (1911)	115 m	1911 - 1919
8x24 Stereo/r Walkar (1919)	100 m	1919 - 1930
8x24 Stereor Walkar (1930)	150 m	1930 - 1937
8x24 Spezialglas (1926)	100 m	1926 - 1930
8x24 Grossfeld (1930)	145 m	1930 - 1933
8x24 Grossfeld (Modell 1933)	150 m	1933 - 1937
8x24 Grossfeld LM (1937)	150 m	from 1937
6x30 models (from 1911)		
6x30 Stereo Walkar (1911)	150 m	1911 - 1919
6x30 Stereo/r Walkar (1919)	150 m	1919 - 1933
6x30 Stereor Walkar LM (1936)	150 m	from 1936
6x30 Jagdglas (1928)	150 m	1928 - 1936
8x30 models (from 1920)		
8x30 Stereo Walkar (1920)	110 m	1920 - 1925
8x30 Stereor-Walkar (1925)	150 m	1925 - 1936
8x30 Stereor-Walkar LM (1936)	150 m	from 1936
8x30 Sportglas (1931)	150 m	1931 - 1936
12x30 models (from 1911)		
12x30 Stereo Walkar (1911)	65 m	1911 - 1919
12x30 Stereo/r Walkar (1919)	65 m	1919 - 1933
12x30 Stereor Walkar (1933)	80 m	1933 - 1937
12x30 Stereor Walkar LM (1937)	80 m	1937 - 1939