

**Magnifiers / Microscopes / Glass rulers / Stereo microscopes
Video microscopes / Endoscopes / Profile projectors**



Stand magnifier 5x

Standard, all-purpose magnifier.

- Dimensions: $\phi 35 \times 55$ mm.



Item No.
905.110

Stand magnifier 10x

Standard, all-purpose magnifier. Very suitable for inspection of tissues, structures and photographic negatives.

- Dimensions: $\phi 34 \times 41$ mm.



Item No.
905.112

Stand magnifier 10x

A simple, all-purpose magnifier.

- Dimensions: $\phi 41 / \phi 45 \times 40$ mm.



Item No.
905.316

Stand magnifier 15x

Bright images with high contrast due to a coated achromatic lens. With wide acrylic tube.

- Dimensions: $\phi 27 / \phi 36 \times 33$ mm.



Item No.
905.114

Stand magnifier 22x

Bright images with high contrast due to a coated achromatic lens. Suitable for inspection of high precision work.

- Dimensions: $\phi 28 \times 30$ mm.



Item No.
905.116

Zoom magnifiers 8-16x and 10-20x

Unique stepless zoom lens with sufficient brightness in each stage of magnification and a minimum of optical aberration. With click-stop on magnifications 8/10/12/14/16x and 10/15/20x, respectively. Equipped with scale.

- Field of view: $\phi 20$ -10 mm or $\phi 13$ -7 mm.
- Graduation: 0.1 mm.



905.198

905.197

Item No.	Magnification	Field of view ϕ /mm	Adjustment range eye correction	Measuring range/mm	Dimensions mm
905.197	8-16x	20-10	+2.5D to -5D	16	$\phi 45 \times 65$
905.198	10-20x	13-7	+5D to -3.5D	12	$\phi 42 \times 52$

Telecentric magnifier 7x

A telecentric magnifier shows objects, which are at different distances, with the same magnification. In this way 3D objects, or e.g. a needle above a scale, can be shown and measured accurately without parallax error.

- Field of view: $\phi 24$ mm.
- Measuring range scale: 20 mm.
- Graduation: 0.1 mm.
- Adjustable diaphragm with apertures $\phi 0.5$, 1 and 3 mm.
- Dimensions: $\phi 38 \times 74$ mm.



Item No.	Description
905.136	Telecentric magnifier 7x including case and standard scale (for scales of $\phi 26$ mm)

Stand magnifier 4x

This practical and convenient magnifier can be used for many purposes, like inspecting films. The magnifier is delivered with a clear and a black base, which allows you, depending on the amount of light, to choose the base which is most suitable for your application.

- Field of view: $\phi 45$ mm.
- Dimensions: $51 \times 51 \times 65$ mm.
- Weight: 80 g.



Item No.	Description
905.399	Stand magnifier 4x

Magnetic magnifier 5x

This magnifier has two small magnets which make sure that the magnifier can be put on a fixed position without moving. By placing this magnifier on hard to read scale divisions of, for example, graduated rulers, height gauges or micrometers, the possibility of reading errors substantially reduces.

- Field of view: $\phi 30$ mm.
- Dimensions: $\phi 44 \times 20 \times 30$ mm.
- Weight: 15 g.



Item No.	Description
905.210	Magnetic magnifier 5x

Eye magnifiers 3.3x...20x

Eye magnifiers can be placed in front of the eye easily, which makes them ideal tools for working on small products like watches, clocks and jewelry.

- Made of aluminum.
- A small hole in the tube prevents the lens from becoming blurred.



905.390



905.394



905.301

Item No.	Type	Magnification	Lenses
905.390	A13D	3.3x	1
905.391	A16D	4.0x	1
905.392	A20D	5.0x	1
905.393	A26D	6.7x	1
905.394	A40D	10.0x	2
905.299	A48D	12.0x	1
905.300	A60D	15.0x	1
905.301	A80D	20.0x	1



Stand magnifier 8x

Convenient and smartly designed magnifier with achromatic lens. A scale is engraved at the bottom of the transparent acrylic base. Photographic negatives can be inspected using the base with opal glass.

- Field of view: 24×36 mm.
- Dimensions without base: $46 \times 49 \times 39$ mm.
- Weight: 52 g.



Item No.	Description
905.290	Magnifier w/o base
905.291	Base

Light magnifier 3.5x

Large square lens (52×52 mm) of plastic with illumination, e.g. for reading maps and indicators, and for inspection of production processes.

- Dimensions: $60 \times 75 \times 190$ mm.
- Weight (without batteries): 120 g.
- Power supply: 2 batteries type C.



Item No.	Description
905.212	Magnifier (w/o batteries)
495.153	Battery (2 needed)

Monocular telescopes

Lightweight pocket-size telescopes with erect image.

- Dimensions 905.207: $\phi 22.5 \times 50$ mm, 905.208: $\phi 22.5 \times 53$ mm.
- Weight: 32 g.
- Delivery in a case.



905.207

Item No.	Magnification	Lens aperture ϕ /mm	Close focus distance/mm	Field of view (angle)	Field of view* ϕ /mm ϕ /m
905.207	2x	8	100	11°	12 192
905.208	4x	10	220	10°	29 175

* Field of view respectively at close focus distance and at 1000 m.

Head magnifiers 2.2x ... 5.2x

Because of the velcro strip, the head magnifier can be used easily. The great advantage of a head magnifier is that the user has both hands free for e.g. production and assembly of precision instruments. The head magnifier is designed in such a way that people who wear glasses can use it as well. With the extra pair of lenses inside the head magnifier, the magnification can be enhanced from 2.2x to 3.3x.

- Clear, broad and 3-dimensional view.
- Weight 905.318: 100 g.
- 905.317: 118 g.



Item No. Magnification

905.318	2.2x / 3.3x
905.317	2.2x / 3.3x / 4.1x / 5.2x

Pen microscopes with EIM 25x ... 100x

These pen microscopes have a fixed scale and EIM system. With standard microscopes, the magnification is upside down, but because of the EIM system, this is not the case with these pen microscopes.

- Dimensions: ϕ 20.7 x 111 mm.
- Weight: 25 - 28 g.



Item No.	Magnification	Field of view ϕ /mm	Measuring range/mm	Graduation mm
905.404	25x	3.50	3.0	0.05
905.405	50x	1.70	1.6	0.02
905.406	75x	1.10	1.0	0.01
905.407	100x	0.86	0.8	0.005



Pen microscopes 25x ... 100x

- Dimensions: ϕ 12.4 x 127 mm.
- Weight: 13 - 16 g.
- With a fixed scale (only 905.263/264).



Item No.	Magnification	Field of view ϕ /mm	Measuring range/mm	Graduation mm
905.267	25x	3.30	—	—
905.268	50x	2.00	—	—
905.269	75x	1.09	—	—
905.266	100x	0.84	—	—
With fixed scale:				
905.263	25x	3.30	3.00	0.05
905.264	50x	2.00	1.60	0.02



Scale magnifier 7x

All-purpose scale magnifier. Aberrations are avoided by the excellent achromatic lenses.

- Field of view: ϕ 26 mm.
- Measuring range standard scale: 20 mm.
- Graduation: 0.1 mm.
- Dimensions: ϕ 36 x 62 mm.
- Weight: 56 g.



Scale magnifier with illumination 905.138

- Field of view: ϕ 22 mm.
- Dimensions: ϕ 36 x 58 x 175 mm.
- Weight (without batteries): 118 g.
- Power supply: 2 batteries type C.

Item No. Description

905.140	Magnifier with standard scale in a case
905.155	Set of magnifier 905.140 and five scales in a case
905.138	Magnifier 905.140 with illumination (without batteries)
495.153	Battery (2 needed)

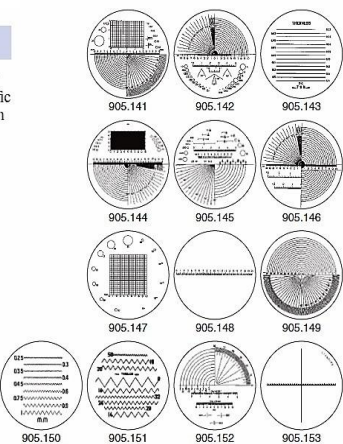


Set 905.155
Scale magnifier 905.140 in a set with the five most frequently used scales (2, 3, 7, 8 and 10).

Scales ϕ 26 mm

Aside from the standard scale, various other scales are available, each one with its own specific application. These scales are interchangeable in scale magnifiers like the one above.

Item No.	Scale
905.141	no. 1
905.142	no. 2
905.143	no. 3
905.144	no. 4
905.145	no. 5
905.146	no. 6
905.147	no. 7
905.148	no. 8
905.149	no. 9
905.150	no. 10
905.151	no. 11
905.152	no. 12
905.153	standard



Light magnifiers 10x and 15x

Magnifier with illumination.

- Field of view: ϕ 25 mm.
- Dimensions and weight (without batteries):
905.118: 175 x 35 x 41 mm, 81 g,
905.119: 180 x 36 x 42 mm, 90 g.
- Power supply: 2 batteries type C, not included.



Item No. Magnification

905.118	10x
905.119	15x
495.153	Battery (2 needed)

Folding magnifiers 7x ... 20x

Steinheil magnifiers with an excellent chromatic correction and a large field of view.

- Dimensions: 39 x 24 x 22 mm.
- Weight: 18 - 22 g.



Item No. Magnification Field of view ϕ /mm

905.200	7x	16
905.202	10x	15.5
905.204	14x	12
905.206	20x	7

Folding magnifiers 3x ... 9x

Because of their small size, these folding magnifiers are easy to use. Available in several magnifications, with one or two lenses.

The advantage of two lenses is that it gives a very sharp image, because the image error of the first lens is being corrected by the second one.

A mm scale is engraved at each of the four sides of the base. The scale length is equal to the width of the field of view (see table).



Item No.	Magnification	Field of view/mm	Number of lenses	Material/color
905.230	9x	10 x 10	1	Al/clear
905.375	7x	15 x 15	1	Al/clear
905.376	6x	25 x 25	1	Al/clear
905.377	9x	10 x 10	1	Al/black
905.378	7x	15 x 15	1	Al/black
905.379	6x	25 x 25	1	Al/black
905.383	4x	30 x 30	2	Al/black
905.384	3x	50 x 50	2	Al/black
905.380	9x	10 x 10	2	Zn/black
905.381	8x	15 x 15	2	Zn/black
905.382	6x	25 x 25	2	Zn/black

Scale magnifier 10x

All-purpose scale magnifier. Aberrations are avoided by the excellent achromatic lenses. High resolution and large field of view.

- Field of view: ϕ 35 mm.
- Measuring range standard scale: 30 mm.
- Graduation: 0.1 mm.
- Dimensions: ϕ 46 x 44 mm.
- Weight: 74 g.



Scale magnifier with illumination 905.178

- Field of view: ϕ 32 mm.
- Dimensions: ϕ 47 x 45 x 185 mm.
- Weight (without batteries): 134 g.
- Power supply: 2 batteries type C.

Item No. Description

905.180	Magnifier with standard scale in a case
905.195	Set of magnifier 905.180 and five scales in a case
905.178	Magnifier 905.180 with illumination (without batteries)
495.153	Battery (2 needed)

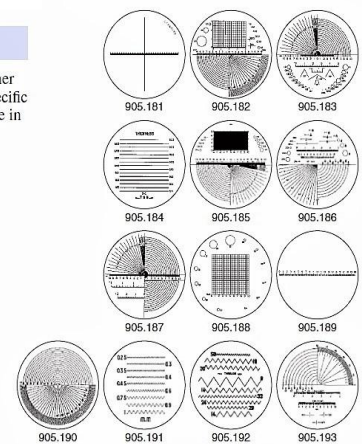


Set 905.195
Scale magnifier 905.180 in a set with the five most frequently used scales (2, 3, 7, 8 and 10).

Scales ϕ 35 mm

Aside from the standard scale, various other scales are available, each one with its own specific application. These scales are interchangeable in scale magnifiers like the one above.

Item No.	Scale
905.181	standard
905.182	no. 1
905.183	no. 2
905.184	no. 3
905.185	no. 4
905.186	no. 5
905.187	no. 6
905.188	no. 7
905.189	no. 8
905.190	no. 9
905.191	no. 10
905.192	no. 11
905.193	no. 12



Long-distance microscope

The long-distance microscope consists of a stand microscope 40x (905.330) and an objective unit. The objects being inspected can be enlarged sharply at a short distance of 200 mm as well as at long distances. The microscope has a large field of view, and comes with a Huygens eyepiece (magnification 10x) and a detachable soft rubber eye adapter.

- Focusing with helicoid ring.
- Dimensions at working distance 200 mm: $\phi 46 \times 316$ mm, infinite: $\phi 46 \times 262$ mm.

- Weight: 414 g.
- Delivery in a case incl. standard scale.



Working distance/mm	Magnification	Field of view ϕ /mm
200	27x	5.5
300	15x	10
400	10x	15
500	8x	19

Item No.	Description
905.435	Long-distance microscope

Scale magnifier 3x

Scale magnifier with a lens system separated from the scale by a stand, hereby creating a larger working distance, field of view and luminous intensity. The scale is placed in a rotatable ring in the base of the stand.

- Field of view: $\phi 58$ mm.
- Measuring range scale: 54 mm.
- Graduation: 0.1 mm.

- Dimensions: 76 x 105 x 96 mm.
- Weight: 378 g.



Item No.	Description
905.328	Magnifier with scale and stand

Scale magnifier 30x

- Field of view: $\phi 7$ mm.
- Measuring range standard scale: 5 mm.
- Graduation: 0.05 mm.
- Dimensions: $\phi 30 \times 19$ mm.
- Weight: 16 g.

- Scale magnifier with LED illumination 905.287
- Dimensions: $\phi 43 \times 65 \times 184$ mm.
- Weight (without batteries): 48 g.
- Power supply: 2 batteries type AAA.

NEW

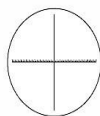


Item No.	Description
905.285	Scale magnifier in case
905.287	Magnifier 905.285 with illumination (without batteries)
497.914	Battery (2 needed)
905.286	Separate standard scale

Anastigmatic scale magnifiers 4x and 7x

Magnifier with anastigmatic lens. This is a combined objective which reflects a large, undistorted image with sharp features, very suitable for inspection of (photographic) films.

- Large field of view, 905.216: $\phi 58$ mm, 905.400: $\phi 41$ mm.
- Removable scale with mm graduation.
- Measuring range scale 905.217: 54 mm, 905.401: 36 mm.
- Graduation scale: 0.1 mm.
- Dimensions and weight: 905.216: $\phi 73 \times 77$ mm, 272 g, 905.400: $\phi 55 \times 53$ mm, 103 g.



Item No.	Description
905.216	Scale magnifier 4x
905.400	Scale magnifier 7x
905.217	Standard scale for magnifier 905.216
905.401	Standard scale for magnifier 905.400

905.400

Scale magnifier 30x

- Field of view: $\phi 7$ mm.
- Measuring range standard scale: 5 mm.
- Graduation: 0.05 mm.
- Dimensions: $\phi 30 \times 19$ mm.
- Weight: 16 g.

- Scale magnifier with illumination 905.287
- Dimensions: $\phi 43 \times 65 \times 184$ mm.
- Weight (without batteries): 48 g.
- Power supply: 2 batteries type AA.



Item No.	Description
905.285	Scale magnifier in case
905.287	Magnifier 905.285 with illumination (without batteries)
495.111	Battery (2 needed)
905.286	Separate standard scale

Anastigmatic scale magnifiers 4x and 7x

Magnifier with anastigmatic lens. This is a combined objective which reflects a large, undistorted image with sharp features, very suitable for inspection of (photographic) films.

- Large field of view, 905.216: $\phi 58$ mm, 905.400: $\phi 41$ mm.
- Removable scale with mm graduation.
- Measuring range scale 905.217: 54 mm, 905.401: 36 mm.
- Graduation scale: 0.1 mm.
- Dimensions and weight: 905.216: $\phi 73 \times 77$ mm, 272 g, 905.400: $\phi 55 \times 53$ mm, 103 g.



905.216



905.400

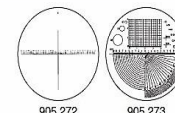


Item No.	Description
905.216	Scale magnifier 4x
905.400	Scale magnifier 7x
905.217	Standard scale for magnifier 905.216
905.401	Standard scale for magnifier 905.400

Scale magnifier 15x

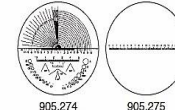
- Field of view: $\phi 20$ mm.
- Measuring range standard scale: 14 mm.
- Graduation: 0.1 mm.
- Dimensions: $\phi 35 \times 33$ mm.
- Weight: 40 g.

NEW



905.272

905.273



905.274

905.275

Item No.	Description
905.270	Magnifier with standard scale in a case
905.278	Magnifier 905.270 with illumination (without batteries)
497.914	Battery (2 needed)
905.272	Separate standard scale
905.273	Scale no. 1
905.274	Scale no. 2
905.275	Scale no. 8

- Scale magnifier with LED illumination 905.278
- Dimensions: $\phi 43 \times 65 \times 184$ mm.
- Weight (without batteries): 72 g.
- Power supply: 2 batteries type AAA.



Stand magnifier 30x

This *microscopic* magnifier has a very high magnification despite its small size. In this way, the magnifier can be held with one hand, while you can hold the product to be inspected in the other. Because of the sophisticated optic design, this magnifier is almost comparable to a microscope of the same size, while the field of view is larger. This magnifier is often used in photo technique, for the production of precision instruments and for inspection of precision work.

- Lens aperture: $\phi 7$ mm.
- Dimensions: $\phi 37 \times 20$ mm.
- Weight: 10 g.



- Stand magnifier with illumination 905.402
- Dimensions: $\phi 43 \times 65 \times 184$ mm.
- Weight (without batteries): 40 g.
- Power supply: 2 batteries type AA.

Item No.	Description
905.222	Stand magnifier $M=30x$
905.402	Stand magnifier 905.222 with illumination (without batteries)
495.111	Battery (2 needed)

ABC magnifier 3-18x

The ABC magnifier consists of three lenses. Combining the three lenses, seven different magnifications are possible.

- Magnification: 3x, 6x, 9x, 12x, 14x, 16x and 18x.
- Magnification and diameter of the lenses:
lens A: 12x, ϕ 14 mm,
lens B: 3x, ϕ 28 mm,
lens C: 6x, ϕ 20 mm.
- Dimensions: 60 x 39 x 24 mm.
- Weight: 76 g.



Item No.	Description
905.196	ABC magnifier 3-18x

Magnifying glass 2.5-5x

This model of the classical magnifying glass has a lens-in-lens construction. In the big ϕ 75 mm lens a smaller ϕ 20 mm lens has been integrated which offers extra strong magnification. The big lens has a 2.5x magnification, the small lens 5x.

- Dimensions: ϕ 80 x 170 mm.
- Weight: 111 g.



Item No.	Description
905.214	Magnifying glass 2.5-5x

Magnifier on magnetic stand

- Magnification: 2x (ϕ 90 mm).
- Total length: 280 mm.
- Magnetic force: 600 N.



Item No.	Description
909.609	Magnifier on magnetic stand

Flexible stand magnifier

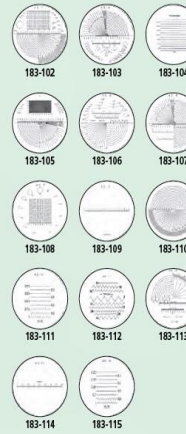
This magnifier has a flexible arm which can be adjusted freely from a solid and stabilized stand. The lens can be put in many positions for the most ergonomic use thus leaving both hands of the user free.

- Dimensions:
145 x 120 x 485 mm
(maximum height).
- Weight: 1.5 kg.



Item No.	Magnification	Lens ϕ /mm
905.279	1.7x	115
905.427	2.0x	100
905.428	2.2x	90

Optional Reticles for pocket comparators



Pocket Comparator 8x with Reticles Set

- Set No.
- 183-901 183-101, 183-106
 - 183-902 183-101, 183-102, 183-106, 183-107, 183-112, 183-113, 183-114
 - 183-903 183-101, 183-102, 183-106, 183-107, 183-109, 183-113, 183-115
 - 183-904 183-101, 183-102

Pocket Magnifiers

SERIES 183

FEATURES

- Suitable for inspecting metal surfaces.

SPECIFICATIONS

Magnification	Order No.	Remarks
25X	183-201	Pen type
	183-202	With stand
50X	183-203	With stand



Pocket Comparators

SERIES 183

FEATURES

- By replacing optional reticles, dimensional, angle, and other types of measurements can be performed.
- Illuminator (950757) is available.

SPECIFICATIONS

Magnification	Order No.	Remarks
8X	183-101	Optional reticles available
10X	183-131	Optional reticles available



Zoom Loupe

SERIES 183

FEATURES

- Allows the user 8X - 16X zoom observation.
- Magnification indicator is provided for 8X, 10X, 12X, 14X, and 16X observation.
- Metric and inch scales are provided for measuring.
- Comes with a carrying case.



SPECIFICATIONS

Magnification	Order No.	Remarks
8X - 16X	183-304	With reticle (Scale graduation: 0.1mm, 0.005")

Clear Loupe

SERIES 183



SPECIFICATIONS

Magnification	Order No.	Remarks
7X	183-301	Drawtube removable
10X	183-302	Drawtube removable
15X	183-303	Drawtube removable

Mitutoyo