Eye Protection Against Diagnostic or Therapeutic Radiation
X-Ray Protective Glasses & Visors in a Separate Catalogue

The lens of the human eye is regarded as very sensitive towards radiation exposure and carries a high risk of damage.

X-Ray protective glasses for medical personnel are used for the protection against scatter radiation. Scatter radiation is secondary radiation emitted from the radiographed patient.

The correct fit of safety glasses is particularly important. Due to the great variety of facial features, multiple models are needed. Our unique collection of various frames, which allow for an optimal fit, can be found in the catalogue „Personal Protection Glasses“.
Cataract Risk

It has been long known that the exposure to ionising radiation while working can lead to radiation-induced lens clouding.

According to recent studies, the initial stages may already occur from a radiation exposure of 0.5 Gy.

Regardless of the dose being acute or spread out over time, its effect is cumulative and the individual doses are accumulated.

„Eye Protection against Diagnostic or Therapeutic Radiation“

*Our exclusive collection with multiple frames and designs for an optimal fit can be found in our separate Eye Protection Catalogue.*
## MAVIG Today

As an independent researcher and manufacturer, MAVIG has been successful across the globe for more than 90 years. MAVIG products stand for quality and reliability.

We set international standards with our intelligent solutions for the medical industry. Our products are manufactured with the latest technology and processes at the company’s location in Munich, Germany.

The recognition from our customers is both an affirmation and motivation to continue to invest our energy and competence in further research and the development for innovative solutions in the medical field.

### QUALITY: SIGNED AND SEALED

MAVIG is DIN EN ISO 13485 certified. All MAVIG products are certified in accordance with the applicable CE standard: EU Directive 89/686/EU (Personal Protective Equipment) and/or 93/42/EU for medical products.

Even here MAVIG was a pioneer. Already in the middle of 1995, MAVIG protective products were approved according to the then new, binding CE directives.

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X-Ray Protective Visors BRV500 und BRV501

BRV500 full face coverage to the chin
BRV501 facial coverage to the cheek bones (with a nose cut-out)

The visors were specially developed for the protection of medical personnel involved in radiology applications. They optimally protect the lens of the eye from scattered X-ray radiation. Prescription glasses can be worn under both visor models. The visors allow heavy reduction of the radiation exposure to the eyes and a large part of the facial area (see table).

The quality features of our visors make them ideal for use in the medical environment:

- Lead equivalent value (weight): BRV500 Pb 0.10 mm (approx. 525 g)
  BRV501 Pb 0.10 mm (approx. 505 g)
- Certified in accordance with 89/686/EU Personal Protective Equipment, Category III
- Individually adjustable size and fit
- Versatile possibilities for adjustment to the facial geometry
- Easy to adjust by pressing and turning the pivot mechanism for a tight fit
- Comfortable, changeable, and washable padding
- Curved lead acrylic with Pb 0.10 mm
- Carefully selected materials reduce the risk of allergy to a minimum

Unfortunately, visors are not available with prescription.

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<th>X-ray tube voltage</th>
<th>Scattered radiation attenuation</th>
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<td>50 kV</td>
<td>96.9 %</td>
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<tr>
<td>60 kV</td>
<td>94.4 %</td>
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<tr>
<td>80 kV</td>
<td>86.3 %</td>
</tr>
<tr>
<td>100 kV</td>
<td>80.0 %</td>
</tr>
<tr>
<td>120 kV</td>
<td>75.0 %</td>
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"State of the Art Eye Protection"

X-RAY PROTECTIVE GLASSES

The statutory annual dose limit value for eye lenses is 150 mSv (millisievert) for people older than 18 who are occupationally exposed to radiation.

Beyond the specification of this limit value, the German X-ray ordinance (RöV) stipulates a minimisation requirement which implies that the radiation exposure must also be kept as low as possible below this limit value.

BR126

The model BR126 offers the choice of two frame sizes: small-medium or large. The design of the glasses adapts harmoniously to the facial anatomy resulting in a comfortable fit. The model design features extended lateral protection through additional inlays in the frame.

Included in delivery: case, headband, and lens cleaning cloth

Lead equivalent values: Front/side protection
(weight)
Pb 0.50 mm / 0.50 mm (approx. 70 g)
Pb 0.75 mm / 0.50 mm (approx. 80 g)

This model comes standard with antireflective coated lenses.

This model is also available with single or progressive lenses.

BR127

Individual sizes are the basis of a good fit of protection glasses. Large frames are not suitable for slim facial features. Here our BR127 is an ideal solution. The size of the lenses and the curved shape of the glasses are designed to optimize the protection of the eyes.

Included in delivery: case, headband, and lens cleaning cloth

Lead equivalent values:
(weight)
Pb 0.50 mm (approx. 65 g)
Pb 0.75 mm (approx. 75 g)

Additional anti-reflective coating for the lenses available (only plano and single lenses).

This model is also available with single, bifocal or progressive lenses.

MAVIG only uses protective lenses of the highest quality. This guarantees the best light transmission values. An ideal composition of the protective material results in a high level X-ray absorption and optimized production processes achieve an absolute homogeneous allocation of the glass additives.
BR128 - Design: Ebony / Graphite & White / Sand

When other frames are also tight, our BR128 is designed to give you extra comfort. The size of the lenses and the curved shape of the glasses are designed to optimize the protection of the eyes.

Included in delivery: case, headband, and lens cleaning cloth

**Lead equivalent values:**
(weight) Pb 0.50 mm (approx. 65 g) 
Pb 0.75 mm (approx. 75 g)

Additional anti-reflective coating for the lenses available.

*Due to the highly curved frame, corrective lenses are unfortunately not available for this model.*

BR129 - Design: Titanium / Fire & Ice Blue / Yellow

The design of the BR129 has been optimized to suite a large range of individual faces. The curvature of the frame allows one size to fit most. The size of the lenses and the curved shape of the glasses are designed to optimize the protection of the eyes.

Included in delivery: case, headband, and lens cleaning cloth

**Lead equivalent values:**
(weight) Pb 0.50 mm (approx. 55 g) 
Pb 0.75 mm (approx. 65 g)

Additional anti-reflective coating for the lenses available.

*Due to the highly curved frame, corrective lenses are unfortunately not available for this model.*

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**Special features of the BR126 & BR127 & BR128 & BR129**

- Great frame stability through high-grade synthetic materials
- Optimized balance of sturdy, light-weight frame and lenses
- No plasticizers used throughout the entire manufacturing process and low allergy risk due to carefully chosen materials
- Minimized risk of injury due to shape and used components
- Easy cleaning and superior resistance against chemical influences (disinfection)
- Robust and durable finish coating

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"State of the Art Eye Protection"

Special features of the BR126 & BR127 & BR128 & BR129
"The Traditional Series"

**BR115**
X-ray protective glasses with plastic frame in size L. Included in delivery: case, soft headband
- **Lead equivalent value** (weight): Pb 0.75 mm (approx. 110 g)
- Available colour: Black
- Prescription lenses not available with this model

**BR118**
X-ray protective glasses with plastic frame in size M and padded earpieces. Included in delivery: case, soft headband
- **Lead equivalent value** (weight): Pb 0.75 mm (approx. 60 g)
- Available colours: Taupe, Blue, Black
- Prescription lenses available in: single and bifocal

**BR119**
X-ray protective glasses with plastic frame in size M and padded earpieces. Included in delivery: case, soft headband
- **Lead equivalent value** (weight): Pb 0.75 mm (approx. 65 g)
- Available colours: Silver, Black
- Prescription lenses available in: single and bifocal

**BR178**
Economical solution for X-ray protective glasses with a front protection of Pb 0.75 mm. The glasses can be adjusted to fit most head sizes with its flexible head band. The frame is made of an extremely durable plastic that ensures easy cleaning and good resistance to chemicals (disinfectant agents). The BR178 comes with a storage case.
- **Lead equivalent value** (weight): Pb 0.75 mm (approx. 100 g)
- Available colours: White transparent
- Prescription lenses not available with this model

* Please note that the BR178 is not CE/PPE certified.
**BR310**

Plastic frame with a tortoise shell design in attractive brown tones with individually adjustable silicone nose pads. Included in delivery: case, soft headband

- **Lead equivalent value** (weight): Pb 0.75 mm (approx. 90 g)
- Lateral protective lenses in Pb 0.75 mm
- Prescription lenses available in: single and bifocal

**BR321**

Metal frame galvanised in a bronze colour with individually adjustable silicone nose pads. Included in delivery: case, soft headband

- **Lead equivalent value** (weight): Pb 0.75 mm (approx. 65 g)
- Side protection by special plastic shells in Pb 0.50 mm (the insides of the plastic shells are covered with protective material up to the level of the earpieces)
- Prescription lenses available in: single and bifocal

**BR322**

Metal frame galvanised in a gold colour with individually adjustable silicone nose pads. Included in delivery: case, soft headband

- **Lead equivalent value** (weight): Pb 0.75 mm (approx. 70 g)
- Side protection by special plastic shells in Pb 0.50 mm (the insides of the plastic shells are covered with protective material up to the level of the earpieces)
- Prescription lenses available in: single and bifocal

**BR331**

Plastic frame in transparent design contrasted with blue. Included in delivery: case, soft headband

- **Lead equivalent value** (weight): Pb 0.75 mm (approx. 85 g)
- Side protection in Pb 0.50 mm (laterally angled frame; the insides of the plastic shells up are covered with protective material to the level of the earpieces)
- Prescription lenses available in: single and bifocal
## Worldwide Mavig Offices

<table>
<thead>
<tr>
<th>Region</th>
<th>Country</th>
<th>Address</th>
<th>Phone(s)</th>
<th>Fax(es)</th>
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