

Eye Protection against Diagnostic or Therapeutic Radiation



#### MAVIG Through The Years













1921

1960

1972

1985

#### **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.



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

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).

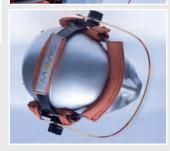
## The quality features of our visors make them ideal for use in the medical environment:

- 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

X-ray tube voltage	Scattered radiation attenuation
50 kV	96.9 %
60 kV	94.4 %
80 kV	86.3 %
100 kV	80.0 %
120 kV	75.0 %







Unfortunately, visors are not availbale with prescription.



### **State of the Art Eye Protection**









BR126 - Design: Cocoa / Light Blue

**BR126 - Design:** Silver Bronze / Orange

Special features of the BR126 model:

- 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

#### **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.

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.









Dimensions:

Width of Frame 140 mm (S/M) 145 mm (L) Lens Height / Lens Width 36 mm / 54 mm (S/M) 36 mm / 58 mm (L) Bridge Width
17 mm (S/M)
16 mm (L)

Temple Length
130 mm (S/M)
130 mm (L)

#### CATARACT RISK



"According to today's knowledge, initial stages of radiation-induced cataracts can occur from a radiation exposure level of 0.5 Gy." 1) 2)

"Regardless of whether the dose occurs acutely or over an extended period, the effect is cumulative, single doses accumulate." 1)

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.

Further information can be found in our separate "Cataract Risk" flyer.

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Radiation-induced cataracts, recommendation of the Radiation Protection Commission with scientific justification [conference]. - Bonn, May 14th, 2009. - 234th edition Session of the Radiation Protection Commission on May 14th, 2009. - P. 9, 18, 21

2) Radiological Protection Ordinance: Ordinance on protection against damage caused by ionising radiation [Ordinance]. - October 2011 - P. 31, 32, 34



### The Traditional Series



BR115 - Colour:

#### **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



#### **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





#### **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









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