EN

BR126

The Best Possible Radiation Protection for the Lens of the Eye

MAVIG

BR126

Optimisation of X-Ray Protection for the Lens of the Eye

The updated radiation protection legislation has lowered the limit of the organ equivalent dose for the lens of the eye, for persons exposed to occupational radiation above the age of 18, from 150 mSv to 20 mSv per calendar year (Radiation Protection Act – StrlSchG, coming into force on 01/10/2017 and 31/12/2018). A significant minimisation of cataract risk is expected from this change in legislation.

Another requirement is to keep radiation exposure as low as reasonably achievable (the ALARA principle), even below the new limit of 20 mSv per calendar year, by taking into account current scientific and technical knowledge.

The use of X-ray protection glasses is an important tool for meeting the legal requirement for reducing the organ equivalent dose.

Efficient radiation protection for the lens of the eye also requires protection from secondary radiation hitting the lens from the side and also from below. It is therefore important that there is more than just frontal protection for the eyes. The size of the shielding for the facial area is also important.

This is why MAVIG has taken these important factors into consideration in the development of its new X-ray protection glasses and has also given its previous models a thorough facelift.

We have therefore redesigned our most popular eye protection model, the BR126, taking into account the new findings on avoiding radiation-induced cataracts.

Below you will find information on the new generation BR126 model series.

Important points with respect to radiation protection for eye lenses

- Ensure proper protective shielding of the lens from secondary radiation hitting from the side or below.
- The greatest possible shielding of the facial area improves radiation protection for the lens of the eye!
- The bottom edge of the protection glasses must be as close as possible to the cheek area!
- Compliance with the new limit values for the organ equivalent dose with respect to the lens of the eye for persons exposed to occupational radiation (over 18 years of age): 20 mSv per calendar year!
- It is recommended that suitable straps are used for a correct fit of the protection glasses for the duration of a procedure!

The BR126 Glasses at a Glance

X-ray Protection Glasses

The first generation BR126 protection glasses were already equipped with adequate side protection. After the facelift, second-generation BR126 glasses have optimized side radiation protection.

Good Fit and Comfort

To ensure that the fit is optimally consistent with one's respective facial geometry, we offer two sizes in this model range. The important performance parameter of a tight seal of the glasses against the cheekbones is perfectly implemented with the curve of the frame.

The soft curves on all the components of the frame provide good, wearable comfort. We have made sure there is a wide contact surface at the nose bridge, which distributes the weight of the protection glasses over a widespread area.

Eyesight Correction

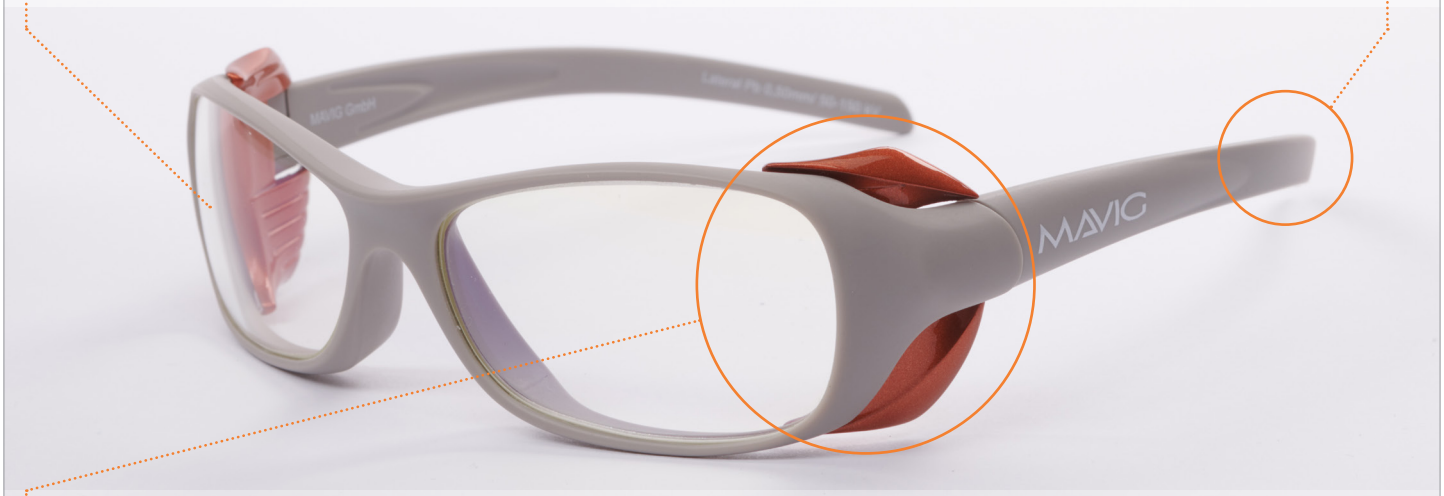
The mineral lead lenses used by us in combination with the special fit of the BR126 allow for the correction of eyesight in the single-vision as well as for bifocal and progressive lenses.

MAVIG lenses are made of the highest quality mineral radiation protection glass. Excellent light transmission of the glasses and perfect transparency are guaranteed.

An anti-reflective coating increases light transmission and provides relaxed vision through the avoidance of disturbing reflections or mirror images. Symptoms of fatigue are reduced and what you need to see is kept in view.

The temple tips have a rounded shape, which ensures that there is no pressure behind the ears. To maintain correct positioning of the protective glasses throughout the entire time of wearing them, we recommend using the strap that is included.

This ensures a secure hold of the X-ray protection glasses on the face even when wearing them over a long period of time.



The BR126 is designed to best protect the user's eyes from scattered radiation from all angles of incidence.

This requirement has been effectively addressed in the design of the glasses by means of large-area X-ray protective glazing and two side radiation protection zones that are closely connected to the front lenses.

Special quality features make the glasses ideal for use in the medical field

- Frame made of high-quality plastic materials with great shape retention
- Complete avoidance of the use of plasticisers in production
- The materials used ensure the greatest possible freedom from allergens
- Easy to clean and a high degree of chemical resistance (disinfectant resistance)
- Standard anti-reflective coating on the lenses
- Sight-correction lenses are available as single-vision, bifocal, and progressive lenses

Technical Data and Specifications

BR126 X-ray protective glasses
(image showing the sandstone/orange design)

BR126 X-ray protective glasses
(image showing the cocoa/light blue design)

BR126

X-ray protective glasses with side radiation protection zones adjacent to the front lenses

Model	**BR126**	**BR126**
Colour design	Sandstone/orange	Cocoa/light blue
Sizes	"Small-medium" and "large"	"Small-medium" and "large"
Lead equivalent value – front protection (50–150 kV)	Pb 0.50 mm or Pb 0.75 mm	Pb 0.50 mm or Pb 0.75 mm
Lead equivalent value – side protection (50–150 kV)	Pb 0.50 mm	Pb 0.50 mm
Weight	Approx. 80 g (Pb 0.50 mm) Approx. 85 g (Pb 0.75 mm)	Approx. 80 g (Pb 0.50 mm) Approx. 85 g (Pb 0.75 mm)
Anti-reflective coating	✓	✓
Glasses strap	✓	✓
Cleaning / disinfection	✓ / ✓	✓ / ✓
Conformity: DIN EN 61331-1:2016 / DIN EN 61331-3:2016	✓ / ✓	✓ / ✓

Width of glasses

140 mm (S/M)
145 mm (L)

Height of glasses / width of glasses

36 mm / 55 mm (S/M)
36 mm / 58 mm (L)

Bridge width

15 mm (S/M)
16 mm (L)

Temple length

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

MAVIG - Article Numbers	**BR126** Sandstone/Orange		**BR126** Cocoa/Light Blue	
small-medium / Pb 0.50 mm	Plano:	BR126SM5S-arc	Plano:	BR126SM5C-arc
small-medium / Pb 0.75 mm	Plano:	BR126SM7S-arc	Plano:	BR126SM7C-arc
small-medium / Pb 0.50 mm	Single:	BR126SM5S-arc-presc-S	Single:	BR126SM5C-arc-presc-S
small-medium / Pb 0.75 mm	Single:	BR126SM7S-arc-presc-S	Single:	BR126SM7C-arc-presc-S
small-medium / Pb 0.50 mm	Bifocal:	BR126SM5S-arc-presc-B	Bifocal:	BR126SM5C-arc-presc-B
small-medium / Pb 0.75 mm	Bifocal:	BR126SM7S-arc-presc-B	Bifocal:	BR126SM7C-arc-presc-B
small-medium / Pb 0.50 mm	Progressive:	BR126SM5S-arc-presc-P	Progressive:	BR126SM5C-arc-presc-P
small-medium / Pb 0.75 mm	Progressive:	BR126SM7S-arc-presc-P	Progressive:	BR126SM7C-arc-presc-P
large / Pb 0.50 mm	Plano:	BR126L5S-arc	Plano:	BR126L5C-arc
large / Pb 0.75 mm	Plano:	BR126L7S-arc	Plano:	BR126L7C-arc
large / Pb 0.50 mm	Single:	BR126L5S-arc-presc-S	Single:	BR126L5C-arc-presc-S
large / Pb 0.75 mm	Single:	BR126L7S-arc-presc-S	Single:	BR126L7C-arc-presc-S
large / Pb 0.50 mm	Bifocal:	BR126L5S-arc-presc-B	Bifocal:	BR126L5C-arc-presc-B
large / Pb 0.75 mm	Bifocal:	BR126L7S-arc-presc-B	Bifocal:	BR126L7C-arc-presc-B
large / Pb 0.50 mm	Progressive:	BR126L5S-arc-presc-P	Progressive:	BR126L5C-arc-presc-P
large / Pb 0.75 mm	Progressive:	BR126L7S-arc-presc-P	Progressive:	BR126L7C-arc-presc-P

MAVIG GmbH

Stahlgruberring 5
81829 Munich
Germany E-mail

Phone +49 (0) 89 420 96 0
Fax +49 (0) 89 420 96 200
info@mavig.com

www.mavig.com

Flyer_BR126_en_0520-1 / Printed in Germany