Instructions for use Rodenstock Single vision lenses
For opticians

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Instructions for use Rodenstock Single vision lenses
For opticians

When selling medical products, the adapter, hereinafter referred to as the optician, is obliged to inform the end user, hereinafter referred to as the spectacle wearer, about restrictions of use, preferably in writing.
Convince with your professional competence by informing your customer about relevant restrictions of use during your individual and personal consultation.
You can find important information on Rodenstock lenses at any time at
https://www.rodenstock.de/de/de/instructions-for-use.html

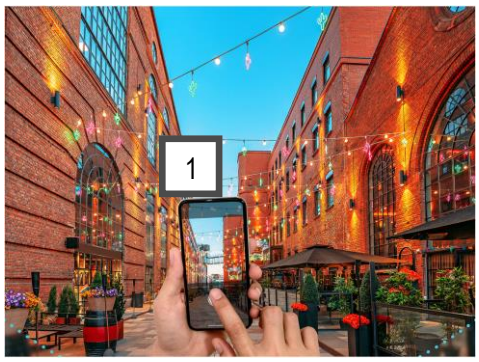
1 Intended use

1.1 Purpose & target group

- Single vision lenses are spectacle lenses used to correct customer-specific refractive errors such as hyperopia (long-sightedness), myopia (short-sightedness), astigmatism and positional defects of the eyes or age-specific presbyopia.
  In addition, solutions for special problems (e.g. aniseikonia) can be offered.
- Single vision lenses offer spectacle wearers a wide vision area.
- Single vision lenses enable the spectacle wearer to see sharply at least one distance, depending on their accommodation capacity.
- Usually single vision lenses are used for correction of far vision. Depending on the wearer's ability to accommodate, they can use single vision lenses for correction of far vision to see sharply at all distances up to near vision by using their accommodation.
- If presbyopic spectacle wearers use single vision lenses for far vision, they need additional glasses for near vision, as their accommodation capacity is not sufficient for sharp vision at near distances with far vision lenses. With near vision lenses, the spectacle wearer can see sharply in a limited near area, but not at far distances.

1.2 Design of single vision lenses

1 **Vision area for one distance, e.g. far vision**
One single power over the entire lens. Sharp vision for one single distance, e.g. the distance (depending on the accommodation ability also up to the near).



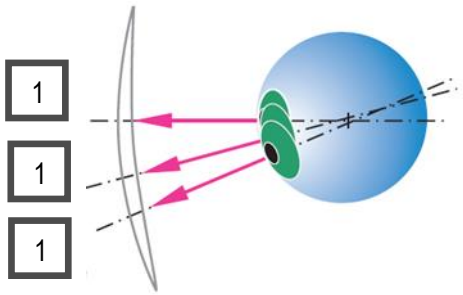


Figure 1: *Schematic structure of a single vision lens* ***Figure 2****: Vertical deflection of view when looking through a single vision lens*

1.3 Further information

- For the B.I.G. Exact and B.I.G. Norm single vision lenses, the distance refraction is the basis of the calculation.
- If the single vision lenses are to be used, e.g. in half-glasses, the influence of the larger cornea vertex distance (CVD) on the refraction data must be taken into account.
- Single vision lenses are optimised for the following wearing situations (variable tilt situation depending on e.g. base curve, frame, centre thickness reduction, individual parameters):
  Possible ranges of values for single vision lenses with individual parameters that can be ordered:
  cornea vertex distance (CVD): 5 - 30 mm,
  pupil distance (PD): 20 - 40 mm,
  face form angle (FFA): -5° - 15°
  pantoscopic tilt (PT): -5 – 20°
  Single vision lenses with orderable PD:
  pupil distance (PD): 20 - 40 mm,
  For products where the individual parameters cannot be ordered, Rodenstock recommends adjusting the frame for a face form angle of approx. 5°, pantoscopic tilt of approx. 8° (for spectacle lenses fitted according to the reference point requirement) and cornea vertex distance of approx. 13 mm.
  Conventional single vision lenses are calculated for a fixed tilt situation and "central" centring.
- Single vision lenses meet the criteria for roadworthiness prescribed by EN ISO 14889 and 8980-3:2013. They are therefore suitable for road use and driving in traffic and operating machinery.
- The satisfaction guarantee for Rodenstock single vision lenses is only valid for the described intended use and with proper application.

2 Restrictions of use & foreseeable misuse

- Single vision lenses used in reading glasses are not suitable for road use and driving in traffic.
- Special single vision sports lenses are recommended for higher curved spectacle frames with higher face form angles.
- For presbyopes, single vision lenses are only suitable for vision at one distance. For best vision at all distances, progressive lenses are more suitable.
- The points mentioned for restrictions of use and foreseeable misuse are only examples and do not claim to be complete. Reference is made to the contents of the chapter "Intended use" and "Correct use".

3 Correct use

- For the selection of the correct type of single vision lens and correct centring, it is essential that the frame is anatomically fitted to the wearer's face. The individual parameters of the wearing situation (pupil distance, corneal vertex distance, partly pantoscopic tilt and face form angle) should be measured and the appropriate single vision lens selected. In order to maintain the full optical performance of the lens, the wearing situation must not be changed afterwards by the optician or spectacle wearer.

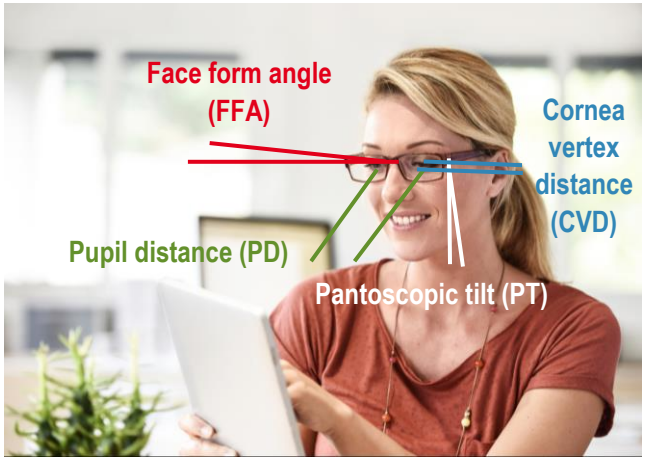


Figure 3: *Individual parameters of the wearing situation*

- All B.I.G. Exact and B.I.G. Norm single vision lenses are to be centred in such a way that the centring point coincides with the centre of the pupil in habitual head and body posture and zero viewing direction.
- All Standard single vision lenses must be centred so that the optical axis of the lens passes through the eye rotation point Z' (eye rotation point requirement).
- The lenses must be fitted according to the specified centring specifications and the resulting spectacles must correspond to the order parameters, so that the respective calculations are optimally applied.
- If single vision lenses which are designed for use at a distance (especially with higher plus power) are used in near spectacles, please note that due to the changed beam path and the geometry of the lens, a correction value must be taken into account in addition to the prescription value when ordering: Order value = prescription value + correction value.
- Single vision lenses are checked in accordance with ISO 8980-1 before delivery to the optician at the reference point to ensure that they are within tolerance. If the measured values of the lens at the distance reference point correspond to the verification values on the lens bag, taking into account the tolerance, the single vision lens is perfect for the wearing situation.
- All single vision lenses are provided with permanent markings (engravings). These serve to identify the manufacturer and, in some cases, the type of lens, as well as to reconstruct the reference point distance. Conventional single vision lenses are provided with engravings in addition to the manufacturer's engraving if it is a prismatic lens, a lens with gradient colours or a glazing order.
  The engravings are usually only visible when the lens is held against the light at a light-dark edge.
- All B.I.G. Exact and B.I.G. Norm single vision lenses are stamped and engraved, Standard single vision lenses only in the following exceptional cases: prismatic lenses, gradient colours and glazing orders.
- Single and repeat orders of single vision lenses are always possible. When ordering single lenses, it is strongly recommended to know the values of the counter lens and to include them in the order so that they can be taken into account in the calculation. The pairing of different lens types is a custom-made product. Please note that the base curves, colours and anti-reflective coatings, for example, are not matched.

- Further information on single vision lenses, such as the correct selection of the required product, depending on the requirement profile of the wearer, can be found in the current Rodenstock consultation programme and Rodenstock Tips & Technology Lenses.

4 Risks & side effects

- There are no particular risks and side effects with single vision lenses.

For further information see also “Instructions for use Rodenstock general”.

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