Bifocal Microscopes

General
Bifocal Microscopes are microscopic lens systems designed to be used in bifocal form, and they come in powers ranging from 2X (+8.00 diopters) to 10X (+40.00 diopters). Composed of a doublet lens system, Type I in design, they are mounted low in the carrier lens and function in the same manner as a flat-top bifocal. Two styles are available:

- Type E Segment: 13 x 23 mm
- Type R Segment: 19 x 25 mm

These Bifocal Microscopes are ideal for people who must be constantly alternating between distance and near vision, e.g., students, business people, etc.

The patient’s distance prescription can be incorporated into the system, as well as a tint for light sensitive patients.

Fitting
Bifocal Microscopes are fit in the same manner as standard bifocals, with some restrictions. They can be set at the patient’s near P.D. within the physical limitations of the frames’s eye wire, although this is not recommended for the higher powers because of the short working distance. There is also a minimum segment height: 15 mm for the Type E system, and 22 mm for the Type R system. For optimal results, however, the bifocal should be set as high as possible, even as high as one would set a trifocal segment – especially on the higher powers. This, along with increasing the pantoscopic angle of the frame, will allow you to position the segment in such a manner that the system’s optical axis is very close to, if not coincident with, the patient’s visual axis, i.e., when the patient reads through the bifocal microscope, he should be looking perpendicularly through the center of the system, or as close to it as possible.

Please see our Microscope Frame Selection Guide for available frames.

Powers Available
- Type E Segment: 2X - 10X
- Type R Segment: 2X - 10X
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Two Type E Bifocal Microscopes mounted in the Yeoman 6 frame

Two Type R Bifocal Microscopes mounted in the Yeoman 6 frame

Type E Bifocal Microscope (in carrier lens)  
2X - 10X

Type R Bifocal Microscope (in carrier lens)  
2X - 10X

Minimum SEG HT 15 mm

Minimum SEG HT 22 mm