



Trial Lens Set

Part Number: 449300 and 592000



449300 Trial Lens Set



592000 Trial Lens Set

Trial lens set is a kind of ophthalmology calculating apparatus, used by hospital ophthalmology and glasses shop to examine people's dioptric situation: hyperopia, myopia, presbyopia, astigmatism, strabismus or color blindness.

It mainly consists of positive or negative sphere lens, positive or negative cylinder lens, prism lens and accessory lens, etc.

Disinfection: clean the lenses with alcohol or ether once a month.

Maintenance

The trial lens set has passed the quality test and should be taken good care of, prevent it from being scratched when it is used, keep it clean and dry by wiping it with soft cloth after using.

Using instruction:

Sphere Lens

The curved surface forms a part of the spherical lens and the dioptric power on all axes position is the same. After passing the lens, the light beam focuses in one point (or a virtual focus). Spherical lens includes concave lens (-) and convex lens (+), which are used to correct myopia, hyperopia and presbyopia.

Cylinder Lens

The curved surface forms a part of cylinder lens and the dioptric power on all axes positions is not the same. After passing the lens, the light beam focuses into a straight line (or a broken line). Cylindrical lens consists of concave cylindrical lens and convex cylindrical lens that are used to correct astigmatism.

Prism Lens

The tangent plain of prismatic lens shows cuneiform. After passing the lens, the light beam bends to the bottom and the object shifts to edges. This kind of lens is used to examine and correct strabismus or latent strabismus as well as to train eye-muscle.

Black Lens

This is a kind of opaque lens for covering the unexamined eye of the examinee in a dark room.

Cross Lens

There are two mutual vertical lines on the plane lens, used for looking for the pupil's centre and measuring interocular distance.

Frosted Lens

This is a kind of half-transparent cover lens which mainly replaces black lens for baby or outdoor activity.

Slit Lens

In its centre, there is a slit, through which light beam can pass while it can not pass the other part of the lens. By turning this lens in front of the eye, astigmatism can be examined as your vision changes in better or in worse at a certain axis position, on the contrary, it proves no existence of astigmatism if your vision has changed.

Plane Lens

This is a kind of transparent plane lens and the light beam never bends when it passes the lens. It is used to examine false blindness, etc.

Color Lens

This kind of lens has different colors: red green blue yellow and dark brown and is used to examine color sensitivity. To such person whose dioptric image is muddy (eg. a patient with cataract), the red or green lens is suitable. It also can be used for recovery-vision inspection and examination of color blindness.

Cross Cylinder Lens

This is a kind of lens with contrary dioptric in two axis position and used to examine the degree and axis position of the cylindrical lens for determining astigmatism. When using, put the cross cylinder lens before cylindrical lens and make its one axis coincide with the axis position of cylindrical lens, then turn the cross cylinder lens 90° counter-clockwise and see the change of vision. If his vision has no change, the degree of cylindrical lens used can be considered as suitable, otherwise, the degree of cylindrical lens would be adjusted according to the variant results. In correcting the axis position, respectively put the two axes of cross cylinder lens at the right side (45°) and the left side (45°) of primary test axis of cylindrical lens, then turn it counter-clockwise and see differences



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of vision at two positions. If vision on one position is better than that on another position, the axis of cylindrical lens can be slightly turned in the direction of position mark of the better one, then test again by the used above, until difference of vision at two positions can hardly be distinguished, thus proving that the cylindrical lens is the correct position.

Maddox Lens

Maddox lens is a ribbed lens, made of a row of glass rods which converts a light spot into a streak, the streak is seen by the patient who is 90° away from the axis of glass rods, Maddox lens is used to measure the strength of eye muscle and for examination of latent strabismus and real strabismus. Put the Maddox lens in front of one eye, tell the patient to watch with both eyes, a light spot he watches with his bare eye is just on the line formed by the Maddox lens, the patient has neither strabismus nor latent strabismus, otherwise he has one of them, if the light spot is on either side of the

vertical line, he has horizontal strabismus, if the light spot is above or below the horizontal line, he has vertical strabismus. Then the strabismus can be cured by using a prism lens, which makes the light spot coincide with the line. The strength of the prism indicates the degree of latent or real strabismus in prism diopters.

Pinhole Lens

In its center, there is a small hole, through which light beam passes to form artificial pupil and it is used to improve diopter especially the astigmatism after wearing it.

Polariscope Lens

135° lens is used to inspect visual function, balance both eyes, and mix function.

45° lens is used to inspect latent strabismus, stereoscopic vision, unequal vision and so on.

Lenses Contained in Kits

Sphere Lens								Cylinder Lens				Prism Lens		Accessory Lens	
Convex (+)				Concave (-)				Convex (+)		Concave (-)		list	pcs	specification	pcs
list	pcs	list	pcs	list	pcs	list	pcs	list	pcs	list	pcs				
0.25	2	5.25	2	0.25	2	5.25	2	0.25	2	0.25	2	0.5	2	red	1
0.50	2	5.50	2	0.50	2	5.50	2	0.50	2	0.50	7	1.0	1	green	1
0.75	2	5.75	2	0.75	2	5.75	2	0.75	2	0.75	2	2.0	1	black	1
1.00	2	6.00	2	1.00	2	6.00	2	1.00	2	1.00	2	3.0	1	plane	2
1.25	2	6.50	2	1.25	2	6.50	2	1.25	2	1.25	2	4.0	1	maddox	2
1.50	2	7.00	2	1.50	2	7.00	2	1.50	2	1.50	2	5.0	1	slit	1
1.75	2	7.50	2	1.75	2	7.50	2	1.75	2	1.75	2	6.0	1	polar scope	1
2.00	2	8.00	2	2.00	2	8.00	2	2.00	2	2.00	2	7.0	1	cross	2
2.25	2	8.50	2	2.25	2	8.50	2	2.25	2	2.25	2	8.0	1	frosted	1
2.50	2	9.00	2	2.50	2	9.00	2	2.50	2	2.50	2	9.0	1	pinhole	2
2.75	2	9.50	2	2.75	2	9.50	2	2.75	2	2.75	2	10.0	1		
3.00	2	10.00	2	3.00	2	10.00	2	3.00	2	3.00	2				
3.25	2	11.00	2	3.25	2	11.00	2	3.25	2	3.25	2				
3.50	2	12.00	2	3.50	2	12.00	2	3.50	2	3.50	2				
3.75	2	13.00	2	3.75	2	13.00	2	3.75	2	3.75	2				
4.00	2	14.00	2	4.00	2	14.00	2	4.00	2	4.00	2				
4.25	2	15.00	2	4.25	2	15.00	2	4.50	2	4.50	2				
4.50	2	16.00	2	4.50	2	16.00	2	5.00	2	5.00	2				
4.75	2	18.00	2	4.75	2	18.00	2	5.50	2	5.50	2				
5.00	2	20.00	2	5.00	2	20.00	2	6.00	2	6.00	2				