OCULUS | Refraction

Trial frames,
Lens cases (BK series)

OCULUS®

Universal Trial Frames

The tool of the trade for every refraction professional
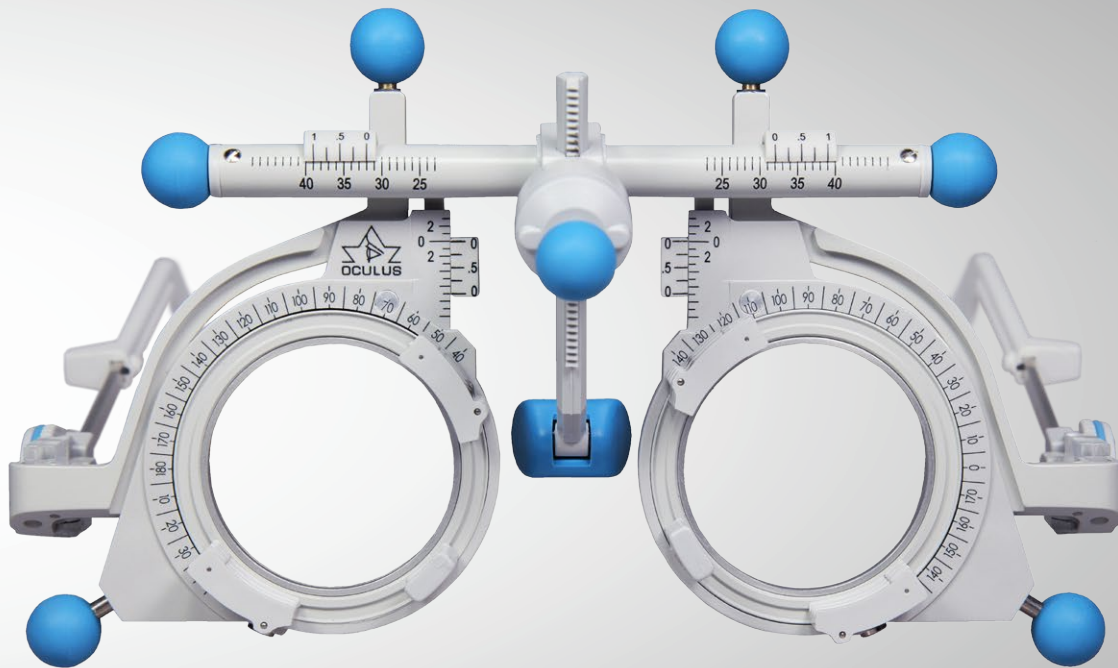

OCULUS UB 6

Highlights

- Six slots for each side: four in front, two behind
- 2.5° gradation for easy legibility
- PD adjustment R/L: 46–80 mm
- Parallax-free reading of the vertex distance (VD)
- Flexible double earpieces for perfect fit
- Anatomically designed nose piece for more comfort
- Height- and depth adjustable nose bridge
- Delivery content includes three additional nose pieces
- Improved thumb wheel for inclination adjustment
- Adjustable arm length
- Made of light metal/plastic
- Featuring a new design

|	
42600	**Universal Trial Frame UB 6**
42680	**Polarizing filter linear for UB 6 (45°/135°)**, pivotable and rotatable (V-/A position), large viewing area for distance and near vision, full rim, easy fitting with mounting clips
42681	**Polarizing filter circular for UB 6**, pivotable, large viewing area for distance and near vision, full rim, easy fitting with mounting clips

OCULUS UB 4 höhenverstellbar*

Highlights

- Five slots for each side: three in front, two behind
- 5° gradation for easy legibility
- Exact centering by horizontal and vertical adjustment of the lens holder
- Height adjustment +/- 4 mm
- Reading accuracy with vernier scale: 0.25 mm
- PD adjustment range R/L: 48-80 mm
- Parallax-free reading of the set vertex distance (VD)
- Flexible bendable ear pieces
- Anatomically shaped nose piece
- Height- and depth adjustable nose bridge
- Delivery content includes two additional nose pieces and attractive wooden box
- Thumb wheel for inclination adjustment
- Adjustable arm length
- Made of light metal/plastic

42503	**Universal Trial Frame UB 4 höhenverstellbar***
45886	**Polarizing filter linear for UB 4 (45°/135°)**, pivotable and rotatable (V-/A position), large viewing area for distance and near vision, full rim, for lateral mount
45881	**Polarizing filter linear for UB 4 (90°/180°)**, pivotable and rotatable, click into place for height adjustment for distance or near examination, semi-rimless, for lateral mount
45883	**Polarizing filter circular for UB 4**, pivotable, large viewing area for distance and near vision, full rim, for lateral mount
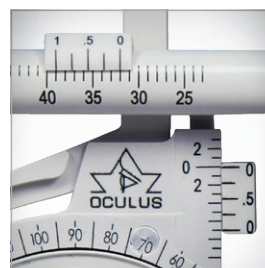
*höhenverstellbar [ˈhøːənfɐɡˈʃtɛlbaːr] = height-adjustable

Universal Trial Frames

The tool of the trade for every refraction professional

OCULUS UB 4

Highlights

- Five slots for each side: three in front, two behind
- 5° gradation for easy legibility
- PD adjustment R/L: 46-80 mm
- Parallax-free reading of the set vertex distance (VD)
- Flexible bendable ear pieces
- Anatomically shaped nose piece
- Height- and depth adjustable nose bridge
- Delivery content includes two additional nose pieces
- Thumb wheel for inclination adjustment
- Adjustable arm length
- Made of light metal/plastic

42500	**Universal Trial Frame UB 4**
45886	**Polarizing filter linear for UB 4 (45°/135°)**, pivotable and rotatable (V-/A position), large viewing area for distance and near vision, full rim, for lateral mount
45881	**Polarizing filter linear for UB 4 (90°/180°)**, pivotable and rotatable, click into place for height adjustment for distance or near examination, semi-rimless, for lateral mount
45883	**Polarizing filter circular for UB 4**, pivotable, large viewing area for distance and near vision, full rim, for lateral mount

OCULUS UB 3

Highlights

- Five slots for each side: three in front, two behind
- 5° gradation for easy legibility
- PD adjustment R/L: 48-80 mm
- Parallax-free reading of the set vertex distance (VD)
- Anatomically shaped ear pieces
- Height- and depth adjustable nose bridge
- Thumb wheel for inclination adjustment
- Adjustable arm length
- Made of light metal/plastic

42180	**Universal Trial Frame UB 3**
45851	**Slip-on rotary polarizer linear (by Hegener)**

Half-eye Trial Frames

Approved half-eye frames for small heads and children

42580

Half-eye Trial Frames

Highlights

- Three slots for each side
- 5° gradation for easy legibility
- PD adjustment R/L: 59-67 mm
- Anatomically shaped ear pieces
- Adjustable arm length
- Fixed nose bridge
- Made of light metal/plastic

42580	**Half-eye Trial Frame**
42588	Half-eye Trial Frame same as 42580, with adjustable nose bridge

42488

Half-eye Trial Frames for small heads and children

Highlights

- Three slots for each side
- 5° gradation for easy legibility
- PD adjustment R/L: 54-58 mm
- Anatomically shaped ear pieces
- Adjustable arm length
- Fixed nose bridge
- Made of light metal/plastic

42480	**Half-eye Trial Frames for small heads and children**
42488	Half-eye Trial Frame for small heads and children same as 42480, with adjustable nose bridge

38 mm
21 mm
DIN EN ISO 9801
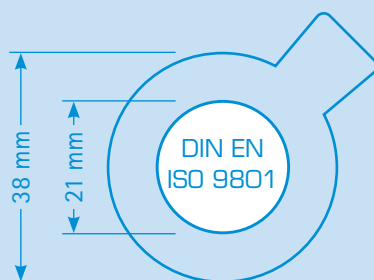
Note

All half-rim and full-rim trial frames are suitable for trial lenses conforming to **DIN EN ISO 9801** with a rim diameter of 38 mm, e.g. an OCULUS "tl" trial lens

Trial Lens Coating

- Super-broadband antireflection coating with residual green reflection
- Hard coating: quartz-titanium coating for optimal resistance and longevity

Trial Lens Cases (BK Series)

Unsurpassed quality made by OCULUS

OCULUS BK 1/T

- Large-set trial lens case in table version containing 228 trial lenses
- 35 pairs each +/- sph 0.12 to 20 D
- 17 pairs each +/- cyl 0.25 to 6 D
- 10 prism trial lenses
- 10 special lenses:
  1 coloured lens red, 1 coloured lens green, 2 cross hair (centering cross), 1 occluder, 1 plano lens, 1 pinhole disc (1.25 mm), 1 stenopaic slit (1.25 mm), 1 Maddox cylinder red, 1 frosted lens

33180	**Trial Lens Case BK 1/T,** table version in grey-white with roll top
331801	Same as 33180, coated
33181	Same as 33180, without convex cylinders
331811	Same as 33181, coated
33184	Trial Lens Case BK 1/T, without trial lenses, with lens tray

Trial Lens Sets BK 1

33182	Trial Lens Set BK 1, without lens tray, without case
331821	Same as 331821, coated
33183	Same as 33182, without convex cylinder
331831	Same as 33183, coated
33185	Lens tray for BK 1

OCULUS BK 1/W

- Large-set trial lens case in wall version containing 228 trial lenses
- 35 pairs each +/- sph 0.12 to 20 D
- 17 pairs each +/- cyl 0.25 to 6 D
- 10 prism trial lenses
- 10 special lenses:
  1 coloured lens red, 1 coloured lens green, 2 cross hair (centering cross), 1 occluder, 1 plano lens, 1 pinhole disc (1.25 mm), 1 stenopaic slit (1.25 mm), 1 Maddox cylinder red, 1 frosted lens

33280	**Trial Lens Case BK 1/W,** wall version in grey-white with roll top
332801	Same as 33280, coated
33281	Same as 33280, without convex cylinders
332811	Same as 33281, coated
33284	Trial Lens Case BK 1/W, without trial lenses, with lens tray

OCULUS BK 1 SE

- Large-set trial lens case in optionally table or wall version containing 240 trial lenses
- All trial lenses coated
- 37 pairs each +/- sph 0.12 to 20 D
- 18 pairs each - cyl 0.25 to 6 D
- 12 pairs prism trial lenses
- 11 pairs of near-vision addition trial lenses (+ sph 0.5 to 3.0 D)
- 10 special lenses:
  1 coloured lens red, 1 coloured lens green, 2 cross hair (centering cross), 1 occluder, 1 plano lens, 1 pinhole disc (1.25 mm), 1 stenopaic slit (1.25 mm), 1 Maddox cylinder red, 1 frosted lens

331871	**Trial Lens Case BK 1 SE/T,** table version in dark grey with roll top, coated trial lenses
33187	Trial Lens Case BK 1 SE/T, without trial lenses, with lens tray
332861	**Trial Lens Case BK 1 SE/W,** wall version in dark grey with roll top, coated trial lenses
33188	Trial Lens Case BK 1 SE/W, without trial lenses, with lens tray

Trial Lens Set BK 1 SE

331881	Trial Lens Set BK 1 SE, coated, without lens tray, without case
33186	Lens tray for BK 1 SE

OCULUS BK X/O

- All-in trial lens case (according to Kochniss) in table version containing 422 trial lenses
- All trial lenses coated
- 45 pairs each +/- sph 0.25 to 20 D
- 60 pairs each - cyl 0.25 to 6 D
- 44 pairs prism trial lenses
- 11 pairs of near-vision addition trial lenses (+ sph 0.5 to 3.0 D)
- 6 special lenses:
  1 occluder, 2 plano lenses, 2 pinhole discs (1.25 / 2.0 mm), 1 frosted lens
- 1x +/- sph 0.25 D, 1x +/- sph 0.5 D, 2x + sph 0.37 D

33101	**Trial Lens Case BK X/O,** table version in grey-white with roll top, without convex cylinders, coated trial lenses
33104	Trial Lens Case BK X/O without trial lenses, with lens tray

Trial Lens Set BK X/O

33103	Trial Lens Set X/O, without convex cylinders, without lens tray, without case

Trial Lens Cases (BK Series)

Unsurpassed quality made by OCULUS

OCULUS BK 2

- Practical wooden trial lens case containing 130 trial lenses
- 20 pairs each +/- sph 0.25 to 12 D
- 10 pairs each +/- cyl 0.25 to 3 D
- 5 prism trial lenses
- 5 special lenses:
  1 coloured lens red, 1 coloured lens green,
  1 occluder, 1 pinhole disc (1.25 mm),
  1 Maddox cylinder red

33480	**Trial Lens Case BK 2,** beechwood case with lens tray and handle
334801	Same as 33480, coated
33481	Same as 33480, without convex cylinder
334811	Same as 33481, coated
33484	Trial Lens Case BK 2, without trial lenses, with lens tray

Trial Lens Sets BK 2

33482	Trial Lens Set BK 2, without lens tray, without case
334821	Same as 33482, coated
33483	Same as 33482, without convex cylinder
334831	Same as 33483, coated
33485	Lens tray for BK 2

OCULUS Prism Lens Case

- Practical wooden trial lens case containing 72 prismatic trial lenses
- All trial lenses coated
- 36 pairs prism trial lenses

33106	**Prism Lens Case,** beechwood case with lens tray and handle, with coated trial lenses
33109	Prism Lens Case, without trial lenses, with lens tray

Prism Lens Set

33107	Prism Lens Set, coated, without lens tray, without case
33108	Lens tray for prism lens set

Refraction Accessories

36730

36720

36730	**Vario cross cylinder** (by Reiner), with effect changes +/– cyl 0.25 D and 0.50 D, coated
36710	**Jackson cross cylinder,** +/– cyl 0.12 D, coated
36720	**Jackson cross cylinder,** +/– cyl 0.25 D, coated
36740	**Jackson cross cylinder,** +/– cyl 0.50 D, coated
36780	**Jackson cross cylinder,** +/– cyl 1.00 D, coated

36620

36600

36610	**Spherical balance lenses with handle**, +/– sph 0.12 D, coated
36620	**Spherical balance lenses with handle**, +/– sph 0.25 D, coated
36640	**Spherical balance lenses with handle**, +/– sph 0.50 D, coated
36600	**Refraction bar**, +/– sph 0.25 und 0.50 D
36605	**Refraction bar**, +/– sph 0.25 und 0.50 D, coated

49700
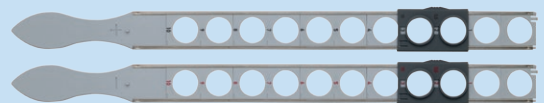
48110

49700	**Retinoscopy mirror**, ø 45 mm
48110	**Retinoscopy bars** with slider (by Trousseau)

OCULUS Trial Lens Case BK F

- Practical add-on case containing 12 trial lenses for spherical and cylindrical fine adjustment
- All trial lenses coated
- 1 pair each +/- sph 0.12 D
- 4 pairs each cyl 0.12 D

33120	**Trial Lens Case BK F,** beechwood case with lens tray, with coated trial lenses

Pair of Polarizing Filters Circular

34085	**Polarizing filters circular tl**

Trial Lens Cases

Overview of trial lenses contained in each Trial Lens Case
(not including special lenses)

spherical convex

	0.12	0.25	0.37	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50
OCULUS BK 1																								
OCULUS BK 1 SE																								
OCULUS BK X/O																								
OCULUS BK 2																								
OCULUS BK F																								
OCULUS Prism Lens Case																								

cylindrical convex (+) axis position 90° [D]

	0.12	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.50	4.00	4.50	5.00	6.00
OCULUS BK 1																		
OCULUS BK 1 SE																		
OCULUS BK X/O																		
OCULUS BK 2																		
OCULUS BK F																		
OCULUS Prism Lens Case																		

cylindrical con[vex]

	0.12	0.25	0.50	0.75	1.00	1.25	1.50	1.75
OCULUS BK 1								
OCULUS BK 1 SE								
OCULUS BK X/O								
OCULUS BK 2								
OCULUS BK F								
OCULUS Prism Lens Case								

prismatic base position 0° [PD]

	0.50	1.00	2.00	3.00	4.00	5.00	6.00	8.00	10.00	12.00
OCULUS BK 1										
OCULUS BK 1 SE										
OCULUS BK X/O										
OCULUS BK 2										
OCULUS BK F										
OCULUS Prism Lens Case										

prismatic base position 13[5°]

	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.50	3.00	3.50	4.00	5.00
OCULUS BK 1													
OCULUS BK 1 SE													
OCULUS BK X/O													
OCULUS BK 2													
OCULUS BK F													
OCULUS Prism Lens Case													

spherical convex (+) [D]

5.75	6.00	6.25	6.50	6.75	7.00	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00	11.50	12.00	12.50	13.00	14.00	15.00	16.00	18.00	20.00

0.12	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00

cylindrical concave (-) axis position 90° [D]

2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.50	5.00	5.50	6.00

cylindrical concave (-) axis position 0° [D]

0.12	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.50	5.00	5.50	6.00

cylindri...

0.12	0.25	0.50	0.75	1.00	1.25

...5° [PD]

6.00	7.00	8.00	10.00	12.00	15.00	20.00

prismatic base position 45° [PD]

0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.50	3.00	3.50	4.00	5.00	6.00	7.00	8.00	10.00	12.00	15.00	20.00

prismatic...

0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00

spherical concave (-) [D]

3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00	11.50	12.00	12.50	13.00	14.00	15.00	16.00	18.00	20.00

cylindrical concave (-) axis position 45° [D]

1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.50	5.00	5.50	6.00

cylindrical concave (-) axis position 135° [D]

0.12	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.50	5.00	5.50	6.00

prismatic base position 315° [PD]

2.50	3.00	3.50	4.00	5.00	6.00	7.00	8.00	10.00	12.00	15.00	20.00

prismatic base position 225° [PD]

0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.50	3.00	3.50	4.00	5.00	6.00	7.00	8.00	10.00	12.00	15.00	20.00

OCULUS Trial Lenses

Clever detail solutions that make sense

Tab with aperture and reading mark for precise alignment

Clear colour coding of concave and convex trial lenses

Clear indication of the axis position of cylindrical lenses

*Clear indication of the base position of prism trial lenses*

Occluder with PD Meter

and addtional features

- For the cover test
- For visual acuity testing with Tumbling E optotype for testing at 40 cm distance and numerals for testing at 70 cm distance
- For measuring monocular and binocular pupillary distance
- For determining the near point of accommodation using Duane's test image
- For measuring pupil and corneal diameter
- As a fixation target (fixation star)
- Includes a ruler for measuring palpebral fissure width
- Material: resistant, nonabrasive polystyrene
- Dimensions (W x D x H):
  approx. 220 x 60 x 2 mm (8.66 x 2.36 x 0.08 in)

The inscriptions are in German and English.

35100	Occluder with PD Meter
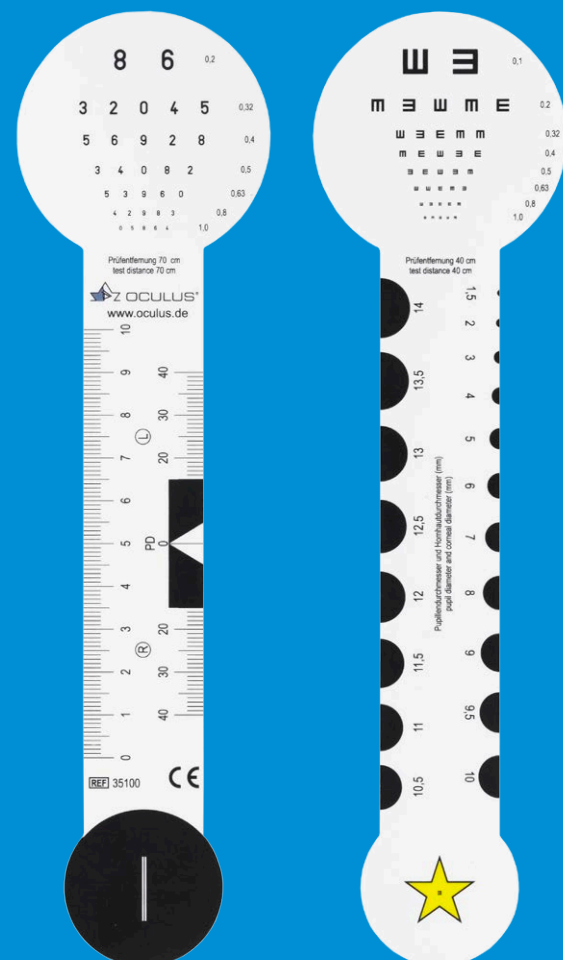
Technical Data
Trial Lens Sets & Trial Frames

BK 1	
Dimensions (W x D x H)	Table version: 578 x 475 x 155 mm (22.8 x 18.7 x 6.1 in) Wall version: 578 x 155 x 475 mm (22.8 x 6.1 x 18.7 in)
Weight	approx. 7.5 kg (16.5 lbs)
BK 1 SE	
Dimensions (W x D x H)	Table version: 578 x 475 x 155 mm (22.8 x 18.7 x 6.1 in) Wall version: 578 x 155 x 475 mm (22.8 x 6.1 x 18.7 in)
Weight	approx. 7.5 kg (16.5 lbs)
BK X/O	
Dimensions (W x D x H)	595 x 485 x 390 mm (23.4 x 19.1 x 15.4 in)
Weight	approx. 19.8 kg (43.6 lbs)
BK 2	
Dimensions (W x D x H)	378 x 255 x 55 mm (14.9 x 10 x 2.2 in)
Weight	approx. 2 kg (4.4 lbs)
Prism Lens Case	
Dimensions (W x D x H)	378 x 255 x 55 mm (14.9 x 10 x 2.2 in)
Weight	approx. 2 kg (4.4 lbs)
BK F	
Dimensions (W x D x H)	137 x 79 x 59 mm (5.4 x 3.1 x 2.3 in)
Weight	approx. 344 g (12.13 oz)
Lens tray – Dimensions (W x D x H)*	
BK 1	545 x 401 x 36 mm (21.5 x 15.8 x 1.4 in)
BK 1 SE	545 x 401 x 36 mm (21.5 x 15.8 x 1.4 in)
BK 2	357 x 234 x 23 mm (14.1 x 9.2 x 0.9 in)
Prism Lens Set	357 x 234 x 23 mm (14.1 x 9.2 x 0.9 in)

* Note: A drawer for keeping the lens tray requires a minimum height of 60 mm (2.36 in).

Trial Frames	Weight	PD adjustment range	Arm length
UB 6	60.2 g (2.12 oz)	46 – 80 mm	92 – 130 mm (3.6 x 5.1 in)
↳ Polarizing filter linear (45°/135°)	11.6 g (0.41 oz)		
↳ Polarizing filter circular	10.9 g (0.38 oz)		
UB 4 höhenverstellbar	72.0 g (2.54 oz)	48 – 80 mm	88 – 124 mm (3.5 x 4.9 in)
UB 4	62.8 g (2.21 oz)	46 – 80 mm	88 – 124 mm (3.5 x 4.9 in)
↳ Polarizing filter linear (45°/135°) or (90°/180°)	11.9 g (0.42 oz)		
↳ Polarizing filter circular	12.5 g (0.44 oz)		
UB 3	58.0 g (2.05 oz)	48 – 80 mm	97 – 132 mm (3.8 x 5.2 in)
↳ Slip-on rotary polarizer linear (by Hegener) (45°/135°)	16.0 g (0.56 oz)		
Half-eye trial frame	24.8 g (0.87 oz)	59 – 67 mm	94 – 129 mm (3.7 x 5.1 in)
Half-eye trial frame with adjustable nose bridge	28.7 g (1.01 oz)	59 – 67 mm	94 – 129 mm (3.7 x 5.1 in)
Half-eye trial frames for small heads and children	25.0 g (0.88 oz)	54 – 58 mm	94 – 129 mm (3.7 x 5.1 in)
Half-eye trial frame for small heads and children with adjustable nose bridge	29.1 g (1.02 oz)	54 – 58 mm	94 – 129 mm (3.7 x 5.1 in)

CE in accordance with Medical Device Directive 93/42/EEC