

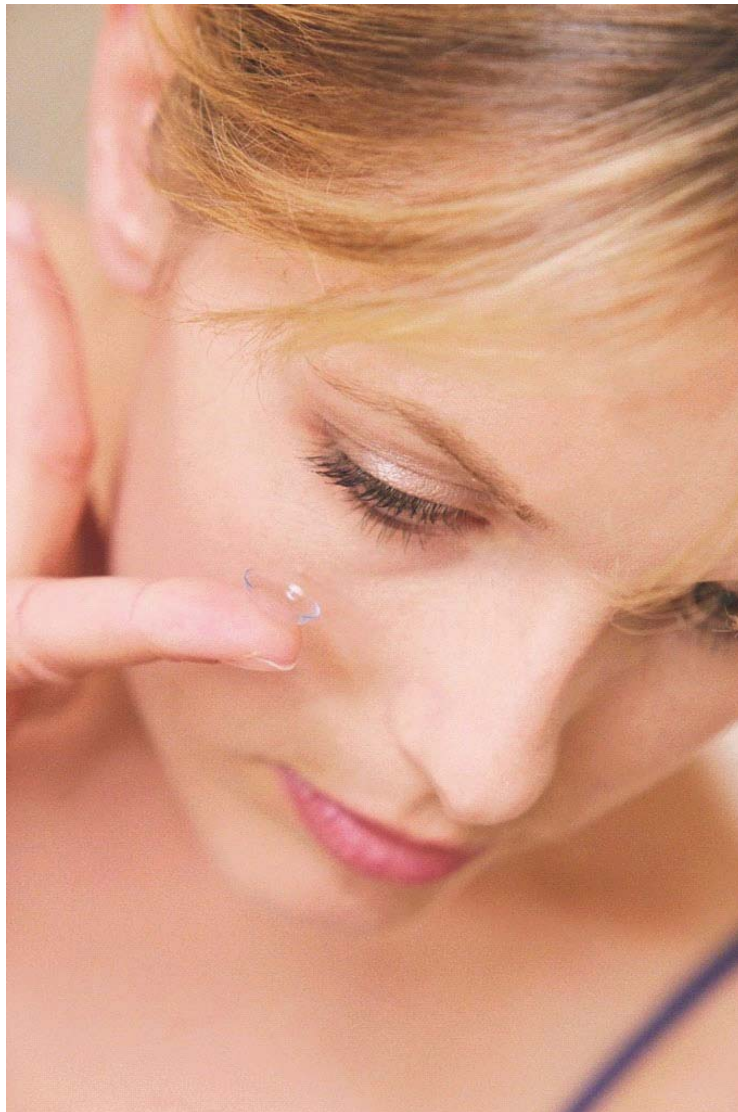
So₂ Clear[®]

Brand Contact Lenses

Clear, Comfortable, Healthy Vision™

A Product Of  **DAKOTA**
SCIENTES

Fitting Guide



Manufactured by

ARTOptical
contact lens, inc.

Ordering 800.253.9364

Consultation 800.566.8001

Online www.artoptical.com

So₂Clear™ corneal-scleral rigid gas permeable (RGP) contact lenses are designed to equally distribute pressure along corneal and scleral surfaces, offering a unique combination of visual and comfort benefits. When properly fitted, **So₂Clear™** lenses provide visual performance consistent with rigid designs and lens comfort and stability approaching hydrogel designs.*

* Clinical Data on File

So₂Clear™ lenses must be fit utilizing the following principles: 1) Base curve – central corneal alignment with mild mid-peripheral corneal clearance, 2) Peripheral curve – alignment along scleral surfaces, 3) Overall diameter – 1.0 to 1.25 mm of lens coverage beyond the HVID, 4) Movement – 0.25 mm of movement.

So₂Clear™ lenses are best fit utilizing diagnostic lenses. If diagnostic lenses are not available, please contact our consultants for assistance. With diagnostic lenses, utilize the following guidelines to promote the most successful use of this truly unique contact lens technology.

Diagnostic Fitting

Base Curve Selection (BC)

Chose the final base curve that provides alignment centrally, with mild mid-peripheral corneal clearance. The following chart can be utilized to determine an initial, diagnostic base curve:

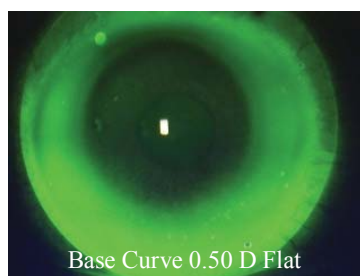
Corneal Cylinder	Base Curve
< 1.00 D	on flat K
1.00 to 2.00 D	0.50 D steeper than flat K
> 2.25 D	1/3 corneal cylinder steeper than flat K

Example:

Keratometry: 44.00/45.25 @ 090 (1.25 D of corneal cylinder)

Initial base curve: 44.00 + 0.50 = 44.50 D (7.58 mm)

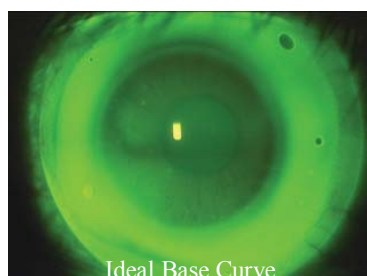
Final BC: 7.58 mm



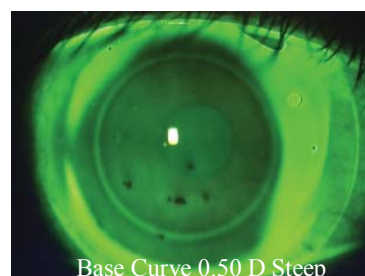
44.00 D

Lens Power

Determination (PWR)



44.50 D



45.00 D

With the best fit (BC) diagnostic lens in place, perform an over-refraction to yield the final lens power.

Example:

Best BC Dx lens: BC 7.58 mm, DIA 14.0, PWR -3.00 D, PC STD

Over-refraction: -2.25 D

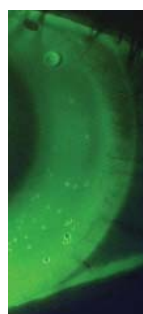
Final Lens Power: -2.25 + -3.00 = -5.25 D

Peripheral Curve Selection (PC)

Review the PC of the best fit (BC) diagnostic lens to ensure alignment along the underlying sclera. If the PC is too flat (flares away from the conjunctiva) select the next steepest diagnostic lens that provides PC alignment. If the PC is too steep (impinges into the conjunctiva) select the next flattest diagnostic lens that provides PC alignment.

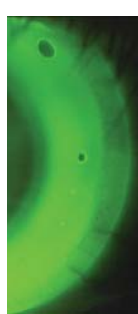
Specify the PC based upon the diopter change in base curve from the best fit BC to the best fit PC diagnostic lenses (ex. S0.5, S1.0, S1.5, or F0.5, F1.0, F1.5, etc.).

PC 0.50 D Flat



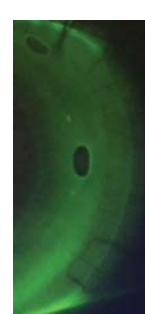
EX: PC STD

PC Ideal



EX: PC S0.50

PC 0.50 D Steep



EX: PC S1.00

Example:

Best fit Dx lens: BC 7.58 mm, DIA 14.0, PWR -3.00 D, PC STD

Best fit PC Dx lens: BC 7.50

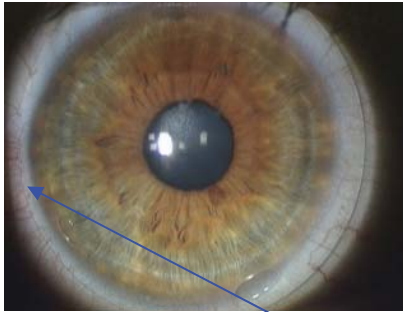
PC Determination: Best PC 7.50 (45.00) – Best BC 7.58 (44.50) = +0.50

Final PC: S0.50

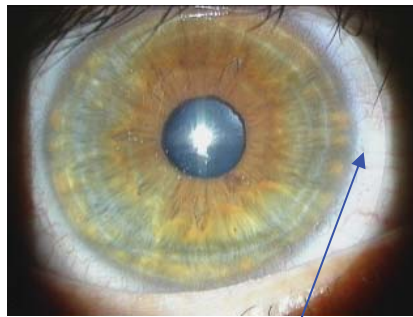
Overall Diameter Selection (OAD)

Select an OAD that provides 1.0 to 1.25 mm of lens coverage beyond the HVID. The following table provides general guidelines for OAD selection:

HVID	OAD
<11.5	13.5 mm
11.5 to 12.00	14.0 mm
>12.0	14.5 mm



OAD 0.5 mm Too Small



OAD Ideal



OAD 0.5 mm Too Large

Note Lens edge

Example:

HVID 11.8 mm

Final OAD: 14.0 mm

Clinical Example

Example Clinical Data:

Keratometry: 44.00/45.25 @ 090

Manifest Refraction: -5.00 -1.25 x 180

HVID: 11.8 mm

Final Lens Parameters:

BC 7.58, OAD 14.0, PWR -5.25, PC S0.50

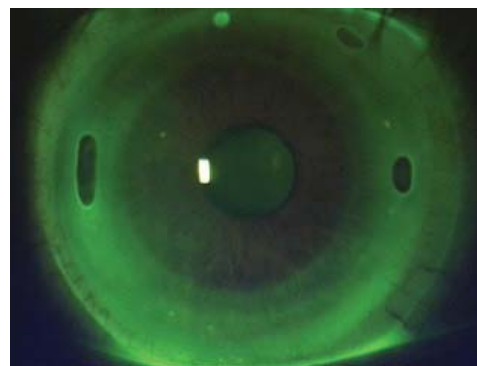
Troubleshooting

<u>Finding</u>	<u>Cause</u>	<u>Solution</u>
Central air bubble	BC too steep	Flatten BC
Mid-peripheral air bubble	PC too steep	Flatten PC
Lens adherence	Steep fit	Flatten BC or PC
Lens adherence	Coated lens surface	Surface/protein cleaning
Lens flexure	Steep fit	Flatten BC or PC
Lens flexure	Thin profile	Increase CT (0.03 mm)



Problem – Steep BC
Ex: BC 45.00

Solution – Flatten BC
Ex: BC 44.00



Problem – Steep PC
Ex: PC Std

Solution – Flatten PC
Ex: PC F0.50

Central Air Bubble – BC Flattened to Resolve

Mid-peripheral Air Bubble – PC Flattened to Resolve

Available Parameters

BC	6.82mm-9.00mm
OAD	13.10mm-15.00mm (Dependent on HVID)
PWR	-20.00D-+20.00D
PC	+/- 5.00D from standard in .50D steps
Materials	Bausch & Lomb Boston XO[®], Bausch & Lomb Boston XO₂[®]

Diagnostic Set Parameters

BC	46.00-40.50 in .50D steps (Standard); 58.00-47.00 in 1.0 D steps (Aspheric Keratoconic)
OAD	14.00mm
PWR	-3.00D (Standard) -3.00D at 47.00 to -14.00D at 58.00 (Aspheric Keratoconic)
PC	+/- 5.00D from standard in .50D steps
Materials	Bausch & Lomb Boston XO[®]