

X-Cel Optical 2014 Lens Technical Data

Glass Polarized Lenses

POLARIZED Glass SFSV Gry 1, 3, Brn 1, 3, Photo Gry, Brn

Diam	Nominal	True	Sag.	C.T.	E.T.	Back	Rx Range
71mm	3.25	3.00	1.780	7.8	11.2	-6.00	-3.25 to --6.00
71mm	4.25	4.16	2.477	7.8	10.2	-6.00	-2.00 to -3.00
71mm	5.25	5.19	3.107	7.8	9.0	-6.00	-1.25 to -1.75
71mm	6.25	6.20	3.737	7.8	7.4	-6.00	+2.00 to -1.00
71mm	7.25	7.13	4.330	9.2	7.7	-6.00	+1.25 to +3.00
71mm	8.25	8.16	5.004	10.5	7.3	-6.00	+3.25 to +5.50

POLARIZED Glass Multifocals Gry 1, 3, Brn 1, 3

Diam	Nominal	True	Sag.	C.T.	E.T.	Back	Rx Range
71mm	4.25	4.15	2.470	7.6	10.2	-6.00	-2.25 to -5.00
71mm	6.25	6.20	3.737	7.7	7.2	-6.00	+2.00 to -2.00
71mm	8.25	8.16	5.004	10.5	7.3	-6.00	+2.25 to +5.50
Seg Location:	4 & 6 base D28		5.5 In/4.0 Dn		4 & 6 base 7X28		5.5 In/1.5 Dn
	8 base D28		5.0 In/5.0 Dn		8 base 7X28		5.0 In/2.0 Dn

POLARIZED Glass Multifocals Photochromic Gray, Brown, Autum Gold

Diam	Nominal	True	Sag.	C.T.	E.T.	Back	Rx Range
71mm	4.25	4.15	2.470	7.6	10.2	-6.00	-2.25 to -5.00
71mm	6.25	6.20	3.737	7.7	7.2	-6.00	+2.00 to -2.00
71mm	8.25	8.16	5.004	10.5	7.3	-6.00	+2.25 to +5.50
Seg Location:	D28 5.0 In/5.0 Dn			7X28 5.0 In/2.0 Dn			

POLARIZED 1.60 Glass Freedom ID Gry 1, 3, Brn 1, 3, Photo Gry, Brn

Diam	Nominal	True	Sag.	C.T.	E.T.	Back	Rx Range
71mm	3.25	3.34	1.982	8.0	10.0	-6.25	-4.00 to -2.25
71mm	5.25	5.34	3.200	7.8	7.5	-6.25	-2.00 to +2.00
71mm	7.25	7.23	4.395	10.5	6.5	-6.25	+2.25 to +5.00
Fitting cross 2.5 In/4.0 Up Recommended Fitting Height is 17mm							

POLARIZED Glass, All 76mm Styles Gry 1, 3, Brn 1, 3

Diam	Nominal	True	Sag.	C.T.	E.T.	Back	Rx Range
76mm	4.25	4.15	2.470	7.8	10.0	-6.00	-4.00 to -2.25
76mm	6.25	6.20	3.737	7.8	7.4	-6.00	-2.00 to +2.00
76mm	8.25	8.16	5.004	10.5	7.0	-6.00	+2.25 to +5.50
Seg Location:	D28 6.0 In/5.0 Dn			7X28 6.0 In/2.0 Dn			

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Actual Front Cover Plate Thicknesses, Add 0.4 mm To All For Finished Thickness.

Polarized Glass Front Curves and Film Curves

	Nom	True	Film Curve	Front Cover Thickness		
				ESV CT. & ET.	SFSV CT	SFSV ET
For flat top front cover thicknesses, use chart below.	3.25	3.00	3.75		1.8	2.7
	4.25	4.16	4.13		1.8	1.8
	5.25	5.19	5.63		1.8	2.3
	6.25	6.20	6.05	1.1	1.8	1.8
	7.25	7.13	7.50		1.8	2.4
	8.25	8.16	8.00	1.1	2.0	1.8

Polarized Glass D-28 & 7X28

Gray, Brown 1 & 3 and Thin & Dark gray
Front Cover Thickness

Add	All Gray & Brown 1 & 3 Flat Tops			All Photo Thin & Dark Gray Flat Tops		
	Base	Base	Base	Base	Base	Base
	4.25	6.25	8.25	4.25	6.25	8.25
1.00	1.9	1.9	1.8	1.8	1.8	1.8
1.25	1.8	1.8	2.2	1.8	1.8	2.2
1.50	1.8	1.8	2.6	1.8	1.8	2.6
1.75	1.8	1.8	1.8	1.8	1.8	1.8
2.00	1.9	1.9	1.8	1.8	1.8	1.8
2.25	2.1	2.1	2.0	1.8	2.0	2.0
2.50	1.8	2.3	2.3	1.8	1.8	2.3
2.75	1.9	2.5	2.5	1.8	1.8	2.5
3.00	2.1	2.7	2.7	2.0	2.0	2.7

All film curves match the front true curves.

Polarized Glass D-28, 7X28 & Freedom ID

All Progressive Freedom ID
All PBX & Autumn Gold D-28 & 7X28
Front Cover Thickness

Add	All Freedom ID In All Colors			All PBX and Autumn Gold Flat Tops		
	Base	Base	Base	Base	Base	Base
	3.25	5.25	7.25	4.25	6.25	8.25
1.00	1.8	1.8	1.8	1.8	1.8	1.8
1.25	1.8	1.8	1.8	1.8	2.2	2.2
1.50	1.8	1.8	1.8	1.8	1.8	2.6
1.75	1.8	1.8	1.8	1.8	1.8	1.8
2.00	1.8	1.8	1.8	1.8	1.8	1.8
2.25	1.8	1.8	1.8	1.8	2.0	2.0
2.50	1.8	1.8	1.8	1.8	1.8	2.3
2.75	1.8	1.8	1.8	1.8	1.8	2.5
3.00	1.8	1.8	1.8	2.0	2.0	2.7

All film curves match the front true curves.