

X-Cel Optical 2014 Lens Technical Data

High-X™ 1.67 Clear Lenses

SFSV

Diam.	Nominal	True	Sag.	C.T.	E.T.	Back	Rx Range
74mm	-6.25	-6.09	-3.665	11.3	18.0	+1.22	-16.25 to -20.00
74mm	-2.25	-2.22	-1.313	9.3	20.4	-6.08	-9.25 to -16.00
74mm	1.25	1.22	0.720	11.3	18.0	-6.08	-5.25 to -9.00
75mm	2.25	2.00	1.182	9.2	14.6	-6.10	-3.75 to -5.00
75mm	3.25	2.92	1.730	6.9	10.0	-5.10	-2.25 to -3.50
75mm	4.25	3.94	2.344	6.3	8.0	-5.10	-1.25 to -2.00
75mm	5.25	4.88	2.917	6.2	8.0	-6.10	0.00 to -1.00
75mm	6.25	5.87	3.530	7.7	6.8	-5.10	+0.25to +1.75
75mm	7.25	6.68	4.042	8.9	6.8	-5.10	+2.00to +3.25
75mm	8.25	7.83	4.786	10.1	6.6	-5.10	+3.50 to +4.50
75mm	9.25	9.44	5.873	11.0	6.4	-6.10	+4.75 to +7.00
68mm	10.25	11.10	7.068	12.5	8.0	-8.24	+7.25 to +9.00
68mm	12.25	12.63	8.260	14.8	7.2	-8.24	+ 9.25to +12.50
80mm	6.25	5.89	3.540	10.0	10.6	-6.10	-2.00to +1.75
80mm	7.25	6.69	4.050	11.5	10.7	-6.10	+2.00to +3.25
80mm	8.25	7.86	4.810	9.7	11.0	-8.25	+3.50 to +4.50

D-28 Bifocals

Diam.	Nominal	True	Sag.	C.T.	E.T.	Back	Rx Range
74mm	-2.25	-2.22	-1.313	9.3	20.4	-6.08	-20.00 to -9.25
74mm	1.25	1.22	0.720	11.3	18.0	-6.08	-9.00 to -5.00
74mm	3.25	3.17	1.880	10.0	15.0	-6.08	-4.75 to -2.25
74mm	5.25	5.22	3.126	8.0	9.3	-6.08	-2.00 to +1.50
74mm	7.25	7.41	4.511	11.0	8.9	-6.08	+1.75 to +4.25
74mm	9.25	9.53	5.935	12.7	6.8	-6.08	+4.50 to +9.00

Segment Locations are:

74mm D-28 -2.25 Base 2 In/5 Dn

74mm D-28 1.25 through 9.25 Base 5 In/7 dn

Freedom ID Technical Data

17mm Fitting Height

Diam.	Nominal	True	Sag.	C.T.	E.T.	Back	Rx Range
74mm	1.25	1.48	0.878	10.2	15.8	-6.10	-12.50 to -6.25
74mm	3.25	2.98	1.770	8.8	12.5	-6.10	-6.00 to -2.00
74mm	5.25	4.51	2.685	9.1	10.8	-6.10	-1.75 to +2.00
74mm	6.25	5.75	3.454	8.2	8.4	-6.10	+2.25 to +4.00
74mm	7.25	7.00	4.245	10.1	8.4	-6.10	+4.25 to +6.00

Segment Location or Fitting Cross is 2.5mm In/4.0mm up from geometric center.
The semi-visible marking is a circle.

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7X28 Trifocals

Diam.	Nominal	True	Sag.	C.T.	E.T.	Back	Rx Range
70mm	1.00	0.96	0.566	7.0	13.0	-6.45	-9.00 to -5.00
70mm	3.00	3.01	1.784	7.5	11.0	-6.45	-4.75 to -2.25
70mm	5.00	5.03	3.009	8.0	9.0	-6.45	-2.00 to +3.00
70mm	7.00	7.10	4.311	9.2	8.0	-5.71	+3.25 to +5.00

Segment Location: 5 In/2 Dn

D-35 Bifocals

Diam.	Nominal	True	Sag.	C.T.	E.T.	Back	Rx Range
70mm	1.00	1.02	0.602	7.0	13.0	-6.45	-9.00 to -5.00
70mm	3.00	3.02	1.790	7.5	11.0	-6.45	-4.75 to -2.25
70mm	5.00	5.05	3.021	8.0	9.0	-6.45	-2.00 to +3.00

Segment Location: 5 In/5 Dn

High-X™ 1.74 Clear Lenses

SFSV

Diam.	Nominal	True	Sag.	C.T.	E.T.	Back	Rx Range
65mm	0.50	0.50	0.295	7.0	15.3	-8.25	-18.00 to -9.50
65mm	1.00	0.97	0.572	7.5	15.3	-8.25	-9.25 to -7.25
72mm	2.00	2.00	1.182	6.5	11.9	-6.10	-7.00 to -4.50
72mm	3.00	2.92	1.730	6.5	10.8	-6.10	-4.25 to -2.50
72mm	4.00	3.94	2.344	6.0	7.5	-5.08	-2.25 to +1.25
72mm	5.00	4.88	2.917	6.0	5.5	-4.59	+1.50 to +3.00
72mm	6.00	5.85	3.518	7.0	5.9	-5.08	+3.25 to +4.00
72mm	7.00	6.65	4.023	7.0	6.3	-6.10	+4.25 to +5.00
65mm	8.00	7.82	4.779	8.5	9.7	-8.25	+5.25 to +6.00
65mm	9.00	9.44	5.873	9.5	8.7	-8.25	+6.25 to +8.50