

RADIUS CONVERSION TABLE				12 MM VERTEX CONVERSION TABLE		
D	r	D	r	MINUS	POWER	PLUS
36.00	9.37	48.00	7.03	-3.87	4.00	+4.25
36.12	9.33	48.12	7.01	-4.00	4.25	+4.50
36.25	9.30	48.25	7.00	-4.25	4.50	+4.75
36.37	9.27	48.37	6.98	-4.50	4.75	+5.00
36.50	9.24	48.50	6.96	-4.75	5.00	+5.37
36.62	9.21	48.62	6.95	-5.00	5.25	+5.62
36.75	9.18	48.75	6.92	-5.12	5.50	+5.87
36.87	9.15	48.87	6.91	-5.37	5.75	+6.12
37.00	9.12	49.00	6.89	-5.62	6.00	+6.50
37.12	9.09	49.12	6.87	-5.87	6.25	+6.75
37.25	9.06	49.25	6.85	-6.00	6.50	+7.00
37.37	9.03	49.37	6.84	-6.25	6.75	+7.37
37.50	9.00	49.50	6.82	-6.50	7.00	+7.62
37.62	8.97	49.62	6.80	-6.62	7.25	+8.00
37.75	8.94	49.75	6.78	-6.87	7.50	+8.25
37.87	8.91	49.87	6.77	-7.12	7.75	+8.50
38.00	8.88	50.00	6.75	-7.25	8.00	+8.87
38.12	8.85	50.12	6.73	-7.50	8.25	+9.12
38.25	8.82	50.25	6.72	-7.75	8.50	+9.50
38.37	8.79	50.37	6.70	-7.87	8.75	+9.75
38.50	8.76	50.50	6.68	-8.12	9.00	+10.12
38.62	8.73	50.62	6.67	-8.37	9.25	+10.37
38.75	8.70	50.75	6.65	-8.50	9.50	+10.75
38.87	8.68	50.87	6.63	-8.75	9.75	+11.00
39.00	8.65	51.00	6.62	-8.87	10.00	+11.37
39.12	8.62	51.12	6.60	-9.12	10.25	+11.75
39.25	8.59	51.25	6.59	-9.37	10.50	+12.00
39.37	8.57	51.37	6.57	-9.50	10.75	+12.37
39.50	8.54	51.50	6.55	-9.75	11.00	+12.62
39.62	8.51	51.62	6.54	-9.87	11.25	+13.00
39.75	8.49	51.75	6.52	-10.12	11.50	+13.37
39.87	8.45	51.87	6.51	-10.25	11.75	+13.62
40.00	8.43	52.00	6.49	-10.50	12.00	+14.00
40.12	8.41	52.12	6.48	-10.62	12.25	+14.37
40.25	8.38	52.25	6.46	-10.87	12.50	+14.75
40.37	8.36	52.37	6.44	-11.00	12.75	+15.00
40.50	8.33	52.50	6.43	-11.25	13.00	+15.37
40.62	8.30	52.62	6.41	-11.67	13.50	+16.12
40.75	8.28	52.75	6.40	-12.00	14.00	+16.87
40.87	8.25	52.87	6.38	-12.37	14.50	+17.50
41.00	8.23	53.00	6.37	-12.75	15.00	+18.25
41.12	8.20	53.12	6.35	-13.12	15.50	+19.00
41.25	8.18	53.25	6.34	-13.37	16.00	+19.75
41.37	8.15	53.37	6.32	-13.75	16.50	+20.62
41.50	8.13	53.50	6.31	-14.12	17.00	+21.37
41.62	8.10	53.62	6.29	-14.50	17.50	+22.12
41.75	8.08	53.75	6.28	-14.75	18.00	+23.00
41.87	8.06	53.87	6.26	-15.12	18.50	+23.75
42.00	8.03	54.00	6.25	-15.62	19.00	+24.62
42.12	8.01	54.12	6.24	-15.75	19.50	+25.50
42.25	7.98	54.25	6.22	-16.25	20.00	+26.37
42.37	7.96	54.37	6.21	-16.75	21.00	+28.00
42.50	7.94	54.50	6.19	-17.37	22.00	+29.87
42.62	7.91	54.62	6.18	-18.00	23.00	+31.75
42.75	7.89	54.75	6.16	-18.62	24.00	+33.75
42.87	7.87	54.87	6.15	-19.25	25.00	+35.75
43.00	7.84	55.00	6.14	-19.87	26.00	+37.75
43.12	7.82	55.12	6.12	-20.37	27.00	+40.00
43.25	7.80	55.25	6.11	-21.00	28.00	+42.25
43.37	7.78	55.37	6.10	-21.50	29.00	+44.50
43.50	7.75	55.50	6.08	-22.00	30.00	+46.87
43.62	7.73	55.62	6.07	-22.62	31.00	+49.37
43.75	7.71	55.75	6.05	-23.12	32.00	+52.00
43.87	7.69	55.87	6.04	-23.62	33.00	+54.62
44.00	7.67	56.00	6.03	-24.12	34.00	+57.50
44.12	7.64	56.12	6.01	-24.62	35.00	+60.37
44.25	7.62	56.25	6.00	-25.12	36.00	+63.38
44.37	7.60	56.37	5.99	-25.62	37.00	+66.50
44.50	7.58	56.50	5.97	-26.00	38.00	+69.87
44.62	7.56	56.62	5.96	-26.62	39.00	+73.37
44.75	7.54	56.75	5.95	-27.00	40.00	+76.87
44.87	7.52	56.87	5.94			
CALCULATED RESIDUAL ASTIGMATISM						
45.00	7.50	57.00	5.92	C.R.A = T.R.A. - Δ K		
45.12	7.48	57.12	5.91			
45.25	7.45	57.25	5.90			
				RIGHT EYE		
				CYLINDER	AXIS	
45.37	7.43	57.37	5.88			
45.50	7.41	57.50	5.87			
45.62	7.39	57.62	5.86	T.R.A.	.	
45.75	7.37	57.75	5.84			
45.87	7.35	57.87	5.83			
46.00	7.33	58.00	5.82	(-) Δ K	.	
46.12	7.31	58.12	5.81			
46.25	7.29	58.25	5.79			
46.37	7.27	58.37	5.78	C.R.A.	.	
46.50	7.25	58.50	5.77			
				LEFT EYE		
				CYLINDER	AXIS	
46.62	7.23	58.62	5.76			
46.75	7.21	58.75	5.75			
46.87	7.20	58.87	5.73			
47.00	7.18	59.00	5.72	T.R.A.	.	
47.12	7.16	59.12	5.71			
47.25	7.14	59.25	5.70			
47.37	7.12	59.37	5.68	(-) Δ K	.	
47.50	7.10	59.50	5.67			
47.62	7.08	59.62	5.66			
47.75	7.06	59.75	5.65	C.R.A.	.	
47.87	7.05	59.87	5.64			

MANIFEST REFRACTION				SCRATCH PAPER
SPHERE		CYLINDER		
OD	.	-	.	
OS	.	-	.	
VERTEX CORRECTED POWERS				
SPHERE		CYLINDER		AXIS
OD	.	-	.	
OS	.	-	.	
MEASURED KERATOMETRY				
FLAT	MERIDIAN	STEEP	MERIDIAN	
OD	.	.	.	
OS	.	.	.	
IMPORTANT MEASUREMENTS				
H.V.I.D.	O.D.		O.S.	
	.	MM	.	MM
V.V.A.	.	MM	.	MM
SUP. LID STATION	.	MM	.	MM
INF. LID STATION	.	MM	.	MM

LENS PARAMETER SELECTION CHART					
H.V.I.D.	10.00 mm	10.50 mm	11.00 mm	11.50 mm	12.00 mm
O.A.D.	8.50 mm	8.80 mm	9.20 mm	9.60 mm	10.00 mm
P.O.Z.	7.10 mm	7.40 mm	7.70 mm	8.00 mm	8.40 mm
A.O.Z.	7.50 mm	7.80 mm	8.10 mm	8.40 mm	8.80 mm
HORIZONTAL FIT FACTOR	On K	0.25 D Flat	0.25 D Flat	0.25 D Flat	0.75 D Flat
VERTICAL FIT FACTOR	1.00 D Flat	1.25 D Flat	1.25 D Flat	1.25 D Flat	1.75 D Flat
2° R / W	B.C.R. + 1.00 mm / 0.30 mm	B.C.R. + 1.00 mm / 0.30 mm	B.C.R. + 1.00 mm / 0.30 mm	B.C.R. + 0.80 mm / 0.30 mm	B.C.R. + 0.80 mm / 0.30 mm
3° R / W	B.C.R. + 1.50 mm / 0.20 mm	B.C.R. + 1.50 mm / 0.20 mm	B.C.R. + 1.50 mm / 0.20 mm	B.C.R. + 1.00 mm / 0.30 mm	B.C.R. + 1.00 mm / 0.30 mm
4° R / W	B.C.R. + 2.00 mm / 0.20 mm	B.C.R. + 2.00 mm / 0.20 mm	B.C.R. + 2.00 mm / 0.30 mm	B.C.R. + 1.50 mm / 0.20 mm	B.C.R. + 1.50 mm / 0.20 mm
C.T.	As Thin As Possible (T.A.P.) Per the Material Manufacturer				
E.T.	≈0.13 mm	≈0.13 mm	≈0.13 mm	≈0.13 mm	≈0.13 mm

NEWMAN'S VERSION OF THE MANDELL-MOORE BITORIC LENS GUIDE					
O.D.			O.S.		
HORIZONTAL MERIDIAN			HORIZONTAL MERIDIAN		
	CURVATURE	POWER		CURVATURE	POWER
ENTER HORIZONTAL (K) VALUE			ENTER HORIZONTAL (K) VALUE		
VERTEX CORRECTED SPECTACLE			VERTEX CORRECTED SPECTACLE		
ENTER HORIZONTAL FIT FACTOR	-	+	ENTER HORIZONTAL FIT FACTOR	-	+
FINAL CONTACT LENS PRESCRIPTION			FINAL CONTACT LENS PRESCRIPTION		
B.C.R. IN mm.		POWER	B.C.R. IN mm.		POWER
BASE CURVE			BASE CURVE		
VERTICAL MERIDIAN			VERTICAL MERIDIAN		
	CURVATURE	POWER		CURVATURE	POWER
ENTER VERTICAL (K) VALUE			ENTER VERTICAL (K) VALUE		
VERTEX CORRECTED SPECTACLE			VERTEX CORRECTED SPECTACLE		
ENTER VERTICAL FIT FACTOR	-	+	ENTER VERTICAL FIT FACTOR	-	+
FINAL CONTACT LENS PRESCRIPTION			FINAL CONTACT LENS PRESCRIPTION		
B.C.R. IN mm.		POWER	B.C.R. IN mm.		POWER
BASE CURVE			BASE CURVE		

1. Measure the H.V.I.D. and select the proper lens parameters from the Lens Parameter Selection Chart.
2. Enter the Horizontal Measured Keratometry reading in row one, and the corresponding Vertex Corrected Meridian Power in row two.
3. Enter the Horizontal Fit Factor in row three.
4. Subtract the Fit Factor from the Measured Keratometry reading and add the Fit Factor to the Vertex Corrected Meridian Power.
5. Convert the Final Contact Lens Prescription Curvature value to millimeters.
6. Repeat Steps Two through Five, using the Vertical Measured Keratometry reading, the corresponding Meridian Power, and the Vertical Fit Factor.
7. For obliquely toric corneas use a Fit Factor of 0.75 D throughout.
8. Specify the B.C.R. with the corresponding Power for each meridian.

