

9x19mm - 115 gr - CZ Scorpion

R (yd)	Z (mil)	W (mil)	T (s)
0	0	0	0
25	-1.45	0.54	0.07
50	-2.06	0.9	0.14
75	-1.49	1.27	0.22
100	-0.56	1.61	0.29
125	0.54	1.94	0.38
150	1.78	2.26	0.46
175	3.12	2.57	0.55
200	4.55	2.87	0.64
225	6.07	3.17	0.73
250	7.67	3.46	0.83
275	9.36	3.75	0.93
300	11.12	4.04	1.03

Wind 10 mph @ 90°

Zero @ 16 or 111 ; 130 yd MBPR ±6"

MV 1150 fps, sight height 3"

$$\frac{length(mm)}{arc(mrad)} = Range(m)$$

5.56 NATO - 62 gr - 16" Barrel

R (yd)	R (m)	Z (mil)	W (mil)	T (s)
50	46	0.03	0.10	0.05
100	92	-0.44	0.18	0.11
150	137	-0.38	0.26	0.16
200	183	-0.18	0.35	0.22
250	229	0.08	0.45	0.28
300	274	0.39	0.55	0.34
350	320	0.73	0.65	0.40
400	366	1.10	0.75	0.47
450	412	1.49	0.86	0.54
500	457	1.91	0.98	0.61
550	503	2.36	1.10	0.68
600	549	2.83	1.22	0.76
700	640	3.87	1.48	0.92
800	732	5.04	1.76	1.10
900	823	6.37	2.07	1.30
1000	914	7.88	2.41	1.51

Wind 10 mph @ 90°

Zero @ 40 or 292 ; 341 yd MBPR ±4"

MV 2950 fps; 1340 fps @ 1000 yd

Sight height 2.75"

$$\frac{length(mm)}{arc(mrad)} = Range(m)$$

7.62x39mm - 123gr - 16" barrel

R	R	Z	W	T	V
(yd)	(m)	(mil)	(mil)	(s)	(ft/s)
0	0	0	0	0	2300
50	46	-0.8	0.22	0.07	2167
100	92	-1.05	0.41	0.14	2038
150	137	-0.74	0.62	0.21	1914
200	183	-0.26	0.85	0.3	1793
250	229	0.33	1.1	0.38	1677
300	274	1.01	1.36	0.48	1565
350	320	1.78	1.64	0.57	1456
400	366	2.64	1.95	0.68	1351
450	412	3.61	2.28	0.8	1250
500	457	4.69	2.63	0.92	1155
550	503	5.9	3.01	1.06	1091
600	549	7.25	3.37	1.2	1052
650	594	8.73	3.71	1.34	1019
700	640	10.32	4.03	1.49	991
800	732	13.86	4.63	1.8	943

Wind 10 mph @ 90°

30/219 yd Zero. 254 yd MBPR (±4")

G7 BC .1533, MV 2300, sight offset 2.75"

Trans-sonic from 500-550 yd

$$\frac{length(mm)}{arc(mrad)} = Range(m)$$

7.62x51mm - 147 gr - 22" barrel

R (yd)	R (m)	Z (mil)	W (mil)	T (s)	V (ft/s)
0	0	0.0	0.0	0.0	2800
50	46	-0.4	0.1	0.1	2690
100	92	-0.5	0.2	0.1	2583
150	137	-0.3	0.3	0.2	2478
200	183	0.0	0.5	0.2	2375
250	229	0.4	0.6	0.3	2274
300	274	0.7	0.7	0.4	2176
350	320	1.2	0.8	0.4	2080
400	366	1.6	1.0	0.5	1987
450	412	2.1	1.1	0.6	1895
500	457	2.7	1.3	0.7	1806
550	503	3.2	1.5	0.8	1719
600	549	3.8	1.6	0.8	1635
650	594	4.5	1.8	0.9	1553
700	640	5.2	2.0	1.0	1473
750	686	5.9	2.2	1.1	1394
800	732	6.8	2.4	1.3	1317
850	777	7.7	2.6	1.4	1242
900	823	8.6	2.9	1.5	1172
950	869	9.7	3.1	1.6	1113
1000	915	10.8	3.4	1.8	1079

Wind 10 mph @ 90°

Zero @ 200 ; ???? yd MBPR ±6"

G7 BC .207, MV 2800, sight height 2.75"

Trans-sonic from 900-950 yd

$$\frac{length(mm)}{arc(mrad)} = Range(m)$$

7.62 NATO - M80 - 10" barrel

R (yd)	R (m)	Z (mil)	W (mil)	T (s)	V (ft/s)
50	46	-0.63	0.15	0.06	
100	92	-0.96	0.27	0.13	
150	137	-0.77	0.40	0.19	
200	183	-0.41	0.54	0.26	
250	229	0.02	0.69	0.34	
300	274	0.51	0.85	0.41	
350	320	1.05	1.01	0.50	
400	366	1.64	1.19	0.58	
450	412	2.28	1.37	0.67	
500	457	2.98	1.56	0.76	
550	503	3.72	1.76	0.86	
600	549	4.53	1.97	0.97	
700	640	6.35	2.43	1.19	
800	732	8.49	2.95	1.45	
900	823	11.01	3.47	1.73	
1000	914	13.90	3.96	2.02	

Wind 10 mph @ 90°

Zero @ 33 or 244 ; 285 yd MBPR ±4"

G7 BC .207, MV 2485, sight height 2.75"

$$\frac{length(mm)}{arc(mrad)} = Range(m)$$

6.5 Creedmore - 125 gr - 18" barrel

R (yd)	R (m)	Z (mil)	W (mil)	T (s)	V (ft/s)
100	92	-1.1	0.2	0.1	2631
200	183	-0.8	0.4	0.2	2469
300	274	-0.2	0.5	0.4	2313
400	366	0.6	0.7	0.5	2162
500	457	1.5	0.9	0.6	2017
600	549	2.4	1.2	0.8	1878
700	640	3.5	1.4	1.0	1745
800	732	4.8	1.7	1.1	1620
900	823	6.1	2.0	1.3	1503
1000	914	7.6	2.2	1.5	1394
1100	1006	9.3	2.6	1.8	1296
1200	1097	11.2	2.9	2.0	1211
1300	1189	13.3	3.2	2.3	1138
1400	1280	15.7	3.6	2.5	1080
1500	1372	18.2	3.9	2.8	1032
1600	1463	21.1	4.2	3.1	992
1800	1646	27.4	4.9	3.7	928
2000	1829	34.8	5.5	4.4	877

Winchester Deer Season XP, 2800 fps MV

G1 0.54; wind 10 @ 90°; Transsonic @ 1314 yds

Zero @ 32 or 325 yards; 381 MPBR for ±6"

$$\frac{length(mm)}{arc(mrad)} = Range(m)$$

6.5 Creedmore - 140 gr - 18" barrel

R (yd)	R (m)	Z (mil)	W (mil)	T (s)
50	46	-0.48	0.09	0.06
100	92	-0.88	0.16	0.12
150	137	-0.75	0.24	0.18
200	183	-0.49	0.32	0.24
250	229	-0.16	0.41	0.30
300	274	0.21	0.49	0.37
350	320	0.62	0.58	0.44
400	366	1.05	0.67	0.51
450	412	1.50	0.77	0.58
500	457	1.98	0.87	0.65
550	503	2.49	0.97	0.73
600	549	3.01	1.07	0.81
700	640	4.15	1.29	0.98
800	732	5.40	1.52	1.15
900	823	6.77	1.77	1.34
1000	914	8.29	2.04	1.55

140 gr BTHP, 2650 fps MV

2.75" bore to sight offset

G7 0.313; wind 10 @ 90°

Zero @ 36 or 270 yards; 315 MPBR for ±4"

$$\frac{length(mm)}{arc(mrad)} = Range(m)$$