



Velocity was the average of five shots fired with each bullet/powder/powder charge combination. Standard sabots packaged with Barnes Bullets were used in all tests.

Trajectory tables were based on the following standard atmospheric conditions:

Data for tables were obtained from 26-inch in-line standard-twist barrels.

Sea Level  
59° F  
1.5" Sight Height  
150 Yard Zero

Recommended for use in guns with 1:16" to 1:34" twists.

**Bullet Weight and style**                      **.45 Caliber**

**195-gr Expander MZ**

Volume Charge (grains)	Average Velocity (fps)	Average Velocity (fps)
	Pyrodex Pellets	Pyrodex RS
90	1978	2125
100	-----	2254
110	-----	2347
120	2190	2430
150	2420	-----

**.45 CAL. 195-GR. EXPANDER MZ                      B.C. = .176**

Muzzle Velocity	2000 FPS	2100 FPS	2200 FPS	2300 FPS	2400 FPS
50 yds.	1.96	1.67	1.42	1.21	1.02
100 yds.	2.69	2.38	2.11	1.87	1.67
200 yds.	-6.98	-6.26	-5.62	-5.06	-4.56
250 yds.	-19.32	-17.38	-15.65	-14.13	-12.77
300 yds.	-38.08	-34.45	-31.16	-28.2	-25.56

**250-gr Expander MZ**

**.50 Caliber**

Volume Charge (grains)	Average Velocity (fps)	Average Velocity (fps)	Average Velocity (fps)	Average Velocity (fps)	Average Velocity (fps)
	Pyrodex Pellets	Triple Se7en Pellets	Pyrodex Select FFG	Triple Se7en FFG	Goex Black FFG
90	1700	1629	1784	1946	1463
100	1852	1861	1858	1955	1521
110	-----	-----	1927	2030	1579
120	1891	1884	2031	2050	1631
150	2197	2199	2148	2119	1745

**.50 CAL. 250-GR. EXPANDER MZ                      B.C. = .189**

Muzzle Velocity	1600 FPS	1800 FPS	2000 FPS	2100 FPS	2200 FPS
50 yds.	3.52	2.58	1.89	1.61	1.37
100 yds.	4.34	3.34	2.61	2.30	2.04
200 yds.	-10.53	-8.40	-6.70	-6.00	-5.39
250 yds.	-28.21	-22.88	-18.44	-16.57	-14.92
300 yds.	-53.90	-44.41	-36.26	-32.72	-29.54

**Bullet  
Weight and  
style**

**.50 Caliber Continued**

**\*300-gr  
Expander  
MZ**

Volume Charge (grains)	Average Velocity (fps)	Average Velocity (fps)	Average Velocity (fps)	Average Velocity (fps)	Average Velocity (fps)
	Pyrodex Pellets	Triple Se7en Pellets	Pyrodex Select FFG	Triple Se7en FFG	Goex Black FFG
90	1598	1528	1636	1803	1358
100	1692	1730	1701	1831	1443
110	-----	-----	1710	1875	1507
120	1767	1735	1801	1858	1572
150	2061	2094	1910	2066	1697

\*For 300-gr bullets use in guns with 1:16" to 1:26" twists.

**245-gr  
Spit-Fire MZ**

90	1637	1663	1759	1944	1467
100	1817	1898	1823	2040	1545
110	-----	-----	1909	2042	1569
120	1852	1887	2009	2102	1651
150	2191	2283	2089	2191	1786

**285-gr  
Spit-Fire MZ**

90	1599	1566	1643	1837	1371
100	1730	1716	1700	1883	1445
110	-----	-----	1733	1923	1523
120	1806	1780	1771	1956	1570
150	2067	2064	1946	2068	1694

**250-gr  
Spit-Fire  
TMZ**

90	1695	1638	1754	1952	1454
100	1868	1872	1850	2052	1502
110	-----	-----	1917	2106	1572
120	1925	1872	1986	2153	1627
150	2227	2246	2078	2242	1755

**.50 CAL. 300-GR. EXPANDER MZ**

**B.C. = .207**

Muzzle Velocity	1600 FPS	1800 FPS	2000 FPS	2100 FPS	2200 FPS
50 yds.	3.41	2.49	1.82	1.55	1.31
100 yds.	4.19	3.22	2.51	2.22	1.96
200 yds.	-10.12	-8.02	-6.38	-5.71	-5.13
250 yds.	-27.07	-21.76	-17.45	-15.67	-14.10
300 yds.	-51.67	-42.14	-34.16	-30.75	-27.73

**.50 CAL. 245-GR. SPIT-FIRE MZ**

**B.C. = .203**

50 yds.	3.43	2.51	1.84	1.56	1.32
100 yds.	4.22	3.25	2.53	2.23	1.98
200 yds.	-10.2	-8.1	-6.44	-5.77	-5.18
250 yds.	-27.31	-21.99	-17.65	-15.85	-14.26
300 yds.	-52.13	-42.61	-34.58	-31.15	-28.09

**.50 CAL. 285-GR. SPIT-FIRE MZ**

**B.C. = .239**

50 yds.	3.25	2.37	1.72	1.46	1.23
100 yds.	3.99	3.06	2.38	2.10	1.85
200 yds.	-9.54	-7.49	-5.96	-5.33	-4.78
250 yds.	-25.43	-20.21	-16.14	-14.49	-13.03
300 yds.	-48.44	-38.97	-31.33	-28.15	25.36

**.50 CAL. 250-GR. SPIT-FIRE TMZ**

**B.C. = .210**

50 yds.	3.39	2.48	1.81	1.54	1.30
100 yds.	4.17	3.20	2.49	2.20	1.95
200 yds.	-10.06	-7.96	-6.33	-5.67	-5.09
250 yds.	-26.89	-21.59	-17.31	-15.54	-13.98
300 yds.	-51.33	-41.8	-33.85	-30.47	-27.46

**Bullet  
Weight and  
style**

**.50 Caliber Continued**

**290-gr  
Spit-Fire  
TMZ**

Volume Charge (grains)	Average Velocity (fps)	Average Velocity (fps)	Average Velocity (fps)	Average Velocity (fps)	Average Velocity (fps)
	Pyrodex Pellets	Triple Se7en Pellets	Pyrodex Select FFG	Triple Se7en FFG	Goex Black FFG
90	1581	1544	1632	1808	1386
100	1731	1700	1729	1844	1449
110	-----	-----	1766	1851	1515
120	1828	1771	1815	2000	1577
150	2109	2051	1994	2047	1706

*With both Pyrodex and Triple Se7en pellets, 3-30 gr. pellets were used in the .50-cal. 90 gr. loads, 2-50 gr. pellets in the 100 gr. loads, 4-30 gr. pellets in the 120 gr. loads and 3-50 gr. pellets in the 150 gr. loads. Win 209 primers were used for ignition.*

**.50 CAL. 290-GR. SPIT-FIRE TMZ**

**B.C. = .241**

Muzzle Velocity	1600 FPS	1800 FPS	2000 FPS	2100 FPS	2200 FPS
50 yds.	3.24	2.36	1.71	1.45	1.23
100 yds.	3.98	3.05	2.37	2.09	1.85
200 yds.	-9.51	-7.46	-5.94	-5.31	-4.76
250 yds.	-25.35	-20.13	-16.08	-14.42	-12.97
300 yds.	-48.27	-38.80	-31.18	-28.02	-25.24

**Bullet  
Weight and  
style**

**.54 Caliber**

**275-gr  
Expander  
MZ**

Volume Charge (grains)	Average Velocity (fps)	Average Velocity (fps)	Average Velocity (fps)
	Pyrodex RS	Pyrodex P	Pyrodex Select
90	1481	1525	1431
100	1581	1613	1535
110	1646	1658	1599
120	1700	1751	1639

**.54 CAL. 275-GR. EXPANDER MZ**

**B.C. = .184**

Muzzle Velocity	1400 FPS	1500 FPS	1600 FPS	1700 FPS	1800 FPS
50 yds.	4.82	4.15	3.55	3.04	2.61
100 yds.	5.67	5.00	4.38	3.84	3.38
200 yds.	-13.15	-11.87	-10.66	-9.53	-8.53
250 yds.	-34.62	-31.53	-28.56	-25.78	-23.24
300 yds.	-65.31	-59.79	-54.59	-49.67	-45.12

**325-gr  
Expander  
MZ**

90	1444	1479	1342
100	1524	1530	1448
110	1565	1614	1491
120	1617	1684	1566

**.54 CAL. 325-GR. EXPANDER MZ**

**B.C. = .204**

50 yds.	4.69	4.01	3.42	2.92	2.51
100 yds.	5.51	4.83	4.21	3.69	3.24
200 yds.	-12.71	-11.41	-10.18	-9.07	-8.07
250 yds.	-33.43	-30.26	-27.25	-24.45	-21.93
300 yds.	-62.87	-57.33	-52.02	-47.04	-42.49