

Velocity and Kinetic Energy Comparison

To determine the value of the new High Energy and Light Magnum ammunition, hunters must consider three factors: accuracy, velocity (and therefore, trajectory), and kinetic energy at the target. The figures below were obtained after we did our range work, and uses the actual muzzle velocities we obtained with our test rifles. We used the Barnes Ballistics computer program for this job. No sighting adjustments were made in the computer program, other than placing the initial line-of-sight 1.5 inches above the bore height to simulate the use of a scope sight.

Remington .300 Win. Mag. Safari Grade
200-grain Swift A-Frame. Muzzle Velocity: 2,886 fps

Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)
0	-1.50	2,886	3,698
100	-2.20	2,693	3,221
200	-9.27	2,509	2,795
300	-21.86	2,332	2,414
400	-40.85	2,162	2,075
500	-67.34	1,998	1,773

Federal .300 Win. Mag. High Energy
200-grain Nosler Partition. Muzzle Velocity: 2,933 fps

Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)
0	-1.50	2,933	3,820
100	-2.12	2,738	3,329
200	-8.95	2,552	2,892
300	-21.17	2,373	2,500
400	-39.50	2,201	2,152
500	-65.08	2,036	1,841

Federal .300 Win. Mag. High Energy
180-grain Trophy Bonded. Muzzle Velocity: 3,080 fps

Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)
0	-1.50	3,080	3,791
100	-1.91	2,876	3,305
200	-8.07	2,681	2,872
300	-19.15	2,494	2,486
400	-35.77	2,315	2,142
500	-58.93	2,143	1,835

Federal .300 Win. Mag. Premium
180-grain Nosler Partition. Muzzle Velocity: 2,947 fps

Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)
0	-1.50	2,947	3,471
100	-2.09	2,749	3,020
200	-8.88	2,560	2,618
300	-21.00	2,377	2,259

Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)
400	-39.22	2,203	1,940
500	-64.68	2,036	1,656

Speer .30-06 Nitrex
180-grain Grand Slam. Muzzle Velocity: 2,690 fps

Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)
0	-1.50	2,690	2,892
100	-2.56	2,487	2,472
200	-10.77	2,293	2,101
300	-25.62	2,107	1,775
400	-48.32	1,931	1,490
500	-80.34	1,764	1,243

Federal .30-06 Premium
180-grain Nosler Partition. Muzzle Velocity: 2,620 fps

Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)
0	-1.50	2,620	2,743
100	-2.67	2,436	2,372
200	-11.25	2,259	2,039
300	-26.63	2,090	1,745
400	-50.01	1,928	1,485
500	-82.75	1,774	1,258

Federal .30-06 High Energy
180-grain Nosler Partition. Muzzle Velocity: 2,831 fps

Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)
0	-1.50	2,831	3,203
100	-2.31	2,638	2,780
200	-9.66	2,453	2,405
300	-22.81	2,275	2,069
400	-42.68	2,105	1,771
500	-70.41	1,943	1,508

Federal .30-06 Classic
150-grain Hi-Shok. Muzzle Velocity: 2,793 fps

Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)
0	-1.50	2,793	2,598
100	-2.41	2,561	2,184
200	-10.17	2,340	1,824
300	-24.30	2,130	1,511
400	-46.10	1,932	1,243
500	-77.19	1,745	1,014

Hornady .30-06 Custom
150-grain Interlock Spire Point. Muzzle Velocity: 2,815 fps

Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)
0	-1.50	2,815	2,639
100	-2.37	2,562	2,186
200	-10.08	2,323	1,797

Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)	Range (yards)	Bullet Drop (in.)	Velocity (fps)	Energy (ft./lbs)
300	-24.25	2,096	1,463	500	-80.72	1,802	1,190
400	-46.40	1,883	1,181				
500	-78.16	1,685	945				

Hornady .30-06 Light Magnum

150-grain Interlock Spire Point Boattail. Mu. Vel: 2,815 fps

0	-1.50	2,815	2,639
100	-2.37	2,562	2,186
200	-10.08	2,323	1,797
300	-24.25	2,096	1,463
400	-46.40	1,883	1,181
500	-78.16	1,685	945

Hornady .308 Light Magnum

150-grain Interlock Spire Point. Muzzle Velocity: 2,674 fps

0	-1.50	2,674	2,619
100	-2.59	2,482	2,256
200	-10.84	2,297	1,933
300	-25.71	2,121	1,647
400	-48.32	1,952	1,396
500	-80.15	1,792	1,177

Federal .308 High Energy

165-grain Trophy Bonded. Muzzle Velocity: 2,673 fps

0	-1.50	2,673	2,617
100	-2.60	2,458	2,214
200	-11.00	2,253	1,860
300	-26.25	2,058	1,552
400	-49.75	1,874	1,286
500	-82.94	1,700	1,059

Federal .308 Premium

165-grain Trophy Bonded. Muzzle Velocity: 2,469 fps

0	-1.50	2,469	2,233
100	-3.03	2,264	1,877
200	-12.88	2,068	1,567
300	-30.90	1,883	1,298
400	-58.55	1,709	1,070
500	-98.36	1,548	877

Remington .308 Extended Range

165-gr. Extended Range. Muzzle Velocity: 2,650 fps

0	-1.50	2,650	2,572
100	-2.62	2,466	2,227
200	-10.99	2,289	1,919
300	-26.02	2,119	1,645
400	-48.79	1,957	1,403

Winchester .308 Supreme

150-grain Silvertip Boattail. Muzzle Velocity: 2,689 fps

0	-1.5	2,689	2,408
100	-2.57	2,480	2,048
200	-10.82	2,280	1,732
300	-25.77	2,090	1,455
400	-48.75	1,909	1,213
500	-81.13	1,738	1,006

Federal .308 Classic

150-grain Hi-Shok. Muzzle Velocity: 2,674 fps

0	-1.50	2,674	2,381
100	-2.60	2,448	1,996
200	-11.05	2,233	1,660
300	-26.50	2,028	1,370
400	-50.45	1,836	1,122
500	-84.45	1,656	914

Remington .270 Extended Range

135-grain Extended Range. Muzzle Velocity: 3,011 fps

0	-1.50	3,011	2,717
100	-2.01	2,802	2,354
200	-8.52	2,603	2,031
300	-20.18	2,413	1,745
400	-37.82	2,230	1,490
500	-62.48	2,055	1,266

Winchester .270 Supreme

140-grain Fail Safe. Muzzle Velocity: 2,967 fps

0	-1.50	2,967	2,736
100	-2.06	2,760	2,368
200	-8.78	2,563	2,042
300	-20.82	2,374	1,752
400	-38.98	2,193	1,495
500	-64.44	2,020	1,268

Hornady .270 Light Magnum

140-grain Interlock Spire Point Boattail.

Muzzle Velocity: 3,083 fps

0	-1.50	3,083	2,954
100	-1.91	2,887	2,591
200	-8.02	2,700	2,266
300	-18.98	2,521	1,976
400	-35.39	2,349	1,715
500	-58.08	2,183	1,481