

FEDERAL LOAD NO.	USAGE	FEDERAL LOAD NO.	CALIBER	BULLET WEIGHT IN		BULLET STYLE	FACTORY PRIMER NO.	MUZZLE	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					WIND DRIFT IN INCHES 10 MPH CROSSWIND					HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 100 YARDS. SIGHTS 1.5 INCHES ABOVE BORE LINE.										TEST BARREL LENGTH INCHES	FEDERAL LOAD NO.				
				GRAINS	GRAMS				100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	50 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	50 YDS.	100 YDS.	200 YDS.			300 YDS.	400 YDS.	500 YDS.	
FEDERAL PREMIUM® V-SHOK®																																							
		1	P204D	204 Ruger	32	2.07		Speer TNT Green	205	4030	3320	2710	2170	1710	1330		1155	780	520	335	205	125	1.4	5.9	14.6	29	51.1	-0.4	◆	-1.7	-8.3	0.0	0.9	◆	-5.7	-19.1	-45.3	24	P204D
		1	P204B	204 Ruger	32	2.07		Nosler Ballistic Tip	205	4030	3470	2970	2520	2120	1760		1155	855	625	450	320	220	1.0	4.4	10.6	20.4	34.6	-0.4	◆	-1.4	-6.8	-0.1	0.7	◆	-4.7	-14.9	-33.1	24	P204B
		1	P204A	204 Ruger	39	2.53		Sierra BlitzKing	205	3750	3360	3010	2680	2380	2090		1220	980	785	625	490	380	0.8	3.3	7.8	14.6	24.3	-0.4	◆	-1.6	-7.0	0.0	0.8	◆	-4.7	-14.1	-29.9	24	P204A
		1	P22D	22 Hornet	30	1.94		Speer TNT Green	205	3150	2150	1390	990	830	720		660	310	130	65	45	35	3.5	17.5	46.9	88.9	140.9	-0.1	◆	-6.6	-32.7	1.5	3.3	◆	-22.8	-78.7	-179.7	24	P22D
		1	P22B	22 Hornet	45	2.92		Jacketed Soft Point	205	2690	2100	1590	1210	1000	890		725	440	255	145	100	80	2.6	11.9	30.5	59.3	95.9	0.0	◆	-6.6	-27.5	1.7	3.3	◆	-17.6	-59.5	-134.2	24	P22B
		1	P222C	222 Rem. (5.56x43mm)	40	2.59		Nosler Ballistic Tip	205	3450	2990	2570	2190	1840	1530		1055	790	585	425	300	210	1.2	4.9	11.9	22.8	39.1	-0.3	◆	-2.4	-10.2	0.3	1.2	◆	-6.5	-20.4	-45.0	24	P222C
		1	P222D	222 Rem. (5.56x43mm)	43	2.79		Speer TNT Green	205	3400	2750	2180	1680	1290	1050		1105	720	450	270	160	105	1.8	7.9	20.0	40.4	70.7	-0.3	◆	-3.2	-14.0	0.5	1.6	◆	-9.2	-31.4	-75.9	24	P222D
		1	P223P	223 Rem.	40	2.59		Nosler Ballistic Tip	205	3700	3210	2770	2370	2010	1680		1215	915	680	500	360	250	1.1	4.5	10.8	20.8	35.3	-0.4	◆	-1.9	-8.3	0.1	0.9	◆	-5.5	-17.3	-38.1	24	P223P
		1	P223R	223 Rem.	43	2.79		Speer TNT Green	205	3600	2920	2330	1810	1390	1100		1235	810	515	315	185	115	1.6	7.2	18.3	37.1	65.6	-0.3	◆	-2.7	-11.9	0.3	1.3	◆	-7.9	-27.1	-65.9	24	P223R
		1	P223E	223 Rem.	55	3.56		Sierra GameKing BTHP	205	3240	2850	2490	2150	1850	1570		1280	990	755	565	415	300	1.1	4.7	11.2	21.3	36.1	-0.3	◆	-2.8	-11.3	0.4	1.4	◆	-7.1	-21.6	-46.9	24	P223E
		1	P223F	223 Rem.	55	3.56		Nosler Ballistic Tip	205	3240	2870	2530	2210	1920	1650		1280	1005	780	595	450	335	1.0	4.3	10.4	19.6	33.2	-0.3	◆	-2.8	-11.0	0.4	1.4	◆	-6.8	-20.8	-44.6	24	P223F
		1	P22250D	22-250 Rem.	43	2.79		Speer TNT Green	210	4000	3250	2620	2070	1590	1220		1530	1010	655	405	240	145	1.5	6.4	15.9	31.9	56.7	-0.4	◆	-1.8	-8.9	0.0	0.9	◆	-6.1	-20.8	-50.5	24	P22250D
		1	P22250C	22-250 Rem.	55	3.56		Sierra BlitzKing	210	3625	3230	2860	2530	2210	1930		1605	1270	1000	780	600	450	0.9	3.7	8.8	16.5	27.5	-0.4	◆	-1.8	-8.0	0.1	0.9	◆	-5.2	-15.9	-33.7	24	P22250C
		1	P22250B	22-250 Rem.	55	3.56		Sierra GameKing BTHP	210	3650	3220	2830	2470	2140	1830		1625	1265	975	745	560	410	0.9	4.0	9.5	18.1	30.2	-0.4	◆	-1.9	-8.1	0.1	0.9	◆	-5.3	-16.4	-35.1	24	P22250B
		1	P220B	220 Swift	40	2.59		Nosler Ballistic Tip	210	4250	3690	3200	2770	2370	2000		1605	1210	910	680	500	355	0.9	3.8	9.2	17.3	29.2	-0.5	◆	-1.1	-5.5	-0.2	0.5	◆	-3.9	-12.4	-27.3	24	P220B
		1	P220C	220 Swift	50	3.24		Sierra BlitzKing	210	3850	3390	2980	2610	2270	1950		1645	1280	990	755	570	420	0.9	3.8	9	17	28.4	-0.4	◆	-1.5	-7	0.0	0.8	◆	-4.7	-14.5	-31.2	24	P220C
		1	P243H	243 Win. (6.16x51mm)	55	3.56		Nosler Ballistic Tip	210	3850	3440	3060	2720	2400	2110		1810	1445	1145	905	705	540	0.8	3.4	7.9	14.9	24.7	-0.4	◆	-1.5	-6.6	-0.1	0.7	◆	-4.4	-13.6	-28.9	24	P243H
		1	P243F	243 Win. (6.16x51mm)	70	4.54		Nosler Ballistic Tip	210	3450	3110	2800	2510	2240	1980		1850	1505	1220	980	780	610	0.8	3.4	8.0	15.0	24.8	-0.3	◆	-2.1	-8.6	0.2	1.0	◆	-5.5	-16.5	-34.6	24	P243F
		1	P2506G	25-06 Rem.	85	5.51		Nosler Ballistic Tip	210	3550	3230	2930	2640	2380	2130		2380	1965	1615	1320	1070	855	0.7	3.0	7.2	13.3	22.0	-0.4	◆	-1.8	-7.8	0.1	0.9	◆	-5.0	-15.0	-31.2	24	P2506G
FEDERAL PREMIUM® VITAL-SHOK®																																							
		2	P223S	223 Rem.	55	3.56		Barnes Triple-Shock X-Bullet	205	3200	2750	2350	1980	1650	1360		1250	925	670	475	330	225	1.3	5.6	13.6	26.5	45.2	-0.3	◆	-3.1	-12.6	0.5	1.6	◆	-8.0	-25.1	-55.5	24	P223S
		2	P223Q	223 Rem.	60	3.89		Nosler Partition	205	3160	2740	2350	2000	1680	1400		1330	1000	735	530	375	260	1.2	5.3	13.1	25.2	42.9	-0.2	◆	-3.2	-12.7	0.5	1.6	◆	-8.0	-24.8	-54.4	24	P223Q
		2	P22250Q	22-250 Rem.	50	3.24		Barnes Triple-Shock X-Bullet	210	3780	3220	2730	2290	1890	1540		1585	1155	830	580	395	265	1.2	5	12.1	23.5	40.5	-0.4	◆	-1.9	-8.4	0.1	0.9	◆	-5.6	-18.0	-40.7	24	P22250Q
		2	P22250G	22-250 Rem.	60	3.89		Nosler Partition	210	3500	3040	2630	2250	1910	1600		1630	1235	920	675	485	340	1.1	4.7	11.3	21.6	36.9	-0.3	◆	-2.3	-9.6	0.2	1.1	◆	-6.2	-19.3	-42.4	24	P22250G
		2	P243D	243 Win. (6.16x51mm)	85	5.51		Sierra GameKing BTHP	210	3300	2980	2680	2410	2140	1900		2055	1675	1360	1090	870	680	0.8	3.5	8.3	15.6	25.6	-0.3	◆	-2.4	-9.7	0.3	1.2	◆	-6.0	-18.2	-37.7	24	P243D
		2	P243K	243 Win. (6.16x51mm)	85	5.51		Barnes Triple-Shock X-Bullet	210	3200	2900	2630	2370	2120	1890		1935	1590	1305	1055	850	675	0.8	3.5	8.1	15.2	24.9	-0.3	◆	-2.7	-10.3	0.4	1.3	◆	-6.3	-19.0	-39.2	24	P243K
		2	P243J	243 Win. (6.16x51mm)	95	6.16		Nosler Ballistic Tip	210	3025	2770	2540	2310	2100	1890		1930	1625	1355	1125	925	755	0.8	3.2	7.6	14.2	23.0	-0.2	◆	-3.0	-11.5	0.5	1.5	◆	-6.9	-20.4	-41.6	24	P243J
		2	P243E	243 Win. (6.16x51mm)	100	6.48		Nosler Partition*	210	2850	2610	2390	2170	1970	1780		1805	1515	1265	1045	860	700	0.9	3.4	8.2	15.2	24.8	-0.2	◆	-3.6	-13.4	0.7	1.8	◆	-8.0	-23.3	-47.6	24	P243E
		2	P243C	243 Win. (6.16x51mm)	100	6.48		Sierra GameKing BTSP	210	2960	2740	2530	2330	2150	1960		1945	1670	1425	1210	1020	855	0.7	2.9	6.7	12.6	20.4	-0.2	◆	-3.1	-11.7	0.6	1.6	◆	-7.0	-20.4	-41.3	24	P243C
		2	P6D	6mm Rem.	85	5.51		Barnes Triple-Shock X-Bullet	210	3350	3040	2760	2490	2240	2000		2120	1750	1435	1170	945	755	0.8	3.2	7.7	14.2	23.4	-0.3	◆	-2.3	-9.1	0.2	1.1	◆	-5.7	-17.0	-35.3	24	P6D
		2	P6C	6mm Rem.	100	6.48		Nosler Partition	210	3100	2850	2610	2380	2170	1970		2135	1800	1515	1260	1045	860	0.7	3.1	7.1	13.4	21.9	-0.3	◆	-2.8	-10.7	0.4	1.4	◆	-6.5	-19.2	-39.2	24	P6C
		2	P257B	257 Roberts +P	120	7.78		Nosler Partition	210	2800	2570	2350	2140	1940	1760		2090	1760	1470	1220	1005	820	0.9	3.4	8.2	15.2	25.0	-0.1	◆	-3.8	-13.9	0.8	1.9	◆	-8.3	-24.0	-49.2	24	P257B
		2	P2506H	25-06 Rem.	100	6.48		Barnes Triple-Shock X-Bullet	210	3210	2970	2750	2540	2330	2140		2290	1965	1680	1430	1205	1015	0.6	2.7	6.2	11.4	18.7	-0.3	◆	-2.4	-9.5	0.3	1.2	◆	-5.8	-17.0	-3		

USEAGE	FEDERAL LOAD NO.	CALIBER	BULLET WEIGHT IN		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					WIND DRIFT IN INCHES 10 MPH CROSSWIND					HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 100 YARDS. SIGHTS 1.5 INCHES ABOVE BORE LINE.										TEST BARREL LENGTH INCHES	FEDERAL LOAD NO.				
			GRAINS	GRAMS			100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	50 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.									
FEDERAL PREMIUM® VITAL-SHOK®																																					
HV	2	P270WSMF	270 Win. Short Magnum	110	7.13	Barnes Tipped Triple-Shock X-Bullet	215	3500	3220	2960	2710	2470	2250		2990	2530	2135	1790	1495	1235	0.7	2.7	6.3	11.6	18.9	-0.4	◆	-1.9	-7.7	0.1	0.9	◆	-4.9	-14.6	-30.0	24	P270WSMF
	2	P270WSMTT1	270 Win. Short Magnum	130	8.42	Trophy Bonded Tip	215	3280	3050	2830	2620	2430	2240		3105	2685	2315	1990	1700	1445	0.6	2.4	5.8	10.5	17.1	-0.3	◆	-2.2	-8.8	0.2	1.1	◆	-5.5	-16.0	-32.4	24	P270WSMTT1
◇	2	P270WSMB	270 Win. Short Magnum	130	8.42	Nosler Ballistic Tip	215	3300	3070	2840	2630	2430	2240		3145	2710	2335	2000	1705	1445	0.6	2.5	5.8	10.6	17.3	-0.3	◆	-2.2	-8.7	0.2	1.1	◆	-5.4	-15.8	-32.2	24	P270WSMB
	2	P270WSMD	270 Win. Short Magnum	130	8.42	Barnes Triple-Shock X-Bullet	215	3280	3050	2820	2610	2410	2220		3105	2675	2300	1970	1675	1420	0.6	2.5	5.9	10.8	17.6	-0.3	◆	-2.2	-8.9	0.2	1.1	◆	-5.5	-16.1	-32.7	24	P270WSMD
◇	2	P270WSMA1	270 Win. Short Magnum	140	9.07	Nosler AccuBond	215	3200	3000	2810	2620	2450	2280		3185	2795	2450	2140	1860	1615	0.6	2.2	5.2	9.5	15.4	-0.3	◆	-2.4	-9.2	0.3	1.2	◆	-5.6	-16.2	-32.7	24	P270WSMA1
	3	P270WSMTT2	270 Win. Short Magnum	150	9.72	Trophy Bonded Tip	215	3100	2890	2700	2510	2330	2150		3200	2790	2420	2095	1800	1540	0.6	2.5	5.7	10.5	17.2	-0.3	◆	-2.7	-10.1	0.4	1.3	◆	-6.1	-17.7	-35.9	24	P270WSMTT2
◇	2	P270WSMC	270 Win. Short Magnum	150	9.72	Nosler Partition	215	3100	2890	2690	2500	2320	2150		3200	2785	2415	2085	1790	1530	0.6	2.5	5.8	10.6	17.4	-0.3	◆	-2.7	-10.1	0.4	1.3	◆	-6.1	-17.8	-36.0	24	P270WSMC
	2	P270WBTT1	270 Weatherby Magnum	130	8.42	Trophy Bonded Tip	215	3200	2970	2760	2560	2360	2170		2955	2555	2200	1885	1610	1365	0.6	2.5	5.9	10.9	17.8	-0.3	◆	-2.4	-9.5	0.3	1.2	◆	-5.8	-16.9	-34.3	24	P270WBTT1
◇	2	P270WBC	270 Weatherby Magnum	130	8.42	Barnes Triple-Shock X-Bullet	215	3200	2970	2750	2540	2340	2150		2955	2545	2185	1865	1585	1340	0.6	2.6	6.1	11.1	18.2	-0.3	◆	-2.4	-9.5	0.3	1.2	◆	-5.8	-17.0	-34.6	24	P270WBC
	2	P730A	7-30 Waters	120	7.78	Sierra GameKing BTSP FN	210	2700	2300	1930	1600	1330	1130		1940	1405	990	685	470	340	1.6	7.1	17.7	34.4	58.1	-0.1	◆	-5.1	-19.9	1.2	2.6	◆	-12.2	-38.1	-84.5	24	P730A
◇	2	P7C	7mm Mauser (7x57mm Mauser)	140	9.07	Nosler Partition	210	2660	2460	2260	2080	1900	1740		2200	1875	1595	1345	1125	940	0.8	3.3	7.9	14.4	23.7	-0.1	◆	-4.3	-15.4	1.0	2.1	◆	-9.0	-25.8	-52.6	24	P7C
	2	P708TT2	7mm-08 Rem.	140	9.07	Trophy Bonded Tip	210	2800	2590	2390	2200	2010	1840		2435	2085	1770	1500	1260	1050	0.8	3.1	7.4	13.6	22.1	-0.1	◆	-3.7	-13.5	0.8	1.8	◆	-8.0	-23.2	-46.8	24	P708TT2
◇	2	P708A	7mm-08 Rem.	140	9.07	Nosler Partition	210	2800	2590	2390	2200	2020	1850		2435	2090	1780	1505	1270	1060	0.8	3.1	7.3	13.4	21.8	-0.1	◆	-3.6	-13.5	0.8	1.8	◆	-8.0	-23.1	-46.6	24	P708A
	2	P708B	7mm-08 Rem.	140	9.07	Nosler Ballistic Tip	210	2800	2610	2430	2260	2090	1940		2435	2120	1840	1585	1365	1165	0.7	2.7	6.4	11.9	19.1	-0.2	◆	-3.6	-13.1	0.7	1.8	◆	-7.7	-22.3	-44.5	24	P708B
◇	2	P708C	7mm-08 Rem.	140	9.07	Barnes Triple-Shock X-Bullet	210	2820	2590	2370	2160	1960	1780		2470	2085	1745	1450	1200	980	0.9	3.4	8.1	14.9	24.4	-0.2	◆	-3.7	-13.6	0.8	1.8	◆	-8.1	-23.6	-48.1	24	P708C
	2	P280TT2	280 Rem.	140	9.07	Trophy Bonded Tip	210	2950	2730	2520	2330	2140	1960		2705	2320	1980	1680	1420	1190	0.7	2.9	6.8	12.7	20.5	-0.2	◆	-3.2	-11.8	0.6	1.6	◆	-7.0	-20.6	-41.5	24	P280TT2
◇	2	P280D	280 Rem.	140	9.07	Nosler Ballistic Tip	210	2990	2790	2610	2430	2260	2090		2780	2425	2115	1830	1580	1355	0.6	2.5	5.8	10.7	17.5	-0.2	◆	-3.0	-11.0	0.5	1.5	◆	-6.5	-19.1	-38.5	24	P280D
	2	P280E	280 Rem.	140	9.07	Barnes Triple-Shock X-Bullet	210	2960	2720	2500	2280	2080	1880		2725	2305	1935	1620	1340	1105	0.8	3.2	7.5	13.9	22.6	-0.2	◆	-3.2	-12.0	0.6	1.6	◆	-7.2	-21.1	-42.8	24	P280E
◇	2	P280A	280 Rem.	150	9.72	Nosler Partition	210	2890	2690	2490	2310	2130	1960		2780	2405	2070	1775	1510	1280	0.7	2.9	6.5	12.2	19.6	-0.2	◆	-3.3	-12.2	0.6	1.7	◆	-7.2	-21.1	-42.4	24	P280A
	2	P280TT1	280 Rem.	160	10.37	Trophy Bonded Tip	210	2800	2630	2460	2290	2140	1990		2785	2450	2145	1870	1625	1405	0.7	2.6	5.9	11.0	17.8	-0.2	◆	-3.5	-12.8	0.7	1.8	◆	-7.5	-21.8	-43.6	24	P280TT1
◇	2	P7RP	7mm Rem. Magnum	110	7.13	Barnes Tipped Triple-Shock X-Bullet	215	3500	3200	2920	2650	2400	2170		2990	2500	2075	1720	1410	1145	0.7	2.9	6.8	12.6	20.7	-0.4	◆	-1.9	-7.9	0.1	0.9	◆	-5.1	-15.0	-31.2	24	P7RP
	2	P7RTT2	7mm Rem. Magnum	140	9.07	Trophy Bonded Tip	215	3150	2920	2710	2500	2300	2110		3085	2655	2275	1940	1645	1390	0.6	2.7	6.2	11.4	18.7	-0.3	◆	-2.6	-10.0	0.4	1.3	◆	-6.1	-17.6	-35.9	24	P7RTT2
◇	2	P7RG	7mm Rem. Magnum	140	9.07	Nosler Partition	215	3150	2920	2710	2500	2310	2120		3085	2655	2280	1950	1655	1400	0.6	2.6	6.1	11.3	18.5	-0.3	◆	-2.6	-9.9	0.4	1.3	◆	-6.0	-17.6	-35.8	24	P7RG
	2	P7RM	7mm Rem. Magnum	140	9.07	Barnes Triple-Shock X-Bullet	215	3120	2870	2640	2420	2210	2010		3025	2565	2165	1815	1515	1250	0.7	3.0	6.9	12.9	21.0	-0.3	◆	-2.7	-10.4	0.4	1.4	◆	-6.3	-18.7	-38.1	24	P7RM
◇	2	P7RH	7mm Rem. Magnum	150	9.72	Nosler Ballistic Tip	215	3025	2830	2650	2470	2300	2130		3045	2670	2335	2030	1760	1515	0.6	2.4	5.6	10.3	16.8	-0.2	◆	-2.9	-10.7	0.5	1.4	◆	-6.4	-18.4	-37.2	24	P7RH
	3	P7RD	7mm Rem. Magnum	150	9.72	Sierra GameKing BTSP	215	3110	2890	2680	2470	2280	2090		3220	2775	2385	2035	1730	1460	0.6	2.7	6.2	11.5	18.7	-0.3	◆	-2.7	-10.2	0.4	1.4	◆	-6.2	-18.1	-36.7	24	P7RD
◇	3	P7RA1	7mm Rem. Magnum	160	10.37	Nosler AccuBond	215	2900	2730	2560	2390	2240	2090		2990	2635	2320	2035	1775	1545	0.6	2.4	5.5	10.2	16.5	-0.2	◆	-3.2	-11.7	0.6	1.6	◆	-6.9	-19.9	-39.9	24	P7RA1
	3	P7RN	7mm Rem. Magnum	160	10.37	Barnes Triple-Shock X-Bullet	215	2940	2760	2580	2410	2240	2090		3070	2695	2360	2060	1785	1545	0.6	2.5	5.6	10.5	17.0	-0.2	◆	-3.1	-11.4	0.6	1.6	◆	-6.7	-19.5	-39.3	24	P7RN
◇	3	P7RTT1	7mm Rem. Magnum	160	10.37	Trophy Bonded Tip	215	2900	2720	2550	2380	2220	2070		2990	2630	2310	2015	1755	1525	0.6	2.5	5.6	10.4	16.9	-0.2	◆	-3.2	-11.7	0.6	1.6	◆	-6.9	-20.0	-40.2	24	P7RTT1
	3	P7RF	7mm Rem. Magnum	160	10.37	Nosler Partition	215	2950	2750	2560	2380	2210	2040		3090	2690	2335	2015	1730	1480	0.6	2.7	6.0	11.3	18.2	-0.2	◆	-3.1	-11.5	0.6	1.6	◆	-6.8	-19.8	-40.0	24	P7RF
◇	3	P7RE	7mm Rem. Magnum	165	10.69	Sierra GameKing BTSP	215	2950	2750	2550	2360	2180	2010		3190	2760	2380	2045	1745	1480	0.7	2.7	6.3	11.8	19.0	-0.2	◆	-3.1	-11.6	0.6	1.6	◆	-6.9	-20.1	-40.5	24	P7RE
	3	P7RT1	7mm Rem. Magnum	175	11.34	Trophy Bonded Bear Claw	215	2750	2530	2320	2120	1930	1750		2940	2485	2090	1745	1450	1195	0.8	3.4	8.1	14.8	24.4	-0.1	◆	-3.9	-14.4	0.9	2.0	◆	-8.5	-24.6	-50.2	24	P7RT1
◇	2	P7WSMTT2	7mm Win. Short Magnum	140	9.07	Trophy Bonded Tip	215	3200	2970	2750	2540	2340	2150		3185	2740	2350	2010	1705	1440	0.6	2.6	6.1	11.2	18.3	-0.3	◆	-2.5	-9.5	0.3	1.2	◆	-5.8	-17			

FEDERAL PREMIUM® VITAL-SHOK®	USAGE	FEDERAL LOAD NO.	CALIBER	BULLET WEIGHT IN		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					WIND DRIFT IN INCHES 10 MPH CROSSWIND					HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 100 YARDS, SIGHTS 1.5 INCHES ABOVE BORE LINE.					TEST BARREL LENGTH INCHES	FEDERAL LOAD NO.							
				GRAINS	GRAMS			MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	50 YDS.	100 YDS.	200 YDS.			300 YDS.	400 YDS.	500 YDS.				
HV	2	P3006AQ	30-06 Spring. (7.62x63mm)	110	7.13	Barnes Tipped Triple-Shock X-Bullet	210	3400	3090	2800	2520	2270	2030	2825	2330	1910	1555	1255	1000	0.8	3.2	7.6	14.1	23.2	-0.3	◆	-2.1	-8.8	0.2	1.1	◆	-5.5	-16.5	-34.4	24	P3006AQ
	2	P3006G	30-06 Spring. (7.62x63mm)	150	9.72	Sierra GameKing BTSP	210	2910	2670	2440	2220	2010	1810	2820	2370	1975	1635	1345	1095	0.9	3.4	8.0	14.9	24.3	-0.2	◆	-3.4	-12.7	0.7	1.7	◆	-7.6	-22.3	-45.5	24	P3006G
	2	P3006P	30-06 Spring. (7.62x63mm)	150	9.72	Nosler Ballistic Tip	210	2910	2700	2490	2300	2110	1930	2820	2420	2070	1755	1485	1245	0.7	3.0	6.9	12.8	20.6	-0.2	◆	-3.3	-12.2	0.6	1.6	◆	-7.2	-21.1	-42.6	24	P3006P
	2	P3006Q	30-06 Spring. (7.62x63mm)	165	10.69	Nosler Ballistic Tip	210	2800	2610	2430	2250	2080	1920	2870	2495	2155	1855	1585	1350	0.7	2.8	6.6	12.2	19.6	-0.2	◆	-3.6	-13.1	0.7	1.8	◆	-7.8	-22.4	-44.9	24	P3006Q
	2	P3006TT2	30-06 Spring. (7.62x63mm)	165	10.69	Trophy Bonded Tip	210	2800	2600	2410	2220	2040	1880	2870	2475	2120	1805	1530	1290	0.8	2.9	7.0	12.9	20.9	-0.2	◆	-3.6	-13.3	0.8	1.8	◆	-7.9	-22.8	-45.8	24	P3006TT2
	2	P3006AD	30-06 Spring. (7.62x63mm)	165	10.69	Nosler Partition	210	2830	2610	2400	2190	2000	1820	2935	2490	2100	1760	1465	1210	0.8	3.2	7.7	14.2	23.1	-0.2	◆	-3.6	-13.3	0.7	1.8	◆	-7.9	-23.0	-46.8	24	P3006AD
	2	P3006AF	30-06 Spring. (7.62x63mm)	165	10.69	Barnes Triple-Shock X-Bullet	210	2800	2560	2340	2120	1920	1730	2870	2405	2000	1650	1350	1095	0.9	3.6	8.5	15.6	25.9	-0.1	◆	-3.8	-14.0	0.8	1.9	◆	-8.4	-24.2	-49.9	24	P3006AF
	2	P3006D	30-06 Spring. (7.62x63mm)	165	10.69	Sierra GameKing BTSP	210	2800	2580	2360	2160	1970	1780	2870	2430	2045	1710	1415	1165	0.8	3.3	7.9	14.6	23.9	-0.1	◆	-3.7	-13.8	0.8	1.9	◆	-8.2	-23.7	-48.3	24	P3006D
	3	P3006F	30-06 Spring. (7.62x63mm)	180	11.66	Nosler Partition	210	2700	2510	2330	2160	2000	1840	2915	2525	2175	1865	1590	1350	0.7	2.9	7.0	12.9	20.7	-0.1	◆	-4.0	-14.5	0.9	2.0	◆	-8.5	-24.4	-48.7	24	P3006F
	3	P3006AH	30-06 Spring. (7.62x63mm)	180	11.66	Barnes MRX-Bullet	210	2700	2540	2380	2230	2090	1950	2915	2575	2270	1990	1740	1515	0.6	2.4	5.9	10.8	17.3	-0.1	◆	-3.9	-13.9	0.8	1.9	◆	-8.1	-23.3	-46.1	24	P3006AH
3	P3006AE	30-06 Spring. (7.62x63mm)	180	11.66	Barnes Triple-Shock X-Bullet	210	2700	2500	2320	2140	1970	1800	2915	2505	2145	1825	1545	1295	0.7	3.1	7.3	13.5	21.9	-0.1	◆	-4.0	-14.7	0.9	2.0	◆	-8.6	-24.7	-49.7	24	P3006AE	
3	P3006A1	30-06 Spring. (7.62x63mm)	180	11.66	Nosler AccuBond	210	2700	2545	2215	1920	1660	1425	2915	2545	2215	1920	1660	1425	0.7	2.7	6.5	11.9	19.0	-0.1	◆	-3.9	-14.2	0.9	2.0	◆	-8.3	-23.8	-47.4	24	P3006A1	
HE RMEF	3	P3006TT4	30-06 Spring. (7.62x63mm)	180	11.66	Trophy Bonded Tip	210	2880	2700	2520	2350	2180	2020	3315	2900	2530	2200	1900	1635	0.7	2.6	5.9	11.0	17.8	-0.2	◆	-3.3	-12.0	0.6	1.6	◆	-7.1	-20.6	-41.4	24	P3006TT4
◆	2	P3006TT1	30-06 Spring. (7.62x63mm)	180	11.66	Trophy Bonded Tip	210	2700	2520	2350	2190	2030	1880	2915	2540	2210	1910	1645	1410	0.7	2.7	6.6	12.0	19.4	-0.1	◆	-3.9	-14.3	0.9	2.0	◆	-8.4	-23.9	-47.7	24	P3006TT1
◆	3	P300HA	300 H&H Magnum	180	11.66	Nosler Partition	215	2880	2620	2380	2150	1930	1730	3315	2750	2260	1845	1490	1190	0.9	3.7	8.8	16.3	27.0	-0.2	◆	-3.5	-13.3	0.7	1.8	◆	-8.0	-23.4	-48.5	24	P300HA
◆	3	P300HB	300 H&H Magnum	180	11.66	Barnes Triple-Shock X-Bullet	215	2880	2680	2480	2290	2120	1950	3315	2860	2460	2105	1790	1510	0.7	2.9	6.6	12.4	19.9	-0.2	◆	-3.4	-12.3	0.7	1.7	◆	-7.3	-21.3	-42.9	24	P300HB
◆	3	P300HTT1	300 H&H Magnum	180	11.66	Trophy Bonded Tip	215	2880	2700	2520	2350	2180	2020	3315	2900	2530	2200	1900	1635	0.7	2.6	5.9	11.0	17.8	-0.2	◆	-3.3	-12.0	0.6	1.6	◆	-7.1	-20.6	-41.4	24	P300HTT1
HV	2	P300WL	300 Win. Magnum	130	8.42	Barnes Tipped Triple-Shock X-Bullet	215	3500	3200	2930	2670	2420	2190	3535	2965	2475	2055	1690	1385	0.7	2.8	6.7	12.3	20.2	-0.4	◆	-1.9	-7.9	0.1	0.9	◆	-5.0	-14.9	-30.8	24	P300WL
	3	P300WTT2	300 Win. Magnum	165	10.69	Trophy Bonded Tip	215	3050	2840	2630	2440	2250	2080	3410	2950	2540	2180	1860	1575	0.6	2.7	6.1	11.4	18.5	-0.2	◆	-2.9	-10.7	0.5	1.4	◆	-6.4	-18.7	-37.9	24	P300WTT2
	2	P300WR	300 Win. Magnum	165	10.69	Barnes Triple-Shock X-Bullet	215	3050	2800	2560	2340	2120	1920	3410	2870	2400	1995	1650	1345	0.7	3.2	7.4	13.9	22.6	-0.2	◆	-3.0	-11.2	0.5	1.5	◆	-6.7	-20.0	-40.8	24	P300WR
	2	P300WK	300 Win. Magnum	165	10.69	Nosler Partition	215	3050	2820	2590	2380	2180	1990	3410	2905	2465	2080	1740	1450	0.7	3.0	6.8	12.8	20.8	-0.2	◆	-2.9	-10.9	0.5	1.5	◆	-6.6	-19.4	-39.5	24	P300WK
	3	P300WTT1	300 Win. Magnum	180	11.66	Trophy Bonded Tip	215	2960	2770	2590	2420	2250	2090	3500	3070	2680	2335	2025	1745	0.6	2.5	5.7	10.5	17.1	-0.2	◆	-3.1	-11.2	0.5	1.5	◆	-6.6	-19.3	-38.9	24	P300WTT1
	3	P300WX	300 Win. Magnum	180	11.66	Barnes MRX-Bullet	215	2960	2790	2620	2470	2310	2160	3500	3110	2750	2430	2135	1870	0.5	2.3	5.1	9.4	15.3	-0.2	◆	-3.0	-11.0	0.5	1.5	◆	-6.5	-18.7	-37.6	24	P300WX
	3	P300WP	300 Win. Magnum	180	11.66	Barnes Triple-Shock X-Bullet	215	2960	2750	2550	2360	2180	2010	3500	3025	2605	2235	1905	1610	0.7	2.8	6.3	11.8	19.2	-0.2	◆	-3.1	-11.5	0.6	1.6	◆	-6.8	-20.0	-40.4	24	P300WP
	3	P300WD2	300 Win. Magnum	180	11.66	Nosler Partition	215	2960	2700	2460	2220	2010	1800	3500	2915	2410	1980	1605	1295	0.9	3.5	8.3	15.4	25.3	-0.2	◆	-3.3	-12.3	0.6	1.6	◆	-7.4	-21.9	-45.0	24	P300WD2
	3	P300WA1	300 Win. Magnum	180	11.66	Nosler AccuBond	215	2960	2770	2600	2420	2260	2100	3500	3075	2690	2350	2040	1765	0.6	2.5	5.6	10.4	16.8	-0.2	◆	-3.0	-11.2	0.5	1.5	◆	-6.6	-19.2	-38.7	24	P300WA1
	3	P300WT1	300 Win. Magnum	200	12.96	Trophy Bonded Bear Claw	215	2700	2480	2260	2060	1870	1690	3235	2720	2275	1885	1550	1265	0.9	3.6	8.5	15.7	26.1	-0.1	◆	-4.2	-15.2	0.9	2.1	◆	-8.9	-25.9	-53.3	24	P300WT1
HV	2	P300WSMK	300 Win. Short Magnum	130	8.42	Barnes Tipped Triple-Shock	215	3500	3200	2930	2670	2420	2190	3535	2965	2475	2055	1690	1385	0.7	2.8	6.7	12.3	20.2	-0.4	◆	-1.9	-7.9	0.1	0.9	◆	-5.0	-14.9	-30.8	24	P300WSMK
	2	P300WSMD	300 Win. Short Magnum	150	9.72	Nosler Ballistic Tip	215	3250	3020	2800	2590	2390	2200	3520	3035	2610	2235	1905	1615	0.6	2.5	5.9	10.8	17.6	-0.3	◆	-2.3	-9.1	0.3	1.2	◆	-5.6	-16.3	-33.3	24	P300WSMD
	3	P300WSMTT2	300 Win. Short Magnum	165	10.69	Trophy Bonded Tip	215	3130	2910	2710	2510	2320	2140	3590	3110	2680	2305	1970	1675	0.6	2.6	5.9	10.9	17.9	-0.3	◆	-2.6	-10.0	0.4	1.3	◆	-6.0	-17.6	-35.7	24	P300WSMTT1
	2	P300WSME	300 Win. Short Magnum	165	10.69	Nosler Partition	215	3120	2880	2660	2450	2240	2050	3565	3045	2590	2190	1840	1535	0.6	2.8	6.6	12.2	20.0	-0.3	◆	-2.7	-10.3	0.4	1.4	◆	-6.2	-18.3	-37.4	24	P300WSME
	2	P300WSMG	300 Win. Short Magnum	165	10.69	Barnes Triple-Shock X-Bullet	215	3130	2870	2630	2400	2190	1980	3590	3025	2540	2115	1750	1435	0.7	3.1	7.1	13.4	21.9	-0.3	◆	-2.7	-10.5	0.4	1.4	◆	-6.3	-18.8	-38.5	24	P300WSMG
	3	P300WSMJ	300 Win. Short Magnum	180	11.66	Barnes MRX-Bullet	215	2980	2810	2640	2480	2330	2180	3550	3150	2790	2465	2170	1900	0.5	2.2	5.1	9.3	15.1	-0.2	◆	-2.9	-10.8	0.5	1.5	◆	-6.4	-1			

FEDERAL LOAD NO.	CALIBER	BULLET WEIGHT IN GRAMS	BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					WIND DRIFT IN INCHES 10 MPH CROSSWIND					HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 100 YARDS. SIGHTS 1.5 INCHES ABOVE BORE LINE.					TEST BARREL LENGTH INCHES	FEDERAL LOAD NO.									
					MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	50 YDS.	AVERAGE RANGE	100 YDS.			200 YDS.	300 YDS.	400 YDS.	500 YDS.					
FEDERAL PREMIUM® CAPE•SHOK®																																			
4	P370C	370 Sako Magnum	Barnes Triple-Shock X-Bullet	210	286	18.53	2550	2370	2190	2020	1860	1710	4130	3555	3045	2595	2195	1855	0.7	3.3	7.6	14.0	23.1	0.0	0.0	-4.8	-16.7	1.2	2.4	-9.6	-27.5	-56.0	24	P370C	
4	P370SA	370 Sako Magnum	Swift A-Frame	210	286	18.53	2550	2330	2120	1920	1730	1560	4130	3440	2845	2330	1900	1540	0.9	4.1	9.4	17.9	29.4	0.0	0.0	-5	-17.6	1.2	2.5	-10.1	-30	-61.5	24	P370SA	
4	P370A	370 Sako Magnum	Barnes Banded Solid	210	286	18.53	2550	2220	1920	1650	1410	1210	4130	3135	2340	1720	1255	935	1.5	6.2	15.4	29.4	49.2	0.0	0.0	-5.5	-20.8	1.4	2.8	-12.5	-37.7	-81.3	24	P370A	
4	P9362C	9.3x62 Mauser	Barnes Triple-Shock X-Bullet	210	286	18.53	2360	2160	1970	1790	1630	1470	3535	2965	2465	2035	1675	1375	1.1	4.3	9.9	18.8	30.4	0.0	0.0	-0.2	-6.4	0.1	0.0	-5.9	-20.8	-46.9	-85.7	24	P9362C
4	P9362D	9.3x62 Mauser	Barnes Banded Solid	210	286	18.53	2360	2050	1760	1500	1290	1130	3535	2660	1965	1435	1055	805	1.7	7.1	17.2	32.9	54.5	0.0	0.0	-0.3	-7.4	0.1	0.0	-6.8	-25	-59	-114.2	24	P9362D
4	P9362SA	9.3x62 Mauser	Swift A-Frame	210	286	18.53	2360	2150	1950	1760	1580	1420	3535	2930	2405	1960	1590	1285	1.2	4.5	10.8	20.2	32.9	0.0	0.0	-0.2	-6.5	0.1	0.0	-6.0	-21.3	-48.0	-88.4	24	P9362SA
4	P9374C	9.3x74R	Barnes Triple-Shock X-Bullet	210	286	18.53	2360	2160	1970	1790	1630	1470	3535	2965	2465	2035	1675	1375	1.1	4.3	9.9	18.8	30.4	0.0	0.0	-0.2	-6.4	0.1	0.0	-5.9	-20.8	-46.9	-85.7	24	P9374C
4	P9374D	9.3x74R	Barnes Banded Solid	210	286	18.53	2360	2050	1760	1500	1290	1130	3535	2660	1965	1435	1055	805	1.7	7.1	17.2	32.9	54.5	0.0	0.0	-0.3	-7.4	0.1	0.0	-6.8	-25.0	-59.0	-114.2	24	P9374D
4	P9374SA	9.3x74R	Swift A-Frame	210	286	18.53	2360	2150	1950	1760	1580	1420	3535	2930	2405	1960	1590	1285	1.2	4.5	10.8	20.2	32.9	0.0	0.0	-0.2	-6.5	0.1	0.0	-6.0	-21.3	-48.0	-88.4	24	P9374SA
4	P375H	375 H&H Magnum	Barnes Triple-Shock X-Bullet	215	400	19.44	2470	2240	2010	1800	1610	1440	4065	3325	2700	2170	1735	1380	1.1	4.6	10.9	20.7	33.8	0.0	0.0	-5.5	-19.5	1.4	2.7	-11.3	-33.6	-69.0	24	P375H	
4	P375J	375 H&H Magnum	Barnes Banded Solid	215	400	19.44	2500	2230	1970	1730	1520	1330	4165	3300	2585	2000	1535	1185	1.3	5.4	12.9	24.3	40.4	0.0	0.0	-0.1	-5.7	0.0	0.0	-5.5	-20.1	-46.3	-88.0	24	P375J
4	P375T1	375 H&H Magnum	Trophy Bonded Bear Claw	215	400	19.44	2400	2160	1930	1720	1530	1360	3835	3105	2485	1975	1555	1230	1.3	5.0	12.1	22.6	37.3	0.1	0.1	-5.9	-21.3	1.6	3.0	-12.4	-36.6	-75.9	24	P375T1	
4	P375T2	375 H&H Magnum	Trophy Bonded Sledgehammer Solid	215	400	19.44	2440	2120	1820	1550	1320	1150	3965	2980	2195	1595	1165	875	1.7	6.9	16.9	32.2	53.6	0.0	0.0	-0.2	-6.7	0.1	0.0	-6.3	-23.4	-55.1	-107.3	24	P375T2
4	P375T3	375 H&H Magnum	Trophy Bonded Bear Claw	215	400	19.44	2600	2350	2110	1890	1680	1490	4505	3670	2965	2365	1880	1480	1.0	4.5	10.5	20.1	33.1	0.0	0.0	-4.9	-17.4	1.2	2.4	-10.1	-30.4	-62.9	24	P375T3	
4	P375SA	375 H&H Magnum	Swift A-Frame	215	400	19.44	2450	2190	1950	1730	1530	1350	4000	3205	2540	1995	1555	1215	1.3	5.2	12.4	23.3	38.6	0.0	0.0	-0.1	-6.0	0.1	0.0	-5.7	-20.7	-47.3	-89.1	24	P375SA
4	P416D	416 Rigby	Barnes Triple-Shock X-Bullet	216	400	25.92	2400	2190	1990	1800	1630	1460	5115	4255	3515	2875	2345	1905	1.1	4.4	10.2	19.3	31.4	0.0	0.0	-0.2	-6.1	0.1	0.0	-5.8	-20.3	-45.9	-84.3	24	P416D
4	P416E	416 Rigby	Barnes Banded Solid	216	400	25.92	2400	2190	1990	1790	1620	1460	5115	4250	3500	2860	2325	1885	1.1	4.5	10.3	19.6	31.8	0.0	0.0	-0.2	-6.1	0.1	0.0	-5.8	-20.3	-46.1	-84.7	24	P416E
4	P416T1	416 Rigby	Trophy Bonded Bear Claw	216	400	25.92	2300	2080	1880	1690	1520	1360	4700	3860	3140	2540	2045	1645	1.2	4.8	11.6	21.6	35.4	0.0	0.0	-0.3	-7.1	0.2	0.0	-6.4	-23.0	-51.5	-95.4	24	P416T1
4	P416T2	416 Rigby	Trophy Bonded Sledgehammer Solid	216	400	25.92	2370	2070	1800	1550	1340	1170	4990	3815	2870	2135	1590	1215	1.6	6.6	16.1	30.5	50.5	0.0	0.0	-0.3	-7.1	0.1	0.0	-6.6	-24.2	-56.3	-108.3	24	P416T2
4	P416SA	416 Rigby	Swift A-Frame	216	400	25.92	2350	2130	1920	1720	1540	1380	4905	4020	3265	2635	2110	1695	1.2	4.7	11.5	21.5	35.2	0.0	0.0	-0.3	-6.6	0.1	0.0	-6.1	-21.9	-49.4	-91.6	24	P416SA
4	P416RB	416 Rem. Magnum	Barnes Triple-Shock X-Bullet	216	400	25.92	2370	2160	1960	1770	1600	1440	4990	4145	3415	2795	2280	1850	1.1	4.4	10.4	19.7	32.0	0.0	0.0	-0.2	-6.4	0.1	0.0	-5.9	-20.9	-47.3	-86.7	24	P416RB
4	P416RC	416 Rem. Magnum	Barnes Banded Solid	216	400	25.92	2400	2190	1990	1790	1620	1460	5115	4250	3500	2860	2325	1885	1.1	4.5	10.3	19.6	31.8	0	0	-0.2	-6.1	0.1	0	-5.8	-20.3	-46.1	-84.7	24	P416RC
4	P416RT1	416 Rem. Magnum	Trophy Bonded Bear Claw	216	400	25.92	2400	2180	1970	1770	1590	1430	5115	4215	3445	2790	2250	1805	1.2	4.6	10.9	20.5	33.4	0.0	0.0	-0.2	-6.2	0.1	0.0	-5.8	-20.6	-46.8	-86.4	24	P416RT1
4	P416RT2	416 Rem. Magnum	Trophy Bonded Sledgehammer Solid	216	400	25.92	2400	2100	1820	1570	1360	1190	5115	3920	2950	2200	1635	1245	1.6	6.5	15.8	29.9	49.7	0.0	0.0	-0.2	-6.8	0.1	0.0	-6.4	-23.5	-54.6	-105.2	24	P416RT2
4	P416RSA	416 Rem. Magnum	Swift A-Frame	216	400	25.92	2400	2180	1960	1760	1580	1410	5115	4200	3420	2760	2215	1775	1.2	4.7	11.1	20.9	34.1	0.0	0.0	-0.2	-6.2	0.1	0.0	-5.8	-20.8	-47.1	-87.1	24	P416RSA
4	P458T1	458 Win. Magnum	Trophy Bonded Bear Claw	215	500	32.40	2250	2030	1810	1620	1440	1290	4495	3640	2920	2325	1845	1480	1.3	5.3	12.9	23.8	39.2	0.0	0.0	-0.4	-7.7	0.2	0.0	-7.0	-24.8	-55.6	-103.7	24	P458T1
4	P458T2	458 Win. Magnum	Trophy Bonded Bear Claw	215	500	32.40	2090	1820	1580	1370	1200	1080	4850	3685	2775	2080	1595	1285	1.7	7.7	18.3	34.4	55.8	0.0	0.0	-0.8	-10.7	0.4	0.0	-9.2	-32.2	-74.1	-140.5	24	P458T2
4	P458T3	458 Win. Magnum	Trophy Bonded Sledgehammer Solid	215	500	32.40	1950	1730	1530	1350	1210	1100	4220	3320	2595	2030	1615	1335	1.8	7.2	16.9	31.2	50.2	0.0	0.0	-1.1	-12.4	0.6	0.0	-10.2	-35.7	-79.6	-148.0	24	P458T3
4	P458D	458 Win. Magnum	Barnes Triple-Shock X-Bullet	215	500	32.40	2050	1870	1700	1540	1390	1270	4665	3865	3190	2620	2150	1780	1.1	5.2	12.2	22.5	36.6	0.0	0.0	-0.7	-10.1	0.4	0.0	-8.7	-29.4	-64.8	-118.4	24	P458D
4	P458E	458 Win. Magnum	Barnes Banded Solid	215	500	32.40	2050	1860	1680	1520	1370	1240	4665	3830	3130	2545	2075	1710	1.1	5.5	12.7	23.7	38.5	0.0	0.0	-0.8	-10.3	0.4	0.0	-8.8	-29.7	-65.9	-120.9	24	P458E
4	P458SA	458 Win. Magnum	Swift A-Frame	215	500	32.40	2090	1880	1680	1500	1350	1210	4850	3915	3145	2510	2010	1630	1.2	5.9	13.7	25.7	41.8	0.0	0.0	-0.7	-9.9	0.3	0.0	-8.5	-29.2	-65.5	-121.1	24	P458SA
4	P458LT1	458 Lott	Trophy Bonded Bear Claw	216	500	32.40	2300	2020	1760	1520	1320	1160	5875	4515	3420	2565	1935	1495	1.6	6.7	16.1	30.5	50.3	0.0	0.0	-0.4	-7.8	0.2	0.0	-7.1	-25.6	-59.4	-113.4	24	P458LT1
4	P458LT2	458 Lott	Trophy Bonded Sledgehammer Solid	216	500	32.40	2300	2060	1830	1620	1430	1270	5875	4690	3700	2900	2260	1780	1.4	5.6	13.6	25.2	41.7	0.0	0.0	-0.3	-7.4	0.2	0.0	-6.7	-24.1	-54.6	-102.7	24	P458LT2
4	P458LA	458 Lott	Barnes Triple-Shock X-Bullet	216	500	32.40	2																												

FEDERAL LOAD NO.	FEDERAL LOAD NO.	CALIBER	BULLET WEIGHT IN		BULLET STYLE	FACTORY PRIMER NO.	MUZZLE	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					WIND DRIFT IN INCHES 10 MPH CROSSWIND					HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 100 YARDS, SIGHTS 1.5 INCHES ABOVE BORE LINE.					TEST BARREL LENGTH INCHES	FEDERAL LOAD NO.								
			GRAINS	GRAMS				100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	50 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.			500 YDS.							
1	222A	222 Rem. (5.56x43mm)	50	3.24	Soft Point	205	3140	2710	2320	1960	1640	1370			1095	815	595	425	300	205	1.3	5.5	13.5	26.3	44.7	-0.2	◆	-3.3	-13.1	0.6	1.6	◆	-8.2	-25.7	-56.5	24	222A
1	223A	223 Rem.	55	3.56	Soft Point	205	3240	2800	2400	2040	1710	1420			1280	955	705	505	355	245	1.2	5.3	12.9	25.0	42.6	-0.3	◆	-3.0	-12.0	0.5	1.5	◆	-7.6	-23.8	-52.3	24	223A
1	223B	223 Rem.	55	3.56	Full Metal Jacket Boat-Tail	205	3240	2870	2540	2220	1930	1670			1280	1010	785	605	455	340	1.0	4.3	10.2	19.4	32.7	-0.3	◆	-2.7	-10.9	0.4	1.4	◆	-6.8	-20.6	-44.2	24	223B
	223L	223 Rem.	64	4.15		Soft Point	205	3050	2680	2340	2030	1740	1490			1320	1020	780	585	430	315	1.2	4.9	11.8	22.6	38.2	-0.2	◆	-3.3	-13.1	0.6	1.7	◆	-8.1	-24.7	-53.2	24
1	22250A	22-250 Rem.	55	3.56	Soft Point	210	3650	3170	2730	2340	1980	1660			1625	1225	915	670	480	335	1.1	4.6	10.9	21.1	35.8	-0.4	◆	-2.0	-8.6	0.1	1.0	◆	-5.7	-17.8	-39.2	24	22250A
2	243AS	243 Win. (6.16x51mm)	80	5.18	Soft Point	210	3330	3050	2790	2540	2310	2090			1970	1655	1380	1150	945	775	0.7	3.0	6.9	12.8	21.1	-0.3	◆	-2.2	-9.0	0.2	1.1	◆	-5.6	-16.6	-34.2	24	243AS
2	243B	243 Win. (6.16x51mm)	100	6.48	Soft Point	210	2960	2700	2450	2210	1990	1780			1945	1615	1330	1085	880	705	0.9	3.6	8.4	15.8	25.9	-0.2	◆	-3.3	-12.4	0.6	1.6	◆	-7.5	-22.1	-45.4	24	243B
2	6AS	6mm Rem.	80	5.18	Soft Point	210	3400	3120	2850	2600	2360	2140			2055	1725	1445	1200	995	815	0.7	2.9	6.8	12.5	20.5	-0.3	◆	-2.1	-8.5	0.2	1.0	◆	-5.4	-15.8	-32.6	24	6AS
2	6B	6mm Rem.	100	6.48	Soft Point	210	3100	2830	2570	2330	2100	1880			2135	1775	1470	1205	980	785	0.8	3.4	7.9	14.8	24.1	-0.3	◆	-2.9	-11.0	0.5	1.4	◆	-6.7	-19.9	-40.7	24	6B
2	2506BS	25-06 Rem.	117	7.58	Soft Point	210	3030	2770	2520	2280	2060	1850			2385	1990	1650	1355	1105	890	0.8	3.4	8.0	14.9	24.4	-0.2	◆	-3.1	-11.6	0.5	1.5	◆	-7.0	-20.8	-42.5	24	2506BS
2	6555B	6.5x55mm Swedish	140	9.07	Soft Point*	210	2650	2450	2260	2080	1900	1740			2185	1865	1585	1340	1120	935	0.7	3.3	7.8	14.3	23.6	-0.1	◆	-4.3	-15.5	1.0	2.2	◆	-9.0	-25.9	-52.8	24	6555B
2	270A	270 Win.	130	8.42	Soft Point	210	3060	2800	2560	2330	2110	1900			2705	2265	1890	1565	1285	1045	0.8	3.2	7.6	14.2	23.1	-0.2	◆	-3.0	-11.2	0.5	1.5	◆	-6.7	-20.0	-40.9	24	270A
2	270B	270 Win.	150	9.72	Soft Point RN	210	2830	2490	2170	1870	1610	1370			2665	2055	1565	1165	860	630	1.3	5.4	12.8	24.9	41.7	-0.1	◆	-4.2	-15.7	0.9	2.1	◆	-9.4	-29.2	-62.6	24	270B
2	270WSME	270 Win. Short Magnum	130	8.42	Soft Point	215	3250	2980	2720	2480	2250	2030			3050	2560	2140	1775	1460	1195	0.7	3.0	7.1	13.2	21.7	-0.3	◆	-2.4	-9.6	0.3	1.2	◆	-5.9	-17.5	-36.0	24	270WSME
2	7B	7mm Mauser (7x57mm Mauser)	140	9.07	Soft Point	210	2660	2450	2260	2070	1890	1720			2200	1870	1585	1330	1110	920	0.8	3.4	8.0	14.7	24.3	-0.1	◆	-4.3	-15.5	1.0	2.1	◆	-9.0	-25.9	-53.1	24	7B
2	7A	7mm Mauser (7x57mm Mauser)	175	11.34	Soft Point RN	210	2390	2090	1810	1560	1350	1180			2220	1695	1275	950	705	540	1.6	6.5	16.0	30.2	50.2	0.1	◆	-6.5	-23.7	1.7	3.2	◆	-14.1	-42.4	-90.4	24	7A
2	708CS	7mm-08 Rem.	150	9.72	Soft Point	210	2650	2440	2240	2040	1860	1690			2340	1980	1665	1390	1150	950	0.8	3.5	8.3	15.3	25.4	-0.1	◆	-4.4	-15.7	1.0	2.2	◆	-9.2	-26.5	-54.4	24	708CS
2	280B	280 Rem.	150	9.72	Soft Point	210	2890	2670	2460	2250	2060	1880			2780	2370	2010	1690	1415	1175	0.8	3.1	7.3	13.6	22.0	-0.2	◆	-3.4	-12.6	0.7	1.7	◆	-7.5	-21.9	-44.2	24	280B
2	7RA	7mm Rem. Magnum	150	9.72	Soft Point	215	3110	2840	2590	2350	2120	1910			3220	2685	2230	1835	1495	1210	0.8	3.3	7.7	14.5	23.6	-0.3	◆	-2.8	-10.8	0.4	1.4	◆	-6.6	-19.6	-40.1	24	7RA
3	7RB	7mm Rem. Magnum	175	11.34	Soft Point	215	2860	2650	2440	2250	2060	1880			3180	2720	2315	1960	1650	1375	0.8	3.0	7.2	13.3	21.4	-0.2	◆	-3.5	-12.8	0.7	1.7	◆	-7.6	-22.1	-44.6	24	7RB
2	7WSME	7mm Win. Short Magnum	150	9.72	Soft Point	215	3100	2830	2580	2340	2110	1900			3200	2670	2215	1820	1485	1200	0.8	3.3	7.7	14.5	23.7	-0.3	◆	-2.9	-10.9	0.5	1.4	◆	-6.6	-19.7	-40.4	24	7WSME
1	30CA	30 Carbine	110	7.13	Soft Point RN	205	1990	1560	1230	1030	920	840			965	595	370	260	205	170	3.5	15.1	35.8	63.7	97.4	0.7	◆	-13.0	-49.1	3.9	6.5	◆	-29.7	-90.9	-190.2	18	30CA
2	76239B	7.62x39mm Soviet	123	7.97	Soft Point	210	2350	2060	1780	1540	1330	1160			1510	1155	870	645	480	370	1.6	6.7	16.2	30.7	50.8	0.2	◆	-6.7	-24.6	1.8	3.4	◆	-14.5	-43.9	-93.3	20	76239B
	3030C	30-30 Win.	125	8.10	Hollow Point	210	2570	2080	1660	1310	1080	950			1835	1205	760	475	325	250	2.3	10.2	25.6	49.9	81.6	0.1	◆	-6.7	-26.4	1.7	3.3	◆	-16.4	-53.7	-120.6	24	3030C
2	3030A	30-30 Win.	150	9.72	Soft Point FN	210	2390	2020	1690	1400	1180	1040			1900	1360	945	650	465	360	2.0	8.6	20.8	40.0	65.9	0.1	◆	-7.2	-26.7	1.9	3.6	◆	-15.9	-50.1	-109.8	24	3030A
2	3030B	30-30 Win.	170	11.02	Soft Point RN	210	2200	1890	1620	1380	1190	1060			1825	1355	990	720	535	425	1.8	8.1	19.4	36.7	59.9	0.3	◆	-8.4	-30.0	2.4	4.2	◆	-17.4	-53.5	-114.4	24	3030B
2	300A	300 Savage	150	9.72	Soft Point	210	2630	2350	2090	1850	1630	1430			2305	1845	1460	1140	885	680	1.1	4.9	11.5	22.1	36.4	-0.1	◆	-4.8	-17.5	1.2	2.4	◆	-10.2	-31.1	-64.8	24	300A
2	300B	300 Savage	180	11.66	Soft Point	210	2350	2140	1930	1750	1570	1410			2205	1825	1495	1215	985	795	1.2	4.5	10.9	20.5	33.3	0.1	◆	-6.1	-21.6	1.6	3.0	◆	-12.5	-36.5	-74.4	24	300B
2	308A	308 Win. (7.62x51mm)	150	9.72	Soft Point	210	2820	2530	2260	2010	1770	1560			2650	2135	1700	1340	1045	805	1.1	4.4	10.4	19.7	32.9	-0.1	◆	-3.9	-14.7	0.8	2.0	◆	-8.8	-26.3	-55.2	24	308A
2	308B	308 Win. (7.62x51mm)	180	11.66	Soft Point	210	2570	2350	2130	1930	1740	1570			2640	2195	1815	1485	1210	980	0.9	4.1	9.4	17.8	29.4	0.0	◆	-4.9	-17.3	1.2	2.4	◆	-10.0	-29.5	-60.7	24	308B
	3006CS	30-06 Spring. (7.62x63mm)	125	8.10	Soft Point	210	3140	2780	2450	2140	1850	1590			2735	2145	1660	1265	950	705	1.0	4.5	10.8	20.4	34.6	-0.3	◆	-3.0	-11.9	0.5	1.5	◆	-7.4	-22.3	-48.0	24	3006CS
2	3006A	30-06 Spring. (7.62x63mm)	150	9.72	Soft Point	210	2910	2620	2340	2080	1840	1620			2820	2280	1825	1440	1125	875	1.0	4.2	10.0	18.7	31.4	-0.2	◆	-3.6	-13.6	0.7	1.8	◆	-8.2	-24.4	-51.3	24	3006A
2	3006B	30-06 Spring. (7.62x63mm)	180	11.66	Soft Point	210	2700	2470	2250	2050	1850	1670			2915	2440	2025	1670	1365	1110	0.9	3.7	8.8	16.2	27.0	-0.1	◆	-4.2	-15.3	1.0	2.1	◆	-9.0	-26.2	-54.0	24	3006B
2	3006HS	30-06 Spring. (7.62x63mm)	220	14.26</																																	

REMIUM® HANDGUN BALLISTICS

FEDERAL LOAD NO.	CALIBER	BULLET WEIGHT IN		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					TRAJECTORY 3 INCHES ABOVE BORE LINE				TEST BARREL LENGTH INCHES
		GRAINS	GRAMS			MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.	
FEDERAL PREMIUM® PERSONAL DEFENSE®																				
P32HS1	32 Auto (7.65mm Browning)	65	4.21	Hydra-Shok JHP	100	925	890	860	830	810	125	115	105	100	95	⊕	-1.8	-6.6	-14.5	4
P9HS1	9mm Luger (9x19mm Parabellum)	124	8.04	Hydra-Shok JHP	200	1120	1070	1030	990	960	345	315	290	270	255	⊕	-1.0	-4.0	-9.3	4
P9HS2	9mm Luger (9x19mm Parabellum)	147	9.53	Hydra-Shok JHP	200	1000	980	950	930	910	325	310	295	285	275	⊕	-1.4	-5.2	-11.5	4
P357S1	357 Sig	125	8.10	JHP	200	1350	1270	1190	1130	1080	505	445	395	355	325	⊕	-0.5	-2.4	-6.1	4
P38MA	38 Special	125	8.10	NyClad HP	100	830	780	730	680	640	190	165	145	130	115	⊕	-2.7	-9.5	-21.1	2-V
P38HS1	38 Special +P	129	8.36	Hydra-Shok JHP	100	950	930	900	880	870	260	245	235	225	215	⊕	-1.6	-5.9	-13.0	4-V
P357HS1	357 Magnum	158	10.24	Hydra-Shok JHP	100	1240	1190	1140	1100	1060	540	495	455	425	395	⊕	-0.6	-3.0	-7.1	4-V
P40HS2	40 S&W	155	10.04	Hydra-Shok JHP	100	1140	1080	1030	990	950	445	400	365	335	315	⊕	-1.0	-4.0	-9.2	4
P40HS3	40 S&W	165	10.69	Hydra-Shok JHP	100	980	950	920	900	880	350	330	310	295	280	⊕	-1.5	-5.6	-12.3	4
P40HS1	40 S&W	180	11.66	Hydra-Shok JHP	100	1000	970	950	920	900	400	375	360	340	325	⊕	-1.4	-5.3	-11.6	4
P10HS1	10mm Auto	180	11.66	Hydra-Shok JHP	150	1030	1000	970	950	920	425	400	375	355	340	⊕	-1.3	-4.9	-10.9	5
P44HS1	44 Rem. Magnum	240	15.55	Hydra-Shok JHP	150	1210	1150	1100	1060	1020	780	705	645	600	560	⊕	-0.7	-3.3	-7.7	4-V
P45GHS1	45 G.A.P.	230	14.90	Hydra-Shok JHP	200	880	860	850	830	820	395	380	365	355	340	⊕	-2.0	-7.1	-15.3	5
P45HS1	45 Auto	230	14.90	Hydra-Shok JHP	150	900	880	870	850	830	415	395	380	365	355	⊕	-1.9	-6.7	-14.6	5

FEDERAL PREMIUM® PERSONAL DEFENSE® LOW RECOIL

PD327HS1 H	327 Federal Magnum	85	5.51	Hydra-Shok JHP	205	1400	1310	1220	1150	1090	370	320	280	250	225	⊕	-0.4	-2.2	-5.7	4-V
PD380HS1 H	380 Auto (9x17mm Short)	90	5.83	Hydra-Shok JHP	100	1000	950	910	880	850	200	180	165	155	145	⊕	-1.5	-5.6	-12.5	3.75
PD9CSP2 H	9mm Luger (9x19mm Parabellum)	105	6.80	EFMJ	200	1230	1140	1070	1010	970	355	305	265	240	220	⊕	-0.8	-3.4	-8.2	4
PD9HS5 H	9mm Luger (9x19mm Parabellum)	135	8.75	Hydra-Shok JHP	200	1060	1030	1000	970	950	335	315	300	280	270	⊕	-1.2	-4.5	-10.2	4
PD38HS3 H	38 Special	110	7.13	Hydra-Shok JHP	100	980	940	910	880	860	235	215	205	190	180	⊕	-1.5	-5.7	-12.6	4-V
PD357HS2 H	357 Magnum	130	8.42	Hydra-Shok JHP	100	1410	1330	1260	1190	1140	575	510	455	410	375	⊕	-0.3	-2.0	-5.2	4-V
PD40CSP2 H	40 S&W	135	8.75	EFMJ	100	1200	1110	1040	990	940	430	370	325	290	265	⊕	-0.9	-3.7	-8.8	4
PD40HS4 H	40 S&W	135	8.75	Hydra-Shok JHP	100	1200	1120	1050	1000	960	430	375	330	300	275	⊕	-0.8	-3.7	-8.6	4
PD45G1 H	45 G.A.P.	185	11.99	Hydra-Shok JHP	200	1090	1050	1010	970	950	490	450	415	390	365	⊕	-1.1	-4.3	-9.8	5
PD45HS3 H	45 Auto	165	10.69	Hydra-Shok JHP	150	1060	1010	980	940	910	410	375	350	325	305	⊕	-1.2	-4.7	-10.6	5
PD45CSP2 H	45 Auto	165	10.69	EFMJ	150	1140	1080	1030	990	950	475	425	390	360	335	⊕				

PREMIUM® HANDGUN BALLISTICS

FEDERAL LOAD NO.	CALIBER	BULLET WEIGHT IN		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					TRAJECTORY 3 INCHES ABOVE BORE LINE				TEST BARREL LENGTH INCHES
		GRAINS	GRAMS			MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.	
FEDERAL PREMIUM® VITAL-SHOK®																				
P357XB1	357 Magnum	140	9.07	Barnes Expander	100	1400	1330	1260	1200	1140	610	545	490	445	405	⊕	-0.3	-2.0	-5.3	6-V
P357J	357 Magnum	180	11.66	CastCore	100	1130	1090	1060	1030	1000	510	475	450	425	400	⊕	-0.9	-3.8	-8.7	6-V
P357SA	357 Magnum	180	11.66	Swift A-Frame	100	1130	1090	1050	1020	990	510	470	440	415	390	⊕	-0.9	-3.9	-8.9	6-V
P41XB1	41 Rem. Magnum	180	11.66	Barnes Expander	150	1340	1260	1190	1130	1080	720	635	570	515	470	⊕	-0.5	-2.5	-6.1	6-V
P41B	41 Rem. Magnum	250	16.20	CastCore	150	1160	1120	1090	1050	1030	745	695	655	615	585	⊕	-0.8	-3.5	-8.1	6-V
P41SA	41 Rem. Magnum	210	13.61	Swift A-Frame	150	1270	1210	1150	1110	1070	750	680	620	570	530	⊕	-0.6	-2.8	-6.8	6-V
P44XB1	44 Rem. Magnum	225	14.58	Barnes Expander	150	1280	1210	1150	1100	1050	820	730	660	600	555	⊕	-0.6	-2.8	-6.9	6-V
P44E	44 Rem. Magnum	300	19.44	CastCore	150	1160	1120	1090	1050	1030	895	835	785	740	700	⊕	-0.8	-3.5	-8.1	6-V
P44SA	44 Rem. Magnum	280	18.14	Swift A-Frame	150	1170	1110	1060	1010	980	850	760	695	640	595	⊕	-0.9	-3.7	-8.6	6-V
P454XB1	454 Casull	250	16.20	Barnes Expander	205	1530	1420	1330	1240	1170	1300	1125	975	850	755	⊕	-0.2	-1.6	-4.4	5.7-V
P454SA	454 Casull	300	19.44	Swift A-Frame	205	1520	1410	1310	1220	1150	1540	1325	1145	995	880	⊕	-0.2	-1.7	-4.6	5.7-V
P460XB1	460 S&W	275	17.82	Barnes Expander	210	1800	1720	1640	1570	1500	1980	1810	1650	1505	1370	⊕	0.2	-0.5	-2.0	8.4-V
P460SA	460 S&W	300	19.44	Swift A-Frame	210	1750	1630	1510	1400	1300	2040	1760	1510	1300	1125	⊕	0.1	-0.8	-2.8	8.4-V
P480XB1	480 Ruger	275	17.82	Barnes Expander	150	1350	1270	1190	1130	1080	1115	980	870	780	710	⊕	-0.5	-2.4	-6.1	7.5-V
P500XB1	500 S&W	275	17.82	Barnes Expander	210	1660	1540	1440	1340	1250	1680	1455	1255	1090	950	⊕	0.0	-1.1	-3.4	8.4-V
P500SA	500 S&W	325	21.06	Swift A-Frame	210	1800	1680	1560	1450	1350	2340	2030	1755	1515	1315	⊕	0.1	-0.6	-2.4	8.4-V

PREMIUM® HANDGUN BALLISTICS

FEDERAL LOAD NO.	CALIBER	BULLET WEIGHT IN		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					TRAJECTORY 3 INCHES ABOVE BORE LINE				TEST BARREL LENGTH INCHES
		GRAINS	GRAMS			MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.	
FEDERAL PREMIUM® GOLD MEDAL®																				
GM38A	38 Special	148	9.59	Lead Wadcutter Match	GM100M	690	650	610	570	540	155	140	120	110	95	⊕	-4.3	-14.4	-31.2	4-V
GM45B	45 Auto	185	11.99	FMJ-SWC Match	GM150M	770	740	700	670	640	245	220	205	185	170	⊕	-3.1	-10.6	-23.0	5
GM45A	45 Auto	230	14.90	FMJ Match	GM150M	860	840	830	810	800	380	365	350	340	325	⊕	-2.2	-7.5	-16.1	5

Abbreviation Key: FMJ = Full Metal Jacket, SWC = Semi-Wadcutter

These trajectory tables were calculated by computer using the best available data for each load. Trajectories are representative of the nominal behavior of each load at standard conditions (59°F temperature; barometric pressure of 29.53 inches; altitude at sea level). Shooters are cautioned that actual trajectories may differ due to variations in altitude, atmospheric conditions, guns, sights and ammunition.

USAGE	FEDERAL LOAD NO.	CALIBER	BULLET WEIGHT IN		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)				ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)				TRAJECTORY SIGHTS 9 INCHES ABOVE BORE LINE				TEST BARREL LENGTH INCHES		
			GRAINS	GRAMS			MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.		75 YDS.	100 YDS.
FEDERAL® POWER-SHOK®																					
2	C357G	357 Magnum	180	11.66	JHP	100	1080	1050	1020	1000	970	465	440	415	395	380	◆	-1.1	-4.2	-9.6	4-V
2	C41A	41 Rem. Magnum	210	13.61	JHP	150	1230	1170	1120	1080	1040	705	640	585	545	505	◆	-0.7	-3.1	-7.3	4-V
2	C44B	44 Rem. Magnum	180	11.66	JHP	150	1460	1340	1240	1160	1090	850	720	615	535	470	◆	-0.3	-2.0	-5.4	4-V
2	C44A	44 Rem. Magnum	240	15.55	JHP	150	1230	1170	1120	1070	1040	805	730	665	615	570	◆	-0.7	-3.1	-7.4	4-V
FEDERAL® PERSONAL DEFENSE® REVOLVER																					
6	C32HRB	32 H&R Magnum	85	5.51	JHP	100	1120	1070	1020	990	950	235	215	195	185	170	◆	-1.0	-4.1	-9.4	5
6	C357B	357 Magnum	125	8.10	JHP	100	1440	1340	1240	1160	1100	575	495	425	375	335	◆	-0.3	-2.1	-5.4	4-V
6	C357E	357 Magnum	158	10.24	JHP	100	1240	1190	1140	1100	1060	540	495	455	425	395	◆	-0.6	-3.0	-7.1	4-V
FEDERAL® PERSONAL DEFENSE® AUTOMATIC PISTOL																					
6	C9BP	9mm Luger (9x19mm Parabellum)	115	7.45	JHP	200	1180	1110	1050	1000	960	355	310	280	255	235	◆	-0.9	-3.7	-8.7	4
6	C40SWA	40 S&W	180	11.66	JHP	100	1000	970	950	920	900	400	375	360	340	325	◆	-1.4	-5.3	-11.6	4
6	C45C	45 Auto	185	11.99	JHP	150	950	920	900	880	860	370	350	330	315	300	◆	-1.7	-6.0	-13.1	5
6	C45D	45 Auto	230	14.90	JHP	150	850	830	820	800	790	370	355	345	330	320	◆	-2.2	-7.7	-16.4	5
FEDERAL® CHAMPION™																					
5	C32LA	32 S&W Long	98	6.35	Lead Wadcutter	100	780	720	670	620	570	130	115	95	80	70	◆	-3.3	-11.5	-25.4	5.3
5	C32LB	32 S&W Long	98	6.35	Lead Round Nose	100	780	760	750	730	720	130	125	120	115	115	◆	-2.9	-9.6	-20.4	5.3
5	C32HRA	32 H&R Magnum	95	6.16	Lead Semi-Wadcutter	100	1020	970	930	890	860	220	200	180	170	155	◆	-1.4	-5.3	-12.0	5
5	C44SA	44 Special	200	12.96	Semi-Wadcutter HP	150	870	850	830	810	790	335	320	305	290	275	◆	-2.1	-7.4	-16.0	4-V
5	C45LCA	45 Colt	225	14.58	Semi-Wadcutter HP	150	830	810	790	780	760	345	330	315	300	290	◆	-2.4	-8.2	-17.7	4-V
AMERICAN EAGLE®																					
5	AE25AP	25 Auto (6.35mm Browning)	50	3.24	Full Metal Jacket	200	760	740	720	700	680	65	60	55	55	50	◆	-3.1	-10.4	-22.1	2
5	AE32AP	32 Auto (7.65mm Browning)	71	4.60	Full Metal Jacket	100	900	870	850	820	800	130	120	115	105	100	◆	-2.0	-7.0	-15.2	4
5	AE327A	327 Federal Magnum	85	5.51	Jacketed Soft Point	205	1400	1310	1220	1150	1090	370	320	280	250	225	◆	-0.4	-2.2	-5.7	4-V
5	AE327	327 Federal Magnum	100	6.48	Jacketed Soft Point	205	1500	1410	1320	1250	1180	500	440	390	345	310	◆	-0.2	-1.6	-4.5	4-V
5	AE380AP	380 Auto (9x17mm Short)	95	6.16	Full Metal Jacket	100	980	940	900	870	840	205	185	170	160	145	◆	-1.6	-5.8	-13.0	3.75
5	AE9MK	9mm Makarov (9x18mm Makarov)	95	6.16	Full Metal Jacket	100	1000	960	920	890	860	210	195	180	165	155	◆	-1.5	-5.5	-12.3	3.75
5	AE9DP	9mm Luger (9x19mm Parabellum)	115	7.45	Full Metal Jacket	200	1180	1110	1050	1000	960	355	310	280	255	235	◆	-0.9	-3.7	-8.7	4
5	AE9AP	9mm Luger (9x19mm Parabellum)	124	8.04	Full Metal Jacket	200	1150	1100	1050	1010	980	365	330	305	280	265	◆	-0.9	-3.8	-8.8	4
5	AE921	9x21mm	124	8.04	Full Metal Jacket	200	1150	1100	1050	1010	980	365	330	305	280	265	◆	-0.9	-3.8	-8.8	4
5	AE9FP	9mm Luger (9x19mm Parabellum)	147	9.53	FMJ Flat Point	200	1000	980	950	930	910	325	310	295	285	275	◆	-1.4	-5.2	-11.5	4
5	AE38S3	38 Super +P**	115	7.45	JHP	200	1130	1070	1020	970	940	325	290	265	240	225	◆	-1.0	-4.1	-9.5	5
5	AE38S1	38 Super +P (HV)	130	8.42	Full Metal Jacket	200	1200	1140	1100	1050	1020	415	375	345	320	300	◆	-0.8	-3.3	-7.9	5
5	AE357S2	357 Sig	125	8.10	Full Metal Jacket	200	1350	1270	1190	1130	1080	505	445	395	355	325	◆	-0.5	-2.4	-6.1	4
5	AE38K	38 Special	130	8.42	Full Metal Jacket	100	890	870	850	830	820	230	220	210	200	195	◆	-2.0	-7.0	-15.1	4-V
5	AE38B	38 Special	158	10.24	Lead Round Nose	100	770	760	750	730	720	210	200	195	190	185	◆	-2.9	-9.8	-20.7	4-V
5	AE357A	357 Magnum	158	10.24	Jacketed Soft Point	100	1240	1190	1140	1100	1060	540	495	455	425	395	◆	-0.6	-3.0	-7.1	4-V
5	AE40R2	40 S&W	155	10.04	Full Metal Jacket	100	1160	1100	1040	1000	960	465	415	375	345	320	◆	-0.9	-3.8	-8.9	4
5	AE40R3	40 S&W	165	10.69	Full Metal Jacket	100	1130	1080	1040	1000	970	470	425	390	365	340	◆	-1.0	-4.0	-9.1	4
5	AE40R1	40 S&W	180	11.66	Full Metal Jacket	100	1000	970	950	920	900	400	375	360	340	325	◆	-1.4	-5.3	-11.6	4
5	AE10A	10mm Auto	180	11.66	Full Metal Jacket	150	1030	1000	970	950	920	425	400	375	355	340	◆	-1.3	-4.9	-10.9	5
5	AE44A	44 Rem. Magnum	240	15.55	JHP	150	1230	1170	1120	1070	1040	805	730	665	615	570	◆	-0.7	-3.1	-7.4	4-V
5	AE44B	44 Rem. Magnum	240	15.55	Jacketed Soft Point	150	1270	1200	1150	1100	1060	860	770	700	640	595	◆	-0.6	-2.9	-6.9	4-V
5	AE45GA	45 G.A.P.	185	11.99	Full Metal Jacket	200	1090	1050	1010	970	950	490	450	415	390	365	◆	-1.1	-4.3	-9.8	4-V
5	AE45GB	45 G.A.P.	230	14.90	Full Metal Jacket	200	880	860	850	830	820	395	380	365	355	340	◆	-2.0	-7.1	-15.3	5
5	AE45LC	45 Colt	225	14.58	Jacketed Soft Point	150	860	840	830	810	800	370	355	345	330	320	◆	-2.2	-7.5	-16.1	4
5	AE45A	45 Auto	230	14.90	Full Metal Jacket	150	890	870	860	840	820	405	390	375	360	345	◆	-2.0	-6.9	-15.0	5
AMERICAN EAGLE® INDOOR RANGE TRAINING																					
5	AE9N1	9mm Luger (9x19mm Parabellum)	124	8.04	TMJ	205TMF	1120	1070	1030	990	960	345	315	290	270	255	◆	-1.0	-4.0	-9.3	4
5	AE9N2	9mm Luger (9x19mm Parabellum)	147	9.53	TMJ	205TMF	1000	980	950	930	910	325	310	295	285	275	◆	-1.4	-5.2	-11.5	4
5	AE40N1	40 S&W	180	11.66	TMJ	205TMF	1000	970	950	920	900	400	375	360	340	325	◆	-1.4	-5.3	-11.6	4
5	AE45N1	45 Auto	230	14.90	TMJ	205TMF	850	830	820	800	790	370	355	345	330	320	◆	-2.2	-7.7	-16.4	5