










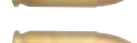
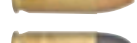
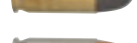
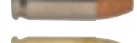














# BALLISTIC DATA

	Symbol	Quantity		Caliber	Bullet		Velocity					Energy					Mid-Range Trajectory				Test Barrel Length					
		Box	Case		Style	Weight		Muzzle		50 m	50 yd	100 m	100 yd	Muzzle		50 m	50 yd	100 m	100 yd	50 m	50 yd	100 m	100 yd			
				g		gr	m/s	fps	m/s	fps	m/s	fps	J	ft.lbs	J	ft.lbs	J	ft.lbs	cm	inch	cm	inch	cm	inch		
25 AUTO		25A	50	1,000	.25 Auto	FMJ	3.24	50	232	760	214	707	199	659	87	64	74	56	64	48	6.1	2.0	26.2	8.7	5.1	2
		32A	50	1,000	.32 Auto	FMJ	4.60	71	276	905	259	855	245	810	175	129	154	115	138	103	4.3	1.4	18.5	5.8	10.2	4
32 AUTO		32B	50	1,000	.32 Auto	JHP	4.60	71	276	905	259	855	245	810	175	129	154	115	138	103	4.3	1.4	18.5	5.8	10.2	4
		32C	50	1,000	.32 Auto	LRN	4.60	71	276	905	259	855	245	810	175	129	154	115	138	103	4.3	1.4	18.5	5.8	10.2	4
		GG32A	20	1,000	.32 Auto	JHP	4.20	65	281	922	265	875	252	833	166	123	148	111	133	100	4	1.3	17.2	5.6	10.2	4
32 S&W		32SWA	50	1,000	.32 S&W	LRN	5.50	85	207	680	195	645	187	610	118	87	105	78	96	70	7.6	2.5	36.8	10.5	7.6	3
		32SWLA	50	1,000	.32 S&W Long	LRN	6.35	98	215	705	202	670	192	635	147	108	130	98	117	88	7.0	2.3	32.0	10.5	10.2-V	4-V
32 S&W LONG		32SWLB	50	1,000	.32 S&W Long	LWC	6.35	98	208	682	174	579	145	491	137	102	96	73	67	52	7.0	2.3	38.5	12.6	10.2-V	4-V
		32SWLC	50	1,000	.32 S&W Long	SJHP	6.35	98	237	778	225	742	214	709	178	132	161	120	146	109	5.6	2.0	25.0	8.0	10.2-V	4-V
		380A-MP380A	50-250	1,000	.380 Auto	FMJ	6.15	95	290	951	261	861	236	781	259	190	209	156	171	128	4.3	1.4	18.0	5.9	9.5	3 3/4
380 AUTO		CR380A	50	1,000	.380 Auto	FEB	6.15	95	290	951	261	861	236	781	259	190	209	157	171	128	4.3	1.4	18.0	5.9	9.5	3 3/4
		380B	50	1,000	.380 Auto	FMJ	6.15	95	290	951	261	861	236	781	259	190	209	156	171	128	4.3	1.4	18.0	5.9	9.5	3 3/4
		380D	50	1,000	.380 Auto	LRN	6.15	95	290	951	261	861	236	781	259	190	209	156	171	128	4.3	1.4	18.0	5.9	9.5	3 3/4
		FD380A	20	1,000	.380 Auto	SCHP	4.99	77	335	1,099	284	943	253	845	280	207	201	152	160	122	3.28	1.07	15.15	4.87	9.5	3 3/4
		GG380A	20	1,000	.380 Auto+P	JHP	5.5	85	330	1,082	303	999	282	936	300	221	252	188	219	166	3.1	1.0	13.3	4.3	9.5	3 3/4
		9A-MP9A	50-250	1,000	9mm Luger	FMJ	7.45	115	346	1,135	310	1,027	290	961	446	330	358	270	313	235	2.7	0.9	12.2	4.0	10.2	4
9MM LUGER		CR9A	50	1,000	9mm Luger	FEB	7.45	115	346	1,135	310	1,041	288	973	446	330	358	277	309	242	2.8	0.9	12.2	4.0	10.2	4
		9B	50	1,000	9mm Luger	FMJ	8.03	124	338	1,109	308	1,030	290	971	459	339	381	292	338	259	3.1	1.0	12.5	4.1	10.2	4
		CR9B	50	1,000	9mm Luger	FEB	8.03	124	338	1,109	308	1,030	290	971	459	338	381	292	338	260	3.1	1.0	12.5	4.1	10.2	4
		9C	50	1,000	9mm Luger	JHP	7.45	115	352	1,155	316	1,047	293	971	462	340	372	280	320	240	2.7	0.9	12.2	3.9	10.2	4
		9D	50	1,000	9mm Luger	JSP Flat	6.15	95	410	1,345	356	1,185	317	1,055	517	380	390	295	309	235	2.4	0.8	12.4	3.4	10.2	4
		9E	50	1,000	9mm Luger	LRN	8.03	124	338	1,109	308	1,030	290	971	459	339	381	292	338	259	3.1	1.0	12.5	4.1	10.2	4
		9G	50	1,000	9mm Luger	FMJ Flat Sub	9.52	147	302	990	286	945	274	907	434	320	389	292	357	268	3.7	1.2	14.6	4.8	10.2	4
		9H	50	1,000	9mm Luger+P+	JHP	7.45	115	405	1,328	358	1,187	325	1,084	611	451	478	360	395	300	1.07	0.3	9.4	3.09	10.2	4
		9K	50	1,000	9mm Luger	JHP Sub	9.52	147	302	990	286	945	274	907	434	320	389	292	357	268	3.7	1.2	14.6	4.8	10.2	4
		9S	50	1,000	9mm Luger	JSP	8.03	124	338	1,109	308	1,030	290	971	459	339	381	292	338	259	3.1	1.0	12.5	4.1	10.2	4
	FD9A	20	1,000	9mm Luger	SCHP	6.0	92.6	405	1,330	353	1,173	318	1,062	492	364	375	283	304	232	1.2	0.4	9.1	3.0	10.2	4	

# BALLISTIC DATA

	Symbol	Quantity		Caliber	Bullet			Velocity					Energy					Mid-Range Trajectory				Test Barrel Length			
		Box	Case		Style	Weight		Muzzle		50 m	50 yd	100 m	100 yd	Muzzle		50 m	50 yd	100 m	100 yd	50 m	50 yd	100 m	100 yd		
						g	gr	m/s	fps	m/s	fps	m/s	fps	J	ft.lbs	J	ft.lbs	J	ft.lbs	J	ft.lbs	cm	inch	cm	inch
9MM LUGER	GG9A	20	1,000	9mm Luger+P	JHP	7.45	115	380	1,246	344	1,137	318	1,056	538	397	441	330	377	285	2.4	0.8	10.5	3.4	10.2	4
	GG9B	20	1,000	9mm Luger	JHP	8.03	124	334	1,096	304	1,017	286	958	448	331	371	285	328	253	3.1	1.0	12.5	4.1	10.2	4
9X21MM	9X21A	50	1,000	9x21mm	FMJ	8.03	124	350	1,150	318	1,066	300	1,003	491	364	406	313	361	277	2.8	0.9	11.7	3.8	10.2	4
	9X21B	50	1,000	9x21mm	LRN	8.03	124	350	1,150	318	1,066	300	1,003	491	364	406	313	361	277	2.8	0.9	11.7	3.8	10.2	4
38 SUPER AUTO	38S	50	1,000	.38 Super Auto+P	FMJ	8.42	130	370	1,215	332	1,099	306	1,017	576	426	464	348	394	298	2.5	0.8	11.0	3.6	12.7	5
38 S&W	38SWA	50	1,000	.38 S&W	LRN	9.45	146	209	686	199	655	190	267	207	152	188	139	170	127	6.9	2.3	29.3	9.6	10.2-V	4-V
	38A-MP38A	50-250	1,000	.38 SPL	LRN	10.24	158	230	755	218	728	209	693	271	200	243	183	224	168	6.2	2.0	24.9	8.3	10.2-V	4-V
	38B	50	1,000	.38 SPL	LWC	9.59	148	216	710	190	634	170	566	224	166	173	132	139	105	7.4	2.4	33.7	10.8	10.2-V	4-V
	38C	50	1,000	.38 SPL	SJSP Flat	10.24	158	230	744	218	723	209	692	271	200	243	183	224	168	6.2	2.0	24.0	8.2	10.2-V	4-V
	38D	50	1,000	.38 SPL+P	SJSP Flat	8.10	125	286	938	270	891	257	851	331	245	295	220	267	200	4.0	1.3	16.5	5.1	10.2-V	4-V
	38E	50	1,000	.38 SPL	SJHP	10.24	158	246	807	237	779	228	753	310	230	287	213	266	199	4.0	1.3	20.4	6.7	10.2-V	4-V
	38F	50	1,000	.38 SPL+P	SJHP	8.10	125	286	938	270	891	257	851	331	245	295	220	267	200	4.0	1.3	16.5	5.4	10.2-V	4-V
	38G	50	1,000	.38 SPL-Short	LRN	8.10	125	209	686	199	649	189	628	177	130	160	120	145	109	6.2	2.0	29.6	9.7	10.2-V	4-V
	38H	50	1,000	.38 SPL+P	SJHP	10.24	158	270	890	258	853	247	879	373	278	340	255	311	231	4.3	1.4	20.2	6.5	10.2-V	4-V
38 SPECIAL	38J	50	1,000	.38 SPL	LSWC	10.24	158	230	755	217	721	207	689	271	200	243	182	224	167	6.1	2.0	25.6	8.4	10.2-V	4-V
	38L	50	1,000	.38 SPL	LFN	10.24	158	244	800	236	776	228	753	305	225	285	211	267	199	5.3	1.8	22.0	7.2	10.2-V	4-V
	38N	50	1,000	.38 SPL+P	SJSP Flat	10.24	158	270	890	235	774	226	746	376	278	283	210	261	196	4.3	1.4	20.2	6.5	10.2-V	4-V
	38P	50	1,000	.38 SPL	FMJ Flat	10.24	158	230	755	218	723	209	692	271	200	243	183	224	168	6.2	2.0	24.0	8.2	10.2-V	4-V
	CR38A	50	1,000	.38 SPL	FEB Flat	10.24	158	230	755	218	723	209	692	271	200	243	183	224	168	6.2	2.0	24.0	8.2	10.2-V	4-V
	38Q	50	1,000	.38 SPL	FMJ Flat	8.10	125	286	938	270	891	257	851	331	245	295	220	267	200	4.0	1.3	16.5	5.4	10.2-V	4-V
	38T	50	1,000	.38 SPL	FMJ	8.42	130	244	800	235	773	226	746	251	185	232	172	215	161	4.73	1.5	21.05	6.0	10.2-V	4-V
	38U	50	1,000	.38 SPL	LFN	8.10	125	280	919	267	879	255	843	317	234	289	214	264	197	3.4	1.1	14.1	4.6	10.2-V	4-V
	FD38A	20	1,000	.38 SPL+P	SCHP	6.16	95	330	1,083	291	965	265	884	335	247	261	197	216	165	3.22	1.05	14.42	4.66	10.2-V	4V
	GG38A	20	1,000	.38 SPL+P	JHP	8.10	125	310	1,017	295	971	282	931	389	287	352	262	322	241	3.4	1.1	14.3	4.6	10.2	4
357 MAGNUM	357A-MP357A	50-250	1,000	.357 MAG	SJSP Flat w/ nickel	10.24	158	376	1,235	333	1,104	305	1,015	724	535	568	428	476	361	2.4	0.8	10.7	3.5	10.2-V	4-V
	357B	50	1,000	.357 MAG	SJHP	10.24	158	376	1,235	333	1,104	305	1,015	724	535	568	428	476	361	2.4	0.8	10.7	3.5	10.2-V	4-V
	357C	50	1,000	.357 MAG	LSWC	10.24	158	376	1,235	333	1,104	305	1,015	724	535	568	428	476	361	2.4	0.8	10.7	3.5	10.2-V	4-V

# BALLISTIC DATA

	Symbol	Quantity		Caliber	Bullet		Velocity					Energy					Mid-Range Trajectory				Test Barrel Length				
		Box	Case		Style	Weight		Muzzle		50 m	50 yd	100 m	100 yd	Muzzle		50 m	50 yd	100 m	100 yd	50 m	50 yd	100 m	100 yd		
						g	gr	m/s	fps	m/s	fps	m/s	fps	J	ft.lbs	J	ft.lbs	J	ft.lbs	cm	inch	cm	inch	cm	inch
AGNUM	357D	50	1,000	.357 MAG	FMJ Flat	10.24	158	376	1,235	340	1,125	314	1,045	724	535	592	444	507	383	2.4	0.8	8.7	2.7	10.2-V	4-V
	357E	50	1,000	.357 MAG	SJSP Flat w/o nickel	10.24	158	376	1,235	333	1,104	305	1,015	724	535	568	428	476	361	2.4	0.8	10.7	3.5	10.2-V	4-V
	357L	50	1,000	.357 MAG	LFN	10.24	158	330	1,085	312	1,031	297	985	558	413	499	373	453	341	2.5	0.8	11.5	3.8	10.2-V	4-V
	357Q	50	1,000	.357 MAG	FMJ Flat	8.10	125	428	1,405	378	1,254	341	1,136	742	548	580	437	470	358	1.8	0.6	8.6	2.8	10.2-V	4-V
	FD357A	20	1,000	.357 MAG	SCHP	6.16	95	430	1,411	348	1,161	302	1,011	569	420	373	285	281	216	2.02	0.67	10.09	3.22	10.2-V	4V
	GG357A	20	1,000	.357 MAG	JHP	8.10	125	420	1,378	353	1,170	307	1,020	714	527	505	381	382	289	1.5	0.5	7.5	2.5	10.2-V	4-V
40 S&W	40A	50	1,000	.40 S&W	JHP	11.66	180	302	990	282	933	268	886	532	390	464	348	419	314	3.7	1.2	14.6	5.0	10.2	4
	40B-MP40B	50-250	1,000	.40 S&W	FMJ Flat	11.66	180	302	990	282	933	268	886	532	390	464	348	419	314	3.7	1.2	14.6	5.0	10.2	4
	CR40A	50	1,000	.40 S&W	FEB	11.66	180	302	990	282	933	268	886	532	390	464	348	419	314	3.7	1.2	14.6	5.0	10.2	4
	40C	50	1,000	.40 S&W	LSWC	10.37	160	355	1,165	325	1,076	297	984	653	484	548	411	457	343	2.7	0.9	11.9	3.9	10.2	4
	40D	50	1,000	.40 S&W	JHP	10.05	155	367	1,205	330	1,018	307	1,096	677	500	547	410	474	357	2.4	0.8	11.0	3.6	10.2	4
	40G	50	1,000	.40 S&W	FMJ Flat	10.69	165	320	1,050	283	941	259	863	547	404	428	325	359	273	3.3	1.2	12.0	4.0	10.2	4
	40PS	50	1,000	.40 S&W	FMJ Flat	11.66	180	320	1,050	300	984	286	938	598	441	525	387	477	352	3.9	1.3	15.6	5.3	10.2	4
	FD40A	20	1,000	.40 S&W	SCHP	8.42	130	363	1,190	336	1,107	315	1,043	555	409	474	354	417	314	1.8	0.6	10.0	3.3	10.2	4
	GG40A	20	1,000	.40 S&W	JHP	10.04	155	367	1,205	338	1,118	317	1,052	677	500	571	430	523	381	2.5	0.8	10.9	3.5	10.2	4
	GG40B	20	1,000	.40 S&W	JHP	11.66	180	302	990	282	938	268	891	532	392	463	352	419	318	3.7	1.2	13.4	4.5	10.2	4
44 SPECIAL	44B	50	1,000	.44 SPL	LFN	15.55	240	232	761	223	731	214	702	418	310	387	286	356	264	6.2	2.0	25.7	8.4	10.2	4
	44E	50	1,000	.44 SPL	LFN	12.96	200	220	722	210	693	201	665	314	232	287	213	262	196	5.4	1.7	22.7	7.4	10.2	4
	44A	50	1,000	.44 REM MAG	SJSP Flat	15.55	240	360	1,180	326	1,081	304	1,010	1,010	741	828	632	720	545	2.8	0.9	11.4	3.7	10.2-V	4-V
44 REM MAGNUM	44C	50	1,000	.44 REM MAG	FMJ Flat	15.55	240	360	1,180	326	1,081	304	1,010	1,010	741	828	632	720	545	2.8	0.9	11.4	3.7	10.2-V	4-V
	44D	20	1,000	.44 REM MAG	SCHP	12.96	200	395	1,296	352	1,164	321	1,067	1,011	746	803	602	668	506	2.22	0.72	9.91	3.2	10.2-V	4V
45 GAP	45GA	50	1,000	.45 G.A.P.	FMJ	14.90	230	255	837	242	800	232	767	484	356	436	326	401	300	4.9	1.6	20.7	6.8	12.7	5
	GG45GA	20	1,000	.45 G.A.P.	JHP	12.00	185	300	984	281	918	266	872	540	398	474	346	423	312	3.6	1.2	15.5	5.1	12.7	5
	GG45GB	20	1,000	.45 G.A.P.	JHP	14.90	230	255	837	240	795	230	756	484	358	429	322	394	292	5	1.7	20.9	6.9	12.7	5
	FD45GA	20	1,000	.45 G.A.P.	SCHP	10.69	165	305	1,001	285	950	269	907	497	367	435	331	387	302	3.5	1.1	15	5	12.7	5
45 AUTO	45A-MP45A	50-250	1,000	.45 Auto	FMJ	14.90	230	255	837	242	800	232	767	484	356	436	326	401	300	4.9	1.6	20.7	6.8	12.7	5
	CR45A	50	1,000	.45 Auto	FEB	14.90	230	255	837	242	800	232	767	484	356	436	326	401	300	4.9	1.6	20.7	6.8	12.7	5

AGNUM

40 S&W

44 SPECIAL

44 REM MAGNUM

45 GAP

45 AUTO



# BALLISTIC DATA

	Symbol	Quantity		Caliber	Bullet		Velocity					Energy					Mid-Range Trajectory				Test Barrel Length				
		Box	Case		Style	Weight		Muzzle		50 m	50 yd	100 m	100 yd	Muzzle		50 m	50 yd	100 m	100 yd	50 m	50 yd	100 m	100 yd		
						g	gr	m/s	fps	m/s	fps	m/s	fps	J	ft.lbs	J	ft.lbs	J	ft.lbs	J	ft.lbs	cm	inch	cm	inch
	45B	50	1,000	.45 Auto	FMJ-SWC	14.90	230	238	780	218	720	199	660	422	310	354	265	295	222	5.5	1.8	23.8	7.8	12.7	5
	45C	50	1,000	.45 Auto	LSWC	12.96	200	290	950	277	910	265	874	545	401	496	368	455	339	2.4	0.8	11.0	4.8	12.7	5
45 A	FD45A	20	1,000	.45 Auto+P	SCHP	10.69	165	335	1,100	312	1,030	294	975	600	443	521	389	463	349	2.5	0.8	11.0	3.6	12.7	5
	GG45A	20	1,000	.45 Auto+P	JHP	12.0	185	350	1,148	323	1,066	303	1,005	735	540	626	467	551	415	2.7	0.9	11.8	3.8	12.7	5
	GG45B	20	1,000	.45 Auto+P	JHP	14.90	230	307	1,007	290	965	279	927	702	518	626	467	580	440	4.0	1.3	12.5	4.0	12.7	5
45 LONG COLT	45D	50	1,000	.45 Colt	LFN	16.20	250	232	761	224	735	216	708	436	323	406	301	378	280	6.1	2.0	25.5	8.3	10.2	4
	45F	50	1,000	.45 Colt	LFN	12.96	200	215	705	206	679	198	653	299	220	279	205	254	190	5.7	1.9	23.6	7.7	10.2	4
	454A	20	1,000	.454 CASULL	SJSP Flat	16.85	260	548	1,800	480	1,577	420	1,381	2,536	1,871	1,901	1,436	1,430	1,083	1.0	0.4	4.6	1.8	19-V	7.5-V
	454B	20	1,000	.454 CASULL	FMJ Flat	16.85	260	548	1,800	480	1,577	420	1,381	2,536	1,871	1,901	1,436	1,430	1,083	1.0	0.4	4.6	1.8	19-V	7.5-V
454 CASUL	454C	20	1,000	.454 CASULL	SCHP	14.58	225	500	1,640	431	1,432	375	1,258	1,822	1,344	1,354	1,025	1,025	790	1.42	0.46	6.63	2.13	19	7.5
	454D	20	1,000	.454 CASULL	SJSP Flat	15.55	240	540	1,771	466	1,549	403	1,354	2,267	1,672	1,689	1,278	1,264	977	1.22	0.40	5.69	1.82	19	7.5
	460B	20	500	.460 S&W	FMJ FLAT	16.85	260	610	2,001	560	1,850	512	1,710	3,135	2,312	2,642	1,975	2,208	1,680	0.9	0.3	4	1.3	25.4	10
460 S&W	460A	20	500	.460 S&W	SCHP	14.58	225	650	2,132	588	1,948	531	1,773	3,080	2,274	2,520	1,895	2,055	1,570	0.8	0.3	3.8	1.2	25.4	10
	500A	20	500	.500 S&W	SJSP Flat	25.92	400	490	1,608	424	1,408	370	1,242	3,113	2,297	2,330	1,762	1,777	1,370	1.5	0.5	6.7	2.2	25.4	10
	500B	20	500	.500 S&W	SJSP Flat	21.06	325	549	1,801	456	1,520	381	1,286	3,174	2,341	2,189	1,667	1,526	1,194	1.23	0.40	5.96	1.90	25.4	10
500 S&W	500C	20	500	.500 S&W	SCHP	17.82	275	508	1,667	434	1,443	374	1,257	2,299	1,696	1,678	1,272	1,246	964	1.39	0.45	6.55	2.1	25.4	10
	500D	20	500	.500 S&W	FMJ Flat	21.06	325	549	1,801	456	1,520	381	1,286	3,174	2,341	2,189	1,667	1,526	1,194	1.23	0.40	5.96	1.90	25.4	10
	500L	20	500	.500 S&W	SJSP-Flat Light	21.06	325	420	1,378	349	1,163	291	982	1,858	1,370	1,283	977	892	696	0.95	0.30	4.55	1.50	25.4	10
	4440A	50	1,000	.44-40 WIN	LFN	12.96	200	360	1,180	331	1,091	309	1,024	840	618	709	529	619	466	7.5	3.0	-3.5	0	61	24
44-40 WINCHESTER	4440B	50	1,000	.44-40 WIN	LFN	14.58	225	221	725	214	703	206	681	356	261	333	247	311	232	6.5	2.1	26.9	8.8	10.2	4
	4440C	50	1,000	.44-40 WIN	LFN	12.96	200	220	722	212	697	203	672	314	232	290	216	268	201	5.4	1.8	22.4	7.3	10.2	4
	30A	50	1,000	30 Carbine	FMJ	7.13	110	607	1,990	549	1,817	495	1,654	1,313	967	1,075	806	875	668	2.2	0.6	18.4	5.7	50.8	20
30 CARBINE	30B	50	1,000	30 Carbine	SP	7.13	110	607	1,990	549	1,817	495	1,654	1,313	967	1,075	806	875	668	2.2	0.6	18.4	5.7	50.8	20
45-70 GOVERNMENT	4570A	20	500	.45-70 Govt	LFN	26.25	405	405	1,328	382	1,266	362	1,213	2,152	1,589	1,915	1,441	1,720	1,323	2	0.7	8.4	2.8	61	24
	50BMGA	10	250	.50 BMG	Ball M33	42.48	656	900	2,952	878	2,900	832	2,750	17,204	12,690	16,374	12,247	14,703	11,093	0.8	0.50	1.4	0.30	914	36