

.4515 Dia., 230 Gr. FMJ Match

POINT BLANK RANGE COMPUTED FOR 2.0 INCHES ABOVE AND BELOW LINE OF SIGHT

RANGE METERS		MUZZLE	50	100	150	200	250
MAXIMUM POINT BLANK RANGE IS 120 METERS. SET ZERO AT 100 METERS.							
VELOCITY FPS		1800	1537	1314	1144	1050	989
ENERGY FT-LB		1654	1206	882	668	563	500
DROP INCHES		.00	-1.77	-7.98	-20.23	-40.37	-69.91
BULLET PATH	(50 M)	-.80	.00	-3.63	-13.31	-30.88	-57.85
INCHES	(100 M)	-.80	1.82	.00	-7.86	-23.61	-48.76
(ZERO RANGE)	(150 M)	-.80	4.44	5.24	.00	-13.13	-35.66
	(200 M)	-.80	7.72	11.80	9.85	.00	-19.25
MPBR ZERO	(100 M)	-.80	1.82	.00	-7.86	-23.61	-48.76
WIND DRIFT	(10 MPH)	.00	1.33	5.63	13.21	23.66	35.97
INCHES	(20 MPH)	.00	2.66	11.26	26.41	47.32	71.95

MAXIMUM POINT BLANK RANGE IS 115 METERS. SET ZERO AT 95 METERS.							
VELOCITY FPS		1700	1450	1245	1098	1026	970
ENERGY FT-LB		1475	1074	792	615	537	481
DROP INCHES		.00	-1.99	-8.96	-22.64	-44.83	-76.87
BULLET PATH	(50 M)	-.80	.00	-4.18	-15.06	-34.46	-63.71
INCHES	(100 M)	-.80	2.09	.00	-8.80	-26.11	-53.27
(ZERO RANGE)	(150 M)	-.80	5.02	5.87	.00	-14.38	-38.60
	(200 M)	-.80	8.62	13.05	10.78	.00	-20.63
MPBR ZERO	(95 M)	-.80	1.84	-.50	-9.56	-27.12	-54.53
WIND DRIFT	(10 MPH)	.00	1.42	5.96	13.76	24.02	35.99
INCHES	(20 MPH)	.00	2.84	11.92	27.53	48.04	71.97

MAXIMUM POINT BLANK RANGE IS 110 METERS. SET ZERO AT 90 METERS.							
VELOCITY FPS		1600	1366	1181	1067	1003	952
ENERGY FT-LB		1307	953	712	582	514	463
DROP INCHES		.00	-2.25	-10.10	-25.39	-49.75	-84.41
BULLET PATH	(50 M)	-.80	.00	-4.80	-17.03	-38.34	-69.95
INCHES	(100 M)	-.80	2.40	.00	-9.83	-28.74	-57.95
(ZERO RANGE)	(150 M)	-.80	5.68	6.56	.00	-15.63	-41.56
	(200 M)	-.80	9.58	14.37	11.72	.00	-22.03
MPBR ZERO	(90 M)	-.80	1.84	-1.13	-11.52	-30.99	-60.76
WIND DRIFT	(10 MPH)	.00	1.51	6.25	14.09	23.97	35.48
INCHES	(20 MPH)	.00	3.02	12.50	28.18	47.93	70.96

MAXIMUM POINT BLANK RANGE IS 105 METERS. SET ZERO AT 85 METERS.							
VELOCITY FPS		1500	1284	1123	1039	981	934
ENERGY FT-LB		1148	842	644	552	491	445
DROP INCHES		.00	-2.56	-11.45	-28.49	-55.13	-92.54
BULLET PATH	(50 M)	-.80	.00	-5.52	-19.20	-42.48	-76.53
INCHES	(100 M)	-.80	2.76	.00	-10.92	-31.44	-62.73
(ZERO RANGE)	(150 M)	-.80	6.40	7.28	.00	-16.88	-44.52
	(200 M)	-.80	10.62	15.72	12.66	.00	-23.42
MPBR ZERO	(85 M)	-.80	1.82	-1.89	-13.75	-35.21	-67.44
WIND DRIFT	(10 MPH)	.00	1.59	6.46	14.04	23.40	34.33
INCHES	(20 MPH)	.00	3.18	12.92	28.08	46.80	68.66

MAXIMUM POINT BLANK RANGE IS 100 METERS. SET ZERO AT 80 METERS.							
VELOCITY FPS		1400	1206	1079	1012	959	915
ENERGY FT-LB		1000	743	595	523	470	428
DROP INCHES		.00	-2.93	-13.01	-31.93	-60.98	-101.28
BULLET PATH	(50 M)	-.80	.00	-6.34	-21.53	-46.84	-83.41
INCHES	(100 M)	-.80	3.17	.00	-12.02	-34.16	-67.56
(ZERO RANGE)	(150 M)	-.80	7.18	8.01	.00	-18.14	-47.52
	(200 M)	-.80	11.71	17.08	13.60	.00	-24.85
MPBR ZERO	(80 M)	-.80	1.77	-2.81	-16.23	-39.78	-74.58
WIND DRIFT	(10 MPH)	.00	1.65	6.48	13.51	22.20	32.40
INCHES	(20 MPH)	.00	3.29	12.97	27.02	44.40	64.79

MAXIMUM POINT BLANK RANGE IS 90 METERS. SET ZERO AT 75 METERS.							
VELOCITY FPS		1300	1134	1045	985	937	896
ENERGY FT-LB		862	656	557	496	448	410
DROP INCHES		.00	-3.38	-14.79	-35.69	-67.26	-110.63
BULLET PATH	(50 M)	-80	.00	-7.22	-23.94	-51.33	-90.52
INCHES	(100 M)	-80	3.61	.00	-13.11	-36.89	-72.46
(ZERO RANGE)	(150 M)	-80	7.98	8.74	.00	-19.41	-50.61
	(200 M)	-80	12.83	18.44	14.56	.00	-26.35
MPBR ZERO	(75 M)	-80	1.67	-3.89	-18.93	-44.66	-82.17
WIND DRIFT	(10 MPH)	.00	1.65	6.10	12.36	20.20	29.50
INCHES	(20 MPH)	.00	3.29	12.19	24.72	40.41	59.00

RANGE METERS		MUZZLE	50	100	150	200	250
MAXIMUM POINT BLANK RANGE IS 85 METERS. SET ZERO AT 70 METERS.							
VELOCITY FPS		1200	1076	1010	957	914	876
ENERGY FT-LB		735	591	521	468	426	392
DROP INCHES		.00	-3.92	-16.75	-39.74	-74.04	-120.74
BULLET PATH	(50 M)	-80	.00	-8.11	-26.39	-55.96	-97.95
INCHES	(100 M)	-80	4.05	.00	-14.22	-39.74	-77.67
(ZERO RANGE)	(150 M)	-80	8.80	9.48	.00	-20.78	-53.97
	(200 M)	-80	13.99	19.87	15.58	.00	-28.00
MPBR ZERO	(70 M)	-80	1.50	-5.11	-21.89	-49.96	-90.45
WIND DRIFT	(10 MPH)	.00	1.51	5.17	10.49	17.30	25.52
INCHES	(20 MPH)	.00	3.02	10.34	20.97	34.60	51.04

MAXIMUM POINT BLANK RANGE IS 85 METERS. SET ZERO AT 70 METERS.							
VELOCITY FPS		1100	1027	972	926	886	852
ENERGY FT-LB		617	539	482	437	401	371
DROP INCHES		.00	-4.49	-18.80	-44.08	-81.46	-132.03
BULLET PATH	(50 M)	-80	.00	-9.02	-29.02	-61.10	-106.38
INCHES	(100 M)	-80	4.51	.00	-15.48	-43.06	-83.83
(ZERO RANGE)	(150 M)	-80	9.67	10.32	.00	-22.41	-58.02
	(200 M)	-80	15.28	21.53	16.81	.00	-30.01
MPBR ZERO	(70 M)	-80	1.69	-5.65	-23.95	-54.35	-97.94
WIND DRIFT	(10 MPH)	.00	.95	3.61	7.81	13.45	20.42
INCHES	(20 MPH)	.00	1.89	7.22	15.63	26.89	40.84

MAXIMUM POINT BLANK RANGE IS 80 METERS. SET ZERO AT 65 METERS.							
VELOCITY FPS		1000	949	906	870	837	807
ENERGY FT-LB		510	460	419	386	358	332
DROP INCHES		.00	-5.36	-22.21	-51.68	-94.86	-152.87
BULLET PATH	(50 M)	-80	.00	-10.69	-34.00	-71.02	-122.86
INCHES	(100 M)	-80	5.35	.00	-17.96	-49.64	-96.14
(ZERO RANGE)	(150 M)	-80	11.33	11.97	.00	-25.69	-66.20
	(200 M)	-80	17.76	24.82	19.27	.00	-34.09
MPBR ZERO	(65 M)	-80	1.50	-7.69	-29.50	-65.03	-115.37
WIND DRIFT	(10 MPH)	.00	.78	3.04	6.69	11.66	17.92
INCHES	(20 MPH)	.00	1.56	6.09	13.38	23.31	35.84

MAXIMUM POINT BLANK RANGE IS 70 METERS. SET ZERO AT 55 METERS.							
VELOCITY FPS		900	864	831	802	774	747
ENERGY FT-LB		413	381	353	328	305	285
DROP INCHES		.00	-6.51	-26.93	-62.35	-113.84	-182.66
BULLET PATH	(50 M)	-80	.00	-13.10	-41.22	-85.39	-146.90
INCHES	(100 M)	-80	6.55	.00	-21.56	-59.19	-114.15
(ZERO RANGE)	(150 M)	-80	13.74	14.37	.00	-30.44	-78.21
	(200 M)	-80	21.35	29.59	22.83	.00	-40.16
MPBR ZERO	(55 M)	-80	.61	-11.89	-39.40	-82.97	-143.87
WIND DRIFT	(10 MPH)	.00	.67	2.65	5.92	10.51	16.40
INCHES	(20 MPH)	.00	1.33	5.29	11.85	21.01	32.80

MAXIMUM POINT BLANK RANGE IS 65 METERS. SET ZERO AT 50 METERS.							
VELOCITY FPS		800	772	745	720	697	674

ENERGY FT-LB		326	304	283	265	248	232
DROP INCHES		.00	-8.11	-33.63	-77.83	142.03	-227.62
BULLET PATH	(50 M)	-80	.00	-16.62	-51.91	107.20	-183.88
INCHES	(100 M)	-80	8.31	.00	-26.98	-73.97	-142.34
(ZERO RANGE)	(150 M)	-80	17.30	17.99	.00	-37.99	-97.37
	(200 M)	-80	26.80	36.98	28.49	.00	-49.88
MPBR ZERO	(50 M)	-80	.00	-16.62	-51.91	107.20	-183.88
WIND DRIFT	(10 MPH)	.00	.65	2.62	5.92	10.58	16.64
INCHES	(20 MPH)	.00	1.31	5.24	11.84	21.17	33.28

MAXIMUM POINT BLANK RANGE IS 55 METERS. SET ZERO AT 45 METERS.

VELOCITY FPS		700	676	654	633	613	593
ENERGY FT-LB		250	234	219	205	192	180
DROP INCHES		.00	-10.57	-43.80	101.25	184.58	-295.58
BULLET PATH	(50 M)	-80	.00	-21.86	-67.94	139.91	-239.54
INCHES	(100 M)	-80	10.93	.00	-35.15	-96.19	-184.89
(ZERO RANGE)	(150 M)	-80	22.65	23.43	.00	-49.32	-126.30
	(200 M)	-80	34.98	48.09	36.99	.00	-64.65
MPBR ZERO	(45 M)	-80	-1.02	-23.89	-70.99	143.97	-244.62
WIND DRIFT	(10 MPH)	.00	.70	2.82	6.41	11.51	18.18
INCHES	(20 MPH)	.00	1.40	5.64	12.82	23.03	36.36