

STANDARD BALLISTICS OF KYNOCHE CENTRAL-FIRE METALLIC CARTRIDGES

DESCRIPTION	POWDER	BULLET	Pressure at 60° F.	Muzzle		50 yards		100 yards	
				Velocity	Energy	Velocity	Energy	Velocity	Energy
				Tons per sq. in.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.	Ft. lbs.
5.5 mm. Velo Dog Revolver -297/-230 (Morris) Short	11 grs. Smokeless	45 gr. Metal-covered	—	—	650	42	584	34	—
..	31 grs. Black	37 gr. Lead	—	—	870	62	809	54	—
..297/-230 (Morris) Long	11 grs. Smokeless	37 gr. Lead	—	—	1,200	118	1,059	92	971
..	51 grs. Black	37 gr. Lead	—	—	—	—	—	—	77
..242 "Rimless Nitro-Express Rifle (Vickers)	24 grs. Smokeless	100 gr. Metal-covered Pointed	19.5	3,000	2,000	—	—	2,694	1,607
6.35 mm. (.25) Automatic Pistol	2 grs. Smokeless	50 gr. Metal-covered	—	625	43	584	37	—	—
..297/-250 Rook Rifle	61 grs. Black	56 gr. Lead	—	1,150	164	1,049	137	978	119
..	24 grs. Smokeless	56 gr. Lead	—	—	—	—	—	—	—
..25—20 Marlin Rifle	15 grs. Black	86 gr. Lead	—	1,350	348	—	—	1,049	210
..	61 grs. Smokeless	86 gr. Metal-based	—	1,350	348	—	—	1,049	210
..255 "Rook Rifle"	61 grs. Smokeless	86 gr. Metal-covered	—	1,700	551	—	—	1,233	290
..	9 grs. Black	65 gr. Lead	—	1,200	204	1,089	171	1,017	149
6.5 mm. (.256) Mannlicher Rifle	36 grs. Smokeless	160 gr. Metal-covered	21.5	2,395	2,035	—	—	2,144	1,631
..	40 grs. Smokeless	135 gr. Metal-covered Pointed	21.5	2,800	2,348	—	—	2,604	2,031
6.5 mm. (.256) Mannlicher- Schönauer Rifle	36 grs. Smokeless	160 gr. Metal-covered	21.5	2,395	2,035	—	—	2,144	1,631
..	40 grs. Smokeless	135 gr. Metal-covered Pointed	21.5	2,800	2,348	—	—	2,604	2,031
6.5 mm. (.256) Mauser Rifle	38 grs. Smokeless	155 gr. Metal-covered	—	2,395	1,972	—	—	2,136	1,569
6.5 mm. (.256) Krag-Jorgensen Rifle	38 grs. Smokeless	160 gr. Metal-covered	20.5	2,395	2,035	—	—	2,144	1,631
..	40 grs. Smokeless	135 gr. Metal-covered Pointed	21.5	2,800	2,348	—	—	2,604	2,031
7 mm. Walking-stick	4 grs. Black	45 gr. Lead	—	—	—	—	—	—	—
7 mm. (.276) Mauser Rifle	38 grs. Smokeless	173 gr. Metal-covered	17.5	2,300	2,030	—	—	2,035	1,590
..	43 grs. Smokeless	140 gr. Metal-covered Pointed	19.5	2,800	2,417	—	—	2,579	2,048
..	43 grs. Smokeless	140 gr. Metal-covered Copper- pointed	19.5	2,800	2,435	—	—	2,594	2,090
..280 Flanged Nitro-Express Rifle	49 grs. Smokeless	160 gr. Metal-covered H.P.	19.0	2,850	2,885	—	—	2,525	2,265
..	50 grs. Smokeless	140 gr. Metal-covered H.P.	19.0	2,850	2,525	—	—	2,480	1,912
..	48 grs. Smokeless	180 gr. Metal-covered Pointed	19.0	2,650	2,803	—	—	2,481	2,459
..	49½ grs. Smokeless	150 gr. Metal-covered Pointed	19.0	2,800	2,609	—	—	2,592	2,236
..280 Rimless Nitro-Express Rifle (Ross)	51 grs. Smokeless	160 gr. Metal-covered H.P.	20.0	2,910	3,005	—	—	2,580	2,362
..	52 grs. Smokeless	140 gr. Metal-covered H.P.	20.0	3,010	2,814	—	—	2,627	2,142
..	50 grs. Smokeless	180 gr. Metal-covered Pointed	20.0	2,760	3,042	—	—	2,587	2,673
..	51½ grs. Smokeless	150 gr. Metal-covered Pointed	20.0	2,920	2,837	—	—	2,706	2,436
..280 Jeffery Nitro-Express Rifle Rimless	57 grs. Smokeless	140 gr. Metal-covered Pointed	18.5	2,850	2,522	—	—	2,625	2,139

STANDARD BALLISTICS OF KYNOCHE CENTRAL-FIRE METALLIC CARTRIDGES—continued

DESCRIPTION	POWDER	BULLET	Pressure at 60° F.	Muzzle		50 yards		100 yards	
				Velocity	Energy	Velocity	Energy	Velocity	Energy
				Tons per sq. in.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.	Ft. lbs.
7.5 mm. (.295) Nagant Revolver (Swedish)	10 grs. Black	105 gr. Lead	—	—	725	122	688	110	—
7.5 mm. (.295) Nagant Revolver (Swiss)	5 grs. Smokeless	105 gr. Metal-covered	—	—	725	122	688	110	—
..300 Mauser Automatic Pistol	7 grs. Smokeless	85 gr. Metal-covered	—	1,400	370	1,214	278	1,087	223
..300 Revolver	6 grs. Black	80 gr. Lead	—	—	600	64	560	56	—
..300 (or .295) Rook Rifle	24 grs. Smokeless	80 gr. Lead	—	—	—	—	—	—	—
..	10 grs. Black	80 gr. Lead	—	—	1,100	215	1,017	183	949
..	4 grs. Smokeless	80 gr. Lead	—	—	—	—	—	—	160
7.62 mm. Nagant Revolver (Russian)	5 grs. Smokeless	104 gr. Metal-covered	—	—	925	197	854	168	—
..300 "Sherwood" Rifle	7 grs. Smokeless	140 gr. Metal-based	—	1,400	609	1,286	514	1,189	439
..	7 grs. Smokeless	140 gr. Metal-covered	—	1,400	609	1,286	514	1,189	439
..	7 grs. Smokeless	120 gr. Metal-covered W.R. Capped	—	1,450	560	1,313	460	1,205	387
..30 Flanged Rifle (U.S.A. Army)	35 grs. Smokeless	220 gr. Metal-covered	16.5	2,000	1,952	—	—	1,771	1,531
..30 Rimless Rifle (U.S.A. Model 1903)	41 grs. Smokeless	220 gr. Metal-covered	—	2,200	2,360	—	—	1,966	1,887
..30 Rimless Rifle (U.S.A. Model 1906)	47 grs. Smokeless	150 gr. Metal-covered Pointed	20.0	2,750	2,516	—	—	2,507	2,090
..30—30 Winchester Rifle	22 grs. Smokeless	170 gr. Metal-covered	—	1,950	1,434	—	—	1,522	873
7.63 mm. Mannlicher Automatic Pistol	7 grs. Smokeless	85 gr. Metal-covered	—	1,050	208	979	181	917	159
7.65 mm./m or .32 Automatic Pistol	34 grs. Smokeless	72 gr. Metal-covered	—	875	122	815	106	—	—
7.65 mm. Parabellum Automatic Pistol	54 grs. Smokeless	92 gr. Metal-covered	—	1,200	294	1,039	220	—	—
7.65 mm. (.301) Mauser Rifle	35 grs. Smokeless	219 gr. Metal-covered	16.0	2,034	2,010	—	—	1,801	1,575
..	40½ grs. Smokeless	154 gr. Metal-covered Pointed	18.0	2,700	2,491	—	—	2,468	2,080
..303 Rifle (British Mark VI Model)	31 grs. Smokeless	215 gr. Metal-covered	17.0	2,060	2,024	—	—	1,821	1,581
..	31½ grs. Smokeless	192 gr. Metal-covered Copper- tubed	17.0	2,200	2,065	—	—	1,940	1,604
..303 Rifle (British Mark VII Model)	41 grs. Smokeless	174 gr. Metal-covered Pointed	18.5	2,450	2,317	—	—	2,253	1,959
..	43 grs. Smokeless	150 gr. Metal-covered Copper- pointed	18.5	2,700	2,430	—	—	2,438	1,975
..303 Savage Rifle	26 grs. Smokeless	180 gr. Metal-covered	—	1,975	1,558	—	—	1,701	1,154
..303 Magnum Rifle	53 grs. Smokeless	175 gr. Metal-covered Nobeloy Stream-line	21.5	2,780	3,000	—	—	2,570	2,564
..375/.303 Nitro-Express Rifle	45 grs. Smokeless	215 gr. Metal-covered	18.0	2,500	2,980	—	—	2,233	2,378

STANDARD BALLISTICS OF KYNOCH CENTRAL-FIRE METALLIC CARTRIDGES—continued

DESCRIPTION	POWDER	BULLET	Pressure at 60° F.	Muzzle		50 yards		100 yards	
				Velocity	Energy	Velocity	Energy	Velocity	Energy
			Tons per sq. in.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.
.310 Cadet Rifle	5 grs. Smokeless	120 gr. Lead	—	1,200	383	1,100	322	1,033	284
7.9 mm. (.311) Mauser Rifle ..	40½ grs. Smokeless	227 gr. Metal-covered ..	15.5	2,034	2,082	—	—	1,794	1,621
8 mm. Lebel Revolver ..	50 grs. Smokeless	154 gr. Metal-covered Pointed	18.0	2,800	2,679	—	—	2,544	2,211
8 mm. (.315) Mannlicher Rifle ..	11 grs. Black ..	120 gr. Metal-covered ..	—	625	104	594	94	—	—
8 mm. (.315) Mannlicher Rifle ..	4 grs. Smokeless	120 gr. Metal-covered ..	—	725	140	691	127	—	—
8 mm. (.315) Mannlicher Rifle ..	41 grs. Smokeless	244 gr. Metal-covered ..	14.0	2,034	2,240	—	—	1,810	1,773
8 mm. (.315) Mannlicher Rifle ..	50 grs. Smokeless	154 gr. Metal-covered Pointed	18.0	2,750	2,583	—	—	2,497	2,129
8 mm. (.315) Mannlicher-Schönauer Rifle ..	39 grs. Smokeless	200 gr. Metal-covered ..	—	2,200	2,147	—	—	1,914	1,625
8 mm. (.315) Mauser Rifle ..	40½ grs. Smokeless	227 gr. Metal-covered ..	15.5	2,034	2,082	—	—	1,794	1,621
8 mm. (.315) Mauser Rifle ..	50 grs. Smokeless	154 gr. Metal-covered Pointed	18.0	2,800	2,679	—	—	2,544	2,211
.318 Rimless Nitro-Express Rifle ..	48 grs. Smokeless	250 gr. Metal-covered ..	19.5	2,400	3,194	—	—	2,148	2,558
.318 Rimless Nitro-Express Rifle ..	54 grs. Smokeless	180 gr. Metal-covered ..	19.5	2,750	3,020	—	—	2,325	2,160
.32 S. & W. Revolver ..	41 grs. Black ..	85 gr. Lead	—	550	57	512	49	—	—
.32 S. & W. Revolver ..	2 grs. Smokeless	85 gr. Lead	—	700	106	662	95	—	—
.32 S. & W. Long Revolver ..	10 grs. Black ..	98 gr. Lead	—	725	114	686	81	—	—
.32 S. & W. Long Revolver ..	4 grs. Smokeless	98 gr. Lead	—	725	114	686	81	—	—
.320 Revolver ..	6 grs. Black ..	80 gr. Lead	—	550	54	510	46	—	—
.320 Revolver ..	24 grs. Smokeless	80 gr. Lead	—	550	54	510	46	—	—
.320 Long (Rifle) ..	8 grs. Black ..	80 gr. Lead	—	1,100	215	1,012	182	—	—
.320 Long (Rifle) ..	31 grs. Smokeless	80 gr. Lead	—	1,100	215	1,012	182	—	—
.32 Colt New Police Revolver ..	11 grs. Black ..	100 gr. Lead	—	725	117	686	104	—	—
.32 Colt New Police Revolver ..	4 grs. Smokeless	100 gr. Lead	—	725	117	686	104	—	—
.32—20 Winchester Rifle ..	19 grs. Black ..	115 gr. Lead	—	1,230	386	—	—	987	249
.32—20 Winchester Rifle ..	6 grs. Smokeless	115 gr. Metal-based ..	—	1,400	500	—	—	1,052	282
.32—20 Winchester Rifle ..	6 grs. Smokeless	115 gr. Metal-based ..	—	1,400	500	—	—	1,052	282
.32 Winchester "Special" Rifle ..	23 grs. Smokeless	170 gr. Metal-covered ..	—	2,000	1,508	—	—	1,529	881
.32—40 Marlin and Winchester Rifle ..	33 grs. Black ..	165 gr. Lead	—	1,450	770	—	—	1,133	470
.32—40 Marlin and Winchester Rifle ..	18 grs. Smokeless	165 gr. Metal-covered ..	—	1,650	996	—	—	1,255	576
.333 Flanged Nitro-Express Rifle ..	49 grs. Smokeless	300 gr. Metal-covered ..	—	2,150	3,075	—	—	1,949	2,527
.333 Flanged Nitro-Express Rifle ..	53 grs. Smokeless	250 gr. Metal-covered Pointed	—	2,400	3,194	—	—	2,144	2,549
.333 Rimless Nitro-Express Rifle ..	50 grs. Smokeless	300 gr. Metal-covered ..	18.5	2,200	3,221	—	—	1,996	2,653
.333 Rimless Nitro-Express Rifle ..	54 grs. Smokeless	250 gr. Metal-covered Pointed	18.0	2,500	3,465	—	—	2,238	2,776
.35 Winchester Rifle ..	48½ grs. Smokeless	250 gr. Metal-covered ..	—	2,220	2,683	—	—	1,764	1,726
.400/.350 Nitro-Express Rifle ..	43 grs. Smokeless	310 gr. Metal-covered ..	16.0	2,150	3,178	—	—	1,926	2,551
.351 Winchester Self-loading Rifle ..	18 grs. Smokeless	180 gr. Metal-covered ..	—	1,800	1,294	—	—	1,484	880
9 mm. Walking Stick ..	8 grs. Black ..	100 gr. Lead	—	—	—	—	—	—	—
9 mm. Automatic Pistol ..	51 grs. Smokeless	110 gr. Metal-covered ..	—	1,000	244	933	212	—	—
9 mm. Parabellum Automatic Pistol ..	51 grs. Smokeless	124 gr. Metal-covered ..	—	1,200	397	1,080	321	—	—

STANDARD BALLISTICS OF KYNOCH CENTRAL-FIRE METALLIC CARTRIDGES—continued

DESCRIPTION	POWDER	BULLET	Pressure at 60° F.	Muzzle		50 yards		100 yards	
				Velocity	Energy	Velocity	Energy	Velocity	Energy
			Tons per sq. in.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.
9 mm. Mannlicher-Schönauer Rifle ..	47 grs. Smokeless	232 gr. Metal-covered ..	—	2,250	2,605	—	—	1,960	1,978
9 mm. Mauser Rifle ..	45 grs. Smokeless	262 gr. Metal-covered ..	—	2,100	2,563	—	—	1,840	1,967
.360 No. 5 Revolver ..	16 grs. Black ..	125 gr. Lead	—	1,050	306	982	267	—	—
.360 No. 5 Rook Rifle ..	14 grs. Black ..	134 gr. Lead	—	1,030	315	968	279	—	—
.360 No. 5 Rook Rifle ..	31 grs. Smokeless	145 gr. Lead	—	1,030	342	975	306	—	—
.360 Nitro-Express Rifle ..	30 grs. Smokeless	300 gr. Metal-covered ..	14.0	1,650	1,812	—	—	1,453	1,405
.360 Nitro for Black Powder Express Rifle ..	22 grs. Smokeless	190 gr. Metal-based ..	—	1,750	1,290	—	—	1,527	980
.360 Black Powder Express Rifle ..	50 grs. Black ..	155 gr. Lead H.P. ..	10.0	1,700	994	—	—	1,331	609
.360 Black Powder Express Rifle ..	50 grs. Black ..	190 gr. Lead Copper-tubed	—	1,550	1,014	—	—	1,275	684
.360 Black Powder Express Rifle ..	50 grs. Black ..	215 gr. Lead Solid ..	—	1,450	1,003	—	—	1,229	721
.400/.360 Nitro Express Rifle (Purdey) ..	40 grs. Smokeless	300 gr. Metal-covered ..	15.5	1,950	2,530	—	—	1,725	1,979
.400/.360 Nitro-Express Rifle (Westley Richards) ..	41 grs. Smokeless	314 gr. Metal-covered ..	15.5	1,900	2,515	—	—	1,695	2,001
.360 No. 2 Nitro-Express Rifle ..	55 grs. Smokeless	320 gr. Metal-covered ..	14.7	2,200	3,435	—	—	1,967	2,747
9.5 mm. Mannlicher-Schönauer Rifle ..	45 grs. Smokeless	270 gr. Metal-covered ..	—	2,200	2,905	—	—	1,914	2,195
.375 Rimless Nitro-Express Rifle ..	43 grs. Smokeless	270 gr. Metal-covered ..	—	2,100	2,641	—	—	1,823	2,034
.375 Flanged Nitro-Express Rifle ..	40 grs. Smokeless	270 gr. Metal-covered ..	14.5	1,975	2,336	—	—	1,711	1,753
.38 S. & W. Revolver ..	10 grs. Black ..	145 gr. Lead	—	625	126	591	113	—	—
.38 S. & W. Revolver ..	24 grs. Smokeless	145 gr. Lead	—	625	126	591	113	—	—
.38 Colt Police Positive Revolver ..	10 grs. Black ..	150 gr. Lead	—	660	145	600	120	—	—
.38 Colt Police Positive Revolver ..	24 grs. Smokeless	150 gr. Lead	—	660	145	600	120	—	—
.38 S. & W. "Special" Revolver ..	18 grs. Black ..	158 gr. Lead	—	875	268	838	246	—	—
.38 S. & W. "Special" Revolver ..	6 grs. Smokeless	158 gr. Lead	—	875	268	838	246	—	—
.380 Revolver ..	10 grs. Black ..	124 gr. Lead	—	625	107	584	94	—	—
.380 Revolver ..	3 grs. Smokeless	124 gr. Lead	—	625	107	584	94	—	—
.380 Long (Rifle) ..	15 grs. Black ..	124 gr. Lead	—	1,050	303	978	263	—	—
.380 Long (Rifle) ..	4 grs. Smokeless	124 gr. Lead	—	1,050	303	978	263	—	—
.380 Long Rifle (Long Colt) ..	16 grs. Black ..	124 gr. Lead	—	1,125	348	1,034	294	—	—
.380 Revolver (Dutch) ..	10 grs. Black ..	190 gr. Lead	—	600	152	572	138	—	—
.380 Automatic Hammerless Pistol ..	31 grs. Smokeless	95 gr. Metal-covered ..	—	840	149	805	137	—	—
.380 Automatic Webley Pistol ..	31 grs. Black ..	130 gr. Metal-covered ..	—	1,050	318	986	280	—	—
9 mm. Short Automatic Pistol ..	31 grs. Black ..	180 gr. Lead	—	1,325	701	—	—	1,011	408
.38 Automatic Pistol ..	6 grs. Smokeless	130 gr. Metal-covered ..	—	1,050	318	986	280	—	—
.38—40 Winchester Rifle ..	45 grs. Black ..	255 gr. Lead	—	1,350	1,031	—	—	1,103	688
.38—40 Winchester Rifle ..	24 grs. Smokeless	255 gr. Metal-based ..	—	1,600	1,448	—	—	1,254	889

STANDARD BALLISTICS OF KYNOCH CENTRAL-FIRE METALLIC CARTRIDGES—continued

DESCRIPTION	POWDER	BULLET	Pressure at 60° F.	Muzzle		50 yards		100 yards	
				Velocity	Energy	Velocity	Energy	Velocity	Energy
.38—55 Marlin and Winchester Rifle	24 grs. Smokeless	255 gr. Metal-covered	Tons per sq. in.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.
.450/400 Nitro for Black Powder Express Rifle, 2½" ..	32 grs. Smokeless	270 gr. Metal-based ..	—	1,600	1,448	—	—	1,254	889
.450/400 Black Powder Express Rifle, 2½"	80 grs. Black ..	230 gr. Lead Copper-tubed ..	10°0	1,850	1,747	—	—	1,505	1,155
.450/400 Nitro-Express Rifle, 3" ..	80 grs. Black ..	255 gr. Lead Solid	—	1,750	1,562	—	—	1,451	1,191
.450/400 Magnum Nitro-Express Rifle, 3½"	60 grs. Smokeless	400 gr. Metal-covered ..	16°0	2,125	4,006	—	—	1,897	3,194
.450/400 Magnum Nitro for Black Powder Express Rifle, 3½" ..	60 grs. Smokeless	400 gr. Metal-covered ..	16°5	2,150	4,101	—	—	1,920	3,271
.450/400 Magnum Black Powder Express Rifle, 3½" ..	40 grs. Smokeless	270 gr. Metal-based	—	1,850	2,050	—	—	1,503	1,354
.404 Rimless Nitro-Express Rifle ..	110 grs. Black ..	230 gr. Lead Copper-tubed ..	11°0	2,000	2,041	—	—	1,633	1,360
.405 Winchester Rifle	110 grs. Black ..	255 gr. Lead Solid	—	1,900	2,042	—	—	1,580	1,412
.410 Revolver	60 grs. Smokeless	400 gr. Metal-covered ..	16°0	2,125	4,006	—	—	1,884	3,150
.430 Revolver	52 grs. Smokeless	300 gr. Metal-covered ..	—	2,200	3,220	—	—	1,891	2,380
.433 (11 mm.) Remington Rifle (Egyptian)	12 grs. Black ..	160 gr. Lead	—	700	174	660	155	—	—
" " (Spanish)	13 grs. Black ..	200 gr. Lead	—	700	217	664	196	—	—
.433 (11 mm.) Gras Rifle	67 grs. Black ..	420 gr. Lead	—	1,340	1,673	—	—	1,188	1,315
.433 (11 mm.) Mauser Rifle	75 grs. Black ..	390 gr. Lead	—	1,340	1,554	—	—	1,116	1,077
.44 S. & W. Revolver (American) ..	81 grs. Black ..	386 gr. Lead	—	1,500	1,927	—	—	1,216	1,266
" " (Russian)	77 grs. Black ..	386 gr. Lead	—	1,427	1,744	—	—	1,253	1,344
.44 Nagant Revolver (Brazilian) ..	19 grs. Black ..	220 gr. Lead	—	710	246	677	224	—	—
.440 Nagant Revolver (Argentine) ..	61 grs. Smokeless	220 gr. Lead	—	710	275	680	252	—	—
.44 Revolver (Montenegrin)	21 grs. Black ..	246 gr. Lead	—	700	261	669	238	—	—
.44—40 Winchester Rifle	7 grs. Smokeless	246 gr. Lead	—	710	246	677	224	—	—
" " "	19 grs. Black ..	220 gr. Lead	—	600	240	563	211	—	—
.442 Revolver	30 grs. Black ..	300 gr. Lead	—	1,300	750	—	—	1,000	444
.442 Long (Rifle)	33 grs. Black ..	200 gr. Lead	—	700	239	666	217	—	—
.45 Colt Automatic Pistol	12½ grs. Smokeless	200 gr. Metal-based ..	—	1,000	488	948	439	—	—
.450 Revolver	12½ grs. Smokeless	220 gr. Lead	—	870	336	825	302	—	—
" " (U.S.A.)	61 grs. Smokeless	230 gr. Metal-covered ..	5°0	810	335	772	304	—	—
" " "	13 grs. Black ..	225 gr. Lead	—	660	217	625	195	—	—

STANDARD BALLISTICS OF KYNOCH CENTRAL-FIRE METALLIC CARTRIDGES—continued

DESCRIPTION	POWDER	BULLET	Pressure at 60° F.	Muzzle		50 yards		100 yards	
				Velocity	Energy	Velocity	Energy	Velocity	Energy
.450 Revolver	6 grs. Smokeless	225 gr. Lead	Tons per sq. in.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.
.450 Long (Rifle)	18 grs. Black ..	225 gr. Lead	—	710	252	674	227	—	—
.450 No. 1 Rifle	28 grs. Black ..	270 gr. Lead	—	600	180	567	160	—	—
.45—70—405 Marlin and Winchester Rifle	—	—	—	1,000	599	—	—	912	498
.450 Nitro-Express Rifle	57 grs. Black ..	405 gr. Lead	—	1,300	1,518	—	—	1,150	1,188
.450 Nitro for Black Powder Express Rifle	70 grs. Smokeless	480 gr. Metal-covered ..	17°0	2,150	4,920	—	—	1,911	3,887
.450 Black Powder Express Rifle ..	45 grs. Smokeless	365 gr. Metal-based	—	1,750	2,479	—	—	1,486	1,787
" " "	120 grs. Black ..	270 gr. Lead Copper-tubed ..	11°0	1,975	2,336	—	—	1,598	1,530
" " "	120 grs. Black ..	310 gr. Lead Solid	—	1,810	2,253	—	—	1,501	1,550
" " "	120 grs. Black ..	325 gr. Lead Copper-tubed ..	—	1,775	2,271	—	—	1,484	1,588
.500/450 No. 1 Nitro for Black Powder Express Rifle ..	120 grs. Black ..	365 gr. Lead Solid	—	1,700	2,339	—	—	1,443	1,686
.500/450 No. 1 Black Powder Express Rifle	42 grs. Smokeless	365 gr. Metal-based	—	1,900	2,920	—	—	1,423	1,640
.500/450 Magnum Nitro-Express Rifle	110 grs. Black ..	270 gr. Lead Copper-tubed ..	10°0	1,900	2,162	—	—	1,535	1,411
.500/450 Magnum Nitro for Black Powder Express Rifle ..	110 grs. Black ..	310 gr. Lead Solid	—	1,825	2,291	—	—	1,514	1,576
.500/450 Magnum Black Powder Express Rifle	75 grs. Smokeless	480 gr. Metal-covered ..	15°5	2,175	5,037	—	—	1,934	3,983
.500/450 Magnum Nitro for Black Powder Express Rifle ..	52 grs. Smokeless	365 gr. Metal-based	—	1,850	2,775	—	—	1,524	1,880
.500/450 Magnum Black Powder Express Rifle	140 grs. Black ..	325 gr. Lead Copper-tubed ..	11°0	1,950	2,742	—	—	1,636	1,217
" " "	140 grs. Black ..	365 gr. Lead Solid	11°0	1,875	2,847	—	—	1,596	2,062
.450 No. 2 Nitro-Express Rifle	80 grs. Smokeless	480 gr. Metal-covered ..	13°0	2,175	5,037	—	—	1,934	3,983
.500/450 No. 1 Musket	76 grs. Black ..	480 gr. Lead Solid	—	1,300	1,799	—	—	1,171	1,460
.500/450 No. 2 Musket	76 grs. Black ..	480 gr. Lead Solid	—	1,300	1,799	—	—	1,171	1,460
.577/450 Solid Martini-Henry Rifle	35 grs. Smokeless	480 gr. Lead Solid	—	1,300	1,799	—	—	1,171	1,460
" " "	85 grs. Black ..	480 gr. Lead Solid	—	1,350	1,940	—	—	1,212	1,564
" " "	90 grs. Black ..	325 gr. Lead Copper-tubed ..	—	1,600	1,846	—	—	1,339	1,308
" " "	44½ grs. Smokeless	480 gr. Lead Solid	—	1,350	1,940	—	—	1,212	1,564
.577/450 Solid Martini-Henry Carbine	44 grs. Smokeless	365 gr. Metal-based	—	1,425	1,644	—	—	1,226	1,285
.577/450 Coiled Martini-Henry Rifle	34 grs. Smokeless	410 gr. Lead Solid	—	1,150	1,203	—	—	1,056	1,014
.577/450 Coiled Martini-Henry Carbine	85 grs. Black ..	480 gr. Lead Solid	—	1,320	1,855	—	—	1,187	1,501
" " "	90 grs. Black ..	325 gr. Lead Copper-tubed ..	—	1,575	1,789	—	—	1,277	1,176
.577/450 Coiled Martini-Henry Carbine	70 grs. Black ..	410 gr. Lead Solid	—	1,150	1,203	—	—	1,058	1,019

STANDARD BALLISTICS OF KYNOCH CENTRAL-FIRE METALLIC CARTRIDGES—continued

DESCRIPTION	POWDER	BULLET	Pressure at 60° F.	Muzzle		50 yards		100 yards	
				Velocity	Energy	Velocity	Energy	Velocity	Energy
			Tons per sq. in.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.
.455 Revolver	18 grs. Black ..	265 gr. Lead	—	710	296	679	271	—	—
	7 grs. Smokeless ..	265 gr. Lead	—	600	212	572	192	—	—
.455 Webley Self-loading Pistol	7 grs. Smokeless ..	224 gr. Metal-covered ..	—	710	250	674	226	—	—
.500/.465 Nitro-Express Rifle ..	75 grs. Smokeless ..	480 gr. Metal-covered ..	14.0	2,125	4,807	—	—	1,878	3,755
.470 Nitro-Express Rifle ..	75 grs. Smokeless ..	500 gr. Metal-covered ..	14.0	2,125	5,007	—	—	1,881	3,924
.475 Nitro-Express Rifle ..	75 grs. Smokeless ..	480 gr. Metal-covered ..	15.0	2,175	5,037	—	—	1,908	3,877
.475 No. 2 Nitro-Express Rifle ..	85 grs. Smokeless ..	480 gr. Metal-covered ..	15.5	2,200	5,152	—	—	1,932	3,974
" (for Jeffery Rifles)	80 grs. Smokeless ..	500 gr. Metal-covered ..	—	1,900	4,000	—	—	1,620	2,910
.476 Nitro-Express Rifle ..	75 grs. Smokeless ..	520 gr. Metal-covered ..	16.0	2,100	5,086	—	—	1,865	4,013
.500 Revolver	24 grs. Black ..	350 gr. Lead	—	650	328	597	277	—	—
.500 Nitro-Express Rifle, 3" ..	80 grs. Smokeless ..	570 gr. Metal-covered ..	16.0	2,150	5,844	—	—	1,901	4,569
.500 Nitro for Black Powder									
Express Rifle, 3" ..	55 grs. Smokeless ..	440 gr. Metal-based ..	—	1,900	3,525	—	—	1,610	2,530
.500 Black Powder Express Rifle,									
3" ..	136 grs. Black ..	340 gr. Lead Copper-tubed ..	—	1,925	2,795	—	—	1,561	1,838
	136 grs. Black ..	380 gr. Lead Solid ..	—	1,850	2,885	—	—	1,532	1,979
.500 Nitro-Express Rifle, 3½" ..	80 grs. Smokeless ..	570 gr. Metal-covered ..	16.0	2,125	5,708	—	—	1,877	4,453
.500 Nitro for Black Powder									
Express Rifle, 3½" ..	55 grs. Smokeless ..	440 gr. Metal-based ..	—	1,900	3,520	—	—	1,554	2,360
.500 Black Powder Express Rifle,									
3½" ..	142 grs. Black ..	440 gr. Lead Copper-tubed ..	11.0	1,775	3,075	—	—	1,501	2,200
	142 grs. Black ..	480 gr. Lead Solid ..	—	1,700	3,076	—	—	1,456	2,257
.577/.500 No. 2 Nitro for Black									
Powder Express Rifle ..	53 grs. Smokeless ..	440 gr. Metal-based ..	—	—	—	—	—	—	—
.577/.500 No. 2 Black Powder									
Express Rifle ..	130 grs. Black ..	340 gr. Lead Copper-tubed ..	10.0	1,850	2,582	—	—	1,498	1,693
	130 grs. Black ..	380 gr. Lead Solid ..	—	1,775	2,656	—	—	1,468	1,818
.577/.500 Magnum Nitro for									
Black Powder Express Rifle ..	60 grs. Smokeless ..	440 gr. Metal-based ..	—	—	—	—	—	—	—
.577/.500 Magnum Black Powder									
Express Rifle ..	164 grs. Black ..	440 gr. Lead Copper-tubed ..	11.0	1,880	3,451	—	—	1,593	2,477
	164 grs. Black ..	480 gr. Lead Solid ..	—	1,800	3,450	—	—	1,616	2,780
.577 Solid Pistol	28 grs. Black ..	450 gr. Lead Solid ..	—	725	525	695	482	—	—
.577 Solid Snider Rifle ..	70 grs. Black ..	480 gr. Lead Solid ..	—	1,240	1,637	—	—	1,079	1,240
.577 Coiled Snider Rifle ..	70 grs. Black ..	480 gr. Lead Solid ..	—	1,200	1,533	—	—	1,058	1,191
.577 Nitro-Express Rifle, 2½" ..	90 grs. Smokeless ..	750 gr. Metal-covered ..	—	1,795	5,361	—	—	1,579	4,159
.577 Nitro for Black Powder									
Express Rifle, 2½" ..	75 grs. Smokeless ..	570 gr. Metal-based ..	—	1,650	3,445	—	—	1,348	2,300
.577 Black Powder Express Rifle,									
2½" ..	160 grs. Black ..	520 gr. Lead Copper-tubed ..	10.0	1,725	3,431	—	—	1,434	2,371

STANDARD BALLISTICS OF KYNOCH CENTRAL-FIRE METALLIC CARTRIDGES—continued

DESCRIPTION	POWDER	BULLET	Pressure at 60° F.	Muzzle		50 yards		100 yards	
				Velocity	Energy	Velocity	Energy	Velocity	Energy
			Tons per sq. in.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.	Ft. per sec.	Ft. lbs.
.577 Black Powder Express Rifle,									
2½" ..	160 grs. Black ..	560 gr. Lead Solid ..	—	1,650	3,382	—	—	1,390	1,906
.577 Nitro-Express Rifle, 3" ..	100 grs. Smokeless ..	750 gr. Metal-covered ..	14.0	2,050	6,994	—	—	1,810	5,451
.577 Nitro for Black Powder									
Express Rifle, 3" ..	75 grs. Smokeless ..	570 gr. Metal-based ..	—	1,900	4,570	—	—	1,555	3,060
	75 grs. Smokeless ..	650 gr. Metal-based ..	—	1,850	4,940	—	—	1,551	3,470
.577 Black Powder Express Rifle									
3" ..	167 grs. Black ..	570 gr. Lead Copper-tubed ..	10.0	1,725	3,761	—	—	1,454	2,674
	167 grs. Black ..	610 gr. Lead Solid ..	—	1,650	3,684	—	—	1,406	2,673
.600 Nitro-Express Rifle ..	110 grs. Smokeless ..	900 gr. Metal-covered ..	14.0	1,950	7,590	—	—	1,732	6,000
CARTRIDGES FOR HOLLAND RIFLES									
.240 Flanged Nitro-Express ..	38 grs. Smokeless ..	100 gr. Metal-covered, Soft-nosed Pointed ..	18.0	2,850	1,810	—	—	2,567	1,465
" " " ..	38 grs. Smokeless ..	100 gr. Metal-covered, Copper-pointed ..	18.0	2,850	1,810	—	—	2,604	1,510
.240 Belted Rimless									
Nitro-Express ..	41 grs. Smokeless ..	100 gr. Metal-covered, Soft-nosed Pointed ..	19.0	2,950	1,940	—	—	2,659	1,570
" " " ..	41 grs. Smokeless ..	100 gr. Metal-covered, Copper-pointed ..	19.0	2,950	1,940	—	—	2,697	1,620
.275 Flanged Magnum									
Nitro-Express ..	47 grs. Smokeless ..	160 gr. Metal-covered, Soft-nosed Pointed ..	19.0	2,700	2,590	—	—	2,466	2,160
" " " ..	47 grs. Smokeless ..	160 gr. Metal-covered, Copper-pointed ..	19.0	2,700	2,590	—	—	2,497	2,215
.275 Belted Rimless Magnum									
Nitro-Express ..	49 grs. Smokeless ..	160 gr. Metal-covered, Soft-nosed Pointed ..	20.5	2,800	2,780	—	—	2,559	2,325
" " " ..	49 grs. Smokeless ..	160 gr. Metal-covered, Copper-pointed ..	20.5	2,800	2,780	—	—	2,592	2,390
.375 Flanged Magnum									
Nitro-Express ..	60 grs. Smokeless ..	270 gr. Metal-covered, Soft-nosed Pointed ..	18.0	2,600	4,050	—	—	2,291	3,145
.375 Belted Rimless Magnum									
Nitro-Express ..	62 grs. Smokeless ..	270 gr. Metal-covered, Soft-nosed Pointed ..	20.0	2,700	4,375	—	—	2,391	3,425