

Балістичні таблиці для калібру 5.56x45* в залежності від довжини ствола та висоти прицілу

1. Висота прицілу 6,6 см що відповідає механічним прицілам **M4, M16**

20 in (51 cm) ≈ 3100 fps (945 м/с)

Range (m)	Path (cm)	Path (moa)	Drift (cm)	Drift (moa)	Velocity (mps)	Energy (joules)	TOF (s)
0	-6.6	0.0	0.0	0.0	945.0	1794.15	0.0
25	-1.27	+1.6	-0.15	+0.21	918.7	1695.59	0.026
50	3.81	-2.59	-0.28	+0.19	891.57	1596.88	0.055
75	7.62	-3.55	-0.38	+0.18	866.0	1506.72	0.083
100	10.92	-3.76	-0.46	+0.16	840.64	1419.81	0.112
125	13.21	-3.65	-0.51	+0.14	814.76	1333.72	0.143
150	14.73	-3.36	-0.54	+0.12	790.5	1255.35	0.173
175	14.99	-2.97	-0.53	+0.1	766.21	1179.43	0.205
200	14.48	-2.48	-0.5	+0.09	741.67	1105.13	0.239
225	12.7	-1.95	-0.43	+0.07	718.66	1037.61	0.273
250	9.91	-1.36	-0.33	+0.05	695.8	972.66	0.308
275	5.59	-0.7	-0.18	+0.02	672.54	908.67	0.345
300	0.0	-0.01	0.0	0	650.47	850.1	0.383
325	-6.86	+0.72	0.22	-0.02	628.99	794.78	0.421
350	-15.49	+1.53	0.5	-0.05	607.04	740.28	0.463
375	-25.65	+2.36	0.82	-0.08	586.22	690.38	0.504
400	-37.34	+3.22	1.19	-0.1	565.95	643.47	0.547
425	-51.56	+4.18	1.64	-0.13	545.17	597.1	0.593
450	-67.56	+5.16	2.14	-0.16	525.29	554.39	0.639
475	-85.34	+6.18	2.69	-0.2	506.06	514.53	0.687
500	-106.68	+7.33	3.37	-0.23	486.13	474.81	0.739
525	-129.29	+8.48	4.08	-0.27	467.47	439.01	0.79
550	-155.19	+9.7	4.9	-0.31	449.0	404.98	0.844
575	-184.66	+11.04	5.84	-0.35	430.32	372.04	0.902
600	-216.92	+12.43	6.87	-0.39	412.49	341.8	0.961

18 in (46 cm) ≈ 3052 fps (930 м/с)

Range (m)	Path (cm)	Path (moa)	Drift (cm)	Drift (moa)	Velocity (mps)	Energy (joules)	TOF (s)
0	-6.6	0.0	0.0	0.0	930.01	1737.62	0.0
25	-1.02	+1.35	-0.15	+0.22	903.79	1641.08	0.027
50	4.06	-2.81	-0.29	+0.2	876.85	1544.55	0.056
75	8.13	-3.75	-0.4	+0.18	851.46	1456.42	0.084
100	11.43	-3.94	-0.47	+0.16	826.31	1371.82	0.114
125	13.97	-3.81	-0.53	+0.14	800.71	1288.03	0.145
150	15.24	-3.5	-0.55	+0.13	776.69	1211.97	0.176
175	15.75	-3.09	-0.55	+0.11	752.7	1138.21	0.209
200	14.99	-2.57	-0.51	+0.09	728.47	1066.22	0.243
225	13.21	-2.01	-0.44	+0.07	705.46	999.78	0.278
250	10.16	-1.4	-0.34	+0.05	682.93	937.01	0.313
275	5.59	-0.71	-0.19	+0.02	660.04	875.32	0.351
300	0.0	0	0.0	0	638.34	818.64	0.389
325	-7.11	+0.76	0.23	-0.02	616.95	764.68	0.429
350	-16.26	+1.61	0.52	-0.05	595.12	711.53	0.471
375	-26.92	+2.46	0.85	-0.08	574.64	663.4	0.513
400	-39.12	+3.36	1.23	-0.11	554.52	617.71	0.557
425	-54.1	+4.37	1.7	-0.14	533.7	572.29	0.604
450	-70.36	+5.38	2.21	-0.17	514.23	531.21	0.651
475	-89.15	+6.46	2.8	-0.2	495.0	492.3	0.7
500	-111.0	+7.63	3.48	-0.24	475.49	454.2	0.753
525	-134.87	+8.84	4.23	-0.28	456.9	419.35	0.806
550	-161.54	+10.11	5.07	-0.32	438.7	386.68	0.861
575	-192.79	+11.52	6.06	-0.36	420.08	354.55	0.921
600	-226.06	+12.96	7.12	-0.41	402.61	325.67	0.981

16 in (41 cm) ≈ 2960 fps (902 m/c)

Range (m)	Path (cm)	Path (moa)	Drift (cm)	Drift (moa)	Velocity (mps)	Energy (joules)	TOF (s)
0	-6.6	0.0	0.0	0.0	901.99	1634.57	0.0
25	-0.51	+0.82	-0.17	+0.23	876.03	1541.7	0.028
50	4.83	-3.24	-0.31	+0.21	849.81	1450.86	0.057
75	9.14	-4.16	-0.42	+0.19	824.73	1366.53	0.087
100	12.45	-4.32	-0.5	+0.17	800.01	1285.72	0.117
125	14.99	-4.14	-0.56	+0.15	774.86	1206.27	0.15
150	16.51	-3.8	-0.59	+0.13	750.97	1133.06	0.182
175	17.02	-3.35	-0.58	+0.11	727.53	1063.37	0.216
200	16.26	-2.79	-0.54	+0.09	703.91	995.44	0.251
225	14.22	-2.18	-0.47	+0.07	681.44	932.94	0.287
250	10.92	-1.52	-0.36	+0.05	659.22	873.15	0.324
275	6.1	-0.77	-0.2	+0.02	636.73	814.58	0.363
300	0.0	0	0.0	0	615.42	760.89	0.403
325	-7.62	+0.82	0.24	-0.03	594.42	709.91	0.444
350	-17.53	+1.71	0.55	-0.05	573.27	660.28	0.487
375	-28.7	+2.64	0.9	-0.08	553.0	614.32	0.531
400	-42.16	+3.62	1.31	-0.11	533.13	570.93	0.577
425	-58.17	+4.7	1.81	-0.15	512.86	528.36	0.626
450	-75.69	+5.79	2.35	-0.18	493.68	489.59	0.675
475	-96.01	+6.95	2.98	-0.22	474.79	452.84	0.726
500	-119.63	+8.23	3.71	-0.26	455.58	416.91	0.781
525	-145.54	+9.54	4.52	-0.3	437.3	384.24	0.836
550	-174.5	+10.92	5.42	-0.34	419.5	353.6	0.894
575	-208.28	+12.44	6.48	-0.39	401.36	323.63	0.956
600	-244.09	+13.99	7.61	-0.44	384.44	296.92	1.019

14.5 in (37 cm) ≈ 2887 fps (880 m/c)

Range (m)	Path (cm)	Path (moa)	Drift (cm)	Drift (moa)	Velocity (mps)	Energy (joules)	TOF (s)
0	-6.6	0.0	0.0	0.0	879.99	1555.8	0.0
25	-0.25	+0.47	-0.17	+0.24	854.48	1466.86	0.028
50	5.33	-3.62	-0.32	+0.22	828.39	1378.6	0.059
75	9.91	-4.52	-0.44	+0.2	803.48	1296.98	0.089
100	13.46	-4.64	-0.53	+0.18	779.31	1220.24	0.12
125	16.26	-4.43	-0.59	+0.16	754.47	1143.63	0.154
150	17.78	-4.05	-0.61	+0.14	731.22	1074.08	0.187
175	18.03	-3.56	-0.61	+0.12	708.05	1007.24	0.221
200	17.27	-2.96	-0.57	+0.1	684.46	941.21	0.258
225	15.24	-2.31	-0.49	+0.07	662.39	881.42	0.295
250	11.68	-1.61	-0.37	+0.05	640.57	824.34	0.333
275	6.6	-0.82	-0.21	+0.03	618.5	768.61	0.373
300	0.0	0	0.0	0	597.62	717.5	0.414
325	-8.13	+0.87	0.25	-0.03	577.02	668.82	0.456
350	-18.54	+1.83	0.58	-0.06	555.86	620.69	0.501
375	-30.73	+2.81	0.95	-0.09	536.05	577.31	0.546
400	-44.7	+3.85	1.38	-0.12	516.42	535.82	0.593
425	-61.72	+4.99	1.9	-0.15	496.49	495.28	0.644
450	-80.52	+6.15	2.48	-0.19	477.65	458.4	0.694
475	-102.11	+7.4	3.14	-0.23	458.94	423.15	0.747
500	-127.25	+8.76	3.92	-0.27	439.98	388.85	0.804
525	-154.69	+10.14	4.77	-0.31	422.18	358.07	0.861
550	-185.67	+11.62	5.73	-0.36	404.56	328.79	0.921
575	-221.49	+13.24	6.84	-0.41	386.91	300.72	0.986
600	-260.35	+14.92	8.06	-0.46	370.24	275.37	1.051

11.5 in (29 cm) ≈ 2613 fps (796 m/c)

Range (m)	Path (cm)	Path (moa)	Drift (cm)	Drift (moa)	Velocity (mps)	Energy (joules)	TOF (s)
0	-6.6	0.0	0.0	0.0	796.02	1272.98	0.0
25	1.02	-1.45	-0.21	+0.29	771.81	1196.78	0.031
50	7.87	-5.44	-0.39	+0.26	747.0	1120.99	0.065
75	13.46	-6.17	-0.53	+0.24	723.75	1052.25	0.099
100	17.78	-6.14	-0.63	+0.22	700.95	987.04	0.133
125	21.08	-5.79	-0.71	+0.19	677.42	921.96	0.171
150	22.86	-5.25	-0.74	+0.17	655.41	862.98	0.208
175	23.37	-4.59	-0.74	+0.15	633.92	807.39	0.246
200	22.1	-3.8	-0.69	+0.12	611.7	751.8	0.287
225	19.3	-2.97	-0.59	+0.09	590.92	701.5	0.328
250	14.99	-2.06	-0.45	+0.06	570.4	653.64	0.371
275	8.38	-1.06	-0.25	+0.03	549.62	606.86	0.416
300	0.0	-0.01	0.0	0	529.68	563.75	0.462
325	-10.41	+1.1	0.31	-0.03	510.24	522.94	0.51
350	-23.62	+2.32	0.7	-0.07	490.42	483.21	0.561
375	-38.86	+3.56	1.16	-0.11	471.74	447.01	0.612
400	-56.9	+4.9	1.69	-0.15	453.18	412.58	0.665
425	-78.74	+6.37	2.34	-0.19	434.25	378.82	0.723
450	-102.87	+7.87	3.06	-0.23	416.48	348.45	0.781
475	-130.56	+9.46	3.88	-0.28	399.11	319.97	0.842
500	-163.32	+11.22	4.86	-0.33	381.58	292.45	0.907
525	-198.88	+13.02	5.93	-0.39	365.15	267.91	0.973
550	-239.27	+14.96	7.15	-0.45	349.33	245.13	1.043
575	-285.75	+17.08	8.55	-0.51	334.88	225.34	1.117
600	-336.3	+19.28	10.07	-0.58	325.07	212.32	1.192

Обраховано у Applied Ballistics.

Дані для обрахунку:

Firearm Data

Barrel Twist

1 in 7.0

in

Twist Direction

Right

▼

Sight Height

6.6

cm

Ammunition Data

Bullet Diameter

0.223

in

Bullet Weight

62.0

gr

Bullet Length

2.31

cm

Drag Model

G7

▼

Ballistic Coefficient

0.151

Zero Data

Zero Range

300

m

2. Висота прицілу 9 см, що відповідає механічним прицілам **CZ BREN2**

14 in (36 cm) ≈ 2822 fps (860 м/с)

Range (m)	Path (cm)	Path (moa)	Drift (cm)	Drift (moa)	Velocity (mps)	Energy (joules)	TOF (s)
0	-8.89	0.0	0.0	0.0	859.99	1485.84	0.0
25	-2.29	+3.04	-0.18	+0.25	834.48	1399.07	0.029
50	3.81	-2.64	-0.34	+0.23	808.91	1314.47	0.06
75	8.89	-4.03	-0.45	+0.21	784.49	1236.37	0.091
100	12.7	-4.4	-0.55	+0.19	760.51	1161.94	0.123
125	15.75	-4.32	-0.61	+0.17	736.24	1088.99	0.157
150	17.53	-4.02	-0.64	+0.15	712.84	1020.8	0.192
175	18.03	-3.57	-0.63	+0.12	690.25	957.21	0.227
200	17.53	-3.0	-0.59	+0.1	667.3	894.57	0.264
225	15.49	-2.35	-0.51	+0.08	645.2	836.4	0.302
250	11.94	-1.65	-0.39	+0.05	623.99	782.17	0.341
275	6.6	-0.84	-0.22	+0.03	602.04	728.21	0.383
300	0.0	0	0.0	0	581.47	679.26	0.424
325	-8.64	+0.9	0.27	-0.03	560.98	632.22	0.468
350	-19.3	+1.9	0.61	-0.06	540.26	586.39	0.514
375	-31.75	+2.92	0.99	-0.09	520.63	544.5	0.561
400	-46.48	+4.0	1.45	-0.12	501.43	505.18	0.609
425	-64.26	+5.21	2.0	-0.16	481.58	465.86	0.661
450	-84.07	+6.42	2.6	-0.2	462.99	430.61	0.713
475	-106.68	+7.73	3.3	-0.24	444.61	397.12	0.768
500	-133.35	+9.16	4.12	-0.28	425.9	364.44	0.827
525	-162.31	+10.63	5.01	-0.33	408.34	335.02	0.886
550	-194.82	+12.2	6.03	-0.38	391.12	307.36	0.948
575	-232.66	+13.9	7.2	-0.43	373.87	280.79	1.014
600	-273.81	+15.69	8.49	-0.49	357.59	256.93	1.082

11 in (28 cm) ≈ 2559 fps (780 м/с)

Range (m)	Path (cm)	Path (moa)	Drift (cm)	Drift (moa)	Velocity (mps)	Energy (joules)	TOF (s)
0	-8.89	0.0	0.0	0.0	780.01	1222.27	0.0
25	-0.76	+1.09	-0.22	+0.3	755.84	1147.84	0.032
50	6.6	-4.48	-0.4	+0.27	731.46	1074.89	0.067
75	12.45	-5.7	-0.54	+0.25	708.63	1008.86	0.101
100	17.27	-5.92	-0.66	+0.23	685.95	945.28	0.136
125	20.83	-5.69	-0.73	+0.2	662.91	882.91	0.174
150	22.86	-5.23	-0.77	+0.18	641.06	825.56	0.212
175	23.37	-4.61	-0.76	+0.15	619.78	771.73	0.251
200	22.35	-3.84	-0.71	+0.12	598.05	718.58	0.293
225	19.56	-3.01	-0.61	+0.09	577.44	669.91	0.335
250	15.24	-2.09	-0.47	+0.06	557.14	623.68	0.379
275	8.38	-1.06	-0.26	+0.03	536.42	578.12	0.426
300	0.0	0	0.0	0	517.0	537.04	0.472
325	-10.92	+1.15	0.33	-0.03	497.62	497.45	0.521
350	-24.64	+2.42	0.74	-0.07	477.96	458.94	0.574
375	-40.39	+3.71	1.21	-0.11	459.43	423.96	0.626
400	-59.18	+5.1	1.77	-0.15	441.08	390.88	0.681
425	-81.79	+6.62	2.45	-0.2	422.57	358.75	0.74
450	-107.44	+8.2	3.2	-0.24	404.96	329.46	0.8
475	-136.14	+9.86	4.06	-0.29	387.92	302.35	0.862
500	-170.43	+11.71	5.09	-0.35	370.7	276.04	0.93
525	-208.03	+13.63	6.22	-0.41	354.54	252.59	0.998
550	-250.19	+15.65	7.49	-0.47	339.73	231.84	1.069
575	-299.21	+17.88	8.96	-0.54	327.96	216.12	1.146
600	-352.3	+20.2	10.53	-0.6	320.25	206.08	1.222

8 in (21 cm) ≈ 2296 fps (700 m/c)

Range (m)	Path (cm)	Path (moa)	Drift (cm)	Drift (moa)	Velocity (mps)	Energy (joules)	TOF (s)
0	-8.89	0.0	0.0	0.0	700.0	984.46	0.0
25	1.02	-1.57	-0.26	+0.36	677.45	921.96	0.036
50	10.16	-6.99	-0.49	+0.33	654.56	860.81	0.074
75	17.53	-8.06	-0.67	+0.31	632.86	804.68	0.113
100	23.37	-8.07	-0.8	+0.28	611.73	751.8	0.152
125	27.69	-7.61	-0.9	+0.25	590.18	699.74	0.195
150	30.23	-6.93	-0.94	+0.22	569.7	652.01	0.237
175	30.73	-6.07	-0.94	+0.19	549.4	606.32	0.282
200	29.46	-5.04	-0.88	+0.15	528.86	561.99	0.329
225	25.91	-3.94	-0.76	+0.12	509.44	521.45	0.377
250	19.81	-2.74	-0.58	+0.08	490.24	482.81	0.426
275	11.18	-1.4	-0.33	+0.04	470.86	445.39	0.479
300	0.0	0	0.0	0	452.35	411.08	0.533
325	-13.97	+1.48	0.4	-0.04	434.25	378.82	0.588
350	-32.0	+3.14	0.92	-0.09	415.75	347.22	0.649
375	-52.83	+4.84	1.52	-0.14	398.4	318.89	0.709
400	-77.47	+6.67	2.23	-0.19	381.43	292.31	0.773
425	-107.19	+8.67	3.08	-0.25	364.45	266.82	0.841
450	-140.72	+10.76	4.05	-0.31	348.69	244.32	0.911
475	-178.82	+12.96	5.15	-0.37	334.82	225.2	0.983
500	-224.28	+15.42	6.44	-0.44	324.67	211.78	1.061
525	-274.07	+17.95	7.83	-0.51	317.69	202.69	1.138
550	-329.44	+20.61	9.35	-0.59	311.63	195.1	1.216
575	-392.94	+23.5	11.06	-0.66	306.23	188.46	1.299
600	-461.52	+26.45	12.86	-0.74	301.42	182.49	1.38

Обраховано у Applied Ballistics.

Дані для обрахунку:

Firearm Data		
Barrel Twist	1 in 7.0	in
Twist Direction	Right ▼	
Sight Height	9.0	cm
Ammunition Data		
Bullet Diameter	0.223	in
Bullet Weight	62.0	gr
Bullet Length	2.31	cm
Drag Model	G7 ▼	
Ballistic Coefficient	0.151	
Zero Data		
Zero Range	300	m

* За вихідні дані по початковій швидкості кулі взято патрон M855, як такий, що найчастіше зустрічається; джерела даних по швидкості кулі:

- ARMY TM 9-1005-319-10

- <https://rifleshooter.com/2015/12/223-remington-5-56mm-nato-barrel-length-and-velocity-26-inches-to-6-inches/>