

ALTERNATIVE
BALLISTICS

THE ALTERNATIVE®

»»» PRODUCT SPECS SHEET

US Patent Number 11,566,876

PROJECTILE SPECS

9mm Model

Diameter: 3.3 cm

Mass: 50.14 grams (includes ammunition fired into cavity)

Velocity:

- Average Velocity: 210 ft/s or 64 m/s (at 20 ft or 6 m)

Impact Energy:

- Average Impact Energy: 105(J) or 77 (ft/lbs) (at 20 ft or 6 m)

.40cal Model

Diameter: 3.3 cm

Mass: 53.68 grams (includes ammunition fired into cavity)

Velocity:

- Average Velocity: 228 ft/s or 69 m/s (at 20 ft or 6 m)

Impact Energy:

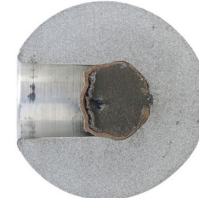
- Average Impact Energy: 130(J) or 95 (ft/lbs) (at 20 ft or 6 m)



THE ALTERNATIVE® to Lethal Force.

The Alternative® is designed to save lives and protect officers in the line of duty.

Transforms Bullets Into Less-Lethal Impact Rounds



Firearm Compatibility
Glock 17/29/22/23/45
Smith & Wesson M&P

CZ P10
Sig Sauer P320

VCMAX AND PROBABILITY OF INJURY BASED ON IMPACT AT 20 FEET

Impact Condition	Vcmax	Skeletal AIS 2+	Severe Lung	Sudden Cardiac Arrest or Commotio Cordis
9mm T-shirt	0.67	35.73%	1.16%	0.00%
9mm Jacket	0.56	22.90%	0.98%	0.00%
.40 Cal T-shirt	1.09	84.92%	2.18%	2.62%
.40 Cal Jacket	0.98	75.31%	1.85%	0.39%

Ballistics Testing & Injury Assessment Studies

Ballistics testing was performed at NTS Chesapeake Testing, an NIJ accredited ballistics laboratory, using standard test method ASTM-E3276. Precision, velocity, and impact energy were assessed. PALLM was utilized to evaluate penetration risk, while the modified NIJ 0101.06 method measured the effect of clothing layers. Injury risk evaluations were carried out by Dr. Cynthia Bir at Wayne State University's Biomedical Engineering Research facilities. An f-BTTR surrogate, calibrated to average-size male cadavers, was deployed. The comprehensive results were analyzed by independent expert Mr. Rob Kinsler of Sydor Technologies, with the summarized findings presented in the charts above. Complete test reports are available upon request.