



NORTH ATLANTIC TREATY ORGANIZATION  
NATO

MILITARY AGENCY FOR STANDARDIZATION  
MAS

STANDARDIZATION AGREEMENT  
STANAG

## NATO STANAG 4569

LEVEL	AMMUNITION	SUPPLIER AND SPECIFIC TEST AMMUNITION	Energia	BULLET	WEIGHT	VELOCITY	VELOCITY	# OF	STRIKE	SPACING	PATTERN	TEST	Thickness
				GRAMS	GRAINS	M/S	FT/S	STRIKES	mm	INCHS	SHAPE	RANGE	BRG
1	5,56 mm x 45 M193	M 193, Ball 3.56 g	1562,78	3,56	2,2784	937	3074,15	3	120	4,72	TRI	15FT	32
	5,56 mm x 45 NATO SS1	SS109, 4.0 g, M855, DM11 Tombac jacket, steel and lead core, projectile weigh 4g	1620,00	4	2,56	900	2952,76	3	120	4,72	TRI	15FT	32
	7,62 mm x 51 NATO ball	Ball iron, copper jacket, 9.65 g lead, DM41 with tombac jacket and lead core projectile weigh 9.45g	3278,63	9,45	6,048	833	2732,94	3	120	4,72	TRI	15FT	42
2	7,62 mm x 39 API BZ	Chicom, CIS State arsenals, 7.77 g, steel core	1876,55	7,77	4,9728	695	2280,18	3	120	4,72	TRI	15FT	55
3	7,62 mm x 54R B32 API	Barnaul machine tool or CIS Russia, AP 7N13, 10.0g	3646,58	10	6,4	854	2801,84	3	120	4,72	TRI	15FT	91
	7,62 mm x 51 AP (WC core)	Bofors Carl Gustaf FFV AP M993 or AP8 Nammo, 8.4g Alloy core	3632,58	8,4	5,376	930	3051,18	3	120	4,72	TRI	15FT	75
4	14,5 mm x 114 API/B32	CIS, Chicom, ARL Drawing number 32000 (figure C.7.), 63.4	26308,50	63,4	40,576	911	2988,85	3	200	7,87	TRI	15FT	130
5	25 mm x 137 APDS-T, PMB 073	Oerlikon-Contraves, 121.5 g W alloy core (150 g with sabot)	118692,30	150	96	1258	4127,30	2	150	5,91	LINE	15FT	

\*V<sub>proof</sub> = Figures are mean values: tolerance of striking velocity for individual shot is ± 20 m/s

testing	actual gun or equiv barrel	samples storage	sample size	witness	dist	velocity	measure 2,5 m (8,2 ft) to target	1 or 3 hits	equilateral triangle	barrel to target
		12 hrs. @ 13 to 23 C 55,4 to 73,4 F	495/5005 mm 19,5/19,9 in	al foil ,02 mm ,008 in 54g/m.3	500 mm 19,7 in	accuracy 1 m/s 3,3 ft/s		3 samples		
	1) full steel jacket plated 2) full steel jacket									
	L CB FJ FN HC1 PB RN SC SCP1	lead coned bullet full metal jacket bullet flat nose steel hard core mass 3,7 +/- 0,1 g HCR 63+ pointed bullet						*twist length **twist length	178 mm 254 mm	

compatibility with APGBT standards

- 1) primary ammunition types
- 2) same number of test samples for qualification
- 3) number of hits and hit spacing
- 4) test conditions/set up similar
- 5) compatible velocities

advantages of APGBT standards

- 1) APGBT includes 4 common types of sovietic ammunition (soviet weapons/ammunitions are commonly used in terrorist activities and random street crime)
- 2) APGBT stipulations multiple ammunitions for select levels (example: FAV standard, AP)  
[this stipulation puts a higher burden on APGBT]  
[creates a higher level of safety for our customers]  
[you can not assume 1 bullet is more lethal than another]
- 3) APGBT includes SS 109 and M 193 protection
- 4) APGBT specifies number of test samples for qualification (3) (they do not call out the number of test samples for qual)