
5.5mm / .22cal: Pellet Table

Characteristics: High Quality + High BC + Available in the US

- **Comprehensive Pellet BC Table**
Ballistic Coefficients .22cal

- Over 40 pellets (available in the US)
- Only quality brands
- Only pellets with medium to high BC (0.020 and above)
(low BC pellets that have a hollow point have their own different table)
- Including required muzzle energies for 600fps and 950fps
- Over 150 BC numbers from tests and published BC lists (PM me if interested)
- Weight variations over time noted

- List of **rebranded pellet names** and brands

A couple of explanations:

- (1) BC* changes somewhat with velocity, unfortunately, especially at the extreme ends (say above 950fps, and really low, maybe 400/300fps and lower).
- (2) To have more precise BC values – do your own BC testing. ChairGun (Windows) and GPC Ballistics Applications** both have a function to calculate BC for the GA drag model.
- (3) Some of these BC numbers are based on experimental conditions and calculations far from how they should be, so that's another reason for some of the variations between the BC values.

*Yes, it's not really that BC changes, it's drag that changes. But because our drag models are not customized to each projectile, the BC number changes. If we had like the PB shooters custom drag models (CDM) we'd have constant BC numbers. Note the Strelok Pro ballistic app allows you to enter up to 5 different BC numbers for different velocities.

**GPC Ballistics Applications = brand new and simply EXCELLENT. For Linux, Windows, Android, and iOS. Here: <https://gpc.fotosoft.co.uk/Home.html>



Mfctr.: Industry Brand

Note on Quality: Macro photos reveal quality (or lack thereof!)!: Note the terrible quality of some pellets, often East Europe, in the photos on this page: <_____>



Schönebek SK Diabolo Rundkopf



BSA Elite



Champion Devastator



Crosman Rochester

Comprehensive BC TABLE | .22cal Pellets | @ US, High BC, High Quality

Rebranding: Indicated by: **➤RB:** (Brand abbreviations after the table) | **Versions:** Mfctrs change their designs sometimes without renaming them. This list refers to these variations as *versions*, in red, e.g., V.1, V.2, V.3, etc. Matthias | 1

BC Data: •Currently, BC values in airgunning are based on an *average* drag model (GA, or worse: G1) that tries to represent pellets of all shapes and weights. Therefore BC is not a fixed value but changing with velocity (cf. Bob Sterne: <https://www.gatewaytoairguns.org/GTA/index.php?topic=14735.msg1265217#msg1265217>). | •The BC values in this table are based on tests under a variety of conditions and with sometimes questionable methods. The source listing provides some data to assess how trustworthy and applicable the data is. | •The sources for the BC data provide the following information: Author (Year). List/or/Test. Ballistic Calculator. Drag-Model. Muzzle Energy. Range

Sources for BC Data: **0F,0H,0I,0K,0L** H&N (2013-12). Test. G1. 30FPE. 50y | **0J** H&N (2013-12). Test. G1. 28FPE. at 1011fps. 50y | **0M** H&N (2013-12). Test. G1. 27FPE. 50y | **0N** H&N (2013-12). Test. G1. 18FEP. 50y | **0G** H&N (2013-12). Test. G1. 25FPE. 50y | **0O** H&N (2013-12). Test. G1. 31FPE. 50y | **0P** H&N (2013-12). Test. G1. 12FPE. 50y | **0V,0W, 0Y** H&N (2015-04). G1. 30FPE (probably). 50y | **0X** H&N (2015-04). Test. G1. 12FPE. 50y | **0ZB** H&N (2021). Test. G1. 50y (probably). | **1** Hard Air Magazine (2020-12). Test. ChairGun Calc, GA-Model. 29FPE. 30y | **1B** Hard Air Magazine (2020-08) [same as Test 1] | **1C** Hard Air Magazine (2021-09) [same as Test 1] | **2** ChairGun V 4.3.1. (2017). List. GA-Model Calc. Some data from the APP | **3** ChairGun (2009-07). List. G1-Model Calc. | **4** ChronoConnect.com (2012 and Older). List | **5** Airgunforum.co.uk (2006-02 -- 2008-11). List | **6C** Bob Sterne (2007 c.). Test. ChairGun Calc, G1-Model. 8FPE. 25y | **6D** Bob Sterne (2007 c.). Test. ChairGun Calc, G1-Model. 25FPE. 25y | **7B** ASRA (2017). Test. ChairGun Calc, GA-Model. 32FPE. 31y | **7C** ASRA (2016). Test. ChairGun 4, GA, 30 Shots, 2 Chronos, w/ Atmospheric C. 33FPE. 32y | **7D** ASRA (2017). Test. GA-Model. 33FPE. 47y | **7E** ASRA (2017). Test. ChairGun Calc, GA-Model. 31FPE. 22,31,47y. Various Atmospheric Conditions | **7F** ASRA (2017). Test. GA-Model. 20FPE. 47y | **7G** ASRA (2017). Test. GA-Model. 32FPE. 31y | **7H** ASRA (2018). Test. ChairGun Calc, GA-Model. 55FPE. 10y | **7I** ASRA (2018). Test. ChairGun Calc, GA-Model. 36FPE. 28y | **7J** ASRA (2017). Test. Doubtful Pellet Quality. GA-Model. 32FPE.

22,31,47y | **7K** ASRA (2017). Test. GA-Model. 35FPE. 50y | **7L** ASRA (2017). Test. GA-Model. 32FPE. 38y | **7M** ASRA (2018). Test. ChairGun Calc, GA-Model. 36FPE. 28y | **7N** ASRA (2018). Test. ChairGun Calc, GA-Model. 36FPE. 11y | **7O** ASRA (2018). Test. ChairGun 4 Calc, GA-Model. 51FPE. 27y | **7Q** ASRA (2016). Test. ChairGun 4 Calc, GA-Model. 49FPE. 32y | **7AA** ASRA (2017). Test. GA-Model. 32FPE. 32y | **7AB** ASRA (2018). Test. GA-Model. 37FPE. 11y | **7AC** ASRA (2018). Test. GA-Model. Near Sonic MV. 55FPE. 10y | **7BA** ASRA (2017). Test. ChairGun Calc, GA-Model. 36FPE. 47y | **7BB** ASRA (2018). Test. ChairGun Calc, GA-Model. 59FPE. 46y | **8** Test B (2016). 11FPE. 22-38y Average | **9** Test C (Before 2011). Doubtful Calculation. 17FPE | **11** Test E (2013). 34-42FPE. 25y | **12** MTC Optics.com (2017 and Much Older). List | **15** AirEnclases.Blogspot (2015 and Older). List | **17** Test I (2011). Doubtful Data. 30y | **19ZH** Straight Shooters (2016). Test. Doubtful Calc. 16FPE. 10,25,50y | **19ZI** Straight Shooters. (2016 c.). Test. Doubtful Calc. 15FPE. 10,25,50y | **19ZJ** Straight Shooters (2017). Test. Doubtful Calc. 12FPE. 10,25,50y | **19ZG** Straight Shooters (2015). Test. Doubtful Calc. 12FPE. 10,25,50y | **20** Air Rifle Pellet Photographic Database (2009 and Older). List | **26** Bob Sterne (2013). Test. ChairGun3, G1-Model. 26FPE. 25y | **27** Test N (2017). BC Calc through POI Change, GA-Model. 100y | **33** Bob Sterne (2015). Test. ChairGun3 Calc, G1-Model. 21FPE. 25y. Drag Comparison of Various Pellets incl. Baracuda vs. JSB Exact Series | **34** Test T (2019). BC Calc through POI Change, ChairGun Calc, GA-Model. 28FPE. 28,55,110y | **35** Test U (2019). ChairGun Calc, GA-Model. 18-24FPE. 25y | **36** Strelak Pro (2020-06 and much earlier). List. | **37** Gamo.com (2019 and earlier). Optimistic test without any specifics whatsoever | **38** thomasair (2020). Test. ChairGun Calc., GA-Model. 57-66FPE. 50y | **105** Test V (2019). GA-Model. Labrador. 30FPE. 11,22,33,44,55,111y | **106** Test W (2020). ChairGun Calc, GA-Model. Labrador. 31FPE. 5–83y | **108** Matt Coulter (2021). ChairGun4, GA, 1 Chrono, 5 Shots with Low Variations. 31FPE. 49y | **109** Matt Coulter (2021). ChairGun4, GA, 1 Chrono, 5 Shots with Low Variations. 37FPE. 49y | **110** By steve123 (2022). Actual Trajectory Test. Up to 160y

Brand	JSB	H&N	Vortex ²⁵	JSB	Crosman: Premier	JSB	SIG	H&N	H&N	RWS	JSB	H&N	Norma	JSB	JSB	JSB	H&N	H&N	SIG	SIG	JSB	Crosman	Norma	JSB	H&N	H&N	H&N	H&N	Crosman	H&N	H&N	RWS	H&N	H&N	JSB	JSB	JSB	JSB		
Model	GTO Lead Free [-Predat or GTO]	Baracuda Green ➤RB: Germ any	Express (made in RS ➤RB: A, C	Exact Jumbo RS ➤RB: A, C	Hol-low Point	Domed [14] ²² = Ultra Magnum ➤RBW	Co pper Mag-num ➤RB: C, W	Exact Jumbo Express ➤RB: C, W	Ven-om Lead	Field Target Trophy ➤RB: D, W, R, V	Field Target Trophy Power	Super Field	Exact Jumbo ➤RB: A, C, E, F, R, W, Y	Bar acu-da 15	Gol-den Troph y FT	Has-des	JSB = Predator Poly-mag Short	JSB = Predator Poly-mag	Horn et	Ter-mi-nator	Dag-ger Lead	Zero Lead	JSB =Predat or Metal mag	Premier Gold Tipped	Golden Tro-phyFT Heavy	Exact Jumbo Heavy ➤RB: A, C, E, F, R	Bar acu-da 18	Crow Magn-um ➤RB: B, S, U	Baracuda Hunter	Baracuda Hunter Extreme	Domed [19] = Premier Ultra Heavy	Baracuda + Baracuda Match ➤RB: B, D, S, U, W	Baracu-da Power ➤RB: B	Power Bolt	Rabbit Mag-num II	Rabbit Mag-num Power	Ultra Shock Heavy ➤RB: C	Exact Jumbo Monster ➤RB: C, E, R	Exact Jumbo Monster Rede-signed	Exact Jumbo Beast ➤RB: E, R
Shape. Material. Various Head Sizes.	Domed Tin!	Domed Tin!	Domed	Domed	Hol-low Point	Domed	Domed, Co pper	Domed	Domed	Domed, Copper	Domed V.2	HdSz 5.50-5.53 / RB-A: 5.51-5.52	Domed	Domed	Hollow Point w/ Petals	Hollow Point, Red Tip Shorter	Hollow Point, Red Tip	Hollo w Point, Brass Tip V.2	Hollow Point, Tip	Domed	Hollo w Point, Tip	Hollow Point, Brass Tip V.2	Hollo w Point, Brass Tip	Domed	Domed	Domed	Hollow Point	Hollow Point	Hollow Point w/ Philips	Domed	Domed (Match are selected HdSz 5.51-5.53	Domed, Coppe r	Torpe-do-Shaped, Pointed	Slug-Shaped V.4	Slug-Shaped, Coppe r V.2	Hollow Point, Barrel-Shaped w/ Waist V.1	[=Straton] Barrel-Shaped, Domed	Tall Domed, "forbet-ter accu-racy" V.2	Tall Domed	
P. Expansion					(✓)						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓							✓				
Weight (gr)	11.75	1296 ^{V3} 1235 ^{V2} 1265 ^{V1}	13.12	13.43	14.30	14.30 / 14.40	14.4	14.35 / 14.3	14.50	14.66	14.66	15.89 / 15.7 ^{6CD} = 16.00	15.89	15.90	15.89	15.89	16.00	16.20 ^{V.2} / 16.00 ^{V.1}	16.36	16.60	16.66	17.00	17.40	17.60	18.13 / 18.10 ⁷ / 18.00 ^{6CD}	18.13	18.21	18.21	18.52 ^{V.2} / 19.09 ^{V.1}	19.00	21.14	21.14	24.70	25.31 ^{V4} 25.62 ^{V2} 25.77 ^{V1}	25.31	25.39	25.39 / 25.4	25.39	33.95 ^{V3, V2, V1}	
BC	0.023 ¹	0.023 ^{V.2.1} / 0.029 ^{V.1.33}	???	0.023 ¹ / 0.025 ¹⁷ / 0.026 ²⁶ / 0.027 ³³	0.020 ¹ / 0.025 ¹⁷ / 0.026 ²⁶ / 0.027 ³³	0.022 ¹ / 0.023 ¹ / 0.019 ¹⁷ / 0.026 ²⁶ / 0.027 ³³	0.023 ¹ / 0.025 ¹⁷ / 0.026 ²⁶ / 0.027 ³³	0.030 ¹ / 0.025 ¹⁷ / 0.026 ²⁶ / 0.027 ³³	0.018 ¹ / 0.025 ¹⁷ / 0.026 ²⁶ / 0.027 ³³	0.020 ¹ / 0.019 ⁸ / 0.027 ⁷ / 0.017 ^{2,192H} / 0.012 ¹⁹² / 0.013 ^{192G} /cf. also ²⁵	0.026 ¹ / 0.025 ¹⁷ / 0.026 ²⁶ / 0.027 ³³	0.031 ¹ / 0.029 ⁸ / 0.028 ¹² / 0.034 ^{A:1 7D,17} / 0.035 ^{33, RB-F.1.4 RB-A:1} / 0.037 ^{8D} / 0.020 ^{8C} / 0.025 ⁸ / 0.039 ²⁶	0.029 ^{1C} / 0.021 ¹⁰⁵ / 0.018 ¹⁸	0.023 ^{1C} / 0.021 ¹⁰⁵ / 0.018 ¹⁸	0.023 ¹ / 0.022 ² / 0.026 ⁹ / 0.028 ¹	0.024 ¹ / 0.022 ² / 0.026 ⁹ / 0.028 ¹	0.024 ¹ / 0.022 ² / 0.026 ⁹ / 0.028 ¹	0.020 ¹ / 0.021 ¹⁰⁵ / 0.018 ¹⁸	???	???	0.028 ^{1.34}	???	0.023 ^{1C} / 0.033 ¹ / 0.042 ¹ / 0.035 ¹ / 0.027 ⁴ / 0.043 ¹ / 0.039 ¹ / 0.038 ²⁰	0.032 ² / 0.029 ^{02B} / 0.042 ¹ / 0.035 ¹ / 0.027 ⁴ / 0.043 ¹ / 0.039 ¹ / 0.038 ²⁰	0.032 ² / 0.029 ^{02B} / 0.042 ¹ / 0.035 ¹ / 0.027 ⁴ / 0.043 ¹ / 0.039 ¹ / 0.038 ²⁰	0.021 ² / 0.022 ² / 0.024 ¹ / 0.026 ⁹ / 0.028 ¹	0.026 ¹ / 0.023 ¹ / 0.027 ¹ / 0.033 ³⁵	0.021 ¹⁰⁸ / 0.017 ¹ / 0.031 ³⁵	0.035 ^{RB-B:1, RB-U:2,20} / 0.038 ² / 0.033 ^{RB-C:7K (+ RB-U)} / 0.033 ^{1,17} / 0.039 ⁷¹ / 0.040 ^{7E} / 0.025 ^{RB-B:26} / 0.027 ³³ / 0.036 ^{7D, RB-B:2,12,109} / 0.042 ^{RB-U:11} / 0.043 ^{7N}	0.041 ¹ / 0.034 ¹ / 0.044 ² / 0.043 ²	???	0.036 ^{25.46gr:} / 0.037 ¹ / 0.035 ^{V.1: 1 (RB Diana at 24.69gr)}	0.039 ¹ / 0.022 ^{7D, 7K} / 0.037 ¹ / 0.044 ² / 0.043 ²	0.027 ¹ / 0.036 ^{7A, 7B} / 0.035 ³³ / 0.044 ^{7M} / 0.049 ^{RB-C:7AB C:7AB} / 0.052 ^{TAC, 7H} / 0.047 ²⁶	0.050 ^{7K} / 0.033 ^{RB-C:} / 0.047 ²⁷ / 0.054 ^{78B}	0.050 ¹⁰ / 0.039 ¹ / 0.047 ^{78A} / 0.051 ^{78B}	0.060 ³⁸ / 0.046 ^{78A} / 0.051 ^{78B}			
fps@12FPE	678	662	642	634	615	615	613	614	611	607	607	583	583	583	583	581	583	578	575	571	570	564	557	554	543	543	545	545	540	533	506	506	-	-	-	-	-	-		
FPEfor600ps	9	10	11	11	11	11	11	11	12	12	12	13	13	13	13	13	13	13	13	13	14	14	14	14	14	14	15	15	15	15	17	17	20	20	20	20	20	20	27	
FPEfor500ps	24	25	26	27	29	29	29	29	29	29	29	32	32	32	32	32	32	32	33	33	33	34	35	35	36	36	36	36	37	38	42	42	46	51	51	51	51	51	68	
Brand	JSB	H&N	Vortex	JSB	Crosman: Premier	JSB	SIG	H&N	H&N	RWS	JSB	H&N	Norma	JSB	JSB	JSB	H&N	H&N	SIG	SIG	JSB	Crosman	Norma	JSB	H&N	H&N	H&N	H&N	Crosman	H&N	H&N	RWS	H&N	H&N	JSB	JSB	JSB	JSB		
Model	GTO Lead Free [-Predat or GTO]	Baracuda Green	Express (H&N made, for Halsan)	Exact Jumbo RS	Hol-low Point	Domed 14 = Ultra Magnum =n/n ²²	Co pper Ma gnum	Exact Jumbo Express	Ven-om Lead	Field Target Trophy	Field Target Trophy Power	Super Field	Exact Jumbo	Bar acu-da 15	Gol-den Troph y FT	Has-des	JSB = Predator Poly-mag Short	JSB = Predator Poly-mag	Horn et	Ter-mi-nator	Dag-ger Lead	Zero Lead	JSB =Predat or Metal mag	Premier Gold Tipped	Golden Troph y FT Heavy	Exact Jumbo Heavy	Bar acu-da 18	Crow Magn-um	Baracuda Hunter	Baracuda Hunter Extreme	Premier Domed Ultra Heavy	Baracuda + Baracuda Match	Baracuda Power	Power Bolt	Rabbit Mag-num II	Rabbit Mag-num Power	Ultra Shock Heavy	Exact Jumbo Monster [=Straton]	Exact Jumbo Monster Rede-signed	Exact Jumbo Beast

[illegible]

Other Info: Z1 Source: H&N. Brochure (2010-10).pdf | **Z2** This is Crossman's standard pellet. Sometimes sold without model designator, sometimes as Ultra Magnum, sometimes as Domed. Part numbers: LDP22 (can); or 22DB (carton, now N/A). | Careful, PyramydAir often calls the JSB pellets "Match" when the can does not! | **Z3** This pellet weighs 14.4gr, and is incorrectly labeled as 15.9gr [https://www.pyramydair.com/s/p/Crossman_Premier_Copper_Magnum_22_Cal_14_4_Grains_Domed_150ct/1351]. | **Z4** Source: Email from H&N, 9Jul20. | **Z5** Field Target Trophy: Error in the BC sources 2, 3, 4, 5, 12, that give the weight as 14.80gr and the BC supposedly as 0.029. | **Z6** Vortex is the Hatsan pellet brand, which is made by different manufacturers – some good ones like H&N (Express), some low quality (Strike, made in Argentina, probably by Apolos) |

Abbreviations: HdSz = different head sizes available |

Rebranding (RB)

Most of the rebranded pellets are domed pellets and can easily be matched up with the original; only some require an explanation.

RB-A of JSB = **Air Arms:** Falcon 13.43gr | Field 15.90gr (15.89) | Field Heavy 18.13grRB-B of H&N = **Beeman:** Crow Magnum 18.21gr | Kodiak 21.13gr | Kodiak Copper Plated 21.13gr

RB-C of JSB = **Cometa**: Exact Jumbo RS 13.43gr | Exact Jumbo Express 14.35gr | Exact Jumbo 15.90gr | Exact Jumbo Heavy 18.13gr | Exact Jumbo Monster 25.40gr | UltraShock Heavy 25.40gr

RB-D of H&N = **Diana:** Sport 12.81gr = H&N Excite Plinking | Magnum 14.66gr | High Power 21.14gr

RB-E of JSB = **EDgun:** Exact 15.89gr | Heavy 18.13gr | Monster 25.39gr | Beast 33.95grRB-F of JSB = **FX:** 15.90gr (15.89) | 18.10gr (18.13) | 24.39gr (24.39)

RB-G

RB-H

RB-I of H&N = **Webley:** Accupell FT 14.66gr

RB-J of JSB = **Webley:** Mosquito Express 14.35gr = JSB Express(?)

RB-K of Crosman = **Webley**: Accupell 14.30 = Crosman Domed(?) | Powapell 14.3gr = Crosman Pointed | Verminpell 14.30gr = Crosman Match | The VMX is a separate design, mfctrd. by H&N.

RB-L

RB-M

RB-N

RB-O of H&N = **BSA** (since 2021): Greenstar = H&N Baracuda Green | Goldstar = Field Target Trophy | Silverstar = Terminator | Blackstar = Baracuda Hunter

RB-Q of H&N = **Rangemaster (Daystate):** Kaiser 14.66grRB-R of JSB = **Rangemaster (Daystate):** All JSB *domes*: Sovereign 15.89gr | Sovereign Hunter 18.13gr | King 25.38gr (25.39) | Emperor 33.95gr

RB-S of H&N = Stoeger: X-Speed 10.03gr	X-Sport 13.12gr → Does not match any H&N or JSB offerings, but “made in Germany”	X-Match 13.73gr = H&N Sport	X-Field 14.66gr
X-Hunt 15.74gr = H&N Excite Spike	X-Magnum 17.13gr = H&N Silver Point	X-Hollow 18.21gr = H&N Crow Magnum	X-Power 21.12gr (21.14)

RB-T

RB-U of H&N = **Bisley:** Pest Control 18.21gr = H&N Crow Magnum | Magnum 21.14gr

RB-V of H&N = **Vortex (Hatsan)**: Eco Lead Free 12.35gr = H&N Baracuda Green **V.2!** | Supreme 14.66gr = H&N Field Target Trophy | Do not confuse with the Hatsan Vortex Strike, which is not from H&N, but is made in Argentina, most likely rebranded from Apolo!

RB-W of JSB = **Weihrauch**: FT-Exact Jumbo 15.89gr | also: RB of H&N: Magnum 21.14gr = H&N Baracuda

RB-X

RB-Y of JSB = **Diana:** Exact 15.89gr

RB-Z

Summary of Rebranding

JSB – rebranded as Air Arms	Edgun	FX	Rangemaster (=Daystate) [most]	Cometa	Weihrauch	Diana [few]	Webley [some?]
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H&N – rebranded as Rangemaster (=Daystate) [few] | Beeman | BSA (since 2021) | Diana [most] | Stoeger | Bisley [some] | Vortex (=Hatsan) [some] | Webley [some]

Crosman – rebranded as Webley [most]

And some of these have changed over the years....