

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 | JungleShooterX@gmail.com | 2021-11-08

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

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** Strelok 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

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	Vortex	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 [=Predator GTO]	Baracuda Green =RB: V	Express (H&N made, for Hatsan)	Exact Jumbo RS =RB: A, C	Hollow Point	Domed [14] ²² = Ultra Magnum =RB: W	Copper Magnum =RB: C, W	Exact Jumbo Express =RB: C, W	Venom 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	Baracuda 15	Golden Trophy FT	Hades	JSB = Predator Poly-mag Short	JSB = Predator Poly-mag	Hornet	Terminator	Dagger Lead	Zero Lead	JSB = Predator Metal mag	Premier Gold Tipped	Strike (JSB made, for Hatsan)	Golden Trophy FT Heavy	Exact Jumbo Heavy =RB: A, C, E, F, R	Baracuda 18	Crow Magnum =RB: B, S, U	Baracuda Hunter	Baracuda Hunter Extreme	Domed [19] = Premier Ultra Heavy	Baracuda + Baracuda Match =RB: B, D, S, U, W	Baracuda Power =RB: B	Power Bolt	Rabbit Magnum II	Rabbit Magnum Power	Ultra Shock Heavy =RB: C	Exact Jumbo Monster =RB: C, E, R	Exact Jumbo Monster =RB: C, E, R	Exact Jumbo Beast =RB: E, R	
Shape. Material. Various Head Sizes.	Domed Tin!	Domed Tin!	Domed	Domed	Hollow Point	Domed	Domed, Copper	Domed	Domed	Domed. HdSz 5.53-5.55	Domed, Copper V.2	Domed. HdSz 5.50-5.53 / 5.51-5.52	Domed	Domed	Hollow Point w/ Petals	Hollow Point, Red Tip, Shorter	Hollow Point, Red Tip	Hollow Point, Red Tip V.2	Hollow Point, Tip	Domed	Hollow Point, Tip	Hollow Point, Brass Tip V.2	Hollow Point, Brass Tip	Domed	Domed	Domed	Domed	Hollow Point	Hollow Point	Hollow Point w/ Philips V.2	Domed	Domed (Match are selected HdSz 5.51-5.53)	Domed, Copper	Tapered-Shaped, Pointed	Slug-Shaped V.4	Slug-Shaped, Copper V.2	Hollow Point, Barrel-Shaped V.1	[=Straton] Barrel-Shaped, Domed V.1	Tall Domed, "for better accuracy" V.2	Tall Domed		
P. Expansion					(✓)										✓	✓	✓	✓	✓		✓	✓	✓						✓	✓	✓							✓				
Weight (gr)	11.75	1296 ¹⁰³ 1235 ¹² 1265 ¹¹	13.12	13.43	14.30	14.30 / 14.40	14.4 ¹⁵ 14.3 ¹⁵ 14.3 ²³	14.35 / 14.3	14.50	14.66	14.66	15.89 / 15.7 ^{60D} = 16.00	15.89	15.90	15.89	15.89	16.00	16.20 ¹ 16.00 ¹	16.36	16.60	16.66	17.00	17.40	17.75	17.60	18.13 / 18.10 ¹ / 18.00 ^{60D}	18.21	18.21	18.21	18.52 ¹ 19.09 ¹	19.00	21.14	21.14	24.70	25.31 ¹⁰⁴ 25.62 ¹⁰⁵ 25.77 ¹⁰⁶	25.31 ¹⁰⁷ 25.77 ¹⁰⁸	25.39	25.39 / 25.4	25.39	25.39	33.95 ¹⁰⁹	
BC	0.023 ¹	0.023 ¹ V.2: 1 / 0.029 ¹	???	0.023 ¹ 17 / 0.025 ¹ 0.026 ²⁶ / 0.013 ⁴ 0.027 ³³	0.020 ¹ 0.023 ¹ 0.019 ¹ 0.026 ⁵ 0.028 ⁶ 0.019 ¹⁵	0.022 ¹ 0.023 ¹ 0.019 ¹ 0.026 ⁵ 0.028 ⁶ 0.019 ¹⁵	0.023 ¹ 0.019 ¹ 0.026 ⁵ 0.024 ⁶ 0.031 ²⁶	???	0.020 ¹ 0.019 ¹⁰ 1 / 0.027 ⁷ / 0.017 ^{2, 198} 0.012 ¹⁹² 0.013 ¹⁹² / cf. also ²⁵	0.026 ¹	0.026 ¹	0.031 ¹ 0.029 ⁸ 0.028 ¹² 0.034 ¹⁷ 0.012 ¹⁵⁰ 0.032 ³³ RB-B, F, 1.4 0.035 ¹	0.026 ¹	0.026 ¹	0.029 ¹	0.021 ¹⁰⁵	0.023 ¹	0.024 ¹ V.2: 1 / 0.022 ² 0.021 ³⁶	0.024 ¹ 0.022 ² 0.026 ⁹ 0.028 ¹	0.020 ¹ 0.021 ¹⁰ 0.021 ¹	???	???	0.028 ¹ 1.34	???	???	0.032 ² 0.033 ¹ 0.042 ¹ 0.035 ¹ 0.027 ⁴ 0.043 ¹ 0.039 ¹ 0.038 ²⁰	0.029 ¹ 0.022 ¹ 0.024 ¹ 0.012 ¹ 0.028 ²⁶ 0.017 ^{60, 15}	0.021 ¹ 0.022 ¹ 0.024 ¹ 0.026 ¹ 0.033 ¹ 0.028 ²⁶	0.025 ¹ V.2: 2 / 0.023 ¹ 0.027 ¹ 0.026 ¹ 0.033 ¹ 0.028 ²⁶	0.021 ¹ 0.017 ¹ 0.031 ³⁵	0.035 ¹ 0.038 ¹ 0.033 ^{1, 17} 0.039 ⁹¹ / 0.045 ⁷¹ 0.025 ²⁶ / 0.027 ³³ 0.036 ⁷⁰ / 0.042 ¹¹ 0.043 ⁷¹	0.041 ¹ 0.034 ¹ 0.044 ¹ 0.043 ¹	???	0.036 ¹ 25.46gr oi / 0.037 ¹ V.1: 1 (RB Diana at 24.69gr) / 0.035 ¹	0.039 ¹ 70 / 0.022 ^{76, 7K}	0.039 ¹ 0.036 ^{7K} / 0.033 ^{RB-C: 27} 0.035 ³³ / 0.044 ^{7M} 0.049 ^{RB-C: 7AB} 0.052 ^{7AC, 7H} / 0.047 ²⁶	0.039 ¹ 0.047 ²⁷ / 0.054 ^{78B} / 0.060 ³⁸	0.046 ¹ 0.051 ^{78A} / 0.051 ^{78B} / 0.060 ³⁸				
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	552	554	543	543	545	545	540	533	506	506	—	—	—	—	—	—	—	—	
FPE for 600ps	9	10	11	11	11	11	11	11	12	12	12	13	13	13	13	13	13	13	13	13	13	14	14	14	14	14	14	14	15	15	15	15	17	17	20	20	20	20	20	20	20	27
FPE for 550ps	24	25	26	27	29	29	29	29	29	29	29	32	32	32	32	32	32	32	33	33	33	34	35	36	35	36	36	36	36	37	38	42	42	46	51	51	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	Vortex	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 [=Predator GTO]	Baracuda Green	Express (H&N made, for Hatsan)	Exact Jumbo RS	Hollow Point	Domed 14 = Ultra Magnum = n/n ²²	Copper Magnum	Exact Jumbo Express	Venom Lead	Field Target Trophy	Field Target Trophy Power	Super Field	Exact Jumbo	Baracuda 15	Golden Trophy FT	Hades	JSB = Predator Poly mag Short	JSB = Predator Poly mag	Hornet	Terminator	Dagger Lead	Zero Lead	JSB = Predator Metal mag	Premier Gold Tipped	Strike (JSB made, for Hatsan)	Golden Trophy FT Heavy	Exact Jumbo Heavy	Baracuda 18	Crow Magnum	Baracuda Hunter	Baracuda Hunter Extreme	Premier Domed Ultra Heavy	Baracuda + Baracuda Match	Baracuda Power	Power Bolt	Rabbit Magnum II	Rabbit Magnum Power	Ultra Shock Heavy	Exact Jumbo Monster [=Straton]	Exact Jumbo Monster Rede-signed	Exact Jumbo Beast	

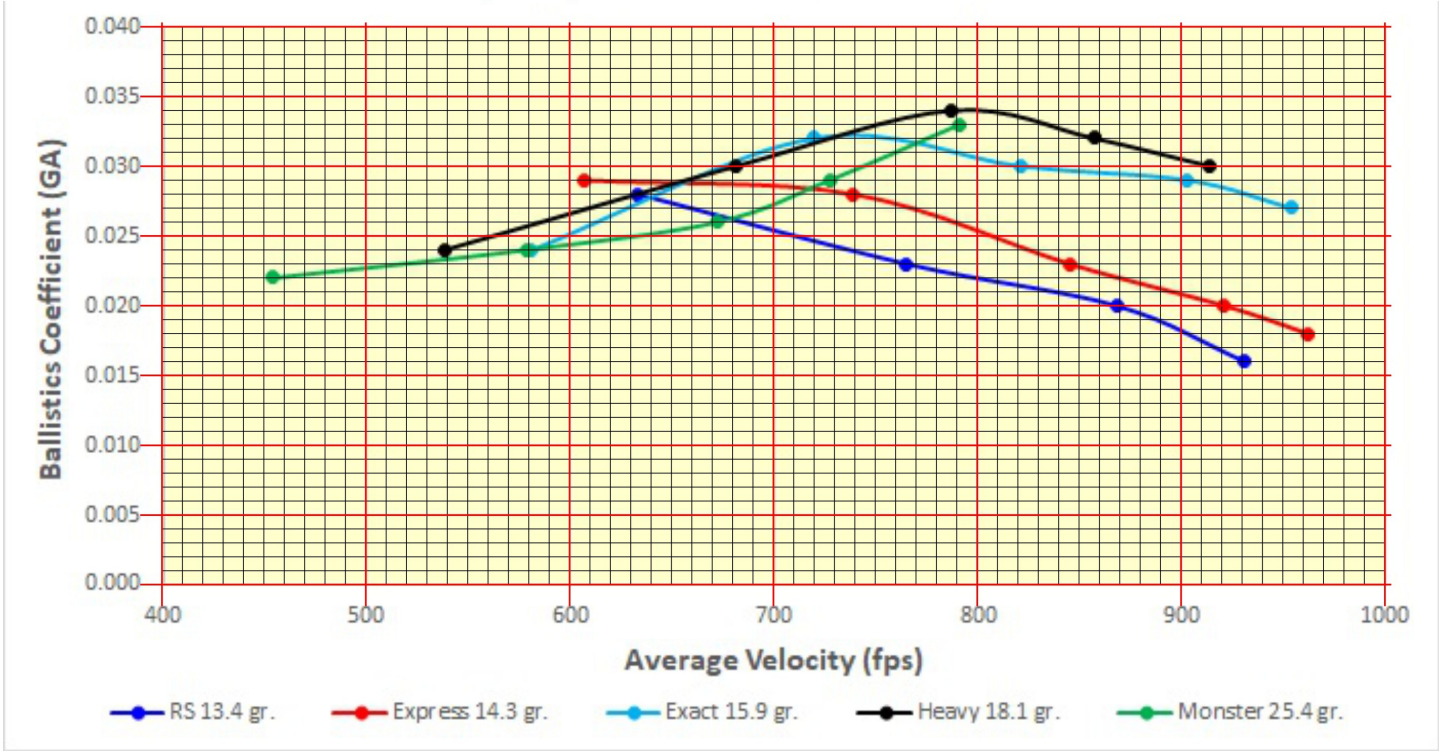
And some of these have changed over the years....

Velocity Dependent BC Data: JSB Domes .22cal

Test by Bob Sterne, 28 June 2017. Calculated with ChairGun Pro 4, using the GA drag model, and correct atmospheric data. Since the drag model does not fit each pellet perfectly there are changes in the BC (for a perfectly fitting drag model the BC is constant; what changes with the velocity is the drag).

Source: <https://www.gatewaytoairguns.org/GTA/index.php?topic=14735.msg1265217#msg1265217>

Bob Sterne's Velocity Dependent BC Data for .22cal JSB Domes



28Jun17 | Calc. w/ ChairGun4 (GA) | Source: <https://www.gatewaytoairguns.org/GTA/index.php?topic=14735.msg1265217#msg1265217>