

Expanded Rifle Bullet Sectional Density List

Compiled By Chuck Hawks

Sectional density (SD) is defined as the weight of a bullet (in pounds) divided by the square of its diameter (in inches). You can use that formula to compute the SD of any bullet not listed below.

The following list is a complete as I can make it and includes all of the popular bullet weights used in all common (and may uncommon) rifle calibers. It is the most comprehensive list of rifle bullet sectional densities of which I am aware.

.17 Caliber (.172")

- 17 grain, SD = .084
- 20 grain, SD = .097
- 25 grain, SD = .121

.20 Caliber (.204")

- 33 grain, SD = .113

.22 Caliber (.222")

- 40 grain, SD = .116

.22 Caliber (.223")

- 45 grain, SD = .129

.22 Caliber (.224")

- 35 grain, SD = .100
- 40 grain, SD = .114
- 45 grain, SD = .128
- 50 grain, SD = .142
- 52 grain, SD = .148
- 53 grain, SD = .151
- 55 grain, SD = .157

- 60 grain, SD = .171
- 62 grain, SD = .177
- 68 grain, SD = .194
- 70 grain, SD = .199
- 75 grain, SD = .214
- 80 grain, SD = .228

.22 Caliber (.228")

- 70 grain, SD = .194

.24/6mm Caliber (.243")

- 55 grain, SD = .133
- 58 grain, SD = .140
- 65 grain, SD = .157
- 70 grain, SD = .169
- 75 grain, SD = .181
- 80 grain, SD = .194
- 85 grain, SD = .206
- 87 grain, SD = .210
- 90 grain, SD = .217
- 95 grain, SD = .230
- 100 grain, SD = .242
- 105 grain, SD = .254
- 115 grain, SD = .290

.25 Caliber (.257")

- 60 grain, SD = .130
- 75 grain, SD = .162
- 85 grain, SD = .183
- 87 grain, SD = .188
- 90 grain, SD = .195
- 100 grain, SD = .216
- 115 grain, SD = .249
- 117 grain, SD = .253
- 120 grain, SD = .260

.26/6.5mm Caliber (.264")

- 95 grain, SD = .195
- 100 grain, SD = .205
- 120 grain, SD = .247
- 125 grain, SD = .256
- 129 grain, SD = .264
- 130 grain, SD = .266
- 140 grain, SD = .287
- 160 grain, SD = .328

.270 Caliber (.277")

- 100 grain, SD = .186
- 110 grain, SD = .205
- 115 grain, SD = .214
- 120 grain, SD = .223
- 130 grain, SD = .242
- 140 grain, SD = .261
- 150 grain, SD = .279
- 160 grain, SD = .298
- 180 grain, SD = .335

.28/7mm Caliber (.284")

- 100 grain, SD = .177
- 110 grain, SD = .195
- 115 grain, SD = .204
- 120 grain, SD = .213
- 130 grain, SD = .230
- 139 grain, SD = .246
- 140 grain, SD = .248
- 145 grain, SD = .257
- 150 grain, SD = .266
- 154 grain, SD = .279
- 160 grain, SD = .286
- 162 grain, SD = .287
- 175 grain, SD = .310
- 195 grain, SD = .345

.30 Caliber (.308")

- 100 grain, SD = .151
- 110 grain, SD = .166
- 125 grain, SD = .188
- 130 grain, SD = .196
- 140 grain, SD = .211
- 150 grain, SD = .226
- 155 grain, SD = .233
- 160 grain, SD = .241
- 165 grain, SD = .248
- 168 grain, SD = .253
- 170 grain, SD = .256
- 178 grain, SD = .268
- 180 grain, SD = .271
- 190 grain, SD = .286
- 200 grain, SD = .301
- 220 grain, SD = .331
- 250 grain, SD = .376

.303 Caliber (.311-.312")

- 123 grain, SD = .183
- 125 grain, SD = .184
- 150 grain, SD = .221
- 174 grain, SD = .255
- 180 grain, SD = .265
- 215 grain, SD = .316

.318 Caliber (.330")

- 250 grain, SD = .328

.32 Caliber (.312")

- 60 grain, SD = .088
- 85 grain, SD = .125
- 98 grain, SD = .142
- 100 grain, SD = .147

.32 Caliber (.321")

- 170 grain, SD = .236

.32/8mm Caliber (.323")

- 125 grain, SD = .171
- 150 grain, SD = .205
- 170 grain, SD = .233
- 180 grain, SD = .247
- 200 grain, SD = .274
- 220 grain, SD = .301
- 250 grain, SD = .343

.33 Caliber (.333")

- 250 grain, SD = .328
- 300 grain, SD = .386

.33 Caliber (.338")

- 160 grain, SD = .200
- 175 grain, SD = .218
- 180 grain, SD = .225
- 185 grain, SD = .231
- 200 grain, SD = .250
- 210 grain, SD = .263
- 225 grain, SD = .281
- 230 grain, SD = .288
- 250 grain, SD = .313
- 275 grain, SD = .344
- 300 grain, SD = .375

.348 Caliber (.348")

- 200 grain, SD = .236
- 220 grain, SD = .260
- 250 grain, SD = .295

.35 Caliber (.357-.358")

- 150 grain, SD = .168
- 158 grain, SD = .177
- 180 grain, SD = .201
- 200 grain, SD = .223
- 220 grain, SD = .245
- 225 grain, SD = .251
- 250 grain, SD = .279
- 275 grain, SD = .307
- 280 grain, SD = .312
- 310 grain, SD = .346

9.3mm Caliber (.366")

- 250 grain, SD = .267
- 270 grain, SD = .288
- 286 grain, SD = .307
- 300 grain, SD = .320
- 320 grain, SD = .341

.375 Caliber (.375")

- 210 grain, SD = .213
- 220 grain, SD = .223
- 225 grain, SD = .229
- 235 grain, SD = .239
- 250 grain, SD = .254
- 255 grain, SD = .259
- 260 grain, SD = .264
- 270 grain, SD = .274
- 285 grain, SD = .290
- 300 grain, SD = .305
- 350 grain, SD = .354

.38-55 Caliber (.377")

- 255 grain, SD = .256

.400 Caliber (.409")

- 400 grain, SD = .342

.400 Caliber (.411")

- 300 grain, SD = .254
- 325 grain, SD = .275
- 350 grain, SD = .296
- 400 grain, SD = .338

.401 Caliber (.406")

- 250 grain, SD = .217

.404 Caliber (.423")

- 350 grain, SD = .279
- 400 grain, SD = .319

.405 Caliber (.411")

- 300 grain, SD = .254

.416 Caliber (.416")

- 300 grain, SD = .247
- 325 grain, SD = .268
- 340 grain, SD = .281
- 350 grain, SD = .289
- 400 grain, SD = .330
- 410 grain, SD = .338
- 450 grain, SD = .372

.425 Caliber (.435")

- 410 grain, SD = .310

.44 Caliber (.429-.430")

- 240 grain, SD = .185
- 250 grain, SD = .194
- 265 grain, SD = .205
- 270 grain, SD = .210
- 275 grain, SD = .213

- 280 grain, SD = .216
- 300 grain, SD = .233

.45 Caliber (.458-.459")

- 250 grain, SD = .170
- 285 grain, SD = .194
- 300 grain, SD = .204
- 350 grain, SD = .238
- 400 grain, SD = .272
- 405 grain, SD = .276
- 450 grain, SD = .306
- 465 grain, SD = .317
- 480 grain, SD = .327
- 500 grain, SD = .341
- 550 grain, SD = .375
- 600 grain, SD = .409

.465 Caliber (.468")

- 480 grain, SD = .313

.470 Caliber (.475")

- 500 grain, SD = .317

.50 Caliber (.509-.510")

- 300 grain, SD = .165
- 385 grain, SD = .217
- 410 grain, SD = .226
- 440 grain, SD = .242
- 450 grain, SD = .247
- 460 grain, SD = .253
- 525 grain, SD = .288
- 570 grain, SD = .313
- 600 grain, SD = .336
- 700 grain, SD = .392
- 750 grain, SD = .412
- 800 grain, SD = .439

.505 Caliber (.505")

- 525 grain, SD = .294
- 600 grain, SD = .336

.54 Caliber (.549")

- 390 grain, SD = .191
- 425 grain, SD = .205

.577 Caliber (.585")

- 650 grain, SD = .271
- 750 grain, SD = .313

.58 Caliber (.588")

- 525 grain, SD = .217

.600 Caliber (.620")

- 900 grain, SD = .334

.700 Caliber (.700")

- 1000 grain, SD = .292