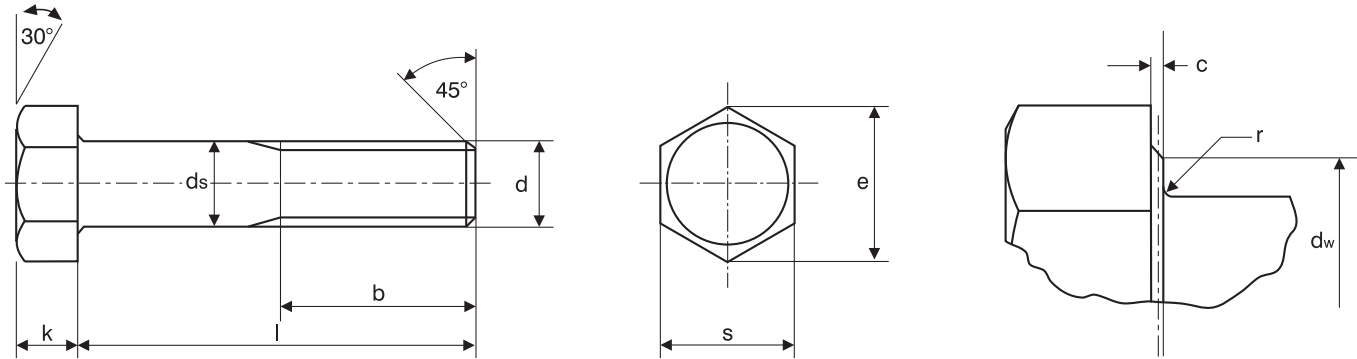


# Hexagon Head Bolts & Setscrews

## BS 1083 High Tensile



### BS 1083 Dimensions of bolts

| Nominal size and thread diameter $d$ | Number of threads per inch |      | Thread Length $b$ | Diameter of unthreaded shank $d_s$ |        | Width across flats $s$ |       | Width across corners $e$ | Dia. of washer face $d_w$ |       | Thickness of head $k$ |       | Radius under head $r$ |       |
|--------------------------------------|----------------------------|------|-------------------|------------------------------------|--------|------------------------|-------|--------------------------|---------------------------|-------|-----------------------|-------|-----------------------|-------|
|                                      | BSW                        | BSF. |                   | min.                               | min.   | max.                   | min.  |                          | max.                      | max.  | min.                  | max.  | nom.                  | min.  |
| 1/4                                  | 20                         | 26   | 0.5000            | 0.2465                             | 0.2500 | 0.438                  | 0.445 | 0.51                     | 0.418                     | 0.428 | 0.166                 | 0.176 | 0.015                 | 0.025 |
| 5/16                                 | 18                         | 22   | 0.6250            | 0.3090                             | 0.3125 | 0.518                  | 0.525 | 0.61                     | 0.498                     | 0.508 | 0.208                 | 0.218 | 0.015                 | 0.025 |
| 3/8                                  | 16                         | 20   | 0.7500            | 0.3715                             | 0.3750 | 0.592                  | 0.600 | 0.69                     | 0.572                     | 0.582 | 0.250                 | 0.260 | 0.015                 | 0.025 |
| 7/16                                 | 14                         | 18   | 0.8750            | 0.4335                             | 0.4375 | 0.702                  | 0.710 | 0.82                     | 0.680                     | 0.690 | 0.292                 | 0.302 | 0.015                 | 0.025 |
| 1/2                                  | 12                         | 16   | 1.0000            | 0.4960                             | 0.5000 | 0.812                  | 0.820 | 0.95                     | 0.790                     | 0.800 | 0.333                 | 0.343 | 0.015                 | 0.025 |
| 9/16                                 | 12                         | 16   | 1.0625            | 0.5585                             | 0.5625 | 0.912                  | 0.920 | 1.06                     | 0.890                     | 0.900 | 0.365                 | 0.375 | 0.020                 | 0.045 |
| 5/8                                  | 11                         | 14   | 1.2500            | 0.6190                             | 0.6250 | 1.000                  | 1.010 | 1.17                     | 0.975                     | 0.985 | 0.407                 | 0.417 | 0.020                 | 0.045 |
| 3/4                                  | 10                         | 12   | 1.5000            | 0.7440                             | 0.7500 | 1.190                  | 1.200 | 1.39                     | 1.165                     | 1.175 | 0.480                 | 0.500 | 0.020                 | 0.045 |
| 7/8                                  | 9                          | 11   | 1.7500            | 0.8670                             | 0.8750 | 1.288                  | 1.300 | 1.50                     | 1.263                     | 1.273 | 0.563                 | 0.583 | 0.040                 | 0.065 |
| 1                                    | 8                          | 10   | 2.0000            | 0.9920                             | 1.0000 | 1.468                  | 1.480 | 1.71                     | 1.443                     | 1.453 | 0.636                 | 0.666 | 0.060                 | 0.095 |
| 1.1/8                                | 7                          | 9    | 2.2500            | 1.1170                             | 1.1250 | 1.640                  | 1.670 | 1.93                     | 1.610                     | 1.620 | 0.710                 | 0.750 | 0.060                 | 0.095 |
| 1.1/4                                | 7                          | 9    | 2.5000            | 1.2420                             | 1.2500 | 1.815                  | 1.860 | 2.15                     | 1.785                     | 1.795 | 0.790                 | 0.830 | 0.060                 | 0.095 |
| 1.3/8                                | -                          | 8    | 2.7500            | 1.3650                             | 1.3750 | 2.005                  | 2.050 | 2.37                     | 1.975                     | 1.985 | 0.880                 | 0.920 | 0.060                 | 0.095 |
| 1.1/2                                | 6                          | 8    | 3.0000            | 1.4900                             | 1.5000 | 2.175                  | 2.220 | 2.56                     | 2.145                     | 2.155 | 0.960                 | 1.000 | 0.060                 | 0.095 |
| 1.3/4                                | 5                          | 7    | 3.5000            | 1.7400                             | 1.7500 | 2.520                  | 2.580 | 2.98                     | 2.485                     | 2.495 | 1.110                 | 1.170 | 0.060                 | 0.095 |
| 2                                    | 4.5                        | 7    | 4.0000            | 1.9900                             | 2.0000 | 2.700                  | 2.760 | 3.19                     | 2.665                     | 2.675 | 1.270                 | 1.330 | 0.060                 | 0.095 |