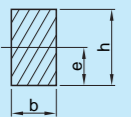
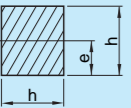
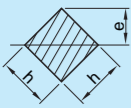
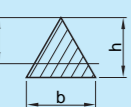
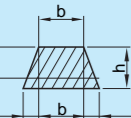
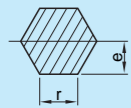
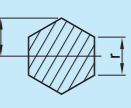
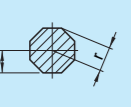
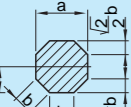
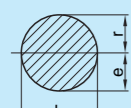
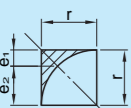
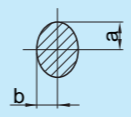
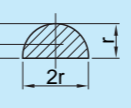
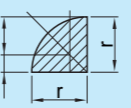
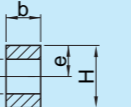
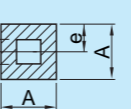
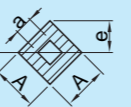
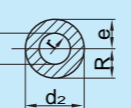
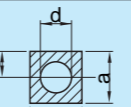
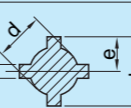
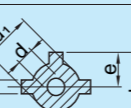


| Section | Sectional area A | Distance of gravitational center e | Sectional secondary moment I | Sectional coefficient Z=I/e |
|---|--|---|--|---|
|  | bh | $\frac{h}{2}$ | $\frac{bh^3}{12}$ | $\frac{bh^2}{6}$ |
|  | h^2 | $\frac{h}{2}$ | $\frac{h^4}{12}$ | $\frac{h^3}{6}$ |
|  | h^2 | $\frac{h}{2}\sqrt{2}$ | $\frac{h^4}{12}$ | $0.1179 h^3 = \frac{\sqrt{2}}{12} h^3$ |
|  | $\frac{bh}{2}$ | $\frac{2}{3}h$ | $\frac{bh^3}{36}$ | $\frac{bh^2}{24}$ |
|  | $(2b + b_1) \frac{h}{2}$ | $\frac{1}{3} \times \frac{3b + 2b_1}{2b + b_1} h$ | $\frac{6b^2 + 6bb_1 + b_1^2}{36(2b + b_1)} h^3$ | $\frac{6b^2 + 6bb_1 + b_1^2}{12(3b + 2b_1)} h^2$ |
|  | $\frac{3\sqrt{3}}{2} r^2$ | $\sqrt{\frac{3}{4}} r = 0.866 r$ | $\frac{5\sqrt{3}}{16} r^4 = 0.5413 r^4$ | $\frac{5}{8} r^3$ |
|  | $= 2.598 r^2$ | r | $\frac{5\sqrt{3}}{16} r^4 = 0.5413 r^4$ | $\frac{5\sqrt{3}}{16} r^3 = 0.5413 r^3$ |
|  | $2.828 r^2$ | $0.924 r^2$ | $\frac{1 + 2\sqrt{2}}{6} r^4$ $= 0.6381 r^4$ | $0.6906 r^3$ |
|  | $0.8284 a^2$ | $b = \frac{a}{1 + \sqrt{2}}$ $= 0.4142 a$ | $0.0547 a^4$ | $0.1095 a^3$ |
|  | $r^2 = \frac{d^2}{4}$ | $\frac{d}{2}$ | $\frac{d^4}{64} = \frac{r^4}{4}$ $= 0.0491 d^4$ $= 0.05 d^4$ $= 0.7854 r^4$ | $\frac{d^3}{32} = \frac{r^3}{4}$ $= 0.0982 d^3$ $= 0.1 d^3$ $= 0.7854 r^3$ |
|  | $r^2 \left(1 - \frac{1}{4}\right)$ $= 0.2146 r^2$ | $e_1 = 0.2234 r$ $e_2 = 0.7766 r$ | $0.0075 r^4$ | $\frac{0.0075 r^4}{e_2}$ $= 0.00966 r^3$ $= 0.01 r^3$ |

| Section | Sectional area A | Distance of gravitational center e | Sectional secondary moment I | Sectional coefficient Z=I/e |
|---|--|--------------------------------------|--|---|
|  | ab | a | $\frac{1}{4} ba^3 = 0.7854 ba^3$ | $\frac{1}{4} ba^2 = 0.7854 ba^2$ |
|  | $\frac{1}{2} r^2$ | $e_1 = 0.4244 r$ $e_2 = 0.5756 r$ | $\left(\frac{1}{8} - \frac{8}{9}\right) r^4$ $= 0.1098 r^4$ | $S_1 = 0.2587 r^3$ $S_2 = 0.1908 r^3$ |
|  | $\frac{1}{4} r^2$ | $e_1 = 0.4244 r$ $e_2 = 0.5756 r$ | $0.055 r^4$ | $S_1 = 0.1296 r^3$ $S_2 = 0.0956 r^3$ |
|  | b(H - h) | $\frac{H}{2}$ | $\frac{b}{12}(H^3 - h^3)$ | $\frac{b}{6H}(H^3 - h^3)$ |
|  | $A^2 - a^2$ | $\frac{A}{2}$ | $\frac{A^4 - a^4}{12}$ | $\frac{1}{6} \frac{A^4 - a^4}{A}$ |
|  | $A^2 - a^2$ | $\frac{A}{2}\sqrt{2}$ | $\frac{A^4 - a^4}{12}$ | $\frac{A^4 - a^4}{12A}\sqrt{2}$ $= \frac{0.1179(A^4 - a^4)}{A}$ |
|  | $\frac{1}{4}(d_2^2 - d_1^2)$ | $\frac{d_2}{2}$ | $\frac{1}{64}(d_2^4 - d_1^4)$ $= \frac{1}{4}(R^4 - r^4)$ | $\frac{1}{32} \left(\frac{d_2^4 - d_1^4}{d_2}\right)$ $= \frac{1}{4} \times \frac{R^4 - r^4}{R}$ |
|  | $a^2 - \frac{d^2}{4}$ | $\frac{a}{2}$ | $\frac{1}{12} \left(a^4 - \frac{3}{16} d^4\right)$ | $\frac{1}{6a} \left(a^4 - \frac{3}{16} d^4\right)$ |
|  | $2b(h - d) + \frac{1}{4} d^2$ | $\frac{h}{2}$ | $\frac{1}{12} \left\{ \frac{3}{16} d^4 + b(h^3 - d^3) + b^3(h - d) \right\}$ | $\frac{1}{6h} \left\{ \frac{3}{16} d^4 + b(h^3 - d^3) + b^3(h - d) \right\}$ |
|  | $2b(h - d) + \frac{1}{4}(d_1^2 - d_2^2)$ | $\frac{h}{2}$ | $\frac{1}{12} \left\{ \frac{3}{16} (d_1^4 - d_2^4) + b(h^3 - d_1^3) + b^3(h - d_1) \right\}$ | $\frac{1}{6h} \left\{ \frac{3}{16} (d_1^4 - d_2^4) + b(h^3 - d_1^3) + b^3(h - d_1) \right\}$ |