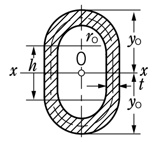
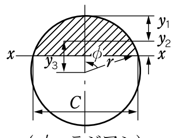
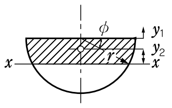
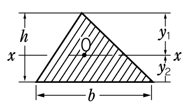
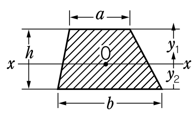
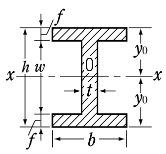
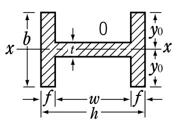
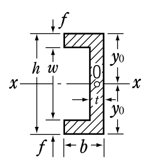
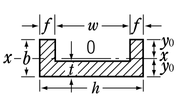
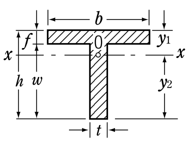
| | 図　　　形 | 断　面　積　$A$ | 図示の軸より縁に至る距離　$y$ | 図示の軸にかんする断面二次モーメント $I$ | 図示の軸にかんする断面係数　$W$ | 図示の軸にかんする回転半径　$r$ |
|---|---|---|---|---|---|---|
| 中空小判形 |  | $2(\pi r_0+h)t$ | $y_0=r_0+\frac{h+t}{2}$ | $\pi t r_0^3+4t r_0^3 h + \frac{\pi}{2} t r_0 h^2+\frac{1}{6} t h^3$ | $W=\frac{I}{y_0}$ | $r=\sqrt{\frac{I}{A}}$ |
| 欠円 |  （$\phi$：ラジアン） | $\frac{r^2}{2}(2\phi-\sin 2\phi)$ | $y_1=r(1-\cos\phi)-y_2$ $y_3=\frac{C^3}{12A}$ $y_2=\frac{2r\left[\frac{1}{3}\sin\phi(2+\cos^2\phi)\right]}{2\phi-\sin 2\phi}-\frac{2r(\phi\cos\phi)}{2\phi-\sin 2\phi}$ | $r^4\left[\phi\left(\frac{1}{4}+\cos^2\phi\right)-\sin\phi\cos\phi\left(\frac{5}{4}-\frac{1}{6}\sin^2\phi\right)\right]$ | $x-x$ 軸にかんする断面二次モーメント | $r=\sqrt{\frac{I}{A}}$ |
| 円帯 |  （$\phi$：ラジアン） | $\frac{r^2}{2}(2\phi+\sin 2\phi)$ | $y_1=r\sin\phi-y_2$ $y_2=\frac{2r\left[\frac{1}{3}\sin\phi\left(\frac{1}{2}\sin 2\phi+3\phi\right)\right]}{2\phi+\sin 2\phi}+\frac{2r\left[\frac{2}{3}(\cos\phi-1)\right]}{2\phi+\sin 2\phi}$ | $r^4\left[\phi\left(\sin^2\phi+\frac{1}{4}\right)-\frac{4}{3}\sin\phi+\sin\phi\cos\phi\left(\frac{13}{12}+\frac{1}{6}\sin^2\phi\right)\right]$ | | $r=\sqrt{\frac{I}{A}}$ |
| 三角形 |  | $\frac{bh}{2}$ | $y_1=\frac{2}{3}h$ $y_2=\frac{1}{3}h$ | $\frac{h^3 b}{36}$ | $W_1=\frac{I}{y_1}=\frac{h^2 b}{24}$ $W_2=\frac{I}{y_2}=\frac{h^2 b}{12}$ | $\frac{h}{\sqrt{18}}=0.236h$ |
| 台形 |  | $\frac{1}{2}(a+b)h$ | $y_1=\frac{a+2b}{a+b}\times\frac{h}{3}$ $y_2=\frac{2a+b}{a+b}\times\frac{h}{3}$ | $\frac{a^2+4ab+b^2}{36(a+b)}h^3$ | $W_1=\frac{I}{y_1}=\frac{a^2+4ab+b^2}{12(2a+2b)}h^2$ $W_2=\frac{I}{y_2}=\frac{a^2+4ab+b^2}{12(2a+b)}h^2$ | $\frac{\sqrt{2(a^2+4ab+b^2)}}{6(a+b)}h$ |
| I形 |  | $bh-w(b-t)$ | $y_0=\frac{h}{2}$ | $\frac{bh^3-w^3(b-t)}{12}$ | $\frac{bh^3-w^3(b-t)}{6h}$ | $\sqrt{\frac{bh^3-w^3(b-t)}{12[bh-w(b-t)]}}$ |
| I形 |  | $bh-w(b-t)$ | $y_0=\frac{b}{2}$ | $\frac{2fb^3+wt^3}{12}$ | $\frac{2fb^3+wt^3}{6b}$ | $\sqrt{\frac{2fb^3+wt^3}{12[bh-w(b-t)]}}$ |
| 溝形 |  | $bh-w(b-t)$ | $y_0=\frac{h}{2}$ | $\frac{bh^3-w^3(b-t)}{12}$ | $\frac{bh^3-w^3(b-t)}{6h}$ | $\sqrt{\frac{bh^3-w^3(b-t)}{12[bh-w(b-t)]}}$ |
| 溝形 |  | $bh-w(b-t)$ | $y_1=\frac{b^2h-w(b-t)^2}{2[bh-w(b-t)]}$ $y_2=b-y_1$ | $\frac{2fb^3+wt^3}{3}-Ay_2{}^2$ | $W_1=\frac{I}{y_1}$ $W_2=\frac{I}{y_2}$ | $\sqrt{\frac{I}{A}}$ |
| T形 |  | $bf+wt$ | $y_1=\frac{h^2t+(b-t)f^2}{2(bf+wt)}$ $y_2=h-y_1$ | $\frac{th^3+(b-t)f^3}{3}-Ay_1{}^2$ | $W_1=\frac{I}{y_1}$ $W_2=\frac{I}{y_2}$ | $\sqrt{\frac{I}{A}}$ |