D = outside diameter
d = inside diameter
I = length of tape
$\mathbf{N}=$ number of wraps
$\mathbf{n}=$ number of parts
p = part pitch
t = tape thickness

$$
N=\frac{D-d}{2 t}
$$

$$
\mathrm{I}=\pi \mathrm{N}\left(\frac{\mathrm{D}+\mathrm{d}}{2}\right)
$$

(includes leaders)

$$
\mathrm{n}=\frac{1}{\mathrm{p}}
$$

$$
\mathrm{n}=\frac{\left(\mathrm{D}^{2}-\mathrm{d}^{2}\right) \pi}{4 \mathrm{pt}}
$$

