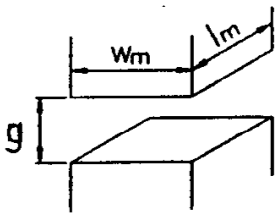
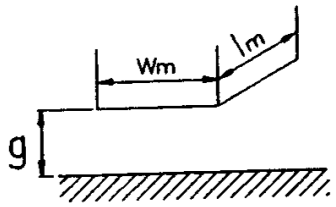
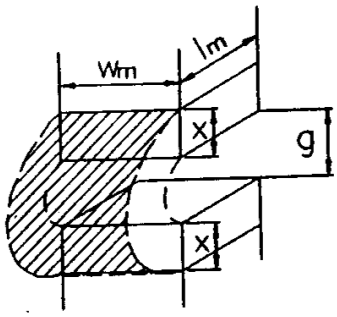
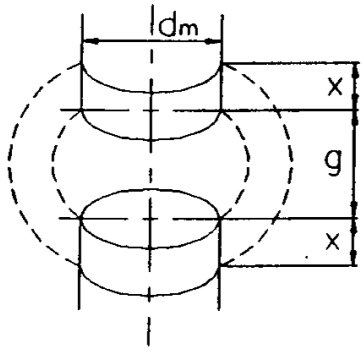
Table 2.1: Permeances of airgaps between poles of different configurations

System	Configuration of poles	Permeance
1		Rectangular poles (neglecting fringing flux paths) $G = \mu_o \frac{w_M l_M}{g}$ where $g/w_M < 0.1$ and $g/l_M < 0.1$
2		Halfspace and a rectangular pole $G = \mu_o \frac{1}{g}(w_M + 0.614g/\pi)(l_M + 0.614g/\pi)$
3		Fringe paths originating on lateral flat surfaces $G = \mu_o \frac{x w_M}{0.17g + 0.4x}$ or $G = \mu_o \frac{w_M}{\pi} \ln \left[1 + 2\sqrt{\frac{x + (x^2 + xg)}{g}}\right]$
4		Cylindrical poles (neglecting fringing flux) $G = \mu_o \frac{\pi d_M^2}{4g}$ More accurate formula for $g/d_M < 0.2$ is $G = \mu_o d_M [\frac{\pi d_M}{4g} + \frac{0.36 d_M}{2.4 d_M + g} + 0.48]$
5	as above	Fringe paths originating on lateral cylindrical surfaces $G = \mu_o \frac{x d_M}{0.22g + 0.4x}$