$\text{Volumenstrom}_{\text{Luft}}$
l_0
A_0
ρ_{el}
?
$\rho_{el} \cdot$
$\frac{l_0}{A_0}$
$\Delta R/R$
??
??
$\partial R \over \partial \rho_{el}\ d\rho_{el} + \frac{\partial R}{\partial l_0}\ dl_0 + \frac{\partial R}{\partial A}\ dA = \frac{l_0}{A}\, d\rho_{el} + \frac{\rho_{el}}{A}\ dl_0 - \frac{\rho_{el} \cdot l_0}{A^2}\ dA = R \cdot (\frac{d\rho_{el}}{\rho_{el}} + \frac{dl_0}{l_0} - \frac{dA}{A})$
d
Δ
$\Delta\rho \ll$
$\rho, \Delta l_0 \ll$
$l_0, \Delta A \ll$
A
??
$\Delta R \over R = \frac{\Delta \rho_{el}}{\rho_{el}} + \frac{\Delta l}{l_0} - \frac{\Delta A}{A_0}$
ε
$\Delta l/l_0$
$\Delta A/A$
$\varepsilon_Q =$
$\frac{\Delta D}{D_0} =$
$-\nu \cdot$
ε
??
$\Delta A \over A = \frac{\frac{\pi}{4} \cdot \left((D + \Delta D)^2 - D^2 \right)}{\frac{\pi}{4} \cdot D^2} = \frac{2D \cdot \Delta D + (\Delta D)^2}{D^2} \approx \frac{2\Delta D}{D} = 2\varepsilon_Q = -2 \cdot \nu \cdot \varepsilon$
??
ε
??
$\Delta R \over R = (1 + 2 \cdot \nu) \cdot \varepsilon + \frac{\Delta \rho_{el}}{\rho_{el}}$
$\frac{\Delta \rho_{el}}{\rho_{el}}$
?
$_k apa.jpg$
$_G liederung_e ines_I CS_g em_I CS-$
$Kompendium.jpg figure Hierarchische Gliederung eines ICS, gem ICS - Kompendium des Bundesamtes fr Sicherheitin$
Pro-
cessSeg-
ment