Tehetetlenségi nyomaték mérése

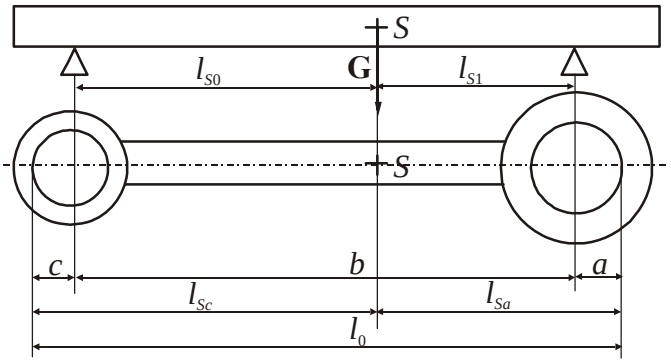
		a [mm]	b [mm]	c [mm]	m_0 [kg]	m_a [kg]	l_{sa} [mm]	l_{sc} [mm]	l_0 [mm]
Hajtó kar	nagy	39	250	21,5	4,185	2,980	111	199,5	310,5
	közepes	26	232	85	1,395	0,870	113,3	153,2	266,5
	kicsi	27,7	202,3	10	0,935	0,660	87,2	152,8	240
Fogaskoszorú		-	-	-	4,85	-	102,5	102,5	205

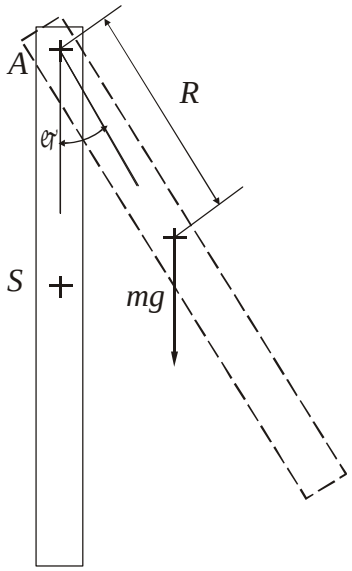
$$l_{s0}G = bF$$

$$l_{s0} = \frac{F}{G}b; \quad l_{s1} = \frac{G-F}{G}b$$

$$l_{sa} = l_{s1} + a = \frac{G-F}{G}b + a = \frac{m_0 - m_a}{m_0}b + a$$

$$l_{sc} = l_{s0} + c = \frac{F}{G}b + c = \frac{m_a}{m_0}b + c$$





$$\dot{\mathbf{L}} = \mathbf{M}$$

$$J_A \varepsilon = -mgR\varphi$$

$$0 = J_A \ddot{\varphi} + mgR\varphi$$

$$\ddot{\varphi} + \frac{mgR}{J_A}\varphi = 0$$

$$\alpha^2 = \frac{mgR}{J_A} = \frac{4\pi^2}{T^2}$$

$$J_A = \frac{mgRT^2}{4\pi^2}$$

$$J_S = \frac{mgRT^2}{4\pi^2} - mR^2 = \left(\frac{T^2 g}{4\pi^2 R} - 1\right) mR^2$$