

Tab.1 The physical parameters of transmission line

parameter	symbol	units	value
tension	$H$	N	30 000
span	$L$	m	125.88
Young's modulus	$E$	N/mm <sup>2</sup>	47 803.3
diameter	$D$	m	0.0286
mass per unit length	$m$	Kg/m	2.379
traverse area	$S$	mm <sup>2</sup>	423.24
air mass density	$\rho$	Kg/m <sup>3</sup>	1.2929
wind velocity	$U$	m/s	4.0
sag	$d$	m	1.5432
vertical dumping	$\mu$	/	0.0005
aerodynamic parameters	$A'$	/	-0.1667
aerodynamic parameters	$B'$	/	8.3581