

			constant	unit	description	configuration	a1	a4	c2	c3	c5
wheel (tire+rim)	nonlinear single track model	rim + tyre	m_vh	kg	wheel mass		7.44	6.374	5.443	6.577	5.307
			theta_vh	kg.m^2	tyre rolling inertia		0.40	0.28	0.17	0.26	0.16
			theta_zz_vh	kg.m^2	tyre z inertia		0.22	0.16	0.10	0.15	0.10
			r	m	tyre outer radius		0.260	0.235	0.203	0.229	0.203
		eff. load	e_z		effective load degressive parameter			0			
			T_x	s	settling time of the tires during fast changes of course or velocity			0.02			
			T_y	s				0.02			
			tyre magic formula	pure longitudinal (SA=0)	PCX1			Shape factor Cfx for longitudinal force	1.278793	0.509153	
	PDX1				Longitudinal friction Mux at Fznom		2.824687	5.447613		3.097078	
	PDX2				Variation of friction Mux with load		-0.723840	-0.441576		-0.758640	
	PKX1				Longitudinal slip stiffness Kfx/Fz at Fznom		-60.730470	-54.143220		-43.330700	
	PKX2				Variation of slip stiffness Kfx/Fz with load		30.189940	-7.051341		2.939219	
	PKX3				Exponent in slip stiffness Kfx/Fz with load		0.005985	0.171439		-0.253608	
	pure lateral (SR=0)	PCY1			Shape factor Cfy for lateral forces		1.389410	1.459571	0.735002	0.829714	1.598327
		PDY1			Lateral friction Muy		-2.509494	-2.470600	-2.985970	-3.151897	-2.294378
		PDY2			Variation of friction Muy with load		0.283008	0.628891	0.243913	0.129540	0.334261
		PKY1			Maximum value of stiffness Kfy/Fznom		73.211130	37.798840	49.328500	55.598290	54.820040
	single track	geom.	l_v	m	distance between S and the front axle (vehicle reference frame)		0.78				
l_h			m	distance between S and the rear axle (vehicle reference frame)	0.77						
h_S			m	height of S (ground reference frame)	0.3						
			m_S	kg	suspended mass	90					
			g	m/s^2	acceleration of gravity	9.81					
			eps		avoid singularity	0.001					