Cornering Stiffness Values for AutoDrive Bolt EV

The following tables include the cornering stiffness of the front/rear tires and corresponding conditions. The cornering stiffness at 1 degree of slip angle is provided, along with higher slip angles (4 and 8 degrees) that are included for reference and represent the non-linear regions of the tire. By definition, cornering stiffness is the absolute value of the first derivative of the lateral force of the free-rolling tire with respect to slip angle. In our application, we normalize the lateral force by the normal force and divide by the slip angle (N/N/deg).



Figure 1. Sample Tire Lateral Force vs. Slip Angle at various example Fz (Normal Load)