

Linear motors:

With Linear motors it's much simpler as the motor force is already in linear units.



In this example we want to accelerate a 1Kg at 4mm/S^2

F motor = M * a = 1 * 4 = 4 N

For some applications we need the nominal torque of the motor to be higher than the torque needed, and in other applications it's enough if the pick torque of the motor is higher than the torque needed. Depending on the duty cycle.