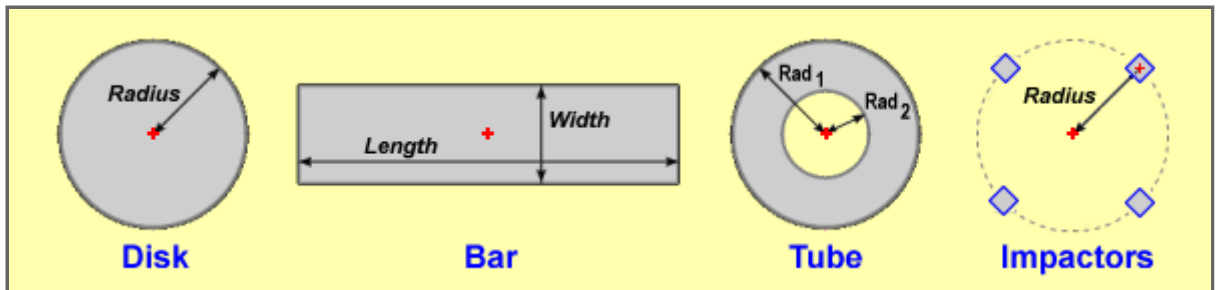




Run Amok Combat Robotics

Spinner Weapon Kinetic Energy Calculator - v.1.02



Weapon Elements dimensions in **millimeters**, mass in **kg**, density in **kg/m³**

Bar: Density Width Thick Length
Tube: Density Rad 1 Rad 2 Length
Disk: Density Radius Thick
Impactors: Mass Radius
Asymetric: MOI Add a zero-mass impactor radius to calc tip speed.

Brushed PMDC Motor RPM at **no-load**, stall torque in **newton-meters**

RPM Torque Drive to 1

Estimating Torque for Brushless Motors

 oz·in in lbs mph
 N·m mm kg m/sec

Weapon Mass: kg

Weapon Speed: rpm

Tip Speed: m/sec

Kinetic Energy: joules

Mass Moment of Inertia: kg·m²

Densities: kg/m ³	
Steel:	7800
Titanium:	4500
Aluminum:	2760
Magnesium:	1770

3.9 joules (1900 rpm)

3.2 joules (1730 rpm)

1.7 joules

(1260 rpm)

Infinity

Infinity

Infinity

In seconds the weapon will spin to 0 joules at 0 RPM.

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