

## Mode Torque Brake (MTB)

Intended as a means to quickly stop shaft motion in the event of drive fault or drive disable.

- Dynamically shunts windings for quick stops
- 60% peak overload stopping power
  - In other words, the motor has 60% more stopping power than its peak published torque at stall when MTB is activated
- Automatically engaged under any shaft protection fault :
  - Position Error (Following Error)
  - Travel Limit Error
  - Over Temperature
  - RMS Over Current

By connecting the travel limits to the E-stop circuitry, the motor can be quickly driven to a stop without the need of complete power removal. MTB only requires control power, not drive power.

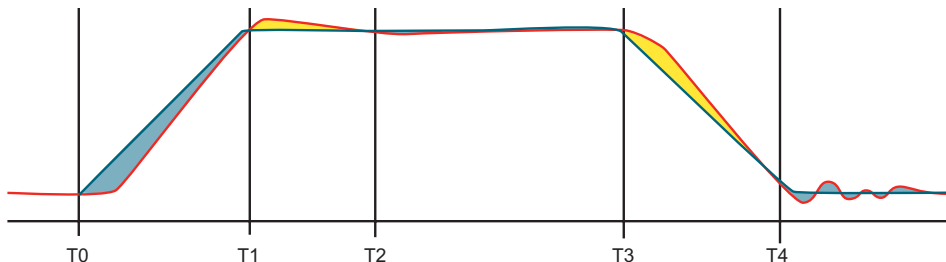
Note: MTB can produce Peak torques as much as 60% beyond advertised stall torque of any given applicable Animatics SmartMotor™.

It is imperative that any gear head or other shaft loads be capable of handling such a peak torque.

## Trajectory Overshoot Braking (TOB)

Allows for smooth controlled deceleration and stabilization of high moment-of-inertia mismatch loads.

- PWM controlled Dynamic braking
  - >30% better slowing power to prevent overshoots in speed or deceleration during the entire trajectory path
- Provides protection against exceeding critical speed limits of lead screws



Yellow Areas above Indicate where TOB takes Effect