

I N T R O D U C I N G

Dual-Stage PK Spring-Applied Brakes

For E-mobility Applications



Smooth, two-step brake engagement prevents harsh dynamic E-stop braking

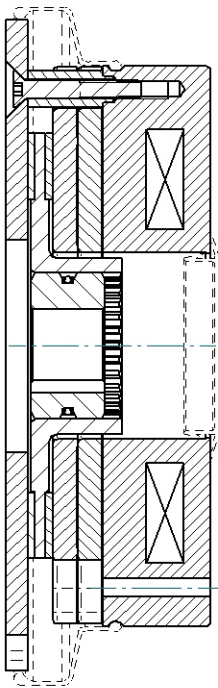
- Same mounting PCD, shaft connection, and torque range as standard PK single armature spring applied brake
- Dual-function, parking and emergency braking functionality
- Available with embedded control unit
- Enhanced dual-voltage coil controlled via PWM (Pulse Width Modulation) provides long service life with reduced power consumption

Special friction material, designed for E-mobility applications, provides proven efficiency based on extensive prototype life-cycle testing. The select material offers the perfect balance between static torque for parking and dynamic torque for high energy service and emergency stopping over its service life.

FLEXIBLE CONTROLLER COMPATIBILITY

The Dual-Stage PK brakes are compatible with most popular controllers. However, the following Warner Electric controllers are recommended for optimum performance...

- **Standard ON/OFF controller**
 - The brake will engage in 2 steps separated by 0.2s to 1s (depending on the voltage suppressor implemented)
 - 1st step provides 20-70% of the nominal brake torque (depending on the application and the customer need)
 - 2nd step provides the remaining % to reach the nominal torque
- **Advanced controller**
 - The 2 torque stages can be controlled through the controller independently
 - A reduced current allows the engagement of the first armature only, thus providing the first torque step.
 - By fully cutting the power, the nominal torque (stage 1 + 2) is achieved



DUAL-STAGE PK BRAKE DESIGN

FEATURES

- One-piece design for easy assembly
- High torque in reduced diameter
- Smooth braking
- Two independent braking stages via controller
- Available with standalone and bespoke control unit
- Dual-voltage coil for power consumption reduction and longer battery life
- Overall lower maintenance costs
- Highly efficient friction material selected for the E-mobility applications

