

Combustion



Hybrid

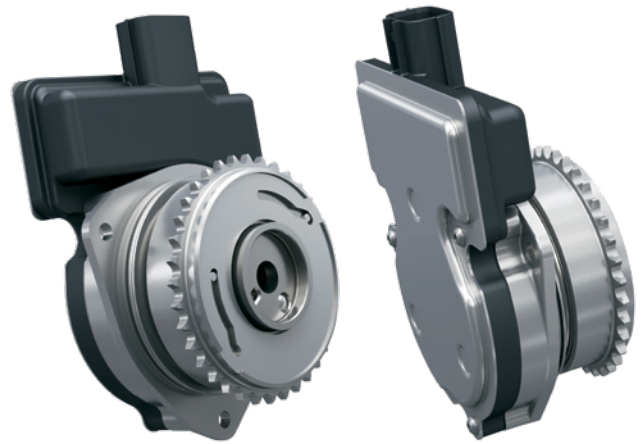
Explore our Technologies

eVCT (Electric Variable Cam Timing)

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Features and Benefits

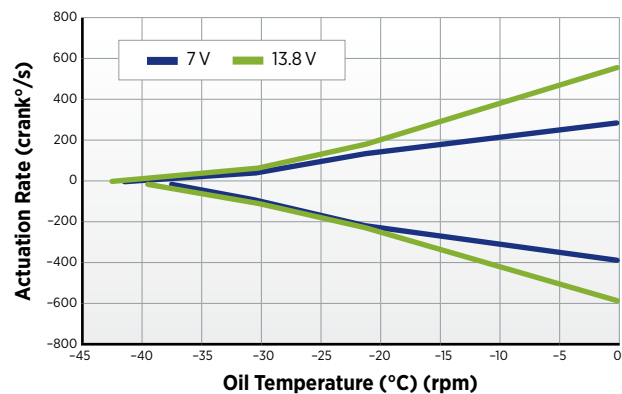
- Faster speed, and greater range of control over hydraulic phaser
- Stop/Start
 - Decreased time to torque/vehicle acceleration
 - Allows decompression for improved NVH
 - Actuation rate for decompression startup recovery
 - Able to reposition camshaft before cranking and improves start NVH for high compression engines
- Able to move quickly across the ROA
- Improved catalyst light off time (Requires eVCT on exhaust)
- Lower power consumption and reduces “time to pressure” requirements from oil pump
- Eliminates “no fly zone” typically seen with hydraulic phasers, including phasing during cranking
- Able to operate at low oil pressure, low oil temperature
- Abnormal shutdown or change of mind recovery
 - Phaser can be commanded to position at or before start



Product Specifications

- Low drag gear system
- Compact efficient brushless motor
- Controls can be integrated on electric motor or in ECU
- Phaser housing diameter: 82 or 70 mm
- Axial length: 74 mm (with controls)
- Speeds up to 550 degs/s (crank)
- 250 millisecond time to target at startup
- Cam position stability within +1 CA
- Normal operating temperature: -40 to 130°C
- Peak current to eMotor with controls: 30 A

Cold Performance 1000 rpm



Closed-Loop Actuation Rate 80 deg Step

