



Single Electronic Throttle body 60-70mm



Overview:

The Jenvey SFGZXX Motorsport single electronic throttle body has been created specifically for use with motorsport and high-performance engines. Designed for single large throttle systems.

All major components, with the exception of the high-performance DC motor, have been designed, developed and manufactured at the Jenvey Dynamics headquarters in the UK. Prototype tests have exceeded 1,000,000 cycles of normal operation without failure.

The SFGZXX consists of a DC Motor with glass-fibre, self-lubricating reduction gearing. It can be driven in either direction and includes an adjustable limp home module.

Advantages of electronic actuation include: packaging, auto-blip for paddle shift, launch control, anti-lag, switchable pedal map, controllable push to pass strategy, pit lane speed control, traction control, warm-up (increased airflow), soft engine safe mode, load compensation, and the ability to combine with torque based strategies allowing ancillary load compensation and hybrid integration.

In all applications it is necessary to seek advice from the ECU supplier regarding the essential tuning of the throttle control system (normally a PID or PI control) and the associated safety systems. Ultimately electronic throttle applications are safer than mechanical cable application due to evaluation of the pedal position, and subsequent checks against throttle position, the removal of mechanical friction and the ability to power the throttles closed.



JENVEY recommend that set-up and tuning is only undertaken in conjunction with ECU suppliers and/or their recommended agents.

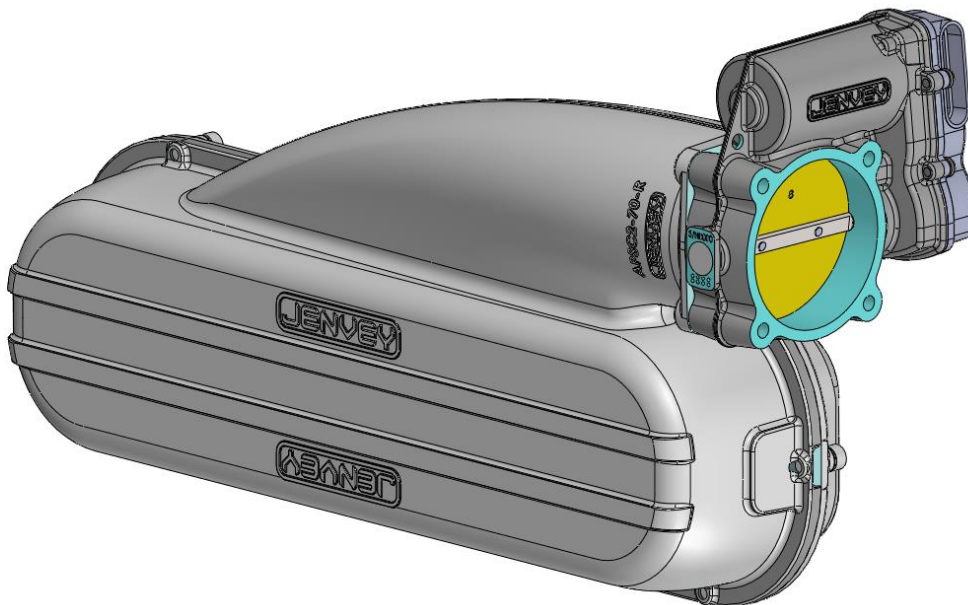
Mechanical variations:

- Return spring – LH (Sprung open) or RH (Sprung closed)– default is with RH return spring.
- Available in bore sizes 60-70mm.

Actuator specifications:

- Temp range of operation: -20°C to 140°C
- Voltage range: 10V to 16V
- Gear ratio: 20:1
- Max torque: 3600Nmm
- Max allowable current: 8 amps
- Loom connector required: 6 pin AMP Superseal 1.5, 1 Row, 6 position connector (see SFGZXX drawing for pin-out)
- Throttle position sensor: Dual output Integrated contactless sensor.
- Mount orientation: Any
- Rotation: Maximum 82 degrees.
- Limp home: adjustable to suit application
- Expected time: 0 to 100% (stable) < 0.08s as tested.
- Unit weight: 710 grams
- Max continuous (holding) current: < 2A
- Power off return time: Max 1 second

Typical application:



SFGZXX installed on Jenvey 70mm sm. Turbo plenum (APSC2-70)