Drive By Wire Throttle Actuator 804-300

Drawing Revision 3 - 13/1/22

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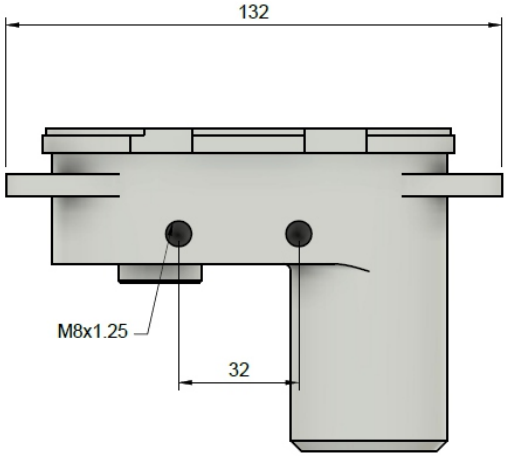
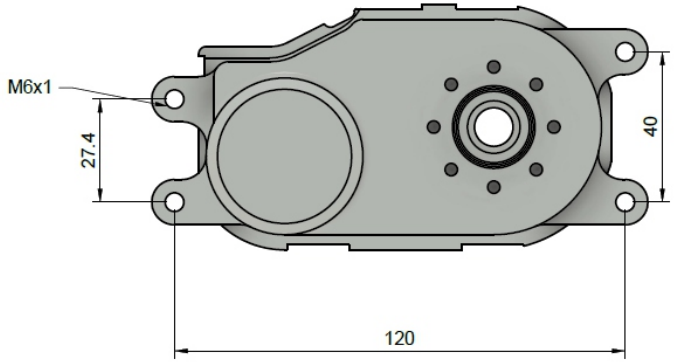
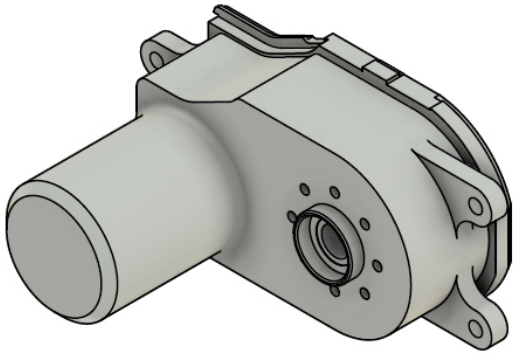
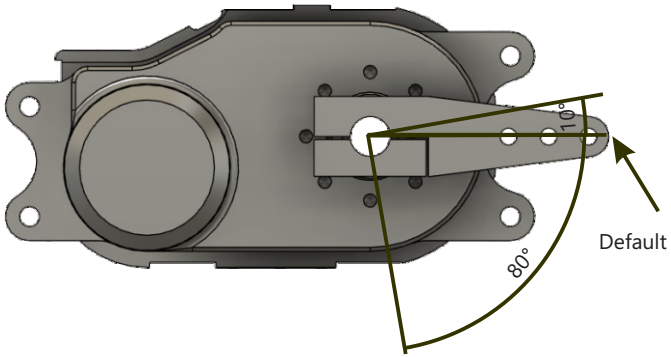
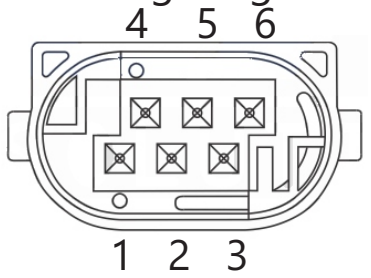








Wiring Diagram



Looking into the Throttle body

1. Motor -
2. TPS - (0V)
3. TPS 5V+
4. Motor +
5. TPS 2 Out. 0 to 5V
6. TPS 1 Out 5 to 0V

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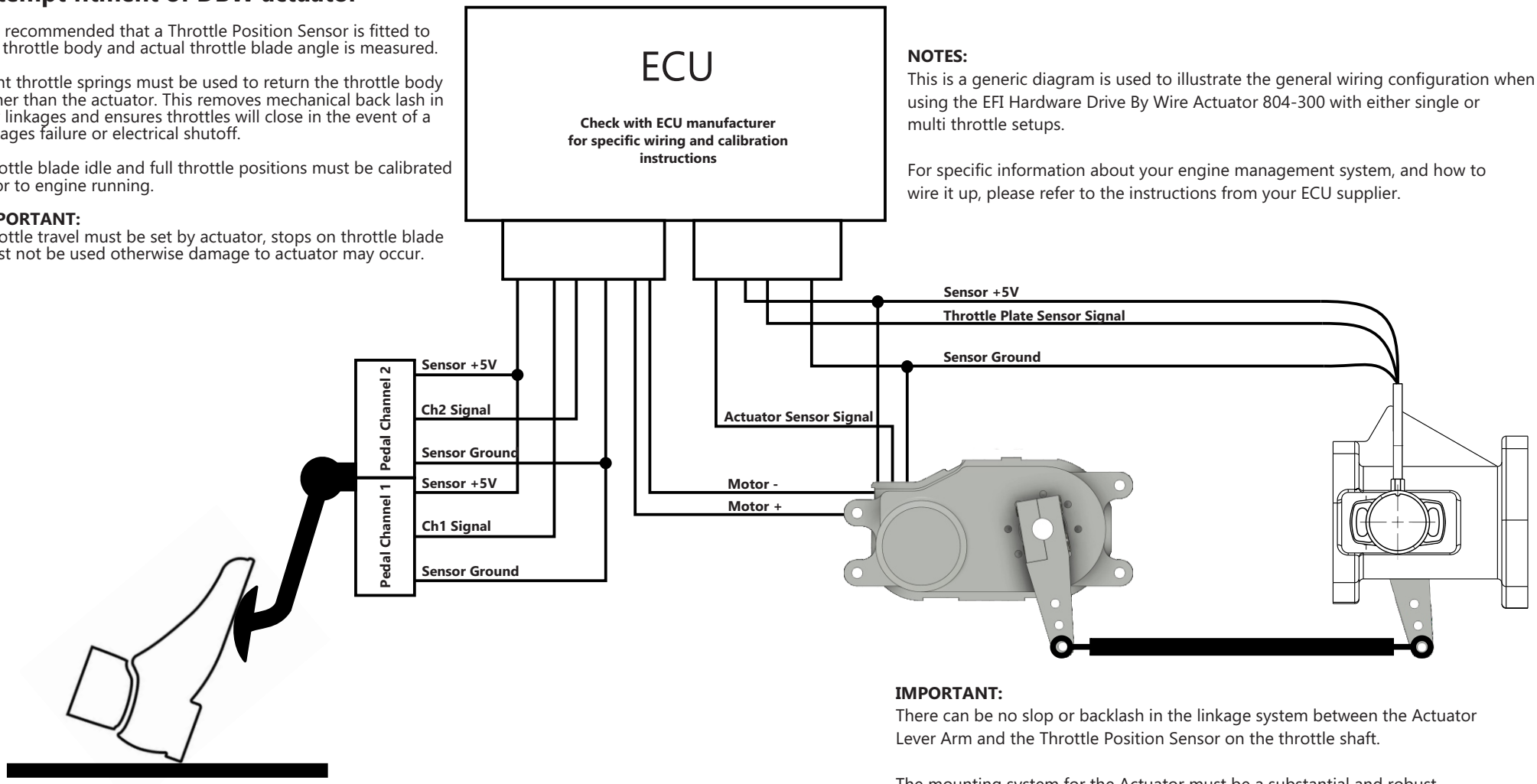
Only an experienced tuner or technician should attempt fitment of DBW actuator

It is recommended that a Throttle Position Sensor is fitted to the throttle body and actual throttle blade angle is measured.

Light throttle springs must be used to return the throttle body rather than the actuator. This removes mechanical back lash in any linkages and ensures throttles will close in the event of a linkages failure or electrical shutoff.

Throttle blade idle and full throttle positions must be calibrated prior to engine running.

IMPORTANT:
Throttle travel must be set by actuator, stops on throttle blade must not be used otherwise damage to actuator may occur.



NOTES:
This is a generic diagram is used to illustrate the general wiring configuration when using the EFI Hardware Drive By Wire Actuator 804-300 with either single or multi throttle setups.

For specific information about your engine management system, and how to wire it up, please refer to the instructions from your ECU supplier.

IMPORTANT:
There can be no slop or backlash in the linkage system between the Actuator Lever Arm and the Throttle Position Sensor on the throttle shaft.

The mounting system for the Actuator must be a substantial and robust physical connection with the throttle body system to ensure the relationship between the Actuator and the Throttles does not change under any conditions.

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Specifications

Mating Connector Part number	C-06FR1-3-7-9-BLK (Bosch#D261.205.358-01)
Operating Temperature	-40 to +140 140°C
Supply Voltage	6 to 16 V
Supply Voltage To Sensor	5.0V +/- 0.2v
Max Allowed Generator Current	<10.0 Amps
Max continuous Current	3A (Note1)
Max Vibration	50 to 250 m/s at 50 Hz to 2 kHz
Gear Ratio from motor to drive shaft	25.65 : 1
Maximum torque at Output shaft	196 Ncm @14v / 10A
Weight inc lever arm	5.7KG at 35mm
Operating speed over full sweep	61millisecond 10-90% unloaded (Note 2)

Note 1: This is a maximum recommended continuous current only, i.e. 100% throttle for extended periods of time. This rating must also be discussed with the throttle controller supplier to make sure drive circuits are also capable of this continuous current.

Note 2: This sweep speed is based on the unloaded motor and lever arm. Speed may be affected by throttle linkage friction, component mass and return springs. The complete throttle assembly must be checked by a qualified person to ensure complete system safety.