eBG50 Electronic BoostGate





The Turbosmart Electronic Straight Boost Gate is a new feature in the blow off valve lineup. The boost gate provides extensive user configurability, world leading extended thermal performance, fatigue resistance and uninterrupted flow performance for optimum control and longevity with its butterfly valve.

- Strap type V-band clamps
- User adjustable actuator position
- Full Electronic control
- **Endless Boost Control Strategies**

Mechanical Data

Flow Diameter	50mm (1.97in)
Mass	1816g
Safe working pressure max.	220 psig / 1520 kPa / 15 bar
Actuator life	550k cycles @ 150°C (302 °F) ambient 800k cycles @ 80°C (176 °F) ambient
Port fittings type	Liquid Cooling: 2x 1/8" NPT
Thermal Data	

Max. ambient/compartment	200ºC / 392ºF
temp.	
Max. actuator temp.	150 ºC / 257ºF

Electrical Data	
Sensor Operating voltage	5V±0.5V
Outputs	 Analog 0-5V
	 Pulse Width Modulated signal
Operating Temperature	-40 °C to 150 °C(-40 °F to 302 °F)
Sensor Supply Current	21mA
PWM Frequency Output	220-268 Hz

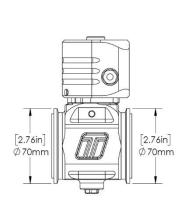
Position Sensor Data

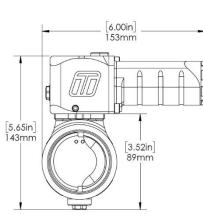
Position	Target Voltage (V)	Duty Cycle
100%	0.20-0.60V	~16%
0%	4.40-4.80V	~84%

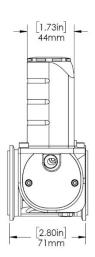
Connection Data

Red 22AWG	5V
Black 22AWG	0V
White 22AWG	Valve position
Blue 22AWG	*Unfiltered Signal (Position Output)
Yellow 22AWG	Sensor Temperature
Red 14AWG	Motor A (Positive Closed)
Black 14AWG	Motor B (Positive Open)
*Note: The Plue (unfilte	rad pacition signal) is not required

*Note: The Blue (unfiltered position signal) is not required for use & is for development purposes only.







^{*}Continual source of minimum 1250°C exhaust gas, with no cool down periods for at least 30minutes and no external air cooling on actuator, this is a destructive test that an ICE engine cannot support. Contact tech support for further information.

Included in the Box

Boostgate unit Outlet V-Band

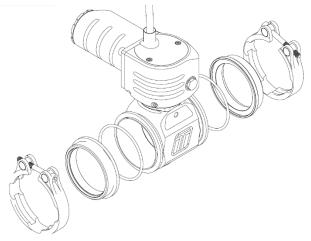
Inlet V-Band

Outlet Aluminium weld flange

Inlet Aluminium weld flange

Sticker

Instruction card



Order Data

TS-0265-1042 eBG50 Electronic BoostGate Black

Accessories

TS-0265-3001	BG50 BoostGate Trumpet
TS-0265-3002	BG50 BoostGate Aluminium Weld Flange
TS-0265-3003	BG50 Boost Gate Stainless Steel Weld Flange
TS-0265-3004	V-Band Clamp (Aluminium) suit Pro Port and PowerPort BOV
TS-0550-3124	eStraight Gate Replacement Motor
TS-0550-3123	eStraight Gate Replacement Sensor

Refer to catalogue for further accessories

Install Req.

Inlet Pipe Suits 57.5mm/2.25" OD

Outlet Pipe Suits 57.5mm/2.25" OD

^{**} High amperage for prolonged periods will damage the motor, keep high Amperage operation to short bursts.