

PBG50/76CG Boost Gate/Solenoid



The Turbosmart Compressed Gas BoostGate50 is a high-performance charge air control valve engineered specifically for CO₂ and compressed gas boost control systems. Designed with drag racing and extreme performance applications in mind, the BoostGate50 replaces traditional wastegate-style boost management with a highly responsive, direct-acting solution mounted on the cold side of the turbo system. With advanced materials, a robust diaphragm design, and ultra-precise actuation, it's the ultimate tool for dialling in your boost with confidence and consistency.

- Optimized for CO₂ / Compressed Gas
- Cold Side Boost Control
- Zero-Offset Butterfly Valve
- Custom Nomex Diaphragm
- Ideal for Drag Racing

Mechanical Data

Boost Gate Option	50mm	76mm
Flow Diameter	50mm (1.97in)	70mm (2.75in)
Mass	1038g	1344g
Safe working pressure max.	220 psig / 1520 kPa / 15 bar	
Actuator Stroke	15mm	
Hysteresis	6.4% of base pressure	
Actuator life	550k cycles @ 150°C (302 °F) ambient 800k cycles @ 80°C (176 °F) ambient	
Max. Spring base Pressure	26 psi / 180kPa / 1.8 bar	
Min. Spring base Pressure	3 psi / 21 kPa / 0.2 bar	
Port fittings type	Air: 2x 1/8" NPT top chamber Air: 2x 1/8" NPT lower chamber	

Thermal Data

Max. ambient/compartment temp.	260°C / 500°F
Max. actuator temp.	310 °C / 590°F

Order Data

TS-0265-1242	PBG50CG Boostgate Compressed Gas 7PSI Black
TS-0265-1252	PBG50CG Boostgate Compressed Gas (Solenoid) 7PSI Black
TS-0267-1242	PBG76CG Boostgate Compress Gas 7PSI Black
TS-0267-1252	PBG76CG Boostgate Compress Gas (Solenoid) 7PSI 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-0567-3001	SG76 Weld Flange - Aluminium
TS-0567-3002	SG76 Weld Flange – Stainless Steel
TS-0567-3003	SG76 V-Band

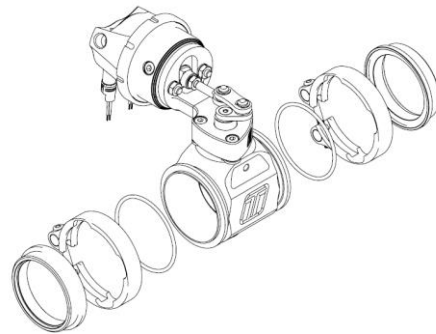
Refer to catalogue for further accessories

Material Data

Beryllium (Be)	0%
Diaphragm	Proprietary Silicone w/Nomex
Actuator Housing	6061 T6 anodised Al.
Control arm Bush/Linkage	N60
Control Arm	431 and 304SS
Elastomers	Viton
Springs	17-7PH Stainless Steel
Bracket	6262 T6 anodised Al.

Included in the Box

- Boost Gate unit
- Outlet V-Band
- Inlet V-Band
- Outlet Aluminium weld flange
- Inlet Aluminium weld flange
- Sticker
- Instruction card



Install Req.

	50mm	70mm
Inlet Pipe	Suits 57.5mm/2.25"	Suits 70mm/2.76"
Outlet Pipe	Suits 57.5mm/2.25"	Suits 70mm/2.76"

Springs

Location	Inner	Inner	Middle	Outer
Pressure	7 PSI	9 PSI	12PSI	21PSI
7PSI	●			
9PSI		●		
12PSI			●	
19PSI	●		●	
21PSI				●

Max. Flow

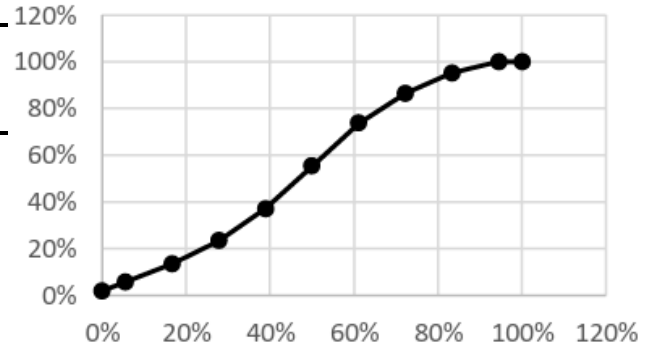
50mm 383.9 CFM / 10.87m³/min @1psiP

76mm 723.7 CFM / 20.5 m³/min @1psidP

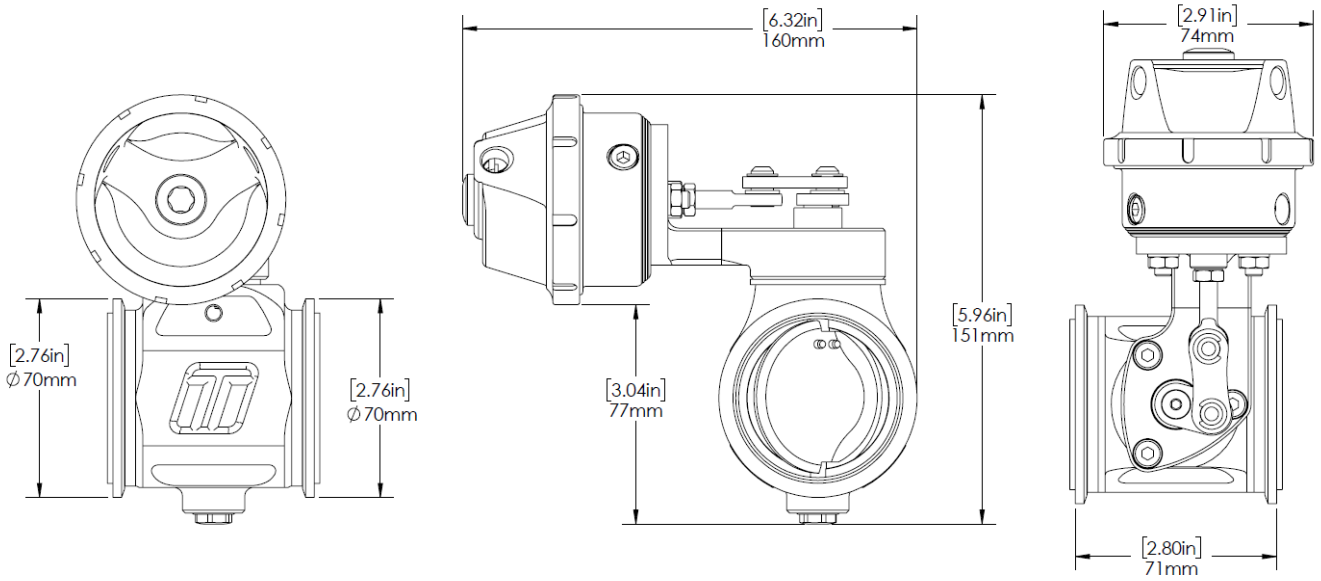
Flow Linearity

50mm -8.8 of full lift (BFSL)

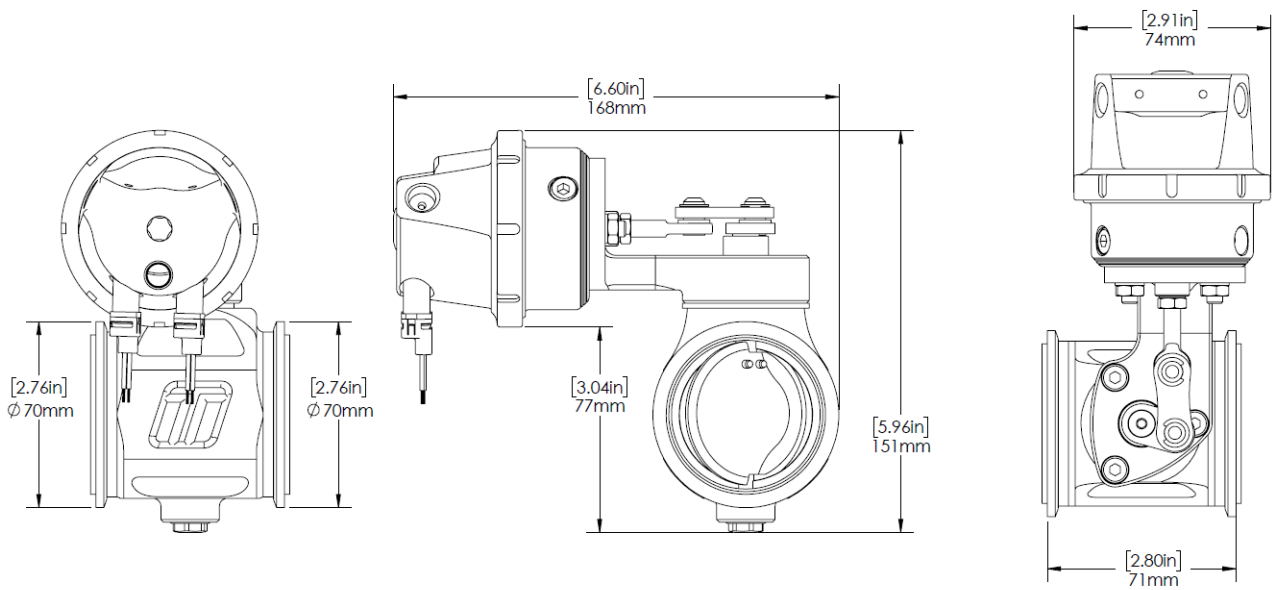
76mm -2.6% of full lift (BFSL)



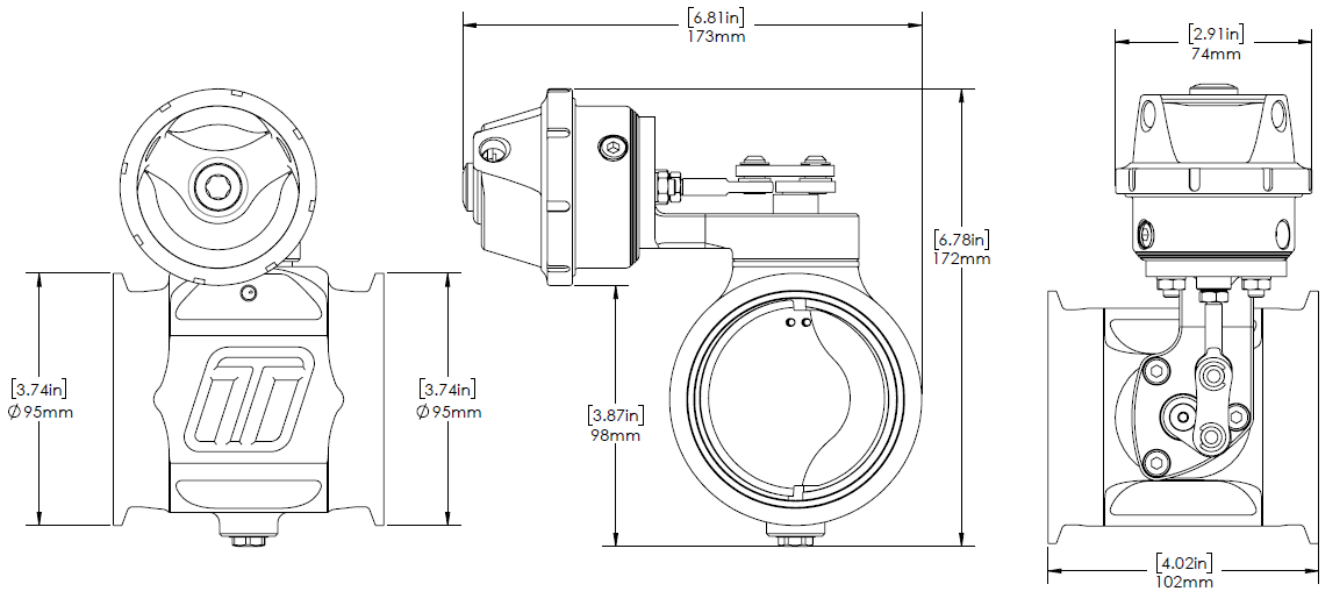
TS-0265-1242



TS-0265-1252



TS-0267-1242



TS-0267-1252

