

Gen V eWG40 CompGate40

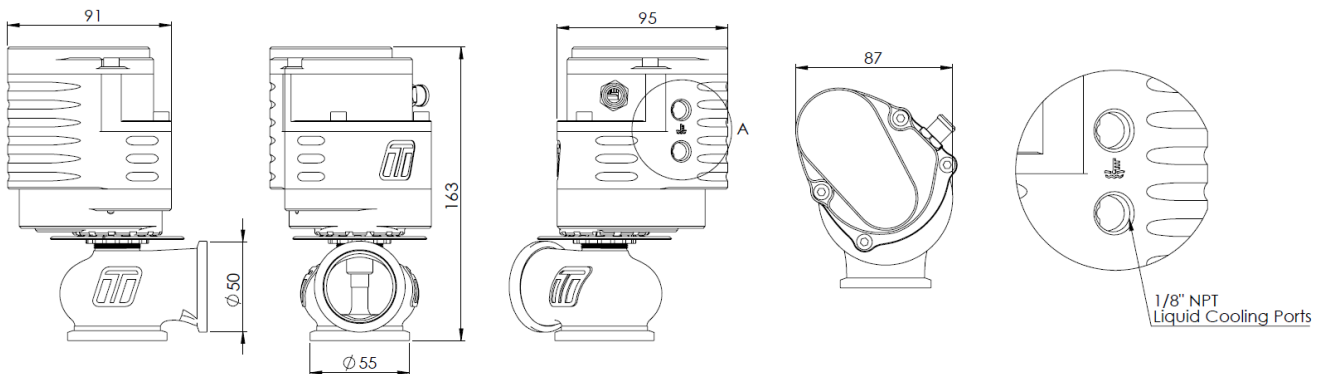


The Gen-V WG40 CompGate40 external electronic wastegate is a cost effective, high performing 40mm external wastegate. The Gen-V provides extensive user configurability, world leading extended thermal performance, fatigue resistance and best in class flow performance for optimum control and longevity.

- Liquid cooling provision
- Strap type V-band clamps
- User adjustable actuator position
- Modular actuator design
- Full Electronic control

Mechanical Data	
Valve diameter	40mm (1.57in)
Mass	WG40 1572g (3.465 lbs)
Actuator linearity	1.02% of full lift (BFSL)
Set pressure accuracy	+/- 0.5 psi of base pressure
Safe working pressure max.	220 psi / 1520 kPa / 15 bar
Safe inverted pressure max.	180 psi / 1250 kPa / 12.5 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. thermal stress (non-cooled)*	>45min @ 1250°C EGT continuous
Max. thermal stress (h2O cooled)*	>24hr @ 1250°C EGT continuous
Max. ambient/compartament temp.	260°C / 500°F
Max. actuator temp.	150°C / 257°F
Electrical Data	
Sensor Operating voltage	5V +/-0.5V
Output	Analog 0-5V
Operating Temperature	-40 °C to 150 °C
Sensor Supply Current	21mA

Temp Sensor Data		
Accuracy	+/- 2.5°C	
Voltage offset at 0°C	500mV	
Gain	10mV/ °C	
Response @63%	1.3s	
Sensor Output (mV)	Deg C	Deg F
500	0	32
2000	150	302
Connection Data		
Red 22AWG	5V	
Black 22AWG	0V	
White 22AWG	Valve position	
Yellow 22AWG	Sensor Temperature	
Red 14WG	Motor A (positive closed)	
Black 14AWG	Motor B (positive open)	



*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.

Material Data																									
Beryllium (Be)	0%																								
Main Body	High temp 347 SS																								
Actuator housing	6061 T6 anodised Al.																								
Valve Guide	Nitronic 60																								
Valve	EV8 w/ proprietary plating																								
V-Band	Heat treated 431 SS w/ 18-8 nut																								
Weld Flanges	304 Stainless Steel																								
Motor Data																									
Wire Size	16AWG																								
Direction	Red wire positive closed																								
Stall Current**	60A																								
Hold Current	0A (Short motor wire for braking)																								
Max Force @stall	4085N																								
Max Force @power	2042N																								
Speed (Opening)	598%/s																								
Speed Vs Force																									
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Flow Characteristics																			
Max. Flow	193.6 CFM/5.48m ³ /min @1psidP																		
Flow Linearity	-18% of full lift (BFSL)																		
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Included in the Box	
Wastegate unit	
SS316 Valve seat	
Inlet V-Band	
Inlet SS304 weld flange	
Outlet V-Band	
Outlet SS304 weld flange	
Collar tool (master/slave)	
Sticker	
Instruction card	

Order Data	
TS-0552-1502	Gen-V eWG40 CompGate40 Electronic Black
Accessories	
	Valve Seat
TS-0552-3002	WG40 Valve and Guide set
TS-0552-3003	WG40 Inlet V-Band
TS-0552-3004	WG40 Outlet V-Band
TS-0552-3006	WG40 Stainless Inlet Weld Flange
TS-0552-3007	WG40 Stainless Outlet Weld Flange
TS-0550-3013	54mm Actuator Collar Tool
<i>Refer to catalogue for further accessories</i>	
Install Req.	
Inlet Pipe	Suits 42.16mm/1.660" OD
Outlet Pipe	Suits 42.16mm/1.660" OD or 33.40mm/1.315" OD
Port Tube Min. ID	6mm / 0.236"

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