



The Gen-V WG40M Comp-Gate40 Motorsport external wastegate is a cost effective, high performing 40mm external wastegate designed specifically for endurance racing or where water cooling is not available and high thermal thresholds are required for extended periods of time. 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.

- CFD driven heatsink design
- Liquid cooling provision
- Strap type V-band clamps
- User adjustable actuator position
- Modular actuator design
- Standard / Compressed Gas configurations available

MECHANICAL DATA

Valve diameter	40mm
Mass	842g
Linearity	-1.13% of full lift (BFSL)
Hysteresis	8.5% of base pressure
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	750k cycles @ 180°C ambient 1000k cycles @ 80°C ambient
Actuator/Valve ratio	2.0:1
Max. spring base pressure	26 psi / 180 kPa / 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 Liquid Cooling: 2x 1/8" NPT

THERMAL DATA

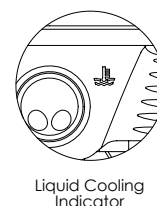
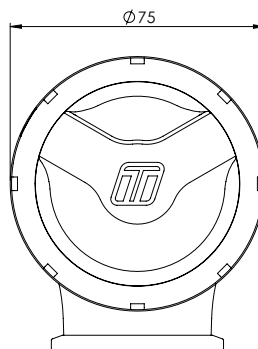
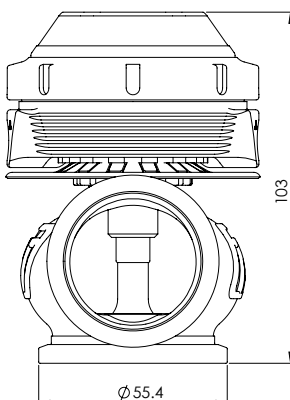
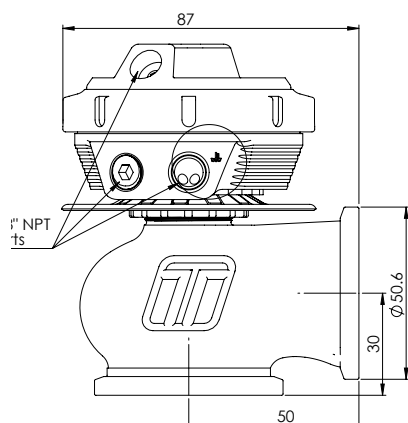
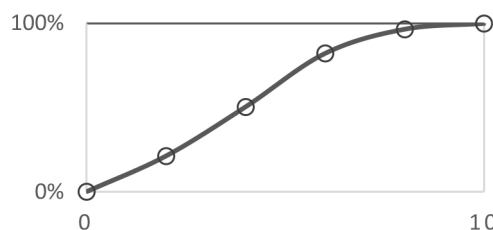
Max. thermal stress (non-cooled)*	>60min @ 1250°C EGT continuous
Max. thermal stress (h2O cooled)*	>24hr @ 1250°C EGT continuous
Max. ambient/compartments temp.	260°C / 500°F
Max. actuator temp.	310°C / 590°F

MATERIAL DATA

Main Body	High temp 347 SS
Heatsink	6061 T6 anodised Al.
Diaphragm	Proprietary Silicone w/ nomex
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
Springs	17/7 PH Stainless Steel
Beryllium (Be)	0%

FLOW DATA

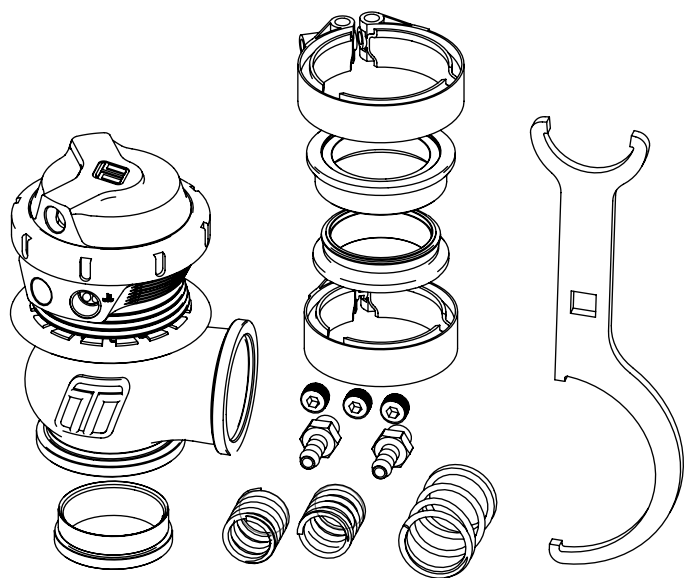
Max. Flow	165.4 CFM/4.53 m³/min @1psidP
Flow Linearity	-15% of full lift (BFSL)



*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

- Wastegate unit (pre-assembled with spring as per order)
- SS316 Valve seat
- Inlet V-Band
- Inlet SS304 weld flange
- Outlet V-Band
- Outlet SS304 weld flange
- Collar tool (master/slave)
- 17/7 PH 3, 5, 7, 14 psi spring kit (1x spring installed)
- 4x 1/8" NPT plugs (1x installed) / 2x 1/8" NPT nipples
- Sticker
- Instruction card



SPRING DATA

Wastegate Size	Spring Pressure			
	3psi	5psi	7psi	14psi
WG38/40	Black	Grey	Pink	Red

ORDER DATA

TS-0552-1101	Gen-V WG40M Compgate 40 14psi Motorsport Blue
TS-0552-1102	Gen-V WG40M Compgate 40 14psi Motorsport Black

ACCESSORIES

TS-0552-3001	WG40 Valve Seat
TS-0552-3003	WG40 Inlet V-Band
TS-0552-3004	WG40 Outlet V-Band
TS-0552-3006	WG40 SS Inlet Weld Flange
TS-0552-3007	WG40 SS Outlet Weld Flange
TS-0550-3022	WG38/40 Sensor Cap Upgrade Kit Black (sensor included)
TS-0550-3023	WG38/40 Sensor Cap Upgrade Kit Blue (sensor included)
TS-0550-3004	WG38/40 Diaphragm Replacement Kit
TS-0550-3013	WG38/40 Actuator Collar Tool

Refer to website for further accessories

INSTALL REQ.

Inlet Pipe	Suits 44.45mm/1.75" OD
Outlet Pipe	Suits 44.45mm/1.75"OD or 38.30mm/1.50" OD
Port Tube Min. ID	6mm / 0.236"

	Location	Inner	Inner	Middle	Outer
	Pressure	3psi	5psi	7psi	14psi
Boost Pressure	3psi	•			
	5psi		•		
	7psi			•	
	10psi	•			
	12psi		•	•	
	14psi				•
	17psi	•			•
	19psi		•		•
	21psi			•	•
	24psi	•		•	•
	26psi		•	•	•

CONFIGURATIONS AVAILABLE

