



MAY 2021

GARRETT BOOST | CLUB LINE 14-22

Garrett
ADVANCING MOTION

GARRETT BOOST | CLUB LINE

Journal bearing turbochargers for small engine displacements



Garrett Boost | Club Line turbochargers are engineered for small engine displacements including powersports, personal watercraft, and automobiles. These turbochargers feature internally wastegated turbine housings and journal bearing rotating groups. Forged, fully-machined compressor wheels can support from 200 up to 350 horsepower for engine displacements ranging from 0.4L up to 2.5L

GBC14 - 22

Product range name

Product line abbreviation

Product line name

Turbo

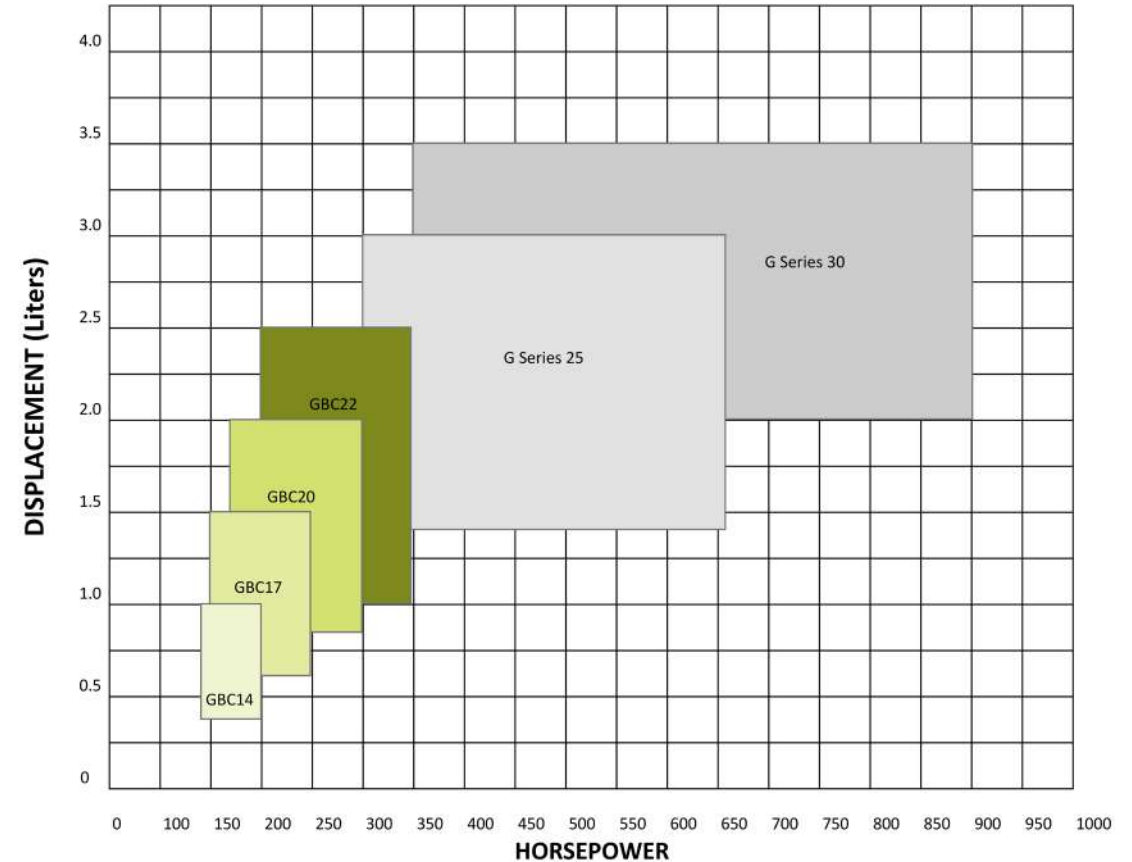
G Boost

GB

GBC: Club line

Features

- Frame sizes => 14, 17, 20, and 22
- 17, 20 and 22 outline interchangeable
- 200 – 350 horsepower capability
- Integrated wastegate assembly with calibrated actuator
- Billet compressor wheel with extended tip design for higher pressure ratio capability
- GTX Gen II compressor aero with modern gasoline turbine wheel aero
- Inconel turbine wheel material
- Ductile iron (SiMo+) turbine housing material
- Latest generation of journal bearing rotor group
- 360-degree thrust bearing
- Oil-cooled center housing
- Boost signal port with installed plug
- Designed to use existing 480009 actuators



GARRETT BOOST | CLUB LINE TURBOCHARGER PART NUMBERS

GBC14-200		Compressor				Turbine					
HP: 140-200	Disp: 0.4L-1.0L	Inducer	Exducer	Trim	A/R	Inducer	Exducer	Trim	A/R	Inlet	Outlet
PN: 896051-5004S		34mm	46mm	55	0.52	39mm	36mm	84	0.45	3 Bolt	4 Bolt
GBC17-250		Compressor				Turbine					
HP: 150-250	Disp: 0.6L-1.5L	Inducer	Exducer	Trim	A/R	Inducer	Exducer	Trim	A/R	Inlet	Outlet
PN: 896052-5003S		36mm	49mm	55	0.52	44mm	40mm	80	0.50	T25	5 Bolt
GBC20-300		Compressor				Turbine					
HP: 170-300	Disp: 0.8L-2.0L	Inducer	Exducer	Trim	A/R	Inducer	Exducer	Trim	A/R	Inlet	Outlet
PN: 896053-5003S		39mm	52mm	57	0.59	47mm	42mm	84	0.55	T25	5 Bolt
GBC22-350		Compressor				Turbine					
HP: 200-350	Disp: 1.0L-2.5L	Inducer	Exducer	Trim	A/R	Inducer	Exducer	Trim	A/R	Inlet	Outlet
PN: 896055-5003S		44mm	56mm	62	0.59	50mm	46mm	84	0.64	T25	5 Bolt

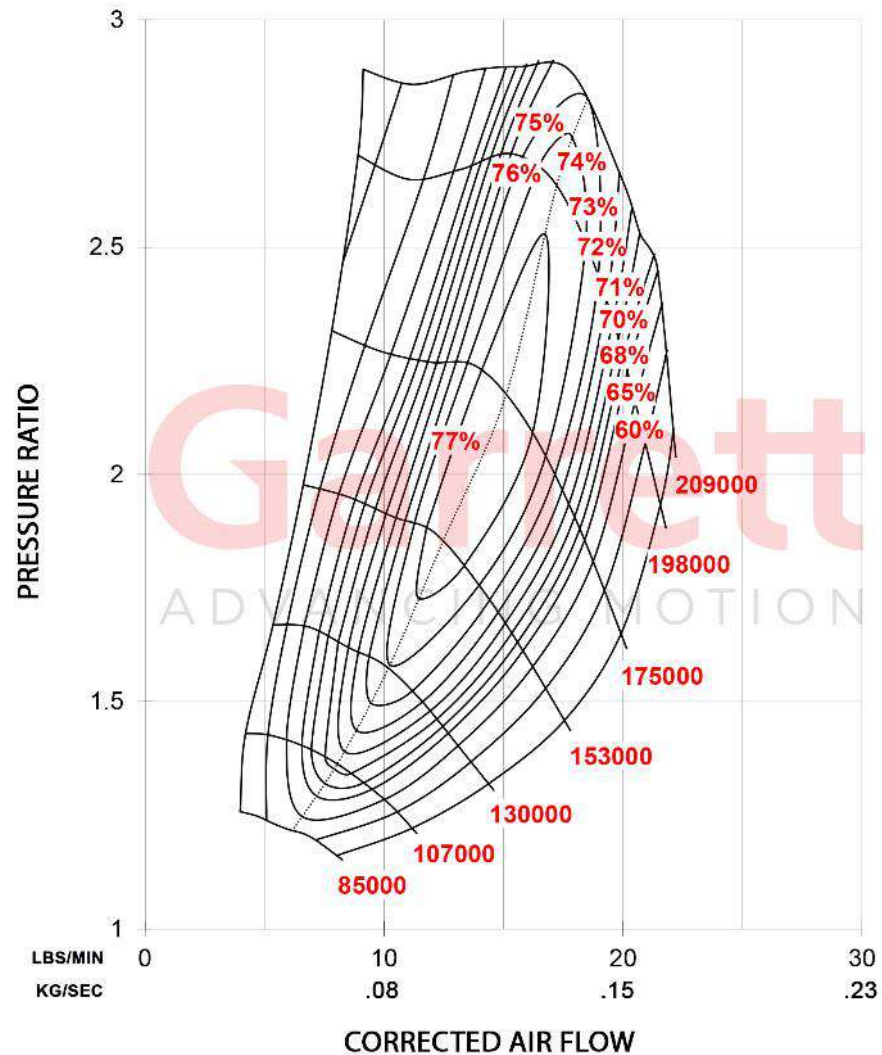
Club Line turbochargers are calibrated with a 0.5 bar actuator. Actuators with higher pressure settings (1.0, 1.5 bar) are available for individual purchase.

Ancillary Part Numbers:

Actuator Part Number	Description
480009-0009	0.5 bar (included)
480009-0006	1.0 bar
480009-0010	1.5 bar

Gasket Part Number	Description
447802-0001	T25 Inlet Gasket
770119-0001	5 Bolt Outlet Gasket
409036-0001	Oil Outlet Gasket
Consumer Sourced	Oil Inlet Gasket

TURBOCHARGER GBC14-200

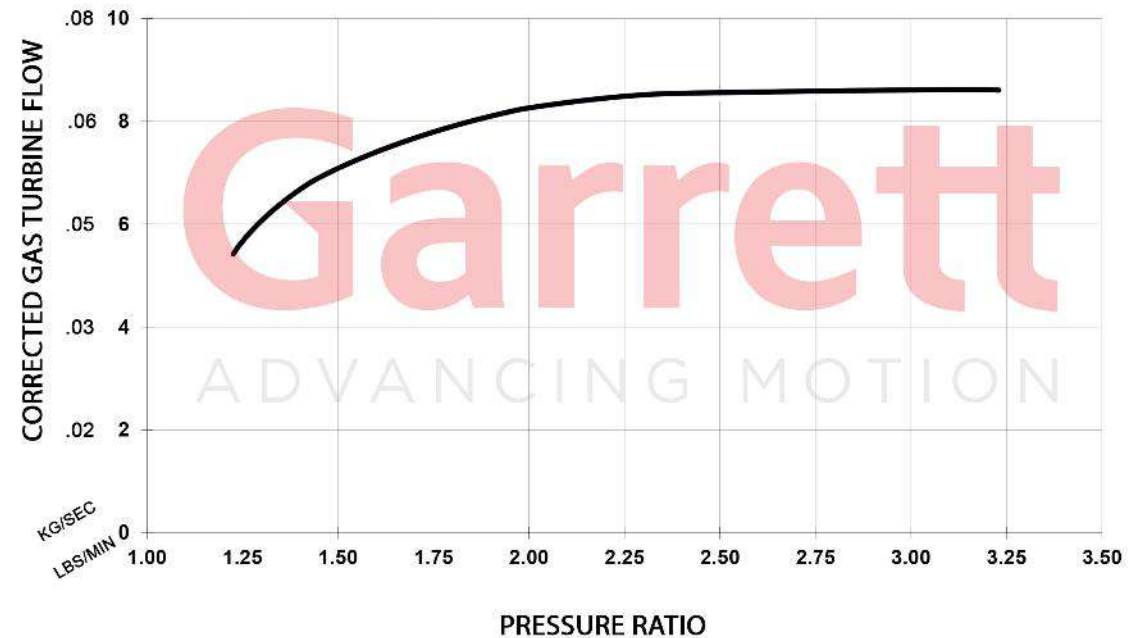


Compressor Specs

- Inducer = 34mm
- Exducer = 46mm
- Trim = 55
- A/R = 0.52
- Flow: 22 lbs/min

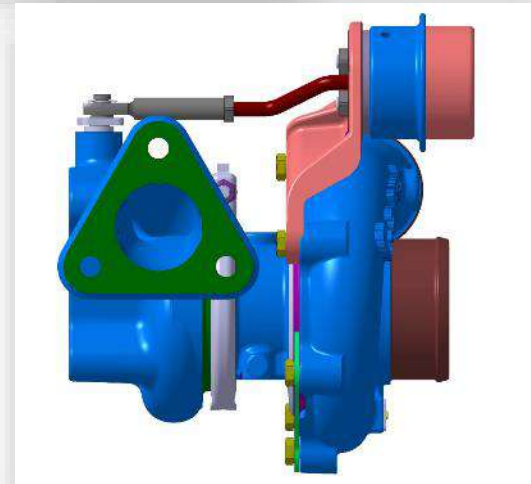
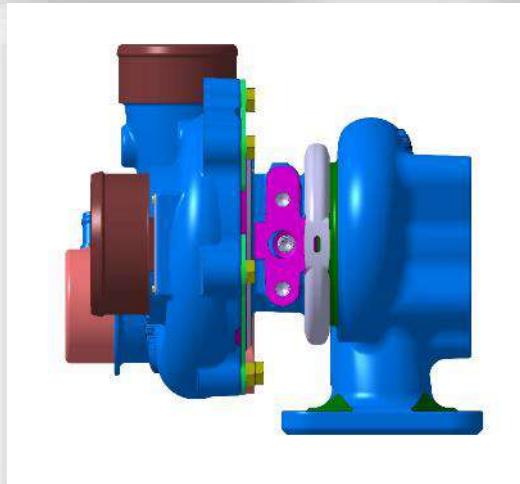
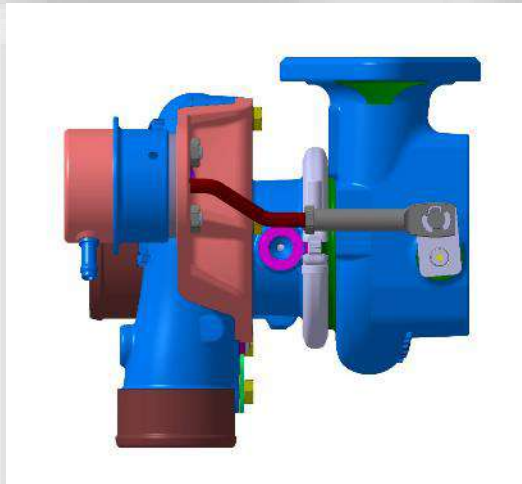
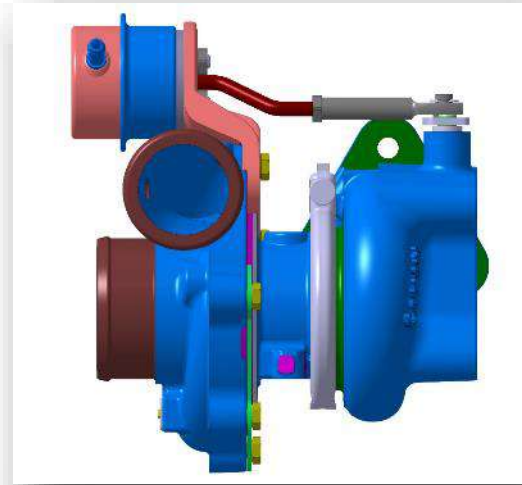
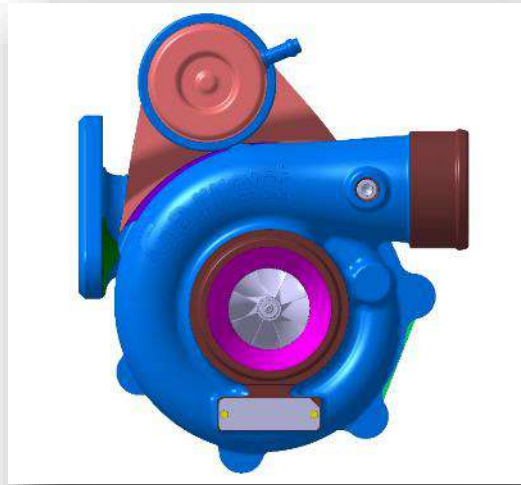
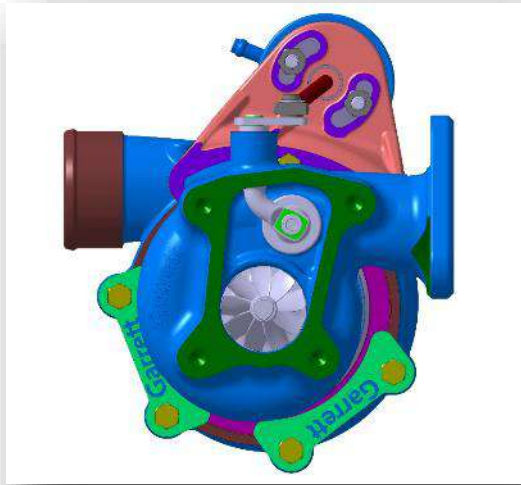
Turbine Specs

- Inducer = 39mm
- Exducer = 36mm
- Trim = 84
- A/R = 0.45
- Flow: 9 lbs/min



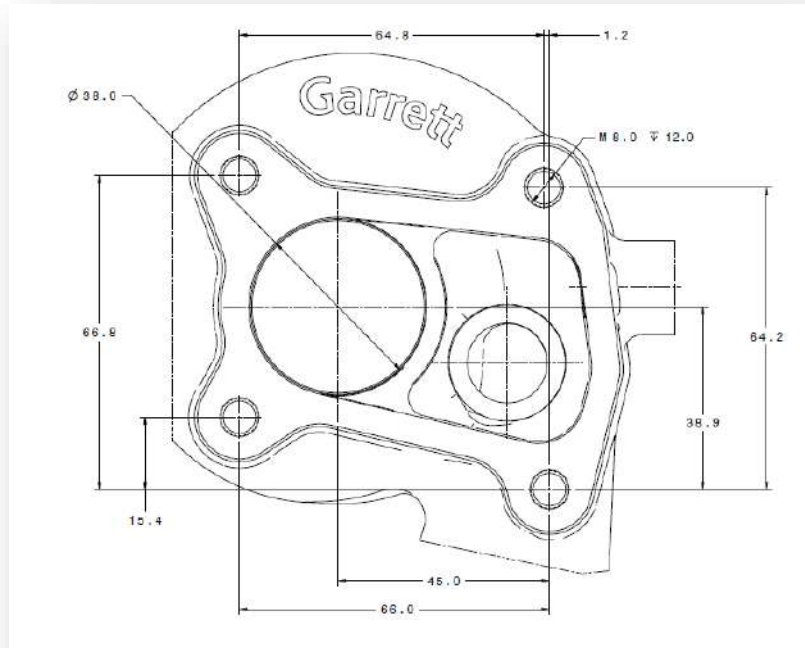
Horsepower 140 – 200 | Displacement 0.4L – 1.0L

TURBOCHARGER GBC14-200

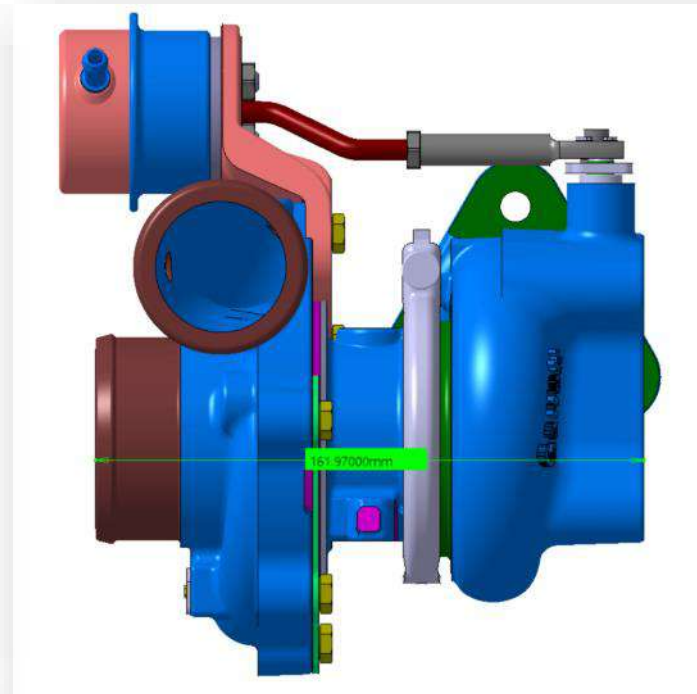


BASIC DIMENSIONS GBC14-200

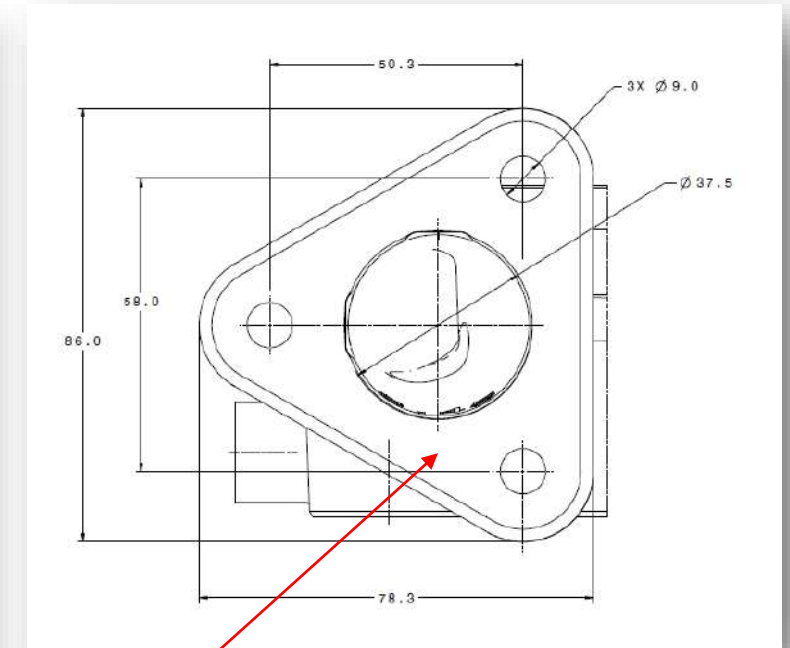
TURBINE OUTLET



OVERALL LENGTH = 162.0 mm



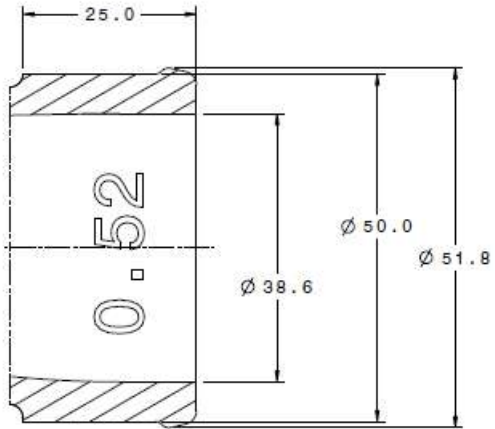
TURBINE INLET



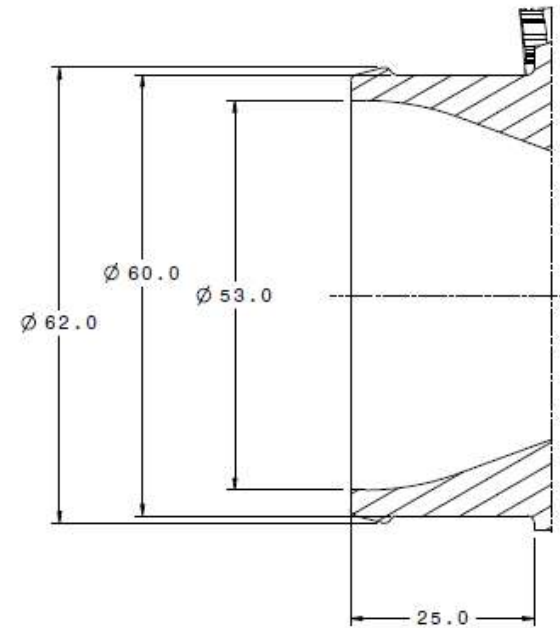
Enough material to machine to V-band flange with OD of 2.24" (57.0mm) for use with 1.75" (44.5mm) tubing

BASIC DIMENSIONS GBC14-200

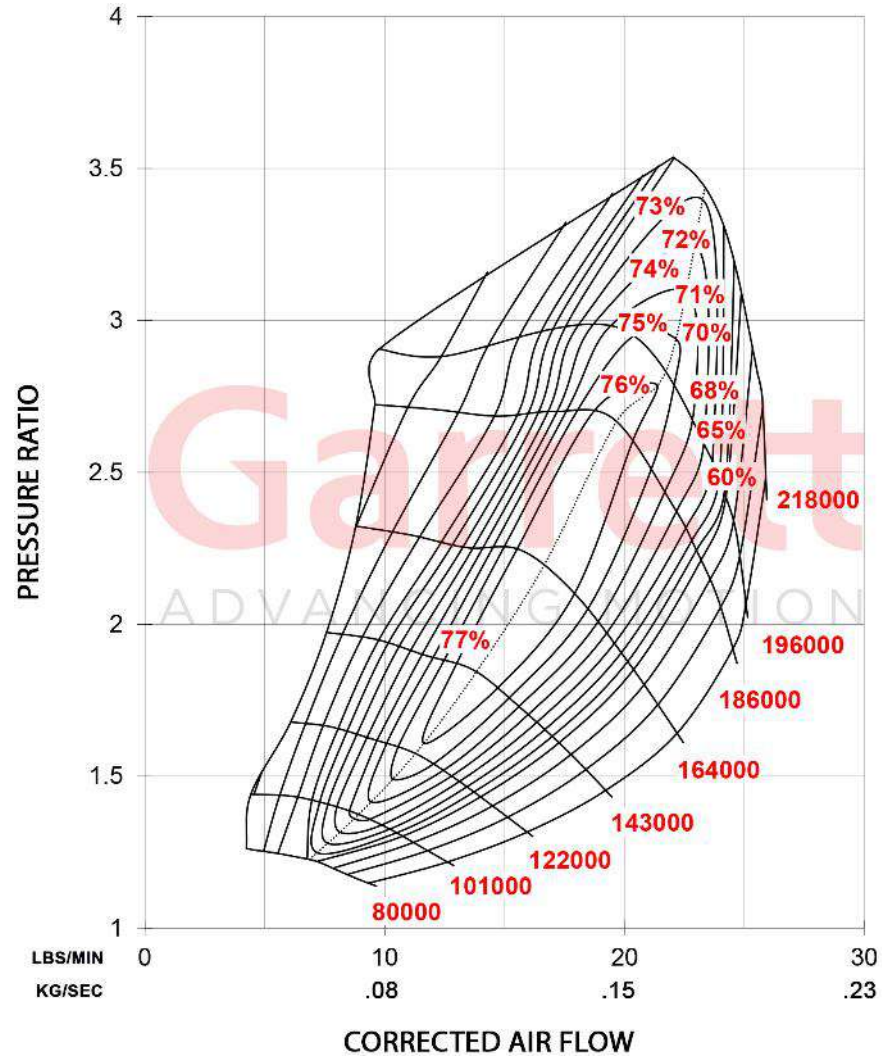
COMPRESSOR OUTLET



COMPRESSOR INLET



TURBOCHARGER GBC17-250

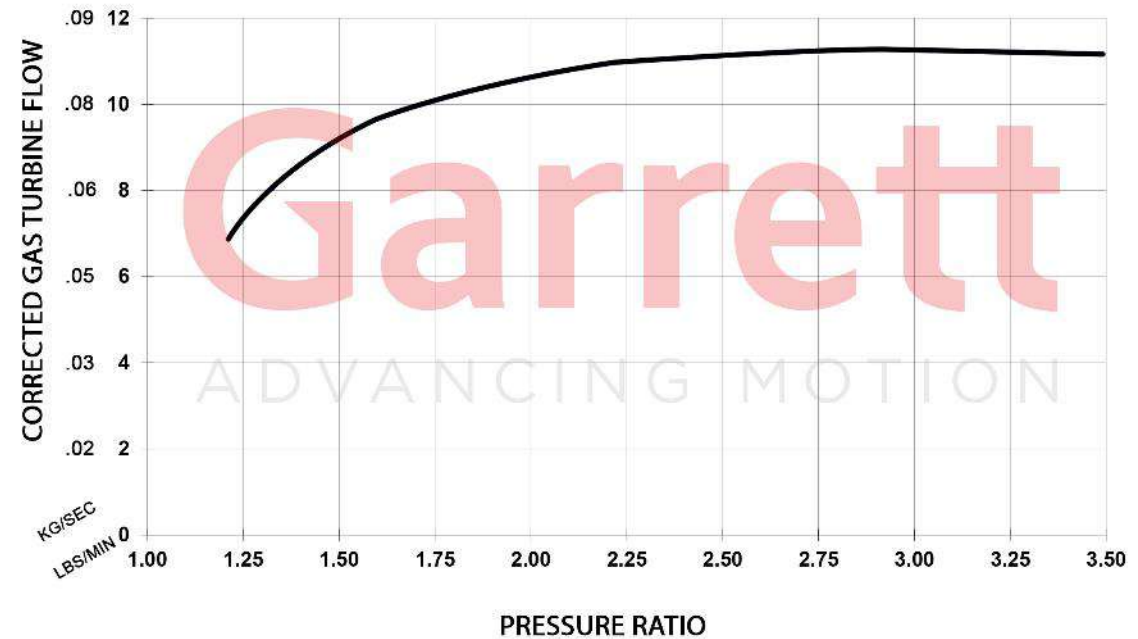


Compressor Specs

- Inducer = 36mm
- Exducer = 49mm
- Trim = 55
- A/R = 0.52
- Flow: 25 lbs/min

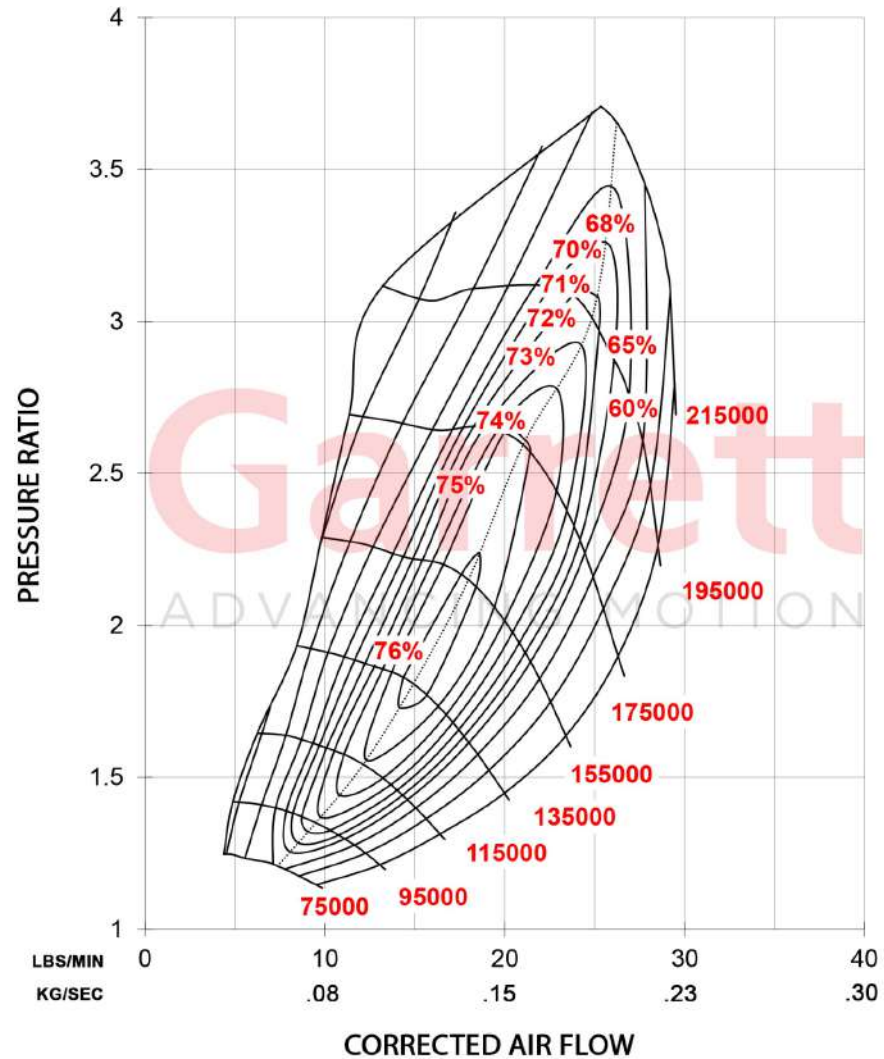
Turbine Specs

- Inducer = 44mm
- Exducer = 40mm
- Trim = 80
- A/R = 0.50
- Flow: 11 lbs/min



Horsepower 150 – 250 | Displacement 0.6L – 1.5L

TURBOCHARGER GBC20-300

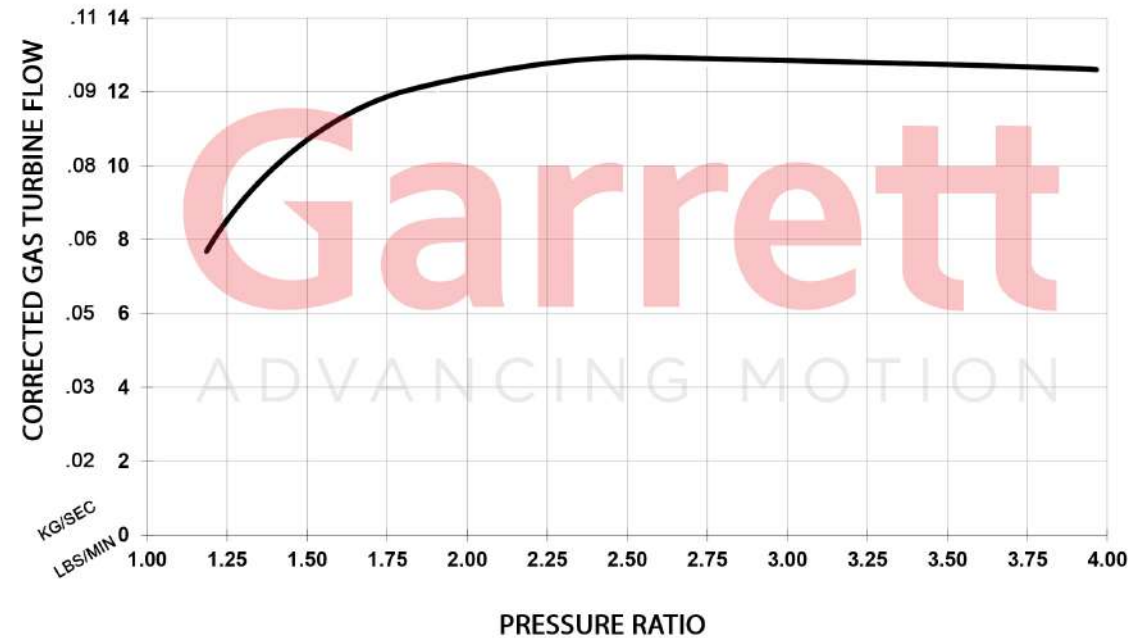


Compressor Specs

- Inducer = 39mm
- Exducer = 52mm
- Trim = 57
- A/R = 0.59
- Flow: 30 lbs/min

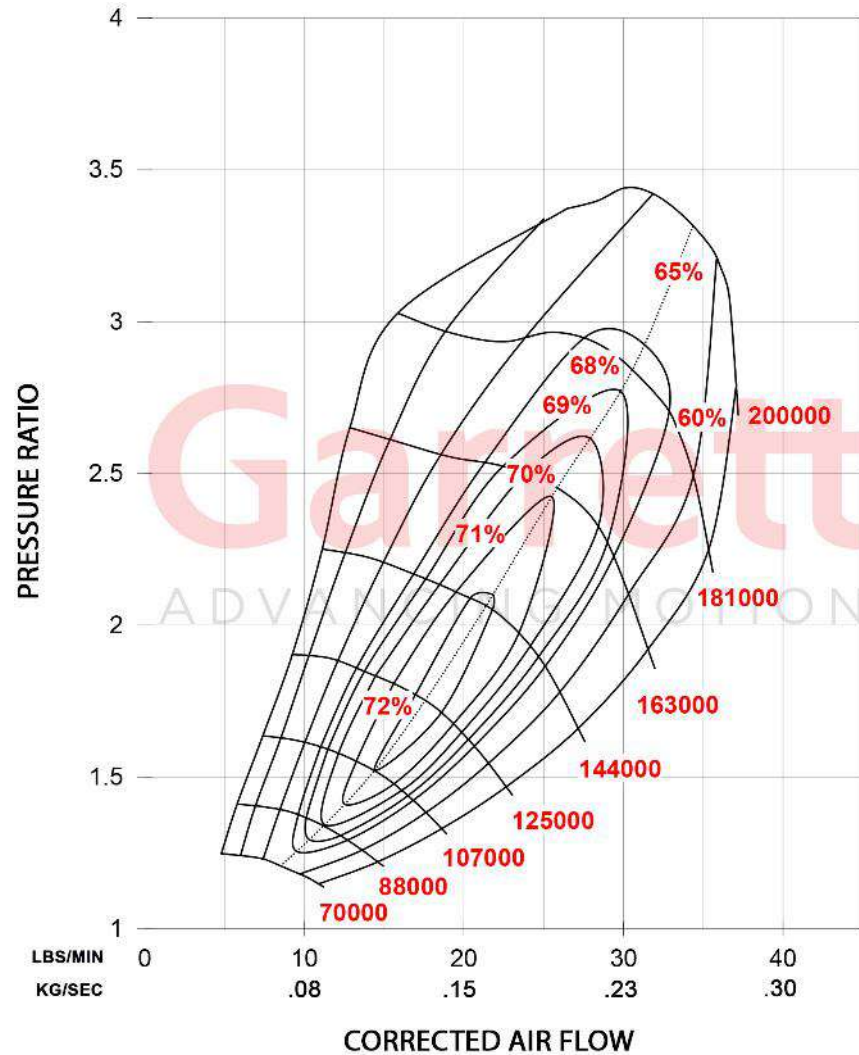
Turbine Specs

- Inducer = 47mm
- Exducer = 42mm
- Trim = 84
- A/R = 0.55
- Flow: 13 lbs/min



Horsepower 170 – 300 | Displacement 0.8L – 2.0L

TURBOCHARGER GBC22-350

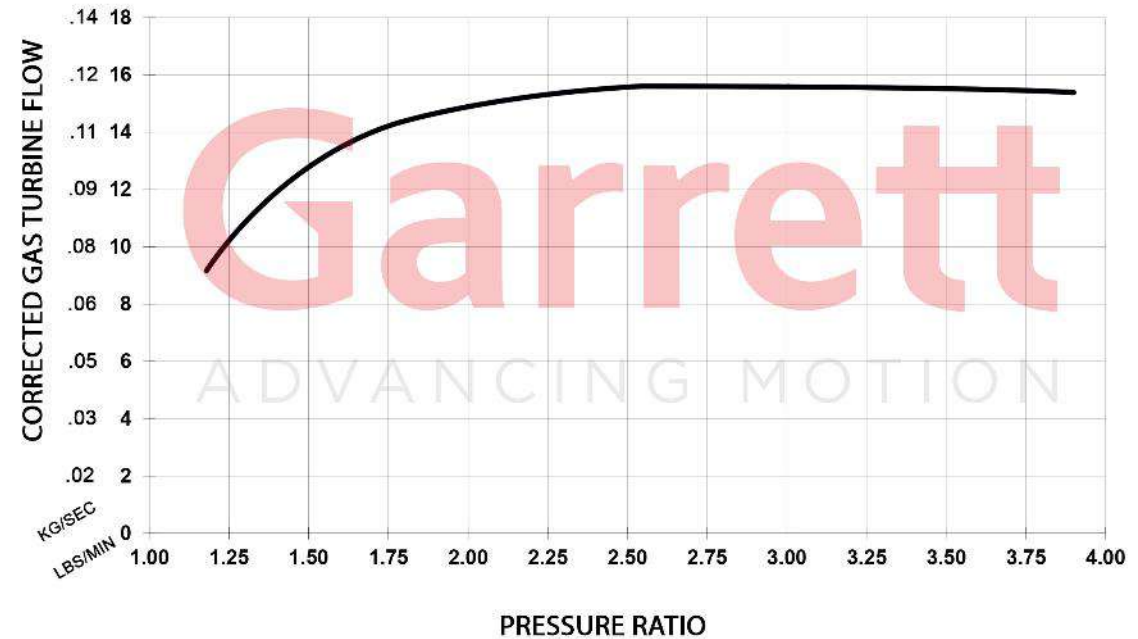


Compressor Specs

- Inducer = 44mm
- Exducer = 56mm
- Trim = 62
- A/R = 0.59
- Flow: 37 lbs/min

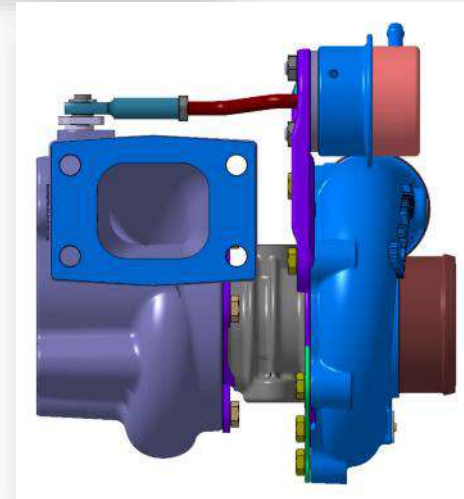
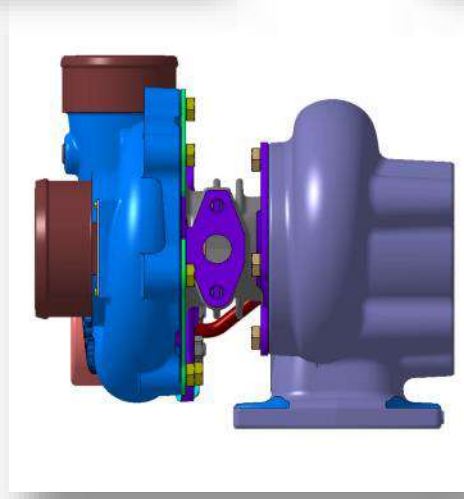
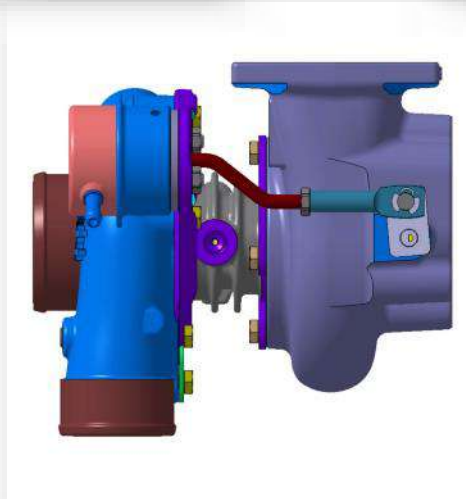
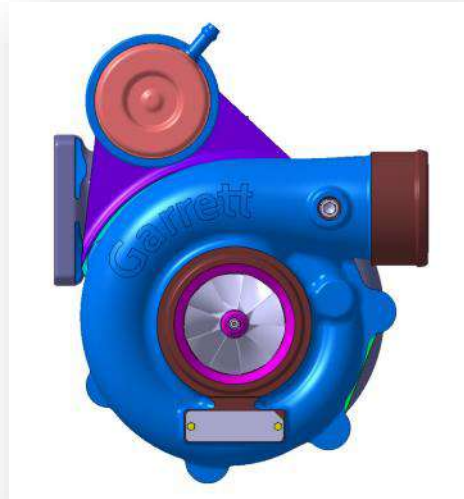
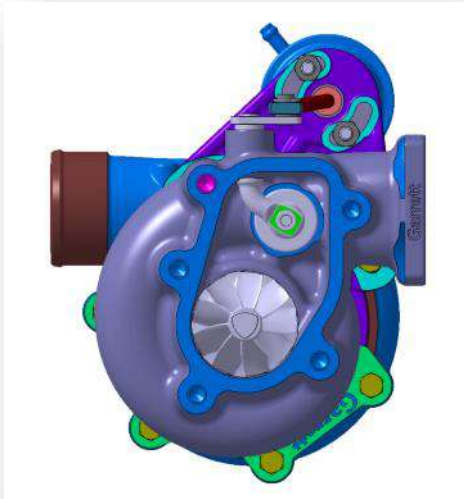
Turbine Specs

- Inducer = 50mm
- Exducer = 46mm
- Trim = 84
- A/R = 0.64
- Flow: 16 lbs/min



Horsepower 200 – 350 | Displacement 1.0L – 2.5L

TURBOCHARGERS GBC17, 20, 22

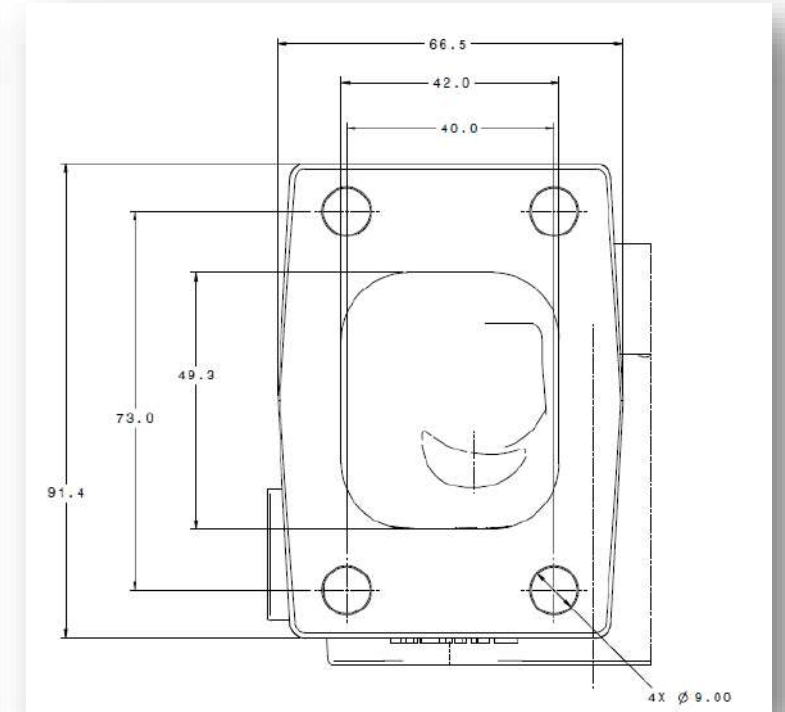
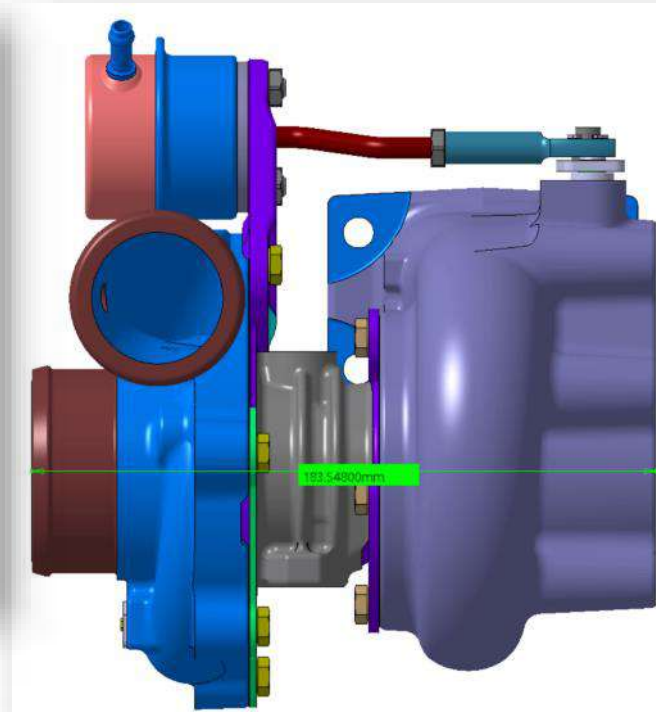
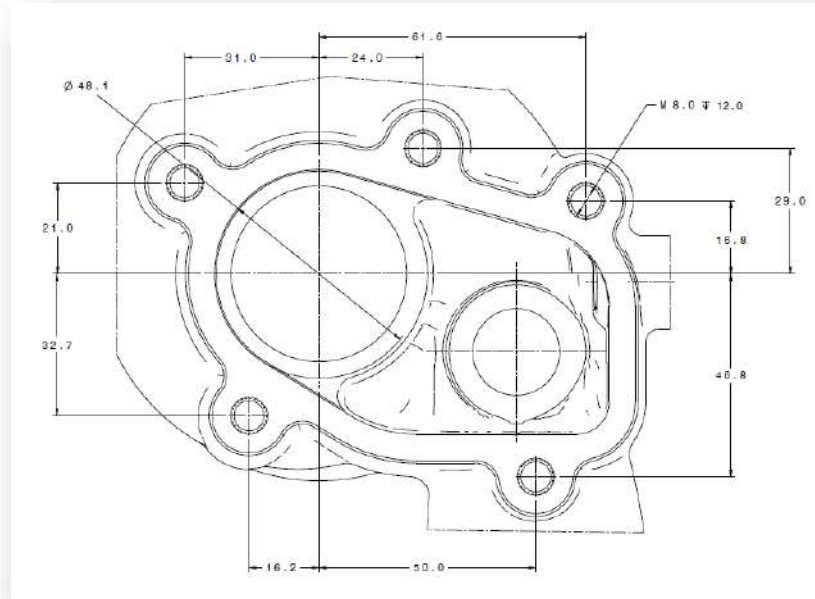


BASIC DIMENSIONS GBC17, 20, 22

TURBINE OUTLET

OVERALL LENGTH = 183.5 mm

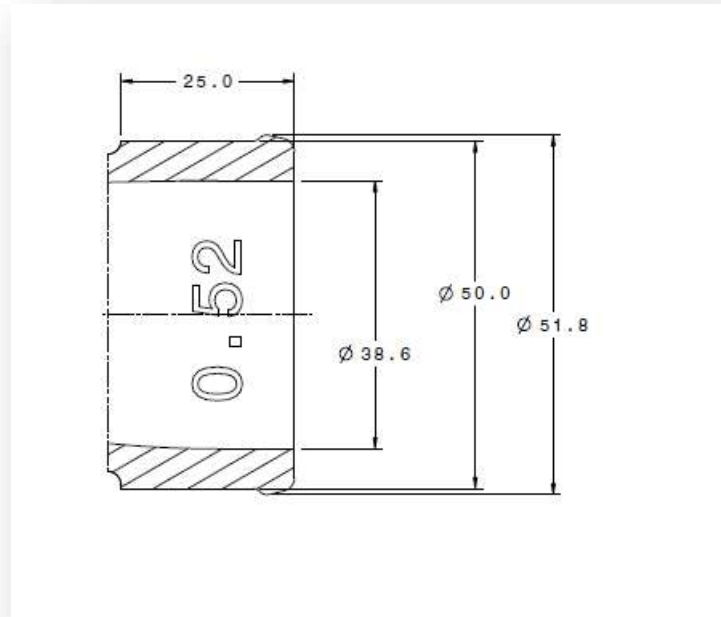
TURBINE INLET



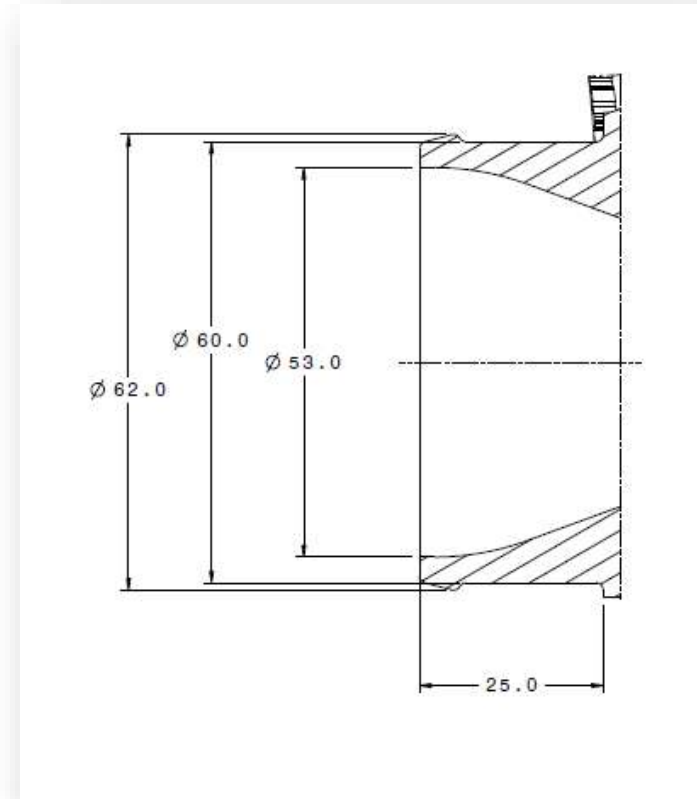
Same Flanges as GT25/28

BASIC DIMENSIONS GBC17, 20, 22

COMPRESSOR OUTLET



COMPRESSOR INLET



Same Flanges as GT22

TARGET APPLICATIONS - Powersports 0.6 – 1.2L



Application Coverage

- Recreational
 - ATV
 - Motorcycle
 - Snowmobile
 - Watercraft

TARGET APPLICATIONS – Passenger Car 1.0 – 2.5L

Application Coverage

- Small Engine Vehicle
 - Street Performance
 - Budget Racing / Drifting



Competitor Product Summary

	0.4 – 1.0L 140 - 200hp	0.6 – 1.5L 150 - 250hp	0.8 – 2.0L 170 - 300hp	1.0 – 2.5L 200 - 350hp
Garrett	GBC14-200	GBC17-250	GBC20-300	GBC22-350
BWTS		S1BG – 34mm	S1BG – 39mm	S1BG – 43mm
Turbonetics	TNX-10			TNX-25
Modified OE Turbos (Hybrid)	Already Turbocharged Applications - Install Larger CW or CW & TW			
OE Turbo From Another App	Boosted & Non-Boosted Applications			
Value Brand Turbos	Turbos From Online Sites Like eBay			

Club Line compared to BorgWarner S1BG

- Billet compressor wheel with extended tip aerodynamic design
- 20% higher compressor flow
- Aero maps available for all frame sizes to assist in turbocharger selection
- Actuators with higher pressure settings available
- Microsize turbo (GBC14) to meet requirements of the smallest engines

Club Line compared to Turbonetics TNX

- Billet compressor wheel with extended tip aerodynamic design
- Aero maps available to assist in turbocharger selection
- Three outline interchangeable frame sizes to enable different stage kits

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