

BRIEF INFORMATION

Waste Gate Actuator

→ Integrated electronics consisting of CIPOS®
(Contactless Inductive Position Sensor), motor control and error diagnosis
→ Spur gear system adapted to the exhaust gas pressure characteristics
→ High measuring precision

PRODUCT FEATURES

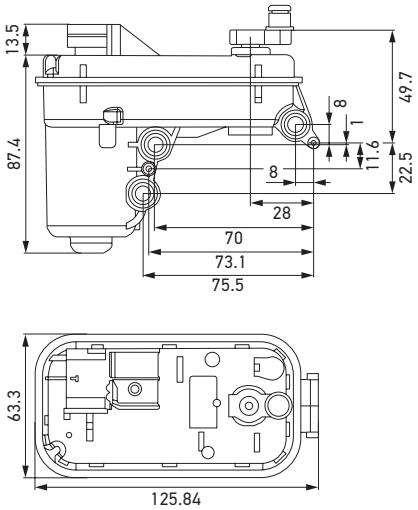
Application
The Waste Gate Actuator was originally developed for wastegate valve used in turbo charged gasoline engines. Applications include turbochargers used with a downsized engine intended for improved fuel efficiency.

Design and function
The main function of the WGA is controlling of a valve that regulates the flow of exhaust gases to the turbine system providing reliable and precise positioning. In other words it regulates the boost pressure to create a wider power band, to eliminate turbo lag and also to protect the engine and the turbocharger. It is especially insensitive to magnetic fields and the high level of temperature stability that are the characteristic qualities of the CIPOS® technology used in the conjunction with the WGA. The position is measured inductively using a non-contact and consequently wear-free method, thus guaranteeing high measuring precision throughout the entire lifetime.

TECHNICAL DETAILS

Technical data	
Rated voltage	13.5 V
Operating voltage	10.5 V to 16 V
Operating temperature	-40 °C to +160 °C
Temperature hot soak	140 °C to 160 °C
Nominal angle	108 ± 1.5°
Nominal speed (@ 20 Ncm)	> 0.45°/ ms
Max. current consumption	< 11 A
Min. torque (U_p, 0.1°/ ms)	≥ 250 Ncm
Sensor resolution	0.039°
Position tolerance over full angle	± 2 %
Protection class	IP 6K9K

Dimensional sketch



PROGRAM OVERVIEW

Product picture	Voltage range	Operating angle	Torque	Part number	Packaging unit
	10.5 – 16 V	108 ± 1.5°	≥ 250 Ncm	**On request**	1

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