

MOTORTECH Throttle Bodies

For WAUKESHA® VHP G/ GSI/ LT

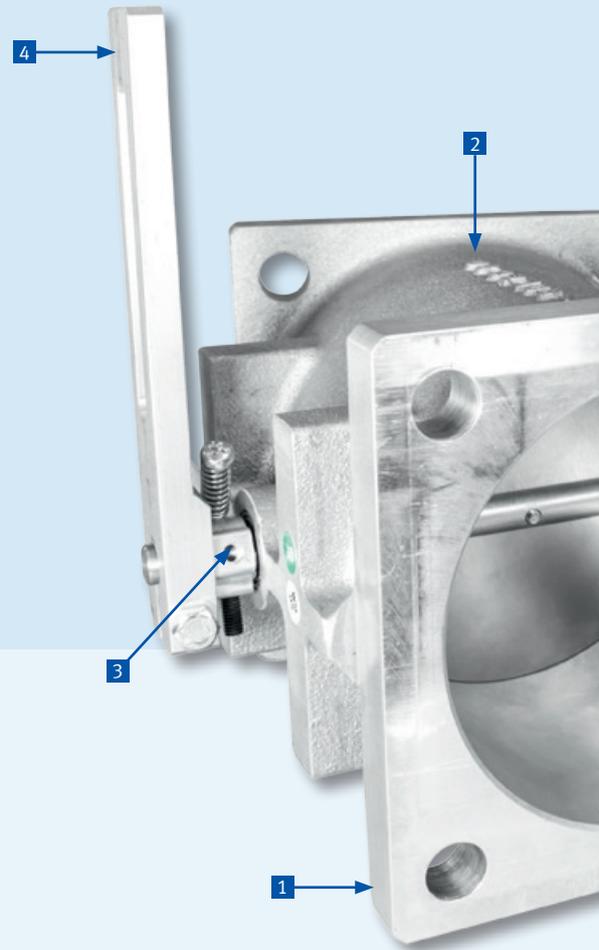
6 & 12 Cylinder Engines



MOTORTECH Throttle Bodies For WAUKESHA® VHP G/ GSI/ LT 6 & 12 Cylinder Engines

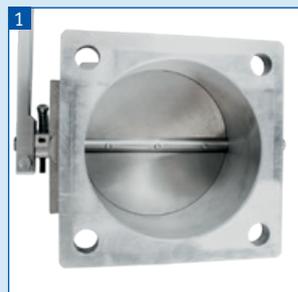
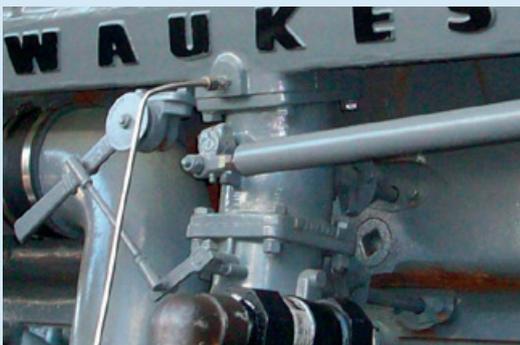
Based on its proven design, MOTORTECH offers a special throttle body series for WAUKESHA® VHP series in-line and V-engines. Designed as a replacement and plug-and-play solution, the throttle bodies perfectly fit the position of the original part below the intake manifold.

In addition and as an upgrade to the commonly used version, MOTORTECH completes the series with the ITB throttle body design. The integrated stepper motor is extremely precisely actuated by the VariStep3 stepper motor driver and eliminates the use of an external actuator. Both, ITB throttle body and VariStep3 stepper motor driver, operate with the standard WOODWARD® 2301D speed governor or with the MOTORTECH SC100 speed controller.



Properties & Features

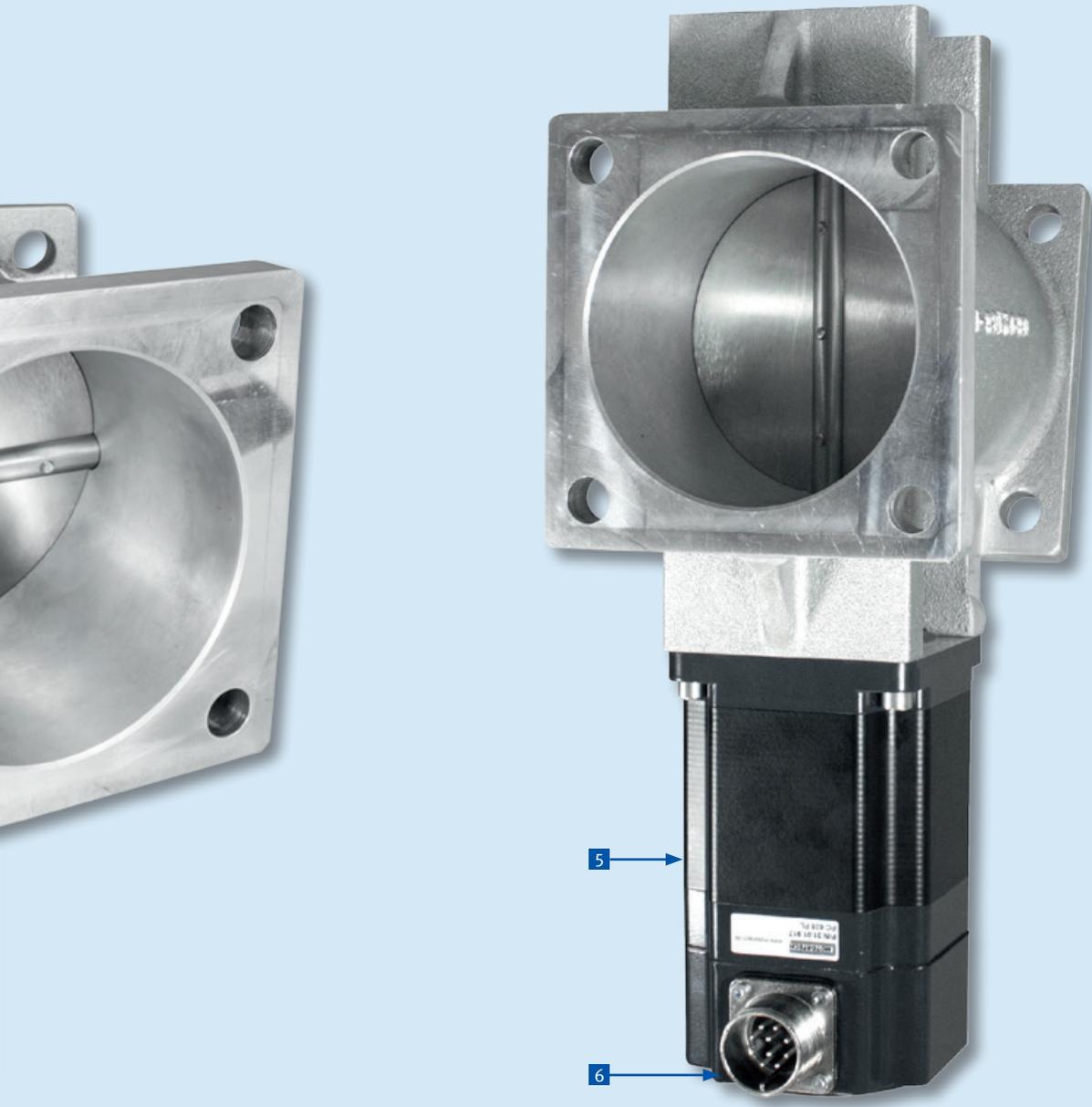
- Same design and shape for easy replacement of original part
- Reinforced shaft and butterfly valve made of stainless for high durability even when backfiring has occurred
- Use of ball bearings instead of plain bearings
- Including end stop and idle speed adjustment
- Lever for connection to the external actuator or integrated stepper motor
- High temperature resistant shaft seals
- Usable with natural and special gases
- Maintenance free product



Same flange sizes as original part



Identical design and shape for easy assembly



3 End stop with adjustment screw for idle speed



4 Lever for connection to the external actuator



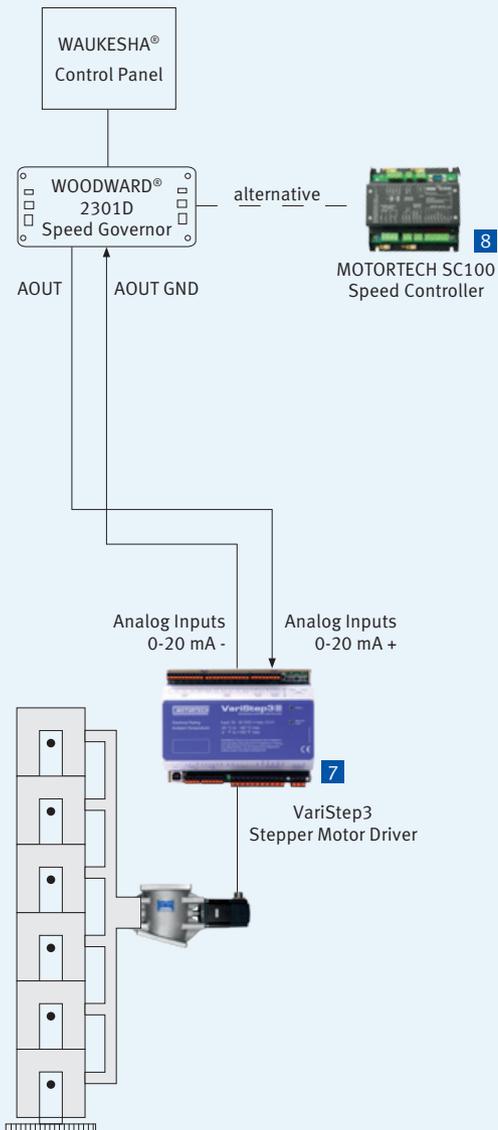
5 Integrated stepper motor



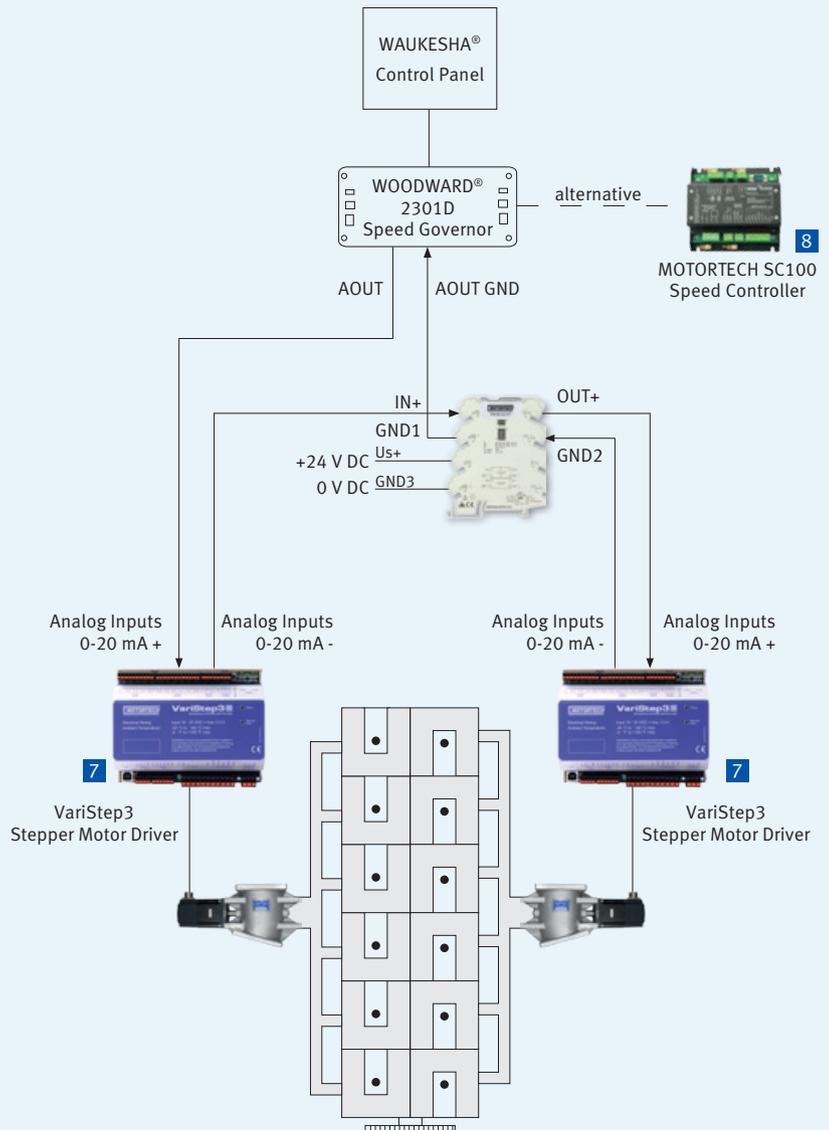
6 MIL style connector for connection to VariStep3 stepper motor driver

ITB – Integrated Throttle Body System Overview

VHP 6 Cylinder In-Line Engines



VHP 12 Cylinder V-Engines



7 VariStep3 Stepper Motor Driver

The stepper motor driver control guarantees the ideal control of the throttle bodies with integrated stepper motor and the various types of MOTORTECH VariFuel2 air/gas mixers.

- Precise adjustment due to microstep operation
- Integrated CANopen and Modbus RTU interface
- Easy access to connectors and switches
- Configuration via MICT software
- Protection class IP 20

8 SC100 Speed Controller

The SC100 guarantees precise and fast speed control of industrial gas engines in variable load applications (island operation) and precise load control in network parallel operation.

- Analog output signals 0-10 V / 0-20 mA signal for stepper motor driver
- Actuator position feedback utilisation
- Different settings for island and network parallel operation to suit the required control parameters
- Protection class IP 20

Ordering Information – Throttle Bodies

P/N	Description	Equivalent to
30.41.151-106-VHP-6	Throttle body for WAUKESHA® VHP 6 cylinder in-line engines F2895G/GSI, F3521G/GSI	E204072
30.41.151-106-VHP-12	Throttle body for WAUKESHA® VHP 12 cylinder V-engines L5108G/GSI, L5790G/GSI, L5774LT, L5794GSI, L7042G/GSI, L7044GSI, fits left and right bank	E204072, A204072, E204072A, A204072A, F204072A

Ordering Information – ITB Throttle Bodies & Accessories

P/N	Description	Quantity	Equivalent to
75.30.148-6	ITB throttle body conversion kit for WAUKESHA® VHP 6 cylinder in-line engines F2895G/GSI, F3521G/GSI Contains: – ITB throttle body P/N 30.43.151-106-VHP-6 – Stepper motor harness P/N 31.01.942 – VariStep3 stepper motor driver P/N 31.01.960	– 1 pc. – 1 pc. – 1 pc.	– E204072
alternative 75.30.149-6	ITB throttle body conversion kit for WAUKESHA® VHP 6 cylinder in-line engines F2895G/GSI, F3521G/GSI Contains: – ITB throttle body P/N 30.43.151-106-VHP-6 – Stepper motor harness P/N 31.01.942 – VariStep3 stepper motor driver P/N 31.01.960 Stepper motor driver built into stainless steel enclosure	– 1 pc. – 1 pc. – 1 pc.	– E204072
75.30.148-12	ITB throttle body conversion kit for WAUKESHA® VHP 12 cylinder V-engines L5108G/GSI, L5790G/GSI, L5774LT, L5794GSI, L7042G/GSI, L7044GSI Contains: – ITB throttle body P/N 30.43.151-106-VHP-12, fits left and right bank – Stepper motor harness P/N 31.01.942 – VariStep3 stepper motor driver P/N 31.01.960 – Isolation amplifier P/N 63.02.017	– 2 pc. – 2 pc. – 2 pc. – 1 pc.	– E204072, A204072, E204072A, A204072A, F204072A
alternative 75.30.149-12	ITB throttle body conversion kit for WAUKESHA® VHP 12 cylinder V-engines L5108G/GSI, L5790G/GSI, L5774LT, L5794GSI, L7042G/GSI, L7044GSI Contains: – ITB throttle body P/N 30.43.151-106-VHP-12, fits left and right bank – Stepper motor harness P/N 31.01.942 – VariStep3 stepper motor driver P/N 31.01.960 – Isolation amplifier P/N 63.02.017 Stepper motor drivers and isolation amplifier pre wired and built into stainless steel enclosure	– 2 pc. – 2 pc. – 2 pc. – 1 pc.	– E204072, A204072, E204072A, A204072A, F204072A
optional 63.50.114	SC100 speed controller to replace WOODWARD® 2301D speed governor	– 1 pc. per kit	

We aim at your problems!



Regardless of which part of the globe we need to travel to.

We know that the stakes are high, and therefore we outperform the others. That is because we want everything to run smoothly at your site, everywhere and at any time.



This is entirely in keeping up with our motto:

Let us drop everything and work on your problem!



Distribution partner for DENSO spark plugs



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