

# Integrated Throttles Industrial Design



ITB Throttle with intergrated stepper motor

VariStep3 Stepper Motor Driver

## Designed and built for use with Industrial Gas Engines.

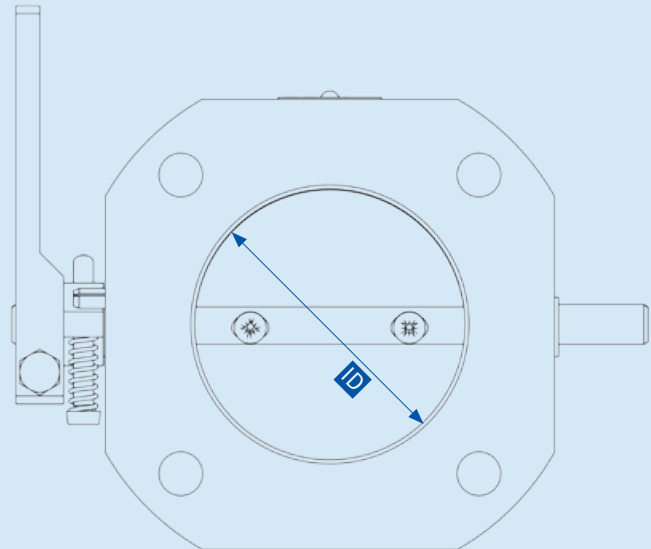
- For use with Natural gas, biogas (minor H<sub>2</sub>S content), mine gas, etc.
- Available as Series 50, 100, 140, 200
- Butterfly diameter 42–115 mm (1.65–4.53 inch)
- Rigid design
- High resolution stepper motor
- Controlled by MOTORTECH VariStep3 stepper motor driver

### Technical Data – The throttles have the following technical characteristics

Feature	Value
Maximum rotation angle of the throttle	80°
Chemical resistance	Water, oil, gaseous fuels
Maximum pressure	6 bar (87 psi)
Maximum temperature of media flowing through	125 °C (257°F) standard version, 200 °C (392 °F) HT version
Connection stepper motor	10-pin military style connector
Permissible vibrations	5g at 20 Hz to 2000 Hz
Climatic Environmental Conditions	-20 °C to +85°C (-4°F to +185°F), max. 95% humidity without condensation

### Weight – The weight depends on the type, series and diameter of the butterfly

Series	Inner Diameter (ID)	Type	Weight
50 series	42 mm (1.65")	Standard	1.7 kg (3.75lbs)
100 series	60 mm (2.36")	Standard	2.6 kg (5.73lbs)
	68 mm (2.68")	Standard	2.5 kg (5.51 lbs)
140 series	75 mm (2.95")	Standard	3.8 kg (8.38 lbs)
	80 mm (3.15")	Standard	3.75 kg (8.27 lbs)
	85 mm (3.35")	Standard	3.7 kg (8.16 lbs)
150 series	90 mm (3.54")	Standard	6.3 kg (13.89 lbs)
	100 mm (3.94")	Standard	6.2 kg (13.67 lbs)
200 series	110 mm (4.33")	Standard	8.2 kg (18.08 lbs)
	115 mm (4.53")	Standard	7.9 kg (17.42lbs)



**NOTE: Specify high temperature model if temperature exceeds 125 °C (257 °F).**

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