

ITB-DC – Throttle with Integrated Stepper Motor Driver

P/N 30.51.152-D

Variations

- Standard diameters D of the throttle (*see drawing*) 100 mm (3.94")

Dimensions

- Length/width of mounting flange 150 mm (5.91")
- Hole spacing on the mounting flange 110 mm (4.33")
- Height of mounting flange 94 mm (3.70")
- Length including stepper motor and controller 339 mm (13.35")
- Width including stepper motor and controller 136 mm (5.35")

Connections

- Stepper motor 24-pole military style connector

Weight

- P/N 30.51.152-100 4.0 kg (8.82 lbs)

Mechanical Data

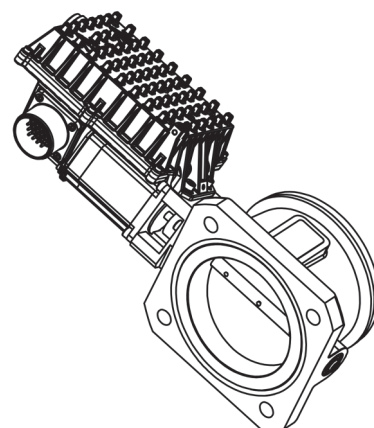
- Maximum rotation angle of the throttle body 80°
- Chemical resistance Water, oil, gaseous fuels
- Maximum absolute pressure 4.5 bar (65 psi)
- Maximum temperature of media flowing through +80 °C (+176 °F)
- Permissible vibrations 5 Hz to 25 Hz: constant vibration displacement of 1.6 mm
25 Hz to 100 Hz: constant acceleration of 4 g
100 Hz to 1,000 Hz: constant acceleration of 2.8 g

Climatic Environmental Conditions

- Permissible temperature range -40 °C to +85 °C (-40 °F to +185 °F)
- Maximum relative humidity Max. 95 % humidity without condensation up to max. 4,000 m above sea level

Electrical Data

- Power consumption Max. 72 W
- Power supply Nominal voltage: 24 V DC
Operating voltage: 16.8 V DC to 32 V DC
- Required current Max. 4 A



**Inputs and Outputs**

- Binary input (Reset) Max. 32 V DC; min. 5 mA
- Binary output (Error) Max. 32 V DC; max. 50 mA
normally closed or normally open
contact (configurable)
- Analog current input 0 mA to 20 mA, configurable
- Analog current output 0 mA to 20 mA, configurable

Stepper motor

- Step width < 0.06°
- Speed (when opening from 10% to 90%) 35 ms
- Holding torque 1.7 Nm (1.25 lb-ft)

Communication

- Interfaces USB, CAN bus

Overview Drawings

152 series (P/N 30.51.152-D)

The 152 series is only available with gasket (O-ring 116 mm x 3 mm [4.57" x 0.12"]).

