### **HT-ITB Throttle Actuator**

# **ITB Series**

#### **Features and Benefits**

- Large selection of various diameter
- 100% sealed
- For Natural Aspirated or Turbocharged Engines up to approx. 550kW
- Integrated Design
- Sealing through O-Ring Design
- Special Diameter available
- CAN Controlled vie HT-Governor series
- High Temperature flap available



# **HT-ITB** integrated throttle actuator

Huegli Tech presents the Integrated throttle actuator for gas engines. The throttle are made out of high quality aluminium with sealed shaft ends for high pressure turbo charged engines.

The ITB throttle bodies are driven by Huegli Tech's well-proven Torque Motor with integrated feedback. The mounting adaptors contain a lever that usefully provides a direct visual indication of the throttle flap position. The throttle has sealed bearings and high temperature 0-rings to prevent leakage.



# **HT-ITB Throttle Actuator**

#### HT-ITB (Integral Throttle Body) Series

**ITB Series** 

- Various Diameter available
- Integrated Design
- Manual Lever for indication
- Quality sealed ball bearing
- High pressure sealing zero leakage
- Sealing through O-Ring Design for mounting



#### Diameter Selection for HT-ITB:



Diameter	Housing Size	Calculated Pressure	Airvolume m3/h	Airmass kg	KW
		drop / mbar			
30 mm	A & B	20	180	205	26-36
35 mm	A & B	20	200	242	36-45
40 mm	A & B	20	266	322	46-59
45 mm	В	20	345	417	60-76
50 mm	В	20	442	535	77-98
55 mm	В	20	565	683	99-125
60 mm	В	20	730	883	126-140
68 mm	В	20	975	1180	140-160
60-70 mm	С	20	730-1025	883-1240	140-200
75-85 mm	D	20	1176-1470	1422-1778	200-390
90 - 100 mm	E	20	1648-1922	1994-2325	390-450
100-115 mm	F	20	1922-2355	2325-2849	450-550

The above values are based on empirical calculation and can vary due to various parameters, engine design and gas medium

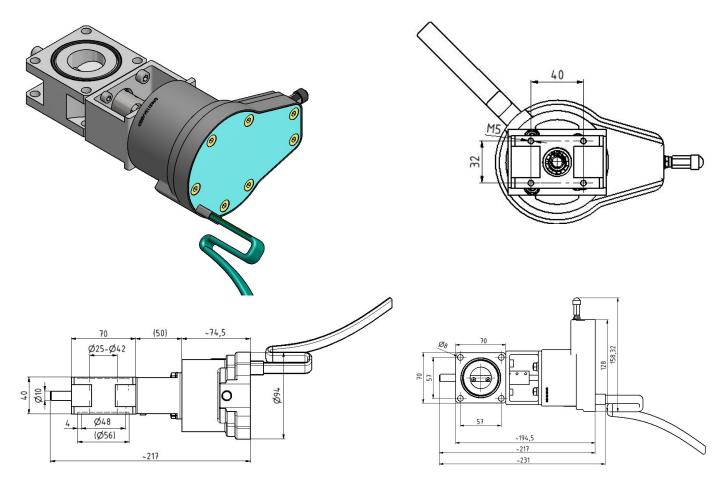


# **HT-MiniMix Gas Engine Mixer**

ITB Series

#### **Dimensions:**

### A-Size Housing:



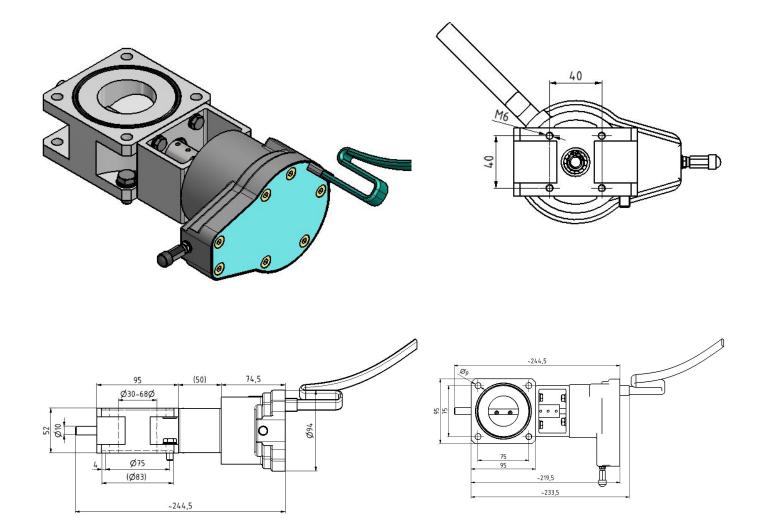


# **HT-MiniMix Gas Engine Mixer**

ITB Series

#### **Dimensions:**

### B-Size Housing:

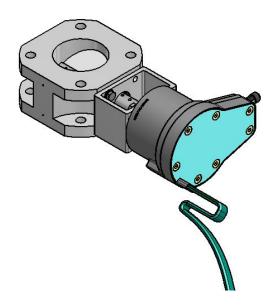


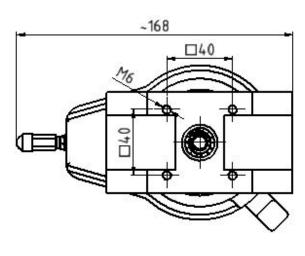


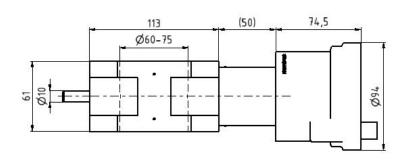
ITB Series

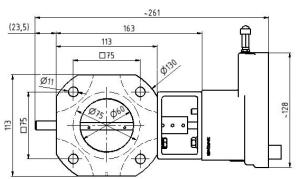
#### Dimensions:

### C-Size Housing:





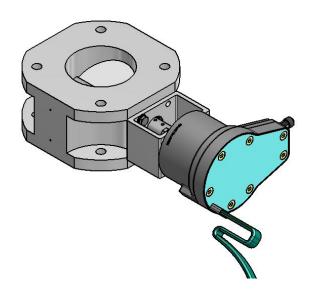


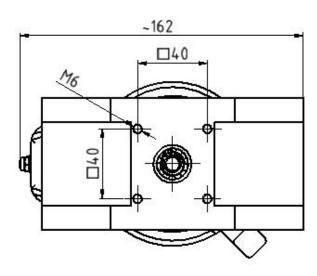


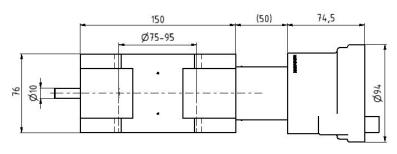


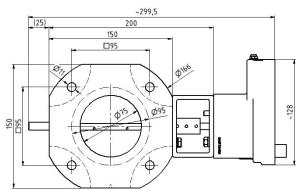
### Dimensions:

## D-Size Housing:





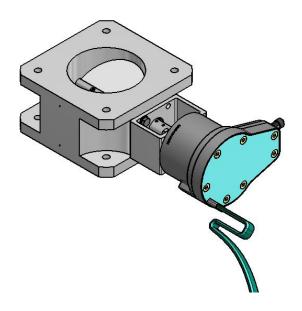


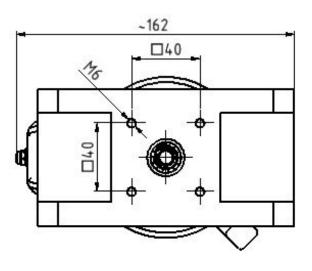


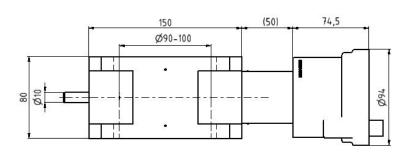


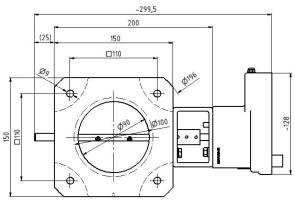
### Dimensions:

# E-Size Housing:





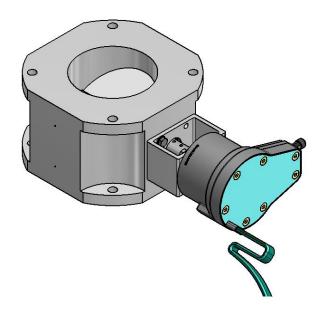


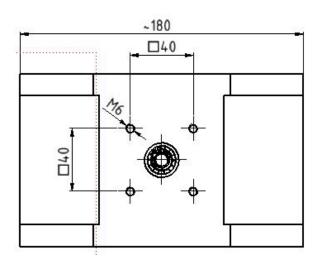


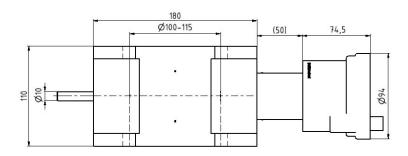


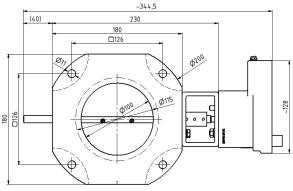
#### Dimensions:

# F-Size Housing:











#### Order Number for ITB Series:

System	Housing Size	Diameter	HT-TM-2200 Actuator	0-Ring	Mating Harness for ITB
HT-ITB-30-A	А	30 mm	Included	Included	Not Included, see below
HT-ITB-35-A	А	35 mm	Included	Included	Not Included, see below
HT-ITB-40-A	А	40 mm	Included	Included	Not Included, see below
HT-ITB-42-A	А	42 mm	Included	Included	Not Included, see below
HT-ITB-45-B	В	45 mm	Included	Included	Not Included, see below
HT-ITB-50-B	В	50 mm	Included	Included	Not Included, see below
HT-ITB-55-B	В	55 mm	Included	Included	Not Included, see below
HT-ITB-60-B	В	60 mm	Included	Included	Not Included, see below
HT-ITB-65-B	В	65 mm	Included	Included	Not Included, see below
HT-ITB-68-B	В	68 mm	Included	Included	Not Included, see below
HT-ITB-60-C	С	60 mm	Included	NA	Not Included, see below
HT-ITB-65-C	С	65 mm	Included	NA	Not Included, see below
HT-ITB-70-C	С	70 mm	Included	NA	Not Included, see below
HT-ITB-75-D	D	75 mm	Included	NA	Not Included, see below
HT-ITB-80-D	D	80 mm	Included	NA	Not Included, see below
HT-ITB-85-D	D	85 mm	Included	NA	Not Included, see below
HT-ITB-90-E	E	90 mm	Included	NA	Not Included, see below
HT-ITB-95-E	E	95 mm	Included	NA	Not Included, see below
HT-ITB-100-E	E	100 mm	Included	NA	Not Included, see below
HT-ITB-100-F	F	100 mm	Included	NA	Not Included, see below
HT-ITB-105-F	F	105 mm	Included	NA	Not Included, see below
HT-ITB-110-F	F	110 mm	Included	NA	Not Included, see below
HT-ITB-115-F	F	115 mm	Included	NA	Not Included, see below

#### **Order Number for Mating Harness for ITB**

CH-TM12-L04: For 12 VDC operation length 4 meter

CH-TM12F-L04: For 12 VDC operation with Position Feedback length 4 meter

CH-TM24-L04: For 24 VDC operation length 4 meter

CH-TM24F-L04: For 24 VDC operation with Position Feedback length 4 meter



#### O-Ring Order Number for Normal and High Temperature:

Two Standard NBR O-Rings are included in the ITB. If high temperature is desired see bylow the order number.

O-Ring-75X3 NBR Temperature Range -25 +125°C, already included

O-Ring-75X3 FKM Temperature Range -20 +200°C





# **HT-MiniMix Gas Engine Mixer**

#### For best governing, the experts recommend:

ITB and MiniMix Series

### **Smart Governing with HT-SG-100**

The HT-SG-100 digital speed control is a highly versatil unit. All sort of diesel and specially gas engines can run optimally with it. The microprocessor design provides precise and user-specific performance and functionality. The HT-SG-100 enables exact (< 0.25%) isochronous rotation speed control. The permanent memory saves the settings even if the power supply is interrupted and thanks to a wide voltage range of 12-24 VDC the HT-SG-100 has a wide range of uses. The units come preconfigured and requires only the number of flywheel teeths to be input.





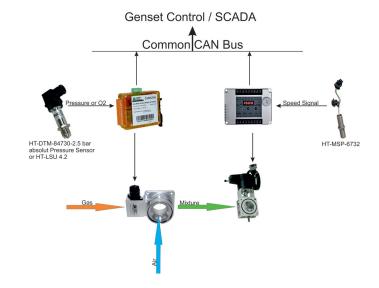
### The closed governing loop together with Cuteline Lambdacontroler

The Lambda Control in the closed loop consistin of:

- HT-CL-AF-1000LS or 1500P Lambdacontroller
- HT-DTM-8473 0-2.5bar Absolut Pressuresensor
- LSU 4.2 Lambdasensor
- HT-SG-100 Governor
- HT-MSP-6732 Pick Up

#### Wiring Harness

- CH-DTM-8473-L07
- CH-LSU-L07
- CH-1230-L04



**Local Distributor / Partner:** 



HUEGLI TECH AG (LTD)
Murgenthalstrasse 30
4900 Langenthal Switzerland
Phone: +41 62 916 50 30
Fax: +41 62 916 50 35

e-mail: sales@huegli-tech.com www.huegli-tech.com