

# HG SERIES ELECTROMAGNETIC FLOWMETERS



**Model No. : HG4000-W**  
**Model Type : Wafer Type**



**Model No. : HG4000-SC**  
**Model Type : Sanitary Type**



**Model No. : HG4000-F**  
**Model Type : Flange Type**



**Model No. : HG4000-SE**  
**Model Type : Separation Type  
(Thread)**

# HG SERIES ELECTROMAGNETIC FLOWMETERS



**Model No. : HG4000-W/SC/F/SE**

The HG 4000 is designed for a wide range of industrial applications and electromagnetic inductance is used to measure the flow of liquids through the meter. It is a highly reliable instrument that can accurately measure the flow of liquids with little pressure drop and long-term stability with mechanical parts within the weighing section. It can be used in a wide variety of fluids, allowing the instrument to be used under the most stringent conditions as well as strong chemistries.

## Features :

- Applicable to chemical and food industry and potable water treatment (stainless steel pipe)
- Operation settings with membrane (flow conversion factor, communication type and transmission rate, measurement dynamics, etc.) or application software
- Flow tube interchangeability (each flow tube has its own calibration constant)
- Accessories : installation sets (iron, stainless steel or to customer specifications)
- Latest application software
- Bidirectional flow measurement (separate counters for each direction)
- Self-diagnosis : Display instrument status
- Volume monitoring for up to 5 resettable flow totalizers (counters)
- Monitoring the maximum flow reached within the time interval

## GENERAL SPECIFICATIONS

Measuring range	1:40 ( $\pm 0.5\%$ for MPE standard), 1:500 ( $Q_0=0.2\% Q_{max}$ )
Accuracy	$\pm 0.5\%$ ( $\pm 0.003m/s$ ) in range from $Q_{min}$ to $Q_{max}$
Minimum Liquid Conductivity	$> 5\mu S/cm$ (common liquid), $\geq 20\mu S/cm$ (demineralized water)
Power Supply	230VAC (+10, -15%), 50~60Hz, optionally 120VAC, 24VAC, 24VDC
Power Demand	10 VA
IEC 536 Protection Class	I
Ingress Protection Rating	IP67
Meter Finish	Powder paint (RAL 8023)
Ambient temperature range	0~70 °C, recommended 15~55°C
Pulse Output 1	In range 0.0001~1600 p/dm <sup>3</sup> (maximum value depends on flowtube inner diameter)
Pulse Output 2	State – Signalization of the negative flow, Pulse – Negative volume (Bidirectional flow)
Pulse Inputs	2 x range (0.0001~1000 p/dm <sup>3</sup> ) to display flow and/or volume measure by external
Empty Pipe Detection	Yes (optional)
Communication Modules	RS485, RS422, RS232, M-Bus, etc (optional)
Communication Protocols	SIMPLE, ModBUS, BitBUS, ASCII, MBUS
Analog Outputs	4~20mA, 0~10V (optional)
Archive	Hourly, monthly, etc (optional)

## WAFFER FLOWTUBE SPECIFICATIONS

Nominal Inner Diameter	DN10 ~ DN150
Flowtube Liner	PTFE
Electrodes	Stainless steel 316L (1.4571), hastelloy C, platinum, tantalum, titanium
Nominal Pressure	PN25
Flowtube Design	Compact , split – 4m cabling (optionally up to 40m)
Flowtube Finish	Powder paint (RAL 7043)
Range of Measure Liquid	0~150 °C (PTFE)
Ingress Production Rating	IP67

# HG SERIES ELECTROMAGNETIC FLOWMETERS



**Model No. : HS-TLD-F**  
**Model Type : Flange Type**

### Features :

- Flow speed range: 0.1 ~ 15m/s
- Flow speed resolution: 0.5mm/s
- AC high frequency switching power, voltage range: 85VAC ~ 250VAC
- DC 24V switching power supply, voltage range: 20VDC ~ 36VDC
- Output function: 4 ~ 20mA, Pulse
- Network function: MODBUS, GPRS, PROFIBUS, HART communication (optional)



**Model No. : HS-TLD-SE**  
**Model Type : Separation Type**

The HS-TLD electromagnetic flowmeter is a next-generation supply flowmeter based on the Faraday electromagnetic induction principle. The measurement accuracy is not affected by the temperature, density, viscosity and conductivity (> 5 s/cm) of the measured medium and maintains a constant accuracy. The electromagnetic flow meters can be used to measure general water, wastewater, strong acids and strong alkalis and other corrosive liquids and muds.

### SPECIFICATIONS

Size	DN10~DN2800
Medium	Conductive liquid, surry
Medium temperature	E grade < 60°C, H grade < 180°C
Conductivity	≥5 u S/cm
Accuracy	±01%, ±0.17%
Rated pressure	0.6, 1.0, 1.6, 2.5, 4.0, 6.4 Mpa (or specified by customer)
Display	Flow, rate, totalizer, velocity, flow rate ratio
Signal output	4~20mA current output, pulse output, RS-485 Hart
Power supply	AC : 85V ~ 265V, DC : 18V ~ 38V
Converter type	Integral, remote
Protection grade	IP65 . IP68
Explosion proof	Ex deibmb IIC T3~6
Velocity	0.05~12m/s (0.1 ~ 15m/s as required)
Liner	CR/F4(PTFE) / 46(FEP) / PFA
Flowing direction	Forward, Reverse
Electrode material	316L, Pt, Ta, Ti, HB, HC, WC
Electrode number	3~6 pcs
Flange material	SS/CS
Alarm (normal open)	Empty, excitation, upper/lower limit
Ambient	-30 ~ +60°C, Humidity : < 90%
Protocol	RS-485 / Hart