



# TCS6200-WL300 插入型電磁式流量計控制錶

TCS6200-WL300 FLOMAT ELECTROMAGNETIC INSERTION FLOWMETER

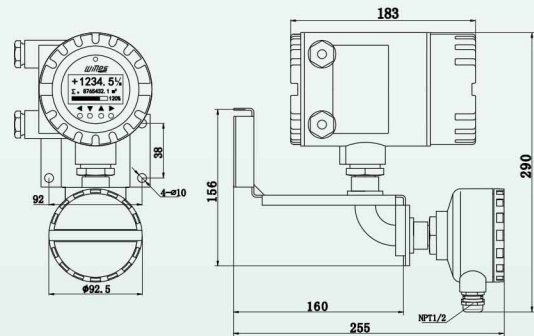
## Flow Tubes in Both Compact or Separate Versions

- Tree line LCD display for Flow rate/Totalizer
- Accuracy of +/-0.2%(Option), +/-0.5% of reading
- Bi-directional flow measurement, current and pulse output
- 4-20mA auxiliary Input include 4 digit display
- MODBUS/HART communication.



## WL300 Series Model Selection Guide

|                            |                                    |   |
|----------------------------|------------------------------------|---|
| <b>Power supply</b>        |                                    |   |
| 【AC-】 90-260 Vac, 50/60 Hz |                                    |   |
| 【DC-】 24Vdc, +/-10%        |                                    |   |
| WL300-<br>XX-              | <b>Mounting</b>                    |   |
|                            | 【1-】 Compact with Sensor           |   |
|                            | 【2-】 Separate, wall mounting       |   |
|                            | 【3-】 Separate, 2" mounting bracket |   |
|                            | <b>Communication</b>               |   |
|                            | 【R】 RS485(MODBUS Protocol)         |   |
|                            | 【H】 HART signal                    |   |
| XX-                        | X-                                 | X |



## Standard Specification

|                            |                                                                                                                                                   |                         |                |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------|
| <b>Accuracy</b>            | +/-0.5% (option +/-0.2%)                                                                                                                          |                         |                |
| <b>Temperature</b>         | -20°C ~ +130°C                                                                                                                                    | <b>Flow-speed Range</b> | 0.1 ~ 12 m/s   |
| <b>Display</b>             | Clear backlighted LCD display, instant, accumulation                                                                                              |                         |                |
| Line1                      | 11 digit totalizer for forward flow / 11 digit totalizer for reverse flow / 11 digit totalizer for difference                                     |                         |                |
| Line2                      | 5 digit flowrate / Velocity / % / mA / Hz                                                                                                         |                         |                |
| Line3                      | Parameter / Query / Clr tot / Query LOG / Alarm / Guidance                                                                                        |                         |                |
| Unit                       | M3/H, L/H, Kg/H, T/H, L/min, M3/min, GPH, GPM                                                                                                     |                         |                |
| <b>Accuracy</b>            | +/-0.5% of reading (Velocity >= 0.5 m/s), +/-0.002 m/s (Velocity < 0.5 m/s) or (+/-0.2% of reading)                                               |                         |                |
| <b>Repeatability</b>       | +/-0.1% of reading                                                                                                                                |                         |                |
| <b>Current Output</b>      | 4-20mA (Isolated)                                                                                                                                 |                         |                |
| Load                       | Max. 800 Ω                                                                                                                                        |                         |                |
| <b>Pulse Output</b>        | Open collector                                                                                                                                    |                         |                |
| Rating                     | 3 to 30 VDC, 20mA Max.                                                                                                                            |                         |                |
| <b>Pulse Rate</b>          | 1. Scale pulse, (Pulse/M3, Pulse/L, Other) / 2. Frequency, 0-5000 Hz                                                                              |                         |                |
| <b>Pulse Output</b>        | Transistor collector open output with photoelectric isolation; pulse equivalent: 0.0001-10 m³/cp                                                  |                         |                |
| <b>Alarms</b>              | High/ Low with open collector output                                                                                                              |                         |                |
| Rating                     | 3 to 30 VDC, 20mA Max.                                                                                                                            |                         |                |
| <b>Communication</b>       | RS485 (MODBUS Protocol) / HART signal                                                                                                             |                         |                |
| <b>Data Storage</b>        | Operation parameters and totalization figures are stored by EEPROM for more then 15 years                                                         |                         |                |
| <b>Keyboard</b>            | 4 keys from internal for programming and display control.<br>4 keys from remote control for programming and display control.                      |                         |                |
| <b>Low Flow Cutoff</b>     | 0 to 9.9%                                                                                                                                         | <b>Damping</b>          | 0 to 99 Second |
| <b>Density Setting</b>     | 0.1 to 9.99 g/cm2                                                                                                                                 |                         |                |
| <b>Self Diagnosis</b>      | The following error message is indicated when applicable<br>- Coil fail / Power fail / Output overranged / Internal error / Overflow / Empty pipe |                         |                |
| <b>Cable Entry</b>         | 2-M20 X 1.5, 1/2NPT(Optional)                                                                                                                     | <b>Protection Class</b> | IP 67          |
| <b>Ambient Temperature</b> | -25 to +65°C                                                                                                                                      | <b>Material</b>         | Aluminum Alloy |
| <b>Power Supply</b>        | 90-260 VAC, 45/63 Hz, 8-36 VDC                                                                                                                    |                         |                |
| <b>Power Consumption</b>   | < 10VA                                                                                                                                            |                         |                |



# TCS6200 插入型電磁式流量計主機

TCS6200 FLOMAT ELECTROMAGNETIC INSERTION FLOWMETER

## TCS6200-EL5000

### Insertion Type Electromagnetic Probe Introduction

For use in large diameter pipes or open channels as an economical solution for liquid metering.

Flow rate for liquids with electrical conductivity better than 5  $\mu\text{s}/\text{cm}$ , for example.

- Water treatment
- Sewage treatment
- Acid, neutral or alkaline solutions
- Chemical and pharmaceutical products

Suitable for use at low and medium temperatures.



TCS620-EL5000-WL300



TCS620-EL5000

### Benefits

- Readings are independent of density, temperature, viscosity and pressure
- Alternating magnetic field for metering avoids electrolysis
- Absence of obstructing elements gives low pressure loss and will allow the pass of solids
- Can be mounted in any position, provided that the pipe is always full
- Low power consumption
- Good stability with temperature and age
- No moving parts provides zero maintenance
- Can be installed with short straight pipe sections(10DN/5DN)
- Good chemical resistance of construction materials



### Standard Specification

|                                  |                                                                                                                    |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Body material                    | Stainless steel AISI 304, Stainless steel AISI316(optional)                                                        |
| Accuracy                         | 1.5%                                                                                                               |
| Size for pipe line $\varnothing$ | Size 1 $\varnothing$ 65-500mm, Size 2 $\varnothing$ 600-1000mm, Size 3 $\varnothing$ 1200-2000mm/ Other on request |
| Nominal pressure                 | PN16/ Other on request                                                                                             |
| Process connection               | Filetatto $\varnothing$ 28mm-Other on request                                                                      |
| Connection material              | Stainless steel AISI 304                                                                                           |
| Liquid temperature               | -20 $^{\circ}\text{C}$ ~100 $^{\circ}\text{C}$ / -20 $^{\circ}\text{C}$ ~150 $^{\circ}\text{C}$ separato           |
| Lining material                  | PTFE                                                                                                               |
| Electrode material               | Stainless steel 316L, Hastelloy B, Hastelloy C, Titanium, Tantalum, Platinum                                       |
| Process Connection               | 1"NPT, Flange Other on request                                                                                     |

### Flow Meter Caliber, Flow Rate Curve Chart

