

# TK301一体化浓度/密度变送器

Tk301 Integrated Concentration/Density Transmitter



## 一、产品简介

TK310智能浓度/密度变送器是一种用于连续在经理测量液体浓度和密度的仪表，可直接用于工业生产过程。

它的独创设计在于采用一个电容式差压传感器以及与其相连的、插入生产过程的一对压力中继器。在两个压力中继器之间有一个温度传感器，用以补偿过程液体的温度变化。一个专用软件利用特定的算法计算密度。

## 二、产品应用

制糖和酒精业奶制品业采矿食品加工制浆造纸业酿酒及饮料加工化工，石化，制药。

## 三、技术提要

精度： $\pm 0.0004\text{g/cm}^3$  ( $\pm 0.10\text{Brix}$ )；

量程： $0.5\text{g/cm}^3 \sim 5\text{g/cm}^3$ 。

## 四、电子线路图示

## Product introduction

TK310 intelligent concentration/density transmitter is one instrument measuring continuously the liquid concentration and density and it can be used directly to the industrial production.

Its original design lies in one capacitance differential pressure sensor and one pressure relay connected with it and inserted into the production. There is one temperature sensor between two pressure relays to compensate for the temperature change of the process liquid. One special software uses particular algorithm to calculate the density.

## Product application

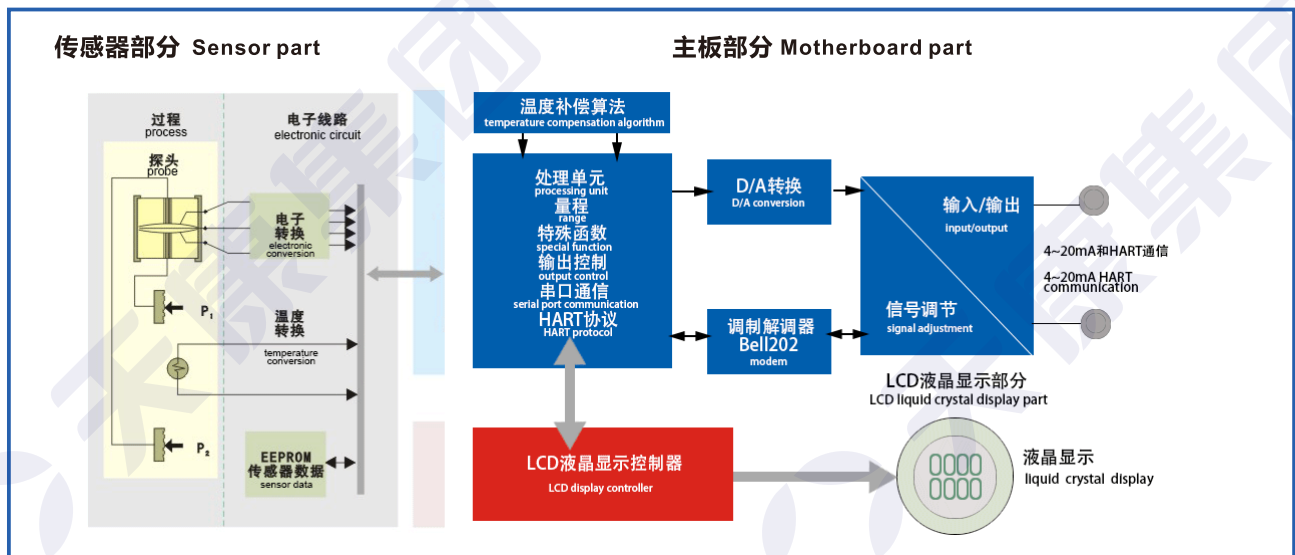
Sugaring, alcohol industry, dairy industry, mining, food processing, slurring, paper making, brewing, beverage processing, chemical engineering, petrochemical industry and pharmacy.

## Technical summary

Accuracy: $\pm 0.0004\text{g/cm}^3$ ( $\pm 0.10\text{Brix}$ ).

Range : $0.5\text{g/cm}^3 \sim 5\text{g/cm}^3$ .

## Electronic circuit diagram



TK301	工业型密度/浓度变送器 Industrial density/concentration transmitter
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代码 Code	量程 Range	最小范围 Minimum scope
1	0.5-1.8g/cm <sup>3</sup>	0-0.025g/cm <sup>3</sup>
2	1.0-2.5g/cm <sup>3</sup>	0-0.050g/cm <sup>3</sup>
3	2.0-5.0g/cm <sup>3</sup>	0-0.250g/cm <sup>3</sup>

代码 Code	触液部分材质 Material for part contacting liquid
H	哈氏合金C276 Hastelloy C276
I	316L不锈钢 316L Stainless steel
Z	其他-指定 Others designated

代码 Code	填充液 Filling liquid
N	Neobee-M20 Propylene Glycol (食品级) (Food class)
D	DC-704 硅油 DC-704 silicon oil
S	DC200/20 硅油 DC200/20 silicon oil
G	甘油和水 Glycerin and water
T	Syltherm 800
Z	其他-指定 Others designated

代码 Code	液晶显示
0	不带显示
1	带显示

代码 Code	电气接口
O	1/2-14NPT
A	M20×1.5
B	Pg13.5DIN
Z	其他-指定 Others designated

代码 Code	安装 Installation
0	顶 Top
1	侧 Side

代码 Code	过程连接持尺寸、耐压等级和标准 Process connection size, withstand voltage class and standard
5	1 3" 150#ANSIB-16.5
5	2 3" 150#ANSIB-16.5
5	3 3" 150#ANSIB-16.5
A	C DN80PN25/40 IN2526-FORMD
Z	Z 其他-指定 Others designated

代码 Code	其他选项 Others designated
H1	316L不锈钢壳体 316L Stainless steel shell
Z2	其他-指定 Others designated

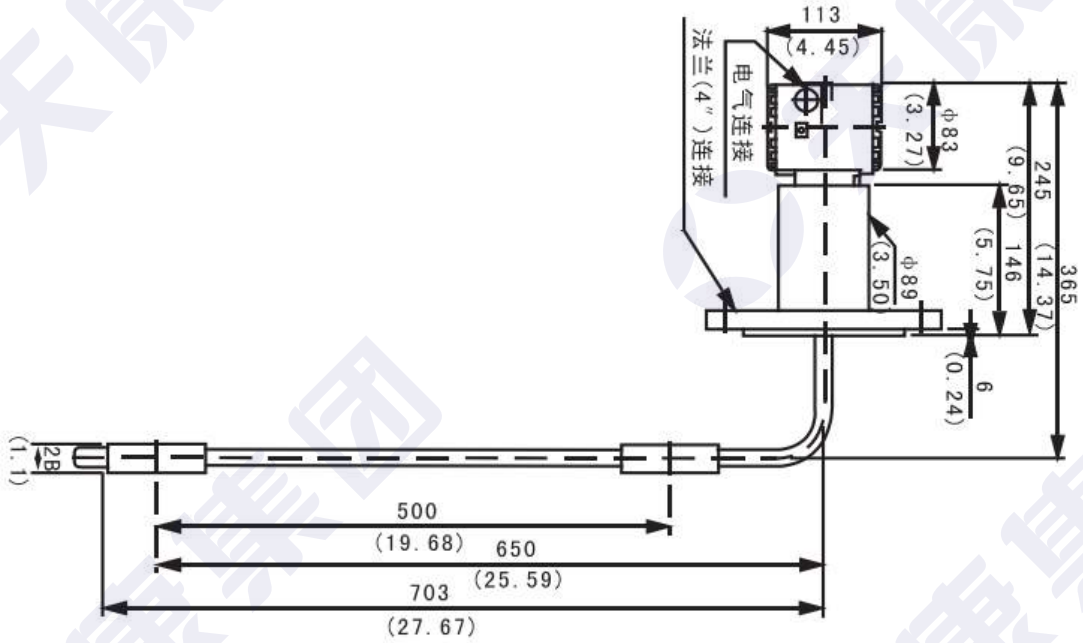
TK301 - 1 1 A - 1 1 1 - 5 1 / H1

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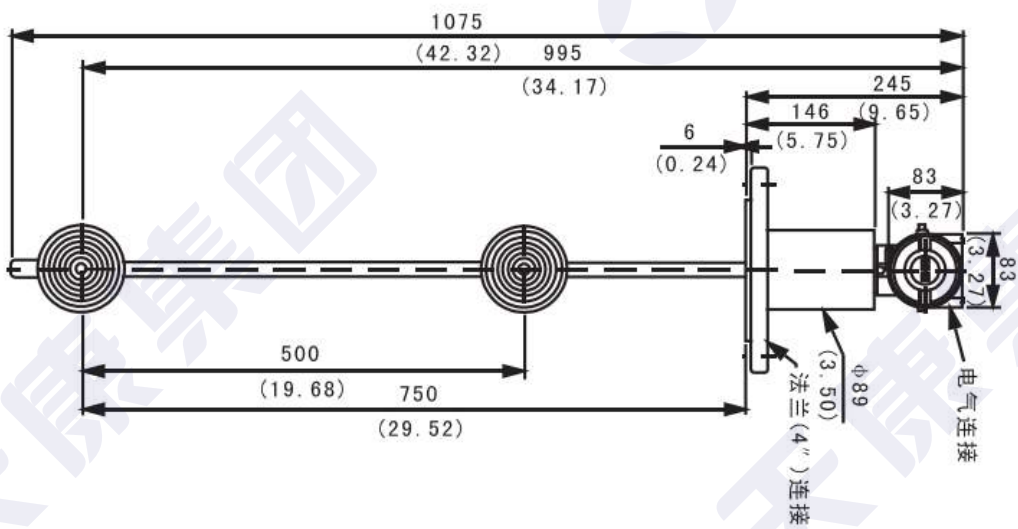
尺寸 Size

(工业型) Industrial type

尺寸单位 mm (英寸)



侧安装类型  
Side installation type



顶安装类型  
Top installation type