

SMT3151TR submersible level transmitter

Description

The submersible level transmitter is based on the principle that the measured hydrostatic pressure is proportional to the liquid level. The diffused silicon or ceramic capacitive sensing element is used to convert the static pressure into an electrical signal. Temperature compensated and linearly corrected. Converted to 4-20mA DC standard current signal output.

The sensor part of the submersible level transmitter can be directly put into the liquid, and the transmitter part can be fixed by flange or bracket, which is very convenient for installation and use.

Features:

Good stability, high precision, high performance/price ratio.

Directly put into the measured medium, installation and use is quite convenient.

Solid state mechanism, no moving parts, high reliability and long service life.

Wide range of temperature compensation with power supply reverse polarity protection and overload current limit protection.

Technical Performance

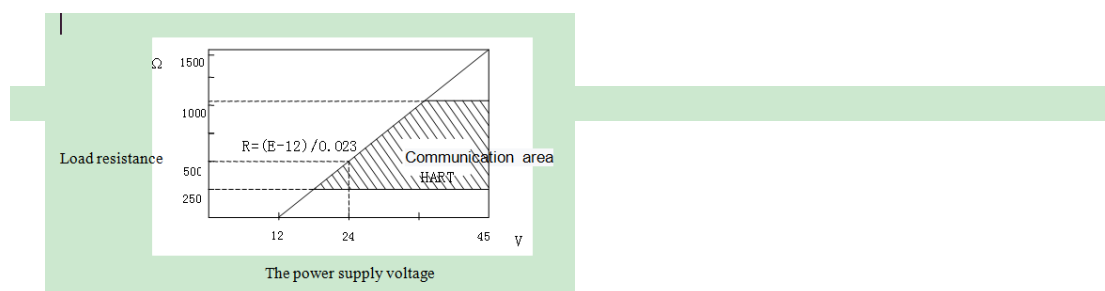
Use object: liquid level

Measuring range: See selection specification sheet

Output signal: 4~20mA dc. Output, superimposed HART protocol digital signal (two-wire system)

Power supply: External power supply 24V dc., power supply range 12V ~ 45V

Load characteristics:



Temperature range:

The electronic circuit board works at -40 to 85 ° C;

Sensitive components work at -40 ~ 85 ° C;

Storage temperature -40 ~ 85 ° C;

With digital display -25 ~ 75 ° C (running);

-40 to 85 ° C (no damage);

Relative humidity: 0 to 95%

Overpressure limit: The pressure transmitter that applies 2 to 5 times the maximum range is not damaged.

Volume change: less than 0.16cm³

Resistance: The time constant is adjustable between 0.1 and 32.0s.

Start-up time: 3s, no need to warm up.

Housing material: stainless steel (1Cr18Ni9Ti)

Protection level: IP68

Application and type selection:

Mainly used in urban water supply and drainage, reservoirs, rivers, oceans, oil storage tanks and oil, chemical, power plant and other departments of the water level and its open container liquid measurement, which is the ideal liquid level transmission in the industrial process inspection and control system of industrial and mining enterprises meter.



Submersible level transmitter selection specification sheet

Model	Transmitter type
3151TR	Submersible level transmitter
Code	Scale range
005	0~0.5m(0~4.9kPa)
...	...
050	0~5.0m(0~49)kPa
...	...
500	0~50m(0~490)kPa
...	...
2000	0~200m (0~1.96) MPa
Code	Output form

E	Linear output 4-20mA dc	
SF	Linear output 4-20mA dc+HART signal, Full function buttons on site	
F	MODBUS-485 signal	
Code	Measurement method	
01	Ordinary sensor liquid connection method (cable type)	
02	Ceramic capacitive anti-blocking type (cable type)	
03	Gas pressure type (non-contact)	
05	Ordinary sensor liquid connection method (rod type)	
06	Ceramic capacitive anti-blocking type (rod type)	
Code	Installation method	
A	No mounting bracket	
B	With mounting bracket	
C	Flange installation (specify flange specifications)	
Code	Structural materials	
	Input device	Isolation diaphragm
22	316 stainless steel	316 stainless steel
23	316 stainless steel	Hastelloy C
24	316 stainless steel	Monel
Code	Shell material	Conduit inlet dimensions
A	Low copper aluminum alloy polyurethane coating	M20×1.5
B	Low copper aluminum alloy polyurethane coating	1/2-14 NPT
C	stainless steel	M20×1.5
D	stainless steel	1/2-14 NPT
0	No wiring housing	
Code	Optional parts	
M1	0~100% Linear indicator	
M4	LCD Multi-function digital display	
Da	Flameproof ExdIIBT5Gb;(explosion-proof certificate no. : CE16.1163)	
Fa	Intrinsically safe ExiaIICT4 / T5 / T6Ga;(explosion-proof certificate no. : CE15.2354X)	

Selection example: 2088TR10E01A22Da 0~1m

