



## Description

The PT-3351 pressure transmitter is one of the most precise transmitters due to the quality sensor and the advanced production management system. The mono crystalline silicon sensor collects the pressure and outputs signals like 4~20 Ma and RS485 by means of intellectual transmit modules. The PT-3351 possesses high accuracy and stability due to the application of digital temperature difference compensation technology. This model is also the most popular for OEM for its quality and competitive price.

## Applications

- Oil & Gas transportation
- Steel smelting industry
- Sewage treatment industry
- Process control in chemical industry
- Nonferrous metal smelting industry
- Process control in power plants

## Technical parameters

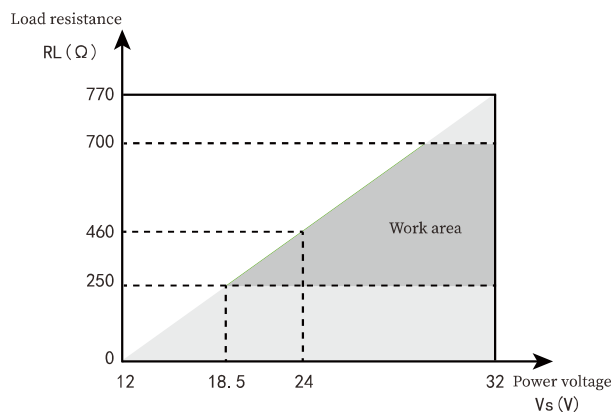
Functional parameters				
Accuracy	0.075%, 0.1%			
Effect of ambient temperature	$\leq \pm 0.1\%F.S/10^{\circ}C$			
Long term stability	$\leq \pm 0.2\%/URL$ (1 year)			
Effect of installation	Can be rectified by re-zero setting			
Response time	0.25s			
Effect of power supply	$\leq \pm 0.005\%/URL/v$			
Effect of vibration	$\leq \pm 0.25\%/URL/g$			
Applicable working conditions				
Working temperature	-40~105 °C			
Ambient/storage temperature	-40~85 °C			
Application/storage humidity	$\leq 95\%RH$			
Electromagnetic compatibility				
N0.	Test items	General standard	Test conditions	Performance level
1	Radiation interference (shell)	GB/T 9251-2008	30MHz~1000MHz	Qualified
2	Conduction emission (DC interface)	GB/T 9251-2008	0.15MHz~30MHz	Qualified
3	ESD immunity	GB/T 17626.2-2006	4kV(Electric Shock) 8kV(Air)	B
4	Electromagnetic field immunity	GB/T 17626.3-2006	10V/m(80MHz~1GHz)	A
5	Power frequency magnetic field immunity	GB/T 17626.8-2006	30A/m	A
6	Point fast transient burst immunity	GB/T 17626.4-2008	2kV(5/50ns,5kHz)	B
7	Surge immunity	GB/T 17626.5-2008	500V(Between lines) 1kV(1.2μs/50μs)	B
8	Transmitted interference immunity	GB/T 17626.6-2008	3V(150kHz~80MHz)	A

Transmit module	
Power supply	10~32V DC*
Load range	Current load resistance $RL \leq (U_s - U_{min}) / 0.026$
Instrument failure diagnosis	Output alarm current in case of failure
Display variables	Percentage, current, master variable (Pa、kPa、MPa、mbar、bar、psi、mmH <sub>2</sub> O)

\*: Voltage should be  $\geq 18.5$  when HART needed.

Sensor measurement segment and the limit value					
Measurement segment	Types of measurement	Minimum range	Upper range limit	Lower range limit	Over pressure limit*
0~1kPa	GP	0.1kPa	1kPa	-1kPa	200kPa
0~6kPa	GP	0.6kPa	6kPa	-6kPa	200kPa
0~40kPa	GP	4kPa	40kPa	-40kPa	1MPa
	AP	10kPa	40kPa	0	1MPa
0~250kPa	GP	25kPa	250kPa	-100kPa	4MPa
	AP	10kPa	250kPa	0	4MPa
0~3MPa	GP	150kPa	3MPa	-100kPa	15MPa
	AP	30kPa	3MPa	0	15MPa
0~10MPa	GP	0.5MPa	10MPa	-100kPa	20MPa
0~40MPa	GP	2MPa	40MPa	-100kPa	50MPa

Material Specifications	
Housing	Cast aluminum alloy (default option), SUS304, SUS316
Ingress protection	IP65 (default option), IP67
Sensor diaphragm	SUS316L (default option), Hastelloy C, Tantalum, SUS316L Gilding
Sensor filling liquid	Silicone oil (default option), Fluorine oil
Sealing diaphragm for housing	Nitrile rubber
Name plate	SUS304



Load resistance RL calculation formula

$$RL = (V_s - 12) / 0.026 (\Omega)$$

RL — Load resistance value ( $\Omega$ )

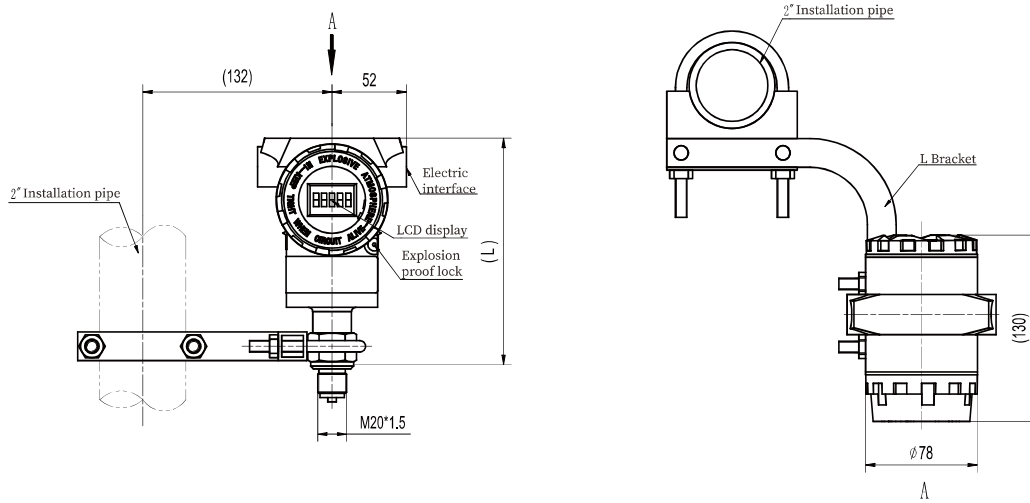
V<sub>s</sub> — Power supply voltage (V)

Figure Relationship of power voltage and load resistance

## Overall dimension

### Pipe installation

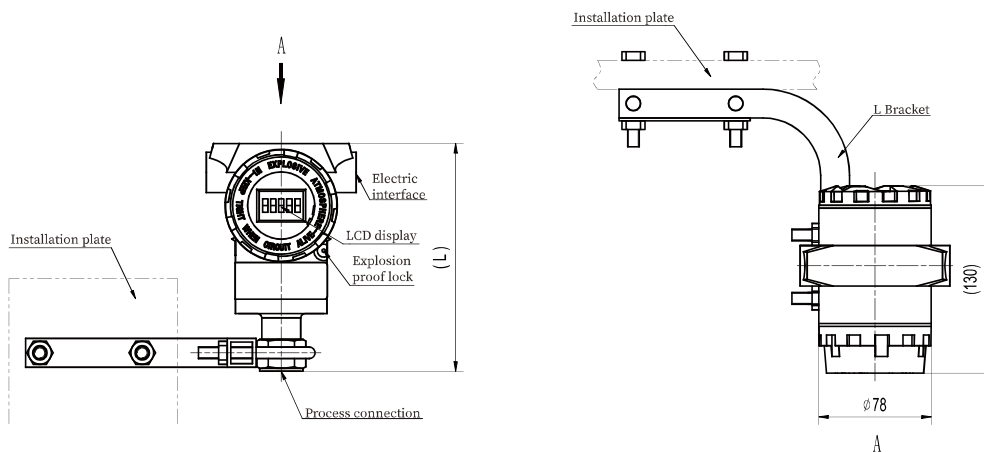
Unit: mm



Process connection	Range	L
G1/2 Male	30bar	181
M20*1.5 Male	2500mbar	176
NPT1/2 Male	100bar	171
NPT1/2 Female	30bar	158
	2500mbar	152

### Plate installation

Unit: mm



Process connection	Range	L
G1/2 Male	30bar	181
M20*1.5 Male	2500mbar	176
NPT1/2 Male	100bar	171
NPT1/2 Female	30bar	158
	2500mbar	152

## Code table product selection

Item	Code	Description	
Product model	PT3351		
Measurement type	G	GP	
	A	AP	
Sensor measurement range	1	0~1kPa	G
	2	0~6kPa	G
	3	0~40kPa	G/A
	4	0~250kPa	G/A
	5	0~3MPa	G/A
	6	0~10MPa	G
	7	0~40MPa	G
Output signal	E	4~20mA	
	S	4~20mA,HART	
	M	Modbus RS485	
Electric interface	1	M20*1.5 Female	
	2	NPT1/2 Female	
	3	G1/2 Female	
Display	M5	Intelligent LCD	
Process connection	0	M20*1.5 Male	
	1	NPT1/2 Male	
	2	NPT1/2 Female	
	3	G1/2 Male	
Wetted diaphragm material	2	SUS316L	
	3	Hastelloy C-276	
	6	SUS316L Gilding	
Process connection material	B	SUS316L	

Annotation: 1.The measurement of sensor depends on the type of sensor.

2.When oxygen is the the medium to measure, Fluorine oil is required to be the filling sensor oil.

3.If the medium is corrosive, you should be very careful with the material of wetted parts, for it will result in damage in case wetted parts occurred problems.

Additional options		
Item	Code	Description
Explosion proof	D	Flame proof(Exd II CT6)
	A	Intrinsically safe(Exia II CT6)
High temperature type	G1	High temperature, 100 °C~150 °C with 5 heat sinks
	G2	IHigh temperature, 150 °C~250 °C with 8 heat sinks
	G3	High temperature, 250 °C~350 °C with 12 heat sinks
Ingress protection	P7	IP67
Special sensor filling fluid	S	Fluorine oil
Housing material	K4	SUS304
	K6	SUS316

Annotation: Please contact us if some of the above parameters can not meet your requirements.