



### Features

- 316L flush diaphragm structure
- Sanitary, anti-fouling
- Analog output options
- EMC and reverse polarity protection
- Wide pressure range
- Good seal, long-term stable work
- With cooling fans, excellent performance for high temperature medium application

### Applications

- Occasion with easy block, high sanitary requirement and convenient cleaning such as medicine and health care, food, liquor-making, dairy and drinks
- Environmental protection chemical coating, polyurethane equipment, paint detection system etc.

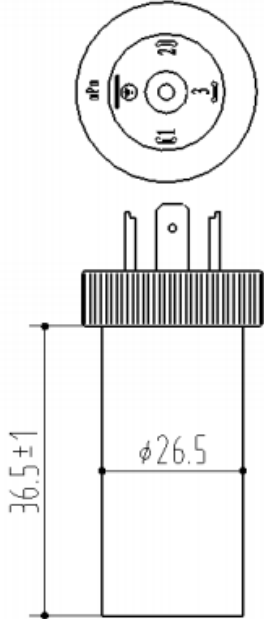
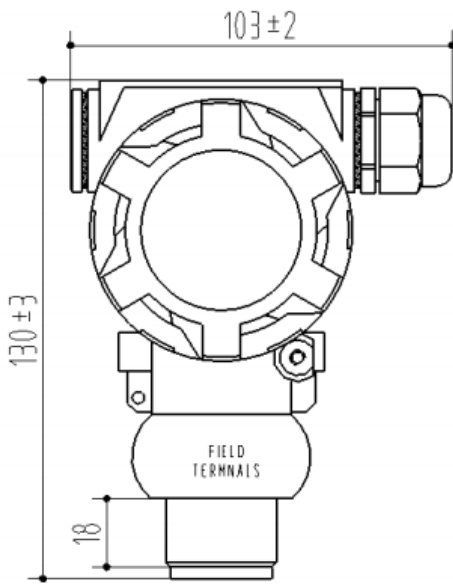
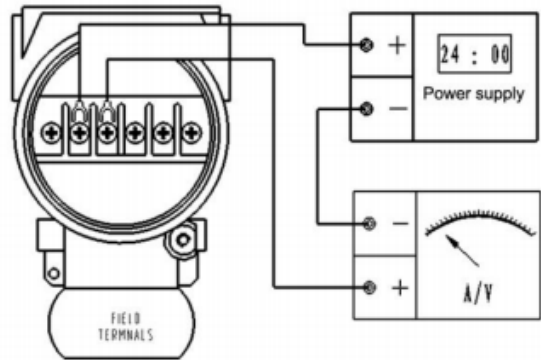
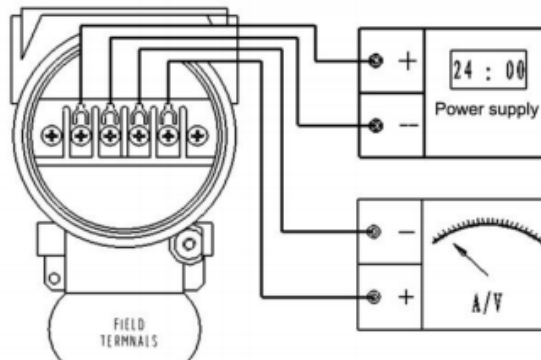
BT10-214 Sanitary Flush Pressure Transmitter adopts flush diaphragm to directly receive pressure signal, takes diffused silicon pressure sensor as sensitive element and uses standard silicone or olive oil as pressure transfer medium. With compact structure, corrosion resistance, vibration resistance and wide range temperature compensation, stainless steel 316L and specially welded flush isolation diaphragm are used for measurement end.

It prevents fouling due to its exposed diaphragm, which is especially applicable to measure viscous fluid pressure with sanitary requirements of health care and food industry, solving problems of fouling, block, cleaning and sanitation. It is also widely applicable to sanitary industries and occasions with fouling forming medium.

### TECHNICAL SPECIFICATIONS

<b>Pressure range</b>	-1bar...0~0.1bar...600bar		
<b>Pressure reference</b>	Gauge pressure, Absolute pressure, Sealed gauge pressure		
<b>Supply &amp; Output</b>	<b>BT10-214</b>	<b>BT20-214</b>	<b>BT05-214</b>
	4~20mA (12~30VDC)	0~10V (15~32VDC)	0~5V, 0.5~4.5V (12~24VDC)
<b>Accuracy</b>	0.5%FS		
<b>Hysteresis ve repeatability</b>	0.1%FS		
<b>Temperature drift</b>	±1.5%FS (-20°C~85°C)		
<b>Response time</b>	≤1ms (up to 90%FS)		
<b>Service life</b>	≥10×10 <sup>6</sup> pressure cycles		
<b>Operating temp.</b>	-20°C ... +85°C		
<b>Medium temp.</b>	-40~85°C (without cooling fans)		
	-40~150°C (with 3 cooling fans), -40°C~250°C (with 5 cooling fans)		
<b>Storage temp.</b>	-40°C ... +85°C		
<b>Insulation resistance</b>	≥100MΩ/250VDC		
<b>Vibration performance</b>	Sinus curve: 20gr, 25Hz~2kHz; IEC 60068-2-6		
	Random: 7.5gr, 5Hz~1kHz; IEC 60068-2-64		
<b>Protection</b>	IP65		
<b>Medium compatibility</b>	All kinds of media compatible with 316L		

ELECTRICAL CONNECTION AND WIRING

Connector Code	DIN43650	2088 housing
<p><b>Dimensions (mm)</b></p>		
<p><b>Protection Class</b></p>	<p>IP65</p>	<p>IP65</p>
<p><b>Connection (current output)</b></p>	<p>Pin 1: Supply Pin 2: Current output</p>	
<p><b>Connection (voltage output)</b></p>	<p>Pin 1: Supply Pin 2: GND Pin 3: Voltage output</p>	

## COOLING FANS

Code	T3: 3 cooling fans	T5: 5 cooling fans
<b>Dimensions (mm)</b>		
<b>Optional thread</b>	M20×1.5-6g, G1/2, M30×1.5	M20×1.5-6g, G1/2

## PRESSURE CONNECTION

Thread code	G1	G1/2
<b>Dimensions (mm)</b>		

Note 1. Recommended torque : 15~25N

2. Recommended torque depends on a number of factors such as gasket material, supporting material, thread lubrication and pressure

## PRESSURE RANGE SELECTION

Code	Pressure Reference	Pressure Range	Overpressure	Burst pressure
10k	G	0~0,1 Bar	%300FS	%500FS
20k	G	0~0,2 Bar	%300FS	%500FS
35k	G	0~0,35 Bar	%300FS	%500FS
70k	G	0~0,7 Bar	%300FS	%500FS
100k	G, A	0~1 Bar	%200FS	%300FS
160k	G	0~1,6 Bar	%200FS	%300FS
250k	G	0~2,5 Bar	%200FS	%300FS
400k	G	0~4 Bar	%200FS	%300FS
600k	G	0~6 Bar	%200FS	%300FS
1M	G	0~10 Bar	%200FS	%300FS
1.6M	G, S	0~16 Bar	%200FS	%300FS
2.5M	G, S	0~25 Bar	%200FS	%300FS
6M	S	0~60 Bar	%150FS	%300FS
10M	S	0~100 Bar	%150FS	%300FS
25M	S	0~250 Bar	%120FS	%200FS
40M	S	0~400 Bar	%120FS	%200FS
60M	G	0~600 Bar	%150FS	%200FS

Note: G: Gauge pressure, A: Absolute pressure, S: Sealed gauge pressure

## ORDER CODE

### Model

**BT10-214:** 4-20mA output  
**BT20-214:** 0-10V output  
**BT05-214:** 0-5V / 0.5-4.5V output

**BTXX-214**

**25B**

### Pressure Range

Different options from 0,1 bar to 600 bar

### Output Signal

**A :** 4-20mA  
**V :** 0-10V  
**V1 :** 0-5V  
**V3 :** 0.5-4.5V

**V1**

**G1**

### Mechanical Connection\*

**G1 :** G1  
**G1/2 :** G1/2  
 \*Only G1/2 connection can be selected at models with cooling fan.

### Fan Selection

**T3 :** 3 cooling fans  
**T5 :** 5 cooling fans  
**No code :** No cooling fan

**T3**

**K1**

### Electrical Connection

**K1 :** 2088 housing  
**KD :** 2088 with display  
**No code :** DIN43650

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