PRESSURE TRANSMITTER

"Flush Pressure Transmitter for High Temperature and Sanitary Applications"

BT10-214
BT20-214
BT05-214



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

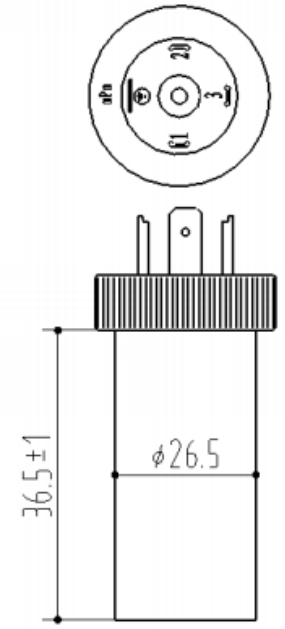
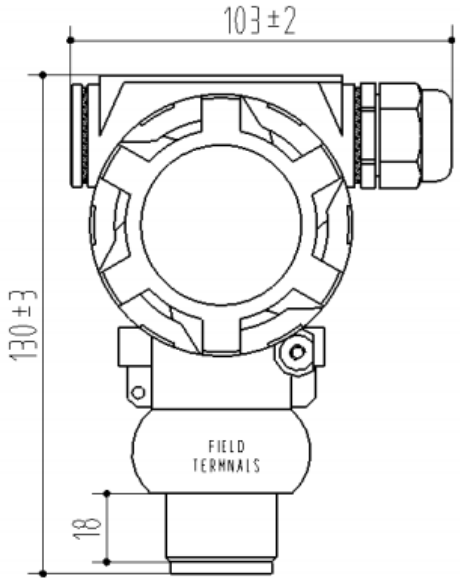
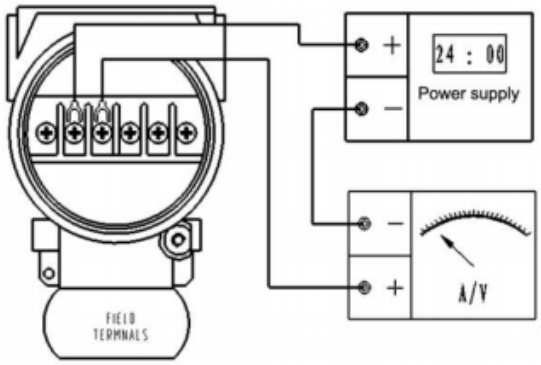
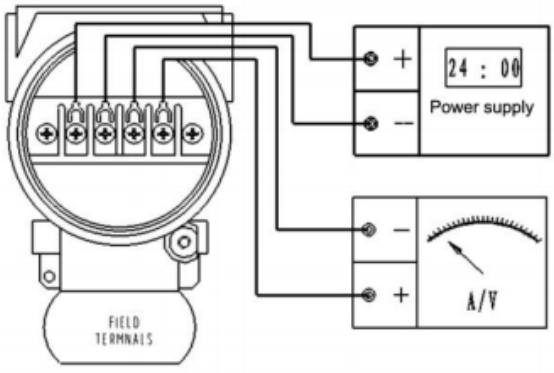
- Occasion with easy block, high sanitary requirement and convenient cleaning such as medicine and health care, food, liquor-making, dairy and drinks
- Environmental protection chemical coating, polyurethane equipment, paint detection system etc.

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.

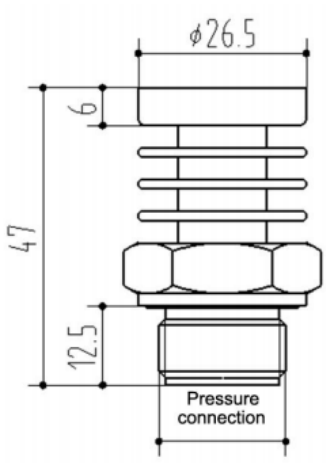
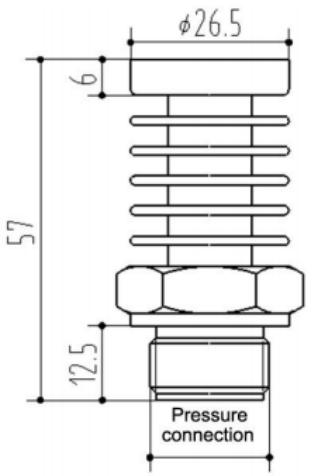
It prevents fouling due to its exposed diaphragm, which is especially applicable to measure viscous fluid pressure with sanitary requirements of health care and food industry, solving problems of fouling, block, cleaning and sanitation. It is also widely applicable to sanitary industries and occasions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

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

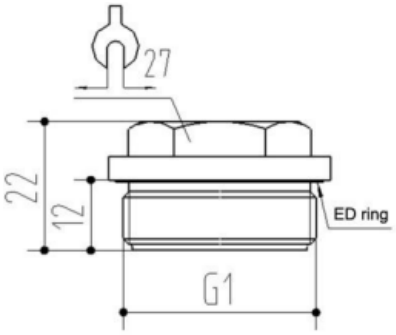
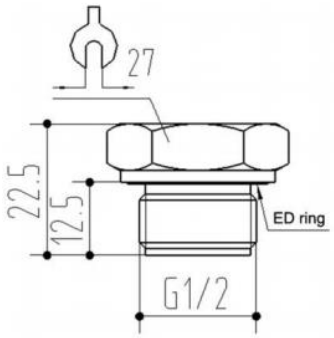
ELECTRICAL CONNECTION AND WIRING

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

COOLING FANS

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

PRESSURE CONNECTION

Therad code	G1	G1/2
Dimensions (mm)		

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	Brust 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: Abolute 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

Output Signal

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

Fan Selection

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

BTXX-214 – **25B** – **V1** – **G1** – **T3** – **K1**

Pressure Range

Different options from 0,1 bar to 600 bar

Mechanical Connection*

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

Electrical Connection

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

Atek Elektronik Sensör Teknolojileri Sanayi ve Ticaret A.Ş.

Gebze OSB, 800. Sokak, No:814 Gebze/KOCAELİ/TURKEY
Tel: +90 262 673 76 00 Fax: +90 262 673 76 08
www.ateksensor.com info@ateksensor.com