



# Differential Pressure Transducer

## VFT-510 series (1) Output: 4-20mA / 0-5V or 0-10VDC RS-485 Modbus

- IP65
- CE
- RoHS

- Output : 4~20mA / 0~5V / 0~10V / RS-485
- ±0.25% F.S High accurate, pressure up to 100psi
- Fine ZERO & SPAN adjustments and Zero setting
- Measurement range selectable
- Relative & Differential Pressure and wind velocity measurement
- Auto. Temperature Compensation
- Multi-function digital LCD display
- Pa, mbar and mmH<sub>2</sub>O unit of measurement optional
- Ceramic sensor, excellent durability
- Converse piezoelectric protection
- IP65, CE and RoHS approved

### Applications :

Space / Duct static pressure, Clean room, Hospital, Compression cooling systems, Air filter monitoring, Pumps, Fan control, Pneumatic controls, Duct airflow, Differential pressure monitoring, HVAC...etc.

**VFT-512** Low Differential Pressure Transducer

**VFT-513** High Differential Pressure Transducer



### Specifications of VFT-510 series Please advise the specification of \* option based on your individual needs.

Model No.		VFT-512	VFT-513
Measuring Range	Differential Pressure	±7000Pa/ ±700mmH <sub>2</sub> O / ±70mbar	±99000Pa / 9900mmH <sub>2</sub> O / 1000mbar
	Wind Speed	0~100m/s (via Pitot tube)	0~210m/s (via Pitot tube)
Resolution	Differential Pressure	1Pa / 0.1mmH <sub>2</sub> O / 0.01mbar	10Pa / 1mmH <sub>2</sub> O / 0.1mbar
	Wind Speed	0.1m/s	1m/s
Accuracy (at 25°C)		±0.25% F.S, TEB<1% ※TEB : Total Error Band	
Measurement Unit		Differential Pressure : Pa, mbar, mmH <sub>2</sub> O switchable Wind Speed : m/s Temperature : °C, °F switchable	
Media Compatibility		Dry air or non-corrosive gases and liquids	
Display and Functions		LCD display (4-digit), The functions can be displayed : Relative pressure, Differential Pressure, Wind Speed, Temp., Max., Min, Averages, Measurement Unit	
Sampling Rate		Approx. 0.5 sec.	
Output Signal*		Analog Output : 4 ~ 20mA / 0 ~ 5V or 0 ~ 10Vdc ※0~10V of output needs 15VDC power supply ※The initial setting range is ±7000 Pa, 4~20mA and 0~5Vdc ※Output of wind speed is 0~100m/s, the minimum reading is 1.2m/s / 0~210m/s is 4m/s Digital Output : RS-485 / Modbus RTU protocol (Wind Pressure,Temp. simultaneously)	
Auto temp. compensation		0 ~ +60°C (+32°F ~ +140°F)	
Measurement range setting		The user can set the measuring range by setting button ※The Initial is ±7000 Pa for the type VFT-512 / ±99000 Pa for the type VFT-513 ※The wind speed can't set the measurement range	
Calibration		Zero & Span adjustments and Zero setting	
Baud Rate		9600	
Over Pressure		About 100PSI	
Operating Environment		0 ~ +55°C (+32 ~ +131°F), 0~95%RH non-condensing	
Storage Environment		-20 ~ +60°C (-4 ~ +140°F), 0~95%RH non-condensing	
Power Supply		DC 12~32V, ≥150mA (Max. DC36V)	
Dimensions		110(L) × 80(W) × 48(D)mm (4.33 × 3.15 × 1.89 inches) ; Not including the pressure hose connector & cable gland	
Weight		Approx. 215g	
Approvals		RoHS, CE, IP65	



# Differential Pressure Transducer

## VFT-510 series (2)

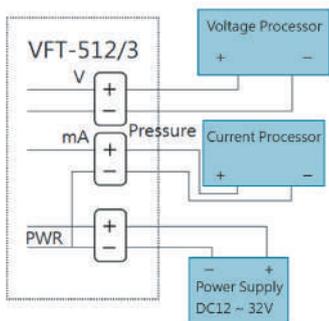
### Option Accessories



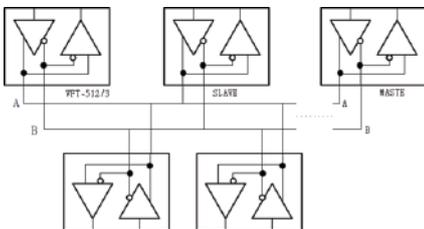
- ① **VFT-512** Low Differential Pressure Transducer
- ② **VFT-513** High Differential Pressure Transducer
- ③ **VF-P0808** Pitot Tube ※Specifications can be customized.
- ④ **VF-S0552** Silicon Tube (1Meter for standard equipment )  
※The length can be specified.
- ⑤ **VF-C0553** Plastic carrying case

### Connecting Diagram

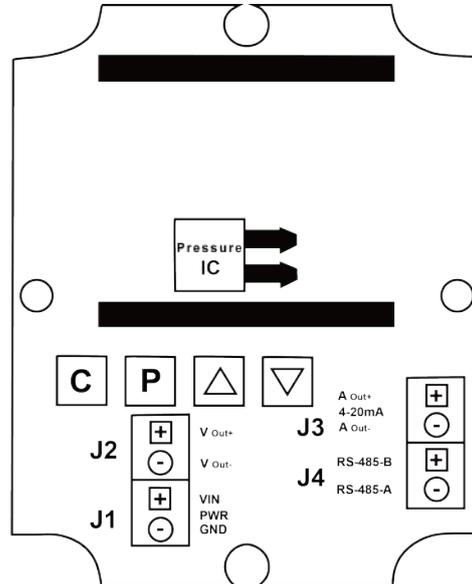
A. DC Voltage (0-5V, 0-10V) output / DC 4-20mA output



B. RS-485 output



### Instrument Description & Wiring



- J1 Power Supply : 12 ~ 36VDC ( ≥ 150mA )
- J2 DC Voltage Output : 0 ~ 5V, 0 ~ 10V (Selectable)
- J3 DC Current Output : 4 ~ 20mA
- J4 Digital Output : RS-485 / Modbus
- C** : Confirm (OK) and °C / °F Selection
- P** : Pressure Unit Selection Button
- Δ** : Up Key, Multiple, Fine tune, Zero Button
- ▽** : Down Key, Multiple, Fine tune, Zero Button

### External Dimensions(mm)

