

# EST3135 Pressure Transducer for VRF Air-Conditioning System

- ✓ Pressure type: Gauge Pressure
- ✓ Range: 0~15bar; 0~30bar; 0~50bar
- ✓ Accuracy:  $\pm 1.0\%F.S.$ ,  $\pm 2.0\%F.S.$
- ✓ Customized working temperature:  $-35^{\circ}C \sim 105^{\circ}C$
- ✓ Signal output: 0.5~2.5...4.5Vdc
- ✓ Power supply:  $5 \pm 0.25Vdc$
- ✓ Housing material: Brass
- ✓ Ingress Protection: IP65 -66
- ✓ OEM: Available



## Applications

VRF Air-conditioning system | multi-line air conditioning | Precision computer room air refrigeration air conditioning | Air source heat pump

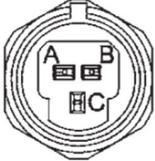
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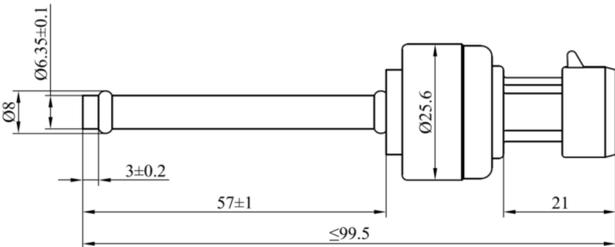
## Product Introduction

EST3135 pressure transducers is a pressure transmitter specially developed for refrigerant pressure measurement. The selection of ceramic capacitive sensitive components and special calibration circuits can realize pressure measurement based on absolute vacuum or sealed gauge pressure. The product can withstand large destructive pressure, and has the advantages of high accuracy at working temperature, high waterproof level, anti-condensation water, etc. It is an ideal choice for refrigerant pressure measurement.

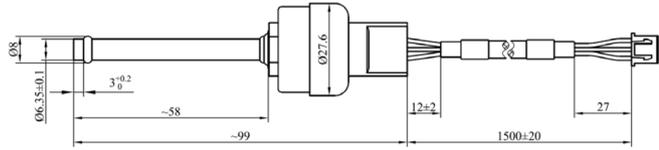
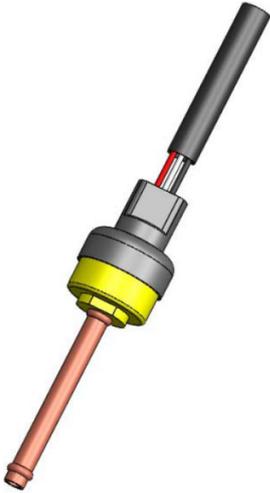
## Electrical Connections and Dimensional drawings

Packard Metri-Pack		
PIN	Three lines (0.5~4.5VDC)	Color of Wire
A	GND	Black
B	Supply power (VCC)	Red
C	Voltage output (OUT)	Green



XHP-3		
PIN	Define	Color of Wire
①	Supply power (Vcc)	Red
②	Voltage output (Vout)	White
③	GND	Black

## Specifications

<b>Measuring Range</b>	0~15bar; 0~20bar; 0~30bar; 0~50bar;
<b>Overload pressure</b>	2 times of rated pressure
<b>Burst Pressure</b>	3 times of rated pressure
<b>Accuracy</b>	±1.5%F.S (include no-linearity, hysteresis, repeatability, and calibration error) <i>Note 1</i>
<b>Total Error Accuracy</b>	±2.5%F.S (include no-linearity, hysteresis, repeatability, and calibration error) <i>Note 1</i>
<b>Long-term Stability.</b>	±0.25%F.S/year
<b>Response Time</b>	(10%~90%)≤10ms
<b>Medium Temperature</b>	-35℃~120℃
<b>Ambient Temperature</b>	-35℃~105℃
<b>Storage Temperature</b>	-35℃~105℃
<b>Output Signal</b>	0.5~4.5 VDC (Ratio)
<b>Supply Voltage</b>	5±0.25VDC
<b>Current without Load</b>	≤ 10mA
<b>Output Load</b>	≥ 10KΩ
<b>Overvoltage</b>	≥ 10KΩ
<b>Overvoltage</b>	20VDC
<b>Reverse Voltage</b>	-14VDC
<b>Insulate Resistance</b>	≥ 100MΩ @500VDC
<b>Dielectric Strength</b>	1800VAC@1s or 1500VAC@1min (no spark, arc, no damage)
<b>ESD</b>	Contact ±8kV, air ±15kV
<b>EMC</b>	EN 61000-6-2, EN 61000-6-3
<b>IP Rating</b>	IP65-66
<b>Random Vibration</b>	10g, 5~2000Hz
<b>Shock</b>	X/Y/Z, 20g, half-sine 11ms
<b>Drop (any Axis)</b>	1m
<b>Pressure Connector</b>	Φ6.35 straight copper tube
<b>Shell Material</b>	Straight copper interface + brass housing <i>Note 2</i>
<b>Electrical Connection</b>	Packard or Epoxy-encapsulated leads +XHP-3 connector
<b>Seal Material</b>	Neoprene
<b>Applicable Refrigerant Medium</b>	R12, R21, R22, R31, R32, R134a, R404a, R407C, R410a, R502, R507
1MPa=10bar; 1bar≈14.5PSI; 1PSI=6.8965kPa; 1kgf/cm2=1atm; 1atm≈98kPa	
<i>Note 1:</i> 0barG=101.325kpaA (1 atm as 0bar)	
<i>Note 2:</i> High temperature & high humidity storage conditions will cause the brass housing and purple copper interface surface oxidized & discolored, but this phenomenon does not affect the sensor's function or performance	