

EST3120C Pressure Transducer for AC/Refrigerant

- ✓ Sensing Element: Ceramic Piezo-Resistive (Thick Film)
- ✓ Pressure type: Gauge
- ✓ Range: -1~1bar...50bar
- ✓ Accuracy: $\pm 0.5\%$ F.S
- ✓ Stability: 0.5%F.S/Year(typical), 1.0%F.S/Year(maximum)
- ✓ Storage Temperature: -40-125C
- ✓ Compensation Temperature: -40-85C
- ✓ Signal Output: 4~20mA, 0.5~4.5V
- ✓ Power supply: 10~30Vdc, 5V(Ratio)
- ✓ Electrical Connection: Park
- ✓ Process Connection: 7-16 20UNF
- ✓ OEM: Available



Applications

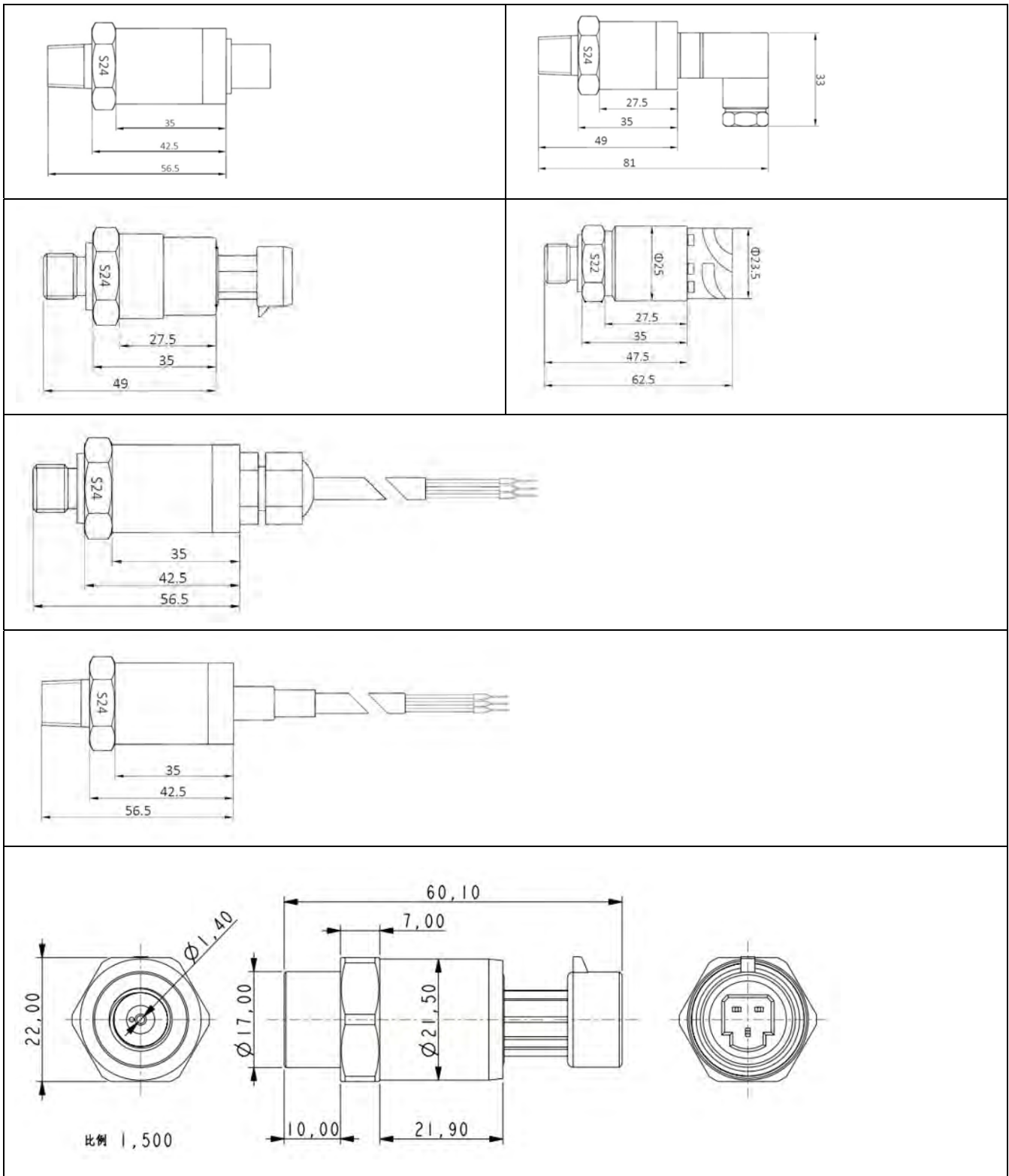
Compressor | Air conditioning unit | Refrigeration equipment

Product Introduction

EST3120C is Ceramic Piezo-resistive based pressure Ceramic piezoresistive, the Al₂O₃ 96% line is low-cost pressure transducer of high quality and reliability. Aiming for both civil and industrial purposes, the product is available for OEM. Being small in size and light in weight, the compact product is widely used for the field measurements of air conditioning, refrigeration, compressors and automobiles.

Electrical Connections and Dimensional drawings

Electrical connection						
Cable	Two wire	Cable	Three wire	Hirschman	12M-3B	Packard
Red	Power	Red	Power	1	1	B
Blue/Green	Output	Blue/Green	Output	2	2	C
		Black	GND	3	3	A
Black	Shield	Yellow	Shield	≡		
Signal output						
Two wire	4~20mA					
Three	0.5~4.5V					



Specifications

Measuring Range	0~2bar...600bar -1~1bar...50bar	Insulation	>100MΩ@50V
Overload pressure	1.5 times of rated pressure	Electric Strength	500V@60second
Burst Pressure	3 times of rated pressure ±0.5%/55℃; Note temperature effect error is doubled at range 3; the error for analog model is doubled	Vibration/Shock	10g/5~2000Hz, axes X/Y/Z20g sine 11ms
Accuracy	±0.25%F.S; ±0.5%F.S; ±1.0%F.S	Pressure type	GP (G), AP(A)
Stability	0.5%F.S/Y, 1.0%F.S/Ymax;	Response time:	10ms
Working temperature	-40~125℃	Pressure durability	2 x 10 ⁶ pressure cycle@25℃
Compensation temperature	-10~80℃	Safety Level	Intrinsically safe and explosion-proof E
Medium compatibility	All corrosive mediums compatible with 1Cr18Ni9Ti and ceramics	Electromagnetic compatibility	Electromagnetic radiation: EN50081-1/-2; Electromagnetic Sensitivity: EN50082-2
Electrical parameters	Two wire	Three wire	
Output Signal	4~20mA		0.5~4.5Vdc
Power supply	10~30Vdc	5Vdc	10~30Vdc/ac
Load resistance	(U-10)/0.02(Ω)		>100kΩ
Electrical Connections	DIN43650, IP65; GX 16-7, IP45; Wire jacket connection, IP68; Waterproof connection; Packard;		
Pressure connection	M20 x 1.5, G1/4, G1/2, NPT1/4, 7/16-20UNF;		
1MPa=10bar; 1bar≈14.5PSI; 1PSI=6.8965kPa; 1kgf/cm2=1atm; 1atm≈98kPa			

Ordering Procedure

EST	Pressure transducer for air compressor industry	
	Code	Model
	CG	Universal
	CA	Current type
	CV	Voltage type
	CX	Frequency water supply system
	Cod	Span
	1	0~2bar...600bar
	Code	Output Type
	A	4~20mA
	V05	0.5~4.5Vdc
	Code	Precision
	0.25	±0.25%F.S
	0.5	±0.5%F.S
	1.0	±1.0%F.S
	Code	Power Supply
	DC10	10~30 Vdc
	DC5	5Vdc
	Code	Pressure connections
	G	G1/4
	N	NPT1/4
	U	7/16-20UNF
	M	M20x1.5
	G2	G1/2

