

EST341 Ceramic Capacitive Pressure Transducer for Automotive/EV

Product Introduction

EST341 is a type of pressure transducer based on the ceramic capacitive sensing principle. EST341 is highly robust and capable of withstanding harsh environmental conditions, such as extreme temperatures, mechanical vibrations, and exposure to chemicals like oils and fuels

EST341 is particularly suitable for sensing pressure in engine management systems, transmission control, and tire pressure monitoring systems, primarily due to its high precision and stability over time. Furthermore, its excellent thermal stability ensures consistent performance across a broad range of temperatures.

The low hysteresis of EST341 ensures that its readings remain stable despite being subjected to varying environmental conditions and mechanical stress.

EST341 is manufactured in compact sizes without compromising sensitivity or reliability. This characteristic allows for greater flexibility in design and integration within confined spaces.



Highlight Features

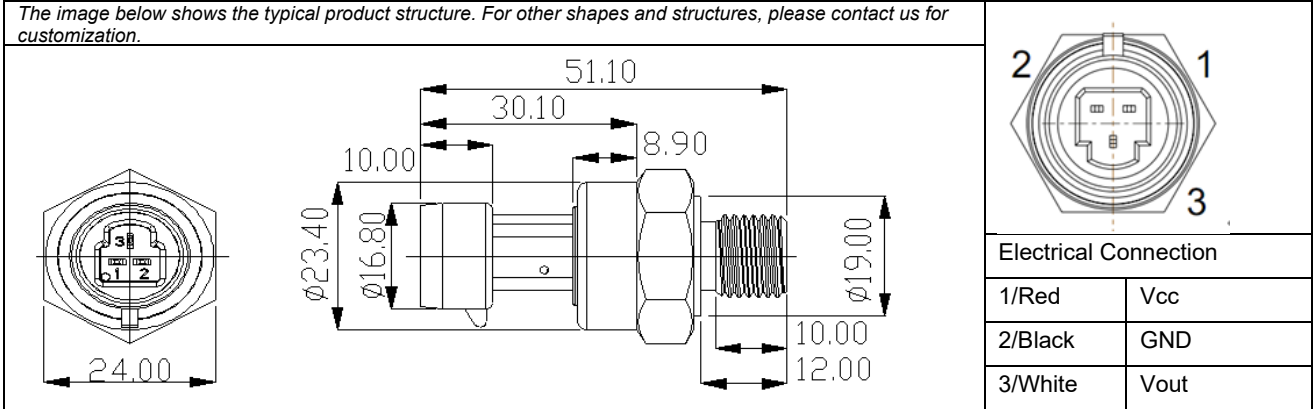
- **Pressure Range:** 0bar~5bar ... 100bar
- **Electrical Connection:** Packard
- **Accuracy:** $\pm 0.5\%/FS$ @25% - $\pm 1.5\%/FS$;
- **Output:** Rationmetric 0.5-4.5V
- **Response Time:** $\leq 3ms$ (10%-90%)
- **Medium:** Compatible with SS304/316/Ceramic

Electrical Connections and Dimensional Drawings

Environment & Working Conditions			
Range	0~0.5MPa...10MPa	Current	3.5mA
Overload Pressure	200%FS	Electrical Connection	Packard
Burst Pressure	500%FS	Process Connection	G1/2 G1/4 M20x1.5 M14x1.5
Pressure Type	Gauge/Sealed Gauge	Ingress Protection	IP65-IP67
Integrated Accuracy	$\pm 0.5\% - \pm 1.5\%$	MOC	SS304(housing); Ceramic (Sensing)
Long term Stability	$\pm 0.3\%/FS/Y$	Vibration	10gRMS, (20~2000)Hz
Working Temperature	-40~125°C	Shock	100g, 11ms
Storage Temperature	-40~150°C	Insulation	>100MΩ @250VDC
Power Supply	5±0.5V (5.5-36V)	Response Time	<1ms (@ 90%FS)
Output Signal	0-5VDC(0.5-4.5VD)		

Structure Size Outline Dimension (mm)

The image below shows the typical product structure. For other shapes and structures, please contact us for customization.



Ordering Procedure

EST341	Ceramic Capacitive Pressure Transmitter						
	Cod	Pressure Type					
	G	Gauge Pressure					
	S	Sealed Gauge					
	Code	Power Supply					
	P1	5VDC					
	P2	5-36VDC					
	Cod	Output Signal					
	C	0-5V					
	V	0.5-4.5V					
	Code	Electrical Connections					
	L1	Packard without cable					
	L2	Packard with 1-3 meter cable					
	Code	Process Connection					
	01	G1/2					
	12	M14x1.5					
	Code	Options					
	-	-					
EST341	G	P1	V	L1	01	Fa	