



Sensing Element: Piezoresistive Silicon Chip

The **STC** pressure transducers are designed with a compact integrated stainless steel structure with a built-in digital processing circuit that converts the millivolt signal of the sensor into standard voltage or current signal output. Its compact design is ideal for the industrial environment. The transducers are widely used in air compressors, air conditioning and refrigeration equipment, automotive and hydraulic control.

ELECTRICAL:

Output:
4 - 20mA (2 wire)
0 - 5V,
0 - 10V
1 - 5V
0.5 - 4.5V (ratiometric)

Supply:
9 - 36 vdc (2wire)
9 - 36 vdc (3 wire)
12 -30 vdc (3 wire)
9 - 36 vdc (3 wire)
5 vdc(+/-0.25V) (3 wire)

ACCURACY:

± 0.5% (Full Scan) (@ 25°C ± 5°C)

HYSTERESIS & REPEATABILITY:

± 0.1% (Full Scan)

PROTECTION:

IP65 with DIN, M12X1, Packard Plug, Cable, Integral Deustch

VIBRATION RESISTANCE:

Sine curve: 20g, 25Hz-2kHz; IEC 60068-2-6
Random: 7.5grms, 5Hz~1kHz; IEC 60068-2-64

SHOCK RESISTANCE:

Shock:: 200g/1ms; IEC 60068-2-27
Free Fall: 1m; IEC 60068-2-32

AMBIENT TEMPERATURE:

-4° to 185°F (-20° to 85°C)

MEDIUM TEMPERATURE:

-22° to 221°F (-30° to 105°C)

STORAGE TEMPERATURE:

-40° to 257°F (-40° to 125°C)

OPERATING TEMPERATURE:

-22° to 212°F (-30° to 100°C)

TEMP. DRIFT:

1.5% FS (-4° to 185°F) (-20° to 85°C)

EMC - INTERFERENCE:

IEC 61000-6-3

EMC - IMMUNITY

IEC 61000-6-2

INSULATION RESISTANCE:

≥ 100MΩ/250VDC (200MΩ/500VDC)

PRESSURE RANGE:

-14.5 - 14500 PSI (-1 - 1000 Bar) (Gauge)

Consult factory for higher pressure.

Caution: Please specify if application has high pressure fluctuation, a pulse snubber should be added against cavaition and liquid hammer

OVERLOAD PRESSURE:

1.5x Full Scan ≤ 8700PSI

1.2x Full Scan ≥ 8702 to 14,500 psi

MATERIAL:

Body: 304 Stainless Steel

Sensing Element: Piezoresistive Silicon Chip

RESPONSE TIME:

≤ 1 ms (Up to 90%FS)

MECHANICAL LIFE:

1 million cycles

ORDERING INFORMATION

STC	- A	- 0/3000	- 4M	- HCM	- 81 *	- 5*
Model	Type	Pressure Range	Port Size	Terminal	Pin Out	Option
STC	A: 4 - 20mA (2 wire) B: 0 - 5V (3 wire) C: 0 - 10V (3 wire) D: 0.5 - 4.5V (3 wire) E: 1 - 5V (3 wire)	Specify Pressure Range Required <i>Note: Ranges Available</i> -14.5/0 PSI (-1/0 BAR), 0/1.5 PSI(0.11 Bar), 0/6 PSI (0/0.4 Bar), 0/14.5 PSI (0/1 Bar), 0/100 PSI (0/7Bar), 0/600 PSI, (0/40 Bar), 0/1500 PSI (0/100 Bar), 0/3000 PSI, (0/200 Bar),0/ 6000 PSI (0/400 Bar), 0/ 8700 PSI (0/600 Bar) 0/ 14,500 PSI (0/1000 Bar) Consult Factory for Other Ranges	2M- 1/8" NPT 4M - 1/4 NPT 4S - 7/16 x 20 SAE Male 4G - 1/4 BSPP (undercut for o-ring seal) 6S - 9/16 X 18 SAE Male Consult Factory for other sizes	PP - Packard Plug C - Cable (standard 3 ft long) M - M12X1 HCM - DIN 43650C Mini DIN DI - Deutsch Integral (2 & 3 pin) 4DI- Deutsch Integral (4 pin)	Refer to Electrical Pin Out Page 48	*Omit if Standard 5 - Spiral Restrictor