



**Designed and Built in Asheville,
North Carolina - USA!**
**Best in Class performance for
any application!**

Wahl SS Series Silicon Pressure Transducers/Transmitters

The Wahl SS Series Silicon Pressure Transducers / Transmitters are extremely reliable, small and lightweight piezoresistive pressure sensors in a compact, rugged, all 304 stainless steel housing and sensor, rated at IP67.

Appropriate for harsh environments, outdoor monitoring or in applications where dust and particulate matter may exist, these silicon sensors feature excellent long term stability with high sensitivity and low drift and are resistant to shock, vibration, EMI/RFI and wide temperature variations.

Wahl Transducers offer three accuracy levels, with both the Ultra-High and Standard accuracy options maintaining their guaranteed accuracy at a wide thermal compensation temperature of -20° to 90°C (-4° to 194°F).

Ultra-High Accuracy offers an amazing accuracy of 0.05% of Full Scale.

Standard Accuracy offers 0.08% accuracy of Full Scale.

Economy Accuracy is also available with 0.10% accuracy of Full Scale at ambient (23°C/74°F).

The Wahl SS Series Silicon Transducers can also withstand and continue operating at an industry leading expanded temperature down to -40°C and up to 125°C, (-40° to 257°F).

SS Series Transducer Features:

- Stainless Steel Diaphragm allows for use in Food Processing
- Compact All 304 Stainless Steel Housing and Sensor
- Relative, Absolute, Sealed, Compound and Vacuum Gauge Measurement Ranges
- High Sensitivity – Low Drift
- Excellent Long-Term Stability
- High EMI/RFI Immunity Rating
- Rugged Construction for Shock and Vibration



**SS Series Silicon
Transducer/Transmitter**

**Ideal for all industrial,
food processing, OEM,
precision and
outdoor applications.**

SS Series Accuracy Specifications

Accuracy	
Ultra-High Accuracy	0.05% of Full Scale
Standard Accuracy	0.08% of Full Scale
Economy Accuracy*	0.10% of Full Scale
* Industry standard is 0.5%	
Accuracy includes non-linearity, hysteresis non-repeatability.	

Stability	
Ultra-High Accuracy	± 0.10% of Full Scale per year
Standard Accuracy	
Economy Accuracy	

Thermal Effect	
Thermal Compensation	-20° to 90°C (-4° to 194°F)
Ultra-High Accuracy	None
Standard Accuracy	None
Economy Accuracy	± 0.055% FS / K

SS Series Applications

- | | |
|--------------------|---------------------------|
| OEM | Process Automation |
| Air Conditioning | Pump Systems Control |
| Compressor Control | Pneumatic Systems Control |
| Food Processing | Refrigeration |
| Hydraulic Systems | Test Stands |

Note: Silicon Transmitters are recommended for use in Food Processing applications.



Pending



Specifications subject to change without notice.

SS Series Silicon Pressure Transducers / Transmitters Specifications

Operating Conditions

Operating Temperature	-40° to 125°C (-40° to 257°F)
Enclosure Protection Class	IP67 / NEMA 4X
Overpressure Limit	2.0 times rated pressure
Burst Limit	3.0 times rated pressure

Signal Output

Signal Type	
Current (2-Wire)	4-20 mA
Voltage (3-Wire)	0-5 V; 1-5 V; 0-10 V
Radiometric (3-Wire)	0.5-4.5 V
Voltage Supply	
4-20 mA	8-30 VDC
0-5 V	8-30 VDC
1-5 V	8-30 VDC
0-10 V	8-30 VDC
0.5-4.5 V	12-30 VDC
Response Time	
Dynamic Rate	< 1mS ¹

¹ Other Response Time Rates can be requested at time of order.

Process Connections

ASME	1/2" NPT, Male; 1/4" NPT, Male
ANSI	M20 x 1.5
EN 837	BSPP 1/2" (G1/2), 1/4" (G1/4); BSPT 1/2" (R1/2), 1/4" (R1/2)

Electrical Connections

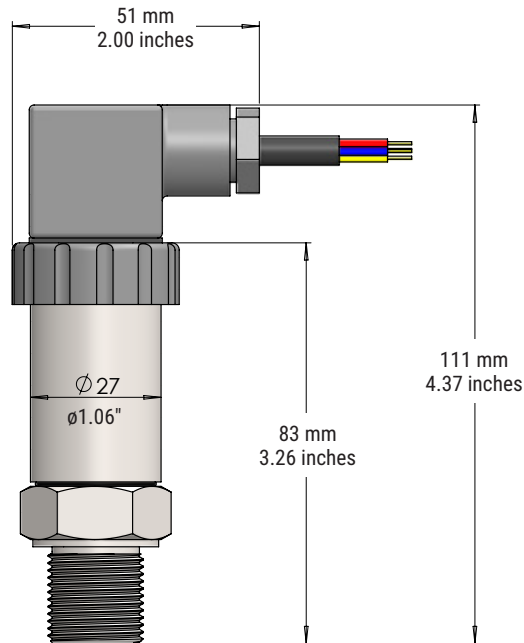
Angular Connector	EN 175301-803A ² , IP65
Circular Connector	M12, IP67
Cable Outlet	Waterproof Plug, IP68

² Previously DIN 43650A

SS Series Silicon Pressure Transducers / Transmitters Dimensional Drawings

**SS Series Silicon
Transmitter / Transducer
Dimensional Drawing**

*Transducer shown with
standard EN 175301-803A
connector.*



**Wahl Transmitters /
Transducers are designed
and built to order in our
Asheville, NC factory.
If your process requires
an option not shown here
please call
Customer Service.**

Pending

SS Series - Silicon Pressure Transducers

SS	Step 1 - Select: Silicon Pressure Transducer	
	Step 2 - Select 1 Pressure Reference	
	G	Relative Gauge
	Step 3 - Select 1 Pressure Range	
	Code	Range
	1#	1 PSI
	3#	3 PSI
	5#	5 PSI
	10#	10 PSI
	15#	15 PSI
	30#	30 PSI
	50#	50 PSI
	100#	100 PSI
	150#	150 PSI
	300#	300 PSI
	500#	500 PSI
	*	Custom Range
	A	Absolute Gauge
	3#	3 PSI
	5#	5 PSI
	10#	10 PSI
	15#	15 PSI
	30#	30 PSI
	50#	50 PSI
	100#	100 PSI
	150#	150 PSI
	300#	300 PSI
	500#	500 PSI
	*	Custom Range
	S	Sealed Gauge
	500#	500 PSI
	1000#	1,000 PSI
	1500#	1,500 PSI
	3000#	3,000 PSI
	5000#	5,000 PSI
	10000#	10,000 PSI
	15000#	15,000 PSI
	*	Custom Range
	C	Compound Gauge
	N15#	-15 / 0 / 15 PSI
	N10#	-10 / 0 / 10 PSI
	N5#	-5 / 0 / 5 PSI
	N1#	-1 / 0 / 1 PSI
	N30#	-15 / 0 / 30 PSI
	N50#	-15 / 0 / 50 PSI
	N100#	-15 / 0 / 100 PSI
	*	Custom Range
	V	Vacuum Gauge
	N15#	-15 / 0 PSI
	N10#	-10 / 0 PSI
	N5#	-5 / 0 PSI
	N1#	-1 / 0 PSI
	*	Custom Range

SS Series Silicon Pressure Transducers / Transmitters Ordering Guide

SS Series - Silicon - Select Specifications		
Step 4 - Select 1 Accuracy		
Code	Accuracy	
E	Economy Accuracy	0.10% FS
S	Standard Accuracy	0.08% FS
U	Ultra-High Accuracy	0.05% FS
Step 5 - Select 1 Process Connection		
Code	Process Connection	
H	1/2" NPT, Male, Standard	
Q	1/4" NPT, Male	
B	M20 x 1.5, Male	
C	BSPP 1/2" (G 1/2), Male	
D	BSPT 1/2" (R 1/2), Male	
F	BSPP 1/4" (G 1/4), Male	
G	BSPT 1/4" (R 1/4), Male	
*	Custom Process Connection	
Step 6 - Select 1 Signal Output		
Code	Signal Output	
1	4-20 mA, 2-wire, Standard	
2	0-5 VDC, 3-wire	
3	0-10 VDC, 3-wire	
4	0.5-4.5 VDC, 3-wire	
5	1-5 VDC, 3-wire	
*	Custom Signal Output	
Step 7 - Select 1 Electrical Connection		
Code	Electrical Connection	
A	EN 175301-803A, Std, IP65	
B	M12, IP67	
D	Waterproof Plug, IP68	
*	Custom Electrical Connection	
Step 8 - Select: Cable Length		
Code	Cable Length	
003	3 feet, Standard	
004-100	Specify: 004 = 4 feet, etc. up to 100 feet	

Model # Example:
SSA50#EQ1A010: SS Series, Absolute Gauge, 50 PSI Range, 0.1% Economy Accuracy, 1/4" NPT Process Connection, 4-20mA Signal Output, EN 175301-803A Electrical Connection, 10 foot Cable Length.

SS			* Note: Engineering will assign Ordering Codes for Custom Range, Process Connection, Signal Output or Electrical Connection.					
Series	Pressure Reference	Pressure Range		Accuracy	Process Connection	Signal Output	Electrical Connection	Cable Length