



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

Wahl CS Series Ceramic Pressure Transducers/Transmitters

The Wahl CS Series Ceramic Pressure Transducers / Transmitters utilize a ceramic pressure measurement sensor that is highly resistant to corrosion and chemicals. These sensors are extremely reliable, small and lightweight piezoresistive pressure sensors in a compact, rugged, all 304 stainless steel body, rated at IP67.

More resistant to most chemicals than silicon sensors, these ceramic transducers are appropriate for harsh environments, outdoor monitoring or in applications where dust and particulate matter may exist. They are leak-free and 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 CS Series Ceramic 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).

CS Series Transducer Features:

- Highly Resistant to Corrosion and Chemicals
- Dry Sensor - Leak, Oil and Grease Free
- Compact 304SS Stainless Steel Body
- Relative, Absolute and Sealed Gauge Measurement Ranges
- High Sensitivity – Low Drift
- Excellent Long-Term Stability
- High EMI/RFI Immunity Rating
- Rugged Construction for Shock and Vibration

CS 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 and non-repeatability.	

Stability	
Ultra-High Accuracy	± 0.075% 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	± 0.020% FS / K

Specifications subject to change without notice.

March
2022

Palmer Wahl Instruments, Inc. • Toll Free: 800-421-2853 • Phone: 828-658-3131 • www.palmerwahl.com



**CS Series Ceramic
Transducer/Transmitter**

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

CS Series Applications

- | | |
|----------------------------|-------------------------|
| Aircraft Industry | Process Engineering |
| Chemical and Petrochemical | Pulp and Paper Industry |
| Compressor Controls | Pump Protection |
| Hazardous Environments | Shipping |
| Pneumatics | Water Treatment Systems |

Note: Ceramic Transducers are not recommended for use in Food Processing applications. See our Silicon Transducers for Food Processing applications.



Pending



CS Series Ceramic 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

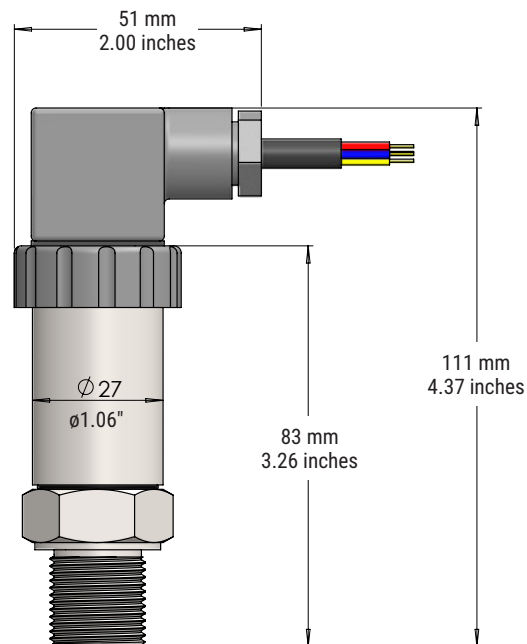
Angular Connector	EN 175301-803A ² , IP65
Circular Connector	M12, IP67
Cable Outlet	Waterproof Plug, IP68

² Previously DIN 43650A

CS Series Ceramic Pressure Transducers / Transmitters Dimensional Drawings

**CS Series Ceramic
Transmitter / Transducer
Dimensional Drawing**

Transducer shown with
standard EN 175301-803A
connector.



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CS Series Ceramic Pressure Transducers / Transmitters Ordering Guide

CS Series - Ceramic Pressure Transducers		
CS	Step 1 - Select: Ceramic Pressure Transducer	
	Step 2 - Select 1 Pressure Reference	
	G	Relative Gauge
	Step 3 - Select 1 Pressure Range	
	Code	Range
	5#	5 PSI
	15#	15 PSI
	30#	30 PSI
	75#	75 PSI
	100#	100 PSI
	150#	150 PSI
	300#	300 PSI
	700#	700 PSI
	*	Custom Range
	A	Absolute Gauge
	Code	Range
	5#	5 PSI
	15#	15 PSI
	30#	30 PSI
	75#	75 PSI
	100#	100 PSI
	150#	150 PSI
	300#	300 PSI
	700#	700 PSI
	*	Custom Range
	S	Sealed Gauge
	Code	Range
	1500#	1,500 PSI
	3000#	3,000 PSI
	6000#	6,000 PSI
	9000#	9,000 PSI
	12000#	12,000 PSI
	*	Custom Range

CS Series - Ceramic - 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	

CS							
Series	Pressure Reference	Pressure Range	Accuracy	Process Connection	Signal Output	Electrical Connection	Cable Length

* Note: Engineering will assign Ordering Codes for Custom Range, Process Connection, Signal Output or Electrical Connection.

Model # Example:

CSG15#UH3A003: CS Series, Relative Gauge, 15 PSI Range, 0.05% Ultra-High Accuracy, 1/2" NPT Process Connection, 0-10 VDC Signal Output, EN 175301-803A Electrical Connection, 3 foot Cable Length.

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