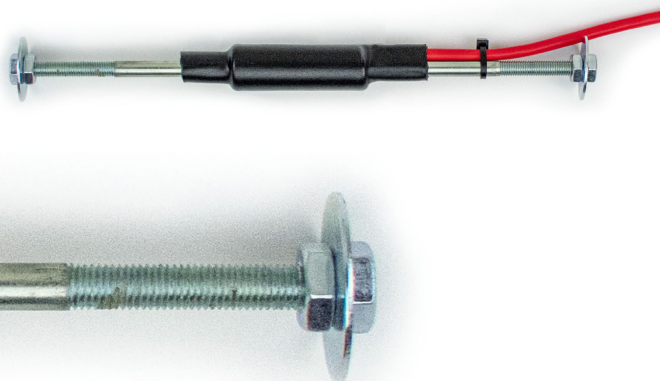


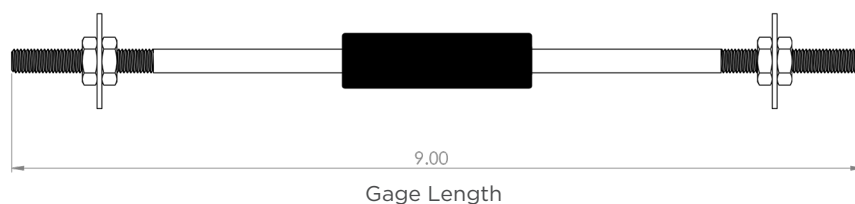
CEST350 | CONCRETE EMBEDMENT STRAIN TRANSDUCER



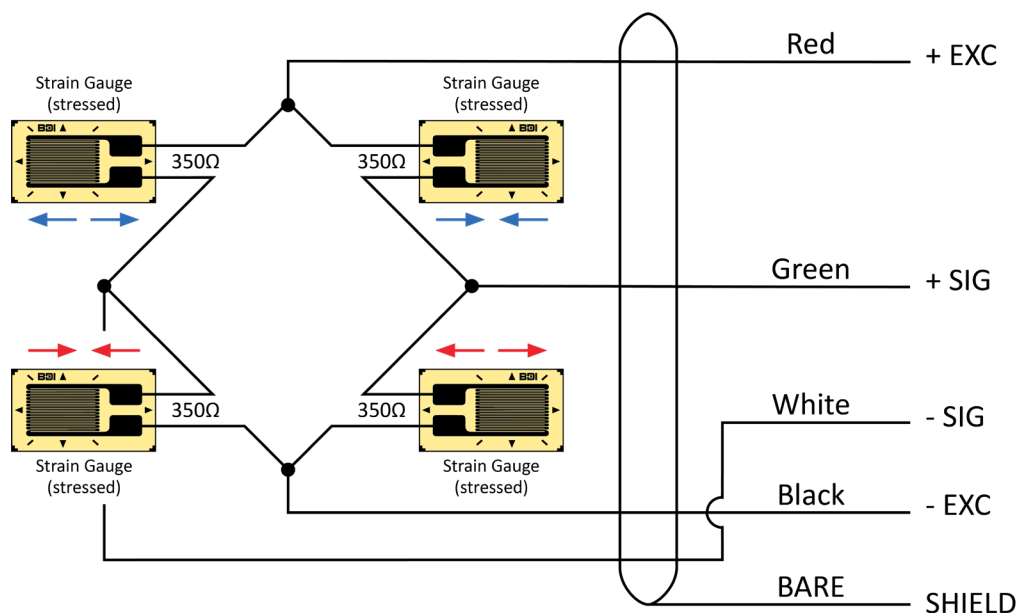
EMBEDMENT STRAIN TRANSDUCERS (CEST) MEASURE AXIAL STRAIN IN RIGID PAVEMENT UNDER LONG-TERM STATIC (SLAB CURLING) OR HIGH-FREQUENCY DYNAMIC (PAVEMENT RESPONSE TO VEHICULAR TRAFFIC) CONDITIONS. THESE RUGGEDIZED SENSORS ARE BUILT TO WITHSTAND THE HARSH CONDITIONS OF CONCRETE PLACEMENT AND VIBRATION.

UTILIZING FOUR ACTIVE ELEMENTS OF A WHEATSTONE BRIDGE CIRCUIT, THIS GAGE IS EASILY ADAPTABLE TO MOST DATA ACQUISITION SYSTEMS. EACH SENSOR IS INDIVIDUALLY CALIBRATED WITH OVERALL LEAD WIRE LENGTH ATTACHED AND IS PROVIDED WITH QC DOCUMENTATION AND CALIBRATION PLOTS.

DIMENSIONS



FULL WHEATSTONE BRIDGE CONFIGURATION



SPECIFICATIONS

MODEL	CEST350
GAGE LENGTH	9 in (229 mm)
CIRCUIT	Full Wheatstone bridge with 4 active 350Ω strain gages
EXCITATION VOLTAGE	+1.0 to +5.0 Vdc
OUTPUT	mV level, ratiometric to Excitation Voltage
SENSITIVITY @1500 µε	~2.0 mV _{out} /V _{exc}
POWER RATING	
MAX	300 mW
TYPICAL	72 mW @ +5.0 Vdc
INTELLIDUCER ¹	13 mW @ +5.0 Vdc
STRAIN RANGE	±2,000 µε
ACCURACY ²	< ±1%
CABLE	Custom lead cable length made to order: IC-02T-125 [24 AWG, 2 pair, drain wire, Teflon insulation and Jacket] IC-02-187 [22 AWG, 2 shielded pair, drain wire, red PVC jacket]
TEMPERATURE RATING	-30° to +176 °F (-34° to +80 °C)

¹ Intelliducer connector required with STS Intelliducer data acquisition nodes.

² Accuracy defined at the calibrated ±2,000 µε range.

OPTIONS & ACCESSORIES



Intelliducer Connector - Required for use with STS Intelliducer Nodes. Instrumentation Cable is integrated into connector and potted.



Instrumentation Cable - 2 shielded twisted pair (22 awg) with drain wire, 0.187" diameter, red PVC jacket.

