

SC-200 Abridged Specifications

Operating power: +15 to +30 V DC (+24 V DC nominal), 80 mA maximum at 24 V DC;
 +15 V DC and -15 V DC needed for ±10 V DC bipolar output

Excitation voltage: 3.0 Vrms (nominal) push-pull drive (factory default)
 4.5 Vrms (nominal) push-pull drive (with shift of jumper J7 on pc board)
 1.5 Vrms (nom) single-ended drive for low impedance (100 -150 Ω) primary

Excitation frequencies: 2.5 kHz, 5 kHz, 7.5 kHz, and 10 kHz (nominal).

LVDT AC output range: 50 mVrms to 5000 mVrms at LVDT's full scale position

Analog DC outputs: 0 - 5 V, 1 - 5 V, 0.5 - 4.5 V, 0.5 - 9.5 V, 0 - 10 V, -10 to +10 V,
 0 - 20 mA 3-wire sourcing, 4 - 20 mA 3-wire sourcing

Loop resistance: 850 Ohms maximum at 24 V DC supply

Output non-linearity: <0.025% of Full Span Output (FSO)

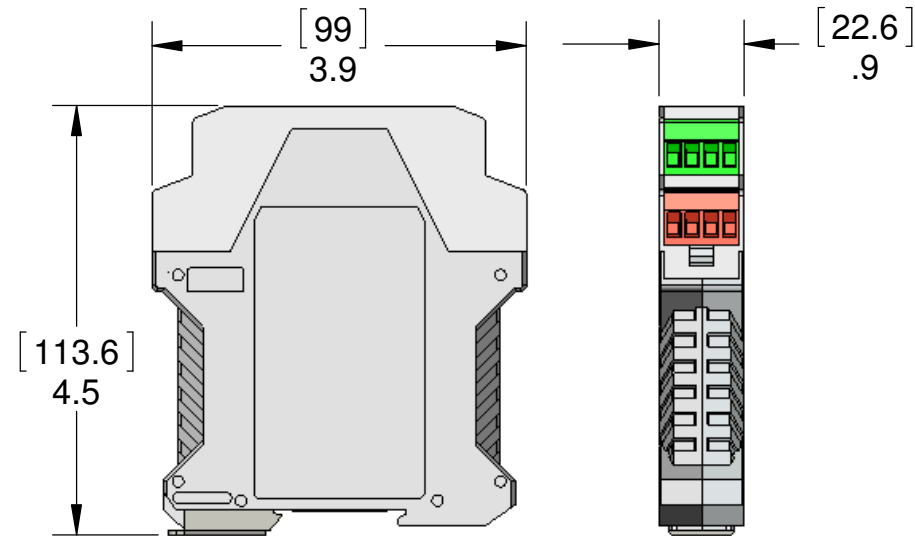
Frequency response: -3 dB at 10% of excitation frequency (minimum) (standard: DS2-4 off)
 -3 dB at 10 Hz (nominal) (reduced bandwidth setting: DS2-4 on)

Null output signal: Up to ±3 V DC floating

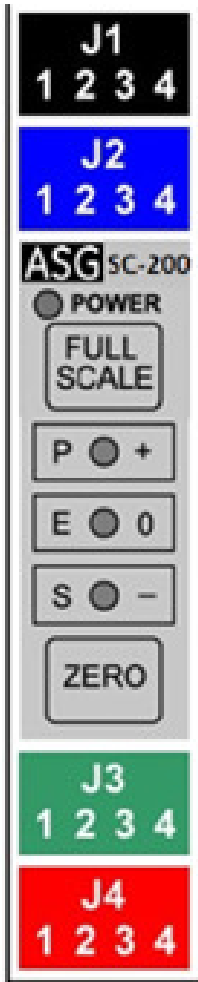
Operating temperature: 0 to 75 C

Temperature Coefficient: 0.002% of FSO/°C (combined span and zero shift)

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	Ref: ECN 20-313	09-30-20	EH

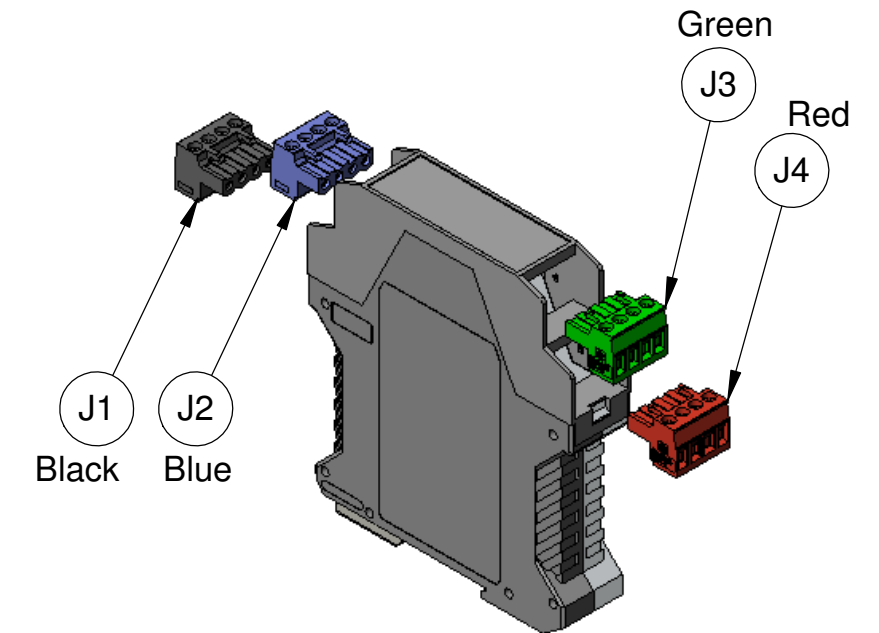


Reference: SC-200 manual at ASG website: www.alliancesensors.com



J1-1	Black	LVDT Primary High <i>or</i> Half-bridge High End
J1-2	Black	LVDT Primary Low <i>or</i> Half-bridge Low End
J1-3	Black	LVDT Secondary Low (<i>Ground if J201 is ON for SC-100 mode</i>)
J1-4	Black	LVDT Secondary High <i>or</i> Half-bridge Mid-tap
J2-1	Blue	LVDT Secondaries Junction Point (<i>Shield Ground if J9 is ON</i>)
J2-2	Blue	Failure Warning Output (<i>Open Collector Switch, 50 mA max.</i>)
J2-3	Blue	-15 V DC input for ±10 V DC output (<i>Shield Ground if J8 is ON</i>)
J2-4	Blue	Sync Input / Output (<i>Master / Slave Bus</i>)
J3-1	Green	RS-485 Data Line (<i>D +</i>)
J3-2	Green	RS-485 Data Line (<i>D -</i>)
J3-3	Green	Analog Output Ground (Common Ground)
J3-4	Green	Analog Output (+) (<i>Voltage or Current, as selected with DS1</i>)
J4-1	Red	Null Indicator Differential DC Output (<i>floating</i>)
J4-2	Red	Null Indicator Differential DC Output (<i>floating</i>)
J4-3	Red	Power Ground (Common Ground)
J4-4	Red	Power Input (+) (<i>15 to 30 V DC</i>)

SC-200 LVDT Signal Conditioner Module I/O Connections



UNLESS OTHERWISE SPECIFIED: 1. DO NOT SCALE DRAWING 2. DIMENSIONS ARE IN INCHES 3. INTERPRET DIM/TOL PER ANSI Y14.5M-1994 4. DEBURR/BREAK SHARP EDGES 5. DIMS ARE BEFORE FINISH 6. (DATA) FOR REFERENCE ONLY		CONTRACT NO. --	ALLIANCE SENSORS GROUP A DIVISION OF H.G. SCHAEVITZ LLC Moorestown, New Jersey USA alliancesensors.com	
TOLERANCES	DECIMAL: .XX ±.010 .XXX ±.005	ANGULAR: ±.5°		
ENGINEER: Ed Herceg	CHECKED BY: Ed Herceg	DATE: 09-10-17	DATE: 09-10-17	SIZE: B CAGE CODE: N/A DWG. NO.: 5000-0005 REV: A
APPROVED BY:	FILENAME:	SCALE: N/A	RELEASE DATE: --	SHEET 1 OF 1