



SNAP Model S100C

Low cost, epoxy mount accelerometer

Features

- Hermetic seal
- ESD protection
- Reverse wiring protection
- Right angle connection mounts in 360° orientation

Dynamic

Sensitivity, ±20%, 25°C.....	100 mV/g
Acceleration range	80 g peak
Amplitude nonlinearity.....	1%
Frequency response, nominal:	
± 3 dB	0.5 - 10,000 Hz
Resonance frequency.....	30 kHz
Transverse sensitivity, max.....	5% of axial
Temperature response:	
-50°C.....	-7
+80°C.....	+5%

Electrical

Power requirement: voltage source	18 - 30 VDC
current regulating diode	2 - 10 mA
Electrical noise, equiv. g:	
Broadband 2.5 Hz to 25 kHz.....	700 µg
Spectral	
10 Hz.....	10 µg/√Hz
100 Hz.....	5 µg/√Hz
1000 Hz.....	5 µg/√Hz
Output impedance, max.	100 Ω
Bias output voltage.....	12 VDC
Grounding.....	case isolated

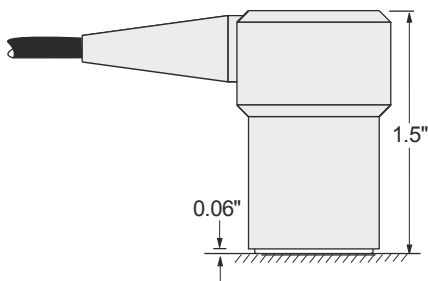
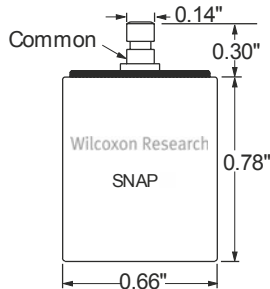
Environmental

Temperature range	-50 to 80°C
Vibration limit.....	500 g
Shock limit, min.	5,000 g
Sealing	hermetic

Physical

Sensing element design	PZT ceramic / shear
Weight	28 grams
Case material	316L stainless steel
Mounting	epoxy
Mating connector	R35
Recommended cabling	J96

Connector pin	Function	Cable conductor color
Shell	common	shield
Pin	power / signal	center
Housing	isolated	n/c



S100C shown with cable assembly and Viton® boot

Accessories supplied: Calibration data (level 2).

See the back for SNAP cabling and mounting instructions.

SNAP cabling

Cable type & length	part #	Description	Temperature range
Coaxial - 16 ft - 32 ft - 64 ft	R35B-0-J41-16 R35B-0-J41-32 R35B-0-J41-64	Coaxial, black PVC jacket, 0.10 in. diameter, SMB connector with SNAP Viton® boot	-20 to 80° C
Triaxial - 16 ft - 32 ft - 64 ft	R35B-0-J43-16 R35B-0-J43-32 R35B-0-J43-64	Triaxial, gray PVC jacket, 0.14 in. diameter, SMB connector with SNAP Viton® boot, outer shield isolated	-20 to 80° C
Twisted, shielded pair - 16 ft - 32 ft - 64 ft	R35B-0-J96-16 R35B-0-J96-32 R35B-0-J96-64	Two conductor shielded, white Teflon® jacket, 0.14 in. diameter, SMB connector with SNAP Viton® boot shield isolated	-80 to 150° C

SNAP mounting instructions

Surface preparation/installation instructions for use with Lord 406 adhesive and accelerator 17

1. Remove oil, grease, rust, or other residues from the surface to be bonded. Degrease with a suitable organic solvent¹ such as acetone, toluene, or white gasoline, and allow to dry thoroughly. Remove rust, paint, and other solid residue with sandpaper. (The strength of bonds on painted surfaces is limited by the bonding strength of the paint to the substrate.)
2. Abrade the mounting surface and the bottom surface of the unit to be bonded with 80 - 120 grit emery paper.
3. Immediately before mounting, remove oil, dust or other residues from the surfaces to be bonded.
4. Mix Lord 406 acrylic adhesive with accelerator 17 in bi-pack thoroughly. Once mixed, the working time of the adhesive is 6 – 10 minutes.
5. Apply an adequate amount to both surfaces and join. If a bead of greater than 0.06" appears at edge, wipe excess adhesive away to ensure boot will seat properly. To ensure an adequate bond, the unit must be fixtured undisturbed for a period of at least 17 minutes (@ 75° F/25° C) prior to handling. A complete cure requires 24 hours.
6. After 17minutes boot/cable assembly may be installed.

Note: ¹ Follow manufacturer's instructions on storage and handling.