PCB PIEZOTRONICS INC.
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INSTRUCTIONS FOR USE – EX356XYYY/MNNNZZ Accelerometer Series Ex ia Version

Model(s)	EX356XYYY/MNNNZZ Series High Temperature Sensor Where X: family type (assigned as a letter A to Z) YYY: variation type (sequential number that together with the letter X make up the model number). MNNNZZ: specifies connectors type and cable length – Optional "M": is present only for metric length for integral cable option – Optional "NNN": specifies cable length (32 feet or 10 meters) (three numbers) – Optional "ZZ": specifies connectors type (two letters) – Optional
Markings	PCB Depew, NY Class 1, Div 1, Groups A, B, C, D, T6 . . .482°C Ex ia IIC T6 . . . 482°C Ga Class 1, Div 2, Zone 2, Groups A, B, C, D, T6 . . .482°C Install Per Drawing 62992
Putting Into Service	The accelerometer must be directly mounted and intimately coupled to the test structure in order to be put into service. Install per Interconnect Drawing 62992.
Safe Use	After completing the system setup, switch on the signal conditioner and allow 1 to 2 minutes for the system to stabilize. If a faulty condition is indicated, first check all system connections, then check the functionality of the cable and signal conditioner. If the system still does not operate properly, consult a PCB factory representative.
Assembling	The EX356XYYY/MNNNZZ Series come assembled and no extra assembly is required.
Dismantling	Other than removal from the mounting, there is no disassembly of the sensor required to take it out of service.
Maintenance	Routine maintenance, such as the cleaning of electrical connectors, housings, and mounting surfaces with solutions and techniques that will not harm the physical material of construction, is acceptable.
Servicing	Due to the sophisticated nature of the accelerometer and associated instrumentation provided by PCB Piezotronics, user servicing or repair is not recommended and, if attempted, may void the factory warranty. However, routine calibration and associated instrumentation is recommended as this helps build confidence in measurement accuracy and acquired data.
Repair	In the event that equipment becomes damaged or ceases to operate, arrangements should be made to return the equipment to PCB Piezotronics for repair. User servicing or repair is not recommended and, if attempted, may void the factory warranty.

Installation	Overview: The accelerometer must be directly mounted and intimately coupled to the test structure in order to be put into service. Characteristics like location, ruggedness, amplitude range, accessibility, temperature, and portability are extremely critical. Cabling: Care and attention to cable installation and cable condition is essential as the reliability and accuracy of any measurement system is no better than that of its weakest link. Due to the nature of vibration measurements, all sensor cables will ultimately fatigue and fail. Good installation practice will extend the life of a cable, however, it is highly recommended to keep spare cables on hand to enable continuation of the test in the event of a cable failure. Install per Interconnect Drawing 62992.
Adjustment	The EX356XYYY/MNNNZZ series come assembled in a system and no user adjustments are possible. However, routine calibration of sensors by the manufacturer is recommended as this helps build confidence in measurement accuracy and acquired data.
Danger Areas (for pressure-relief devices)	N/A – not a pressure relief device.
Training Instructions	Industrial sensors must be installed in Hazardous Locations by trained professionals according to EN/IEC 60079-14 requirements.
Details on Safety of Protection Category	Ex ia is “intrinsic safety”, which limits the energy of sparks and surface temperatures to safe levels.
Entity Parameters and Limits (Values)	Temperature Range: -55°C to +472°C Specific parameters Version with Connectors U_i: 28 V, I_i: 120 mA, P_i: 1 W, C_i: 750 pF, L_i: 0 or U_i: 15 V, I_i: 900 mA, P_i: 1 W, C_i: 750 pF, L_i: 0 Version with integral cables U_i: 28 V, I_i: 120 mA, P_i: 1 W, C_i: 6 nF, L_i: 30 µH or U_i: 15 V, I_i: 900 mA, P_i: 1 W, C_i: 6 nF, L_i: 30 µ
Special Conditions of Use	Version Ex ia : The apparatus must only be connected to a certified associated intrinsically safe equipment. This combination must be compatible regarding intrinsic safety rules (see electrical parameters). The apparatus shall be connected according to drawing 62992. 1. The mounting of the apparatus into an installation must be carried out in such a way that metallic body of the accelerometer and cable shield are reliably connected to the system earth. 2. The cable used must have an operating temperature compatible with the environment in which the accelerometer is installed.
Essential Characteristics of tools fitted to the system.	N/A – No tools are fitted to the system.
Drawings and Diagrams	62990, 62992
Other	CSA c/us

Note: Literature (such as the manual or marketing materials) describing the equipment or protective system must not contradict the instructions with regard to safety aspects.