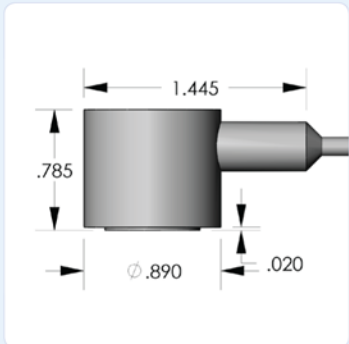


**PRODUCT DATA SHEET**

**ISR15CA-HT Sensor**

**Intrinsically Safe High Temperature Sensor**

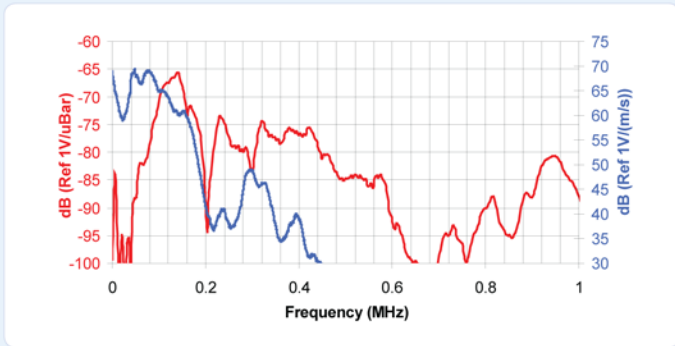


**DESCRIPTION AND FEATURES**

The ISR15CA-HT sensor is a medium frequency, resonant acoustic emission sensor with an integral cable. It is designed to meet the intrinsic safety (IS) and IP66 requirements and can operate at very high temperatures continuously. The special polymer coatings on the sensor along with an integral cable make it 100% insulated and non-conductive. The sensor can be used to temperatures of 150 C.

**APPLICATIONS**

The sensor can be readily used for structural health monitoring in harsh environments requiring intrinsic safety. It can be used for the monitoring of structures like pipelines, pressure vessels and storage tanks in petroleum refineries, chemical plants and offshore platforms.



**OPERATING SPECIFICATIONS**

*Dynamic*

Peak Sensitivity, Ref V/(m/s)..... 70 dB  
 Peak Sensitivity, Ref V/μbar.....-65 dB  
 Operating Frequency Range..... 50-400 kHz  
 Resonant Frequency, Ref V/(m/s).....75 kHz  
 Resonant Frequency, Ref V/μbar.....150 kHz  
 Directionality..... +/-1.5 dB

*Environmental*

Temperature Range..... -40 to 150°C  
 Shock Limit.....500 g  
 Waterproof..... IP66  
 Completely enclosed crystal for RFI/EMI immunity

*Physical*

Dimensions.....0.89"OD X 0.8"H  
 23 mm OD X 20 mm H  
 Weight.....27 grams with 1 meter cable  
 Case Material..... Stainless Steel/Epoxy  
 Face Material..... Ceramic  
 Connector..... BNC on integral cable  
 Connector Locations.....Side

*Certifications*

II 1 (1) GD, Ex ia IIC T3

**ORDERING INFORMATION AND ACCESSORIES**

ISR15CA-HT..... ISR15CA-HT  
 Cable (specify length in '-XX' m) ..... XX  
 IS Zener Barrier/Preamplifier Interface ..... 1281

*Sensors include*

NIST Calibration Certificate & Warranty

