

PRODUCT DATA SHEET

ISR30CA-HT Sensor

Intrinsically Safe High Temperature Sensor

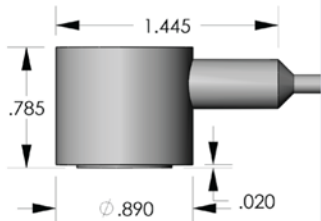


DESCRIPTION AND FEATURES

The ISR30CA-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).....	58 dB
Peak Sensitivity, Ref V/ μ bar.....	-64 dB
Operating Frequency Range.....	150-400 kHz
Resonant Frequency, Ref V/(m/s).....	300 kHz
Resonant Frequency, Ref V/ μ bar.....	350 kHz
Directionality.....	+/-1.5 dB

Environmental

Temperature Range.....	-40 to 150°C
Shock Limit.....	1000 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

ISR30CA-HT.....	ISR30CA-HT
Cable (specify length in 'XX' m).....	XX
IS Zener Barrier/Preamplifier Interface.....	1281

Sensors include

NIST Calibration Certificate & Warranty

