

PRODUCT DATA SHEET

R.45 Sensor

Low Frequency Sensor

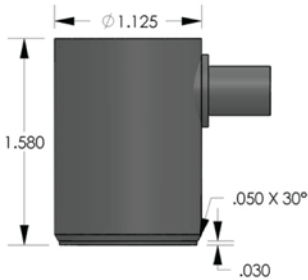


DESCRIPTION AND FEATURES

The R.45 is a low frequency resonant AE sensor with very high sensitivity. With a resonant frequency of 20 kHz the sensor is ideal for monitoring AE activity in very large structures. The sensor features a rugged stainless steel cavity with a BNC connector on the side.

APPLICATIONS

The sensor can be used in any application requiring a resonant low frequency sensor. Typical applications include structural health monitoring of large concrete, steel and geologic structures. The can also be used for leak detection in pipes and tanks.



OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/(m/s).....	85 dB
Operating Frequency Range	5-30 kHz
Resonant Frequency, Ref V/(m/s).....	20 kHz
Directionality	+/-1.5 dB

Environmental

Temperature Range	-45° to 150° C
Shock Limit	500 g
Completely enclosed crystal for RFI/EMI immunity	

Physical

Dimensions.....	1.125"OD X 1.55"H
	28.6 mm OD X 40.6 mm H
Weight	121 grams
Case Material.....	Stainless Steel
Face Material.....	Ceramic
Connector	BNC
Connector Locations.....	Side

ORDERING INFORMATION AND ACCESSORIES

R.45	R.45
Cable (specify length in 'XX' m at end of PN)	1234-X
Magnetic Hold-Down	MHSTD
Pre-amplifier.....	0/2/4, 2/4/6, 1220
Preamp to System Cable (specify length in 'm')	1234-X
Amplifier Subsystems	AE2A, AE5A

Sensors include

NIST Calibration Certificate & Warranty

