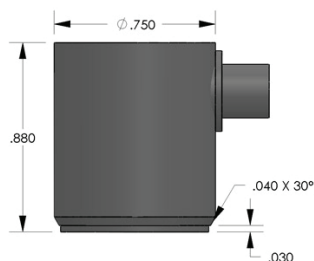


R30α Sensor

General Purpose, 300 kHz Resonant Frequency Sensor



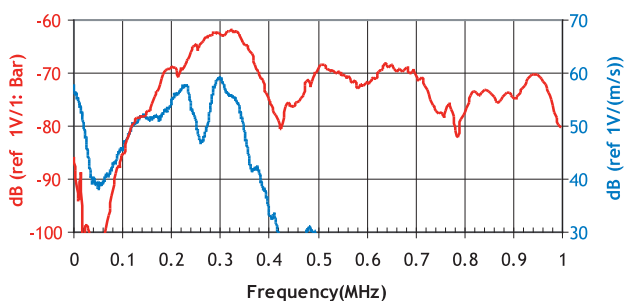
DESCRIPTION AND FEATURES

The R30α is a narrow band resonant sensor with a high sensitivity. The sensor cavity is machined from a solid stainless steel rod, making the sensor extremely rugged and reliable. The ceramic face along with a 30 degree chamfer to cavity electrically isolates the sensor cavity from the structure under test assuring a low noise operation.

The compact size of the sensor makes it readily suitable for deploying in tight spaces for monitoring. The Alpha series family of sensors features an SMA connector versus the Microdot connectors found on MISTRAS' RXX series of sensors. The alpha series includes R3α, R6α, R15α, R30α, R50α, R80α and WSα sensors.

APPLICATIONS

This sensor provides additional noise rejection for applications such as production line process monitoring applications such as punch press monitoring, forming operations, stamping, applications and process control applications such as leak detection within process control plants in the presence of flow and process noises.



PRODUCT DATA SHEET

OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/(m/s).....	58 dB
Peak Sensitivity, Ref V/μbar.....	-62 dB
Operating Frequency Range.....	150-400 kHz
Resonant Frequency, Ref V/(m/s).....	300 kHz
Resonant Frequency, Ref V/μbar.....	330 kHz

Environmental

Temperature Range.....	-65 to 175°C
Shock Limit.....	500 g
Completely enclosed crystal for RFI/EMI immunity	

Physical

Dimensions.....	0.75"OD X 0.88"H
	19 mm OD X 22.4 mm H
Weight.....	29 grams
Case Material.....	Stainless steel
Face Material.....	Ceramic
Connector.....	SMA
Seal.....	Epoxy
Sensor to Preamp Cable (1 or 2 meters)	1232-X-SMA

ORDERING INFORMATION AND ACCESSORIES

R30α	R30α or R30α
Cable (Specify length in 'XX' m).....	1234-SMA/BNC-X
Magnetic Hold-Down	MHR15A
Amplifier subsystems ... AE2A, AE5A or standard AE systems	
Preamplifier	0/2/4, 2/4/6
Preamp to System Cable (specify length in 'm')	1234 - X

Sensors include

NIST Calibration Certificate & Warranty



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