

FDS101 Insight FDS Sensor - Stud or Adhesively Mounted



Product Overview

The **FDS101 Insight FDS Sensor** is easy to mount and provides a monitoring solution for all fluid film bearings.

The **FDS101 Insight FDS Sensor** is the larger and less expensive model of Voyager Instrument's force detection condition monitoring sensors. It is the ideal solution for otherwise unprotected fluid film bearings and offers key insight into the operating conditions of your machinery.

The **FDS101** can be stud or adhesively mounted to bearing housings for simple installation and no downtime for your machine.

For adhesive installation, purchase the FDS101 Installation Kit (which includes two magnetic fixtures and one 3 ml syringe of adhesive.)

Specifications:

- IEPE Powered
- 40 mV/ $\mu\epsilon$
- 0.01Hz-10kHz (Approximate)
- +/- 100 $\mu\epsilon$ Dynamic Range
- M6 x 20 Conical Head Mounting Screw

Parameters					
Parameter	Unit	Min.	Typ.	Max.	Remark
Measured Unit		Strain in longer axis direction			
Sensitivity	mV/ $\mu\epsilon$		40		+20%/-10% at room temperature. Calibration is done by comparison with a strain gauge.
Polarity	-	Positive for applied tension			
Frequency Range	Hz	0.01		10 kHz	
Resonance Frequency	kHz		14.7		
Dynamic Range	$\mu\epsilon$	100			
Connector		Coaxial 10-32 UNF			
Supply Current	mA	2	4	20	
DC Bias Voltage	V	8	12	14	
DC Bias Stabilization	S		60		
Mounting Screw	-	M6 x 20, conical head			
Mounting torque	Nm	3	5*	10	*Nominal Value for Tests
Temperature Range	°C	-40		+85	

Mechanical:

