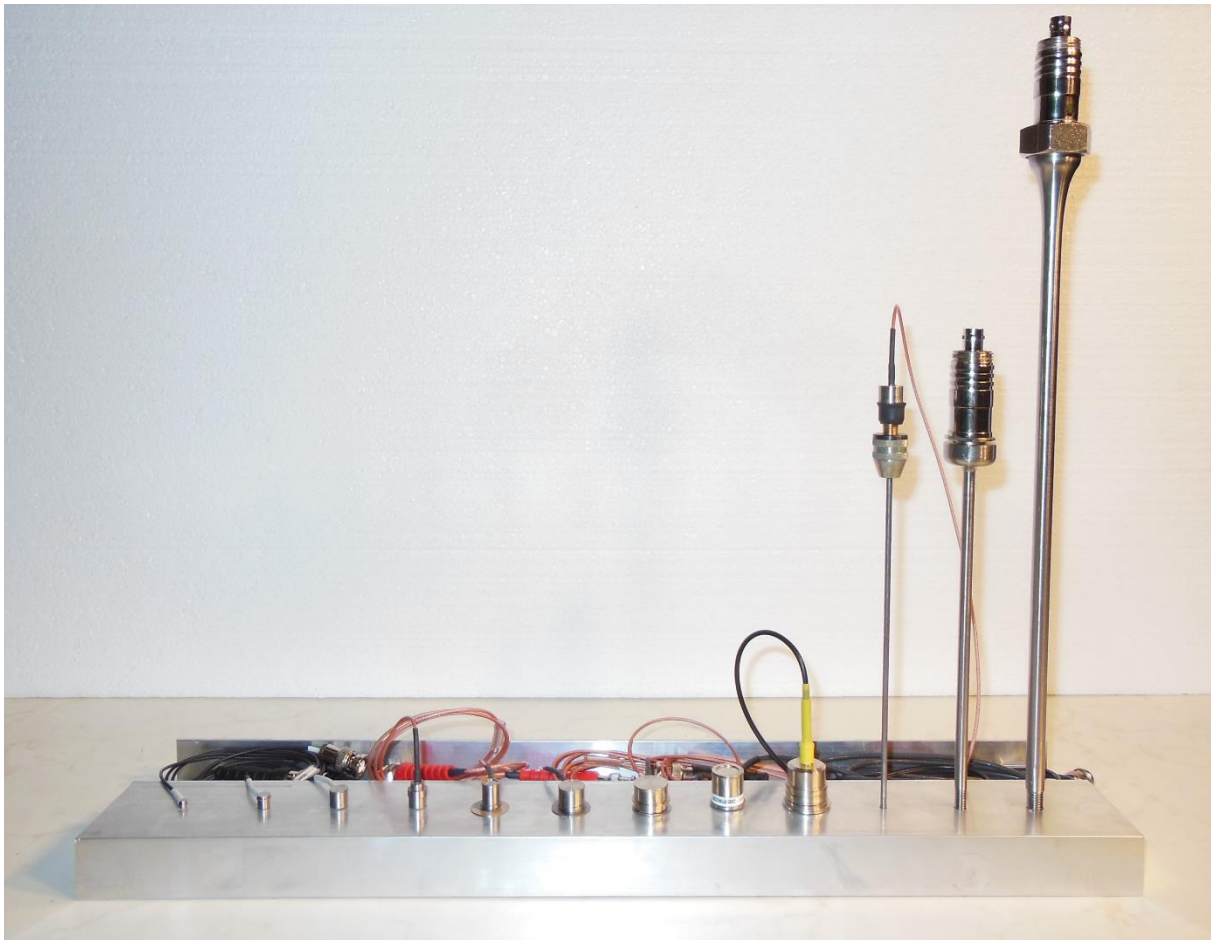




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AE sensor & exciter



2016 v16



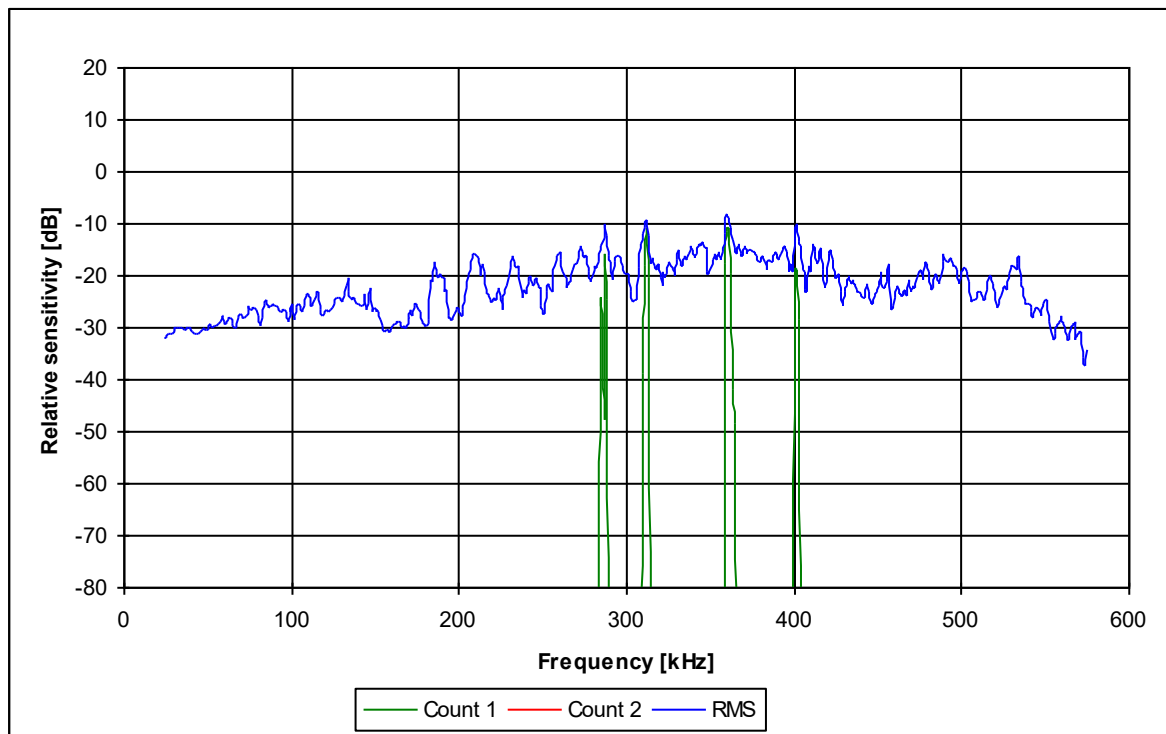
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MODEL	MICRO	
	Dimension	Diam. 3.4 mm, height 3.7 mm
	Case material	Stainless steel
	Contact plate	Stainless steel Diam. 2.8 mm
	Output	Coaxial cable Diam. 1.2 mm, BNC konnector
	Piezoceramic material	PZT class 200
	Temperature range	- 20°C to + 95 °C
	Application	Laboratory using
		External coaxial impedance converter & preamplifier.
	Mounting methods	Glued joint

Advantage >>> DAKEL the smallest sensor & exciter
 >>> compact full metal case >>> low noise, higher wear hardness

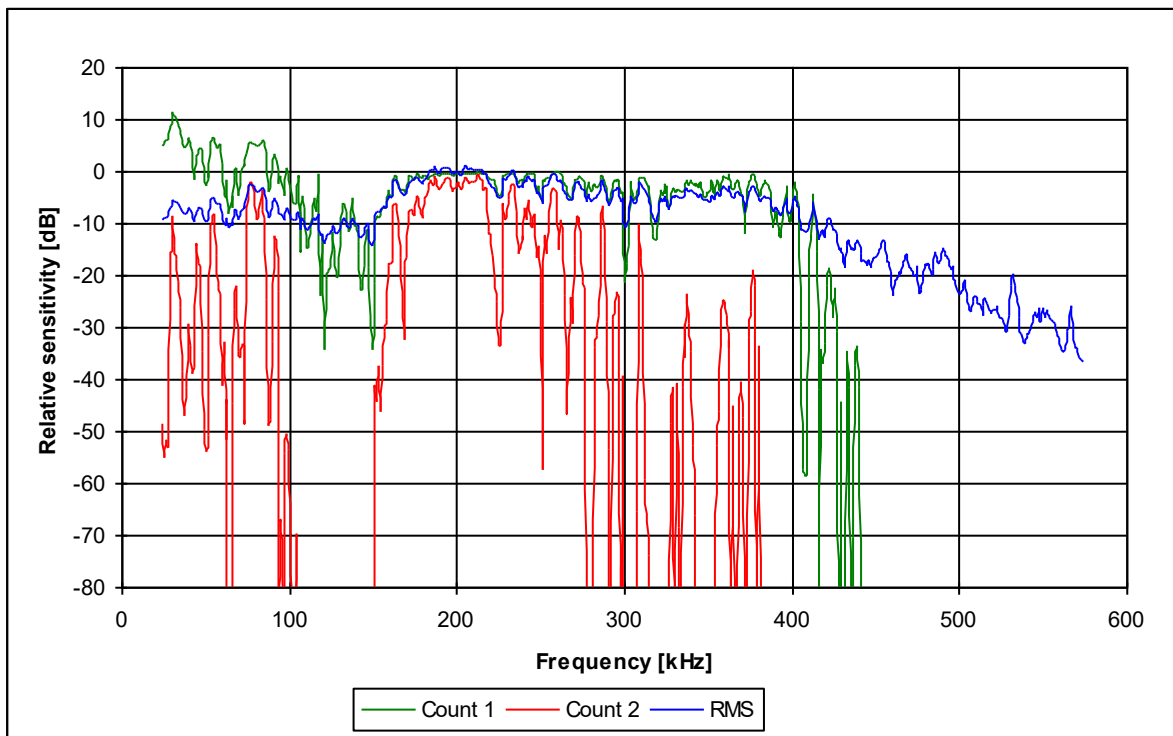




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MODEL	MIDI	
	Dimension	Diam.: 6 mm, height 6,3 mm
	Case material	Stainless steel
	Wear plate	Stainless steel diam.: 5 mm
	Output	Coaxial cable diam.: 1.7 mm BNC connector
	Piezoceramic material	PZT class 200
	Temperature range	- 20°C to + 95 °C
	Application	Laboratory using
		External coaxial impedance converter & preamplifier
	Mounting methods	Glued point Magnetic holder

Advantage >>> small sensor & exciter
 >>> compact full metal case >>> low noise, higher wear hardness

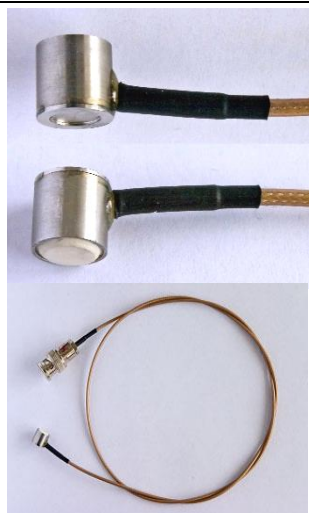




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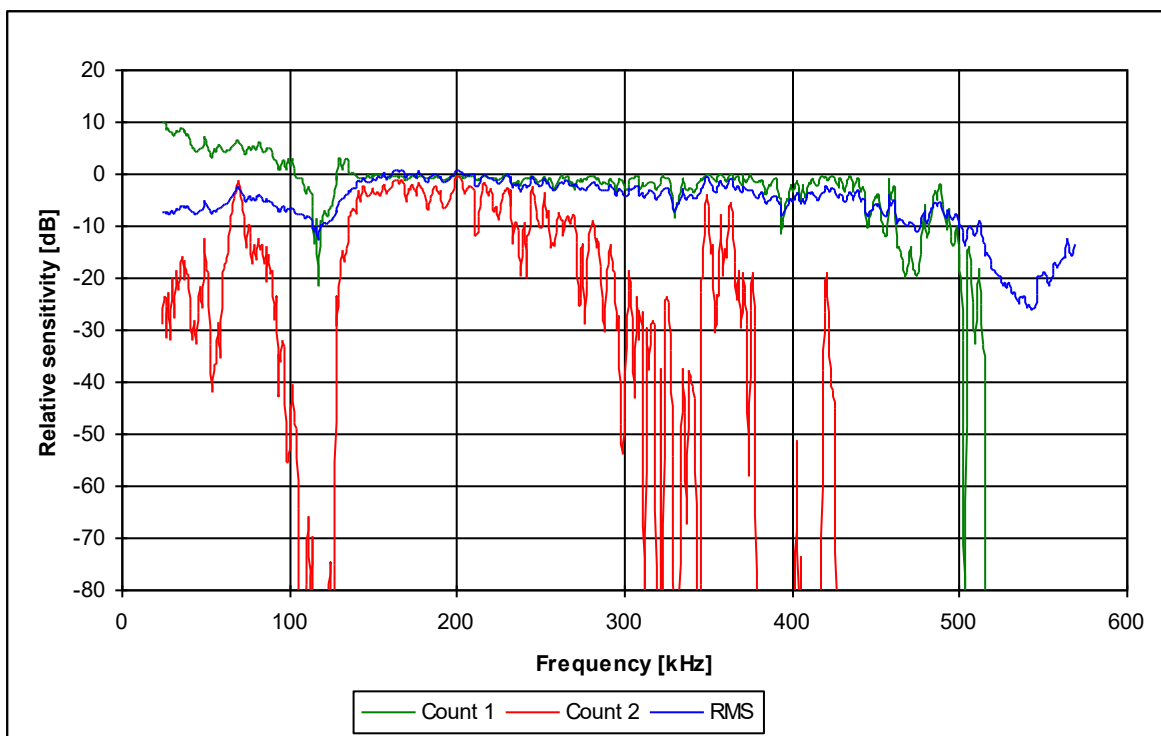
MODEL

IDK-09



Dimension	Diam. 9 mm, height 9 mm
Case material	stainless steel
Wear plate	Alumina sintered, contact area diam. 6mm
Output	Coaxial cable diam.: 1.7 mm BNC connector
Piezoceramic material	PZT class 200
Temperature range	- 20°C to + 95 °C
Application	Laboratory using
	External coaxial impedance converter & preamplifier.
Mounting methods	Glued point Magnetic holder

Advantage >>> small sensor & exciter
 >>> insulated case





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MODEL

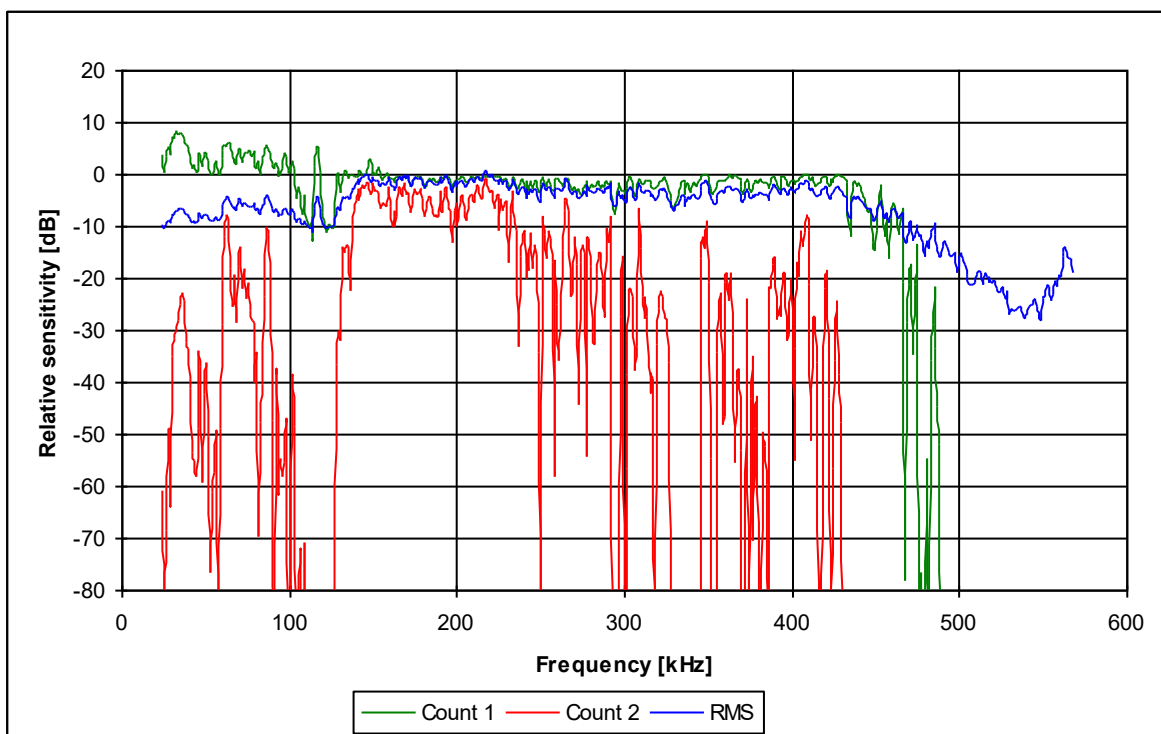
MDK-09



Dimension	Diam. 9 mm, height 13 mm
Case material	Stainless steel
Wear plate	FeNdB magnetic disc, contact area diam. 8mm
Output	Coaxial cable diam.: 1.7 mm BNC connector
Piezoceramic material	PZT class 200
Temperature range	- 20 °to + 75 °C
Application	Laboratory using
	External coaxial impedance converter & preamplifier
Mounting methods	Internal magnetic holder

Advantage >>> axial coaxial output

>>> small dimensions , higher holding force of the in-built magnetic holder





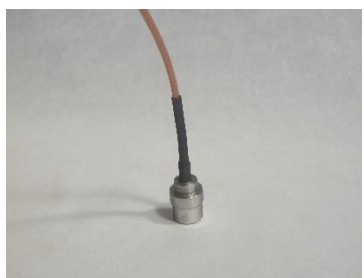
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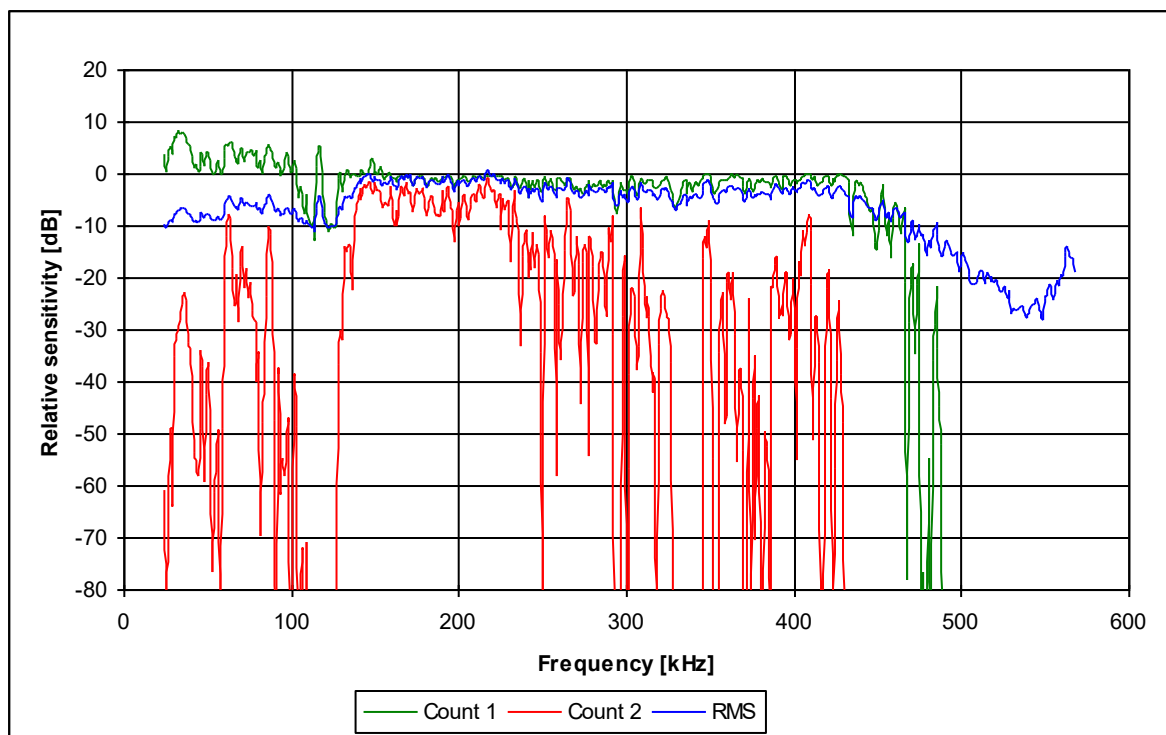
MODEL

IDK-09axial



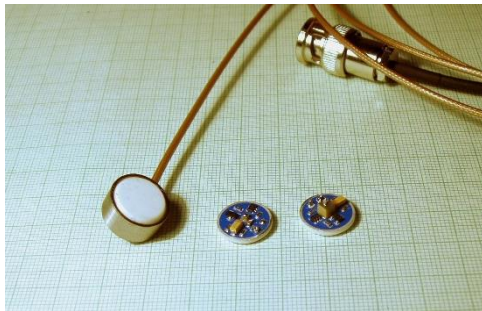
Dimension	Diam. 9 mm, height 10,5 mm
Case material	Stainless steel
Wear plate	Alumina sintered, contact area diam. 6mm
Output	Coaxial cable diam.: 1.7 mm BNC connector
Piezoceramic material	PZT class 200
Temperature range	- 20 °to + 75 °C
Application	Laboratory using
	External coaxial impedance converter & preamplifier
Mounting methods	Glued joint Magnetic holder

Advantage >>> axial coaxial output , electrically isolated case



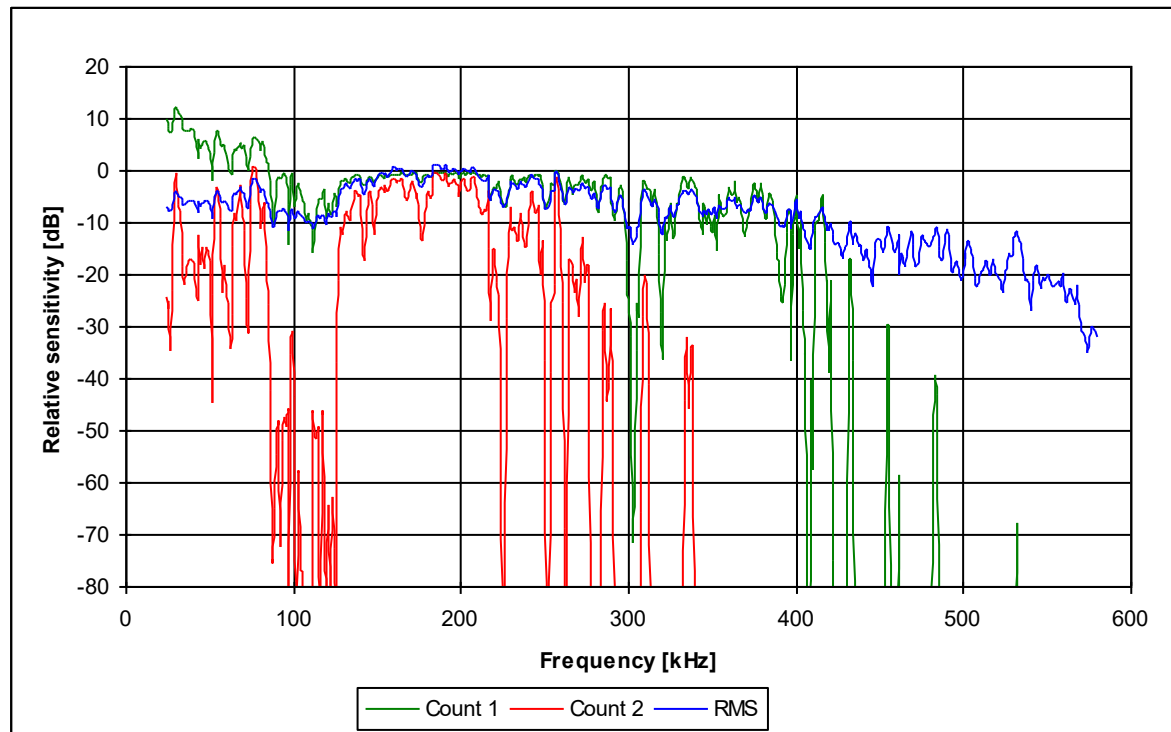
MODEL

IDK-14 / IDK14AS



Dimensions	Diam. 14 mm, height 6 mm
Case material	Stainless steel
Contact plate	Alumina sintered , contact area dim. 11mm
Output	Coaxial cable diam.: 1.7 mm BNC connector
Piezoceramic material	PZT class 200
Temperature range	IDK14AS ... - 20°C to + 65 °C IDK14 ... -20°C to + 95 °C
Application	Laboratory and industrial using
IDK14	External coaxial impedance converter & preamplifier.
IDK14AS	Internal impedance converter & preamplifier cca 35 dB
Mounting methods	Glued joint, magnetic holder

>>> the smallest sensor with internal preamplifier (IDK14AS) and isolated case





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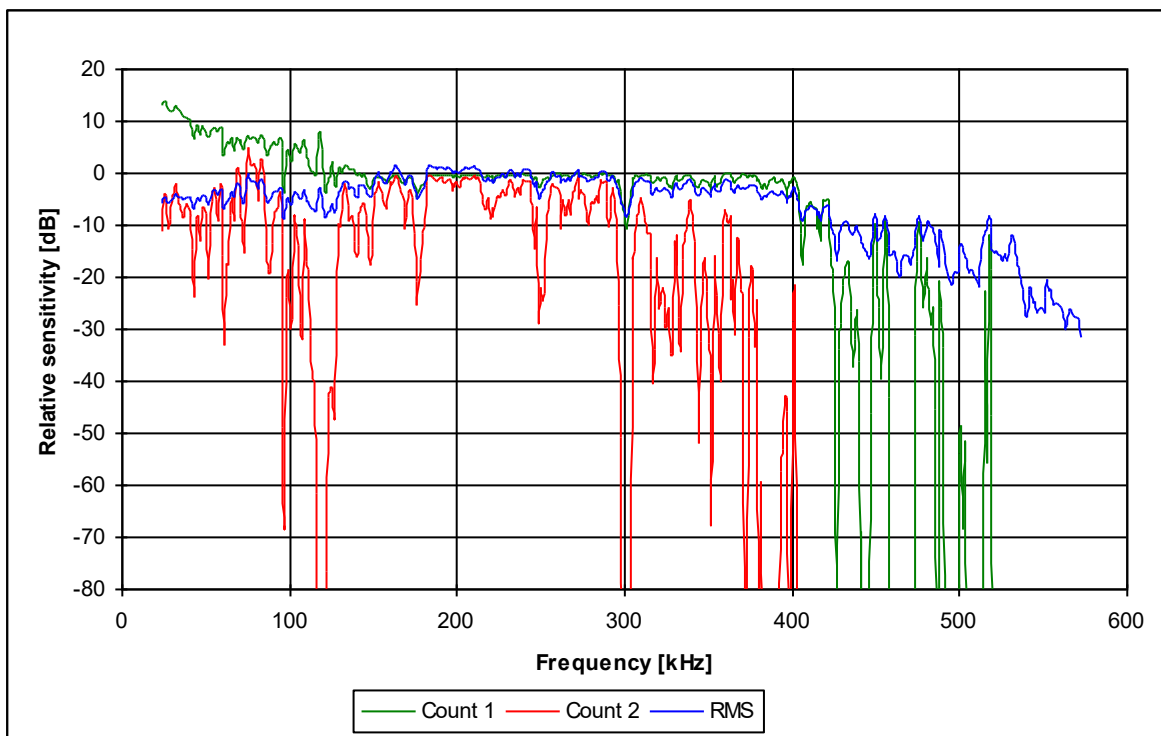
MODEL

MDK 13 / MDK13AS



Dimension	Diam. 13 mm, height 11 mm
Case material	stainless steel
Wear plate	FeNdB magnetic disc, contact area diam. 12mm
Output	Coaxial cable diam.: 1.7 mm BNC connector
Piezoceramic material	PZT class 200
Temperature range	MDK13AS ... -20°C to +65 °C MDK13 ... -20°C to +95 °C
Application	Laboratory and industrial using MDK13 >>> External coaxial impedance converter & preamplifier MDK13AS >> internal preamplifier
Mounting methods	Self-acting on magnetic steel

Advantage >>> the smallest sensor with internal preamplifier (MDK13AS) and inbuilt magnetic holder





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MODEL

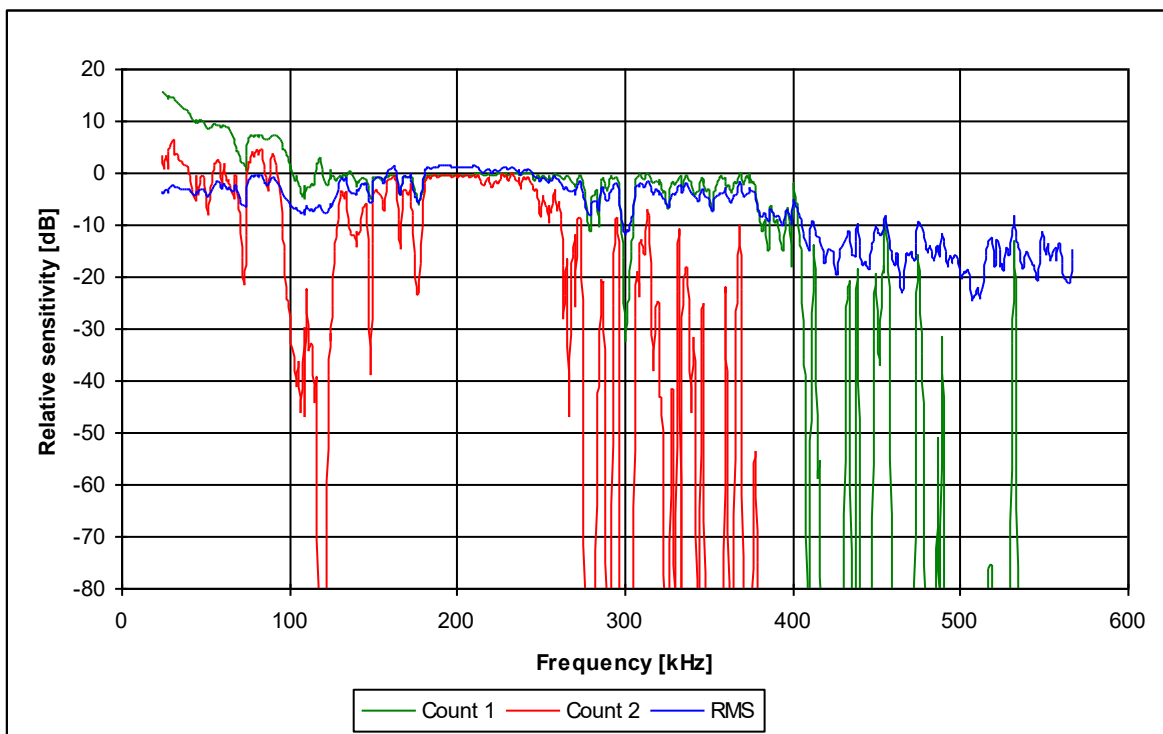
MDK17 / MDK17AS



Dimension	Diam.: 17 mm, height 12,5 mm
Case material	Stainless steel
Wear plate	FeNdB magnetic disc, contact area diam. 15mm
Output	Coaxial cable diam.: 1.7 mm BNC connector
Piezoceramic material	PZT class 200
Temperature range	MDK17AS ... - 20°C to + 65 °C MDK17 ... -20°C to + 95 °C
Application	Laboratory and industrial using MDK17 >>> External coaxial impedance converter & preamplifier MDK17AS >>> internal preamplifier
Mounting methods	Self-acting on magnetic steel

Advantage >>> small sensor with internal preamplifier (MDK17AS) and inbuilt magnetic holder

>>> higher holding force





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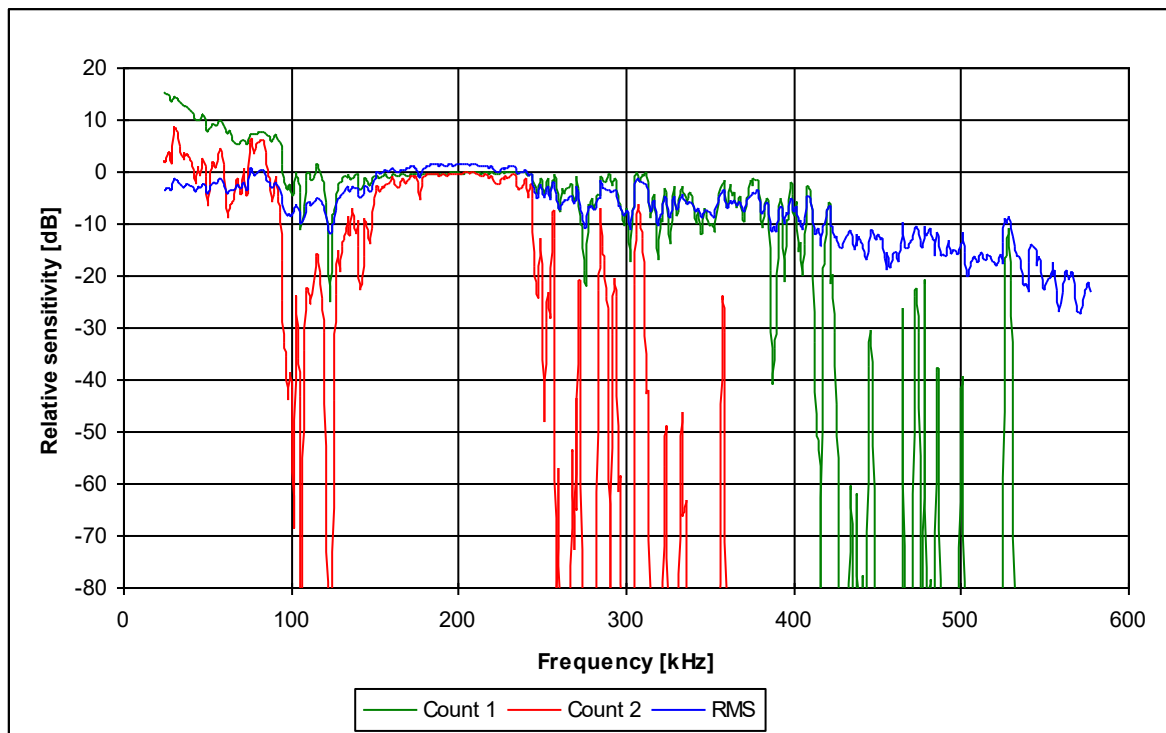
MODEL

MTR-05 / MTPA-05



Dimension	Diam 16 mm, height 17 mm
Case material	Stainless steel
Wear plate	Steel membrane Ni coated diam 12 mm
Output	Coaxial cable diam.: 3.2 mm BNC connector
Piezoceramic material	PZT class 200
Temperature range	MTPA05 ... - 20°C to + 65 °C MTR05 ... - 20°C to + 150 °C
Application	Laboratory using Industrial using
Model MTR-05	External coaxial impedance converter & preamplifier
Model MTPA-05	Internal impedance converter & preamplifier 33 dB
Mounting methods	Glued point, Magnetic holder

Advantage >>> compact full metal case >>> low noise, higher wear hardness





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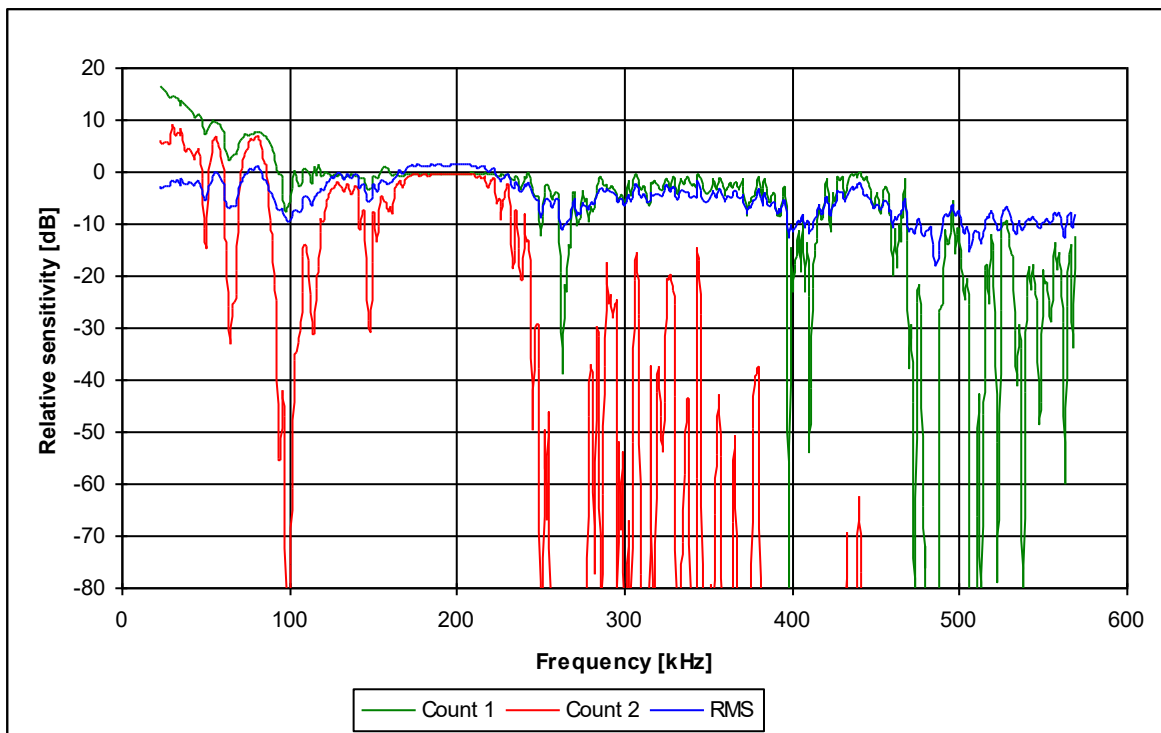
MODEL

MTR-15/MTPA-15




Dimension	Diam. 22 mm, height 52 mm
Case material	Steel Ni coated
Wear plate	Steel Ni coated Diam. 18 mm
Output	BNC connector
Piezoceramic material	PZT class 200
Temperature range	MTPA15 ... - 20°C to + 65 °C MTR15 ... - 20°C to + 150 °C
Application	Industrial using
Model MTR-15	External coaxial impedance converter & preamplifier
Model MTPA-15	Internal impedance converter & preamplifier, mode switch
Mounting methods	Glued point, Magnetic holder or Screw connection, waveguide

Advantage >>> compact full metal case >>> low noise, higher wear hardness
 >>> internal preamplifier and internal mode switch >> pasive (sensor) X active (exciter)

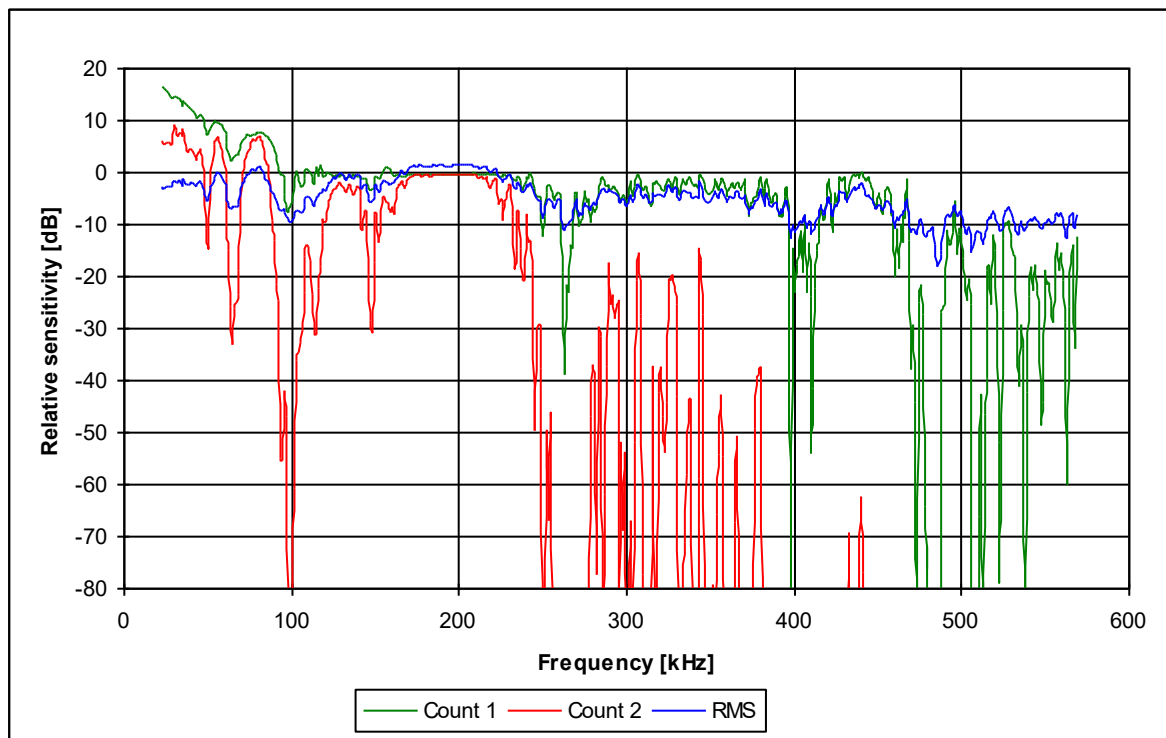




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MODEL	DK16 / DK16AS	
	Dimension	Diam. 22 mm, height 52 mm
	Case material	Steel Ni coated
	Wear plate	Steel Ni coated M16x1
	Output	BNC connector
	Piezoceramic material	PZT class 200
	Temperature range	DK16AS ... - 20°C to + 65 °C DK16 ... - 20°C to + 150 °C
	Application	Industrial using
	Model DK16	External coaxial impedance converter & preamplifier
	Model DK16AS	Internal impedance converter & preamplifier, mode switch
	Mounting methods	Screw connection, waveguide

Advantage >>> compact full metal case >>> low noise, higher wear hardness
 >>> internal preamplifier and internal mode switch >> pasive (sensor) X active (exciter)





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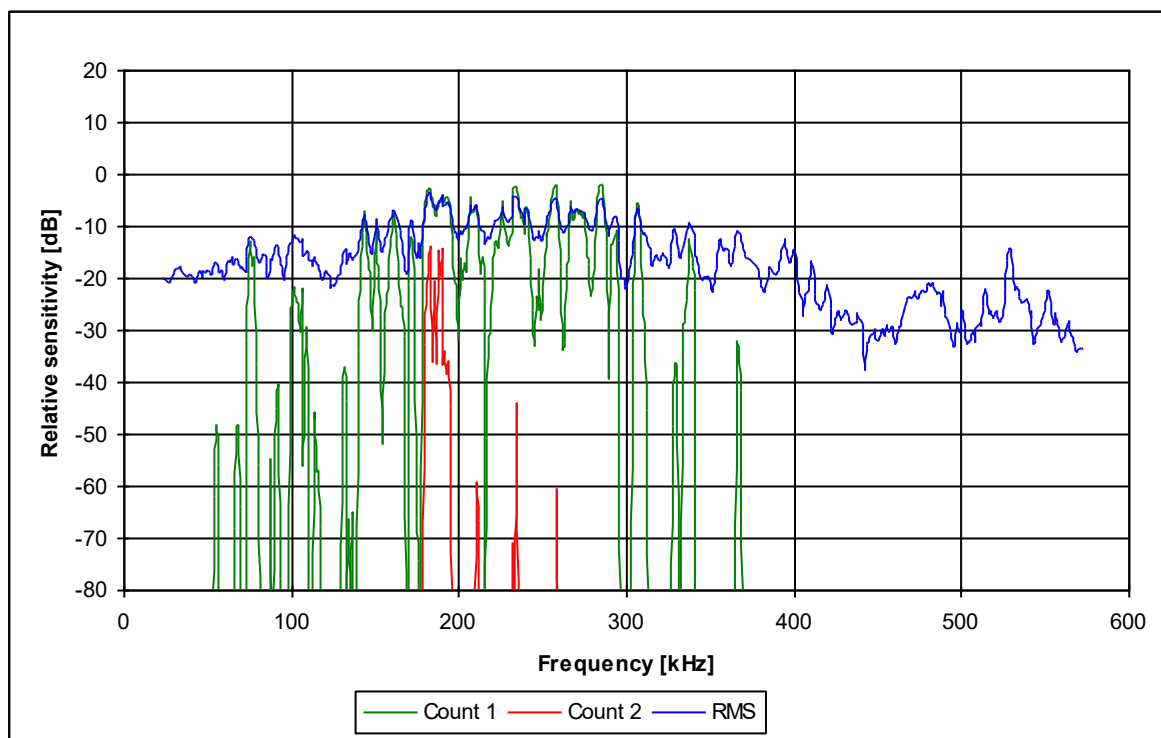
MODEL

MTR-42



Dimension	Diam. 18 mm, height 30 mm
Case material	Steel Ni coated
Wear plate	Steel Ni coated diam 18 mm
Output	Axial output high temperature coaxial cable with BNC connector
Piezoceramic material	Class 800
Temperature range	+ 20°C to + 350 °C
Application	Laboratory and industrial using External coaxial impedance converter & preamplifier
Mounting methods	Glued point, Magnetic holder

Advantage >>> high operating temperature sensor & exciter
>>> PbNb2O6 active element






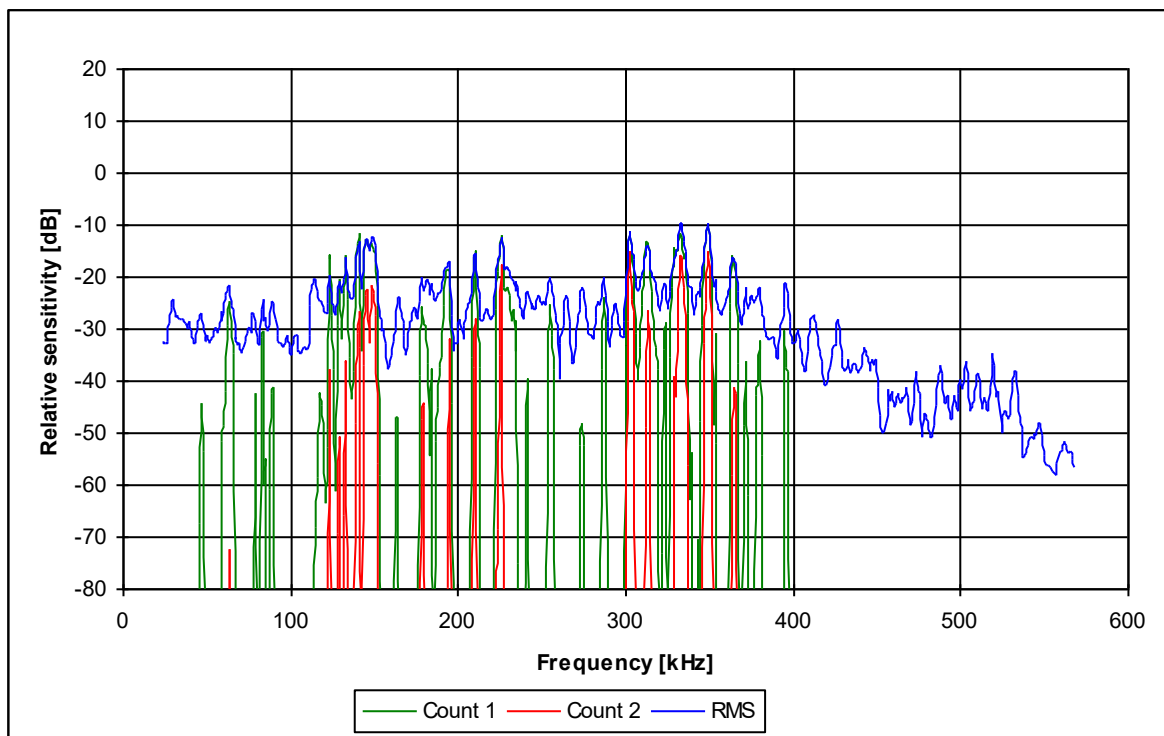
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MODEL		DKKL05	
	Dimension	Diam.: 16 mm, height 51 mm	
	Case material	Stainless steel	
	Wear plate	Snail-type clamp	
	Output	Coaxial cable diam.: 1.7 mm BNC connector	
	Piezoceramic material	PZT class 200	
	Temperature range	- 20°C to + 65 °C	
	Application	Laboratory and industrial using External coaxial impedance converter & preamplifier	
	Mounting methods	Snail-type clamp for the bar with diameter 0.5 – 3mm	

Advantage >>> small sensor & exciter
>>> Mounting method by the build-in snail-type clamp to wave guide

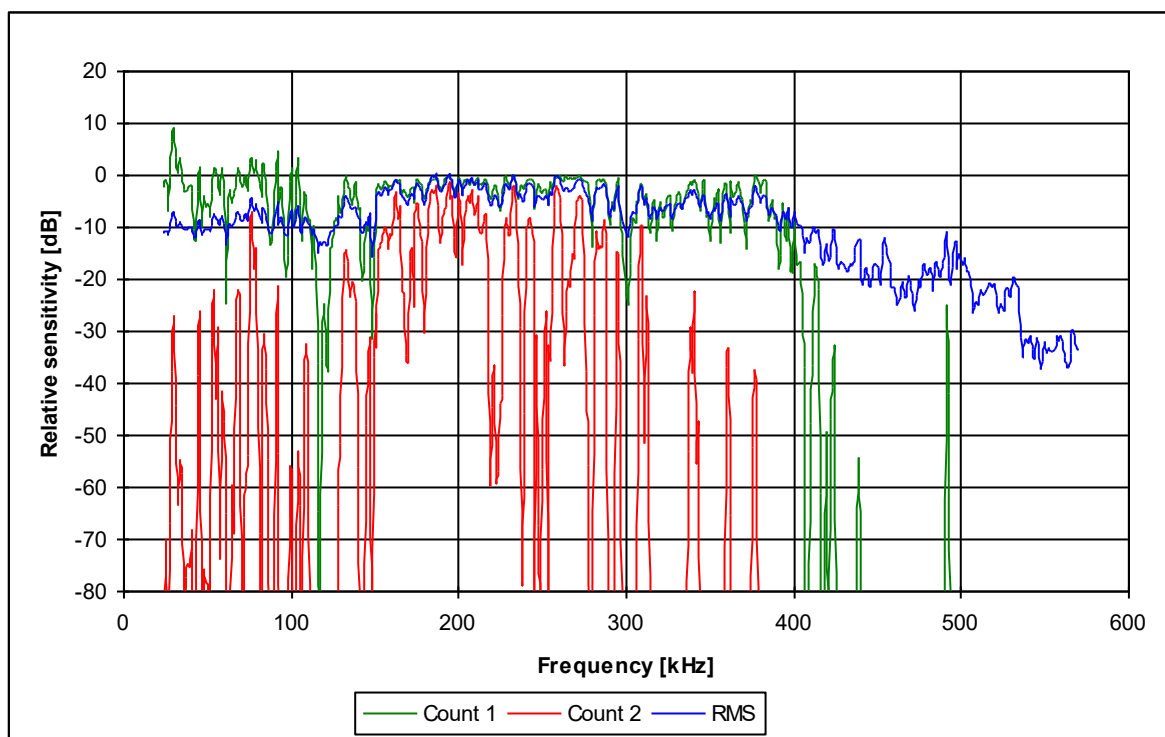




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MODEL	KDK21 / KDK21AS	
	Dimensions	Diam. 21 mm, height 10 mm
	Case material	Alumina sintered
	Contact plate	Alumina sintered , contact area diam. 11mm
	Output	Coaxial cable diam.: 1.7 mm BNC connector
	Piezoceramic material	PZT class 200
	Temperature range	KDK21AS ... - 20°C to + 65 °C KDK21 ... - 20°C to + 100 °C
	Application	Laboratory and industry using
	KDK21AS	Internal impedance converter & preamplifier 32 dB
	KDK21	External coaxial impedance converter & preamplifier
	Mounting methods	Glued joint, magnetic holder

Advantage >>> greatly resistant to corrosion case





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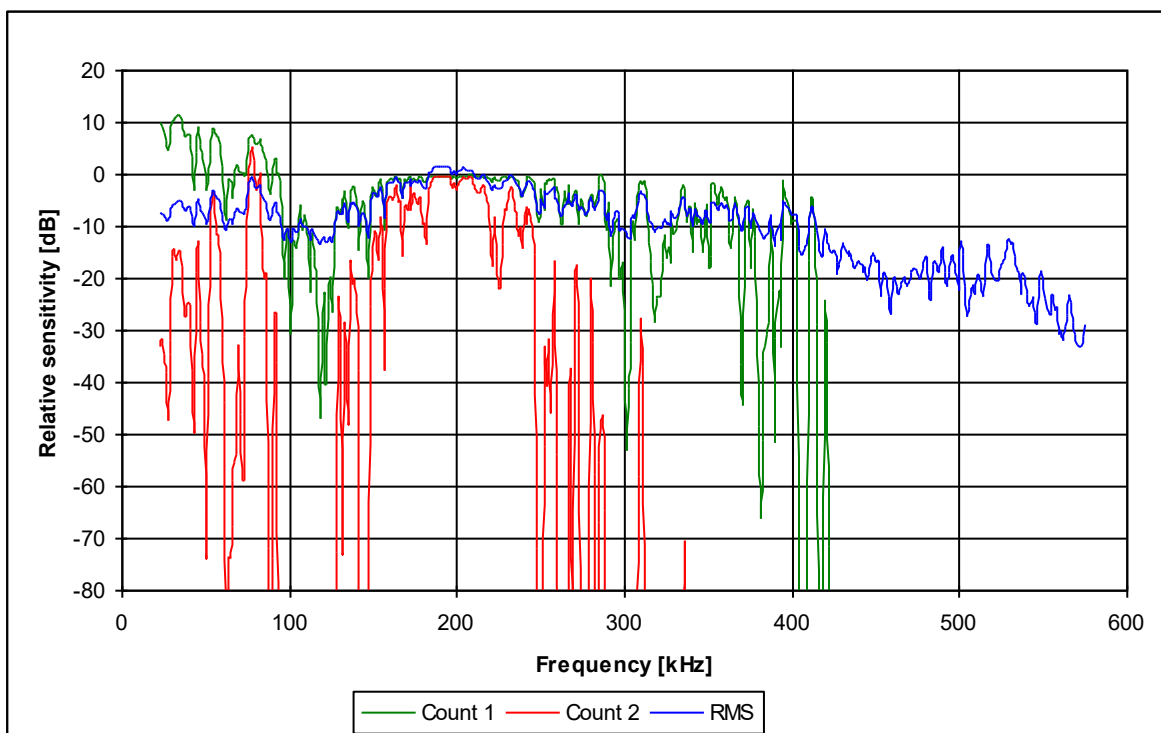
MODEL

DKPA 68




Dimensions	Diam. 22 mm, height 55 mm
Case material	Steel Ni coated
Contact plate	Steel Ni coated , contact area diam. 18mm
Output	Coaxial cable diam.: 5 mm / coaxial cable in protective hose BNC connector
Piezoceramic material	PZT class 200
Temperature range	- 20 ... + 70 °C
Application	Laboratory and industry using, water-resistant IP68
	Internal impedance converter & preamplifier cca 35 dB
Mounting methods	Glued joint, magnetic holder, screw

Advantage >>> water-resistant IP68

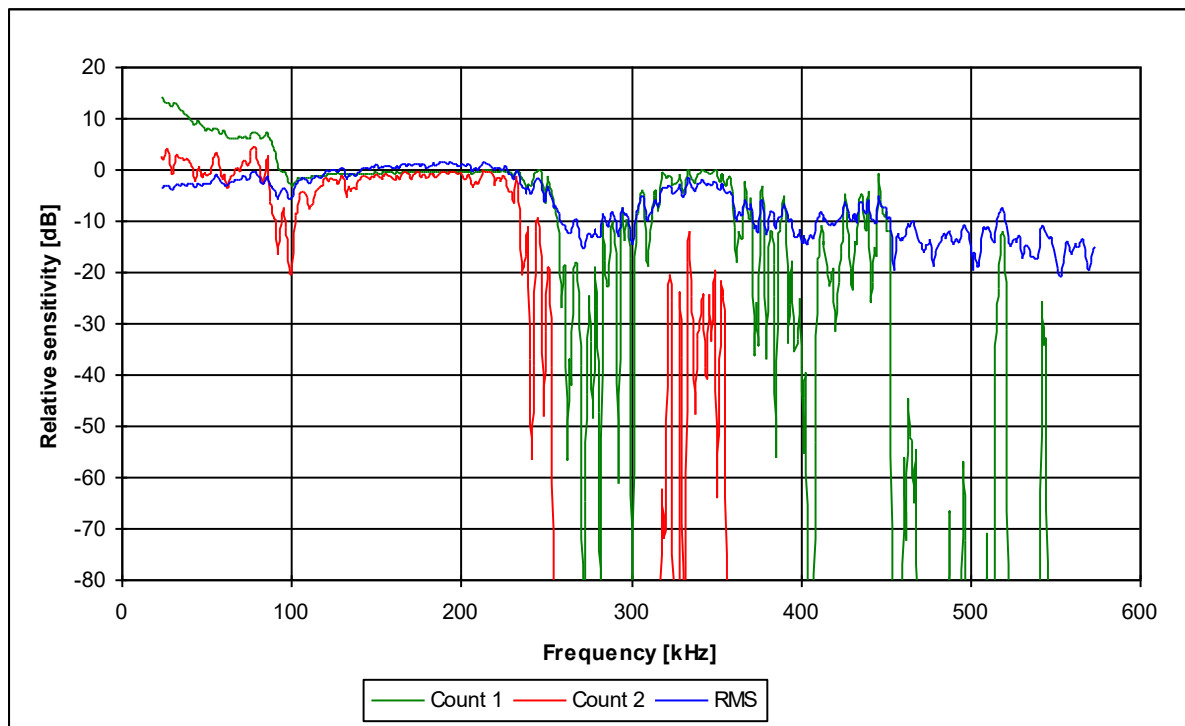




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MODEL	DK15kryo		
	Dimensions	Diam. 22 mm, height 55 mm	
	Case material	Stainless steel	
	Contact plate	Stainless steel, contact area dim. 18mm	
	Output	Coaxial cable diam.: 3 mm / coaxial BNC connector	
	Piezoceramic material	PZT ceramic class 200	
	Temperature range	- 200 °C ... + 70 °C	
	Application	Laboratory and industry using, External impedance converter & preamplifier cca 35 dB	
	Mounting methods	Glued joint, magnetic holder, screw	

Advantage >>> very low operating temperature sensor & exciter





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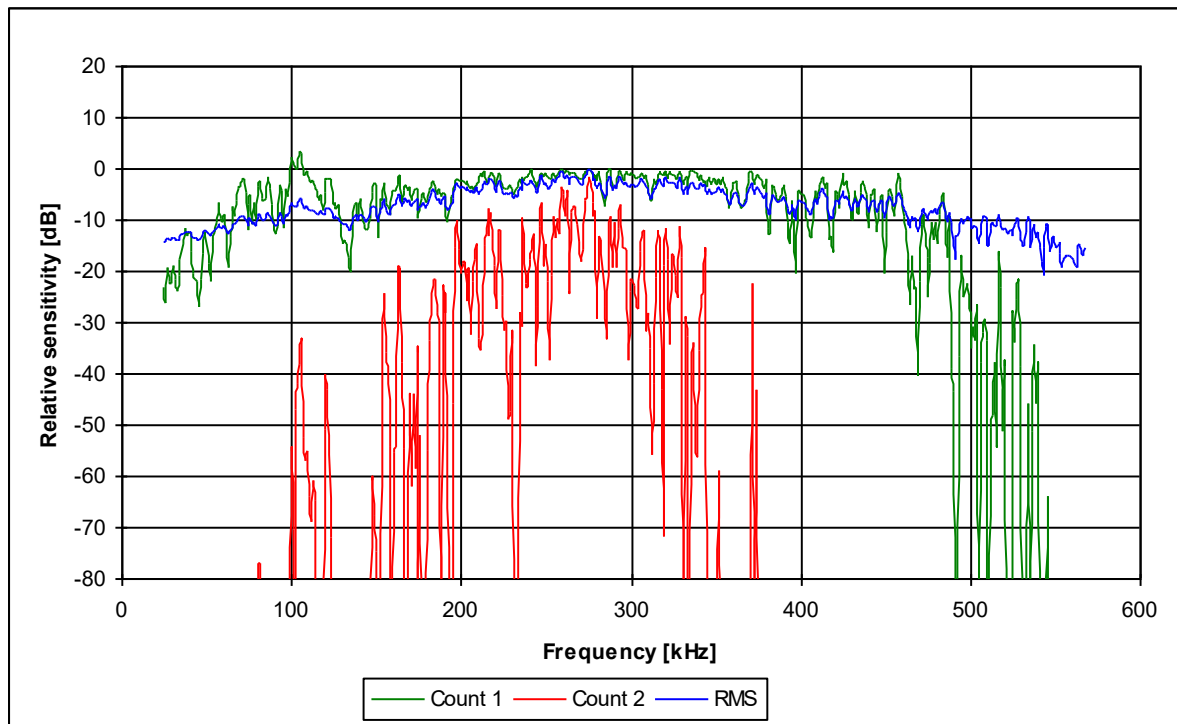
MODEL

IDK-14k / IDK14kAS



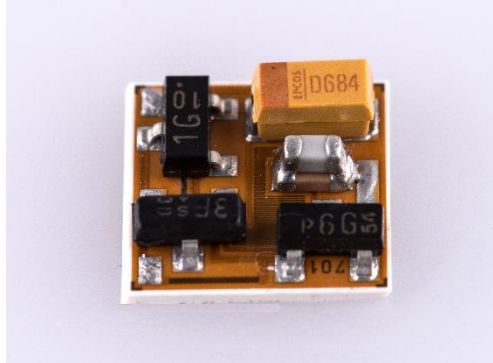
Dimensions	Diam. 14 mm, height 9 mm
Case material	Stainless steel
Contact plate	Alumina sintered , contact area dim. 11mm
Output	Coaxial cable diam.: 1.7 mm BNC connector
Piezoceramic material	DAKEL PZT/polymer composite, version 31
Temperature range	IDK14kAS ... - 20°C to + 65 °C IDK14k ... - 20°C to + 100 °C
Application	Laboratory and industrial using
IDK14kAS	Internal preamplifier 32 dB
IDK14k	External impedance converter & preamplifier cca 35 dB
Mounting methods	Glued joint, magnetic holder

Advantage >>> sensor & exciter with flat frequency characteristic curve
>>> reduced free planar mode of the PZT element



MODEL

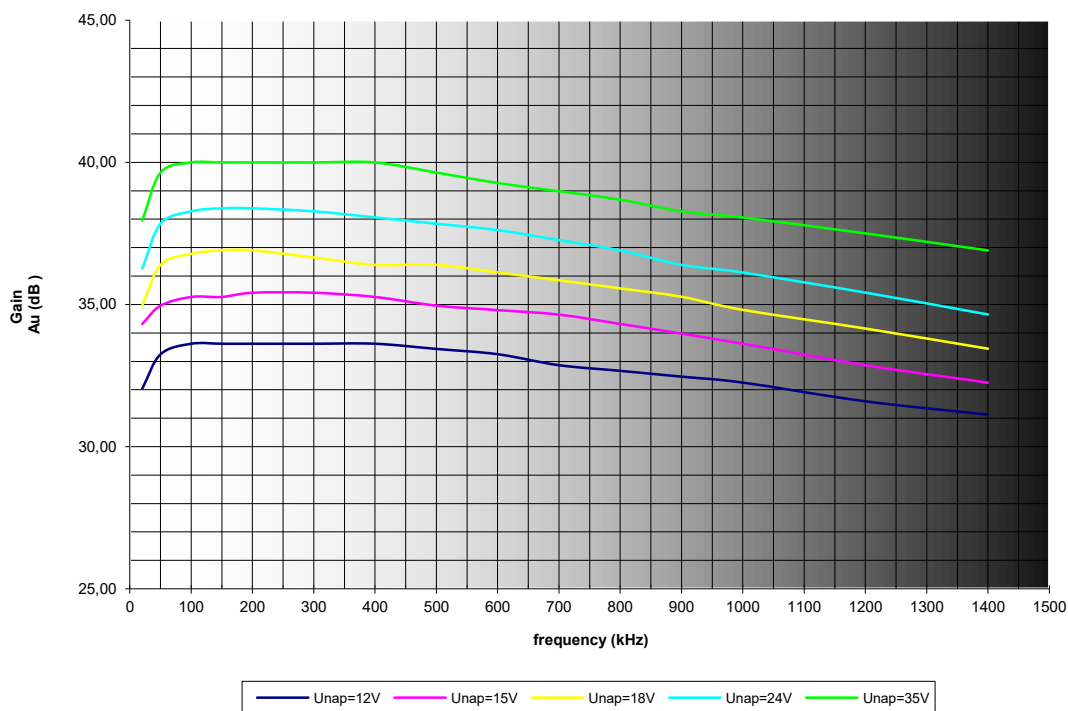
ASIIkoax external preamplifier for DAKEL sensors



Dimensions	Diam. 15 mm, height 659 mm
Case material	Stainless steel
Input	BNC connector
Output	BNC connector
	Coaxial version
Temperature range	- 20°C to + 65 °C
Application	Laboratory and industrial using
Mounting methods	magnetic holder

Advantage >>> Low power consumption
 >>> Small dimensions

Preamplifier ASII - Rsens 820 Ohm

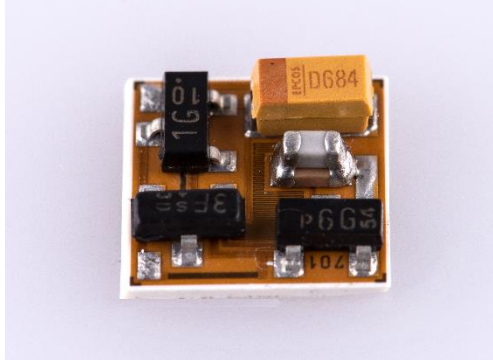




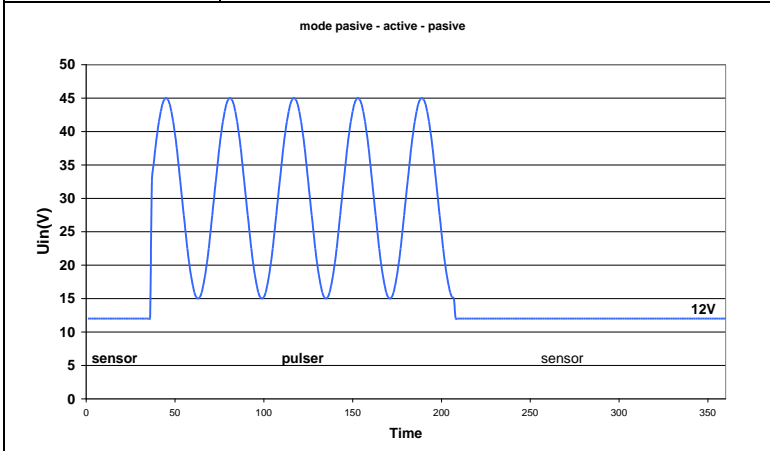
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MODEL

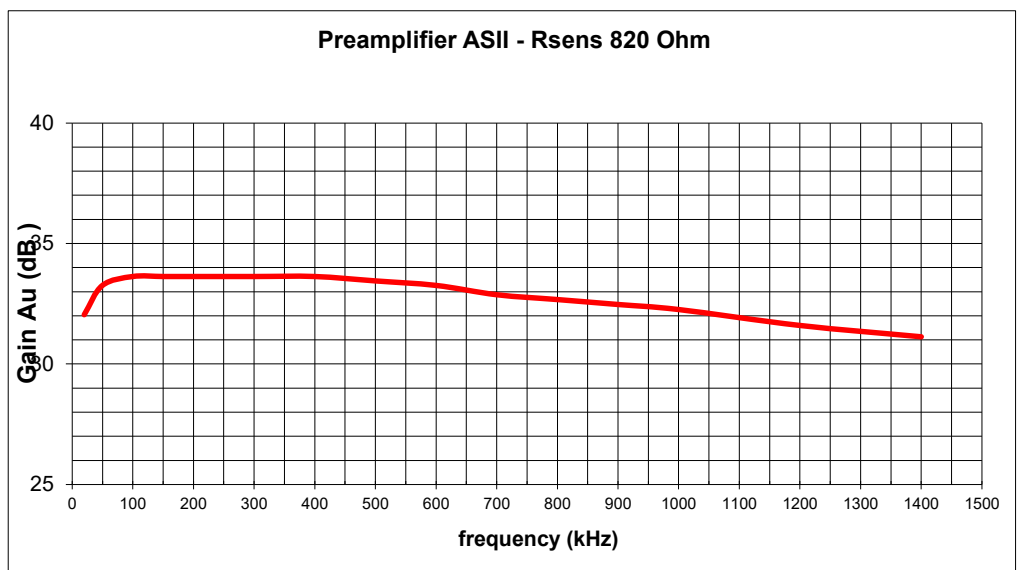
ASIIkoax external preamplifier and mode switch



Dimensions	Diam. 21 mm, height 76 mm
Case material	Stainless steel
Input	BNC connector
Output	BNC connector
	Coaxial version
Temperature range	- 20°C to + 65 °C
Application	Laboratory and industrial using
Mounting methods	magnetic holder



Advantage >>> Low power consumption
 >>> Small dimensions
 >>> external preamplifier and internal mode switch > pasive mode (sensor) X active mode (exciter)






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MODEL	NV12	
	Dimension	48 x 33 x 23 mm
	Case material	Steel (Ni coated)
	Input	BNC connector
	Input power	DC 15V/10mA, paired wire
	Output	BNC connector
	Temperature range	- 20°C to + 65 °C
	Application	Laboratory and industrial using
	Mounting methods	Magnetic holder, screw
<p>Advantage >>> external power unit for DAKEL sensor with the internal preamplifier in the case measuring configuration with the universal devices (oscilloscope, voltmeter, etc.)</p> <p>>>> box is put between the sensor (with the preamplifier) and measuring unit.</p>		