

KS90 KS901

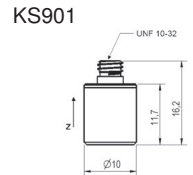
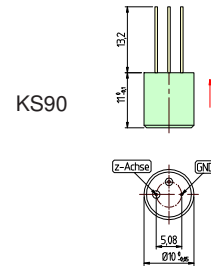
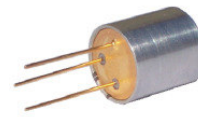
OEM-Beschleunigungsaufnehmer OEM Accelerometers

Überblick

- Kostengünstige Beschleunigungsaufnehmer zum Einbau in Maschinen und Geräten
- Kompaktes Gehäuse
- Klebe-, Klemm- oder Rohr- montage

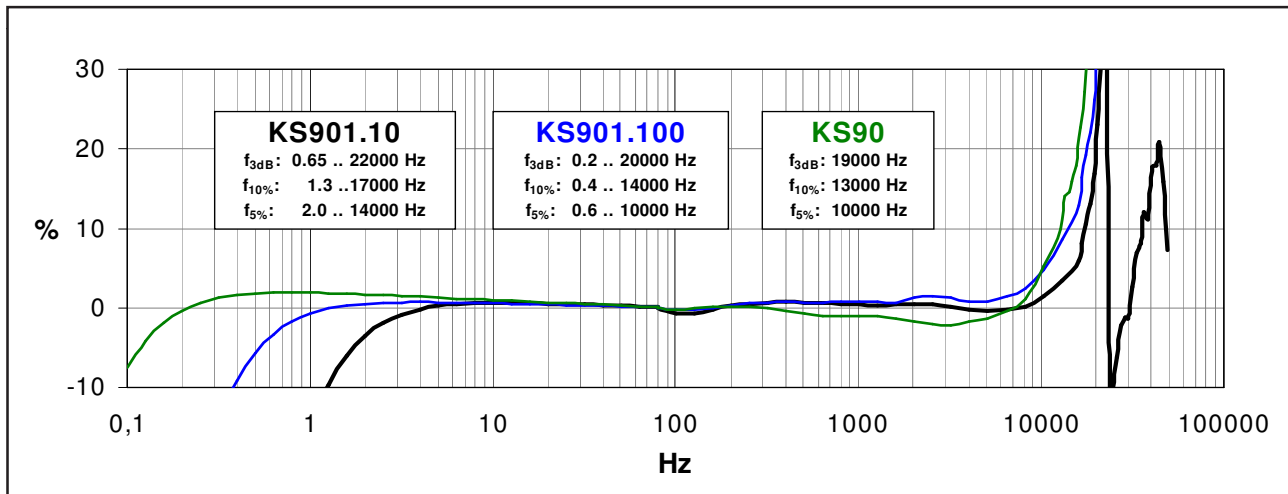
Overview

- Low-cost accelerometers for integration into machines and instruments
- Compact design
- Adhesive, clamp or tube mounting

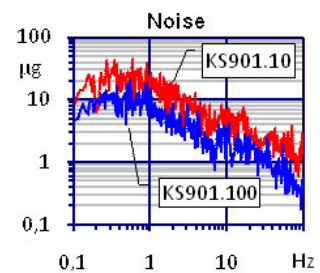
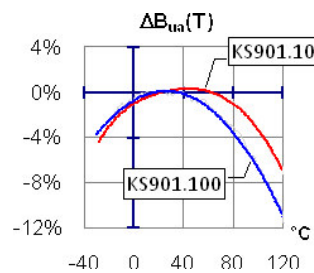
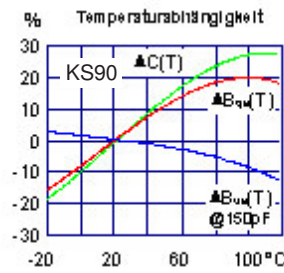
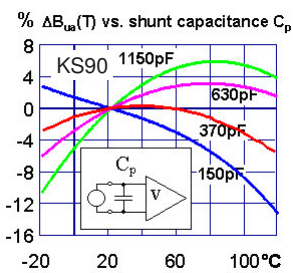


Modell • Model		KS90	KS901.10	KS901.100
Piezoelement • Piezo element				
Ausgang • Output		Ladung • Charge	IEPE (Integrated Electronics Piezo Electric)	
Piezosystem • Piezo system		Scherprinzip • Shear design		
Ladungsübertragungsfaktor • Charge sensitivity	B_{qa}	11 pC/g $\pm 20\%$	-	-
Spannungsübertragungsfaktor • Voltage sensitivity	B_{ua}	21 mV/g $\pm 20\%$	10 mV/g $\pm 20\%$	100 mV/g $\pm 20\%$
Messbereich • Range	a_v/a	± 5000 g	± 500 g	± 60 g
Bruchbeschleunigung • Destruction limit	a_{max}	10 000 g	8000 g	8000 g
Eigenrauschen • Residual noise (0.5 .. 20 000 Hz)	a_n wide band	-	1000 μ g	400 μ g
Rauschdichten • Noise densities	a_n	-	50 μ g/ \sqrt Hz 20 μ g/ \sqrt Hz 5 μ g/ \sqrt Hz 2 μ g/ \sqrt Hz	20 μ g/ \sqrt Hz 8 μ g/ \sqrt Hz 2 μ g/ \sqrt Hz 0.8 μ g/ \sqrt Hz
Resonanzfrequenz • Resonant frequency	f_r	>44 kHz (+25 dB)	>65 kHz (+25 dB)	>45 kHz (+25 dB)
Linearer Frequenzbereich • Linear frequency range	f_L (± 3 dB)	19 000 Hz	0.65 .. 22 000 Hz	0.2 .. 20 000 Hz
Querrichtungsfaktor • Transverse sensitivity	Γ_{90max}	< 5 %		
Konstantstromversorgung • Constant current supply	I_{CONST}	-	2 .. 20 mA	
Arbeitspunktspannung • Output bias voltage	U_{BIAS}	-	12 .. 14 V @ $I_{const} = 4$ mA	
Ausgangsimpedanz • Output impedance	r_{OUT}	-	< 100 Ω @ $I_{const} = 4$ mA	
Keramikkapazität • Ceramic capacitance	C_I	500 pF	-	
Temperaturdaten • Temperature data				
Arbeitstemperatur • Operating temperature	T_{min}/T_{max}	-30 °C / 150 °C	-30 °C / 120 °C	
Temperaturkoeffizient von B_{qa} Temperature coefficient of B_{qa}	$TK(B_{qa})$	siehe Diagramm • see diagram	+0.1 %/K +0.05 %/K ± 0.02 %/K -0.05 %/K	+0.05 %/K ± 0.02 %/K -0.05 %/K -0.1 %/K
Temperaturkoeffizient von C_I • Temperature coefficient of C_I	$TK(C_I)$	0.45 %/K	-	-
Störübertragungsfaktoren • Environmental characteristics				
Temperatursprung • Temperature transients	b_{aT}	0.01 g/K	0.02 g/K	0.01 g/K
Magnetfeld • Magnetic field	b_{aB}	1 g/T		
Mechanische Daten • Mechanical data				
Masse ohne Kabel • Weight without cable	m	5.1 gr. • 0.18 oz	4.6 gr. • 0.16 oz	5.6 gr. • 0.2 oz
Gehäusematerial • Case material		Edelstahl • Stainless steel		
Kabelanschluss • Cable connection		TO-39 axial	axial	
Buchse • Connector		-	UNF 10-32	
Befestigung • Mounting		Kleben, Klemmen • Adhesive, clamping		

Typischer Frequenzgang • Typical Amplitude Response



Temperatur- und Rauschverhalten Temperature and noise characteristics



Bestellinformationen

KS90, KS901.10, KS901.100: Standard

- Sensor
- Dokumente: Listenprotokoll

Der KS901.10/.100 kann direkt an die PC-Messtechnik des *VibroMatrix*[®]-Systems angeschlossen werden. Der KS90 kann über die Ladungsverstärker der ICP100-Serie an die PC-Messtechnik des *VibroMatrix*[®]-Systems angeschlossen werden.

Ordering information

KS90, KS901.10, KS901.100: Standard

- Sensor
- Documents: list protocol

The KS901.10/.100 can be directly connected to the measuring instrumentation of the PC-based *VibroMatrix*[®]-system. The KS90 can be connected to the measuring instrumentation of the PC-based *VibroMatrix*[®]-system by the charge converters of the ICP100-series.

Änderungen vorbehalten.
Specifications subject to change without prior notice.

Februar 2016 • February 2016