

KS74C.10 / .100

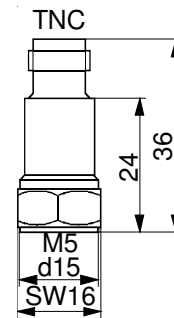
Industrielle Beschleunigungsaufnehmer IEPE Industrial Accelerometers IEPE

Überblick

- Isolierter Befestigungssockel zur Vermeidung von Erdschleifen
- Robustes Edelstahlgehäuse
- KS74C.10: Besonders geringer Temperaturkoeffizient
- Scherkeramik: Unempfindlich gegen Temperaturänderung und Messobjektdehnung
- IEPE-Ausgang: geringe Stömpfindlichkeit in rauer Umgebung; große Kabellängen möglich

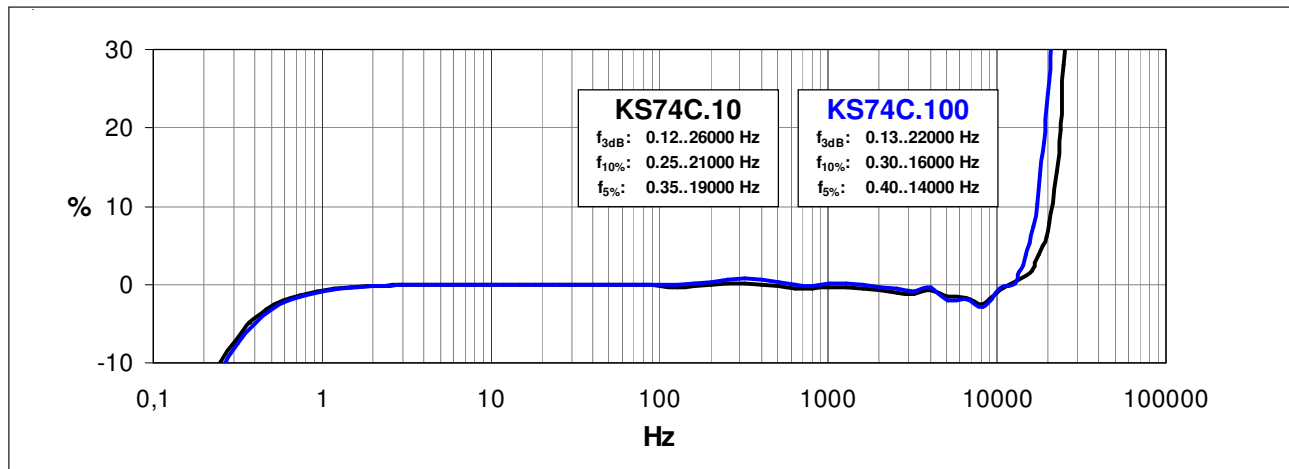
Overview

- Insulated mounting base avoiding ground loop problems
- Rugged stainless steel case
- KS74C.10: Particularly low temperature coefficient
- Shear-type accelerometers: Low sensitivity to temperature transients; low influence of base bending effects
- IEPE output guarantees low EMI under rough environmental conditions; allows long cables

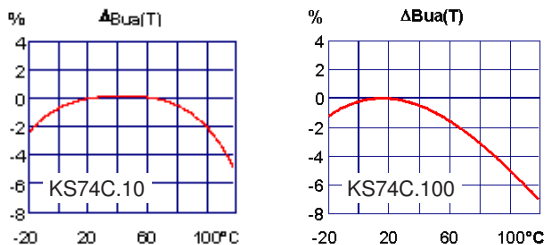


Modell • Model		KS74C.10	KS74C.100
Piezoelement und integrierter Verstärker • Piezo element and integrated charge converter			
Spannungsausgang • Voltage output		IEPE (Integrated Electronics Piezo Electric)	
Piezosystem • Piezo system		Scherdesign • Shear design	
Übertragungsfaktor • Voltage sensitivity	B_{ua}	10 mV/g \pm 5%	100 mV/g \pm 5%
Messbereich • Range	a_v/a_n	\pm 600 g	\pm 60 g
Bruchbeschleunigung • Destruction limit	a_{max}	5000 g	
Speisestrom • Supply current	I_{const}	2 .. 20 mA	
Arbeitspunktspannung • Output bias voltage	U_{Bias}	12 .. 14 V @ $I_{const} = 4$ mA, T = 25 °C	
Eigenrauschen (Effektivwert) • Residual noise (RMS) Rauschdichten • Noise densities	$a_{n \text{ wide band}}$ a_n	<2000 μ g @ 0.5..20000 Hz 100 μ g/ \sqrt Hz @ 0.1 Hz 60 μ g/ \sqrt Hz @ 1 Hz 20 μ g/ \sqrt Hz @ 10 Hz 2 μ g/ \sqrt Hz @ 100 Hz	<300 μ g @ 0.5..20000 Hz 30 μ g/ \sqrt Hz @ 0.1 Hz 10 μ g/ \sqrt Hz @ 1 Hz 3 μ g/ \sqrt Hz @ 10 Hz 1 μ g/ \sqrt Hz @ 100 Hz
Resonanzfrequenz • Resonant frequency	f_r	> 46 kHz (+25dB)	
Linearer Frequenzbereich • Linear frequency range	f_L	0.12..26000 Hz (\pm 3 dB)	0.13..22000 Hz (\pm 3 dB)
Querrichtungsfaktor • Transverse sensitivity	Γ_{90max}	< 5 %	
Ausgangsimpedanz • Output impedance	r_{OUT}	< 130 Ω @ $I_{const} = 4$ mA	
Keramikkapazität • Ceramic capacitance	C_i	400 pF	
Temperaturdaten • Temperature data			
Arbeitstemperatur • Operating temperature	T_{min}/T_{max}	-20 / 120 °C • -4 / 248 °F	
Temp.koeff. von B_{ua} • Temperature coefficient of B_{ua}	TK (B_{ua})	< +0.06 %/K @ -20..0 °C \pm 0.02 %/K @ 0..80 °C > -0.06 %/K @ 80..120 °C	< +0.05 %/K @ -20..0 °C \pm 0.02 %/K @ 0..30 °C > -0.07 %/K @ 30..120 °C
Temp.sprungempfindlichkeit • Temp. transient sensitivity	b_{aT}	0.001 g/K	0.0005 g/K
Mechanische Daten • Mechanical data			
Masse ohne Kabel • Weight without cable	m	28.5 gr. • 1 oz	32 gr. • 1.1 oz
Gehäusematerial • Case material		Edelstahl • Stainless steel	
Kabelanschluss • Cable connection		axial	
Buchse • Connector		TNC	
Schutzgrad • Protection grade		IP64	
Befestigung • Mounting		M5	

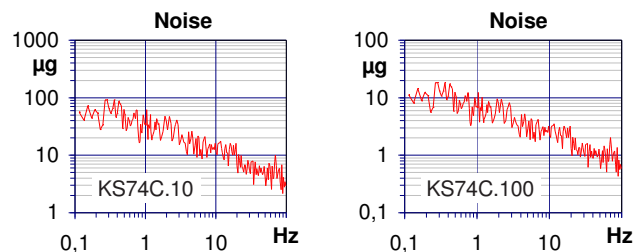
Typischer Frequenzgang • Typical Amplitude Response



Temperaturverhalten • Temperature characteristics



Rauschverhalten • Noise characteristics



Bestellinformationen

KS74C.10/01, KS74C.100/01: Komplettes Zubehör

Transportetui mit folgendem Inhalt:

- Sensor, Bedienungsanleitung, Kennblatt
- 1,5m Kabel, Ø 2,8mm
Steckverbinder TNC - UNF 10-32
BNC - UNF 10-32 Adapter
- Zur Ankopplung: Klebewachs, Stiftschraube M5, Haftmagnet, Tastspitze

KS74C.10, KS74C.100: Standard

- Sensor, Kennblatt

Der KS74C.10 und der KS74C.100 können direkt an die PC-Messtechnik des *VibroMatrix*[®]-Systems angeschlossen werden.

Ordering information

KS74C.10/01, KS74C.100/01: Complete accessories

Transport box including:

- Sensor, instruction manual, individual characteristics
- 1.5 m cable, Ø 2.8mm
connector TNC - UNF 10-32
BNC - UNF 10-32 adapter
- For mounting: adhesive wax, mounting stud M5, clamping magnet, probe

KS74C.10, KS74C.100: Standard

- Sensor, individual characteristics

The KS74C.10 and the KS74C.100 can be directly connected to the measuring instrumentation of the PC-based *VibroMatrix*[®]-system.

Änderungen vorbehalten. • Specifications subject to change without prior notice.

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— D e u t s c h l a n d —

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