

KS76C KS77C

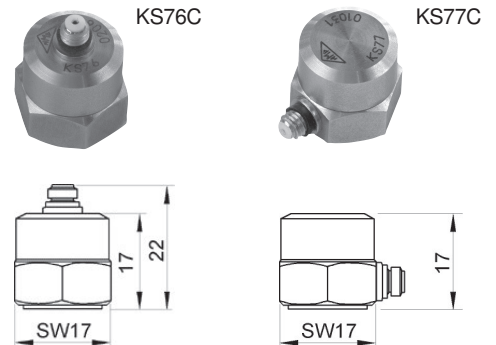
Universelle Beschleunigungsaufnehmer IEPE General Purpose Accelerometers IEPE

Überblick

- Hohe Bandbreite bis 25 kHz
- Rauscharm, hohe Auflösung
- Scherkeramik: Unempfindlich gegen Temperaturänderung und Messobjektdehnung
- IEPE-Ausgang: Geringe Störsensitivität in rauer Umgebung; große Kabellängen möglich
- Robustes Edelstahlgehäuse

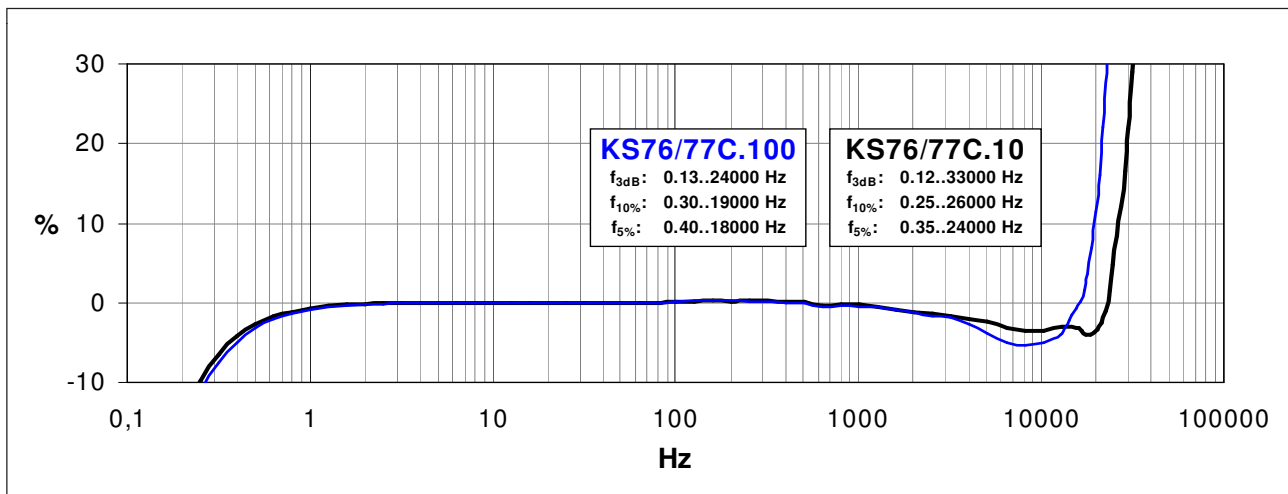
Overview

- High band width up to 33 kHz
- Low noise, high resolution
- 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
- Sturdy stainless steel housing

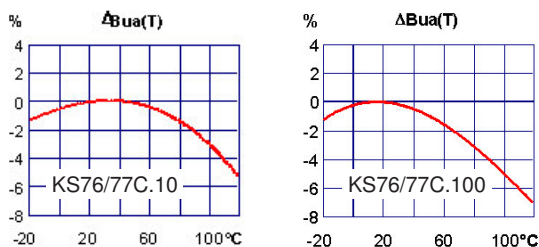


| Modell • Model | | KS76C.10 | KS77C.10 | KS76C.100 | KS77C.100 |
|---|--------------------------|---|----------|---|-----------|
| Piezoelement und integrierter Verstärker • Piezo element and integrated charge converter | | | | | |
| Spannungsausgang • Voltage output | | IEPE (Integrated Electronics Piezo Electric) | | | |
| Piezosystem • Piezo system | | Scherprinzip • Shear design | | | |
| Spannungsübertragungsfaktor • Voltage sensitivity | B_{ua} | 10 mV/g $\pm 5\%$ | | 100 mV/g $\pm 5\%$ | |
| Messbereich • Range | a_+/a_- | ± 600 g | | ± 60 g | |
| Bruchbeschleunigung • Destruction limit | a_{max} | 6000 g | | | |
| Eigenrauschen • Residual noise @ 0.5 .. 20000 Hz | $a_{n \text{ wideband}}$ | < 2000 μg | | < 300 μg | |
| Rauschdichten • Noise densities | a_n | 100 $\mu\text{g}/\sqrt{\text{Hz}}$ @ 0.1 Hz 60 $\mu\text{g}/\sqrt{\text{Hz}}$ @ 1.0 Hz 20 $\mu\text{g}/\sqrt{\text{Hz}}$ @ 10.0 Hz 2 $\mu\text{g}/\sqrt{\text{Hz}}$ @ 100.0 Hz | | 30 $\mu\text{g}/\sqrt{\text{Hz}}$ @ 0.1 Hz 10 $\mu\text{g}/\sqrt{\text{Hz}}$ @ 1.0 Hz 3 $\mu\text{g}/\sqrt{\text{Hz}}$ @ 10.0 Hz 1 $\mu\text{g}/\sqrt{\text{Hz}}$ @ 100.0 Hz | |
| Speisestrom • Supply current | I_{const} | 2 .. 20 mA | | | |
| Arbeitspunktspannung • Output bias voltage | U_{Bias} | 12 .. 14 V @ $I_{const} = 4$ mA, T = 25 °C | | | |
| Resonanzfrequenz • Resonant frequency | f_r | > 50 kHz (+25 dB) | | > 32 kHz (+25 dB) | |
| Linearer Frequenzbereich • Linear frequency range | f_L | 0.12 .. 33 000 Hz (± 3 dB) | | 0.13 .. 24 000 Hz (± 3 dB) | |
| Querrichtungsfaktor • Transverse sensitivity | Γ_{90max} | < 5 % | | | |
| Ausgangsimpedanz • Output impedance | r_{Out} | < 130 Ω | | | |
| Temperaturdaten • Temperature data | | | | | |
| Arbeitstemperatur • Operating temperature | T_{min}/T_{max} | -20 °C / 120 °C • -4 °F / 248 °F | | | |
| Temperaturkoeffizient von B_{ua} • Temperature coefficient of B_{ua} | $TK(B_{ua})$ | +0.06 %/K @ -20 .. 0 °C ± 0.02 %/K @ 0 .. 80 °C -0.06 %/K @ 80 .. 120 °C | | +0.05 %/K @ -20 .. 0 °C ± 0.02 %/K @ 0 .. 30 °C -0.07 %/K @ 30 .. 120 °C | |
| Temperatursprung • Temperature transients | b_{aT} | 0.006 g/K | | 0.003 g/K | |
| Mechanische Daten • Mechanical data | | | | | |
| Masse ohne Kabel • Weight without cable | m | 20 gr. • 0.7 oz | | 23 gr. • 0.8 oz | |
| Gehäusematerial • Case material | | Edelstahl • Stainless steel | | | |
| Kabelanschluss • Cable connection | | axial | radial | axial | radial |
| Buchse • Connector | | UNF 10-32 | | | |
| Befestigung • Mounting | | M5 Innengewinde im Boden • M5 thread in base | | | |

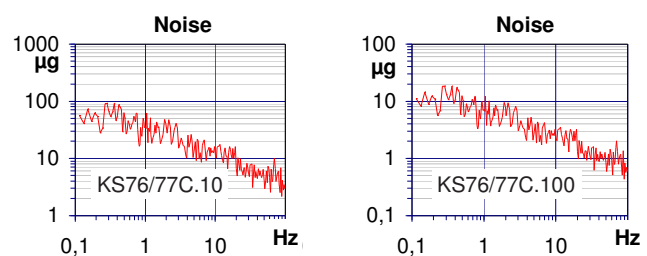
Typischer Frequenzgang • Typical Amplitude Response



Temperaturverhalten • Temperature characteristics



Rauschverhalten • Noise characteristics



Bestellinformationen

KS76C.10/01, KS76C.100/01: Komplettes Zubehör
KS77C.10/01, KS77C.100/01: Komplettes Zubehör

Transportetui mit folgendem Inhalt:

- Sensor
- 1,5m Kabel, Steckverbinder UNF 10-32 - UNF 10-32 inkl. BNC - UNF 10-32 Adapter
- Zur Ankopplung: Klebewachs, Stiftschraube M5, Haftmagnet, Isolierflansch mit Sechskantschlüssel, Tastspitze
- Dokumente: Bedienungsanleitung, Kennblatt

KS76C.10/.100, KS77C.10/.100: Standard

- Sensor
- Dokumente: Kennblatt

Der KS76C und der KS77C können direkt an die PC-Messtechnik des *VibroMatrix*[®]-Systems angeschlossen werden.

Ordering information

KS76C.10/01, KS76C.100/01: Complete accessory set
KS77C.10/01, KS77C.100/01: Complete accessory set

Transport box including:

- Sensor
- 1.5 m cable, connector UNF 10-32 - UNF 10-32 incl. BNC - UNF 10-32 adapter
- For mounting: adhesive wax, mounting stud M5, clamping magnet, insulating flange with spanner, probe
- Documents: instruction manual, individual characteristics

KS76C.10/.100, KS77C.10/.100: Standard

- Sensor
- Documents: individual characteristics

The KS76C and the KS77C 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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