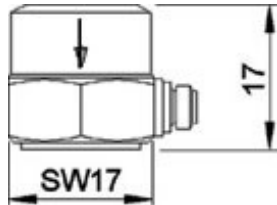


# Standard Accelerometer

KS57

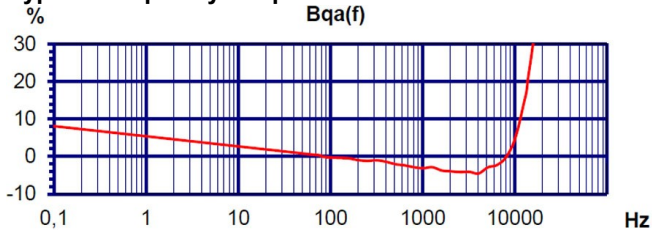
## Properties

- General purpose shear-type accelerometer
- Operating temperature up to 250 °C (480 °F)
- Low sensitivity to temperature transients
- Low influence of base bending effects
- Charge output, no external power required
- Wide dynamic range
- High resonant frequency
- Rugged stainless steel housing

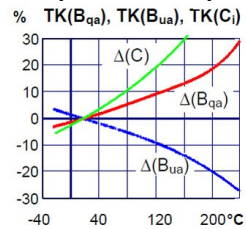


Piezo design	Shear design	
Output	Charge	
Charge sensitivity	20	pC/g
Sensitivity tolerance	20	%
Measurement range, pos./neg.	4000	g
Destruction limit	8000	g
Capacitance without cable	400	pF
Transverse sensitivity	<5	%
Upper frequency limit (3 dB)	15000	Hz
Upper frequency limit (10 %)	9000	Hz
Upper frequency limit (5 %)	8000	Hz
Resonant frequency	>29	kHz
Resonance amplitude	30	dB
Operating temperature range	-40 - 250	°C
Temperature coefficient of voltage sensitivity	-0,07 (25 °C)	%/K
	-0,09 (150 °C)	%/K
	-0,12 (250 °C)	%/K
Temperature coefficient of charge sensitivity	0,08 (25 °C)	%/K
	0,1 (150 °C)	%/K
	0,13 (250 °C)	%/K
Temperature coefficient of capacitance	0,15 (25 °C)	%/K
	0,2 (150 °C)	%/K
	0,34 (250 °C)	%/K
Temperature transient sensitivity	0,02	m/s <sup>2</sup> /K
Magnetic field sensitivity	2	m/s <sup>2</sup> /T
Weight without cable	23	g
Case material	Stainless steel	
Connector direction	radial	
Connector	UNF10-32	
Mounting	M5	

## Typical Frequency Response



## Temperature Response



## Connection Accessories

- 009-UNF-UNF-1,5: Low-noise cable; 1,5 m; UNF 10-32 to UNF 10-32; 120 °C; Ø2,1
- 009/T-UNF-UNF-1,5: Low-noise cable; 1,5 m; UNF 10-32 to UNF 10-32; 200 °C; Ø2,1
- 009-UNF-BNC-1,5: Low-noise cable; 1,5 m; UNF 10-32 to BNC; 120 °C; Ø2,1
- 010-UNF-BNC-5: Low-noise cable; 5 m; UNF 10-32 to BNC; 120 °C; Ø2,1
- 010-UNF-BNC-10: Low-noise cable; 10 m; UNF 10-32 to BNC; 120 °C; Ø2,1
- 016: Coupler UNF 10-32 (female) to UNF 10-32 (female)
- 017: Plug adapter UNF10-32 (female) to BNC (male)
- 117: Plug adapter UNF10-32 (female) to BNC (female)
- 025: Plug adapter UNF10-32 (female) to TNC (male)

## Mounting Accessories

- 001: Sensor probe; M5
- 003: Mounting stud; M5 x 8
- 006: Insulating flange; 2 x M5; SW17; 80 °CS
- 029: Adhesive pad insulating; M5; Ø15; >250 °C
- 045: Thread adapter; M5 x 4 male to UNF 10-32 x 4 male
- 046: Thread adapter; M5 x 4 male to 1/4-28 x 4 male
- 008: Rare earth magnetic base; M5; Ø22; 120 °C
- 030: Triaxial mounting cube; M5; □21

## Delivery version with accessories kit KS57/01

- 009/T-UNF-BNC-1,5
- 003: Mounting stud; M5 x 8
- 002: Bees wax for temporary sensor attachment
- 006: Insulating flange; 2 x M5; SW17; 80 °CS
- 001: Sensor probe; M5
- 008: Rare earth magnetic base; M5; Ø22; 120 °C

**Notice:** The standard delivery includes an individual data sheet.

This is a non-accredited measurement/calibration and consequently not covered by EA MLA.

On request, we offer a DIN EN ISO/IEC 17025:2018 accredited calibration of the measurand acceleration in the measuring range 0.1 m/s<sup>2</sup> to 200 m/s<sup>2</sup>.



## Metra Meß- und Frequenztechnik Radebeul GmbH & Co. KG

Meißner Str. 58a

01445 Radebeul

Tel. +49 (0)351 836 2191

Internet: [www.MMF.de](http://www.MMF.de)

Email: [Info@MMF.de](mailto:Info@MMF.de)

Fax: +49 (0)351 836 2940

03.26

