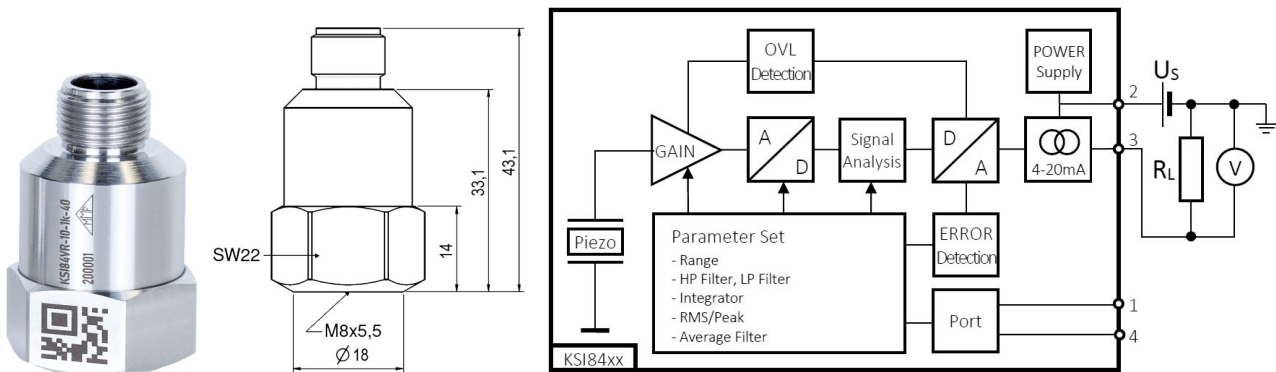


# Vibration Displacement Sensor with Peak-to-Peak Output 4 – 20 mA

KSI84D-...

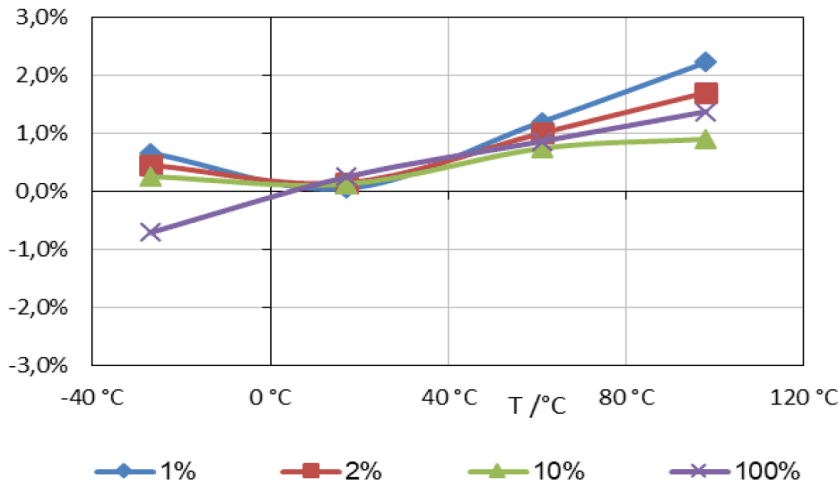
## Properties

- Suited for direct connection to standard control and measurement equipment, e.g. PLCs or panel meters
- Particularly suited for Measurements at vibration conveyors, vibrating screens and separators
- Types with different measurement ranges
- Loop powered
- Ground insulated
- Compact and rugged design
- M12 socket for easy cable connection
- Protected against false polarization and overvoltage
- Double shielded case for best EMC properties
- High protection grade IP68
- With identical design also available as velocity and acceleration sensor with RMS or peak output

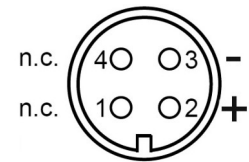


Piezo design	Shear design	
Output	4 .. 20 mA, peak-peak of vibration displacement	
Full scale value (cf. type list)	10 / 12,7 / 20 / 25,4 / 40 / 50,8	mm
Linear range for <2 % error, referred to full scale output	1 – 112,5	%
Full scale tolerance	5	%
Destruction limit	±5000	g
Transverse sensitivity	<5	%
Lower frequency limit (cf. type list)	3	Hz
Upper frequency limit (cf. type list)	300	Hz
Loop supply voltage	10 – 30	V
Settling time	5	s
Operating temperature range	-40 - 100	°C
Temperature coefficient of sensitivity	+0,015	%/K
4 mA offset drift over operating temperature range	±4	µA
4 mA offset drift over time	±1	µA
Weight without cable	60	g
Case material	Stainless steel	
Direction of connector	axial	
Connection	M12, 4 contacts, male. (Binder 713)	
Mounting	tapped hole M8 x 5,5	
Isolation at 250 VDC	>4	GΩ
Protection grade	IP68	
Piezo design	Shear design	

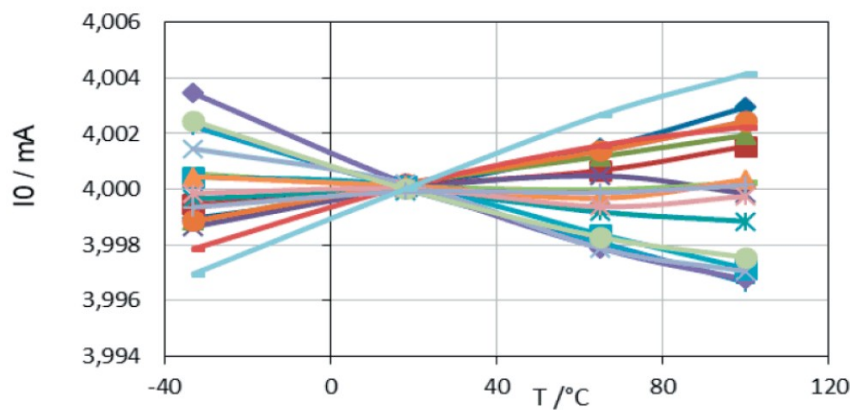
## Linearity vs. Temperature and Vibration Amplitude



## Contact Arrangement



## Offset current 4 mA vs. Temperature



## Type List

High pass H [Hz]	Low pass L [Hz]	Range* R [mm]	Type code KSI84AP-H-L-R	Noise* [mm]
3	300	10	KSI84D-3-300-10	0,016
3	300	12,7	KSI84D-3-300-12	0,020
3	300	20	KSI84D-3-300-20	0,032
3	300	25,4	KSI84D-3-300-25	0,040
3	300	40	KSI84D-3-300-40	0,064
3	300	50,8	KSI84D-3-300-50	0,080

\* peak-peak values

## Mounting Accessories

- 043: Mounting stud; M8 x 10
- 229: Adhesive flange; conductive; M8; D25; >250 °C
- 208: Rare earth magnetic base; M8; D30; 120 °C
- 230: Triaxial mounting cube; M8; □34

## Connection Accessories

- 080G: Plug Binder 713 (female) with screw terminals, IP67; straight
- 080W: Plug Binder 713 (female) with screw terminals, IP67; angled
- 082-B713G-PIG-5: Cable for KSI84xx; 5 m; Binder 713; straight; female to pig tail; 80 °C; D5
- 082-B713W-PIG-5: Cable for KSI84xx; 5 m; Binder 713; angled; female to pig tail; 80 °C; D5

