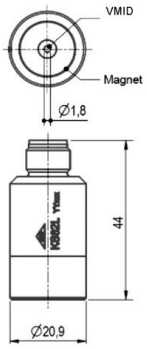
Industrial Accelerometer

KS82L

Properties

- Rugged stainless steel case with integrated magnetic base
- Read-out contact for VMID points in sensor base
- Low-power IEPE output for power-saving operation with battery equipment
- Protection grade IP67 by double sealing against humidity
- M12 connector for easy on-site installation, improved replacement for obsolete MIL-C-5015 connectors
- Well suited for route based monitoring of machine condition



Piezo design	Shear design	
Output	Low-power IEPE	
Voltage sensitivity	35	mV/g
Sensitivity tolerance	20	%
Measurement range, pos./neg.	60	g
Destruction limit	8000	g
Transverse sensitivity	<5	%
Lower frequency limit (3 dB)	0,2	Hz
Upper frequency limit (3 dB)	14000	Hz
Lower frequency limit (10 %)	0,4	Hz
Upper frequency limit (10 %)	10000	Hz
Lower frequency limit (5 %)	0,6	Hz
Upper frequency limit (5 %)	7500	Hz
Resonant frequency	>20	kHz
Resonance amplitude	25	dB
Constant current supply	0,5 - 5	mA
Bias voltage at 4 mA	6 - 7,5	V
Output impedance	<200	Ω
Residual noise; wide band; RMS	<1000 (0,5 - 20000 Hz)	µg
Noise density 1 Hz	250	µg/√Hz
Noise density 10 Hz	70	µg/√Hz
Noise density 100 Hz	10	µg/√Hz
Noise density 1000 Hz	3	µg/√Hz
Operating temperature range	-40 - 100	°C
Temperature coefficient of voltage sensitivity	-0,03 (<0 °C)	%/K
	-0,06 (0 – 40 °C)	%/K
	-0,09 (40 – 80 °C)	%/K
	-0,12 (>80 °C)	%/K
Temperature transient sensitivity	0,005	m/s²/K
Magnetic pulling force	80	N
Weight without cable	54	g
Case material	Stainless steel	
Connector direction	axial	
Connector	Binder 713	
Mounting	Magnet in base	
IP code	IP67	

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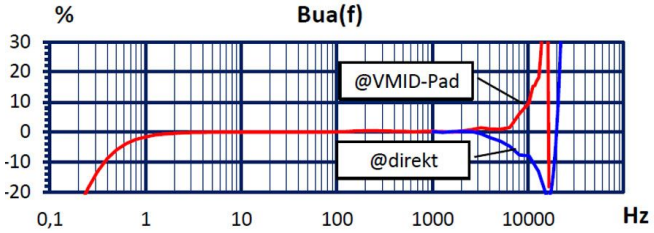
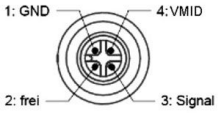
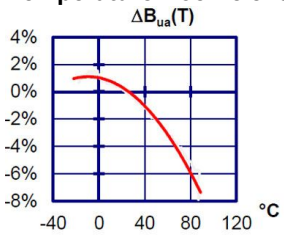
Typical Frequency Response



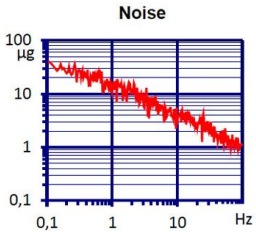
Contact Arrangement



Temperature Coefficient



Noise Characteristics



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/s² to 200 m/s².

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