

# **Application**

- Preamplifier for piezoelectric transducers with charge output
- To be installed close to the transducer, e.g. for measurements at high temperature or with very small transducers
- Output suitable for long distance signal transmission due to low impedance

## **Properties**

- Charge input stage, no influence of sensor cable capacitance
- Low noise device
- Constant current for power supply carried with the output cable, no separate power line required
- $\bullet$  Three gain ranges selectable by internal DIP switch: 0.1 / 1 / 10 mV/pC
- Compatible to standard instrumentation
- Rugged miniature device



### **Technical Data**

### Measurement functions

Measuring range	±50000 (0.1 mV/pC)	pC
	±5000 (1 mV/pC )	
	±500 (10 mV/pC )	
Charge gain	0.1; 1; 10	mV/pC
Gain selection	DIP switches; internal	
Accuracy	±3 (>1 % of full scale )	%
Output noise	<0.1 (1 to 50000 Hz )	mVRMS
Current-gain-dependency	±0.8 % (4 to 20 mA)	
Temperature-gain-dependency	-0.02 %/K	
Lower frequency limit acceleration	0.2	Hz
	0.3	Hz
	0.6	Hz
Upper frequency limit acceleration	65000	Hz
	33000	Hz
	23000	Hz

#### Connectors

Input channels	1	
Input signals	Charge; single ended	
Input connector	BNC female	
IEPEconstant current	4 to 20	mA
Output connector	IEPE; BNC male	
	Impedance <100 Ω	
	non-inverting	

### Case Data

Dimensions without connectors	44 x 24 (L x ø)	mm
Case material	Brass; Nickel coated	
Weight	55	g
Operating temperature range	-20 to 80 (95 % rel. humidity without condensation)	°C

#### Notice

The stated characteristics have been measured with 1 nF sensor capacitance, 1 nF output load and 4 mA



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