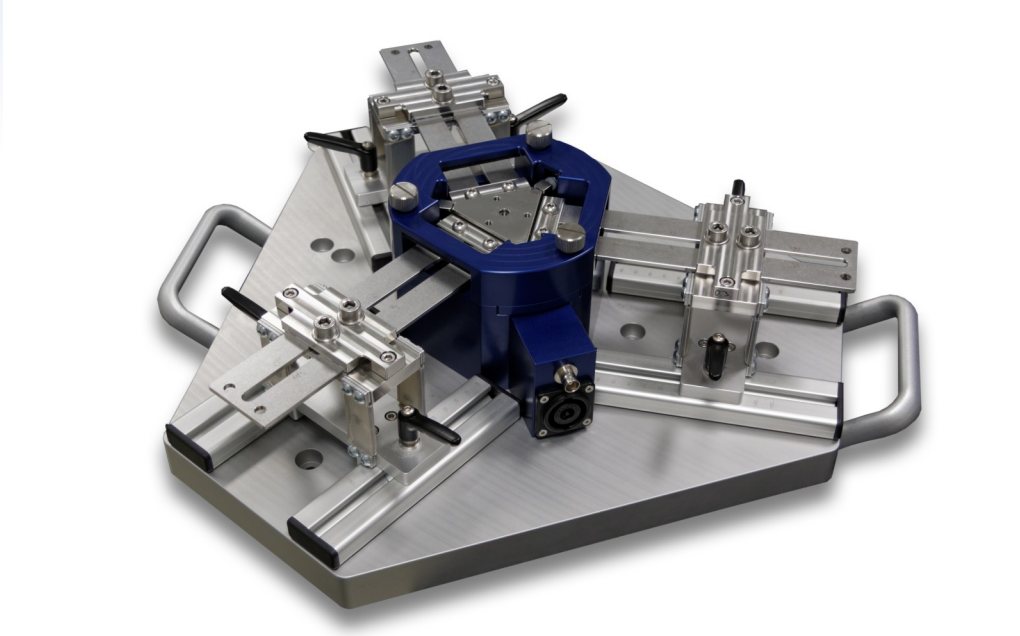
SE-101 RES-HA

Calibration Vibration Exciter for High Acceleration



Application

- **Secondary calibration** of **amplitude linearity** of vibration sensors up to high-g-levels
- **Fatigue testing**

Range of Use

- **Certified calibration laboratories** with outstanding quality demands
- Departments of **measuring instrument verification** in **research and industry**
- **Quality assurance** in sensor manufacturing
- **Testing of fatigue behavior of devices at high acceleration levels**

Features

- **Very high acceleration amplitudes** (up to 400 g_n)
- **Low Transverse motions** < 5 %
- Usable frequency range **65 Hz** ... **500 Hz**
- Maximum mass of DUT **300 gram**
- **Internal reference accelerometer** (ICP®-type, sensitivity about 10 mV / g_n)
- **Customized solutions** and modifications on request

Description

The SE-101 is a high-tech product, which is the result of intensive theoretical and practical examinations. It is designed especially for checking and calibration of amplitude linearity of sensors at certain frequencies up to high acceleration levels.

Thus the significant feature of this exciter is the high acceleration limit of up to 400 g_n using a sinusoidal excitation signal.

The drive of the exciter is electro dynamic. High acceleration amplitudes with very low temperature rise of the shaker and low transverse motions can be reached due to the special resonator design. The easily adjustable spring system allows quick changes of the resonance frequency.

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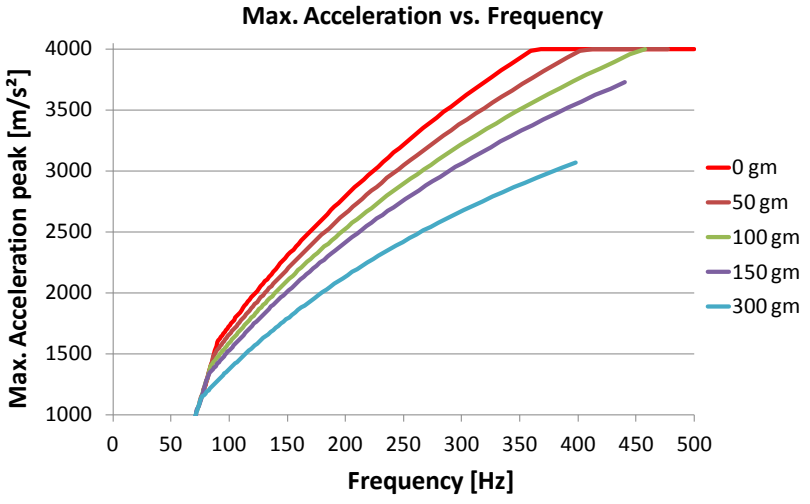
Components

- Vibration exciter
- Internal reference accelerometer, ICP® accelerometer
- Base Plate
- Adjustable spring system

Technical Data

Vibration Exciter		
Frequency Range	65 Hz ... 500 Hz (bare table)	
Max. Stroke	10 mm	
Max. Acceleration	400 g_n	
Max. Payload	300 gram (higher payloads on request)	
Transverse Motion	typ. < 5 %	
Max. Current Input	9 A RMS	
Total Weight	21 kg	
Working Temperature Range	23°C (± 2 K)	73,4°F (± 2 K)
Storage Temperature Range	-25°C ... +55°C	-13°F ... +131°F
Data of the Internal Reference Accelerometer		
Sensitivity (± 10 %)	1 mV / m/s² (10 mV / g_n)	
Frequency Range	2 Hz ... 50 kHz	
Excitation Voltage	18 V_{DC} ... 30 V_{DC}	
Constant Current Excitation	2 mA ... 20 mA	
Output Bias Voltage	8 V_{DC} ... 12 V_{DC}	
Discharge Time Constant	0.5 sec ... 2.0 sec	
Settling Time (within 10 % of bias)	< 5 sec	
Connectors		
Sensor (Internal Reference)	BNC-connector	
Shaker	Speakon®-SV (8-pin)	

Recommended Power Amplifier: **PA 14-180**
Recommended optional extra: Remote shut-down



All data are subject to change without notice

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