



Vibration Test System

IMV i250/SA5M



Specification

- Model: **IMV i250/SA5M**
- Armature diameter: **440 mm**
- Peak load: **600 kg**
- Armature mass: **35 kg**
- Air cooling system
- Maximum peak sine force: **40 kN**
- Maximum displacement:
68 mm (peak to peak)
- Frequency range: **5-2500 Hz**
- Armature resonance: **1900 Hz**
- Allowable eccentric moment:
1550 Nm
- **Optional stroboscope extension**
(IMV LIMCAM system)
- **Supported with a crane system**
up to 3 t capability

The vibration test system is suited for execute and evaluate vibration tests without any additional subassembly. The system is equipped with 2 pieces of 3-axis and 4 pieces of 1-axis accelerometers.

Test cases: resonance search, sine vibration, ASD or PSD random vibration, classic shock and SRS shock tests. The control and the spectra analysis is provided on the same PC through K2 Vibration Control Software.

The system can be extended with an IMV stroboscope (IMV LIMCAM system) for structural analysis using LIMTRACK Software.

The vibration system is supported with a crane system up to 3 t capability.

System Model		i250/SA5M	EM2502
Frequency range		0-2500 Hz	
Force	SINE	40 kN	
	RANDOM	40 kN rms	
	SHOCK	80 kN	
Max. Acceleration	SINE	1140 m/s ²	
	RANDOM	800 m/s ² _{rms}	
	SHOCK	2284 m/s ²	
Max. Velocity	SINE	2.2 m/s	
	SHOCK	2.2 m/s peak	
Max. Disp.	SINE	51 mmp-p	
	MAX. TRAVEL	68 mmp-p	

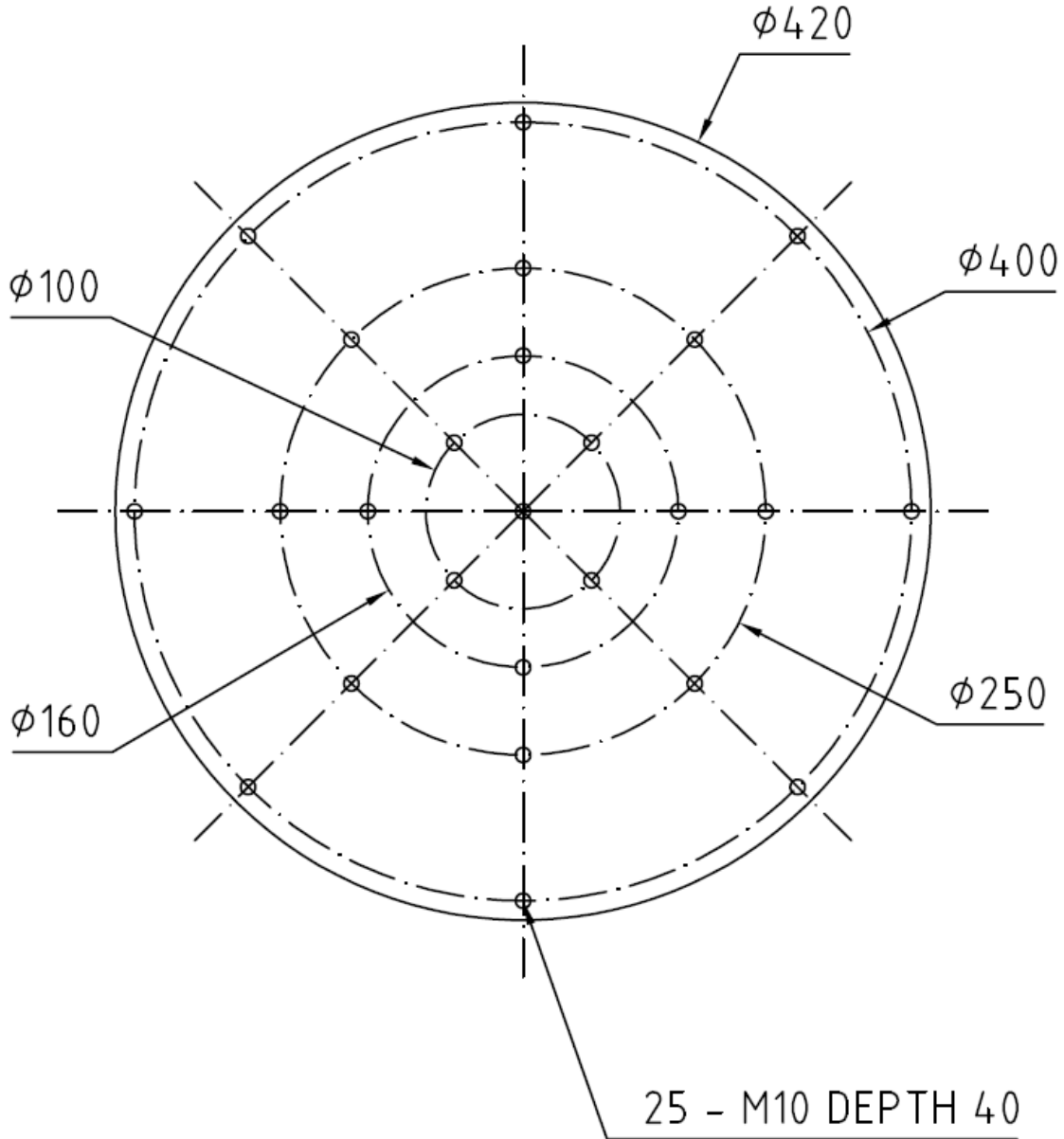
The amplifier has built-in protection to the following: phase-sequence, high temperature, cooling dropout and surge current.

Additional characteristics:

- 25 M10x40 fixing points on the armature;
- vertical dislocation of the armature;
- potential extension with slide table;
- screw-tonned or sticking fixing of the accelerometers.

Shaker adapter plate specification

The following figure shows the dimensions of the shaker adapter plate.



Accelerometer sensor specifications

	3-axis accelerometer		1-axis accelerometer	
	1	1	2	2
Piece(s)	1	1	2	2
Type	TLD356 A02	TLD356 A15	TLD352 C03	TLD352 C33
Min. acceleration range	±200 g	±50 g	±200 g	±50 g
Voltage sensitivity	10 mV/g ± 10%	100 mV/g ± 10%	10 mV/g ± 10%	100 mV/g ± 10%

The accelerometer sensor manufacturer is PCB Piezotronics. For the fixing of the accelerometers Witworth BSF 3/16"x32 or M6x0.75 type course shall be used. The following figure shows the dimensions of the 3-axis accelerometers.

