

Vibration Test System TV 51165-IN



DESCRIPTION

TIRA is manufacturing a range of Inertialshakers from 125 N (28 lbf) to 650 N (146 lbf). The Inertialshakers (IN) are inertial mass devices which may be attached to large structures at any angle through 360 degrees.

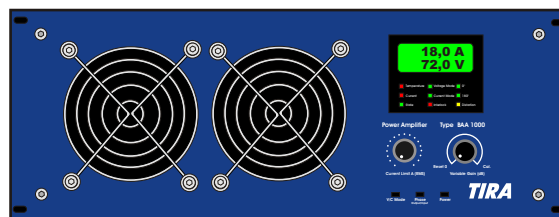
The design of the Inertialshakers is distinguished by a high transverse vibration strength and a high axial stiffness. These permanent magnet shakers are completely enclosed and provide their own inertial support through the use of stiff spider suspension units at each end of the shaker.

A maintenance-free fan guarantees the cooling of the shaker. The cooling air is sucked in via a filter system.

The TIRA Inertialshakers (IN) have found applications in industries, aerospace and aircraft industries, civil engineering and shipbuilding and represent a very cost-effective method of inducing vibration in large structures which are difficult to access.

AMPLIFIER BAA 1000

KVA ratings	1200 VA
Frequency range	2 Hz - 20 kHz
Voltage, max.	72 V
Current, max.	18 A
Load resistance	4 Ohm
Input voltage	< 5 V
Distortion	< 0.1 %
Signal to noise ratio	> 90 dB
Weight	45 kg (99.2 lb)
Size (WxHxD)	483 x 190 x 600 mm



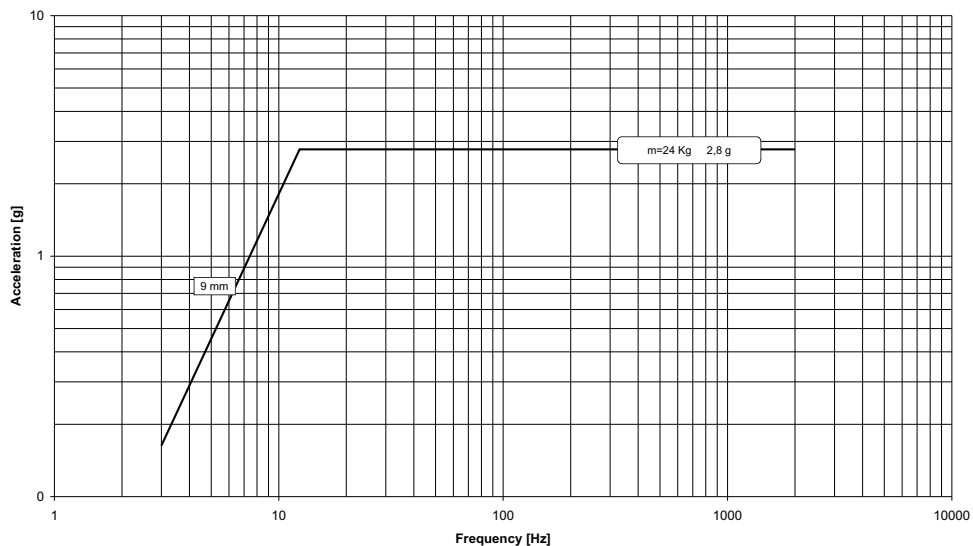
TECHNICAL SPECIFICATION VIBRATION GENERATOR S 51165-IN

Rated peak force (N lbf)	Sine/Random	650/420	145/95
Frequency range (Hz)		DC-2000	DC-2000
Max. rated travel (mm inch)	Pk-Pk	9	0.4
Max. velocity (m/sec inch/sec)	Sine/Random	1.5/1.5	59/59
Max. acceleration (g)	Sine/Random	2.8/1.8	2.8/1.8
Max. power consumption at 230 V (kVA)		1.27	1.27
Suspension stiffness (N/mm lbf/inch)		98	559.6
Effective moving mass (kg lb)		0.85	1.9
Weight (kg lb)		24	52.9
Coupling Thread (ø/mm)		M12	M12
Cooling (m ³ /h ft ³ /min)		80	47

PERFORMANCE DIAGRAM

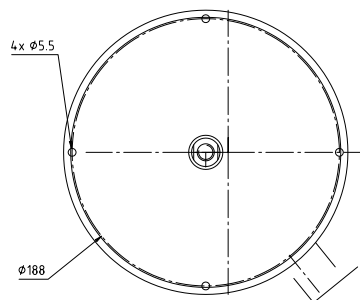
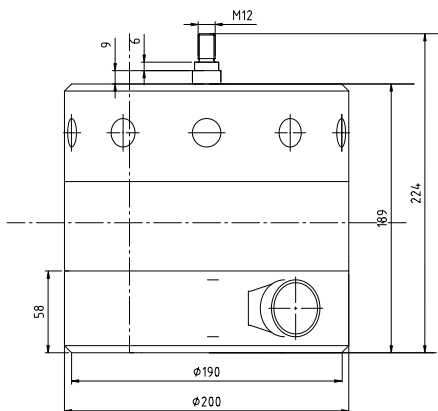
System Performance TV 51165-IN

Force: 650 N max. Acceleration: 2.8 g max. Velocity: 1.5 m/s max. Displacement: 9 mm

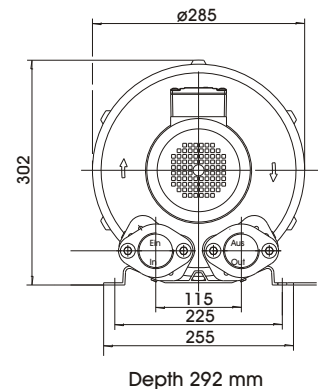


DIMENSIONS (mm)

S 51165-IN (Example drawing)



Blower SB 0140



Subject to modifications

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