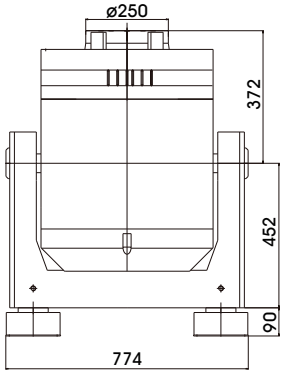
Vibration Test System TV 56280/LSS-250

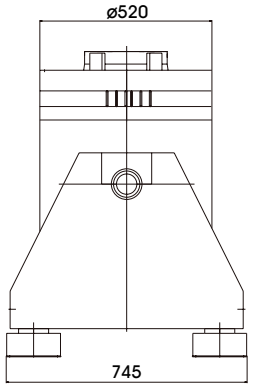
S 56280/LSS-250 (Example drawing) Dimensions in mm

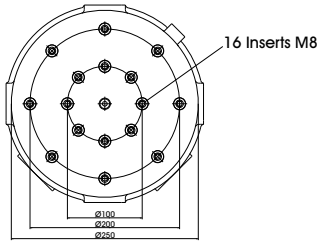
TECHNICAL PARAMETERS Vibration exciter S 56280/LSS-250

Rated peak force Sine$_{pk}$/Random$_{RMS}$[1]/Shock$_{pk}$[2]	8000/6000/20000 N
Frequency range	1 - 2000 Hz
Main resonance frequency	>2000 Hz
Max. displacement Peak-Peak[3]	100 mm
Max. velocity Sine/Random/Shock	2.0/2.0/4.5 m/s
Max. acceleration Sine/Random/Shock	68/48/136 g
Suspension stiffness	electronically adjustable
Effective moving mass (±5%)	13.0 kg
Max. payload	50 kg
Total mass	850 kg
Armature diameter	250 mm
Interlocks	Field coil temperature, displacement, cooling air, overcurrent

1) Random force according to ISO 5344:2004
2) Theoretical maximum shock value. Depends on payload, amplifier, shock and shock width
3) only with foundation mounting
For long-term tests, the load must be reduced to 80 %. Continuous operation at maximum load can cause damage.







SCOPE OF DELIVERY, OPTIONS AND FEATURES OF THE SYSTEM

Scope of delivery:
Vibration exciter 8 kN
Trunnion mount
Power amplifier 15 kVA
Cooling blower
Connection cables (each 5 m)
Power cables (5 m)
for amplifier (CEE 32 connector)
Blower hose ø140 mm (5 m)

Options:
Different thread inserts in the armature
at customer request
Wheels&Rails (incl. 3m rails)
Squeak&Rattle (Silent operation without blower)
Thermobarrier
Chamber leadthrough
Climatic chamber support kit
Remote control (Software)
Silencer
for cooling blower (Noise reduction 3 - 6 dB(A))
Acoustic enclosure
for cooling blower (Noise reduction 5 - 23 dB(A))
Cable extension
Factory acceptance test

Options:
TIRA EMS Energy Management System
Operation with temperature-controlled
cooling blower (and optional with
variable field strength)
ASM-Mode (Auto Shutdown Manager)

Features:
Vibration isolation < 6 Hz
Coarse filter unit
Fully automatic electronic
load compensation
Electronic zero point regulation
with adjustable stiffness
Automatic centering of the armature
Made in Germany
Servicehotline

TIRA GmbH Eisfelder Str. 23/25, 96528 Schalkau, Germany • Tel.: +49 36766 280-0 • Fax: +49 36766 280-99 • Internet: www.tira-gmbh.de • Email: st@tira-gmbh.de

Subject to modifications

TIRA Vibration Test Systems TV 56280/LSS-250

Vibration Test System TV 56280/LSS-250

TECHNICAL PARAMETERS Amplifier A 1 02 11 021 T SV

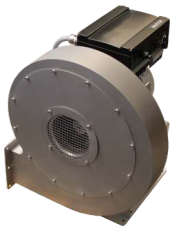
Max. output power$_{RMS}$ (factory-set)	15000 VA
Frequency range	DC - 5 kHz
Voltage$_{RMS}$, max.	±212 V
Current$_{RMS}$, max. (factory-set)	40-100 A
Signal input voltage$_{RMS}$	10 V
Total Harmonic Distortion (at 70A$_{RMS}$, 200 Hz)	< 0.2 %
Signal to noise ratio	> 80 dB
Field voltage (factory-set)	140-280 V
Field current (factory-set)	6-8 A
Total mass	330 kg
Dimensions (WxHxD)	600 x 1740 x 800 mm
Power supply (Standard)	3~ / N / PE 400 V±5% 50 Hz, CEE 32
Recommended fuse protection	32 A slow
Max. power consumption at 400 V (incl. blower)	17 kVA
Interlocks:	Overload, Temperature, Displacement, Cooling air, Phase monitoring, Emergency stop

Features:
Field supply integrated
Field voltage/Field current variable
according to customer spec.
4 Sigma peak current
Electronic zero-point-regulation (TMC)
Mains switch and integrated line filter
Color Touch Screen

TECHNICAL PARAMETERS Cooling blower TB 9 FUK

Max. volume flow rate	1080 m³/h
Total pressure difference	9 kPa
Motor output	4 kW
Max. frequency	90 Hz
Hose diameter	140 mm
Hose length (Std.)	5 m
Total mass	60 kg
Dimensions (WxHxD)	505 x 598 x 464 mm
Max. sound pressure level	99 dB(A)
Power supply (standard)	by amplifier rack
Max. current consumption at 400 V	7.9 A

Options:
Silencer TB 9-SI (Noise reduction 3 - 6 dB(A))
Dimensions (LxD): 1012 x 150 mm
Mass: 1.2 kg
Acoustic enclosure TB 9-AE (Noise reduction 5 - 23 dB(A))
Dimensions (WxHxD): 1250 x 1393 x 1470 mm
Mass: 103 kg
Hose length according to customers request (up to 10 m)



Cooling blower TB 9 FUK

Silencer TB 9-SI
(optional)

Acoustic enclosure TB 9-AE
(optional)

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