

# Vibration Test System TV 56280/LS-180

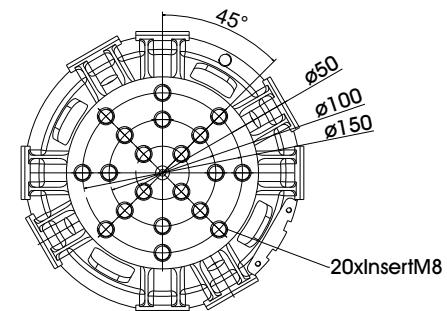
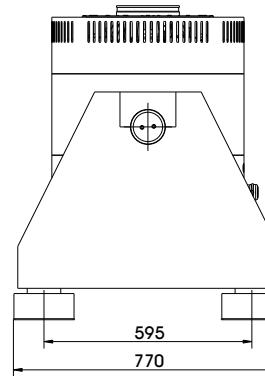
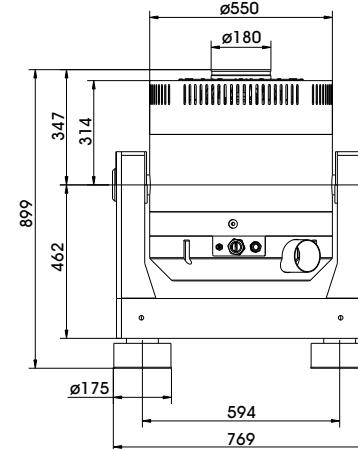
## TECHNICAL PARAMETERS Vibration exciter S 56280/LS-180

Rated peak force Sine <sub>pk</sub> /Random <sub>RMS</sub> /Shock <sub>pk</sub> <sup>1</sup>	8000/7200/24000 N
Frequency range	2-3000 Hz
Main resonance frequency	>2900 Hz
Max. displacement Peak-Peak	50.8 mm
Max. velocity Sine/Random/Shock	2.0/2.0/2.5 m/s
Max. acceleration Sine/Random/Shock <sup>1</sup>	93/72/186 g
Suspension stiffness	50 N/mm
Effective moving mass	8.5 kg
Max. weight tested	250 kg
Weight	765 kg
Magn. stray field Std./low degaussing	<1.5/<0.8 mT
Armature diameter	180 mm
Min. required compressed air supply	600 kPa
Interlocks	Temperature, displacement, cooling air, overcurrent, compressed air

1) theoretical maximum shock value. Depends on payload, amplifier, shock and shock width



S 56280/LS-180 (Example drawing) Dimensions in mm



## 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 ø100 mm (5 m)  
Compressed-air hose NW 7,2  
(Standard) (3 m)

### Options:

Different hole pattern of armature (different pitch diameter and/or thread inserts)  
at customers request  
Low degaussing kit  
to further reduce stray magnetic field  
Squeak&Rattle (Silent operation without blower)  
Wheels&Rails (incl. 3m rails)  
Thermobarrier (-40°C to +140°C)  
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)

### Features:

Vibration isolation < 6 Hz  
Coarse filter unit  
Fully automatic pneumatic load compensation  
Automatic centering of the armature  
Degauss kit to reduce stray magnetic field  
Made in Germany  
Servicehotline

Armature 180 (Standard)

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## TECHNICAL PARAMETERS Amplifier A 1 02 3 023

Output power <sub>RMS</sub>	15000 VA
Frequency range	DC - 4 kHz
Voltage <sub>RMS</sub> , max.	150 V
Current <sub>RMS</sub> , max.	150 A
Signal input voltage <sub>RMS</sub> (switchable)	2.5/5/10 V
Distortion	< 0.7 %
Signal to noise ratio	> 90 dB
Field voltage, max.	280 V
Field current, max.	6 A
Weight	330 kg
Dimensions (WxHxD)	600 x 1800 x 800 mm
Power supply (Standard)	3~ / N / PE 400 V±5% 50 Hz, CEE 32
Recommended fuse protection (Standard)	32 A slow
Max. power consumption at 400 V (incl. blower)	16 kVA
Interlocks:	Overload, temperature, clipping and more
Features:	
High Signal to noise ratio of >90 dB	Noise-button
Field supply integrated	Input voltage analyzer
Mains switch and integrated line filter	Voltage clipping limiter to avoid clipping
ESD-monitoring (Protection of the system against damage)	3 Sigma peak current
Field voltage/Field current variable according to customer spec.	



## TECHNICAL PARAMETERS Cooling blower TB 9

Volume flow rate	max. 870 m <sup>3</sup> /h
Total pressure difference	max. 22 kPa
Power	7 kW
Frequency	50 Hz
Hose diameter	100 mm
Hose length (Std.)	5 m
Weight	104 kg
Dimensions (WxHxD)	560 x 605 x 695 mm
Sound pressure level, max.	max. 86 dB(A)
Power supply (standard)	by amplifier rack
Max. power consumption at 400 V	10 kVA
Options:	
Silencer TB 9-SI (Noise reduction 3 - 6 dB(A))	
Dimensions (LxD): 1012 x 150 mm	
Weight: 1.2 kg	
Acoustic enclosure TB 9-AE (Noise reduction 5 - 23 dB(A))	
Dimensions (WxHxD): 1094 x 1086 x 1000 mm	
Weight: 134 kg	
Hose length according to customers request (up to 10 m)	



Cooling blower TB 9



Silencer TB 9-SI  
(optional)



Acoustic enclosure TB 9-AE  
(optional)