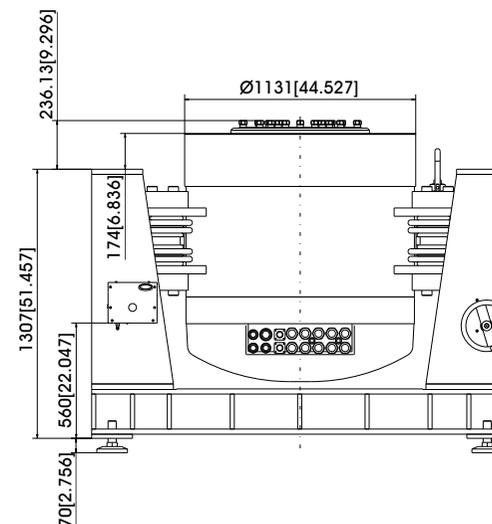


TECHNICAL PARAMETERS Vibration exciter S 59416/AIT-590

Rated peak force Sine _{pk} /Random _{RMS} /Shock _{pk} ¹	168000/168000/504000 N
Frequency range	5-2000 Hz
Main resonance frequency	1700 Hz
Max. displacement Peak-Peak	50.8 mm
Max. velocity Sine/Random/Shock	2.0/2.0/3.0 m/s
Max. acceleration Sine/Random/Shock ¹	100/100/250 g
Suspension stiffness	250 N/mm
Effective moving mass	125 kg
Max. weight tested	1300 kg
Weight	8450 kg
Magnetic stray field	1.5 mT
Armature diameter	590 mm
Required compressed air supply	Min. 700 kPa
Interlocks	Temperature, displacement, water flow rate, differential pressure, overcurrent, compressed air, conductance

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



SCOPE OF DELIVERY, OPTIONS AND FEATURES OF THE SYSTEM

Scope of delivery:

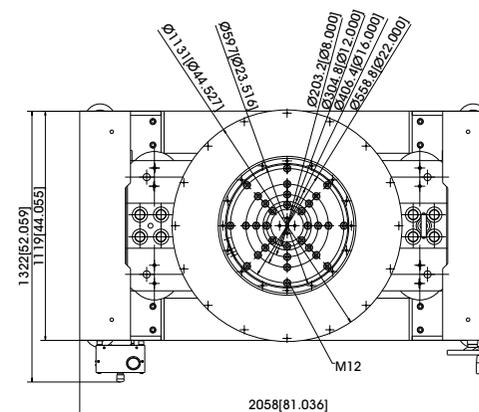
Vibration exciter 168 kN
Trunnion mount
with integrated vibration isolation (AIT)
Power amplifier 195 kVA
Cooling unit with integrated hydraulic unit
Connection cables (each 10 m)
Water hoses with
self-sealing couplings (each 10 m)
Hydraulic hoses with
self-sealing couplings (each 10 m)
Compressed-air hose NW 7.2 (Standard)
(10 m)

Options:

Different hole pattern of armature (different
pitch diameter and/or thread inserts)
at customers request
Thermobarrier (-40°C to +140°C)
Chamber leadthrough
Climatic chamber support kit
Remote control (Software)
Cable/Hose extension
Factory acceptance test

Features:

Vibration isolation < 3 Hz (AIT)
Fully automatic pneumatic load compensation
Frictionless hydrostatic bearing (Dual Bearing)
AIT fixable
Automatic centering of the AIT-System and
the armature
Degauss kit to reduce stray magnetic field
Shaker-water circuit with overpressure
Automatic permanent monitoring
of conductance
Integrated mains switch and line filter
Noise-button
Energy-saving-mode
Input voltage analyzer
Voltage clipping limiter to avoid clipping
3 Sigma peak current
Made in Germany
Servicehotline (Monday-Friday)



TECHNICAL PARAMETERS Power Amplifier A 5 85 3 293

Output power _{RMS}	195000 VA	Features: High Signal to noise ratio of > 90 dB Mains switch Lo-Field/Hi-Field button (Energy-saving mode) Integrated field supply Integrated line filter ESD-monitoring (Protection of the system against damage) Noise-button Input voltage analyzer Voltage clipping limiter to avoid clipping 3 Sigma peak current Field voltage/Field current variable according to customer spec.
Frequency range	DC - 4 kHz	
Voltage _{RMS} max.	150 V	
Current _{RMS} max.	1950 A	
Signal input voltage _{RMS} (switchable)	2.5/5/10 V	
Distortion	< 0.7 %	
Signal to noise ratio	> 90 dB	
Field voltage, max.	240 V	
Field current, max.	355 A	
Weight	2900 kg	
Dimensions (WxHxD)	2840 x 2320 x 1050 mm	
Power supply (Standard)	3~ / N / PE 400 V±5% 50 Hz	
Recommended fuse protection (Standard)	Direct connection (Terminal block) 400 A slow	
Max. power consumption at 400 V (incl. cooling unit)	249 kVA	
Interlocks:	Overload, temperature, clipping and more	



TECHNICAL PARAMETERS Cooling unit C 59430

Environmental conditions:		Features: Closed system --> No pollution and no water loss by evaporation The system works with a higher pressure --> No cavitation interferences at the measuring signal Manometers and flow meters at several places within the circuits Integrated conductance monitoring and demineralisation Fine filter with pollution monitoring Reduction of water consumption at part load by controlling of the process water flow Self-sealing couplings (free from leakage) Optional: Hose length according to customer specs (up to 20 m) Optional: Monitoring of all data, warnings and error messages at the PC
Temperature	5 - 30 °C	
Relative humidity	10 - 80 %	
Energy transfer	max. 3 kW	
Process water:		
Temperature	5 - 15 °C	
Volume flow at max. supply temperature	24 m³/h	
Working pressure: supply - static	≤ 10 bar (≤ 1000 kPa)	
Working pressure: dynamic differential pressure	≥ 3 bar (≥ 300 kPa)	
Dissipated heat flow	max. 220 kW	
Nominal width of supply pipes	R 1 1/2 IT (40 mm)	
pH value	7 ± 1	
Dimensions of dirt particles	< 25 µm	
Water hardness (total/carbonate)	< 1.4 mmol/l / < 0.9 mmol/l	
Weight	620 kg	
Dimensions (WxHxD)	800 x 2140 x 1000 mm	

