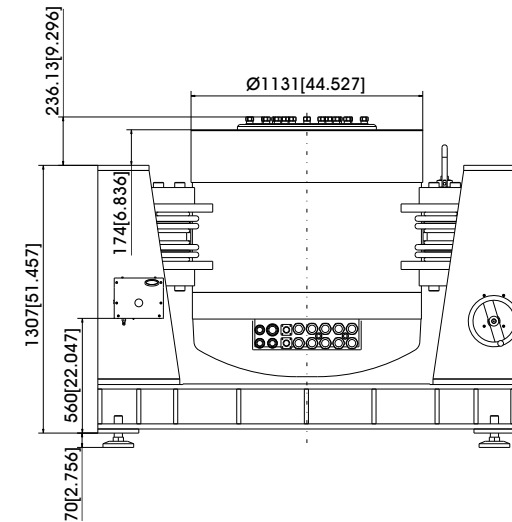


## TECHNICAL PARAMETERS Vibration exciter S 59413/AIT-590

Rated peak force Sine <sub>pk</sub> /Random <sub>RMS</sub> /Shock <sub>pk</sub> <sup>1</sup>	130000/130000/390000 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 <sup>1</sup>	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:

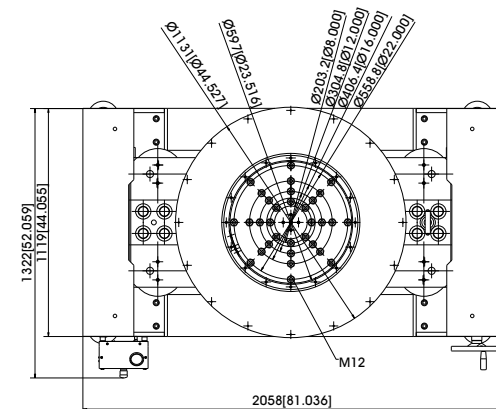
Vibration exciter 130 kN  
Trunnion mount  
with integrated vibration isolation (AIT)  
Power amplifier 165 kVA  
Cooling unit with integrated hydraulic unit  
Connection cables (each 10 m)  
Water hoses with  
self-sealing couplings (each 10 m)  
Hydraulic hoses with  
self-sealing couplings (each 10 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 3 248

Sine output power <sub>RMS</sub>	165000 VA
Frequency range	DC - 4 kHz
Voltage <sub>RMS</sub> max.	150 V
Current <sub>RMS</sub> max.	1650 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.	240 V
Field current, max.	355 A
Weight	2800 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)	200 kVA
Interlocks:	Overload, temperature, clipping and more

**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.



## TECHNICAL PARAMETERS Cooling unit C 59430

<b>Environmental conditions:</b>	
Temperature	5 - 30 °C
Relative humidity	10 - 80 %
Energy transfer	max. 3 kW
<b>Process water:</b>	
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

**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

