

PSU-10i, Orbital Shaker

DESCRIPTION

Shaker PSU-10i provides regulated orbital motion of the platform and is designed for use both in small specialized biotechnological laboratories and in large multidisciplinary laboratories: a choice of five (5) interchangeable platforms provides the possibility of performing various procedures and techniques.

Shaker PSU-10i incorporates a direct drive system, a brushless motor with a guaranteed service life up to 35,000 hours and an automatic loading balancing system. These innovations allow for continuous mixing up to 7 days, ensure reliable, trouble-free operation for more than 2 years and significantly expand the range of the device performance in both high and low limits.

Shaker can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C.



SPECIFICATIONS

Speed control range	50 - 450* RPM (increment 10 rpm) *max. speed depends on the load and vessels' shape
Digital time setting	1 min–96 hrs / non–stop
Timer sound signal	+
Digital speed control	+
Maximum continuous operation time	168 hr
Orbit	10 mm
Maximum load	3 kg
Overall dimensions (W×D×H)	255x255x100 mm
Weight	3.4 kg
Input current/power consumption	12 V, 470 mA / 5.7 W
External power supply	Input AC 100–240 V; 50/60 Hz; Output DC 12 V

CAT. NUMBER

Without platform	Without platform
BS-010144-AAN	230VAC 50/60Hz Euro plug
BS-010144-AAK	230VAC 50/60Hz UK plug, 230VAC 50/60Hz AU plug, 100VAC 50/60Hz US plug, 120VAC 60Hz US plug
BS-010144-AK	IQ OQ document
BS-010144-BK	PQ document

ACCESSORIES



UP-12
BS-010108-AK
platform

Universal platform with adjustable bars for different types of flasks, bottles, and beakers with silicone mat.



Bio PP-4
BS-010116-AK
platform

Flat platform with non-slip silicone mat for Petri dishes, culture flasks, agglutination.



P-12/100
BS-010108-EK
platform

Platform with clamps for flasks.



P-6/250
BS-010108-DK
platform

Platform with clamps for flasks.



P-16/88
BS-010116-BK
platform

Platform with spring holders for up to 88 tubes up to 30 mm diameter (e. g. 10 ml, 15 ml, 50 ml tubes).



HB-200
BS-010108-FK

Additional holding bar for UP-12



PP-4
BS-010108-BK
platform

Flat platform with non-slip silicone mat for Petri dishes, culture flasks, agglutination cards.



SPM
BS-010111-BK
double-sided adhesive mat

Double-sided adhesive mat. **SPM** is compatible with **PP-4** platform, that fits both on **PSU-10i** orbital shaker and in **ES-20** Shaker-Incubator.

EU Declaration of Conformity

Unit type Rockers, shakers, rotators, vortexes

Models **MR-1, MR-12;**
3D, Multi Bio 3D, PSU-10i, PSU-20i, MPS-1, PSU-2T;
Bio RS-24, Multi Bio RS-24, Multi RS-60;
V-1 plus, V-32, MSV-3500

Serial number 14 digits styled XXXXXYYMMZZZZ, where XXXXXX is model code, YY and MM – year and month of production, ZZZZ – unit number.

Manufacturer SIA BIOSAN
Latvia, LV-1067, Riga, Ratsupites str. 7/2

The objects of the declaration described above is in conformity with the following relevant Union harmonization legislations:

LVD 2014/35/EU	LVS EN 61010-1:2011 Safety requirements for electrical equipment for measurement, control, and laboratory use. General requirements. LVS EN 61010-2-051:2015 Particular requirements for laboratory equipment for mixing and stirring.
EMC 2014/30/EU	LVS EN 61326-1:2013 Electrical equipment for measurement, control and laboratory use. EMC requirements. General requirements.
RoHS3 2015/863/EU	Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
WEEE 2012/19/EU	Directive on waste electrical and electronic equipment.

I declare that the Declaration of Conformity is issued under sole responsibility of the manufacturer and belongs to the above-mentioned objects of the declaration.

Svetlana Bankovska
Managing director



Signature

07.02.2020.

Date



ND SERIES

Water Distillers



- New design with distilled water storage tank
- Fully automatic operation with microprocessor control system
- Distilled water quality confirming the requirements of international pharmacopeia and bacteria and pyrogen free with minimized gassing
- Distilled water conductivity is approximately 2,5 μ Siemens/cm at 20°C depending on the inlet water quality
- CO₂ degassing through the gas exhaust pipe
- Safety system and warning leds for :
 - High water pressure - Low water pressure - Heater failure
 - Half full storage tank - Full storage tank
- Water supply controlled by the solenoid valve which stops the water flow when the distilled water tank is full and the distillation is re-started when water tank is withdrawn
- Energy saving design by the distillation of heated cooling water
- Protected heaters against running dry
- Stainless steel heaters
- Boiling tank, storage tank and condenser made of stainless steel
- Suitable for bench and wall mounting
- Easy servicing to decrease maintenance time
- Supplied with siliphos cartridge filter to decrease calcification on the heaters

TECHNICAL SPECIFICATIONS

	ND 4	ND 8	ND 12
Distilled water capacity Lt./hr.	4	8	12
Storage tank capacity liters	8	12	24
Cooling water consumption Lt./hr.	40	80	120
Power consumption	3x1000 W	3x2000 W	3x3000 W
Power supply	400 V 50/60 Hz 3 Phases + N + G		
Internal Material	Stainless Steel		
External Material	Epoxy polyester powder coated aluminium		
External Dimensions (WxDxH) mm.	820x395x650	820x395x650	820x395x710
Packing Dimensions (WxDxH) mm.	880x480x810	880x480x810	880x480x860
Net / Packed Weight kg.	40 / 52	40 / 52	45 / 57

NS 103

Economical Water Distiller



- Designed to produce distilled water economically and rapidly
- Distilled water quality confirming the requirements of international pharmacopeia and bacteria and pyrogen free with minimized gassing
- Distilled water conductivity is approximately 2,5 μ Siemens/cm at 20°C depending on the inlet water quality
- CO₂ degassing through the gas exhaust pipe
- Boiling tank, condenser and heater made of stainless steel
- Energy saving design by the distillation of heated cooling water
- Protected heater against running dry
- Warning led for low water level
- Manometer to adjust and control the inlet water pressure
- Wall mounted type
- Easy and simple operation

TECHNICAL SPECIFICATIONS

Distilled Water Capacity	3,5 lt/hr.
Cooling Water Consumption	35 lt/hr.
Safety System	Surface thermostat
Power Supply	230V, 50/60 Hz.
Power Consumption	2500 W
Boiling Tank Volume	4 lt.
Manometer	0 - 100 mbar
Internal Material	Stainless steel
External Material	Epoxy-polyester powder coated aluminium
External Dimensions (WxDxH) mm.	410x260x565
Packing Dimensions (WxDxH) mm.	650x450x480
Net / Packed Weight kg.	12 / 16



BUREAU
VERITAS

Bureau Veritas Certification

A/S Vestfrost

Falkevej 12, 6705 Esbjerg Ø, Denmark

This is a multi-site certificate, additional site(s) are listed on the next page(s)

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 9001:2015

Scope of certification

Development and manufacture of refrigerators and freezers for commercial purposes.

Original cycle start date:	14-03-1996
Expiry Date of Previous Cycle:	NA
Certification/Recertification Audit Date:	NA
Certification / Recertification Cycle Start Date:	03-10-2020
Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on:	02-10-2023

Certificate No.:	DK013046	Version:	1	Issue Date:	24-09-2020
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Philip Absalonsen



Certification Body Address: 5th Floor, 66 Prescot Street, London, E1 8HG, United Kingdom

Local Office: Bureau Veritas Certification Denmark A/S, Oldenborggade 25-31, 7000 Fredericia

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation.

To check this certificate validity please call: (+45) 77 311 000.



ISO 9001:2015

Scope of certification

Site Name/Location	Site Address	Site Scope
A/S Vestfrost	Falkevej 12, 6705 Esbjerg Ø, Denmark	Development and manufacture of refrigerators and freezers for commercial purposes.
A/S Vestfrost	Spangsbjerg Møllevvej 100, 6705 Esbjerg Ø, Denmark	



BUREAU VERITAS



Certificate No.: **DK013046**

Version: **1**

Issue Date: **24-09-2020**

Philip Absalonson



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Certification Body Address: 5th Floor, 66 Prescott Street, London, E1 8HG, United Kingdom

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BUREAU VERITAS
Certification



A/S Vestfrost

Falkevej 12, 6705 Esbjerg Ø, Denmark

Bureau Veritas Certification Denmark A/S certifies that the Management System of the above organization has been audited and found to be in accordance with the requirements of the management system standards detailed below.

Standard

DS/EN ISO 13485:2016

Scope of certification

Design, development, manufacture, distribution and after-sales service of medical refrigerators and freezers and accessories for the medical, scientific and pharmaceutical field.

Original cycle start date:	27 July 2016
Expiry date of previous cycle:	NA
Certification/Recertification Audit date:	NA
Certification/Recertification cycle start date:	21 January 2019

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: **20 January 2022**

Certificate No.: DK010678 Version: 1 Revision date: **21 January 2019**

Certification Office: *Bureau Veritas Certification Denmark A/S
Oldenborggade 25-31, 7000 Fredericia, Denmark*

Further clarifications regarding the scope of this certificate and the applicability of the Management System requirements may be obtained by consulting the organization. To check this certificate validity, please call **(+45) 77 311 000**.

 **DANAK**
SYSTEM Reg.nr. 5005

