valid until: June 23, 2028

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TESTED®
DEVICE

Bosch Rexroth AG
Lift Modules F1000-F3200
Report No. BO 2304-1420

Statement of
Qualification

Product series
Particle Emission

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Statement of Qualification · Product series

Customer

Bosch Rexroth AG
Löwentorstrasse 74
70376 Stuttgart
Germany

Component tested

Category: Automation Components

Subcategory: Positioning Systems

Product name: Lift Modules F1000-F3200
Tested Products:
- Lift Module F1000 LIFT 350MM (3842 559 967) (manufacturing date: 12/2022)
- Lift Module F1000 LIFT 500MM (3842 559 965) (manufacturing date: 1/2023)
- Lift Module F3200 LIFT 500MM (3842 559 957) (manufacturing date: 11/2022 and 1/2023)

Random sampling of particle emissions (airborne) at representative sites

Test devices: Optical particle counter:
LasAir II 110 and LasAir III 110 with measuring ranges ≥ 0.1 µm, ≥ 0.2 µm, ≥ 0.3 µm, ≥ 0.5 µm, ≥ 1.0 µm and ≥ 5.0 µm

Standards / Guidelines: ISO 14644-1, -14
The norms stated generally refer to the version valid at the time of the tests.

Test environment parameters:
- Cleanroom Air Cleanliness Class (according to ISO 14644-1): ISO 1
- Airflow velocity: 0.45 m/s
- Airflow pattern: vertical laminar flow
- Temperature: 22 °C ± 0.5 °C
- Relative humidity: 45 % ± 5 %

Test procedure parameters:
- Installation position: vertical
- Cycle time: 12.6 to 51.6 s
- Minutes per Cycle: 10 min
- Break: 508 to 548 s
- Test load: 180 or 340 kg
- Velocity: 9 or 25 mm/s
- Stroke: 350 or 500 mm

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Test result / Classification

When operated under the specified test conditions, the series Lift Modules F1000-F3200 is suitable for use in cleanrooms fulfilling the specifications of the following Air Cleanliness Class according to ISO 14644-1:

Test parameter(s)	Air Cleanlines Class
Installation position: vertical Cycle time: 12.6 to 51.6 s Minutes per cycle: 10 min Break: 508 to 548 s Test load: 180 or 340 kg Velocity: 9 or 25 mm/s Stroke: 350 or 500 mm	6
Overall result	

Please note: Transport damages, incorrect installation, oil leakage, aging behavior, corrosion etc. can influence the test result.

The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.

Detailed information and parameters of the test environment can be found in the Fraunhofer IPA test report.

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

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-- — Place, current date

on behalf of
Dr.-Ing. Frank Bürger, Project Manager Fraunhofer IPA

This document only applies to the named product in its original state and is valid for a period of 5 years from the date the first document was issued. The document can be verified under **www.tested-device.com**.