valid until: June 6, 2029

Fraunhofer

TESTED®
DEVICE

Gimatic S.R.L.
KIT-GMPLM3240
Report No. GI 2404-1518

DUPLICATE

Statement of
Qualification
Single product
Particle Emission

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Statement of Qualification · Single product

Customer

Gimatic S.R.L.
Via Enzo Ferrari 2/4
25030 Roncadelle (BS)
Italy

Component tested

Category: Automation Components

Subcategory: Positioning Systems

Product name: GMP kit for long stroke parallel grippers (KIT-GMPLM3240)
(manufacturing date: 8/24/2023; color: black/clear; batch number: ODL-AC12019)

Random sampling of particle emissions (airborne) at representative sites

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

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

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:

- Control unit supplied by customer
- Installation position: vertical
- Cycle time: t_c = 2 s
- Cycles per minute: n = 30
- Test load: none

Test result / Classification

When operated under the specified test conditions, the GMP kit for long stroke parallel grippers (KIT-GMPLM3240) 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: t_c = 2 s Number of cycles per minute: n = 30 Test load: none	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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GI 1904-1109 — Report No. first document
Stuttgart, June 6, 2019 — Place, date of first document issued

GI 2404-1518 — Report No. current document
Stuttgart, June 6, 2024 — 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 current date the document was issued. The document can be verified under **www.tested-device.com**.