



valid until: March 28, 2030

Fraunhofer

TESTED[®] DEVICE

igus GmbH
chainflex CF78.UL.15.12
Report No. IG 2405-1526

Product series
**Particle Emission
in Dry-Cleanroom**

Qualification Certificate

This is to certify that the product mentioned above, provided by

igus GmbH
Cologne, Germany

has been awarded a Fraunhofer certificate TESTED DEVICE
bearing the report number IG 2405-1526.

The chainflex control cable CF78.UL.15.12 was assessed in
compliance with ISO 14644-14. When operated under the
specified test conditions (room temperature of $22^{\circ}\text{C} \pm 1^{\circ}\text{C}$; dew
point: $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$), it is suitable for use in Dry-Cleanrooms
fulfilling the specifications of the following Air Cleanliness Classes
according to ISO 14644-1:

Test parameter(s)	Air Cleanliness Class
$v_1 = 0.5 \text{ m/s}; a_1 = 1.0 \text{ m/s}^2$	4
$v_2 = 1.0 \text{ m/s}; a_2 = 2.0 \text{ m/s}^2$	4
$v_3 = 2.0 \text{ m/s}; a_3 = 4.0 \text{ m/s}^2$	4
Overall result	4

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

IG 2405-1526
Report No. first document

Stuttgart, March 28, 2025
Place, date of first document issued

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Report No. current document

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Place, current date

on behalf of 
Dr.-Ing. Frank Burger, 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.

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