



Fraunhofer

TESTED<sup>®</sup>  
DEVICE

igus GmbH  
chainflex CF12

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 series chainflex data cable CF12 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.

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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](http://www.tested-device.com).

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