





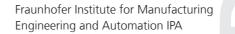
Fraunhofer TESTED® DEVICE igus GmbH chainflex CF38 Report No. IG 2305-1427

Statement of Qualification

Product series Particle Emission

Statement of Qualification • Product series

Customer	igus GmbH Spicher Strasse 1a 51147 Cologne Germany	Test result/Classification	When operated under the specified test conditions, the cable series chainflex Motor cable CF38 is suitable for use in cleanrooms fulfilling the specifications of the following Air Cleanliness Classes according to ISO 14644-1:	
			Test parameter(s)	Air Cleanlines Class
			$v_1 = 0.5 \text{ m/s}; a_1 = 1.0 \text{ m/s}^2$	4
Component tested			$v_2 = 1.0 \text{ m/s}; a_2 = 2.0 \text{ m/s}^2$	4
Category:	Energy Supply		$v_{3} = 2.0 \text{ m/s}; a_{3} = 4.0 \text{ m/s}^{2}$	4
Subcategory:	Cable Systems		Overall result	4
Product name:	chainflex Motor cable CF38 Tested products: • CF38.15.04 (manufacturing date: fourth quarter of 2022) • CF38.100.04 (manufacturing date: first quarter of 2023) • CF38.500.03.0.PE (manufacturing date: fourth quarter of 2012)		Please note: Transport damages, incom can influence the test result.	ect installation, aging behavior, etc.
Random sampling of particle emissions (airbo	rne) 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 $\geq 0.1 \mu\text{m}$, $\geq 0.2 \mu\text{m}$, $\geq 0.3 \mu\text{m}$, $\geq 0.5 \mu\text{m}$, $\geq 1.0 \mu\text{m}$ and $\geq 5.0 \mu\text{m}$			
Test environment parameters:	 Cleanroom Air Cleanliness Class (according to ISO 14644-1):			
Test procedure parameters:	 Energy chain:	The measuring devices used for the qualification test and international standards. In cases where no nation regulations and norms applicable at the time of the Detailed information and parameters of the test env	onal standards exist, the test procedure imp test. The relevant documentation can be vi	lemented complies with the technical ewed on request at any time.



IG 2305-1427 Report No. first document

Department of Ultraclean Technology and Micromanufacturing

Nobelstrasse 12 70569 Stuttgart Germany



Report No. current document

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