

Fraunhofer TESTED® DEVICE

igus GmbH Energy chain/Cable systems Report No. IG 0704-400

IPA Qualification Certificate

This is to certify that the products mentioned below manufactured by the company

igus GmbH

Spicher Str. 1a D-51147 Köln

have been awarded an IPA Qualification Seal bearing the report number IG 0704-400.

The following models of cabel systems operated at the velocities listed below are suitable for use in cleanrooms fulfilling the corresponding air cleanliness specifications in accordance with ISO 14644-1.

	Velocity and Air Cleanliness Class		
Model Description			
	$v_1 = 0.5 \text{ m/s}$	$v_2 = 1.0 \text{ m/s}$	
CF27.07.05.02.01.D	1	-	
Tube white		1	

	Tested with E3.15.040.075.0 Velocity and Air Cleanliness Class	
Model Description		
	$v_1 = 0.5 \text{ m/s}$	$v_2 = 1.0 \text{ m/s}$
CF34.25.04	1	1
CF9.15.07	1	1
CF5.10.07	2	2

Detailed information and parameters of the test environment can be found in the IPA Test Report compiled by the Fraunhofer Society.

Certified on 12th September 2007.

The duration of the validity of this certificate is unlimited. For further information visit our website at http://www.ipa-qualification.com.

Stuttgart, Germany, 12th September 2007

on behalf of



Fraunhofer Institut

Institut Produktionstechnik und Automatisierung