

Test Intention:

In test 5006a we want to investigate the lifespan of our CFBUS.052 in a 100mm radius.

Client:

Name: Nils Jäger Team: chainflex® Date: 28.05.2013

Order-Info:

Customer / No.: igus® GmbH, Spicher Str.1a, 51147 Köln

Series / No: CFBUS.052 Installation type: horizontal, short way
 Customer test: Yes No Development test: Yes No

Technical data

Target & Examination

e-chain® type: E6.29.050.100.0	Cable length [m]: 7,0
e-chain® radius [mm]: 100	Target [double strokes]: Lifespan
Stroke [m]: 1,5	Optical check: <input checked="" type="checkbox"/>
Acceleration a [m/sec ²]: -/-	Fluke DTX-ELT: <input type="checkbox"/>
Velocity v [m/s]: -/-	Standard measuring: <input type="checkbox"/>
Ambient temperature [°C]: approx. 25°C	AutΩMeS: <input type="checkbox"/>

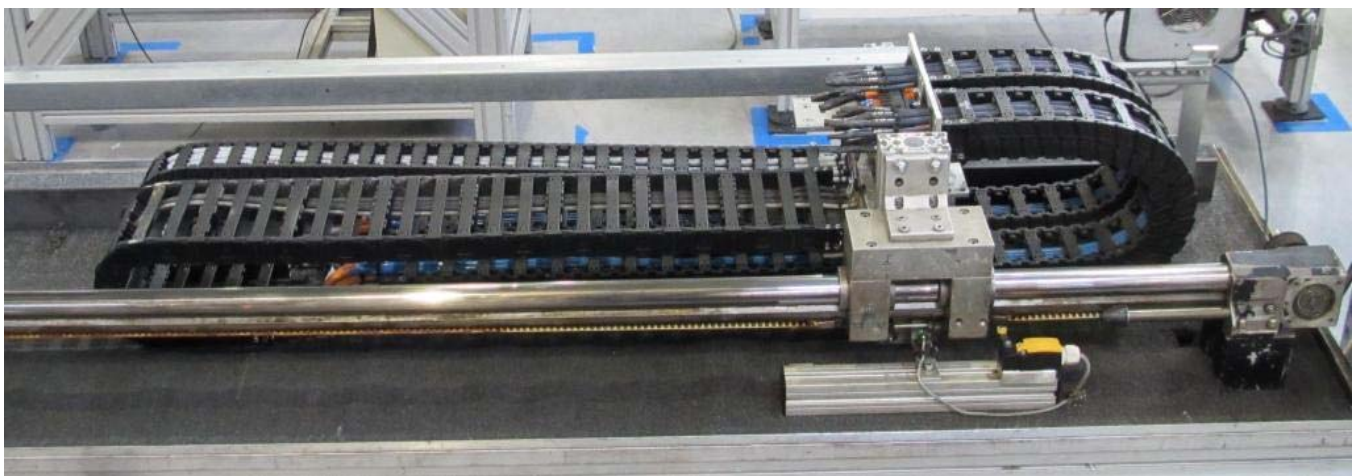
Experimental setup

Checklist for the experimental preparations

- additional inscription/label at all wires
- strain reliefs at both ends of the chain
- correct electrical connection of all wires
- radius was marked at the cables and the energy chain

1. Construction:

This test is built up on the „Zollern“. The following picture shows the test structure:



2. Cable and hose packages:

No. 1: **1x CFBUS.052** with the cable marking

01025m igus chainflex CFBUS.052 (4x(2x0,15)C)C E310776 N cFLUs AWM Style 21235 VW-1
AWM I/II A/B 80°C 300V FT-1 CE N P/CF DESINA Ethernet / CAT7 conform RoHS-II conform
www.igus.de

3. Description of the cable construction:

Standard igus chainflex® catalogue cable

4. Remarks:

The following charts give an overview regarding the test parameters:

Cable no.	Cable type	e-chain radius [mm]	External diameter [mm]	Bending factor [xd]	Bending factor catalogue [xd]
1.X	CFBUS.052	100	10,2	9,8	12,5

Cable no.	Cable type	Counter reading		Effectively tested strokes	Cable okay after ... strokes
		... mounting	... demounting		
1.1	CFBUS.052	92.520.886	33.814.706	41.293.820	41.293.820

Test-order was checked by ... [Martin Göllner or Christian Mittelstedt and further employee]

Date:	28.05.2013	Name:		Name:	Jakob Gödde
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Result

Start report 10.06.2013:

At the 10.06.2013 we started the test 5006a at counter reading of 92.520.886 double strokes, and we will make an optical check regularly.

Interim report 28.06.2013

At the 28.06.2013 we checked the cable 1.1 after 1.169.132 double strokes. The specimen looks well and shows no abrasion.

Interim report 16.08.2013

At the 16.08.2013 we checked the cable 1.1 at counter reading 94.728.100, after 4.414.428 double strokes. The specimen looks well and shows no abrasion.

Interim report 06.12.2013

At the 06.12.2013 we checked the cable 1.1 after 5.616.154 double strokes. The specimen looks well and shows no noteworthy abrasion.

Interim report 04.04.2014

At the 04.04.2014 we checked the cable 1.1 after 18.340.188 double strokes. The specimen looks well and shows no noteworthy abrasion.

Interim report 01.08.2014:

At the 01.08.2014 we checked the cable 1.1 after 25.763.988 double strokes. The specimen looks well and shows no immoderate abrasion.

End report 16.04.2015:

At the 16.04.2015 we demounted the cable 1.1 at counter reading 33.814.706 double strokes, after 41.293.820 double strokes. The specimen looks well and shows no immoderate abrasion.