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Test Intention:
In test 4003 we want to investigate the lifespan of CF113.02.05.02 on the short way.

Client:					
Name: M. Göllner	Team:	chainflex	8	Date:	23.08.2010
Order-Info:					
Customer / No.: igus [®] GmbH, Spicher	Str.1a, 511	47 Köln			
Series / No: CF113.02.05.02			Installation type: horizont	tal, short w	ay
Customer test: Yes ☐	No 🖂		Development test:	Yes 🛛 N	o 🗌
Technical data			Target & Examination		
e-chain [®] type: 1500.1	25.048.0		Cable length [m]:	4,0	
e-chain [®] radius [mm]: 048			Target [Strokes]:	Lifespar	1
Stroke [m]: 0,8			Optical check:	\boxtimes	
Acceleration a [m/sec ²]: 4,0			Function check:		
Velocity v [m/s]: 1,5			Standard measuring:	\boxtimes	
Ambient temperature [°C]: approx	. 25°C		AutΩMeS:		
Experimental setup (Sketch, Photo .)				
Checklist for the experimental prepa ☐ additional inscription/label at all wire ☐ strain reliefs at both ends of the cha ☐ correct electrical connection of all w ☐ radius was marked at the cables an	es ain vires	gy chain			

1. Construction:

This test is built up on the "kleine Bahr". The following pictures show the test structure:





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For internal

use only

The managing data show the results of the accomplished examinations. With all data it still acts neither around one or more warranties of certain characteristics around one or more warranties regarding the suitability of a product for a certain targeted application, since the examinations on laboratory conditions took place. The warranty of certain characteristics of the products and/or their suitability for a certain application requires writing in the confirmation of order. Finally we recommend user-specific measurements under genuine operating conditions.

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2. Cable and hose packages:

No. 1: 1x CF113.02.05.02 with the cable marking

07566m igus CHAINFLEX CF113.02.05.02 (5x2x0,25)C 300/300V E310776 cURus AWM Style

20233 AWM I/II A/B 80°C 300V FT1 CE RoHS conform www.igus.de

3. Description of the cable construction:

Standard igus chainflex[®] catalogue cable. Construction details see catalogue 11/2010 page 148 and follow.

4. Remarks:

To detect broken conductor or shielding wires we will measure the ohmic resistance of these cable elements. The cores of the samples are connected in series and one core is connected with the shielding to measure the ohmic resistances.

The following chart gives an overview regarding the test parameters:

Cable no.	Cable type	E-chain radius [mm]	Outer diameter [mm]	Bending factor [xd]	Bending factor catalogue [xd]
1.1	CF113.02.05.02	48	8,95	5,4	10,0

Cable no.	Cable type	Counter	reading	Effectively	Cable okay
Cable 110.	Cable type	mounting	demounting	tested Strokes	after Strokes
1.1	CF113.02.05.02	25.731.514	91.099.066	65.367.552	65.367.552

Test-or	der was checked by	[Rainer I	Rössel or Martin Gö	öllner and fu	urther em	ployee]	

Date:	19.01.2011	Name:	Name:	Ch. Mittelstedt





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Result

Start report 07.02.2011:

At the 07.02.2011 we started the test 4003 at counter reading 25.731.514, we will measure the ohmic resistance regularly.

Interim report 03.07.2012:

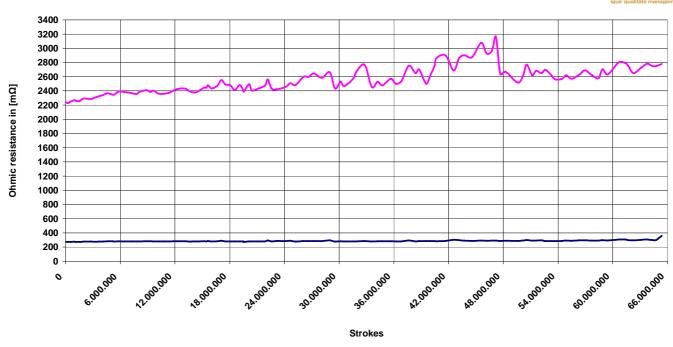
At the 03.07.2012 we demounted the cable after 65.367.552 strokes, to finalize the test

The following diagrams show the trend of the ohmic resistances during the test:



Trend of the ohmic resistances





	CF113.02.05.02 Shielding
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Cable no.	Cable type	Counter reading		Effectively	Cable okay
Cable 110.	Cable type	mounting	demounting	tested Strokes	after Strokes
1.1	CF113.02.05.02	25.731.514	91.099.066	65.367.552	65.367.552

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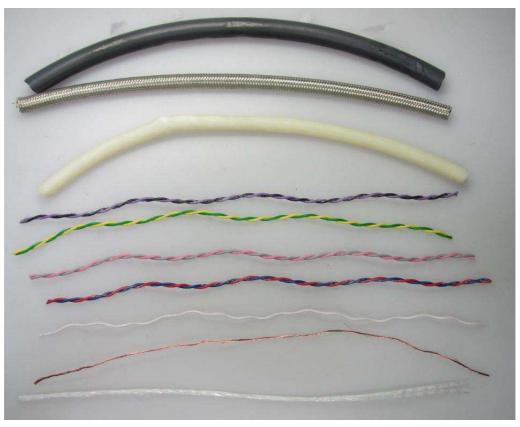
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Evaluation

Dissection report:

The condition of the cable no.1.1 (CF113.02.05.02 fleece) after 65.367.552 strokes





Double strokes [DS]	65.367.552
Condition outer jacket	Abrasion
Condition overall shielding	Ok
Condition inner jacket	Ok
Condition centre element	Ok
Twisted Pair 0,25mm ²	
Condition core insulation	Ok
Condition conductor	Ok

Name: Ch. Mittelstedt Date: 03.07.20

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