



4932

Test No.:

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Test Intention:

In test 4932 we want to investigate the lifespan of our new CF298.05.04 in an e-chain with a 18mm radius.

Client:						
Name: Christian Mittelstedt	Team: chainflex	®	Date:	27.05.2014		
Order-Info:						
Customer / No.: igus® GmbH, Spicher	Str.1a, 51147 Köln					
Series / No: CF298		Installation type: horizontal, short way				
Customer test: Yes	No 🖂	Development test:	Yes 🖂 N	lo 🗌		
Technical data		Target & Examination				
e-chain [®] type: 045.10	.018.0	Target [strokes]:	Lifespa	n		
e-chain [®] radius [mm]: 18		Optical check: 🔀				
Stroke [m]: 0,6		Function check:				
Ambient temperature [°C]: approx	Standard measuring:					
Cable length [m]: 2,5		AutΩMeS:				
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 "MinLin". The following picture shows the test structure:						

Ch. Mittelstedt/Versuch/10.12.2021

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 CF298.05.04** with the cable marking 00563m igus chainflex CF298.05.04 4x0,5 300/300V CE F P/EC RoHS-II conform www.igus.de

3. Description of the cable construction:

Standard igus chainflex[®] catalogue cable.

4. Remarks:

To detect broken conductor or shielding wires we will measure the ohmic resistance of these cable elements with Aut Ω MeS.



The following chart gives 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	CF298.05.04	18	5,8	3,1	4,0			
I									
Cable no	Cable no.	Cable type	Counte	Counter reading		Cable okay			
	Cubic no.	Ouble type	mounting	demounting	tested strokes	after strokes			
	1.1	CF298.05.04	0	53.874.106	53.874.106	53.874.106			
Т	Test-order was checked by [Martin Göllner or Rainer Rössel and further employee]								
	Date: 27.05.2014 Name:			Na		Christian Mittelstedt			





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Result

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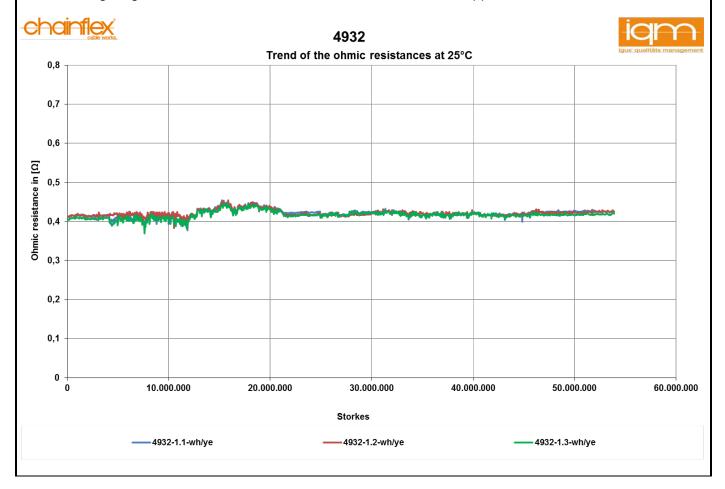
Start report 24.06.2014:

At the 24.06.2014 we started the test 4932 at counter reading of 0, we will measure the ohmic resistance with Aut Ω MeS.

Interim report 07.02.2016:

At the 07.02.2016 we demounted cables no. 1.1 after 53.874.106 strokes, because we want to check the condition of the cable elements

The following diagram shows the trend of the ohmic resistance after approx. 53.874.106 strokes:







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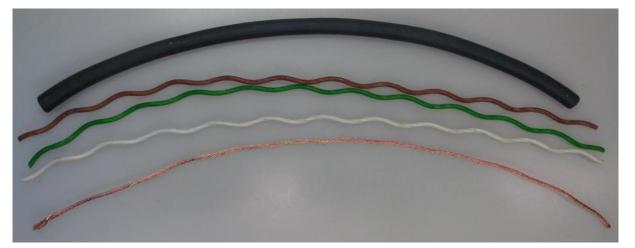
Evaluation

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Dissection report:

The following pictures show the dissected elements of the cable

The condition of the cable no. 1.1 (CF298.05.04) after 53.874.106 strokes



Strokes	53.874.106
Condition outer jacket	О.К.
Condition total stranding	0.K.
Condition core insulation	О.К.
Condition conductor	О.К.
Condition centre element	О.К.

Name: Christian Mittelstedt

10.02.2017

Date:

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