

# Report - Pull-out force

Customer : CIMCO-Werkzeugfabrik  
 Project : Tensile test according to DIN EN 61238  
 Protocol-No. : 2130530-01DT  
 Material : Copper with tinning  
 Test Standard : DIN EN 61238  
 Sample Type : 50 mm<sup>2</sup> cable compressed with cable lugs stamping 12-50

Sample 1: Marking KL  
 Sample 2: Marking CN


Comment : The sample cables do not show any macroscopically visible damage, cracks or material weaknesses.

The determination of the pull-out force was carried out in accordance with the standard.

The specimen was loaded to the required stress level of 60N/mm<sup>2</sup> and then hold at this level for 1 minute.  
 During the hold stress of 60MPa, the specimen did not slip.

The tested cables has passed the test according to DIN EN 61238.

Subsequently, the specimen was further loaded until failure.

Examiner : M. Braun 

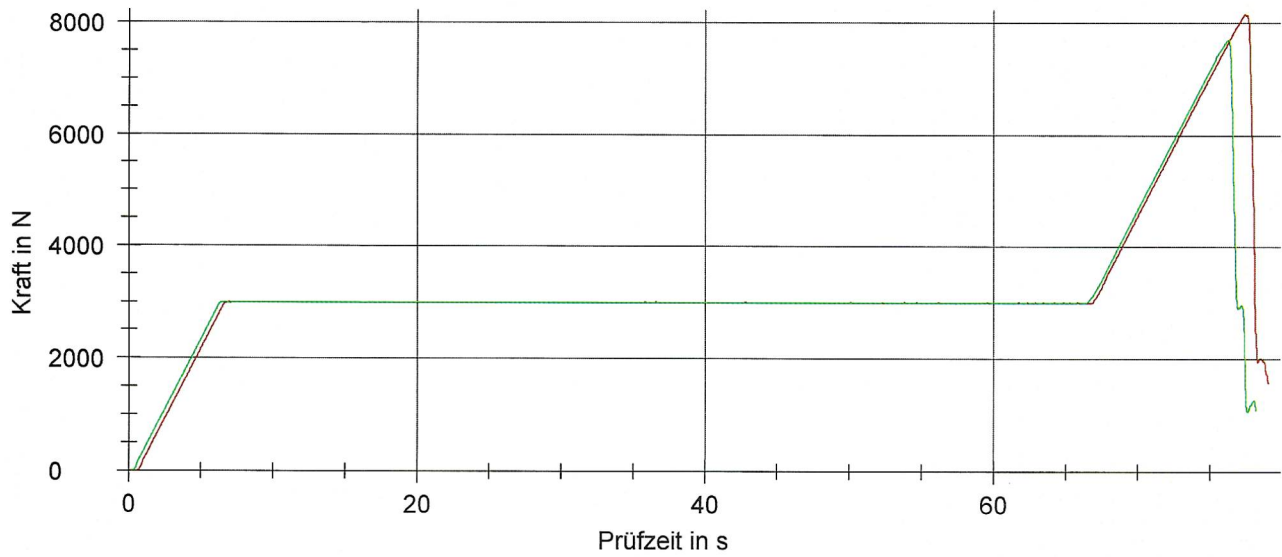
Freigabe: G. Schäfer 

Date : 22.09.2021

## Prüfergebnisse:

Nr	Part-No.	F <sub>Ende Abschnitt 1</sub> N	F <sub>max</sub> N	dL(F <sub>max</sub> ) mm	t <sub>Prüfung</sub> s
1	12-50 KL	2999,75	8160	16,5	79,03
2	12-50 CN	2999,75	7700	20,8	78,20

**Seriengrafik:**



**Statistik:**

Serie n = 2	F <sub>Ende Abschnitt 1</sub> N	F <sub>max</sub> N	dL(F <sub>max</sub> ) mm	t <sub>prüfung</sub> s
$\bar{x}$	2999,75	7930	18,7	78,61
s	0,00	323	3,1	0,59
v	0,00	4,07	16,59	0,75

