



High Force Tweezer

KHG/3

Tweezer for extrem
Forces

F > 10N / 1kg
... 500N / 50kg

Tweezer KHG/3

The tweezer KHG/3 was made for high force pull tests. Tests with forces up to 500 N / 50 kg can be done.

Typical applications are pull tests on electrical connections as studs, connectors or even pulling off entire devices.

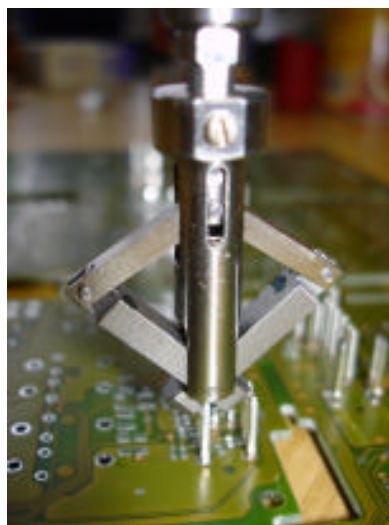


Fig. 1 tweezer KHG/2

Function

The tweezer KHG/3 has an integrated toggle-lever-gear which can apply extremely high forces. Maximum force is limited due to the tool miniaturisation. Although the gripper can pull up to 500 Newton it is still a very handy tool.

The gripper itself gives only a small gripping force which is just enough to hook on the application. When doing the test, the pulling force of the machine is transferred into gripping force. The mechanic is designed to apply automatically enough gripping force for not losing the object. As a rule of thumb gripping force is approximately 2 times the pull force.

Successful testing depends on the right tweezer spikes. They have to engrave deep enough for holding the application safely but must not tearing it off. There is a number of standard spikes available for most common tests but customised spikes can also be provided. Spikes are normally made of tungsten carbide which is extremely durable and can be structured very fine.

The mechanical interface of KHG/3 works with all major tester brands.

Recommended Use

The tool can handle objects up to 3mm thickness. After having positioned the application the tweezer has to be slid over the probe by lowering the testhead. Tool protection force has to be adjusted properly. Because the tool has no integrated actuator automatic test require special equipment. Taking off the teared rests normally has to be done manually.

Gassmann Engineering

Basedowstr. 25
D-01237 Dresden
Germany
Telefon +49 (0) 351 46335293
Fax +49 (0) 351 3100619
e-mail gassmann@ifte.de
web www.memorygreifer.de

Technical Data KHG/3

Mass:	appr. 20 gram
Dimensions:	appr. 51 mm x 33 mm x 12 mm
Tweezer spikes:	customised
Spike Material:	tungsten carbide / HSS
Gripping force:	self adjusting
Max. pull force:	500 N / 50 kg
Object size:	0 ... 3 mm

Fig. 2 main dimensions KHG/3
scale appr. 2:1

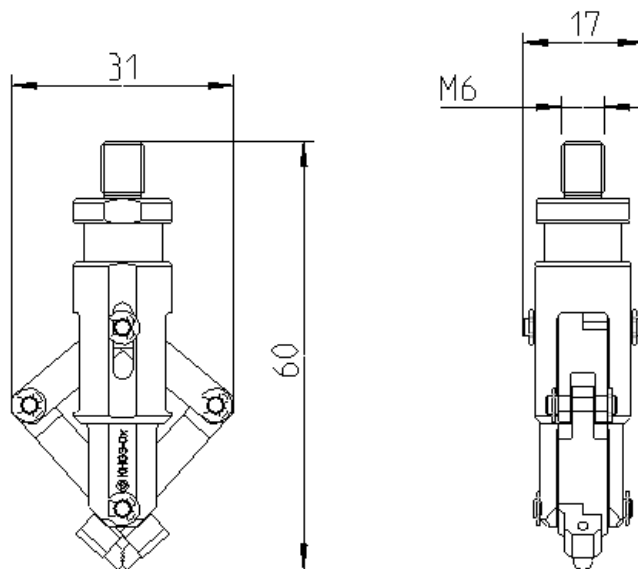
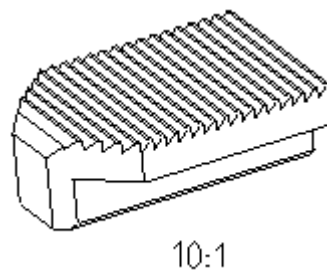


Fig. 3 customised spike



Test Procedure

First the tweezer has to be positioned central above the test object. Then lower the tweezer down on the object until the tweezer spikes place over the object as shown in Abb. 2.a.

With starting the test procedure, the gripper holds the object automatically and transfers the pull force applied by the test machine automatically into appropriate gripping force.

At maximum force the test object will be destroyed.

