






Film grips



Suitable for gripping thin films

Selectable from wide range according to sample material and dimension

	<p>Light weight aluminum model Suitable for small force measurement because of the light body Capacity:250N(FC-21)</p>	<p>Standard steel model Suitable for big force measurement because of the solid steel body Capacity:500N(FC-20,FC-40)</p>
<p>Standard width Film width: max 20mm Film thickness: max 2mm</p>	<p>FC-21 (Weight:25g) M6</p> 	<p>FC-20 (Weight:73g) M6</p> 
<p>Wide width Film width: max 40mm Film thickness: max 2mm</p>	/	<p>FC-40 (Weight:125g) M6</p> 
<p>Custom width Film width: max (A)0mm Film thickness: max (B)mm Please specify numbers for width(A) and thickness(B)</p>	<p>FC-(A)1-(B) (*1)</p>  <p>Contact us for the detail</p>	<p>FC-(A)0-(B) (*1)</p>  <p>Contact us for the detail</p>

*1 FC-(A)0-(B)
 ↑ (B): Thickness
 ↑ 1: Material 0: Steel 1: Aluminum
 ← (A): Width

Ex) Width 30mm, Steel, Thickness 3mm
 FC-30-3

Ex) Width 15mm, Aluminum, Thickness 1mm
 FC-1.51-1

2011/03/01

[Special purpose model]

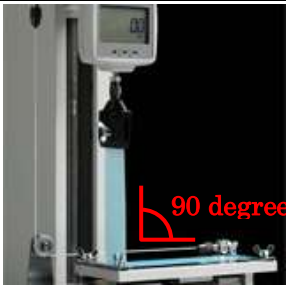
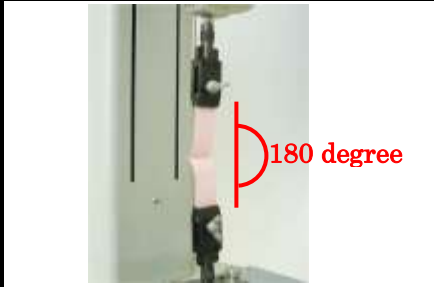

	Light weight aluminum model Capacity:250N (FC-21U,FC-41U,FC-21UQ)
Single urethane grip model Film width: max 20mm Film thickness: max 2mm	FC-21U (Weight:40g) M6 
Single urethane grip model for wide width Film width: max 40mm Film thickness: max 2mm	FC-41U (Weight:70g) M6 
Lever operation single urethane grip model Film width: max 20mm Film thickness: max 0.2mm	FC-21UQ (Weight:50g) M6 
Special custom model Please ask us for measurement of special material and dimension	 Contact us for the detail



Suitable for thin films with the single urethane grip minimizing the possible damage to the sample

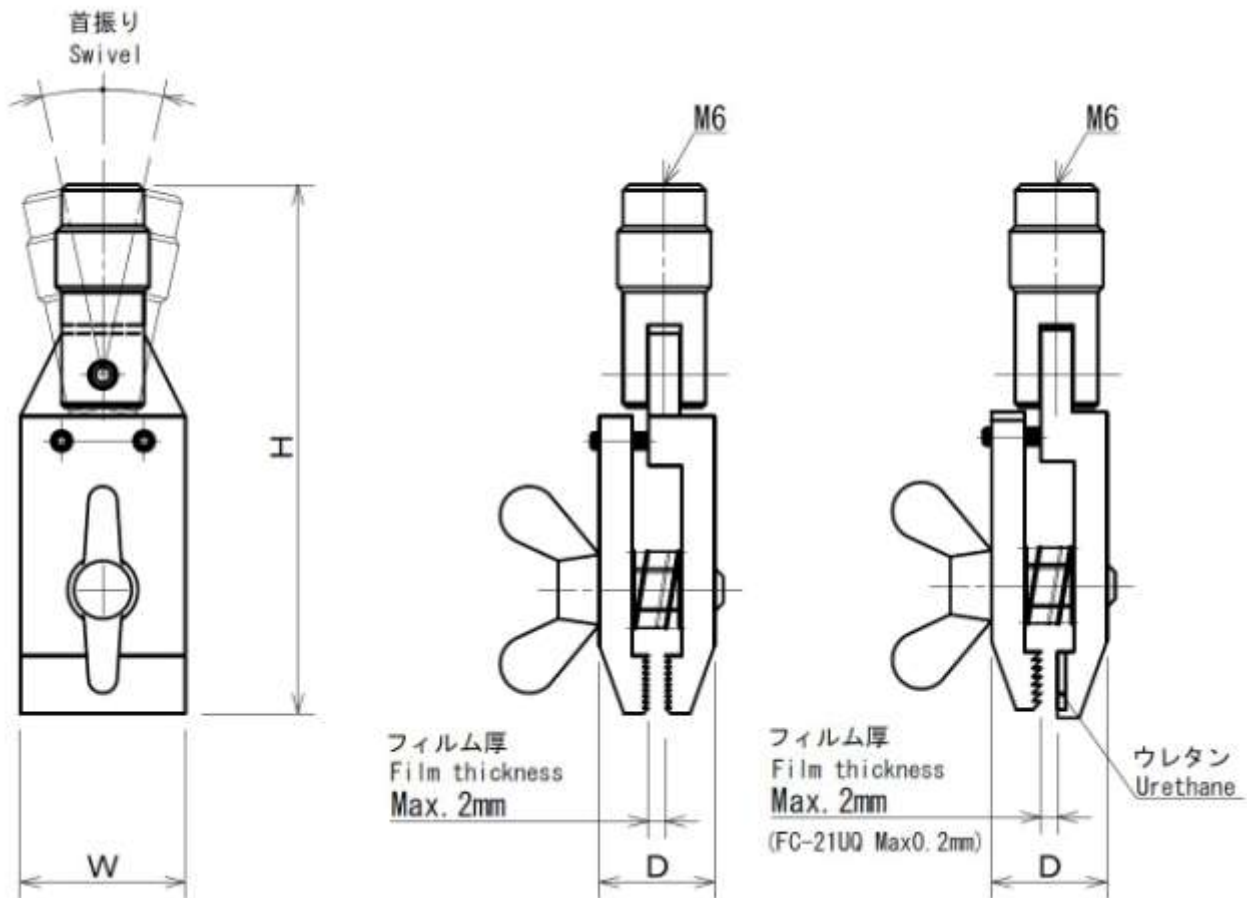
Wide width model of single urethane grip model

One touch lever operation model of single urethane grip model

Applications		
90 degree peel test Seal adhesive strength test	180 degree peel test Seal adhesive strength test	Film material strength test Strength test of film material
		
JISZ1707(1997)	General rules of plastic films for food packaging	
JISZ0238(1998)	Testing methods for heat sealed flexible packages	
JISZ1711(1994)	Polyethylene film bags	
JISZ1712(1997)	Oriented polypropylene films for packaging	

2011/03/01

[Dimension]



Model	Dimension W*H*D(mm)
FC-21	20*53*8
FC-20	20*64*12
FC-40	40*64*12
FC-21U	20*64.5*12
FC-41U	40*64.5*12
FC-21UQ	20*64.5*12

Differences of models

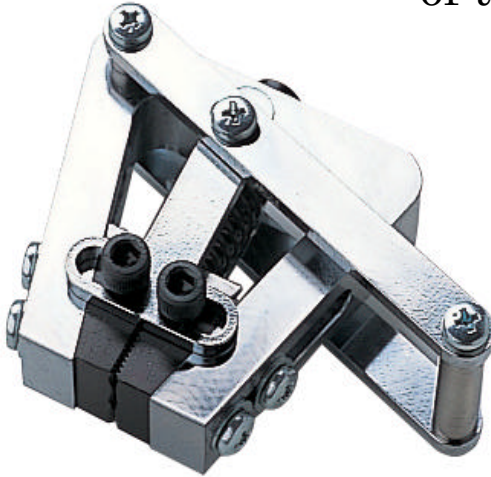
[General caution]

- The contents may be changed without notice in advance.
- This product is designed for measurement purpose only.
- Some samples of certain material/shape may not be used with these attachments even if it is within specification. Please contact us for the detail.
- Do not copy and use this content without authority.

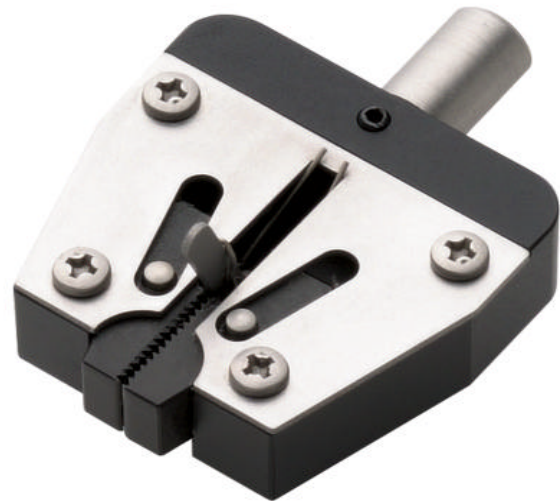
2011/03/01

Wedge grip/KC – 100, 1001, 5000

Universal type grip for easy-attachment/detachment
of test piece



KC-100



KC-1001

[Application]

The wedge grip is installed on the Imada's force gauge for tensile tests of various test pieces.

[Feature]

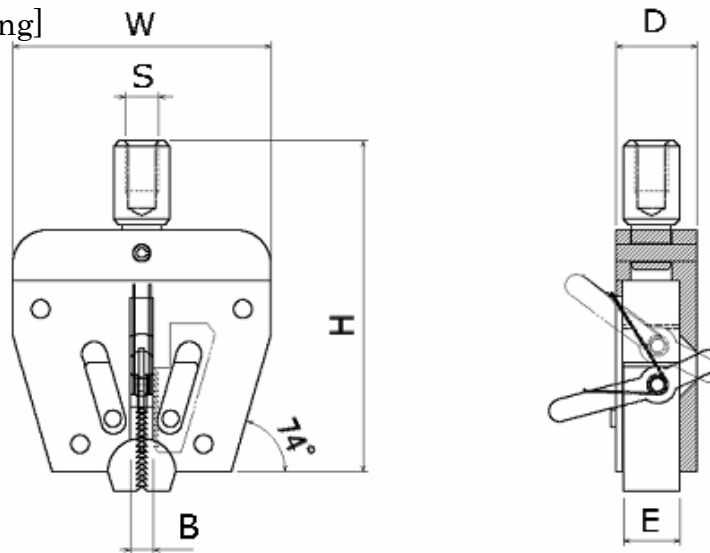
Attachment/detachment of a test piece can be done by one-touch operation.
The wedge grip is self-tightened by applying tensile force (spring-loaded wedge grip).

2003/11/26

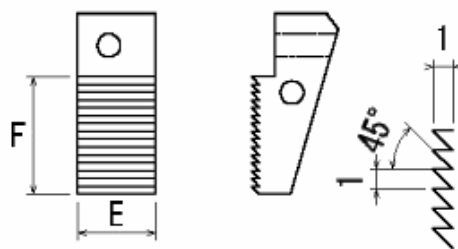
[Specifications]

	KC-100	KC-1001	KC-5000
Feature	Standard model	Standard model	High capacity model
Capacity	500N	1000N	5000N
Mounting screws	M6 P1	M6 P1	M10 P1.5
Weight	330g	95g	565g
Dimension (W×H×D)	(92)×60×30mm	46×(59)×14.5 mm	75×(94)×36 mm
Stroke [B]	MAX10	MAX 2.0mm	MAX 5mm
Width [E]	15mm	9.8mm	23.8mm
Height [F]	22mm	15mm	26mm
Recommended force gauge model	PS/FB/DPS/DPZ series from 10 N	PS/FB/DPS/DPZ series from 10 N	PSH/DPSH/DPZH series from 50 N

[Dimensional drawing]



[Grip serration]



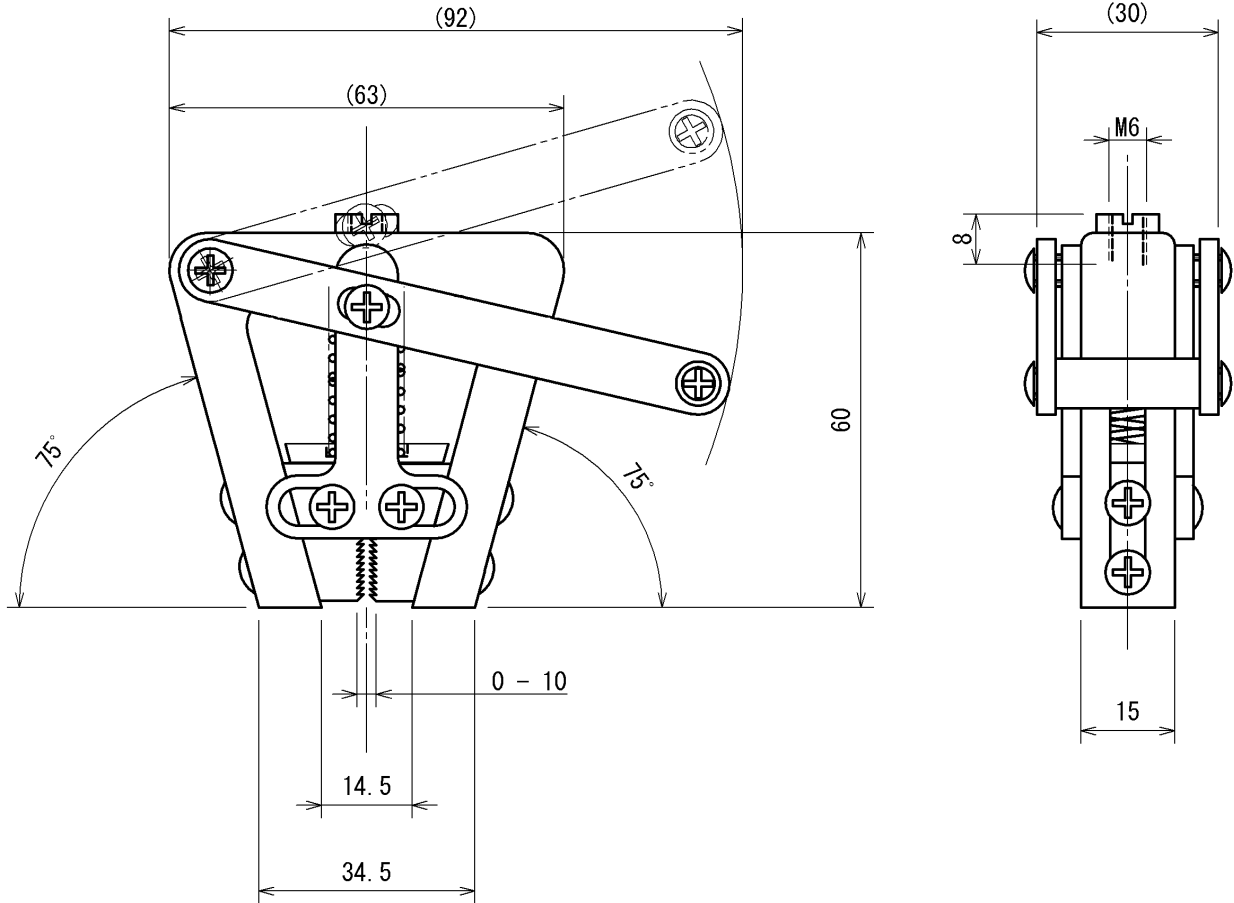
* KC-100 Sketch drawing on the next page

[Precaution]

- The wedge grip can not grip particular material or shape.
- Combining with Imada's test stand, more stable measuring becomes possible.
- All information is subject to change without prior notice
- There are slight differences in shape and material among the models in this series.

2003/11/26

[KC-100 Dimensional drawing]



2003/11/26

Fine Point Chuck / FP-50,51

For small to medium wire



[Applications]

The fine point chuck is installed on the Imada's force gauge for tension test of various test wires.

[Feature]

They are suitable for checking small to medium wires.

It is suitable for low weight test because this attachment is lightweight model.

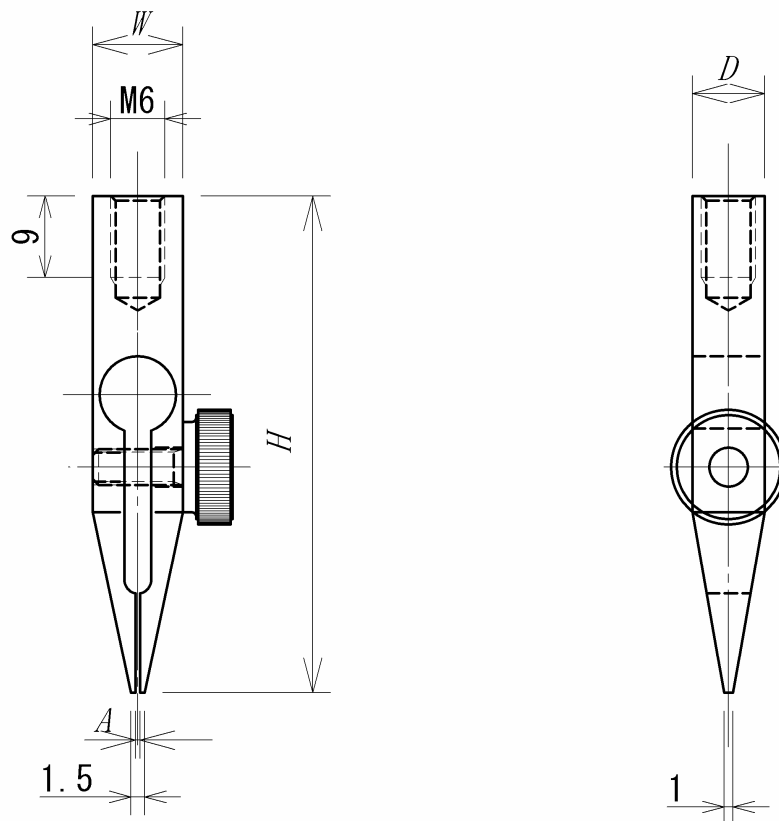
They are suitable for measuring in narrow space.

2003/10/23

[Specifications]

	FP-51	FP-50
Type	Lightweight type	Normal
Capacity	50N	100N
Mounting Screws [S]	M6P1	M6P1
Dimension (W×H×D)	10×55×8 mm	10×55×8 mm
Opening width	0.5mm	0.5mm
Weight	8g	19g
With Force Gauge	PS/FB/DPS/DPX/DPZ 2.4N~50N	PS/FB/DPS/DPX/DPZ 2.4N~100N

[Dimension]



[Note]

- Particular materials and shape can not be used.
- Combining with Imada's test stand, more stable measuring becomes possible.
- All information is subject to change without prior notice.

2003/10/23

Force gauge attachment

IMADA CO., LTD. 1/2

Wedge grips / CW-500N

Easy to clamp by wedge grip



[Application]

- For various material of tensile strength test such as wire and cable

[Features]

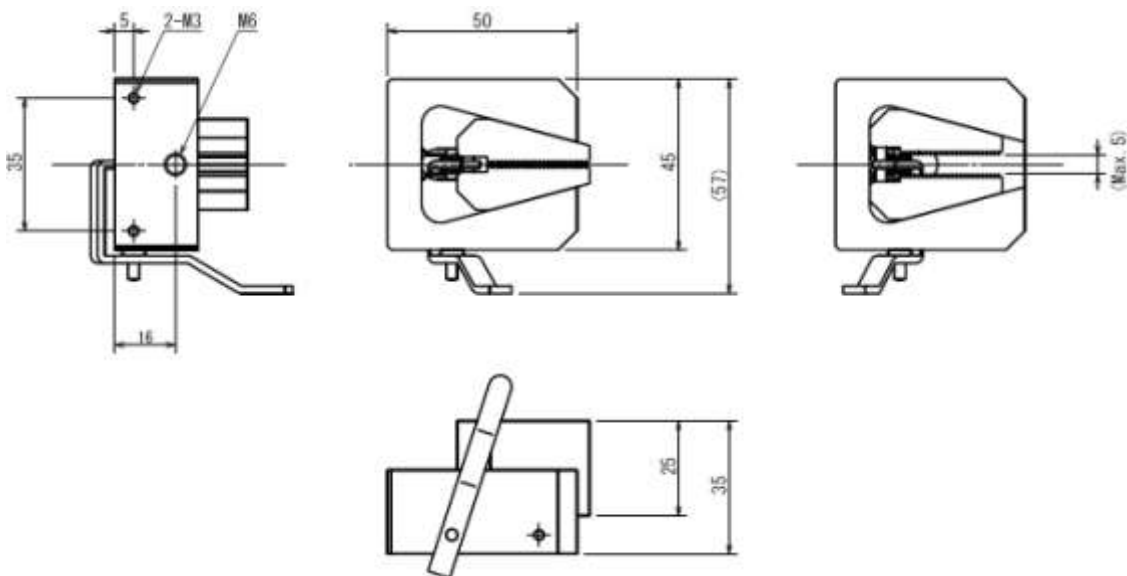
- Easy to clamp by one-touch operation
- Possible to clamp tightly by wedge grip function

2004/3/31

[Specifications]

Model	CW-500N
Capacity	500N
Clamp principle	Wedge grips
Opening width	5mm
Dimension	See below dimension
Weight	Approx.220g

[Dimension]



[Note]

- Particular materials and shape can not be used.
- When you clamp wire for opposite direction, we recommend our CW-500N-M6.
- All information is subject to change without prior notice.

2004/3/31

Force gauge attachment

Knurling & Cam Grip / GP-15

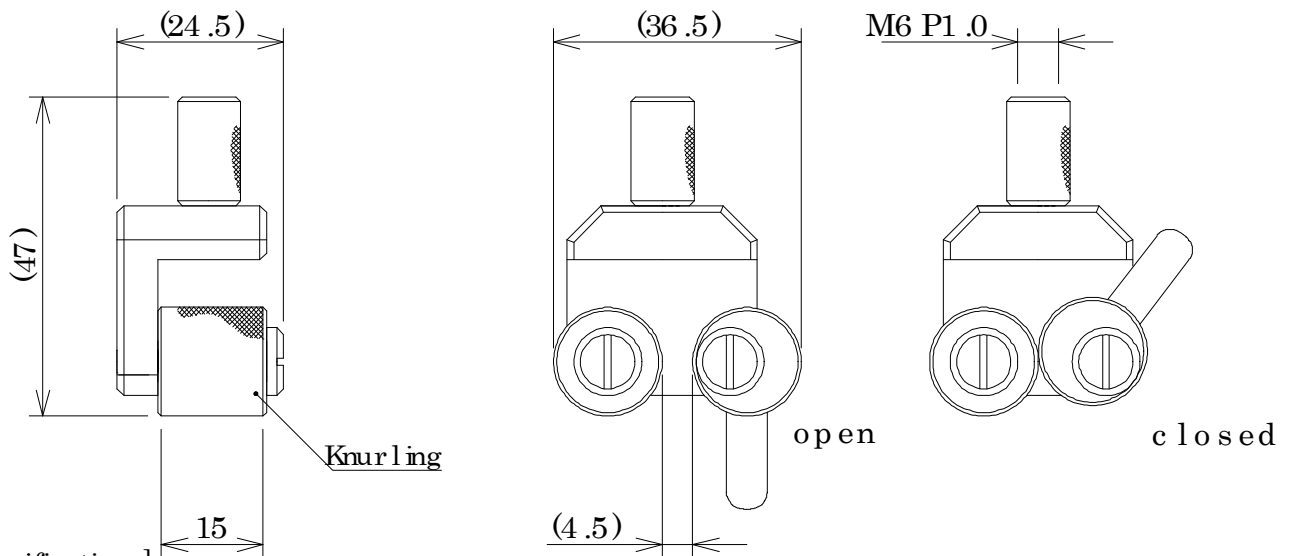
The most suitable for pulling test of silicon rubber, urethane, and resin tube.



[Feature]

Suitable for elasticity samples such as silicon rubber, urethane, and resin.
The knurling cam structure reduce the risk of cutting a sample by fixture.

[Dimensions]



[Specifications]

Capacity / 250N
Weight / Approx. 70g

[NOTICE]

It may change without preliminary notice for improvement!
Particular material and shape can not be used.

IMADA CO.,LTD 1/1

Sep.2005

Pantograph grips PGC series

PGC series are ideal for tensile tests, gripping various types of samples such as film, rubber, paper, buttons and so on. This fixture is an integral component of testing system, so please use it with IMADA force gauges (and test stands if necessary) to carry out tensile tests.

PG




It is for tensile test, gripping different thickness of samples. IMADA offers various designs of PGC grips.



Tensile test example with PGC series

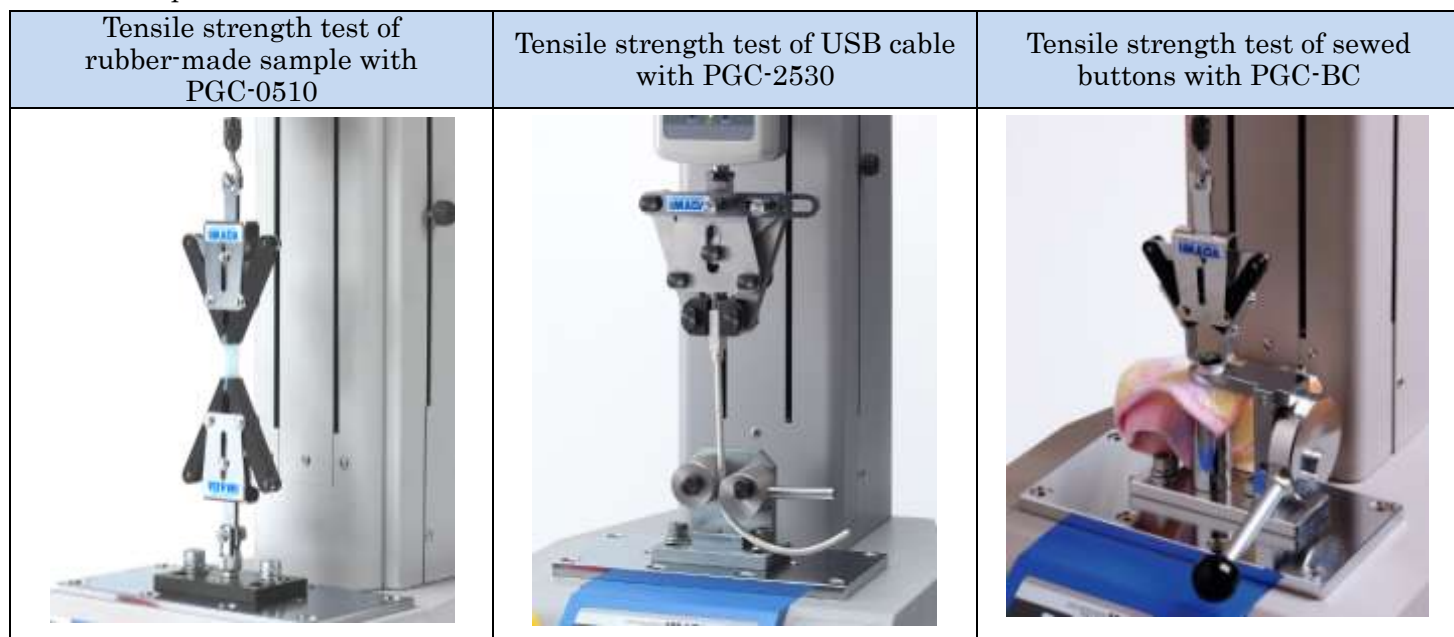


Easy and Handy





Easy and quick set up	Fit to grip flexible samples*	Grip different sizes of samples*
		
<ul style="list-style-type: none"> ● Easy to grip samples like as usability of clothes pins. ● Shorten the time to set up (just hang it on the hook)*1. 	<ul style="list-style-type: none"> ● The more it is pulled, the more strongly it grips samples ● More appropriate to grip flexible samples firmly such as rubber, resin and so on. 	<ul style="list-style-type: none"> ● Opening width is 15mm at maximum ● Grips different thickness of samples.

*Some samples cannot be gripped by PGC series depending on their materials or shapes.

*1PGC-2530(High capacity model type) is attached directly to the thread of a force gauge.



[Specifications]

Model	PGC-0505*1, *2	PGC-0510*2	PGC-2530	PGC-BC*2
Photos				
Features	The slim grip is ideal for a sample at a narrow space.	Lightweight standard model. The grip open widely.	The high capacity model up to 2500N.	Tensile Strength of sewed buttons can be measured combining it with BC-15*3 (fixture for a button)
Capacity	500N		2500N	300N
Hole for a hook (*2)	φ6		—	φ6
Screws to mount	—	—	M10	—
Opening width	0.8~20mm	Max.15mm		Max.20mm
Weight	Approx. 170g	Approx. 110g	Approx. 750g	Approx. 125g
Dimensions	Please refer to Dimensions in the next page			
Recommended force gauges	PS/FB/DS2/ZT Series			

*1It is unable to grip a sample which thickness is under 0.8 mm. It also not suitable for slippery materials and plating surface.

*2A standard attachment small hook (A-1/S-1/SR-1) is necessary to attach PGC to a force gauge.

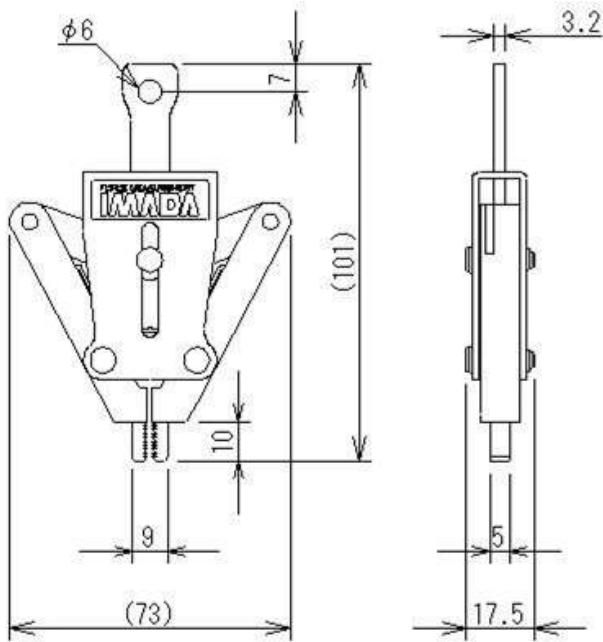
*3Please contact our customer service group (+81-(0)532-33-3288) for the detail of BC-15.

IMADA CO., LTD.
Optional attachment PGC series

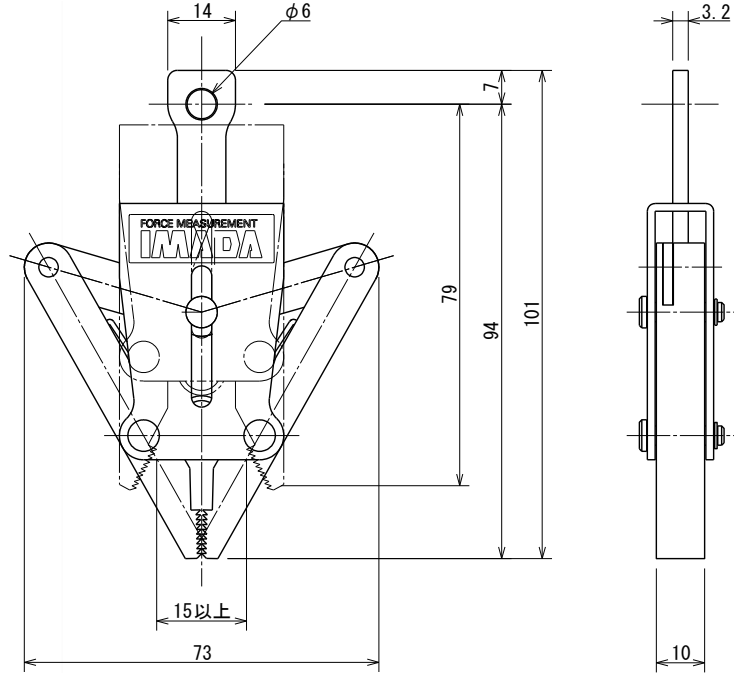


【Dimensions(Unit:mm)】

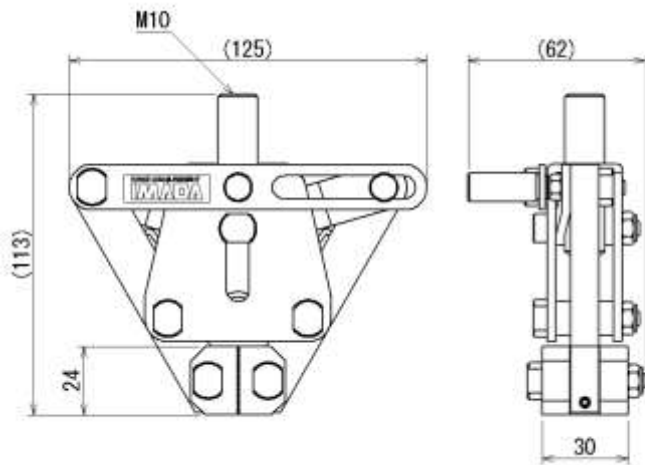
PGC-0505



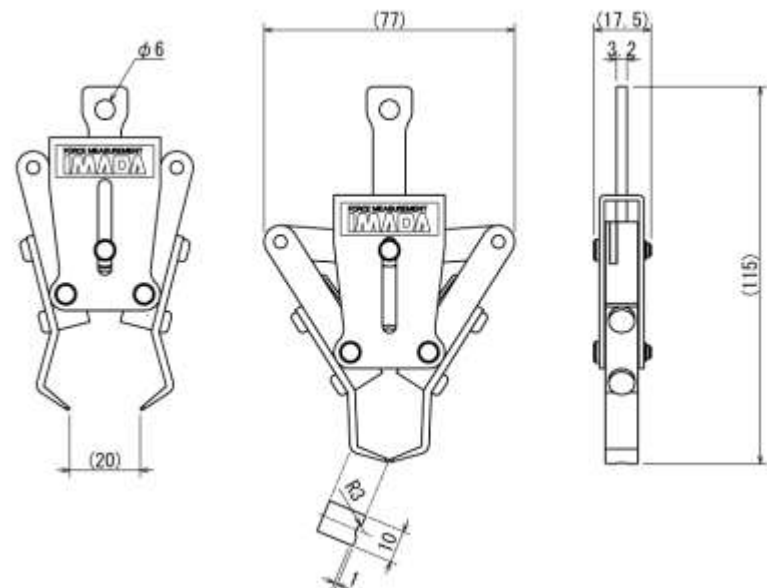
PGC-0510



PGC-2530



PGC-BC



[Optional adaptor]

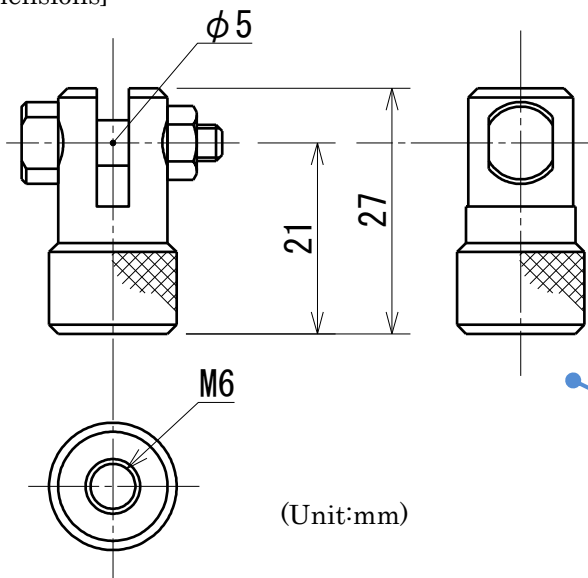
IMADA CO., LTD.

Optional attachment PGC series

[Specifications]

Model	PGC-AD6
The purpose of use	An adaptor to mount PGC-0505/PGC-0510 on IMADA test stand. *The adaptor is necessary if you use PGC series to attach test stand like a photo below.
Capacity	500N
Mounting screw	M6

[Dimensions]



[Caution]

- The contents may be changed without previous notice.
- All of products are designed for measurement purpose only.
- Force gauges and test stands are sold separately.
- Some sample cannot be measured depending on their materials or shapes.
- Do not copy and use this content without authority.

Please feel free to contact us for measurement solutions, distributor's information in your country, and so on.

TEL: +81-(0)532-33-3288
Email: info@forcegauge.net

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1/31/2014

Cam Grips / GR-30,2000

For thin materials

Easy to grip



GR-2000

[Applications]

The cam grips are installed on the Imada's force gauge for tension test of various test pieces.

[Feature]

They are suitable for checking thin materials.

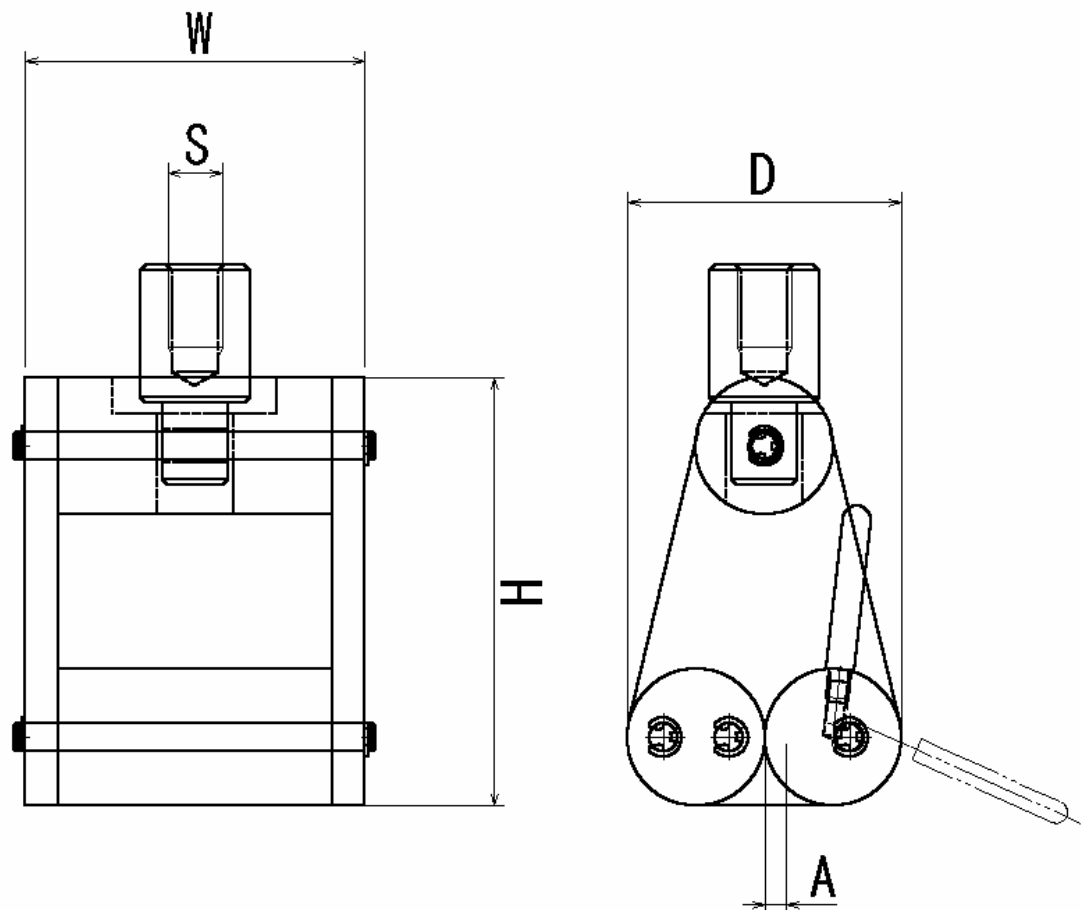
Samples will be tied automatically when the samples are pulled. (Cam system)

2003/10/27

Model	GR-30	GR-2000
Type	Normal	High Capacity
Capacity	500N	2000N
Mounting Screws[S]	M6P1	M10P1.5
Weight	180 g	870 g
Dimension (W×H×D)	36×64×22 mm	62×98.5×50mm
Opening width [A]	2mm	4mm
With Force Gauge	PS/FB/DPS/DPX/DPZ 20N~500N	PSH/DPSH/DPZH ~2000N

* The appearance of GR-30 and GR-2000 is different.

[Dimension]



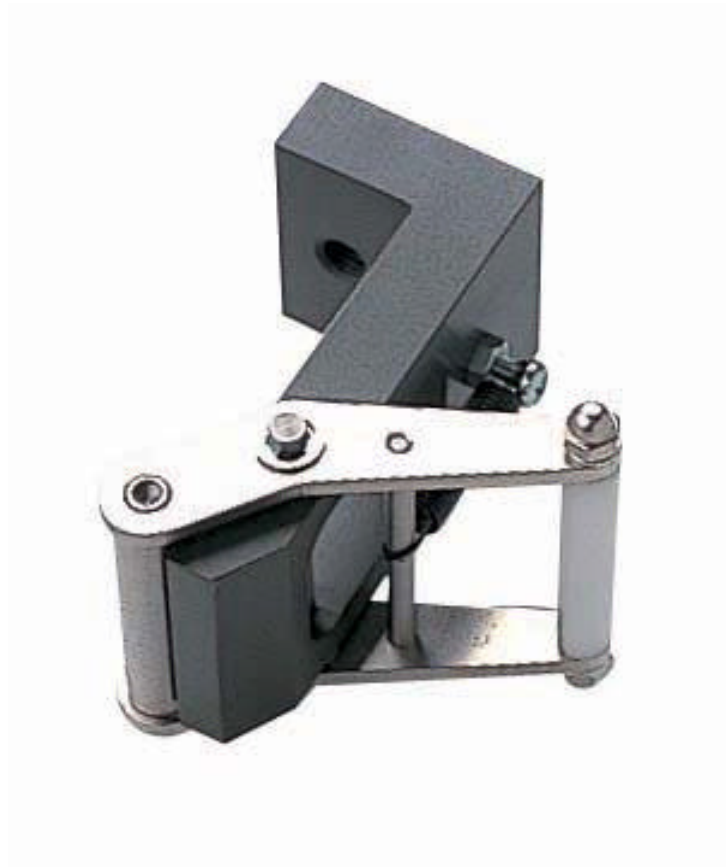
[Note]

- Particular materials and shape can not be used.
- Combining with Imada's test stand, more stable measuring becomes possible.
- All information is subject to change without prior notice.

2003/10/27

Tape Grip/GC-60,100

Optimal attachment for tension test
of tape-like test piece



[Application]

- It is installed to Imada's force gauge for tension test of tape-like test piece.
- The grip is best suited for tension test of rubber, films, or test materials which become deformed or thinned on the testing process.

[Features]

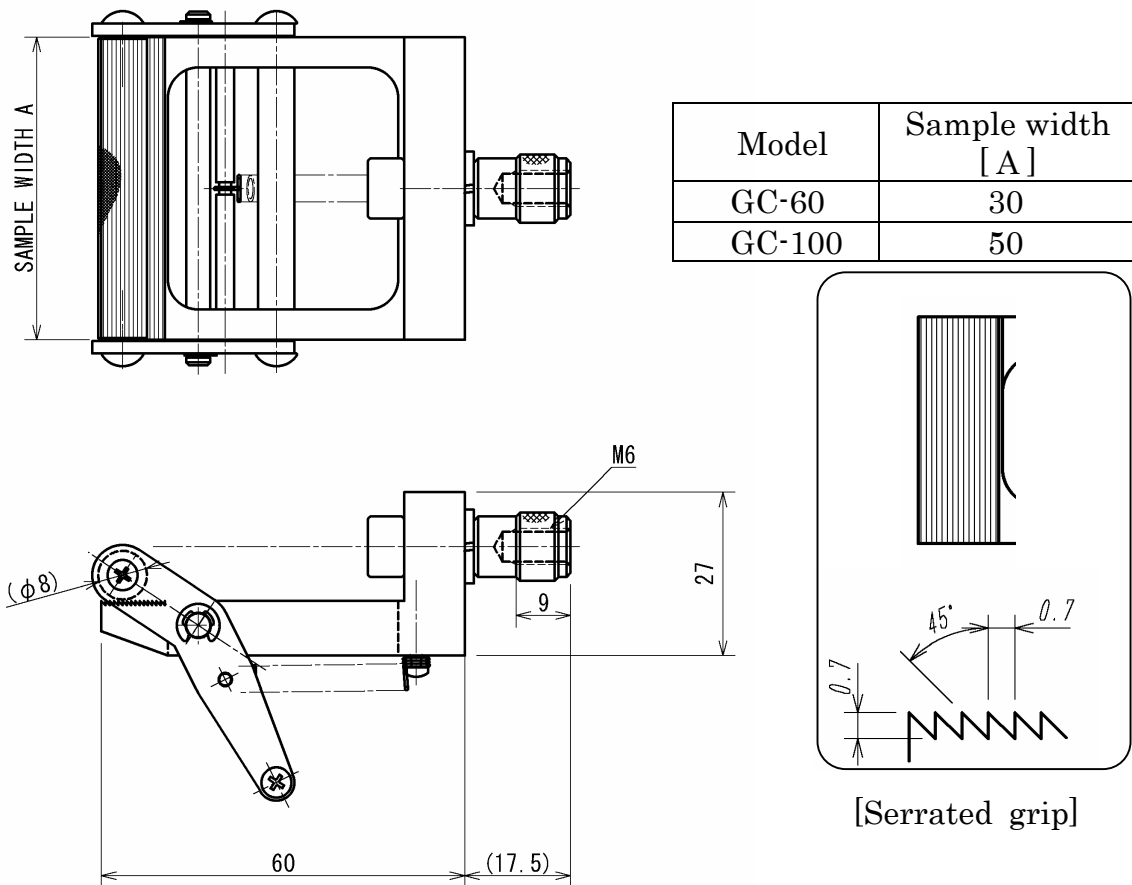
- As the more tensile force is applied to the grip, the more clamping force is obtained.

2003/11/22

[Specifications]

	GC-60	GC-100
Sample width [A]	Max.30 mm	Max.50 mm
Sample thickness	Max.2 mm	
Maximum Capacity	500N	
Mounting screw	M6 P1	
Dimension	W(79)×D(39)×H(51)	W(79)×D(59)×H(51)
Weight	Approx. 158 g	Approx. 300 g
The recommended force gauge	PS/FB/DPS/DPZ series 19.8N to 500N	PS/FB/DPS/DPZ series 49N to 500N

[Dimensional drawing]



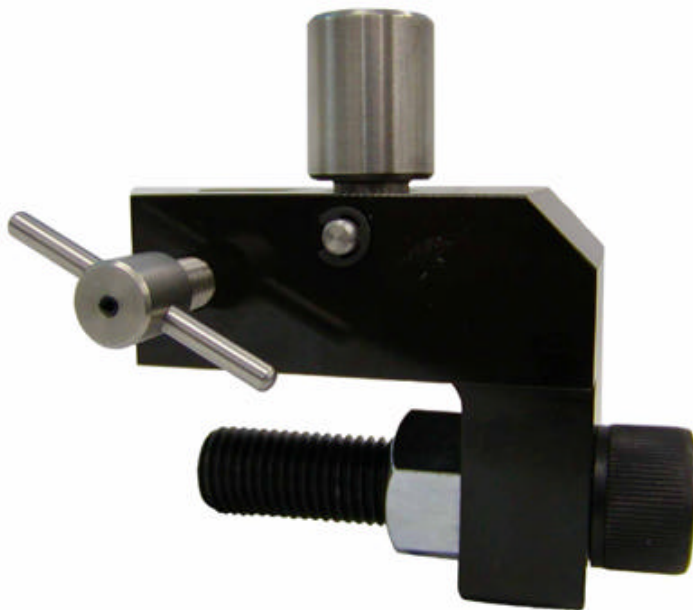
[Precautions]

2003/11/22

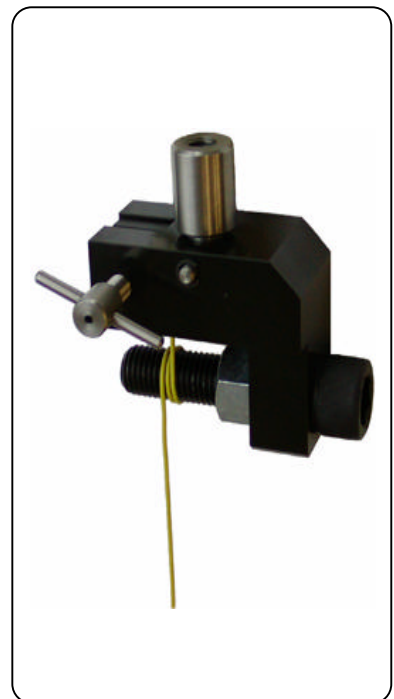
The tape grip can not grip particular material or shape.
Combining with Imada's test stand, more stable measuring becomes possible.
All information is subject to change without prior notice

Wire Wrapping Grips/ GC-30, WC-2000

For measuring the strength of wires



(WC-2000)



[Applications]

The wire wrapping grips are installed on the Imada's force gauge for tension test of various test pieces.

[Feature]

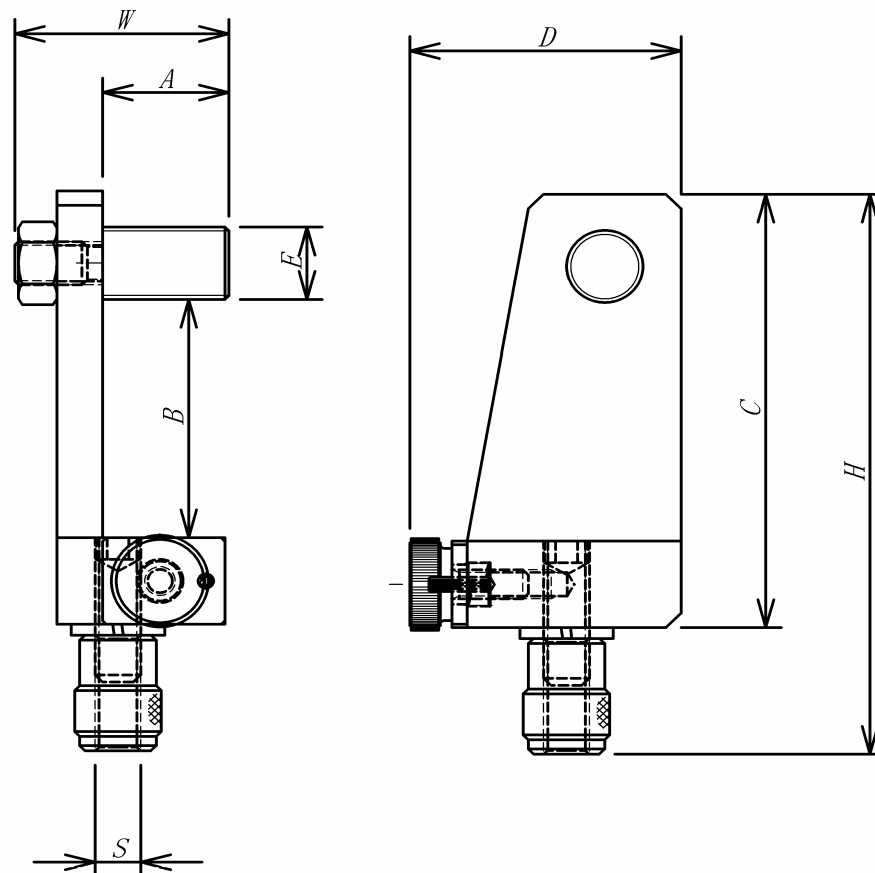
They are suitable for checking the strength of wires, filaments, fibers, etc.

2003/10/27

Model	GC-30	WC-2000
Type	Normal	High capacity
Maximum diameter of wire	1mm	2mm
Mounting screws [F]	M6P1	M10P1.5
Weight	136g	900g
Dimension (W×H×D)	28×77.5×36 mm	71×92×(57) mm
Inside [A]	16.5 mm	42 mm
Height from bolt to grip [B]	33 mm	15 mm
Chuck height [C]	40 mm	65 mm
Diameter of wrapping bolt [E]	M10	M16
With force gauge	PS/FB/DPS/DPX/DPZ 20N~500N	PSH/DPSH/DPZH ~2000N

2003/10/27

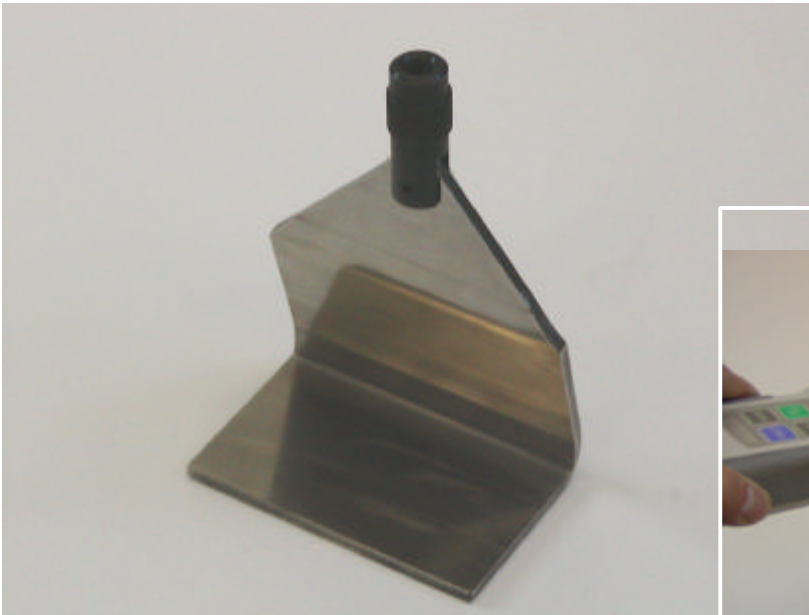
[Dimension]



[Note]

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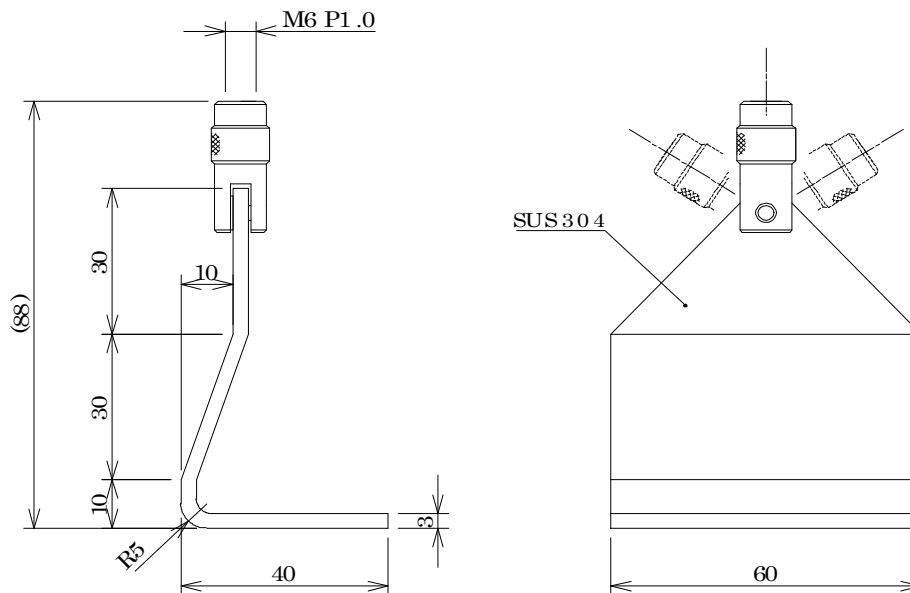
Hook for corrugated cardboard seal strength / DF-60



[Applications]

Suitable for the opening strength measurement of glued corrugated cardboard.
 Inspection for safe and sure shipment.
 The strength measurement for re-packing.

[Dimensions]



[Specifications]

Capacity / 250N
 Weight / Approx. 145g

[NOTICE]

All information is subject to change without prior notice!

Sep.2005