

## Product Presentation



## Application

This tester is designed for conducting tensile, compression, bending, shearing, bonding strength, peeling, tearing and other tests for shoes ,rubber, plastic, leather, metal, nylon line, fabric, paper, aviation, packaging, construction, petrification, electrician, vehicle and other materials. It is a basic equipment of quality control, receiving inspection, physical test, mechanics research, material development.



Textile Material



Leather Material



Plastic Sheet

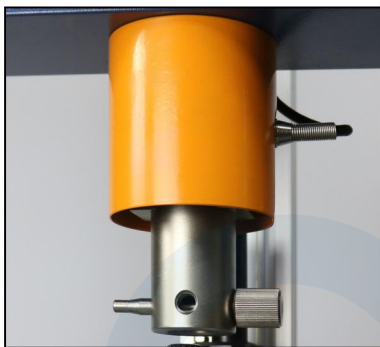


Paper Material



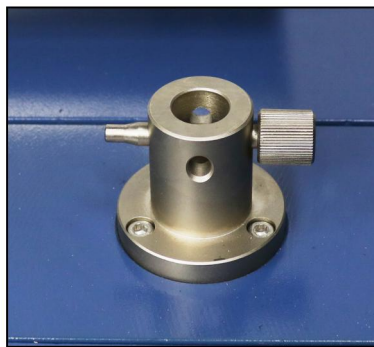
## Test Sample

**Force sensor**



To sense force, to transfer load

**Lower fixture holder**



To fix various lower fixture

**Fix bolt for manual upper limit**



It's upper stroke switch to limit machine manually.

**Fix bolt for manual lower limit**



It is lower stroke switch to limit machine manually

**Punctuation elongation fixture**



To punctuate elongation fixture

**Fix pin**



Fix frame for punctuate elongation fixture  
To adjust position of elongation fixture (when start or stop)

**Scale**



To mark calibration procedure for extension clamp

**Emergency stop**



E-stop(power)

## Feature

- The power system: servo motor and servo drivers and worm gear and rod reducer and ball screw.
- Control system: adopting Pulse Command control method, it will be more accuracy and easy to control.
- The speed control range: 0.001-500mm or 0.001-1000mm/min ( option)
- The intermediate plate adjustment is both fast coarse and slow fine-tuning.
- it will return to original site and save automatically ater testing.
- Data transmission mode: RS232 transmission.
- This instrument can realize constant speed, positioning, constant power, constant stroke control mode and multi-level control mode which can meet the test requirements of the ordinary.
- Testing space: test width is 400 mm (standard)
- All plate walking space: 1500 mm (excluding fixture, according to the customer requirements).
- The entire displacement: the encoder is 1800 P/R, it can improve 4 times accuracy
- Using the LINE DRIVE encoder strong anti-interference ability displacement resolution 0.001 mm.
- Safety device: overload emergency stop device, up and down stroke limit device, leakage automatic blackout system, automatic breakpoint stop function.

## Key Specification

Model	GT-K01-1	GT-K01-2
Max. Capacity	5KN,10KN, 20KN	
Display	Computer display mode	
Force Resolution	1/100,000	
Force Accuracy	≤+/-0.5%	
Stroke Resolution	0.001 mm	
Extensometer Resolution	0.001 mm	
Test Speed	0.001-500mm/min	0.001-1000mm/min
Walking space	1500mm (it can be custom-tailor according to their requirements)	
Force Unit Switch	Kgf, N, lbf, g, ton, Mpa	
Stop Mode	Overload stop, emergency stop button, specimen damage automatic stop, upper & lower limit set automatic stop, automatic reset function	
Machine Drive	Servo motor drive, synchronous wheel and precision ball screw drive	
Power Supply	AC 220V 50/60HZ 10A	
Dimensions	75x70x170cm(WxDxH)	
Weight	170kg	

## Standards

SATRA TM5, TM53, TM52, TM51, TM108, TM113, TM117, TM118, TM120, TM123, TM149, TM162, TM401, TM 411, TM 410,  
 ASTM D 751/2209 /412/624 FIA 1206,  
 BS5131- 3.7, 5.11, 5.13 , BS 5131-2.6  
 ISO22650, ISO 19958, ISO 3377-1, ISO 3377-2, ISO 11644, ISO 20866, ISO 20867, ISO19957, ISO20874,  
 ISO20344-5.2.4, ISO 20345-5.3.1.2, ISO17698, ISO20875, ISO22777, ISO22776, ISO22654, ISO20863,  
 ISO20876, ISO17695, ISO17697, ISO34-1, ISO36, ISO37, ISO 17708, ISO 17696, ISO17706, ISO 22650  
 AS/NZS 2210.2-5.2.4  
 DIN 53331,  
 GB/T 3903.8, GB/T 3903.9, GB/T3903.14 ,GB/T3903.20, GB/T3903.21, GB/T3903.22, GB/T 3903.23 , GB/T  
 3903.24, GB/T 3903.25, GB/T 3903.26, GB/T 3903.29, GB/T3903.32,GB/T 3903.39,GB/T 3903.40, GB/T  
 3903.43, GB/T 4689.20, GB/T20991-5.2.4, GB 21148-5.3.1.2, GB/T 17928, GB/T529, GB/T528, GB/T532,  
 GB/T11413, GB/T21396  
 QB/T 2711, QB/T2675, QB/T2883, QB/T4118, QB/T4198  
 HG/T 2726, HG/T 2877, HG/T4805

## Accessories

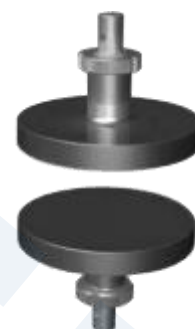
Standards accessories	1set	Manual grips
	1pc	Metal baseplate
	1pc	English operation software
	1pc	Cable connect with PC
	1set	Extensometer
Option accessories	Optional	HP Desk Top Computer
	Optional	Other grips

\*Detailed specification of grips are enclosed in next page.

Model	KE-1 ( <b>Universal Grips</b> )
Capacity	500kg
Application range	Rubber, plastic, metal, leather, textiles, etc.
Clamping surface	Serrated metal surface
Clamping methods	Manual clamping
Max. allowable sample thickness	0-19.5 (mm)
Clamping area	40 x11 mm (W*H)
Dimension of upper fixture	50x50x250 mm (W*D*H)
Dimension of lower fixture	50×50×250 mm (W*D*H)
Standard	ASTMD 751/2209 /412/624 FIA 1206, SATRA TM401, TM118, TM 53, TM52, TM51, TM123 BS5131-5.11, 3.7, 5.13, 2.6 GB/T3903.12, GB/T3903.20, GB/T3903.21, GB/T3903.43, GB/T529, HG/T 2877, HG/T 2726 ISO20872, ISO22777, ISO22776, ISO17697, ISO34-1



Model	KE-2 ( <b>Compress Platen Grips</b> )
Capacity	1000kg
Application range	Rubber, plastic, metal, etc.
Clamping methods	Manual clamping
Clamping area	∅ 100mm (W*H)
Dimension	100x100x300 mm (W*D*H)



Model	KE-3 ( <b>Heel Pull-out Grips</b> )
Capacity	300kg
Application range	heels of high-heel
Clamping methods	Manual clamping
Dimension of upper fixture	100x60x380 mm (W*D*H)
Dimension of lower fixture	300x120x160 mm (W*D*H)
Standard	QB/T 11413



Model	KE-4 ( <b>Stitch Tear Resistance Grips</b> )
Capacity	50kg
Application range	Natural leather, synthetic material, knitted fabric
Clamping methods	Manual clamping
Dimension of upper fixture	70x20x120mm (W*D*H)
Dimension of lower fixture	50x50x250mm (W*D*H)
Standard	GB/T 17928, DIN 53331



Model	KE-5 ( <b>Stitch Split Grips</b> )
Capacity	50kg
Application range	Semi rigid or rigid plastic sheet, rubber sheet
Clamping methods	Manual clamping
Rectangular hole of upper fixture	12.0±0.5 x 6.0±0.5 mm
Dimension of upper fixture	60x40x110 mm (W*D*H)
Dimension of lower fixture	100x50x100 mm (W*D*H)
Standard	SARTA TM 5, GB/T3903.32, BS5131-4.3, ISO20876



Model	KE-6A ( <b>Heel Pull-off Grips A</b> )
Capacity	100kg
Application range	Heels with heel lift, Block-heel shoes with separate adhesive heel
Clamping methods	Manual clamping
Wire diameter	1.2mm
Dimension of upper fixture	140x40x270 mm (W*D*H)
Dimension of lower fixture	50x50x250 mm (W*D*H)
Standard	SARTA TM108, TM113, ISO22650, GB/T 3903.25





Model	KE-6B ( <b>Heel Pull-off Grips B</b> )
Capacity	100kg
Application range	Stiletto shoes with separate adhesive heel
Clamping methods	Manual clamping
Dimension of upper fixture	80x40x280mm (W*D*H)
Dimension of lower fixture	50x50x250mm (W*D*H)
Standard	SARTA TM113, ISO22650, GB/T 3903.25



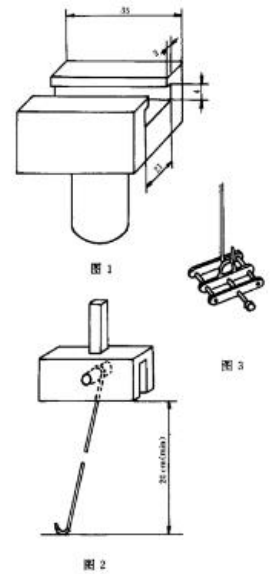
Model	KE-7 ( <b>Top-Piece Attachment Strength Grips</b> )
Capacity	100kg
Application range	Heels with heel lift
Clamping methods	Manual clamping
Screw	M3 or M4
Wire diameter	2mm
Dimension of upper fixture	50x50x350 mm (W*D*H)
Dimension of lower fixture	50x50x330 mm (W*D*H)
Standard	ISO 19958, GB/T 3903.23, BS5131-5.9



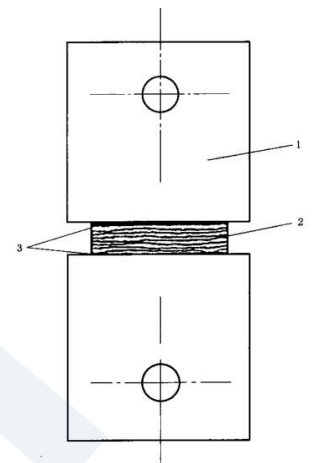
Model	KE-8 ( <b>Leather Tearing Grips</b> )
Capacity	50kg
Application range	Leather
Clamping methods	Manual clamping
Dimension of upper fixture	30x30x170 mm (W*D*H)
Dimension of lower fixture	30x30x170 mm (W*D*H)
Standard	SATRA TM162, QB/T 2711, ISO 3377-2



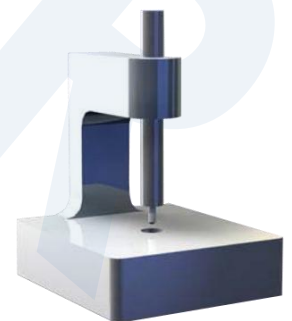
Model	KE-9 ( <b>Coated Leather Peel Grips</b> )
Capacity	15kg
Application range	Coated leather
Clamping methods	Manual clamping
Sample dimension	100x10mm
PVC Plywood	70x20x3mm
Dimension of upper fixture	50x30x350 mm (W*D*H)
Dimension of lower fixture	200x40x130 mm (W*D*H)
Standard	GB/T 4689.20, ISO 11644



Model	KE-10 ( <b>Delamination Peel Strength Grips</b> )
Capacity	500kg
Application range	Midsole or insole materials
Clamping methods	Manual clamping
Sample dimension	Diameter 38mm
Dimension of upper fixture	39x39x140 mm (W*D*H)
Dimension of lower fixture	39x39x140 mm (W*D*H)
Standard	GB/T 3903.8, ISO 20866, BS5131-4.13



Model	KE-11 <b>(Shoes Insole Pin Holding Strength Grips)</b>
Capacity	200kg
Application range	Shoes insole
Clamping methods	Manual clamping
Cooperating fixture	KE-2
Fixture dimension	100x120x200 mm (W*D*H)
Standard	GB/T 3903.9, ISO 20867





Model	KE-12 ( <b>Heel Pin Holding Strength Grips</b> )
Capacity	200kg
Application range	Shoes heel
Clamping methods	Manual clamping
Wire diameter	2mm
Dimension of upper fixture	50x50x120 mm (W*D*H)
Dimension of lower fixture	50x50x250 mm (W*D*H)
Standard	ISO 19957, GB/T 3903.24, BS5131-4.20



Model	KE-13 ( <b>Outsole Needle Tear Strength Grips</b> )
Capacity	50kg
Application range	Shoes outsole materials
Clamping methods	Manual clamping
Needle diameter	1mm
Dimension of upper fixture	50x50x110 mm (W*D*H)
Dimension of lower fixture	50x50x250 mm (W*D*H)
Standard	ISO 20874, GB/T3903.14



Model	KE-14 ( <b>Shoes Sole &amp; Upper Bonding Strength Test Grips</b> )
Capacity	200kg
Application range	Sole outsole material
Clamping methods	Manual clamping
Dimension of upper fixture	70x50x250 mm (W*D*H)
Dimension of lower fixture	50x50x250 mm (W*D*H)
Standard	GB/T20991- 5.2.4, GB/T532, GB 21148- 5.3.1.2, GB/T 3903.29, GB/T 3903.39, ISO 20344-5.2.4, ISO 20345-5.3.1.2, ISO 36, ISO 17698, ISO 20875 AS/NZS 2210.2-5.2.4, HG/T4805, BS5131-5.14



Model	KE-15 ( <b>Wedge Grips</b> )
Capacity	1000kg
Application range	Rubber, plastic
Clamping methods	Manual clamping
Sample thickness	0~24mm
Clamping surface	40x50mm
Dimension of upper fixture	280x90x250 mm (W*D*H)
Dimension of lower fixture	280x90x250 mm (W*D*H)
Standard	GB/T3903.22, GB/T528, ISO22654, ISO37, BS5131-4.5



Model	KE-16 ( <b>Webbing Grips</b> )
Capacity	2000kg
Application range	Textile ribbon, leather, canvas, etc.
Clamping methods	Manual clamping
Max. allowable sample thickness	5mm
Maximum sample width	50mm
Dimension of upper fixture	190x70x200mm (W*D*H)
Dimension of lower fixture	190x70x200 mm (W*D*H)
Standard	ASTM D6775



Model	KE-17 ( <b>Single Yarn Grips</b> )
Capacity	50kg
Application range	Low intensity yarn
Clamping methods	Manual clamping
Max. allowable sample thickness	5mm
Clamping area	20x15mm
Dimension of upper fixture	80x50x60 mm (W*D*H)
Dimension of lower fixture	80x50x60 mm (W*D*H)
Standard	ISO 2062



Model	KE-18 ( <b>Nylon Thread Grips</b> )
Capacity	300kg
Application range	Nylon thread, sewing thread
Clamping methods	Manual clamping
Max. allowable sample thickness	5mm
Clamping area	20x15mm
Dimension of upper fixture	120x40x110 mm (W*D*H)
Dimension of lower fixture	120x40x110 mm (W*D*H)



Model	KE-19 ( <b>Eyelets Impact Grips</b> )
Capacity	100kg
Application range	Eyelets
Clamping methods	Manual clamping
Eyelets diameter	12mm
Fixture dimension	120x50x330mm
Standard	SATRA TM150



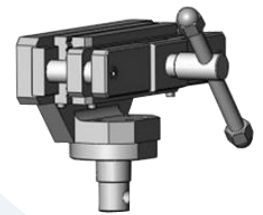
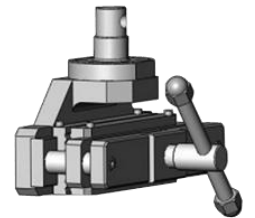
Model	KE-20 ( <b>Shoelace Pull Off Grips</b> )
Capacity	50kg
Application range	Shoelace
Clamping methods	Manual clamping
Dimension of upper fixture	50x50x250mm (W*D*H)
Dimension of lower fixture	60x50x60mm (W*D*H)
Standard	SATRA TM175



Model	KE-21 ( <b>Upper Material Deformation Test Grips</b> )
Capacity	100kg
Application range	Upper material
Clamping methods	Manual clamping
Effective internal diameter of specimen fixture	25mm
Burst ball diameter	20mm
Dimension of upper fixture	150x50x300mm (W*D*H)
Dimension of lower fixture	25x25x300mm (W*D*H)
Standard	GB/T3903.40, ISO 17695



Model	KE-22 ( <b>Plane Tensile Grips</b> )
Capacity	300kg
Application range	Leather, textiles, laces, etc.
Clamping methods	Manual clamping
Clamping surface	Plane or rubber surface
Max. allowable sample thickness	0-10 mm
Clamping area	40 x100mm (W*H)
Dimension of upper fixture	120x170x300 mm (W*D*H)
Dimension of lower fixture	120x170x300 mm (W*D*H)
Standard	QB/T2675, QB/T2883, QB/T4118, QB/T4198, BS5131- 3.7, ISO 17696, ISO17706, ISO 3377-1



Model	KE-23 ( <b>Pneumatic Grips</b> )
Capacity	500kg
Application range	Leather, textiles etc.
Clamping methods	Manual clamping
Clamping surface	Plane or rubber surface
Max. allowable sample thickness	0-10 mm
Clamping area	25 x75mm, or 25 x25mm (W*H)
Dimension of upper fixture	120x170x300 mm (W*D*H)
Dimension of lower fixture	100x50x300 mm (W*D*H)
Standard	ASTM D 2261, ASTM D 5034 EN20344-6.4.1, EN20344-6.3



Model	KE-24 ( <b>Ball Burst Test Grips</b> )
Capacity	200kg
Application range	Leather, textiles, etc.
Ball fixture	25.4mm
Ring inner diameter of lower fixture	44.45mm
Dimension of upper fixture	50x50x140 mm (W*D*H)
Dimension of lower fixture	120x80x160 mm (W*D*H)
Standard	ASTM D 3787



Model	KE-25 ( <b>Toe Compression Grips</b> )
Capacity	2000kg
Application range	Toe of safety shoes
Dimension of upper fixture	100x100x200 mm (W*D*H)
Dimension of lower fixture	100x80x50 mm (W*D*H)
Standard	EN20344-5.5



Model	KE-26 ( <b>Sole Puncture Grips</b> )
Capacity	500kg
Application range	Shoes sole materials
Shoes sole materials	Ø4.5mm
Diameter of test hole	Ø25mm
Dimension of upper fixture	50x50x90 mm (W*D*H)
Dimension of lower fixture	100x100x30 mm (W*D*H)
Standard	EN20344-5.8



Model	KE-27A ( <b>Rubber Ring Grips</b> )
Capacity	50kg
Application range	Rubber ring
Pulley diameter	Ø4.5mm
Dimension of upper fixture	100x40x90 mm (W*D*H)
Dimension of lower fixture	100x50x90 mm (W*D*H)
Standard	ISO 37, JIS K6251



Model	KE-27B ( <b>Rubber Ring Grips</b> )
Capacity	100kg
Application range	Rubber ring
Pulley diameter	Ø25mm
Dimension of upper fixture	100x40x90 mm (W*D*H)
Dimension of lower fixture	100x50x90 mm (W*D*H)
Standard	ISO 37, JIS K6251



Model	KE-28 ( <b>Rubber Extensometer</b> )
Stroke range	1200mm
Resolution	0.005mm
Gauge length	20-1200mm
Fixture clamping force	25N(adjustable)
Application range	Rubber , Plastic
Dimension of upper fixture	300x300x1500 mm (W*D*H)
Weight	30kg
Standard	GB/T3903.22, GB/T528, ISO22654, ISO37, BS5131-4.5

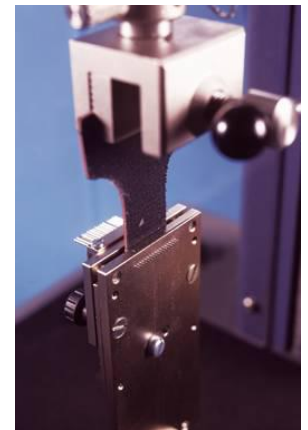




Model	KE-29 ( <b>Slipping Last Grips</b> )
Capacity	500kg mm
Application range	Footwear
Clamping methods	Manual clamping
Dimension of upper fixture	50x50x250mm (W*D*H)
Dimension of lower fixture	400x100x250mm (W*D*H)
Standard	GB/T20991 ISO 20344, ISO 20345



Model	KE-30 ( <b>Needle Tear Test Grips</b> )
Capacity	100kg
Application range	Fabric
Clamping methods	Manual clamping
Dimension of upper fixture	50x100x200mm (W*D*H)
Dimension of lower fixture	50x50x200mm (W*D*H)
Standard	SATRA TM33



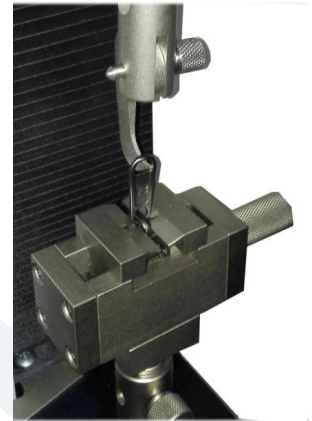
Model	KE-31 ( <b>Shoe Top-lines Strength Grips</b> )
Capacity	200kg
Application range	Leather, Fabric
Clamping methods	Manual clamping
Dimension of upper fixture	60x60x200mm (W*D*H)
Dimension of lower fixture	60x60x200mm (W*D*H)
Standard	SATRA TM143



Model	KE-32-1 ( <b>Zipper Lateral Strength Test Grips</b> )
Capacity	200kg
Clip width	25.4mm
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	26x100x200mm (W*D*H)
Dimension of lower fixture	26x100x200mm (W*D*H)
Standard	SATRA TM51 QB/T 2171 ASTM D2061-Section 14.1,22.4, 30.3 BS3084-Annex G, I



Model	KE-32-2 ( <b>Zipper Puller Pull-off Test Grips</b> )
Capacity	100kg
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	30x50x200mm (W*D*H)
Dimension of lower fixture	60x100x200mm (W*D*H)
Standard	SATRA TM52, QB/T 2171, ASTM D2061-Section 68 BS3084-Annex B



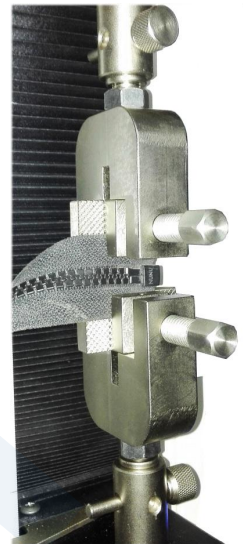
Model	KE-32-3 ( <b>Zipper Top Stop Strength Test Grips</b> )
Capacity	200kg
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	25x50x200mm (W*D*H)
Dimension of lower fixture	25x100x200mm (W*D*H)
Standard	SATRA TM53, QB/T 2171, BS3084-Annex D, J ASTM D2061-Section 22.2, 22.3



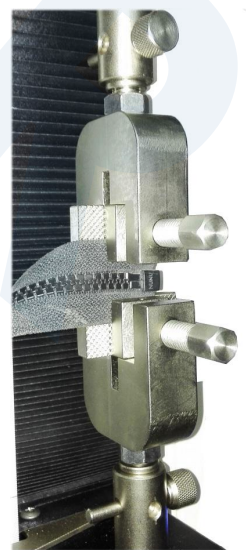
Model	KE-32-4( <b>Zipper Closed-end Strength Test Grips</b> )
Capacity	100kg
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	50x100x200mm(W*D*H)
Dimension of lower fixture	50x100x200mm (W*D*H)
Standard	SATRA TM53 QB/T 2171 BS3084-Annex C ASTM D2061-Section 22.5, 22.6, 87



Model	KE-32-5A ( <b>Zipper Open-end Lateral Strength Test Grips</b> )
Capacity	200kg
Clip width	6mm
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	25x100x200mm (W*D*H)
Dimension of lower fixture	25x100x200mm (W*D*H)
Standard	BS3084-Annex H



Model	KE-32-5B ( <b>Zipper Open-end Lateral Strength Test Grips</b> )
Capacity	200kg
Clip width	12mm
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	25x100x200mm (W*D*H)
Dimension of lower fixture	25x100x200mm (W*D*H)
Standard	BS3084-Annex H



Model	KE-32-6 ( <b>Zipper Separable Pin&amp;Fixed Retainer Pull-Off Test Grips</b> )
Capacity	100kg
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	26x100x200mm (W*D*H)
Dimension of lower fixture	25x100x200mm (W*D*H)
Standard	BS3084-Annex E QB/T 2171 ASTM D2061-Section 30.1,30.2



Model	KE-32-7 ( <b>Zipper Element Slippage Strength Test Grips</b> )
Capacity	50kg
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	26x100x200mm (W*D*H)
Dimension of lower fixture	25x100x200mm (W*D*H)
Standard	QB/T 2171 ASTM D2061-Section 14.3



Model	KE-32-8 ( <b>Zipper Slider Strength Test Grips</b> )
Capacity	50kg
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	25x30x200mm (W*D*H)
Dimension of lower fixture	25x30x200mm (W*D*H)
Standard	QB/T 2171



Model	KE-32-9 ( <b>Zipper Element Pull-Off Test Grips</b> )
Capacity	100kg
Clip width of lower grips	25.4mm
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	20×50×200 mm (W*D*H)
Dimension of lower fixture	26×102×200mm (W*D*H)
Standard	ASTM D2061-Section 14.2



Model	KE-32-10 ( <b>Zipper Slider Compression Test Grips</b> )
Capacity	200kg
Clip dimension	51x51mm
Rubber layer thickness	6mm
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	51x51x100mm (W*D*H)
Dimension of lower fixture	51x51x100mm (W*D*H)
Standard	ASTM D2061-Section 39



Model	KE-32-11 ( <b>Zipper Puller Angular Pull-Off Test Grips</b> )
Capacity	100kg
Clip angle	135° (To vertical direction)
Application range	Zipper
Clamping methods	Manual clamping
Dimension of upper fixture	30x50x200mm (W*D*H)
Dimension of lower fixture	50x102x200mm (W*D*H)
Standard	ASTM D2061-Section78



Model	KE-33 ( <b>Hook Grips</b> )
Capacity	50kg
Hook diameter	8mm
Application range	shoe cover
Clamping methods	Manual clamping
Dimension of upper fixture	20x20x100mm (W*D*H)
Dimension of lower fixture	20x20x100mm (W*D*H)

