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Grip Manual

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Chapter I

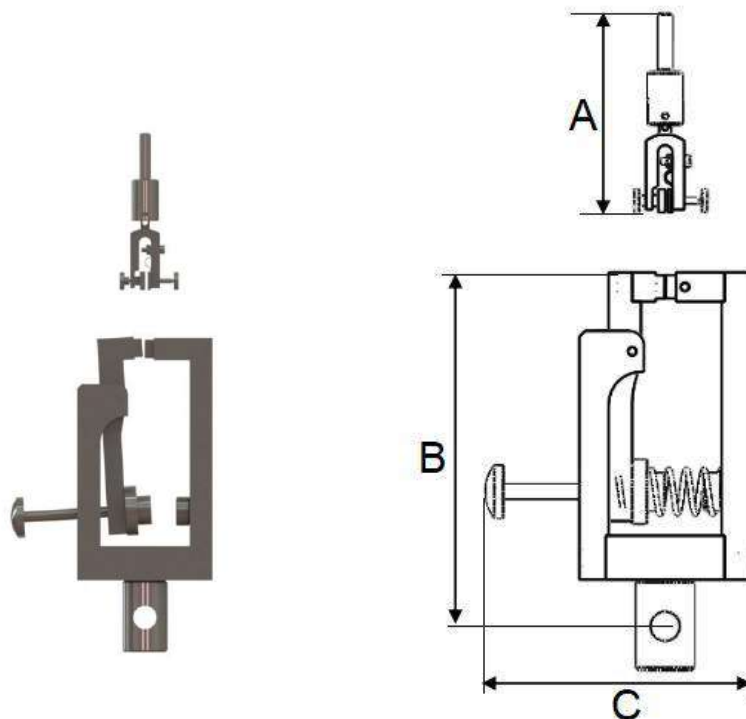
Grips & fixture of EM machine

I Side action grip

1. Tensile grip | Manual Side Action | WDSA201A

Specifications:

Application	Tension test for polyurethane filament
Maximum force	≤20N
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	68mm
Lower grip (B)	136mm
Grip body width (C)	90mm
Working temperature	Ambient
Grip weight	200g

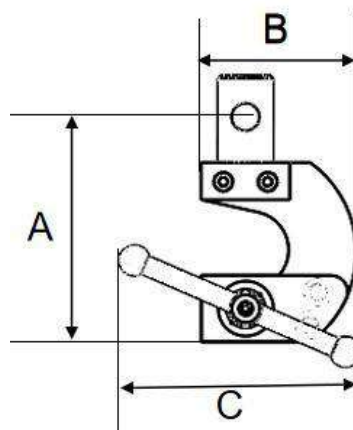


2. Tensile grip | Manual Side Action | WDSA501A

Specifications:

Application	Tension test for plastic sheet, film, strip, fine thread, fabric, and soft materials
Maximum force	≤50N
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	76mm
Grip body width (B)	47mm
Overall width (C)	83mm
Working temperature	Ambient
Grip weight	
Upper grip	0.16kg
Lower grip	0.25kg
Grip jaw	24(H)mm x 32(W)mm
Specimen thickness	≤5mm

Note: Flat jaw with 1mm thickness rubber coated

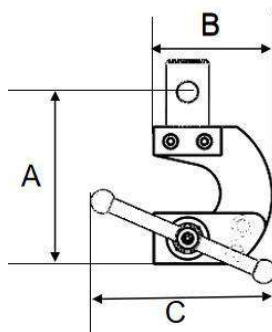


3. Tensile grip | Manual Side Action | WDSA501A (B)

Specifications:

Model	WDSA502A	WDSA502B
Application	Tension test for plastic sheet, film, strip, fine thread, fabric, and soft materials	
Maximum force	≤500N	
Grip material	Alloy steel	Stainless steel
Grip weight		
Upper grip	0.44kg	0.43kg
Lower grip	0.55kg	0.54kg
Connection		
Upper grip	Φ10mm pin	
Lower grip	Φ10mm pin	
Height (A)	80mm	
Grip body width (B)	48mm	
Overall width (C)	80mm	
Working temperature	Ambient	-70°C ~ +350°C
Grip jaw	24(H)mm x 32(W)mm	
Specimen thickness	≤5mm	

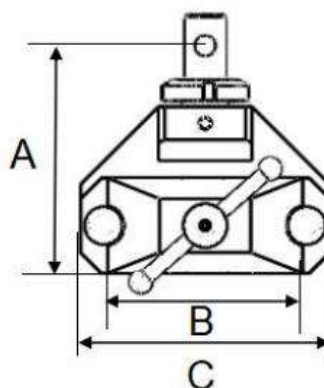
Note: Flat jaw with 1mm thickness rubber coated.



4. Tensile grip | Manual Side Action | WDSA503

Specifications:

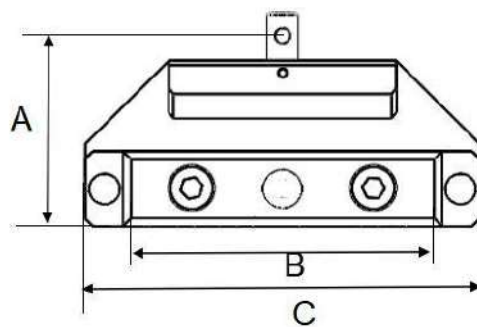
Model	WDSA503A	WDSA503C	WDSA503D	WDSA503E
Application	Tension test for waterproof rolls, film and textile fabric, rubber and Alkali-resistant mesh fabric etc.			
Maximum force	≤5kN			
Grip weight				
Upper grip	2.32kg			
Lower grip	2.32kg			
Connection				
Upper grip	Φ10mm pin			
Lower grip	Φ10mm pin			
Height (A)	105mm			
Grip body width (B)	80mm			
Overall width (C)	120mm			
Specimen thickness	≤10mm			
Working temperature	Ambient			
Grip jaw	46(H)mm x 80(W)mm			
Jaw face type	Wave-profile	Wave-profile	Trapezoid-profile	Trapezoid-profile
Specimen material	Waterproof rolls	Film and textile fabric	Rubber	Alkali-resistant mesh fabric



5. Tensile grip | Manual Side Action | WDSA204C

Specifications:

Application	Tension test for geo-textile
Maximum force	≤20kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	127mm
Grip body width (B)	210mm
Overall width (C)	260mm
Working temperature	Ambient
Grip weight	
Upper grip	8.74kg
Lower grip	8.85kg
Wave-profile jaw face	50(H)mm x 210(W)mm
Specimen thickness	≤10mm

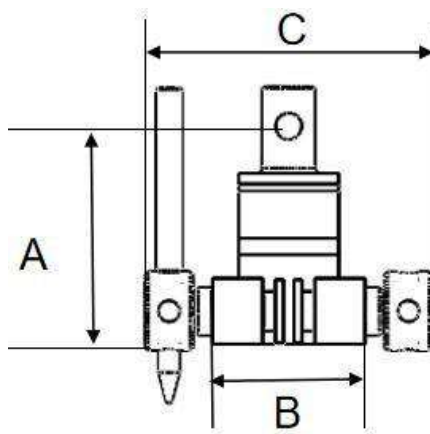


6. Tensile grip | Manual Side Action | WDSB103A

Specifications:

Application	Tension test for textile, plastic film and sheet
Maximum force	≤1kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	75mm
Grip body width (B)	60mm
Overall width (C)	110mm
Working temperature	Ambient
Grip weight	
Upper grip	0.92kg
Lower grip	0.97kg
Diamond jaw face	24(H)mm x 26(W)mm
Flat jaw face	24(H)mm x 26(W)mm
Specimen thickness	≤14mm

Note: Diamond jaw face for textile; flat jaw face for plastic film and sheet.

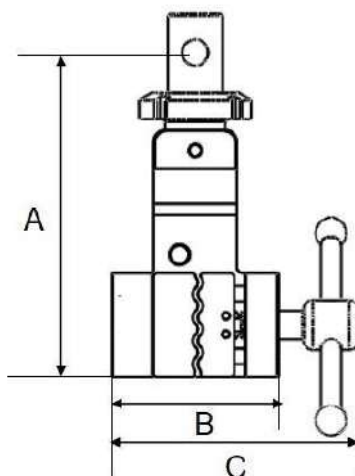


7. Tensile grip | Screw Side Action | WDSB103B

Specifications:

Application	Tension test for textile, plastic film
Maximum force	≤1kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	125mm
Grip body width (B)	60mm
Overall width (C)	95mm
Working temperature	Ambient
Grip weight	
Upper grip	1.22kg
Lower grip	1.22kg
Wave-profile jaw face	40(H)mm x 26(W)mm
Flat jaw face	40(H)mm x 22(W)mm
Specimen thickness	≤6mm

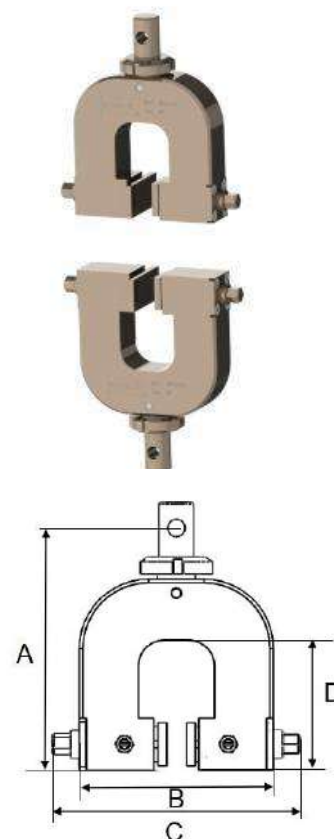
Note: Wave-profile jaw face for textile; flat jaw face for plastic film.



8. Tensile grip | Screw Side Action | WDSB303A

Specifications:

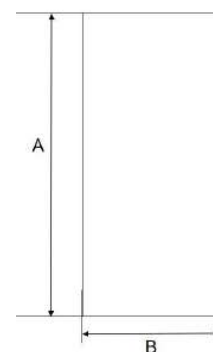
Application	Tension test for textile, plastic film and sheet
Maximum force	≤3kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	135mm
Grip body width (B)	110mm
Overall width (C)	140mm
Depth (D)	75mm
Working temperature	Ambient
Grip weight	
Upper grip	2.38kg
Lower grip	2.38kg
Flat jaw face (left)	25(H)mm x 25(W)mm
Flat jaw face (right)	50(H)mm x 25(W)mm
Specimen thickness	≤16mm



Jaw face (Option)

No.	Length (A) mm	Width (B) mm	Type
WDSB303A-11	25	25	Serrated
WDSB303A-12	50	25	Serrated

Note: Serrated jaw face for textile; flat jaw face for plastic film and sheet.



9. Tensile grip | Screw Side Action | WDSB503A

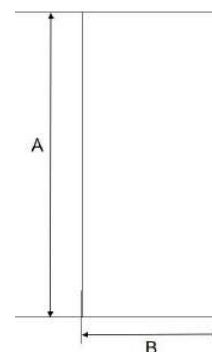
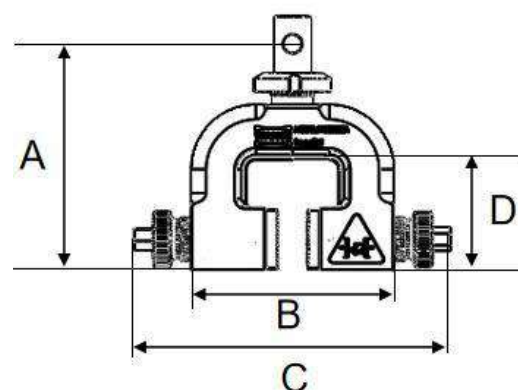
Specifications:

Application	Tension test for textile, plastic film and sheet
Maximum force	≤5kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	120mm
Grip body width (B)	110mm
Overall width (C)	170mm
Depth (D)	60mm
Working temperature	Ambient
Grip weight	
Upper grip	2.19kg
Lower grip	2.19kg
Flat jaw face (rubber coated)	32(H)mm x 32(W)mm
Flat jaw face	32(H)mm x 32(W)mm
Specimen thickness	≤16mm

Note: Serrated jaw face for textile;
Flat jaw face with rubber coated for plastic film and sheet.

Jaw face (Option)

No.	Length (A) mm	Width (B) mm	Type	Specimen
WDSB503A-09/10	70	32	Diamond	Rubber
WDSB503A-11/12	70	32	Serrated	Plastic sheet
WDSB503A-15	32	32	Wave-profile	Textile, plastic bag
WDSB503A-16	70	32		
WDSB503A-18	70	32		

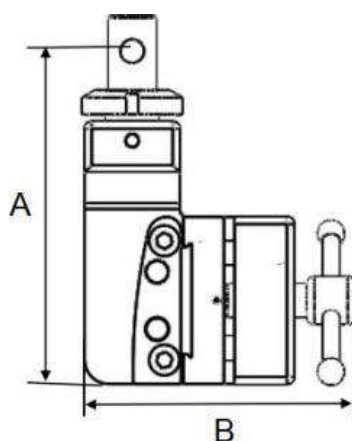


II Wire and cable snubbing grip

1. Tensile grip | Steel Wire snubbing | WCA203B

Specifications:

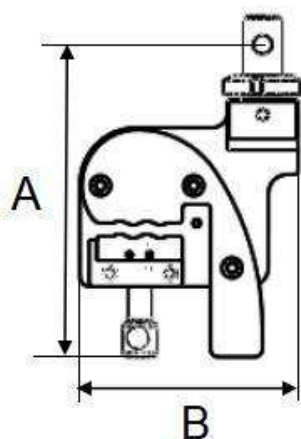
Application	Tension test for steel wire
Maximum force	≤2kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	145mm
Grip body width (B)	110mm
Working temperature	Ambient
Grip weight	
Upper grip	1.99kg
Lower grip	1.99kg
Specimen diameter	Φ0.5 ~ Φ1.5mm



2. Tensile grip | Wire & Rope snubbing | WCA503C

Specifications:

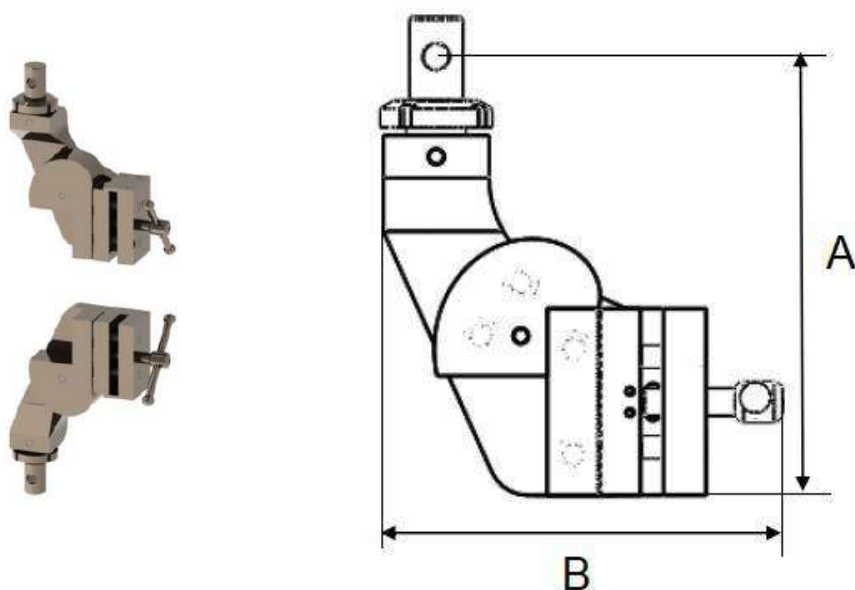
Application	Tension test for glass fiber yarn bundle, rope
Maximum force	≤5kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	165mm
Grip body width (B)	120mm
Working temperature	Ambient
Grip weight	
Upper grip	2.02kg
Lower grip	2.02kg
Wave-profile jaw face	46mm (H) x18 (W) mm
Specimen diameter	≤Φ8mm



3. Tensile grip | Strip snubbing | WCA503D

Specifications:

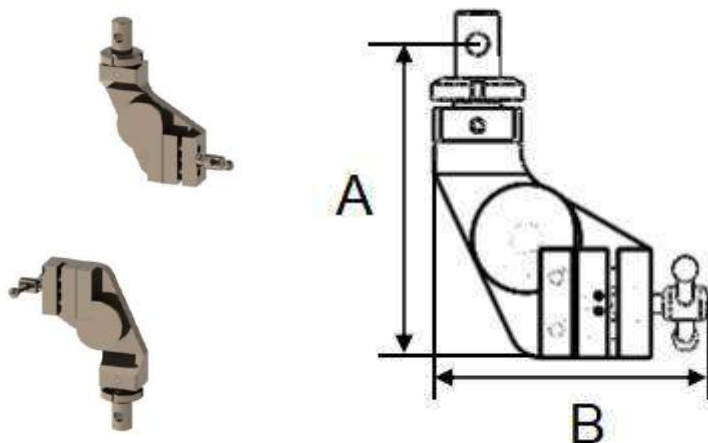
Application	Tension test for glass fiber type geogate, wide strip specimen
Maximum force	≤5kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	170mm
Grip body width (B)	150mm
Working temperature	Ambient
Grip weight	
Upper grip	2.79kg
Lower grip	2.9kg
Diamond jaw face	70mm (H) x30 (W) mm
Specimen diameter	≤30mm



4. Tensile grip | Strip snubbing | WCA503E

Specifications:

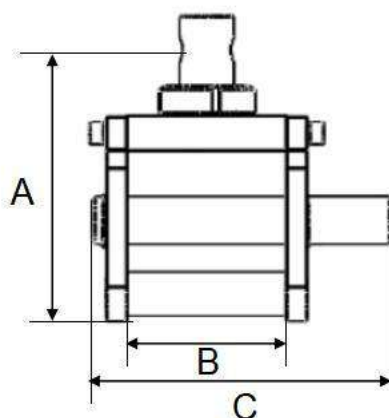
Application	Tension test for glass fiber type geogate, wide strip specimen
Maximum force	≤5kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	140mm
Grip body width (B)	125mm
Working temperature	Ambient
Grip weight	
Upper grip	1.45kg
Lower grip	1.45kg
Jaw face	50mm (H) x15 (W) mm



5. Tensile grip | Strip snubbing | WCA304C

Specifications:

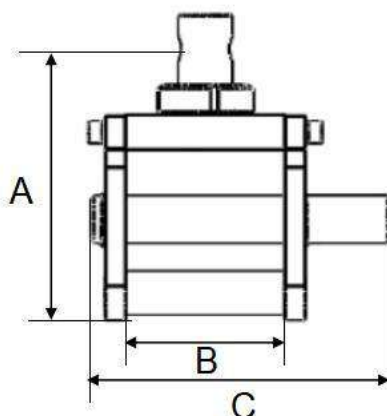
Application	Tension test for seat belts, braided straps
Maximum force	≤30kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	180mm
Grip body width (B)	85mm
Overall width (C)	184mm
Working temperature	Ambient
Grip weight	
Upper grip	7.75kg
Lower grip	7.75kg
Specimen width	≤85 mm
Specimen thickness	0.5 ~ 4mm



6. Tensile grip | Strip snubbing | WCA504D

Specifications:

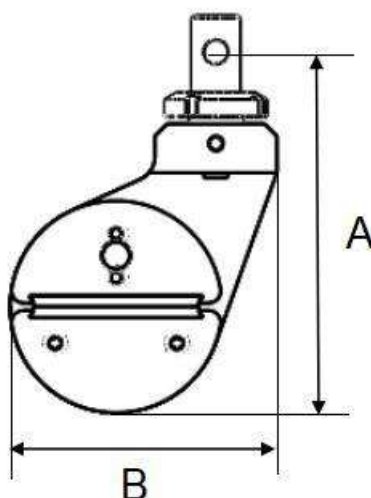
Application	Tension test for seat belts, braided straps
Maximum force	≤50kN
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height (A)	200mm
Grip body width (B)	120mm
Overall width (C)	225mm
Working temperature	Ambient
Grip weight	
Upper grip	7.75kg
Lower grip	7.75kg
Specimen width	≤120 mm
Specimen thickness	0.5 ~ 4mm



7. Tensile grip | Rope snubbing | WCB503A

Specifications:

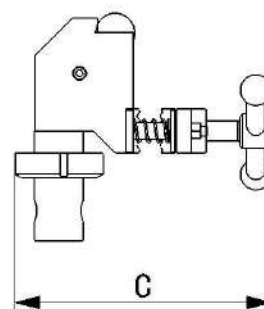
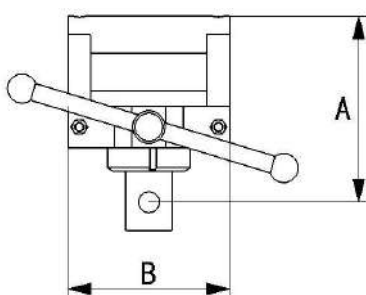
Application	Tension test for nylon rope, steel cord
Maximum force	≤5kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	110mm
Grip body width (B)	70mm
Working temperature	Ambient
Grip weight	
Upper grip	1.79kg
Lower grip	1.79kg
Flat jaw face	68 (H) mm x10 (W) mm
Specimen diameter	Φ0.5 ~ Φ1.5mm



8. Tensile grip | Geogrid snubbing | WCC504A

Specifications:

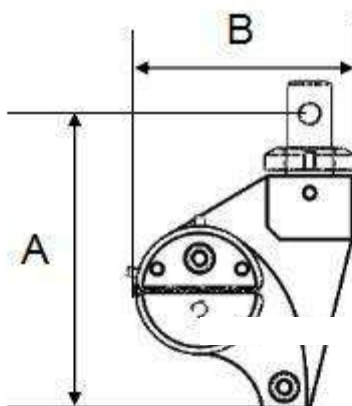
Application	Tension test for geogrid
Maximum force	≤50kN
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height (A)	161mm
Grip body width (B)	120mm
Overall width (C)	190mm
Working temperature	Ambient
Grip weight	
Upper grip	9.37kg
Lower grip	9.37kg
Specimen diameter	Φ0.5 ~ Φ1.5mm



9. Tensile grip | Rope snubbing | WCR104B

Specifications:

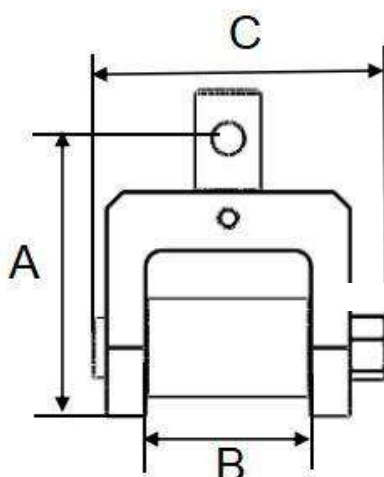
Application	Tension test for rope
Maximum force	≤10kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	135mm
Grip body width (B)	105mm
Overall width (C)	190mm
Working temperature	Ambient
Grip weight	
Upper grip	1.85kg
Lower grip	1.85kg
Wave-profile jaw face	60 (H) mm x 20 (W) mm
Specimen diameter	Φ2 ~ Φ5mm



10. Tensile grip | Rope snubbing | WCR304B

Specifications:

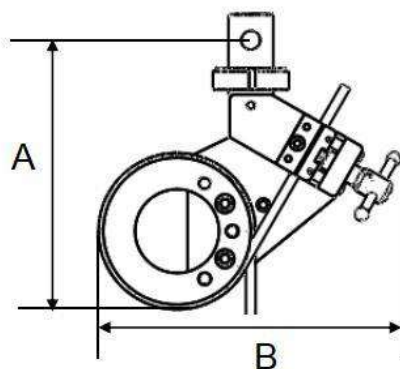
Application	Tension test for rope
Maximum force	≤30kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	90mm
Grip body width (B)	50mm
Overall width (C)	90mm
Working temperature	Ambient
Grip weight	
Upper grip	1.29kg
Lower grip	1.29kg
Specimen diameter	Φ4 ~ Φ8mm



11. Tensile grip | Rope snubbing | WZCC504A

Specifications:

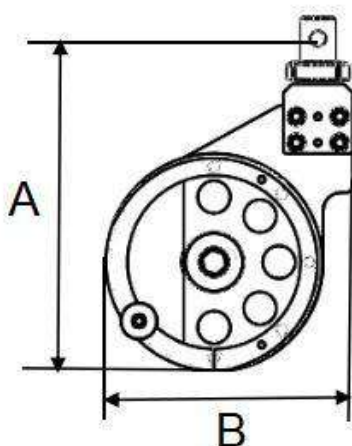
Application	Tension test for steel rope and braided rope
Maximum force	≤50kN
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height (A)	240mm
Grip body width (B)	290mm
Working temperature	Ambient
Grip weight	
Upper grip	9.37kg
Lower grip	9.37kg
Specimen diameter	≤Φ8mm



12. Tensile grip | Rope snubbing | WZCC105A

Specifications:

Application	Tension test for steel rope and braided rope
Maximum force	≤100kN
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height (A)	370mm
Grip body width (B)	190mm
Working temperature	Ambient ~ +150°C
Grip weight	
Upper grip	15.31kg
Lower grip	15.31kg
Specimen diameter	Φ3 ~ Φ10mm

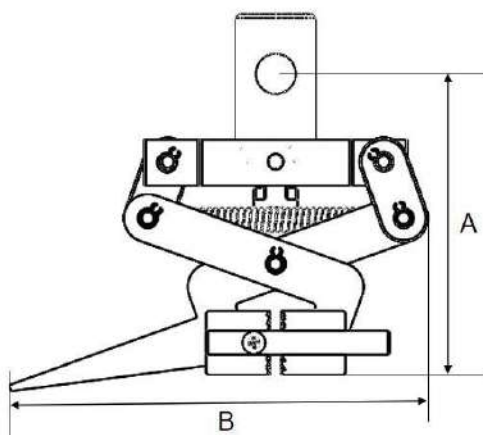


III Self-tightening grip

1. Tensile grip | Self-tightening | WGA203A

Specifications:

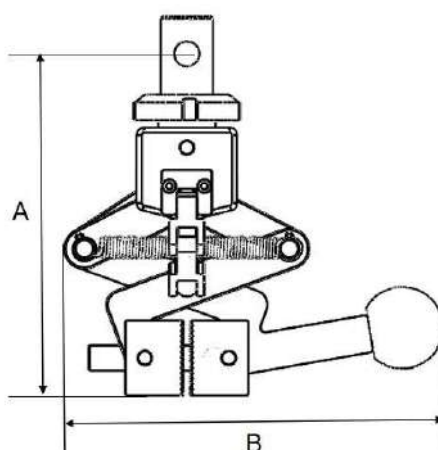
Application	Tension test for plastic and rubber
Maximum force	≤2kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	75mm
Grip body width (B)	104mm
Working temperature	Ambient
Grip weight	
Upper grip	0.49kg
Lower grip	0.49kg
Specimen thickness	≤10mm
Specimen width	≤30mm



2. Tensile grip | Self-tightening | WG5203A

Specifications:

Application	Tension test for plastic and rubber
Maximum force	≤5kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	137mm
Grip body width (B)	150mm
Working temperature	Ambient
Grip weight	
Upper grip	1.5kg
Lower grip	1.5kg
Specimen thickness	≤12mm
Specimen width	≤45mm

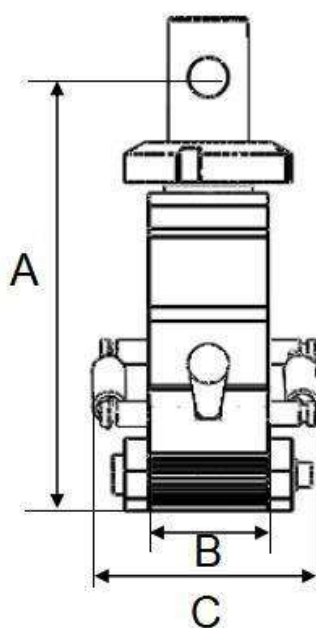


IV Eccentric roller grip

1. Tensile grip | Eccentric roller | WPA502A

Specifications:

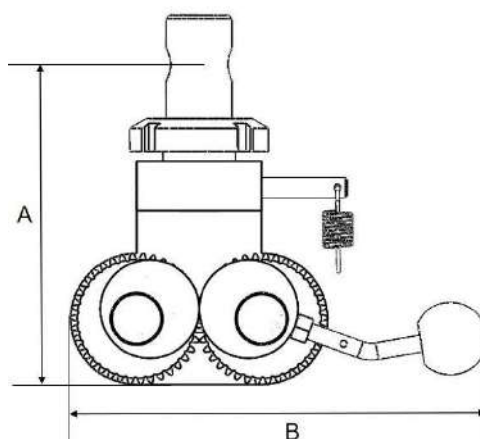
Application	Tension test for rubber, plastic film and soft material
Maximum force	≤500N
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	80mm
Grip body width (B)	30mm
Overall width (C)	50mm
Working temperature	Ambient
Grip weight	
Upper grip	0.44kg
Lower grip	0.44kg
Specimen width	≤30mm



2. Tensile grip | Eccentric roller | WPA502B

Specifications:

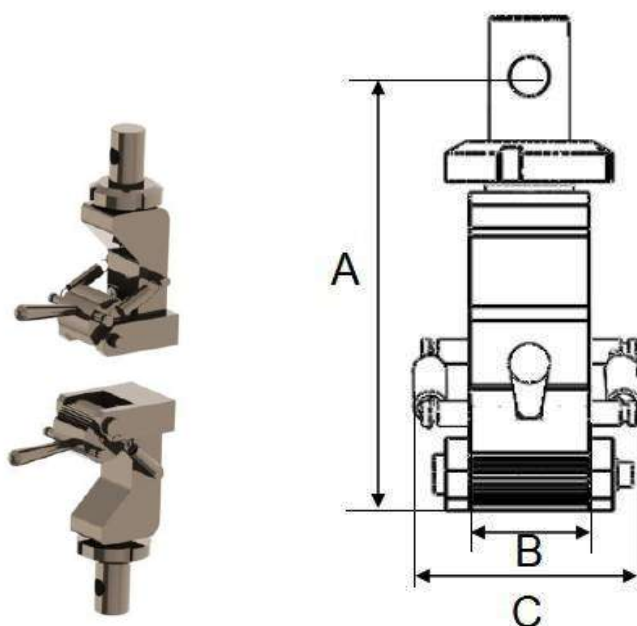
Application	Tension test for rubber, plastic film and soft material
Maximum force	≤500N
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	97mm
Grip body width (B)	125mm
Working temperature	Ambient
Grip weight	
Upper grip	1.13kg
Lower grip	1.13kg
Specimen width	≤30mm



3. Tensile grip | Eccentric roller | WPA103A

Specifications:

Application	Tension test for rubber, plastic film and soft material
Maximum force	≤1kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	110mm
Grip body width (B)	30mm
Overall width (C)	60mm
Working temperature	Ambient
Grip weight	
Upper grip	1.34kg
Lower grip	1.34kg
Specimen width	≤30mm



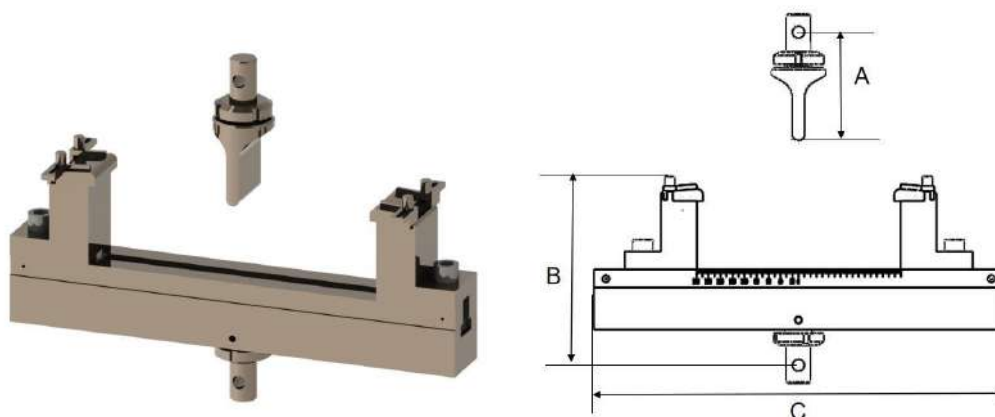
V Bending fixture

1. Bending fixture | 3-point bending | WWA204A

Specifications:

Application	Bending test for plastic, alloy, composite, ceramic etc.
Maximum force	≤20kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (adjustable)	≤200mm
Height (A)	85mm
Grip body width (B)	157mm
Overall width (C)	231mm
Working temperature	Ambient
Grip weight	
Upper grip	0.5kg
Lower grip	5.3kg
Specimen width	≤30mm
Loading nose	R5
Support roller	R5, R2

Note: WANCE can provide various loading nose and support roller according to customer's requirement.

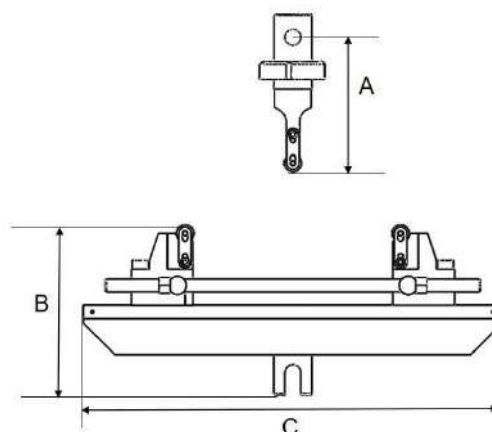


2. Bending fixture | 3-point bending | WWA504A

Specifications:

Application	Bending test for metal, alloy, composite, ceramic construction material etc.
Maximum force	≤50kN
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Span (adjustable)	≤280mm
Height (A)	123mm
Grip body width (B)	190mm
Overall width (C)	400mm
Working temperature	Ambient
Grip weight	
Upper grip	2.5kg
Lower grip	18.5kg
Specimen width	≤80mm
Loading roller	Φ20mm
Support roller	Φ20mm

Note: WANCE can provide various loading roller and support roller according to customer's requirement.

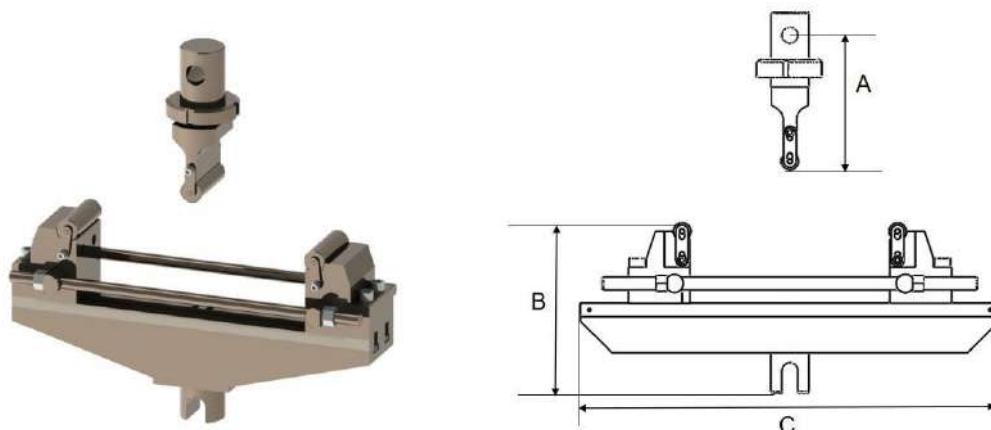


3. Bending fixture | 3-point bending | WWA105A

Specifications:

Application	Bending test for metal, alloy, composite, ceramic construction material etc.
Maximum force	≤100kN
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Span (adjustable)	≤340mm
Height (A)	145mm
Grip body width (B)	190mm
Overall width (C)	464mm
Working temperature	Ambient
Grip weight	
Upper grip	2.5kg
Lower grip	20.6kg
Specimen width	≤80mm
Loading roller	Φ20mm
Support roller	Φ20mm

Note: WANCE can provide various loading roller and support roller according to customer's requirement.

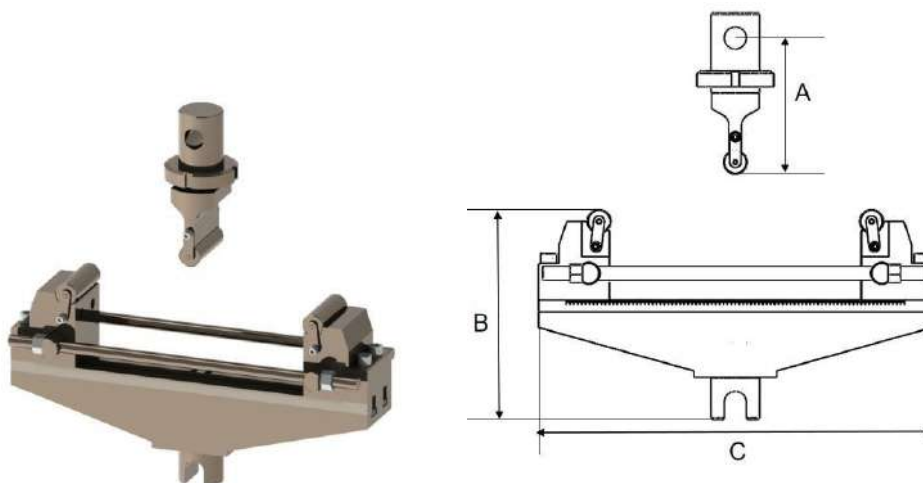


4. Bending fixture | 3-point bending | WWA305A

Specifications:

Application	Bending test for metal, alloy, composite, ceramic construction material etc.
Maximum force	≤300kN
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Span (adjustable)	≤400mm
Height (A)	156mm
Grip body width (B)	267mm
Overall width (C)	500mm
Working temperature	Ambient
Grip weight	
Upper grip	6.0kg
Lower grip	36.0kg
Specimen width	≤90mm
Loading roller	Φ30mm
Support roller	Φ30mm

Note: WANCE can provide various loading roller and support roller according to customer's requirement.

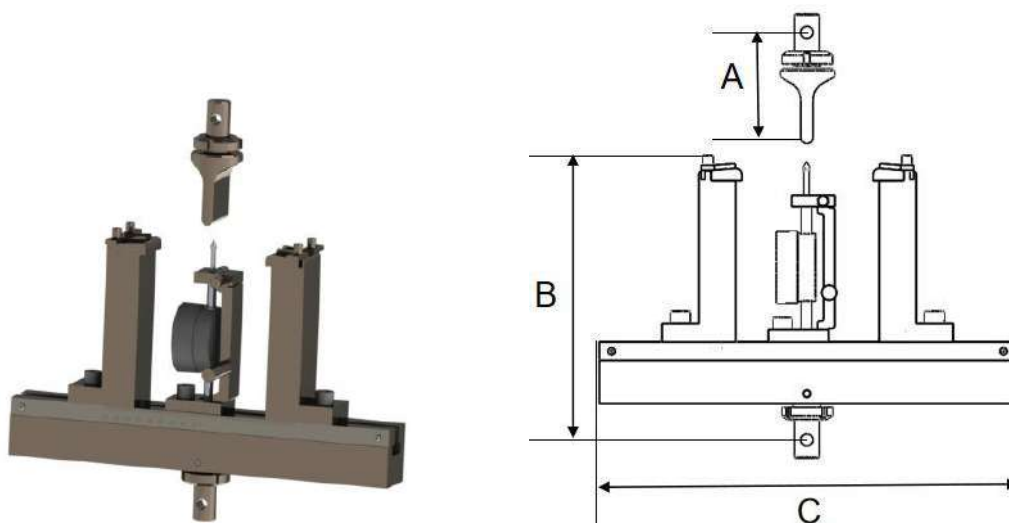


5. Bending fixture | 3-point bending | WZWA104A

Specifications:

Application	Bending test for plastic, alloy, composite, ceramic construction material etc.
Maximum force	≤10kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (adjustable)	≤200mm
Height (A)	90mm
Grip body width (B)	230mm
Overall width (C)	340mm
Working temperature	Ambient
Grip weight	
Upper grip	0.5kg
Lower grip	9.7kg
Specimen width	≤90mm
Loading nose	R5
Support roller	R5

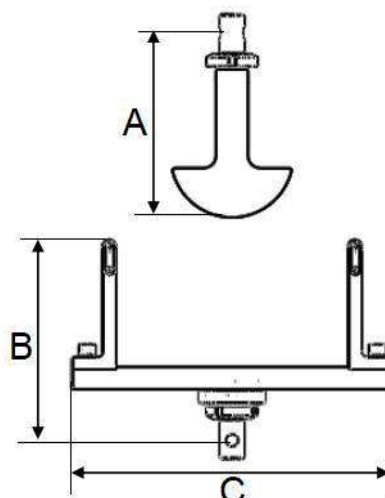
Note: equipped with digital indicator to measure deformation Of the specimen during test.



6. Bending fixture | 3-point bending | WZWA104B

Specifications:

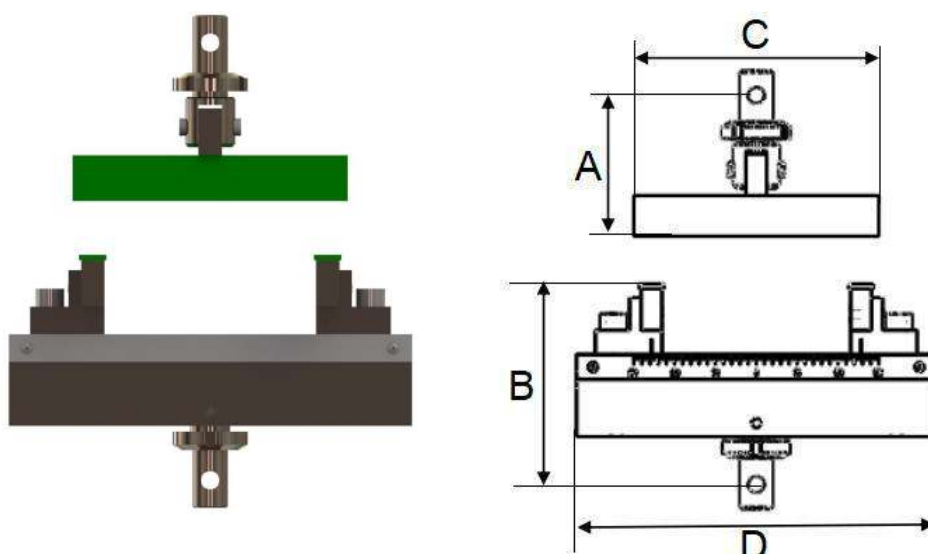
Application	Bending test for adhesive of ceramic tile.
Maximum force	≤10kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (adjustable)	≤200mm
Height (A)	150mm
Grip body width (B)	170mm
Overall width (C)	260mm
Working temperature	Ambient
Grip weight	
Upper grip	2.6kg
Lower grip	6kg
Specimen size	280mm(L)*45mm(W)*5mm(T) 300mm(L)*45mm(W)*3mm(T)
Loading nose	R50*60mm
Support roller	R5*60mm
Span	200mm



7. Bending fixture | Marker bending | WZWA204A

Specifications:

Application	Bending test for raised pavement markers
Maximum force	≤20kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (adjustable)	≤200mm
Height	
Upper grip (A)	85mm
Lower grip (B)	120mm
Width	
Upper grip (C)	150mm
Lower grip (D)	220mm
Working temperature	Ambient
Grip weight	6.5kg

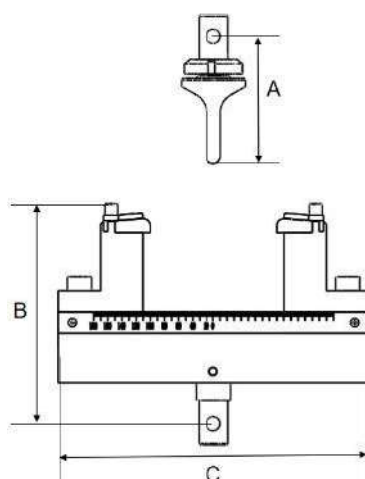
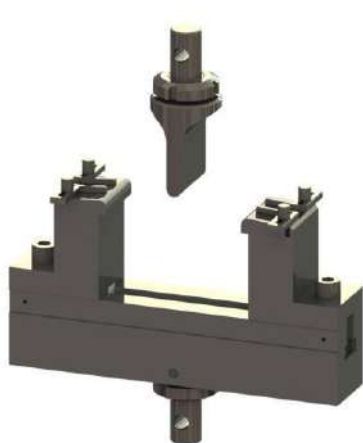


8. Bending fixture | 3-point bending | WZWA104G

Specifications:

Application	Bending test for plastic, composite, ceramic construction material etc.
Maximum force	≤10kN
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (adjustable)	≤90mm
Height	
Upper grip (A)	86mm
Lower grip (B)	157mm
Base width (C)	190mm
Working temperature	-70℃~+350℃
Grip weight	
Upper grip	0.4kg
Lower grip	5.2kg
Specimen width	≤30mm
Loading roller	R5
Support roller	R5, R2

Note: WANCE can provide various loading roller and support roller according to customer's requirement.



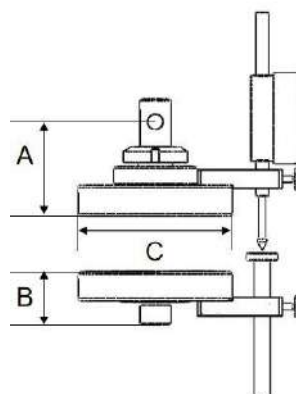
VI Compression fixture

1. Compression fixture | WYA204

Specifications:

Model	WYA204A	WYA204B	WYA204C	WYA204E
Application	Compression test for concrete, metal, plastic, composite etc.			
Diameter	Φ100mm	Φ150mm	Φ200mm	Φ100mm
Maximum force	≤20kN			
Grip weight				
Upper grip	1.8kg	3.8kg	6.5kg	1.6kg
Lower grip	1.4kg	2.7kg	4.8kg	2.8kg
Working temperature	Ambient			
Connection				
Upper grip	Φ10mm pin			
Lower grip	Φ10mm pin			
Height				
Upper grip (A)	65mm	65mm	65mm	60mm
Lower grip (B)	35mm	35mm	35mm	60mm
Width (C)	100mm	150mm	200mm	100mm
Sphere seated	No	No	No	Yes

Note: digital indicator excluded

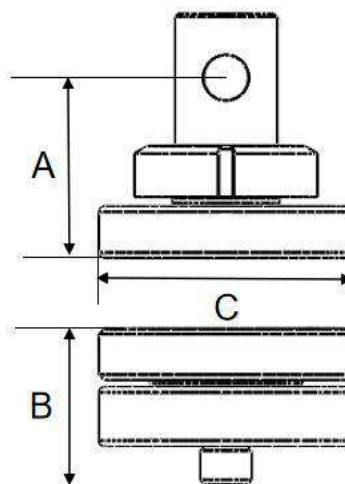


2. Compression fixture | WYA105

Specifications:

Model	WYA105A	WYA105B	WYA105C
Application	Compression test for metal, composite and other components.		
Diameter	Φ100mm	Φ150mm	Φ200mm
Maximum force	≤100kN		
Grip weight			
Upper grip	2.4kg	5.1kg	7.8kg
Lower grip	2.8kg	5kg	7.6kg
Working temperature	Ambient		
Connection			
Upper grip	Φ18mm pin		
Lower grip	Φ18mm pin		
Height			
Upper grip (A)	70mm	90mm	90mm
Lower grip (B)	60mm	66mm	60mm
Width (C)	100mm	150mm	200mm
Sphere seated	Yes	Yes	Yes

Note: WYA105B, WYA105C can be equipped with optional digital indicator.

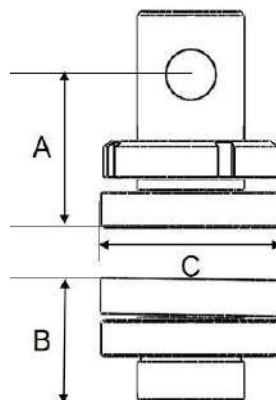


3. Compression fixture | WYA305

Specifications:

Model	WYA305A	WYA305B	WYA305C
Application	Compression test for metal, composite and other components.		
Diameter	Φ100mm	Φ150mm	Φ200mm
Maximum force	≤300kN		
Grip weight			
Upper grip	4.0kg	7.1kg	9.8kg
Lower grip	3.1kg	5.4kg	8.1kg
Working temperature	Ambient		
Connection			
Upper grip	Φ28mm pin		
Lower grip	Φ28mm pin		
Height			
Upper grip (A)	86mm	115mm	116mm
Lower grip (B)	68mm	56mm	72mm
Width (C)	100mm	150mm	200mm
Sphere seated	Yes	Yes	Yes

Note: WYA305B, WYA305C can be equipped with optional digital indicator.

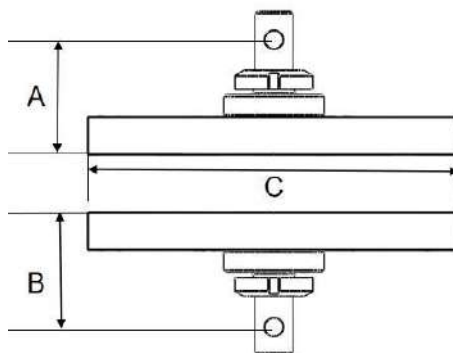
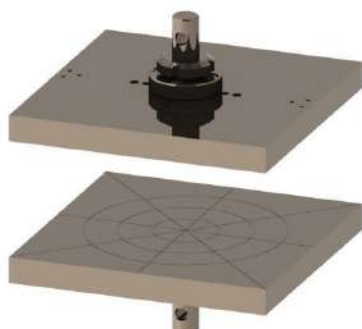


4. Compression fixture | WYB204

Specifications:

Model	WYB204A	WYB204B
Application	Compression for rigid foam	
Diameter	200 x 200mm	300 x 300mm
Maximum force	≤20kN	
Grip weight		
Upper grip	6.6kg	14.5kg
Lower grip	6.6kg	14.5kg
Working temperature	Ambient	
Connection		
Upper grip	Φ10mm pin	
Lower grip	Φ10mm pin	
Height		
Upper grip (A)	62mm	62mm
Lower grip (B)	62mm	62mm
Width (C)	200mm	300mm
Sphere seated	No	No

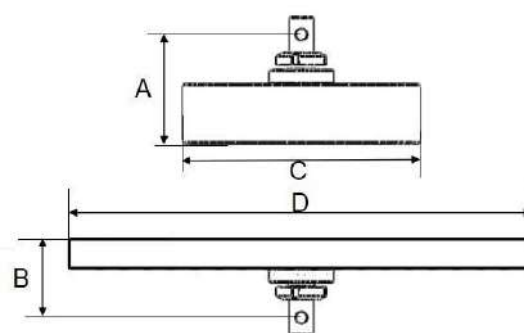
Note: optional digital indicator can be equipped.



5. Compression fixture | WYC203A

Specifications:

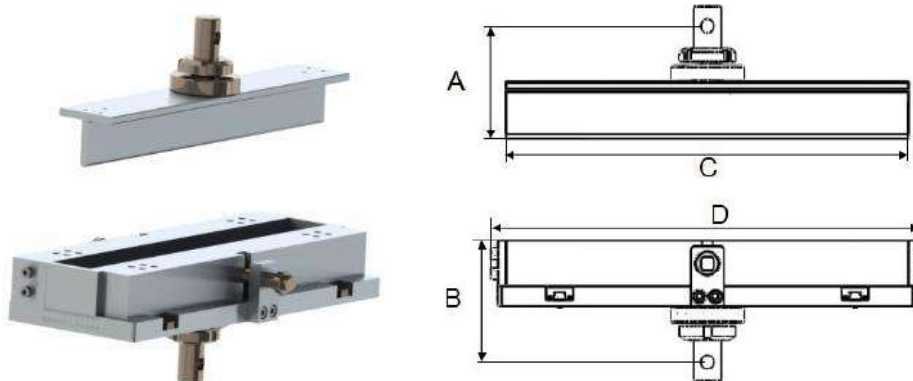
Application	Compression test for foam
Indenter diameter	φ200mm
Support plate	390mm x 390mm
Maximum force	≤2kN
Grip weight	
Upper grip	3.5kg
Lower grip	28.6kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	90mm
Lower grip (B)	70mm
Width	
Upper grip (C)	200mm
Upper grip (D)	390mm



6. Compression fixture | WYC203B

Specifications:

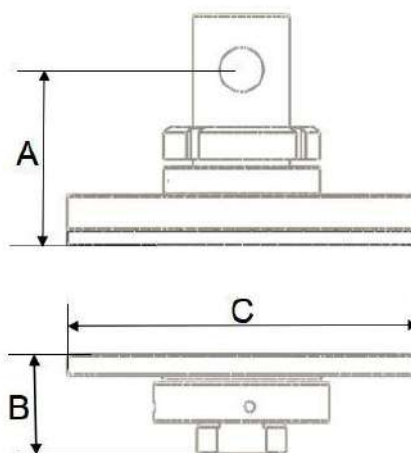
Application	Compression test for sponge
Maximum force	≤2kN
Grip weight	
Upper grip	0.8kg
Lower grip	4.1kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	85mm
Lower grip (B)	90mm
Width	
Upper grip (C)	300mm
Upper grip (D)	320mm



7. Compression fixture | WZYA305B

Specifications:

Application	Compression test for concrete
Maximum force	≤300kN
Grip weight	
Upper grip	10.3kg
Lower grip	7.0kg
Working temperature	Ambient
Connection	
Upper grip	Φ28mm pin
Lower grip	Φ28mm pin
Height	
Upper grip (A)	137mm
Lower grip (B)	72.5mm
Width (C)	220mm

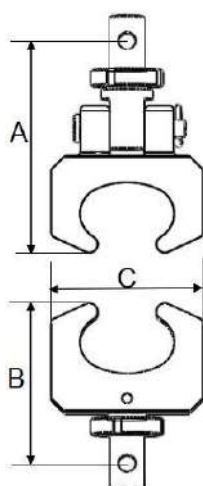
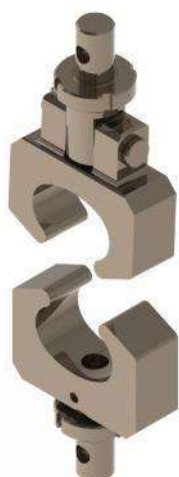


VII Shoulder fixture

1. Tension grip | WZTB203A

Specifications:

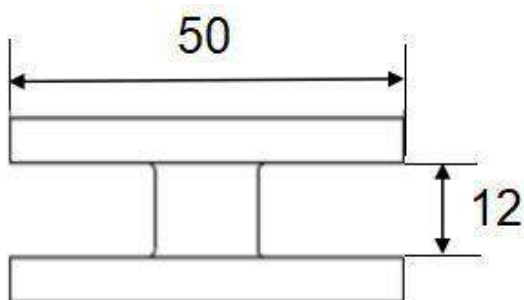
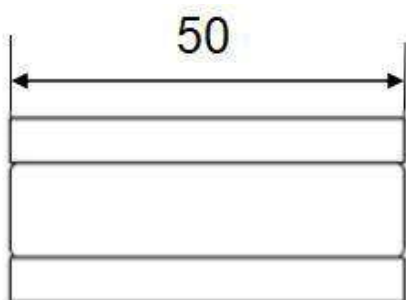
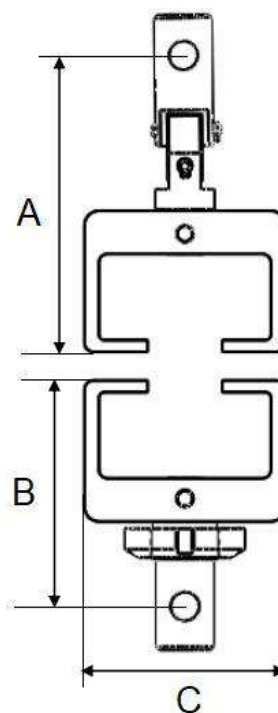
Application	Tension test for cement mortar
Maximum force	≤2kN
Grip weight	
Upper grip	1.18kg
Lower grip	1kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	120mm
Lower grip (B)	88mm
Width (C)	88mm



2. Tension grip | WZTC103A

Specifications:

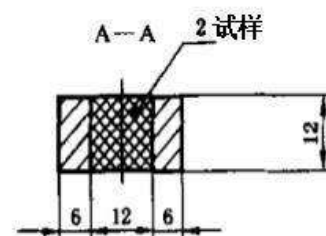
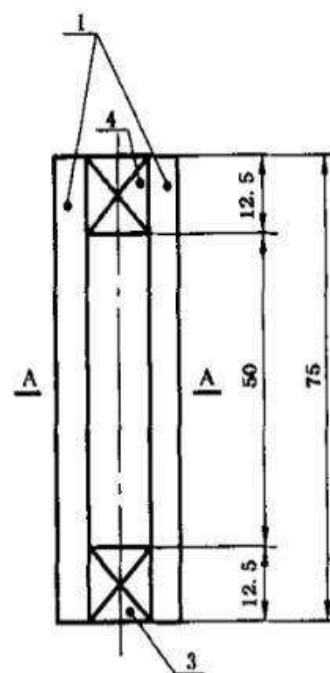
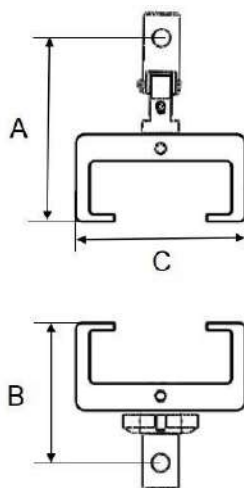
Application	Tension test for adhesives
Maximum force	≤1kN
Grip weight	
Upper grip	0.75kg
Lower grip	0.8kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	100mm
Lower grip (B)	80mm
Width (C)	70mm
Clamping mode	Shoulder
Specimen size	Substrate: 50×50mm Adhesive: 50×12mm



3. Tension grip | WZTC103B

Specifications:

Application	Tension test for adhesives
Maximum force	≤1kN
Grip weight	
Upper grip	0.5kg
Lower grip	0.6kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	110mm
Lower grip (B)	80mm
Width (C)	95mm
Clamping mode	Shoulder
Specimen size	Substrate: 75×12mm Adhesive 50×12mm



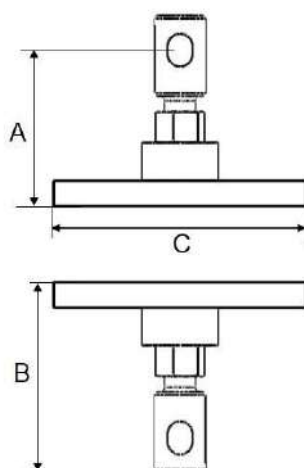
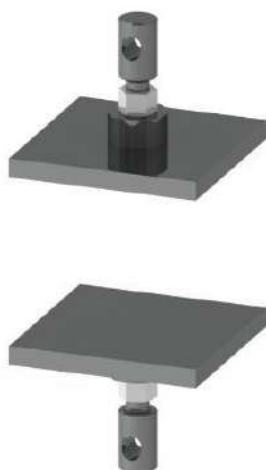
Specimen

4. Tension grip | WZTC203

Specifications

Application	Tension test for adhesives strength		
Model	WZTC203B	WZTC203C	WZTC203E
Specimen size	50mm x 50mm	100mm x 100mm	200mm x 200mm
Maximum force	≤2kN		
Grip weight			
Upper grip	0.36kg	0.95kg	3.32kg
Lower grip	0.36kg	0.95kg	3.32kg
Working temperature	Ambient		
Connection			
Upper grip	Φ10mm pin		
Lower grip	Φ10mm pin		
Height			
Upper grip (A)	60mm	60mm	60mm
Lower grip (B)	60mm	60mm	60mm
Width (C)	50mm	100mm	200mm

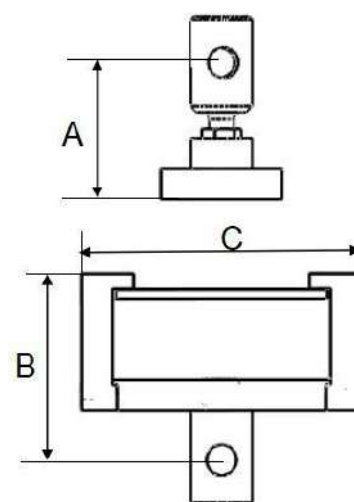
Note: The number of bonding blocks can be selected according to customer's requirements.



5. Tension grip | WZTC503A

Specifications

Application	Tension test for adhesives
Maximum force	≤5kN
Grip weight	
Upper grip	0.03kg
Lower grip	0.16kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	45mm
Lower grip (B)	60mm
Width (C)	90mm
Clamping mode	Shoulder
Specimen size	Substrate: 70×70mm Adhesive: 40×40mm

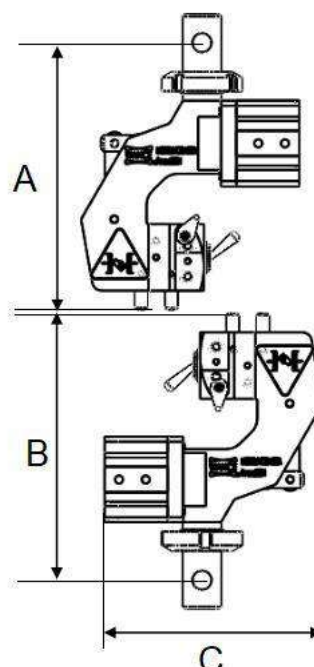


VIII Pneumatic grip

1. Pneumatic tensile grip | Snubbing | WCQA502A

Specifications

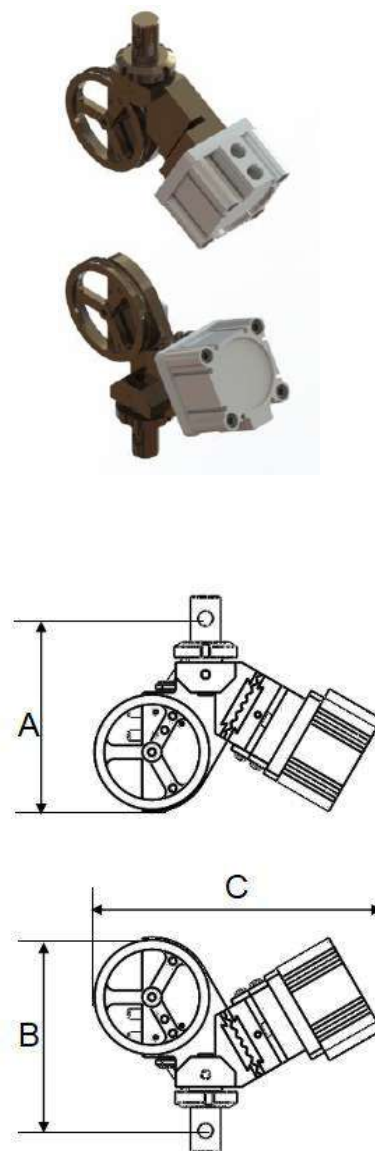
Application	Tension test for filament
Maximum force	≤500N
Grip weight	
Upper grip	0.56kg
Lower grip	0.56kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	140mm
Lower grip (B)	140mm
Width (C)	115mm
Specimen size	≤φ1.5mm



2. Pneumatic tensile grip | Snubbing | WCQA203A

Specifications

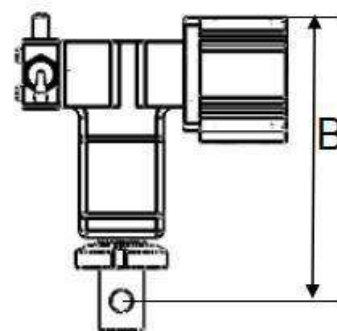
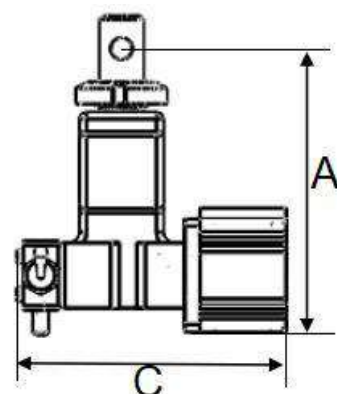
Application	Tension test for textile rope
Maximum force	≤2kN
Grip weight	
Upper grip	1.42kg
Lower grip	1.42kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	130mm
Lower grip (B)	130mm
Width (C)	192mm
Specimen size	φ1-φ3mm
Wave-profile jaw face	50mm (H) x10mm (W)



3. Pneumatic tensile grip | Side action | WDQA502A

Specifications

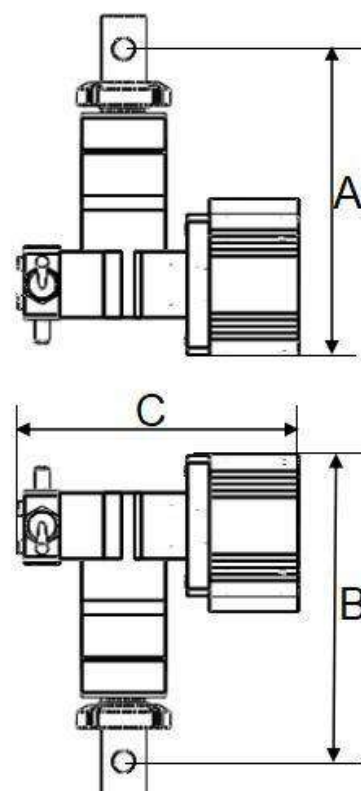
Application	Tension test for plastic film and rubber
Maximum force	≤500N
Grip weight	
Upper grip	0.7kg
Lower grip	0.7kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	132mm
Lower grip (B)	132mm
Width (C)	124mm
Jaw face	30 (H) mmx25 (W) mm
Specimen thickness	≤8mm



4. Pneumatic tensile grip | Side action | WDQA103A

Specifications

Application	Tension test for plastic film and rubber
Maximum force	≤1kN
Grip weight	
Upper grip	0.9kg
Lower grip	0.9kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	140mm
Lower grip (B)	140mm
Width (C)	128mm
Jaw face	30mmx30mm
Specimen thickness	≤6mm

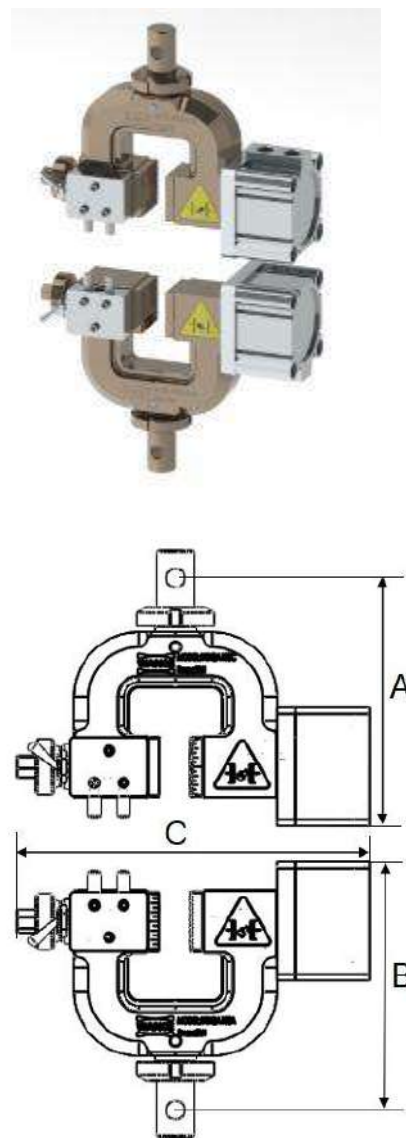


5. Pneumatic tensile grip | Side action | WDQA103C

Specifications

Application	Tension test for textile fabric, plastic sheet, film, rubber etc.
Maximum force	≤1kN
Grip weight	
Upper grip	2.61kg
Lower grip	2.61kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	135mm
Lower grip (B)	135mm
Width (C)	190mm
Serrated jaw face	32mmx32mm
Rubber-coated jaw face	32mmx32mm
Specimen thickness	≤14mm

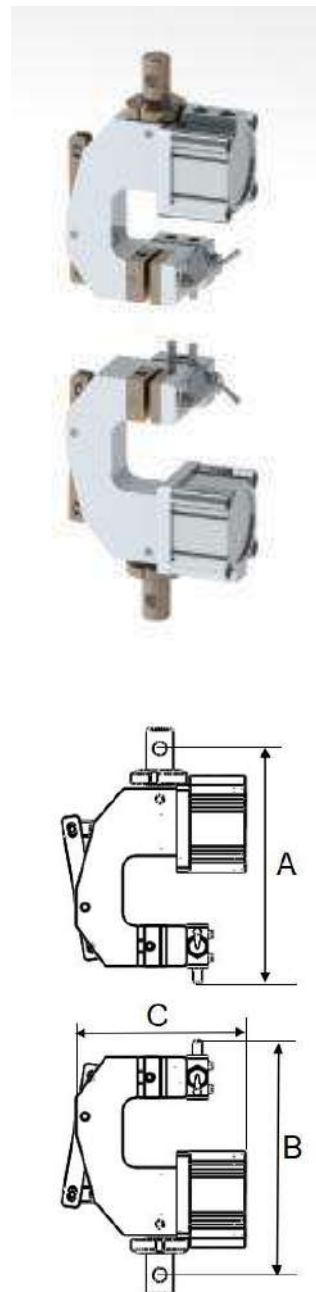
Note: Serrated jaw face for textile cloth, plastic sheet, rubber; Rubber-coated jaw face for plastic film



6. Pneumatic tensile grip | Side action |WDQA203A

Specifications

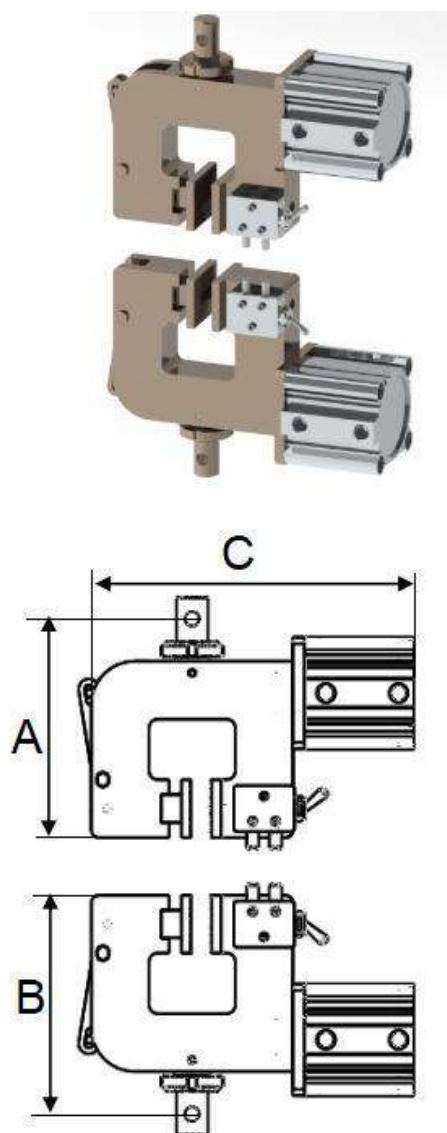
Application	Tension test for plastic, film
Maximum force	≤2kN
Grip weight	
Upper grip	1.27kg
Lower grip	1.27kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	174mm
Lower grip (B)	130mm
Width (C)	174mm
Flat jaw face	30mmx30mm
Specimen thickness	≤5mm



7. Pneumatic tensile grip | Side action | WDQA503A

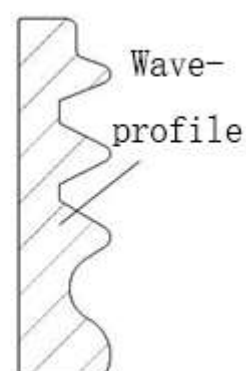
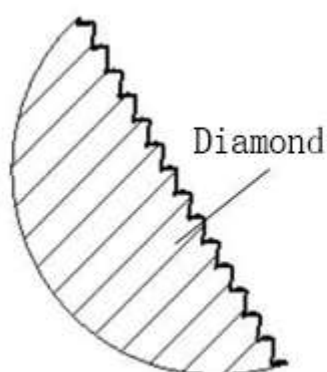
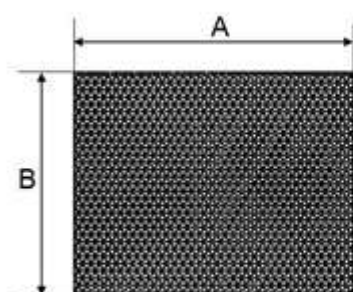
Specifications

Application	Tension test for waterproof roll, textile cloth etc
Maximum force	≤5kN
Grip weight	
Upper grip	4.35kg
Lower grip	4.35kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	150mm
Lower grip (B)	150mm
Width (C)	225mm
Specimen thickness	≤20mm



Jaw faces (Optional)

No.	Width (A) mm	Height (B) mm	Jaw type	Specimen
WDQA503A-07	50	40	Diamond	Textile fabric
WDQA503A-10	60	30	Diamond	Textile fabric
WDQA503A-11	100	35	Wave-profile	Waterproof roll

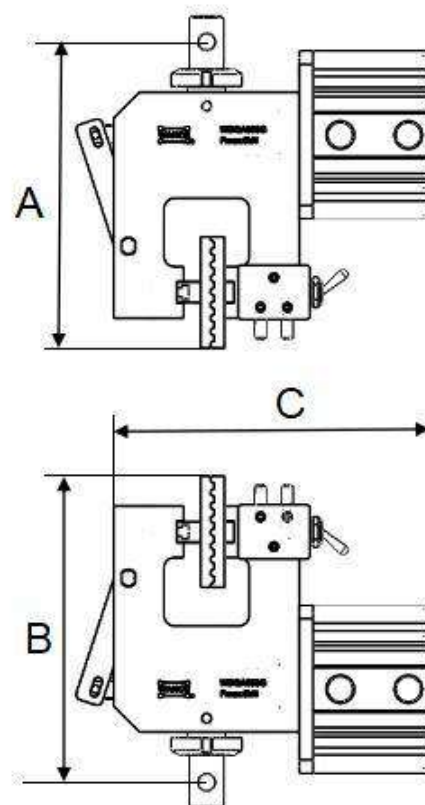
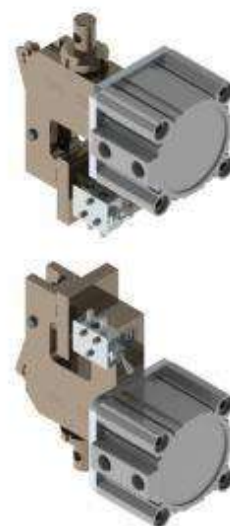


8. Pneumatic tensile grip | Side action | WDQA503G

Specifications

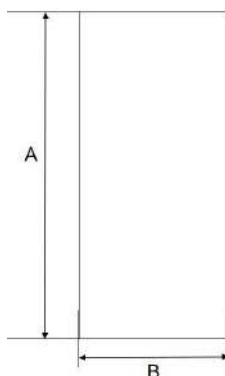
Application	Tension test for waterproof roll, textile cloth etc.
Maximum force	≤5kN
Grip weight	
Upper grip	7.12kg
Lower grip	7.12kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	180mm
Lower grip (B)	180mm
Width (C)	185mm
Wide sawtooth jaw face	65 (H) mmx60(W)mm
Specimen thickness	10mm

Note: Wide sawtooth jaw face for waterproof roll.



Jaw faces (Optional)

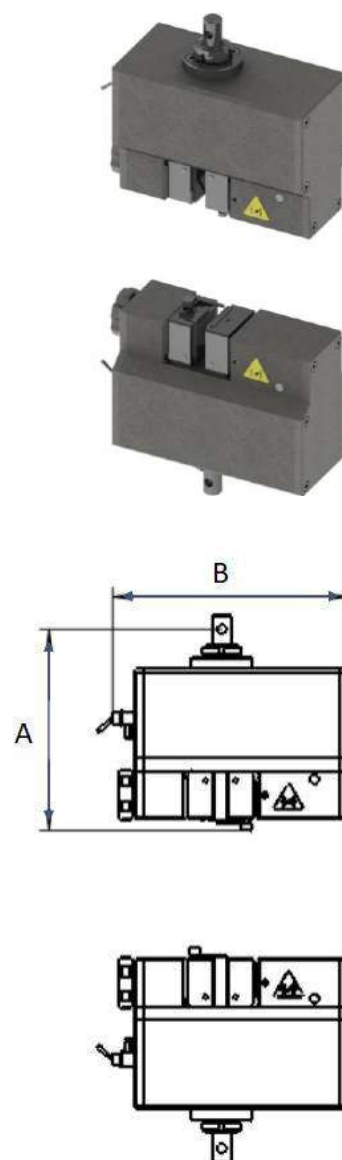
No.	Jaw type	Length (A) mm	Width (B) mm	Specimen
WDQA503A-08/09	Sawtooth	50	40	Textile cloth
WDQA503A-10/11	Sawtooth	80	40	Textile cloth
WDQA503A-12/13	Flat	80	40	Textile cloth
WDQA503A-14/15	Flat	50	40	Textile cloth



9. Pneumatic tensile grip | Side action | WDQB104A

Specifications

Application	Tension test for metallic and non-metallic flat specimen
Maximum force	≤10kN
Grip weight	
Upper grip	10.7kg
Lower grip	10.7kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	210mm
Width (B)	247mm
Serrated jaw face	50(H)mmx45(W)mm

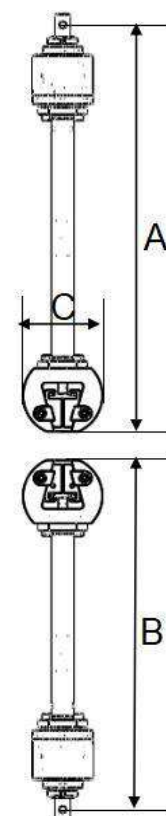


10. Pneumatic tensile grip | Wedge action | WXQC204A

Specifications

Application	Tension test for round and flat specimen of metal and plastic
Maximum force	≤20kN
Grip weight	
Upper grip	7.73kg
Lower grip	7.39kg
Working temperature	-73°C~+315°C
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	568mm
Lower grip (B)	488mm
Width (C)	110mm
Flat jaws	0~6mm; 6~12mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa

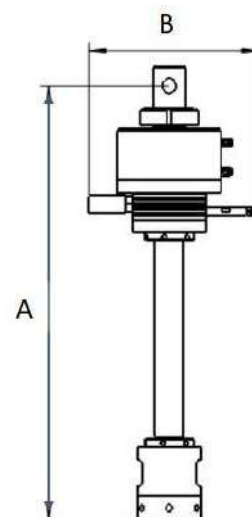


11. Pneumatic tensile grip | Wedge action | WXQC504A

Specifications

Application	Tension test for flat and round specimen of metal,
Maximum force	≤50kN
Grip weight	
Upper grip	13.97kg
Lower grip	13.97kg
Working	-73°C~+315°C
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height (A)	534mm
Width (B)	208mm
Specimen size	Φ5~Φ20mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa

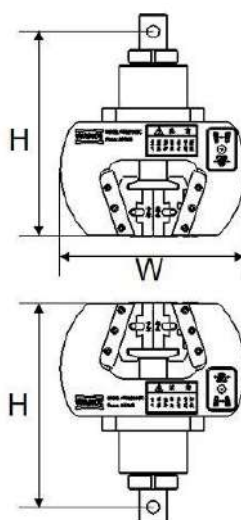


12. Pneumatic tensile grip | Wedge action | WXQD105D

Specifications

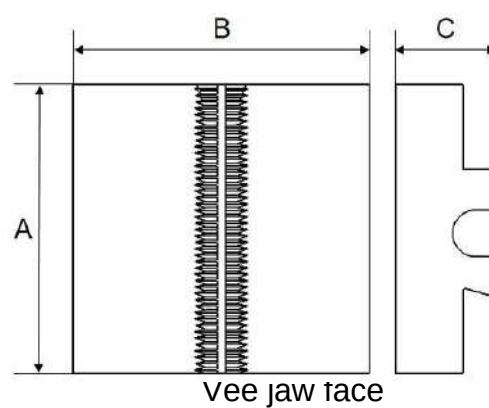
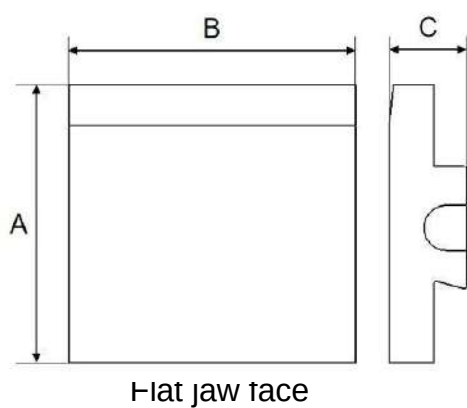
Application	Tension test for flat and round specimen of metal, composite, rigid plastic
Maximum force	100kN
Grip weight	
Upper grip	30kg
Lower grip	30kg
Working temperature	Ambient
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height (H)	299mm
Width (W)	270mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa



Jaw faces (Optional)

No.	Jaw type	Specimen size mm	Jaw face A mm	Jaw face B mm	Jaw face C mm
WXQD105D-02	Flat	0-10	68	70	24
WXQD105D-03	Flat	10-20	68	70	19
WXQD105D-04	Vee	Φ5-Φ12	68	70	24
WXQD105D-05	Vee	Φ12-Φ19	68	70	24
WXQD105D-06	Vee	Φ19-Φ26	68	70	24



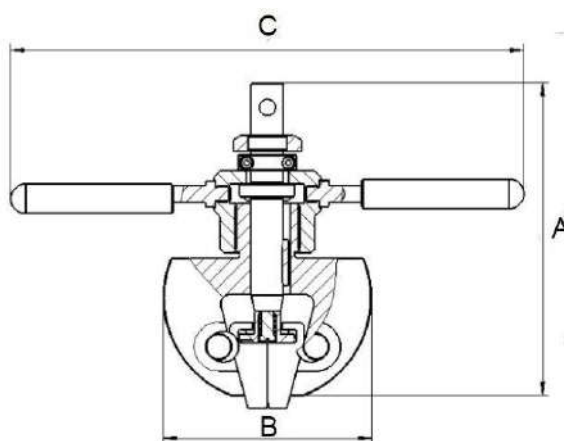
IX Wedge tensile grip

1. Wedge tensile grip | Wedge action | WXSA204G

Specifications

Application	Tension test for flat and round specimen of metal, composite, plastic
Maximum force	20kN
Grip weight	
Upper grip	5.0kg
Lower grip	5.0kg
Working temperature	-73°C~+315°C
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	192mm
Grip body width (B)	128mm
Overall width (C)	316mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa



Flat jaw faces (Optional)

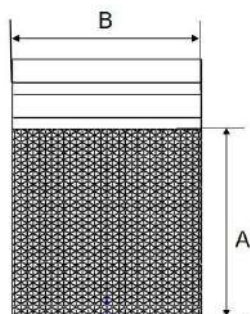
No.	Specimen thickness mm	Height A mm	Width B mm
WXSA204G-13	0~6	40	40
WXSA204G-14	6~12	40	40

Note: All jaw faces' pitch is 1.5mm

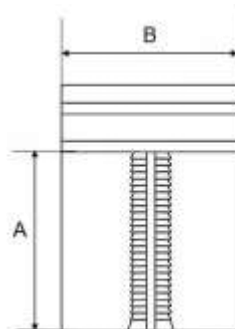
Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
WXSA204G-15	$\Phi 4 \sim \Phi 9$	40	40
WXSA204G-16	$\Phi 9 \sim \Phi 14$	40	40

Note: All jaw faces' pitch is 1.5mm



Flat jaw face



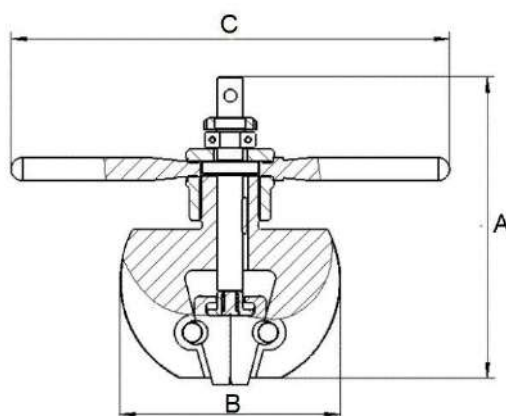
Vee jaw face

2. Wedge tensile grip | Wedge action | WXSA304A

Specifications

Application	Tension test for flat and round specimen of metal, composite, rigid plastic
Maximum force	30kN
Grip weight	
Upper grip	7.6kg
Lower grip	7.6kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	240mm
Grip body width (B)	174mm
Overall width (C)	346mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa



Flat jaw faces (Optional)

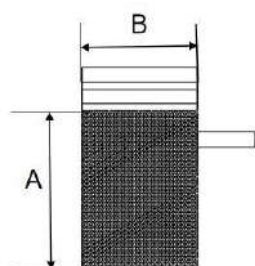
No.	Specimen thickness mm	Height A mm	Width B mm
WXSA105A-13	0~7	55	40
WXSA105A-14	7~14	55	40
WXSA105A-15	14~21	55	40

Note: All jaw faces' pitch is 1.5mm

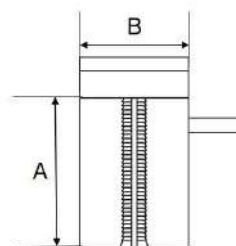
Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
WXSA105A-09	Φ4~9	55	40
WXSA105A-10	Φ9~14	55	40
WXSA105A-11	Φ14~19	55	40

Note: All jaw faces' pitch is 1.5mm



Flat jaw face



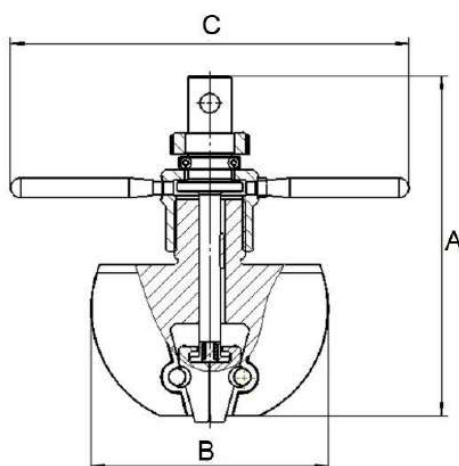
Vee jaw face

3. Wedge tensile grip | Wedge action | WXSA504A

Specifications

Application	Tension test for flat and round specimen of metal, composite, rigid plastic
Maximum force	50kN
Grip weight	
Upper grip	10.6kg
Lower grip	10.6kg
Working temperature	Ambient
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height (A)	236mm
Grip body width (B)	178mm
Overall width (C)	337mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa



Flat jaw faces (Optional)

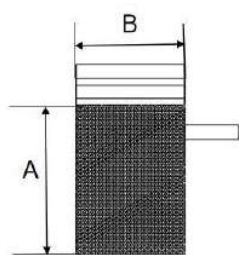
No.	Specimen thickness mm	Height A mm	Width B mm
WXSA105A-13	0~7	55	40
WXSA105A-14	7~14	55	40
WXSA105A-15	14~21	55	40

Note: All jaw faces' pitch is 1.5mm

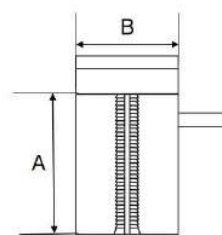
Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
WXSA105A-16	Φ4~9	55	40
WXSA105A-17	Φ9~14	55	40
WXSA105A-18	Φ14~19	55	40

Note: All jaw faces' pitch is 1.5mm



Flat jaw face



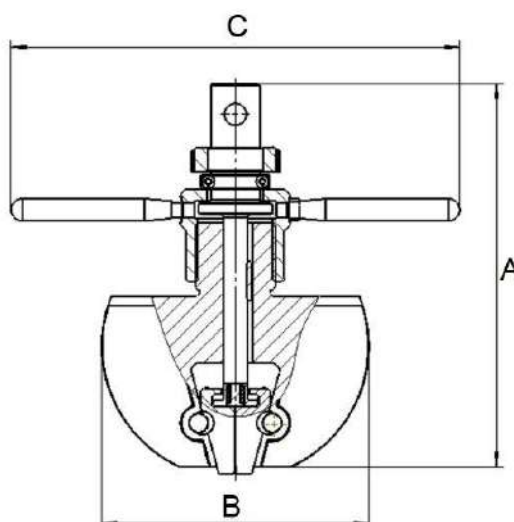
Vee jaw face

4. Wedge tensile grip | Wedge action | WXSA105A

Specifications

Application	Tension test for flat and round specimen of metal, composite
Maximum force	100kN
Grip weight	
Upper grip	14.7kg
Lower grip	14.7kg
Working temperature	Ambient
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height (A)	276mm
Grip body width (B)	164mm
Overall width (C)	350mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa



Flat jaw faces (Optional)

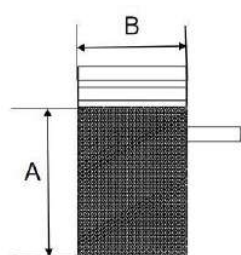
No.	Specimen thickness mm	Height A mm	Width B mm
WXSA105A-13	0~7	55	40
WXSA105A-14	7~14	55	40
WXSA105A-15	14~21	55	40

Note: All jaw faces' pitch is 1.5mm

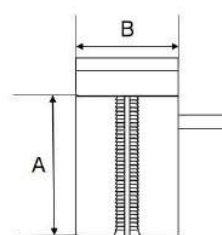
Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
WXSA105A-16	Φ4~9	55	40
WXSA105A-17	Φ9~14	55	40
WXSA105A-18	Φ14~19	55	40

Note: All jaw faces' pitch is 1.5mm



Flat jaw face



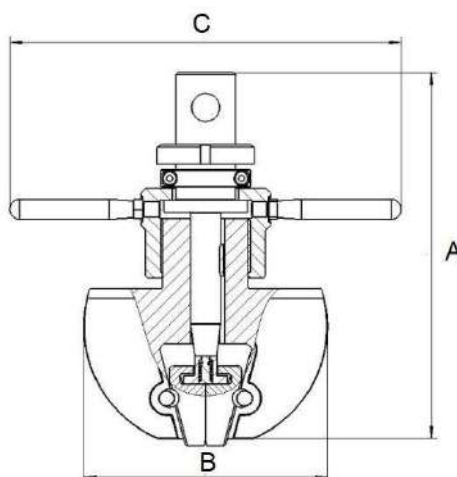
Vee jaw face

5. Wedge tensile grip | Wedge action | WXSA305A

Specifications

Application	Tension test for flat and round specimen of metal, composite
Maximum force	300kN
Grip weight	
Upper grip	36.5kg
Lower grip	36.5kg
Working temperature	Ambient
Connection	
Upper grip	Φ28mm pin
Lower grip	Φ28mm pin
Height (A)	367mm
Grip body width (B)	244mm
Overall width (C)	392mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa



Flat jaw faces (Optional)

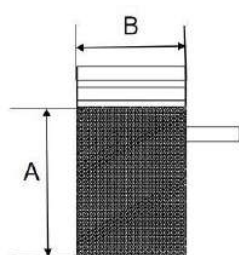
No.	Specimen thickness mm	Height A mm	Width B mm
WXSA305A-14	0~8	62	50
WXSA305A-15	8~16	62	50
WXSA305A-16	16~24	62	50
WXSA305A-17	24~32	62	50

Note: All jaw faces' pitch is 2.5mm

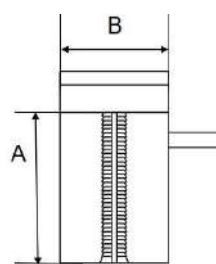
Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
WXSA305A-18	Φ4~9	62	50
WXSA305A-19	Φ9~16	62	50
WXSA305A-20	Φ16~23	62	50
WXSA305A-21	Φ23~30	62	50

Note: All jaw faces' pitch is 2.5mm



Flat jaw face



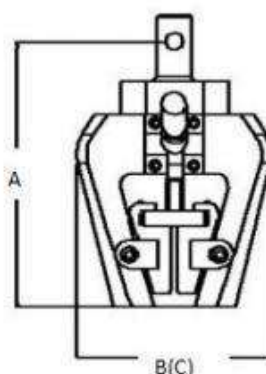
Vee jaw face

6. Wedge tensile grip | Wedge action | WXS204A

Specifications

Application	Tension test for flat and round specimen of metal, composite, plastic
Maximum force	20kN
Grip weight	
Upper grip	4.3kg
Lower grip	7.8kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	162mm
Grip body width (B)	111mm
Overall width (C)	111mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa



Flat jaw faces (Optional)

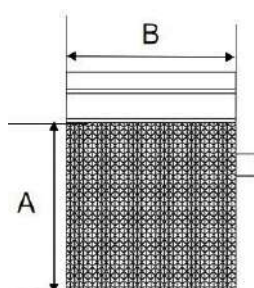
No.	Specimen thickness mm	Height A mm	Width B mm
WXSB204A-09	0~6	40	40
WXSB204A-10	6~12	40	40

Note: All jaw faces' pitch is 1.5mm

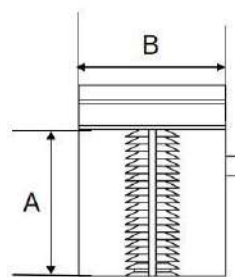
Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
WXSB204A-11	$\Phi 4 \sim 9$	40	40
WXSB204A-12	$\Phi 9 \sim 14$	40	40

Note: All jaw faces' pitch is 2mm



Flat jaw face



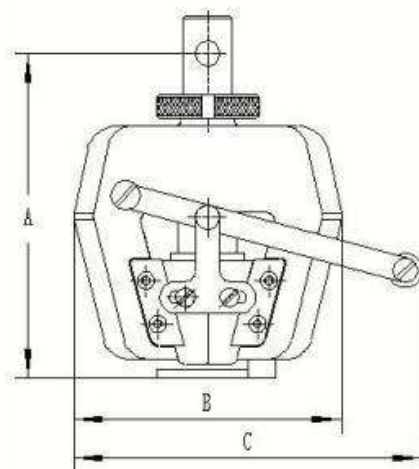
Vee jaw face

7. Wedge tensile grip | Wedge action | WXSB204G

Specifications

Application	Tension test for flat and round specimen of metal, composite, plastic
Maximum force	20kN
Grip weight	
Upper grip	3.76kg
Lower grip	3.76kg
Working temperature	-73°C~+315°C
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	123.5mm
Grip body width (B)	108mm
Overall width (C)	140mm

Note: Specimen hardness below 30HRC and tensile Strength below 600MPa



Flat jaw faces (Optional)

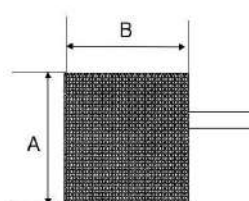
No.	Specimen thickness mm	Height A mm	Width B mm
WXSB204G-09	0~6	40	40
WXSB204G-10	6~12	40	40

Note: All jaw faces' pitch is 1.5mm

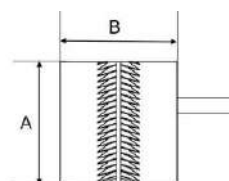
Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
WXSA204G-11	Φ4~9	42	4
WXSA204G-12	Φ9~14	42	4

Note: All jaw faces' pitch is 2mm



Flat jaw face



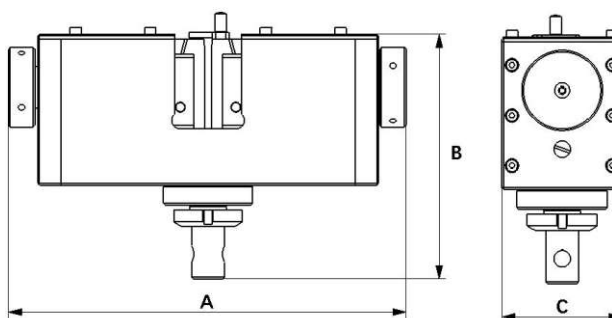
Vee jaw face

8. Wedge tensile grip | Self-tightening wedge action | WXSD104A

Specifications

Application	Tension test for flat and round specimen of metal, composite, plastic
Maximum force	10kN
Grip weight	
Upper grip	9.67kg
Lower grip	9.67kg
Working	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Grip body width (A)	240mm
Height (B)	148mm
Depth (C)	72mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa

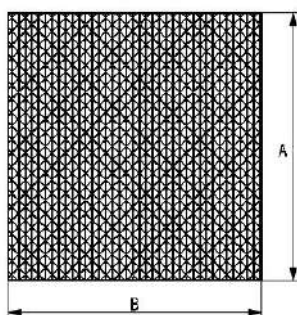


Flat jaw faces (Optional)

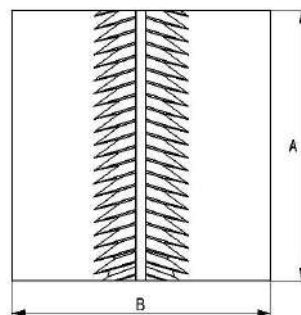
No.	Specimen thickness mm	Height A mm	Width B mm
WXSD104A.01-19	0~10	54	40

Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
WXSD104A.01-20	Φ4~9	54	40
WXSD104A.01-21	Φ9~16	54	40



Flat jaw face



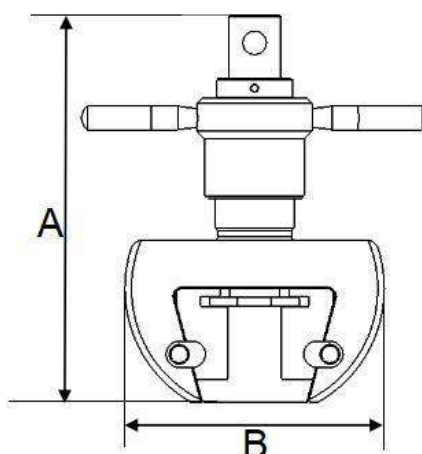
Vee jaw face

9. Wedge tensile grip | Self-tightening wedge action | WZXA105A

Specifications

Application	★★★★☆
Maximum force	≤100kN
Grip weight	
Upper grip	13.7kg
Lower grip	13.7kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Width (A)	198mm
Grip body height (B)	300mm

Note: Specimen hardness below 30HRC and tensile Strength below 600MPa

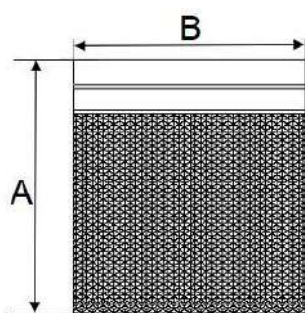


Flat jaw faces (Optional)

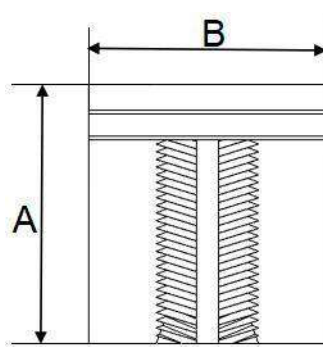
No.	Specimen thickness mm	Height A mm	Width B mm
WZXA105A-12	0~10	70	64
WZXA105A-13	10~20	70	64
WZXA105A-14	20~30	70	64
WZXA105A-15	30~40	70	64
WZXA105A-20	40~50	70	64

Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
WZXA105A-16	Φ4~Φ10	70	64
WZXA105A-17	Φ10~Φ20	70	64
WZXA105A-18	Φ20~Φ30	70	64
WZXA105A-19	Φ30~Φ40	70	64
WZXA105A-09	Φ48	70	64
WZXA105A-10	Φ60	70	64



Flat jaw face



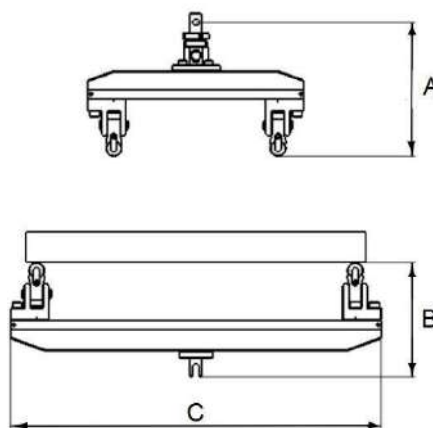
Vee jaw face

X Bending fixture

1. Bending fixture | 4-point bending | WZWB304

Specifications

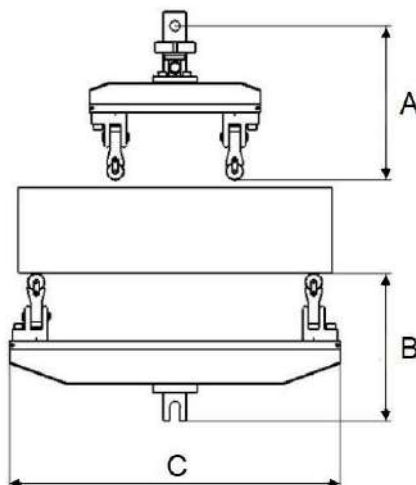
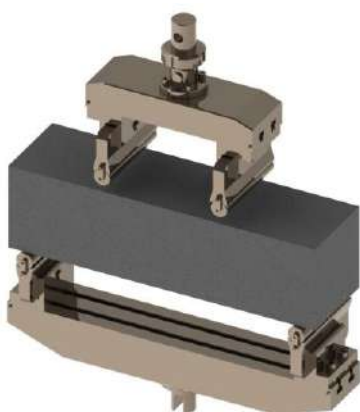
Application	Bending test for natural stone, ceramic, composite		
Model	WZWB304A	WZWB304B	WZWB304C
Maximum force	≤30kN		
Grip weight			
Upper grip	15kg	19kg	22kg
Lower grip	24kg	35kg	47.5kg
Working temperature	Ambient		
Connection			
Upper grip	Φ10mm pin		
Lower grip	Φ10mm pin		
Upper span (Adjustable)	≤250mm	≤400mm	≤500mm
Lower span (Adjustable)	≤500mm	≤800mm	≤1000mm
Maximum specimen width	160mm		
Upper grip height (A)	218mm	218mm	223mm
Lower grip height (B)	185mm	195mm	205mm
Base width (C)	600mm	900mm	1100mm
Roller diameter	Φ25mm		



2. Bending fixture | 4-point bending | WZWB105A

Specifications

Application	Bending test for ordinary concrete, metal, ceramic, composite
Maximum force	≤100kN
Grip weight	
Upper grip	21.3kg
Lower grip	38.9kg
Working temperature	Ambient
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Upper span (Adjustable)	≤200mm
Lower span (Adjustable)	≤480mm
Maximum specimen width	160mm
Upper grip height (A)	270mm
Lower grip height (B)	259mm
Base width (C)	580mm
Roller diameter	Φ30mm
Standard specimen	150mmx150mmx600/550mm
Non-standard specimen	100mmx100mmx400mm



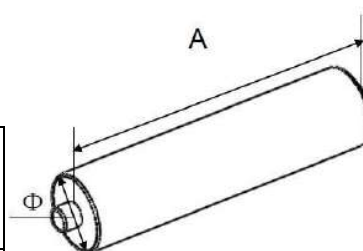
Deformation measurement device (optional)

The bending deformation of the specimen was collected and measured, and the elastic modulus of the specimen was measured and calculated



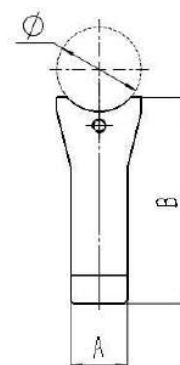
Roller (Optional)

No.	Diameter mm	Width (A) mm
WZWB105A-12	30	160



Roller support (Optional)

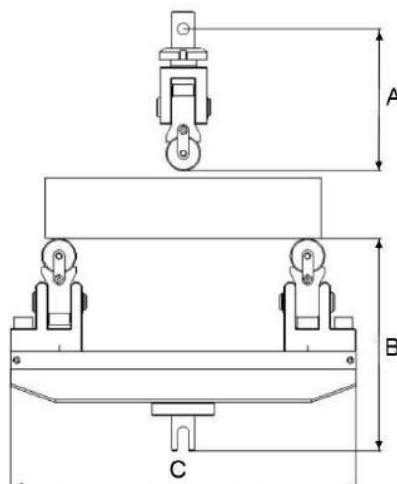
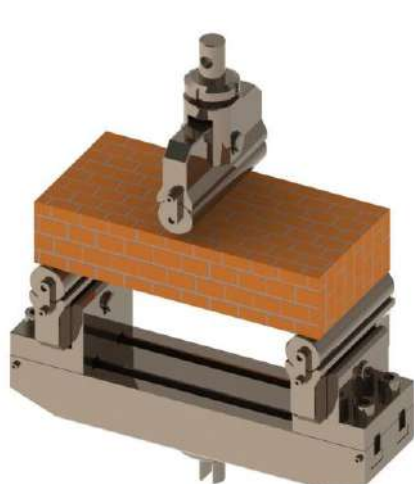
No.	Diameter mm	Width (A) mm	Height (B) mm
WZWB105A-05	3	20	73



3. Bending fixture | 3-point bending | WZWD204A

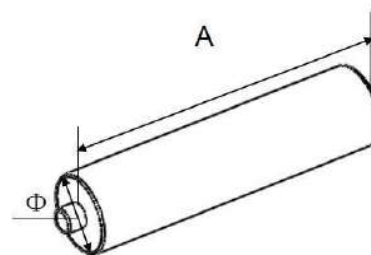
Specifications

Application	Bending test for wall bricks, metal, ceramic, composite
Maximum force	≤20kN
Grip weight	
Upper grip	3.2kg
Lower grip	12.7kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (Adjustable)	≤200mm
Maximum specimen width	90mm
Upper grip height (A)	123mm
Lower grip height (B)	184mm
Base width (C)	300mm
Roller diameter	Φ30mm
Standard specimen	190mmx35mmx90mm
	240mmx115mmx53mm



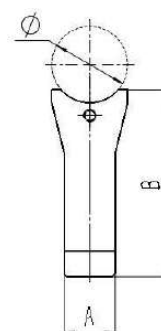
Roller (Optional)

No.	Diameter mm	Width (A) mm
WZWD204A-03	30	120



Roller support (Optional)

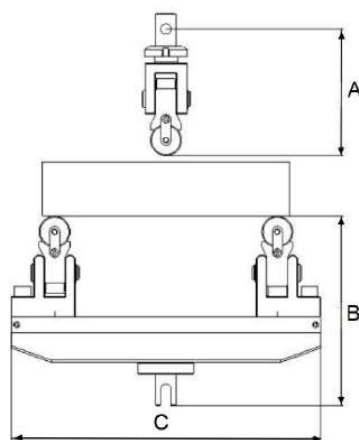
No.	Diameter mm	Width (A) mm	Height (B) mm
WZWD204A-04	30	20	50



4. Bending fixture | 3-point bending | WZWD204B

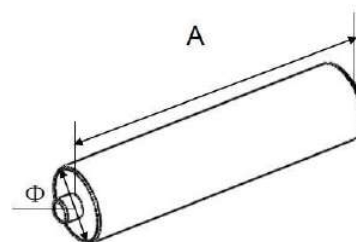
Specifications

Application	Bending test for precast concrete paving bricks, metal, ceramic, composite
Maximum force	≤20kN
Grip weight	
Upper grip	3.2kg
Lower grip	20kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (Adjustable)	≤400mm
Maximum specimen width	123mm
Upper grip height (A)	185mm
Lower grip height (B)	500mm
Base width (C)	90mm
Roller diameter	Φ30mm



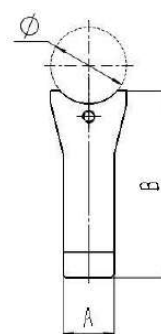
Roller (Optional)

No.	Diameter mm	Width (A) mm
WZWD204B-02	30	210



Roller support (Optional)

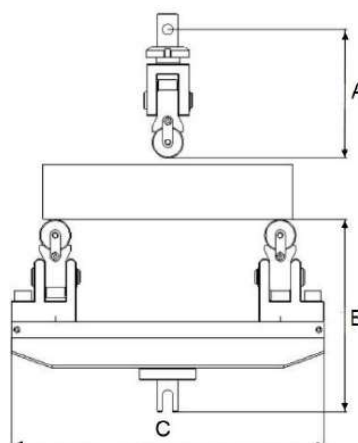
No.	Diameter mm	Width (A) mm	Height (B) mm
WZWD204B-01	30	20	50



5. Bending fixture | 3-point bending | WZWD204C

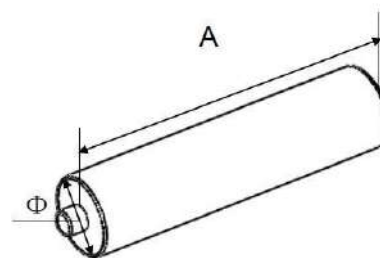
Specifications

Application	Bending test for gypsum plasterboard , metal, ceramic, composite
Maximum force	≤20kN
Grip weight	
Upper grip	3.4kg
Lower grip	20kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (Ajustable)	≤400mm
Maximum specimen width	310mm
Upper grip height (A)	114mm
Lower grip height (B)	176mm
Base width (C)	350mm
Roller diameter	Φ20mm



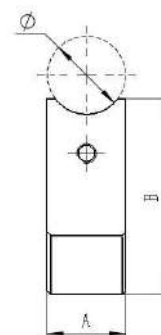
Roller (Optional)

No.	Diameter mm	Width (A) mm
WZWD204C-02	20	310



Roller support (Optional)

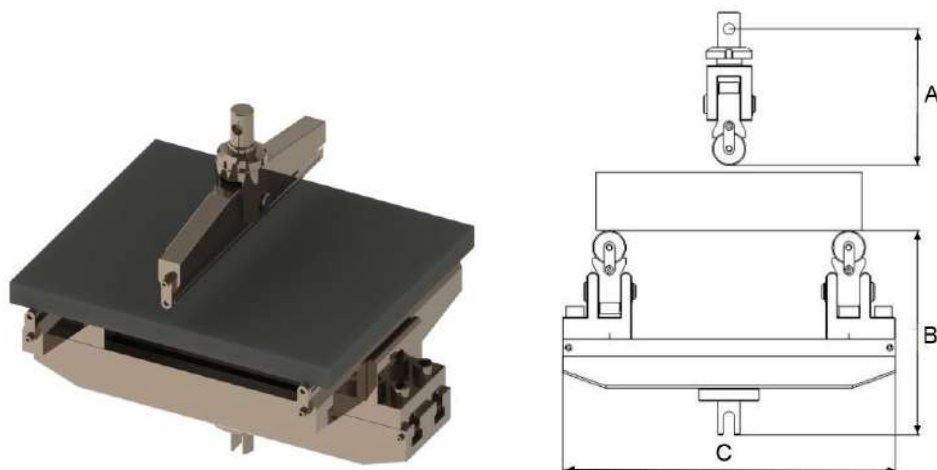
No.	Diameter mm	Width (A) mm	Height (B) mm
WZWD204C-01	20	20	50



6. Bending fixture | 3-point bending | WZWD204D

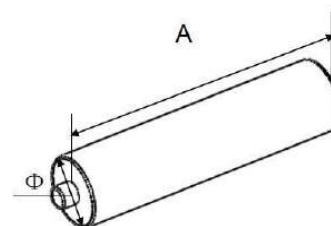
Specifications

Application	Bending test for fiber cement products , metal, ceramic, composite
Maximum force	≤20kN
Grip weight	
Upper grip	2.3kg
Lower grip	14.4kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (Adjustable)	≤240mm
Maximum specimen width	260mm
Upper grip height (A)	106mm
Lower grip height (B)	168mm
Base width (C)	350mm
Roller diameter	Φ10mm



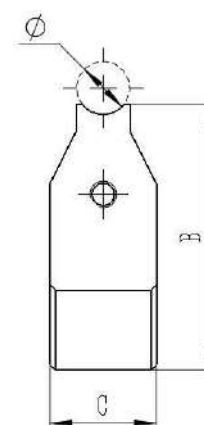
Roller (Optional)

No.	Diameter mm	Width (A) mm
WZWD204D-02	10	260



Roller support (Optional)

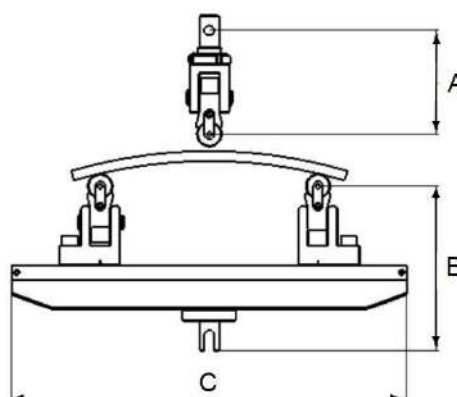
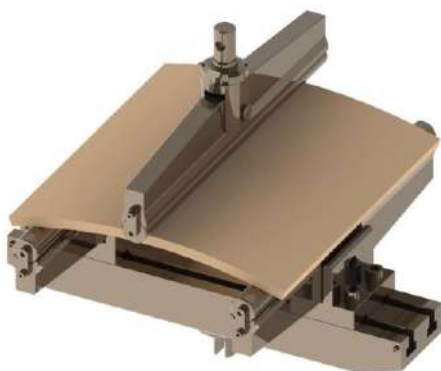
No.	Diameter	Width (A)	Height (B)
WZWD204D-01	10	20	50



7. Bending fixture | 3-point bending | WZWD204E

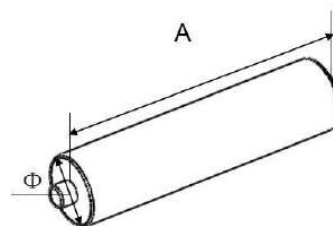
Specifications

Application	Bending test for fired roofing tiles , metal, ceramic, composite
Maximum force	≤20kN
Grip weight	
Upper grip	4.3kg
Lower grip	19.5kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (Adjustable)	≤300mm
Maximum specimen width	350mm
Upper grip height (A)	105mm
Lower grip height (B)	168mm
Base width (C)	400mm
Roller diameter	Φ20mm



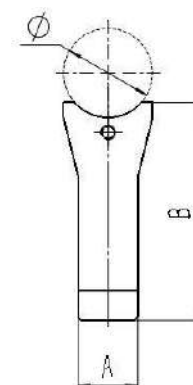
Roller (Optional)

No.	Diameter mm	Width (A) mm
WZWD204C-04	25	350



Roller support (Optional)

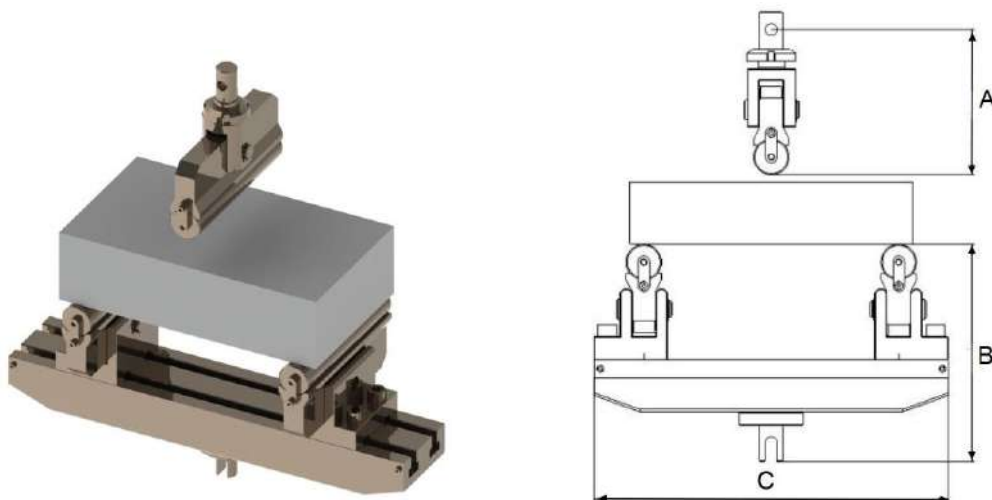
No.	Diameter mm	Width (A) mm	Height (B) mm
WZWD204C-01	25	20	50



8. Bending fixture | 3-point bending | WZWD204F

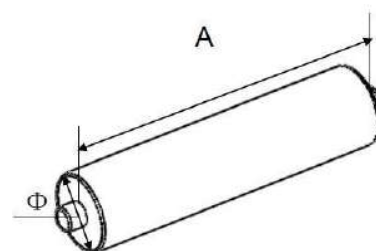
Specifications

Application	Bending test for inorganic rigid thermal insulation foam, metal, ceramic, composite
Maximum force	≤20kN
Grip weight	
Upper grip	2.7kg
Lower grip	16.3kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (Ajustable)	≤300mm
Maximum specimen width	160mm
Upper grip height (A)	123mm
Lower grip height (B)	185mm
Base width (C)	400mm
Roller diameter	Φ30mm



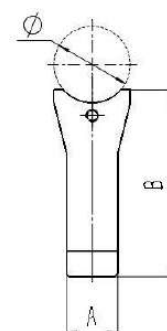
Roller (Optional)

No.	Diameter mm	Width (A) mm
WZWD304A-09	30	160



Roller support (Optional)

No.	Diameter mm	Width (A) mm	Height (B) mm
WZWD304A-06	30	20	50

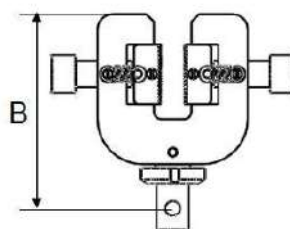
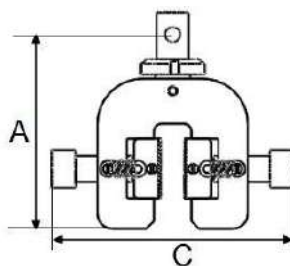


XI Grips & fixtures for wood

1. Tensile grip | Wood tension | WDSB104B

Specifications

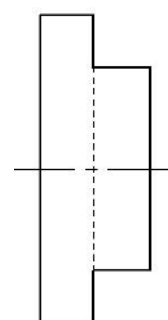
Application	Tension test for wood-based panels and wooden board
Maximum force	≤10kN
Grip weight	
Upper grip	3.82kg
Lower grip	3.82kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Upper grip height (A)	130mm
Lower grip height (B)	130mm
Grip width (C)	160mm
Clamping mode	Side action
Jaw face	60mmx40mm



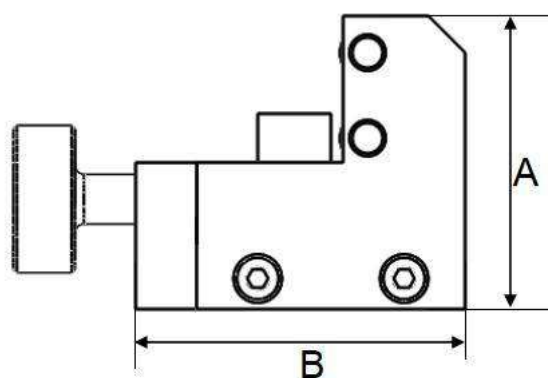
2. Shearing fixture | Wood shearing | WZJB203A

Specifications

Application	Shearing test for layered wood with adhesives and interlaminar shearing for fiber reinforce plastic
Maximum force	≤2kN
Grip weight	0.56kg
Working temperature	Ambient
Grip height (A)	48mm
Grip height (B)	54mm



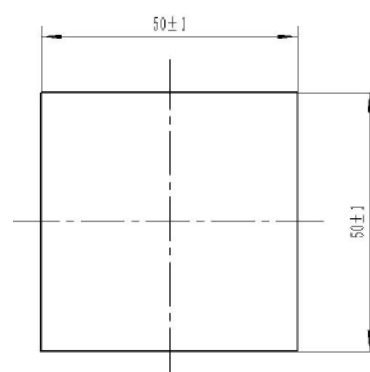
Specimen



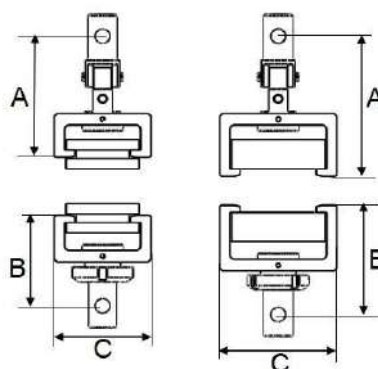
3. Tensile fixture | Wood tension | WZJH104A

Specifications

Application	Tension test for determination of internal bond strength of wood specimen
Maximum force	≤10kN
Left grips weight	1.8kg
Right grips weight	1.7kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Left and right upper grips height (A)	86mm, 96mm
Left and right lower grips height (B)	66mm, 80mm
Left and right grips width height (B)	66mm, 80mm
Specimen size	50mmx50mm



Specimen



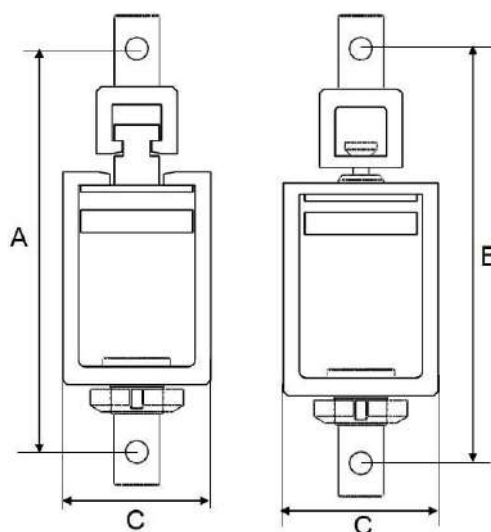
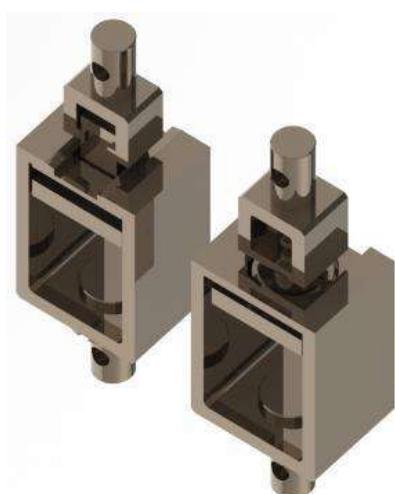
Left grips

Right grips

4. Tensile fixture | Wood tension | WZJH104B

Specifications

Application	Tension test for determination of surface bond strength and surface soundness of wood specimen
Maximum force	≤10kN
Left grip weight	1.56kg
Right grip weight	1.56kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Left grip height (A)	180mm
Right grip height (B)	185mm
Left grip width (C)	66mm
Right grip width (D)	69mm



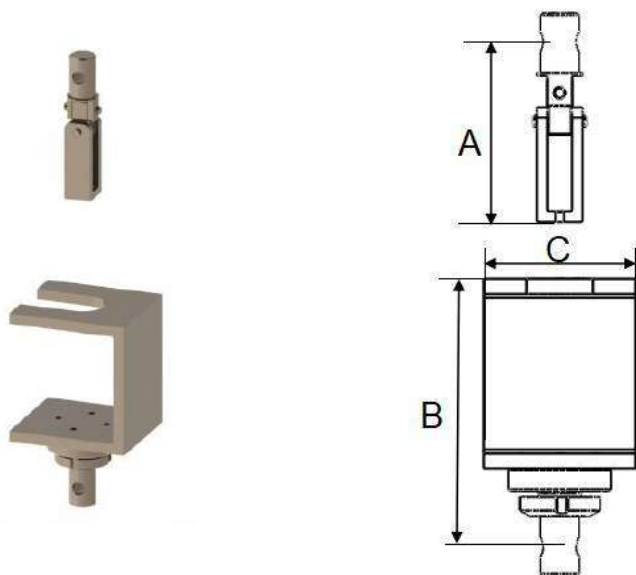
Left grips

Right grips

5. Tensile fixture | Nail /screw withdrawal | WZTB502A

Specifications

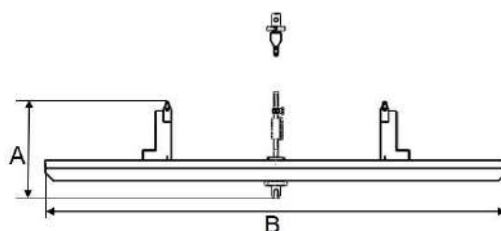
Application	Used for withdrawing nail /screw from wood
Maximum force	≤500N
Weight	
Upper grip	0.24kg
Lower grip	1.6kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip	95mm
Lower grip	141mm
Grip width (C)	90mm



6. Bending fixture | 3/4-point bending | WZWC104C

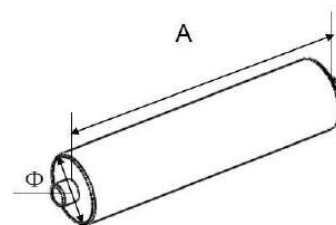
Specifications

Application	Bending test for wood-based panels and wooden board
Maximum force	≤10kN
Weight	43.5kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Lower grip height (A)	230mm
Grip width (B)	1120mm
Upper span (Ajustable)	≤340mm
Lower span (Ajustable)	≤1000mm
Specimen width	≤90mm



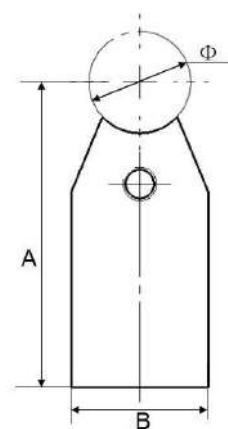
Roller (Optional)

No.	Diameter mm	Width (A) mm
WZWC104C-07	10	92
WZWC104C-11	15	92
WZWC104C-13	30	92



Roller support (Optional)

No.	Diameter mm	Width (A) mm	Height (B) mm
WZWC104C-06	10	45	20
WZWC104C-10	15	45	20
WZWC104C-16	30	49	20

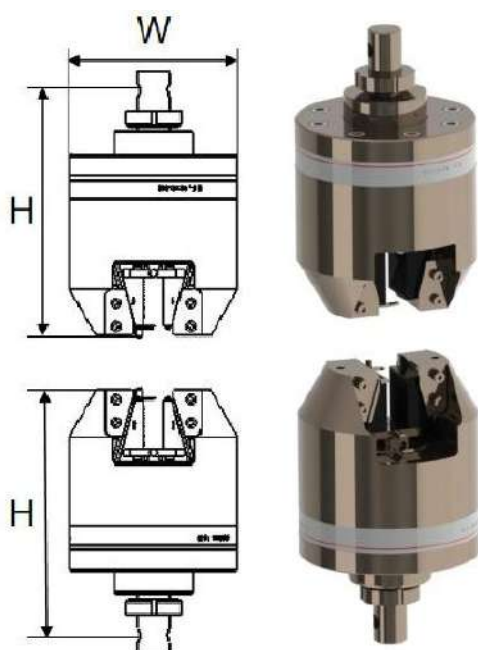


XII Grips & fixtures for composites

1. Tensile grip | Hydraulic wedge action | WXYC105B

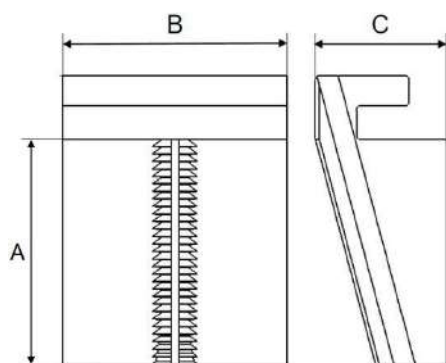
Specifications

Application	Tension test for metal, composite
Maximum force	≤100kN
Weight	
Upper grip	57kg
Lower grip	57kg
Height (H)	
Upper grip	310mm
Lower grip	310mm
Grip width (W)	215mm
Working temperature	0°C~40°C
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin

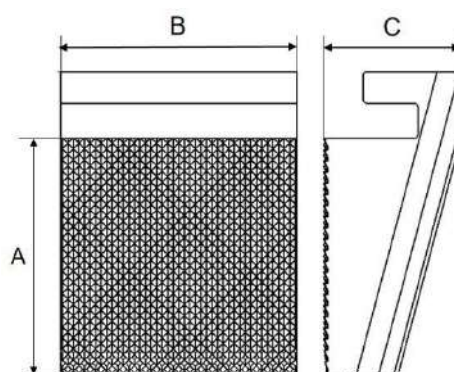


Jaw faces (Optional)

No.	Type	Specimen size mm	Height A mm	Width B mm	Thickness C mm
WXYC105B-11	VEE	$\Phi 4\text{-}\Phi 12$	65	50	35
WXYC105B-12	VEE	$\Phi 12\text{-}\Phi 20$	65	50	32
WXYC105B-13	Flat	0-12	65	50	34
WXYC105B-14	Flat	12-24	65	50	28



Vee jaw face

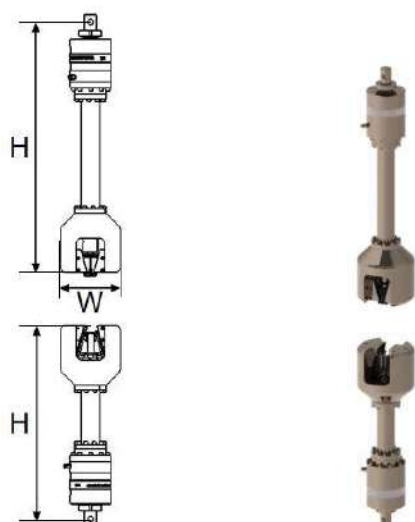


Flat jaw face

2. Tensile grip | Hydraulic wedge action | WXYC105G

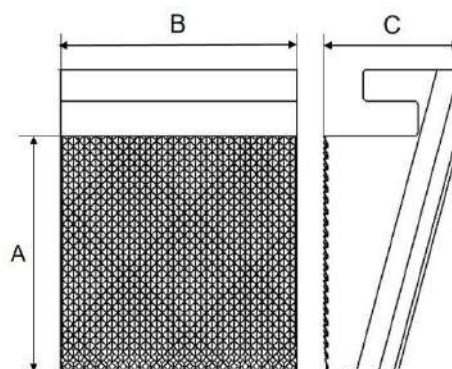
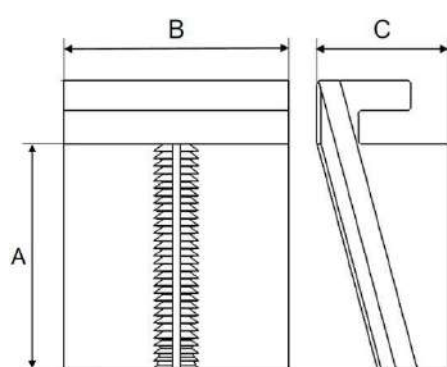
Specifications

Application	Tension test for metal, composite
Maximum force	≤100kN
Weight	
Upper grip	101kg
Lower grip	85kg
Height (H)	
Upper grip	840mm
Lower grip	554mm
Grip width (W)	238mm
Working temperature	-70°C ~ 350°C
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Specimen hardness	≤HRC24



Jaw faces (Optional)

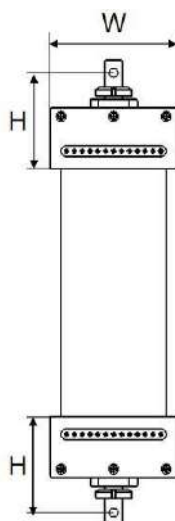
No.	Type	Specimen size mm	Height A mm	Width B mm	Thickness C mm
WXYC105G-16	VEE	$\Phi 4\text{-}\Phi 12$	65	50	35
WXYC105G-17	VEE	$\Phi 12\text{-}\Phi 20$	65	50	32
WXYC105G-18	Flat	0-12	65	50	34
WXYC105G-19	Flat	12-24	65	50	28



3. Tensile grip | Node tensile grip | WZTA502A

Specifications

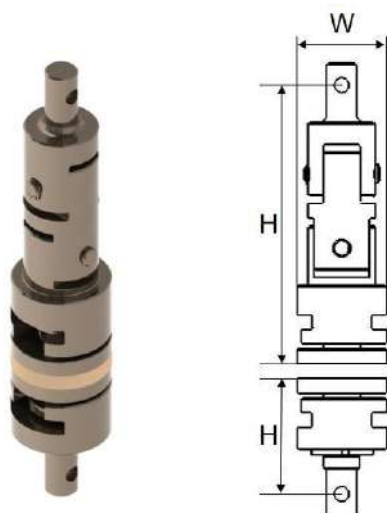
Application	Tension test for honeycomb core materials
Maximum force	500N
Weight	
Upper grip	1kg
Lower grip	1kg
Height (H)	
Upper grip	110mm
Lower grip	110mm
Grip width (W)	145mm
Working temperature	0°C~40°C
Standard	ASTM C363
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Specimen size	260(L)×130(W)×12(16)(T)
Pin diameter	Φ4.5mm
Clamping range	0~20mm



4. Tensile grip | Plane tensile grip | WZTB103A

Specifications

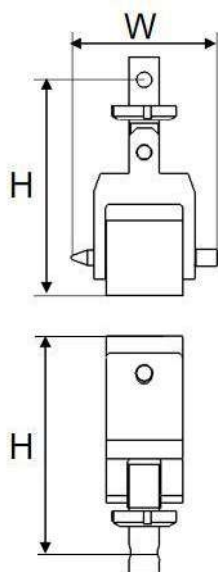
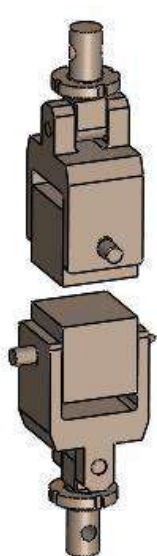
Application	Plane tension test for bonded honeycomb sandwich structure
Maximum force	1kN
Weight	
Upper grip	2.2kg
Lower grip	0.7kg
Height (H)	
Upper grip	188mm
Lower grip	78mm
Grip width (W)	60mm
Working temperature	-70°C~350°C
Standard	QJ 1123
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin



5. Tensile grip | Platwise tensile grip | WZJA104C

Specifications

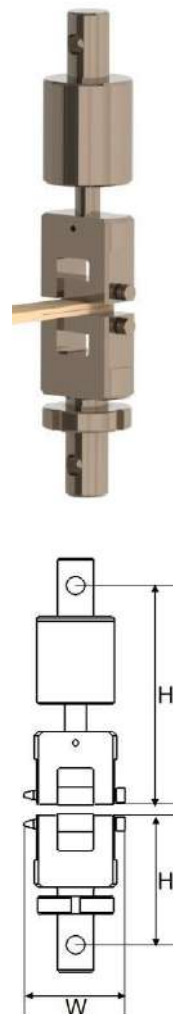
Application	Flatwise tension test for sandwich constructions
Maximum force	10kN
Weight	
Upper grip	2.2kg
Lower grip	2.2kg
Height (H)	
Upper grip	143mm
Lower grip	143mm
Grip width (W)	95mm
Working	0°C~40°C
Standard	ASTM C297
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Specimen size	50(H)mmx50(W)mm



6. Tensile grip | Loading block | WZJA202A

Specifications

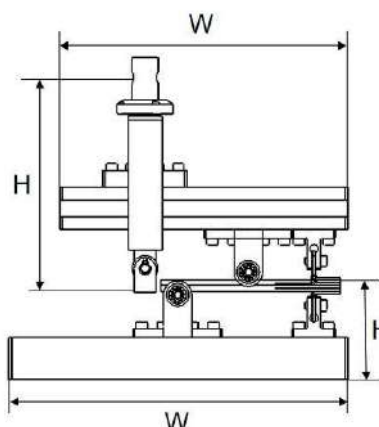
Application	Determination of mode I interlaminar fracture toughness of unidirectional fiber-reinforced polymer matrix composites
Maximum force	200N
Weight	
Upper grip	0.8kg
Lower grip	0.4kg
Height (H)	
Upper grip	121mm
Lower grip	72mm
Grip width (W)	55mm
Working temperature	0°C~40°C
Standard	ASTMD5528、ISO15024、
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Specimen size	125(L)mmx25(W)mm



7. Mixed mode I & II test fixture | WZJA502B

Specifications

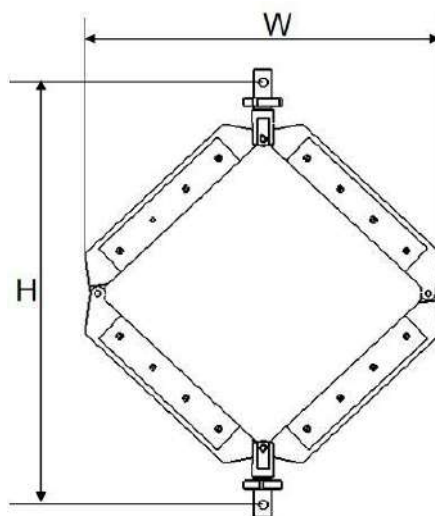
Application	Determination of mixed mode (mode I – mode II) interlaminar fracture toughness of unidirectional fiber-reinforced polymer matrix composites
Maximum force	500N
Weight	
Upper grip	1.7kg
Lower grip	4.2kg
Height (H)	
Upper grip	160mm
Lower grip	74mm
Width (W)	
Upper grip	216mm
Lower grip	254mm
Working temperature	0°C~40°C
Standard	ASTM D6671
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Specimen size	125 (L) mmx25(W)mm



8. Picture frame shear fixture | WZJA502A

Specifications

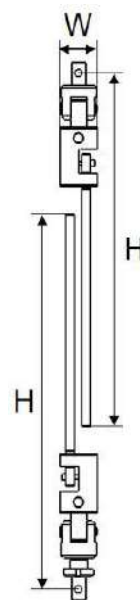
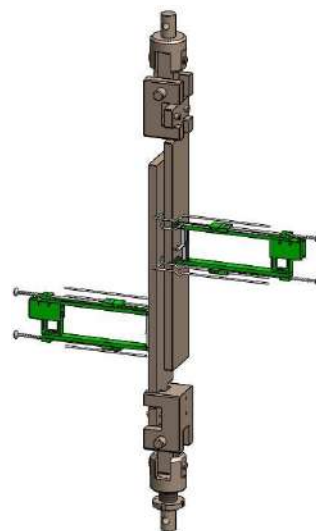
Application	Determination of in-plane shear strength and stiffness properties of flat sandwich constructions with composite face sheets
Maximum force	≤500N
Weight	1.3kg
Working temperature	-70°C~200°C
Standard	ASTM D8067
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (H)	469mm
Width (W)	392mm
Clamping range	0~5mm
Specimen size	180 (H) mmx180(W)mm



9. Tensile shear fixture | WZJA104D

Specifications

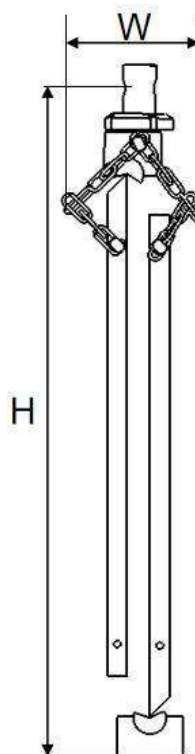
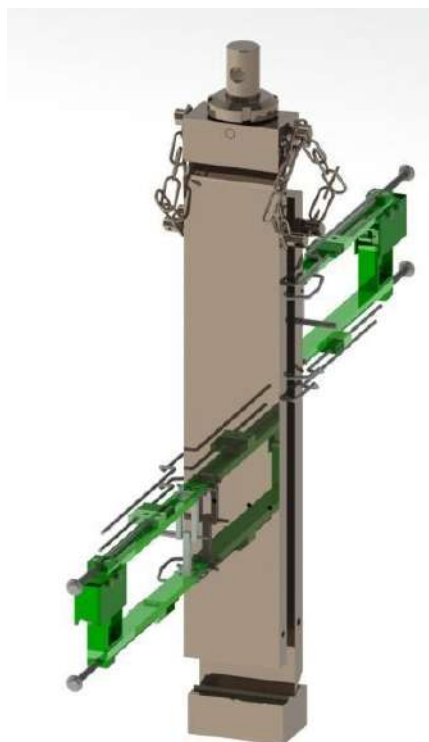
Application	Determination of shear properties of sandwich core materials
Maximum force	10kN
Weight	
Upper grip	3kg
Lower grip	3kg
Height (H)	
Upper grip	400mm
Lower grip	400mm
Grip width (W)	50mm
Working temperature	0°C~40°C
Standard	ASTM C273, GB/T 1455
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Clamping range	5~20mm
Clamping mode	Shoulder
Specimen size	150(H)mmx50(W)mm



10. Compression shear fixture | WZJB104C

Specifications

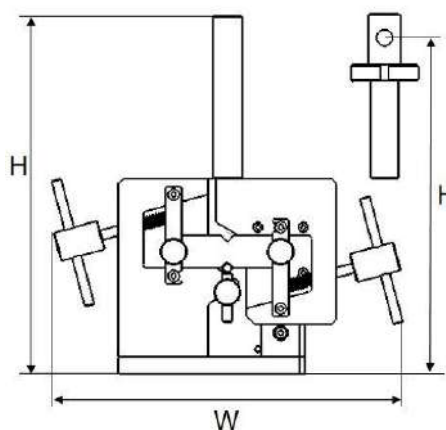
Application	Determination of shear properties of sandwich core materials
Maximum force	10kN
Weight	5kg
Height (H)	413mm
Grip width (W)	77mm
Working temperature	0°C~40°C
Standard	ASTM C273, GB/T 1455
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin



11. V-notched beam shear fixture | WZJB204E

Specifications

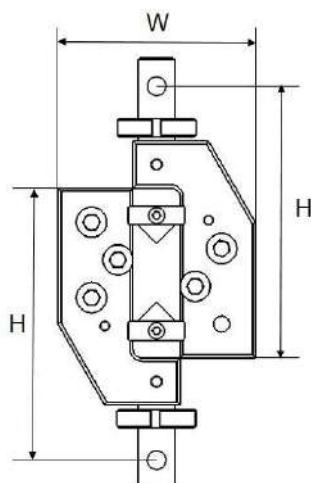
Application	Determination of shear properties of unidirectional laminates or fabric fiber composites
Maximum force	20kN
Weight	3.6kg
Height (H)	
Left	220mm
Right	206mm
Grip width (W)	215mm
Working temperature	-70°C~350°C
Standard	ASTM D5379
Connection	Φ10mm pin
Clamping range	0~6mm
Specimen size	76 (L)mm×19 (W)mm×(3~4)(T)mm



12. V-notched rail shear fixture | WZJB204F

Specifications

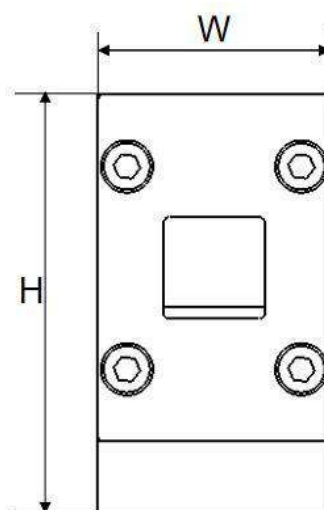
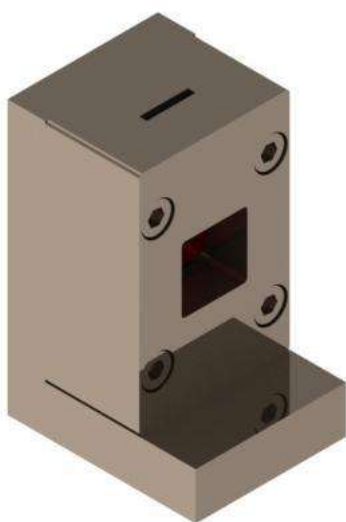
Application	Determination of shear properties of fiber reinforce composite materials
Maximum force	20kN
Weight	
Upper grip	1.7kg
Lower grip	1.7kg
Height (H)	
Upper grip	145mm
Lower grip	145mm
Grip width (W)	105mm
Working temperature	-70°C~350°C
Standard	ASTM D7078, GB/T28889
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Clamping range	1~6mm
Specimen size	76 (L)mm×56 (W)mm× (2~5)(T)mm



13. In-plane shear fixture | WZYB204F

Specifications

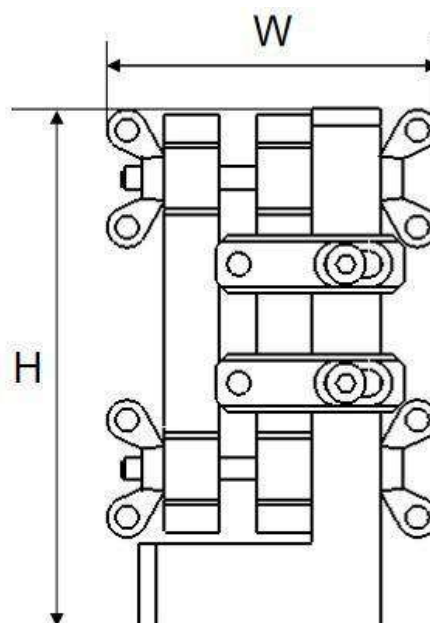
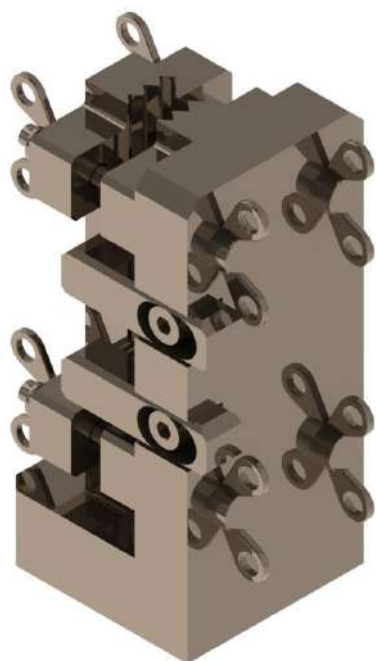
Application	In-plane shear test for fiber reinforce composite materials
Maximum force	20kN
Weight	5.9kg
Height (H)	145mm
Grip width (W)	80mm
Working temperature	-70°C~350°C
Standard	GB/T 5258 Type C
Specimen size	25 (L) mmx25 (W) mmx4~10 (T)



14. In-plane shear fixture | WZYB204J

Specifications

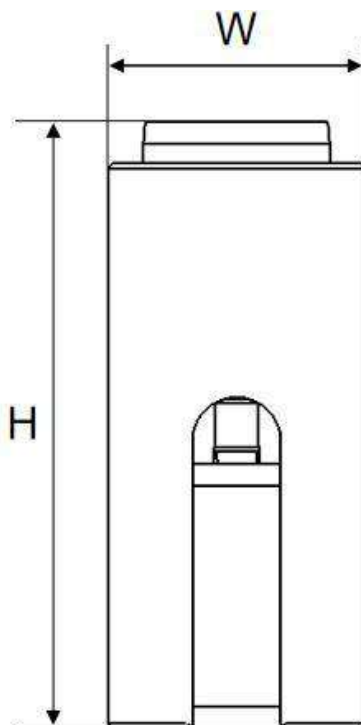
Application	In-plane shear test for fiber reinforce
Maximum force	20kN
Weight	0.8kg
Height (H)	90mm
Grip width (W)	60mm
Working temperature	-70°C~350°C
Standard	ASTM D695
Specimen size	75~80(L)mmx12.5(W)mmx2~6(T)mm



15. Wedge compression fixture | WZYB304K

Specifications

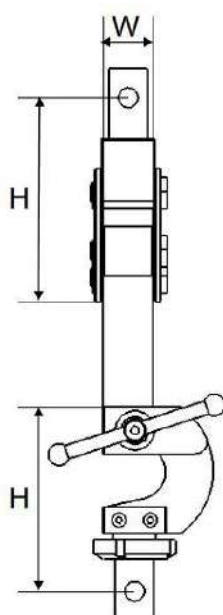
Application	In-plane compression test of polymer matrix composites
Maximum force	30kN
Weight	1.3kg
Height (H)	138mm
Grip width (W)	60mm
Working temperature	0°C~40°C
Standard	EN 2850 (Type AI) ISO14126 (Type A method 1)
Specimen size	110 (L) mmx10 (W) mmx2 (T)



16. Floating roller peel test fixture | WZBB202A

Specifications

Application	★★★
Maximum force	200N
Weight	
Upper grip	0.6kg
Lower grip	0.5kg
Height (H)	
Upper grip	105mm
Lower grip	95mm
Grip width (W)	25.4mm
Working temperature	0°C~40°C
Standard	ASTM D3167
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Clamping range	≤25.4mm



17. Climbing drum peel test fixture | WZBB303A

Specifications

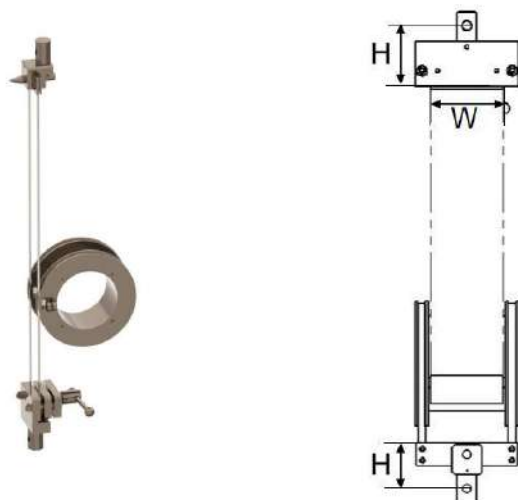
Application	Determination of the peel resistance of sandwich structure
Maximum force	3kN
Weight	
Upper grip	0.7kg
Lower grip	0.4kg
Height (H)	
Upper grip	64mm
Lower grip	48mm
Grip width (W)	108mm
Working temperature	0°C~40°C
Standard	ASTM D1781
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Drum diameter	Ø102



18. Climbing drum peel test fixture | WZBB303F

Specifications

Application	Determination of the peel resistance of sandwich structure
Maximum force	3kN
Weight	
Upper grip	0.7kg
Lower grip	0.4kg
Height (H)	
Upper grip	64mm
Lower grip	48mm
Grip width (W)	108mm
Working temperature	0°C~40°C
Standard	GB/T 1457
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Drum diameter	Ø100

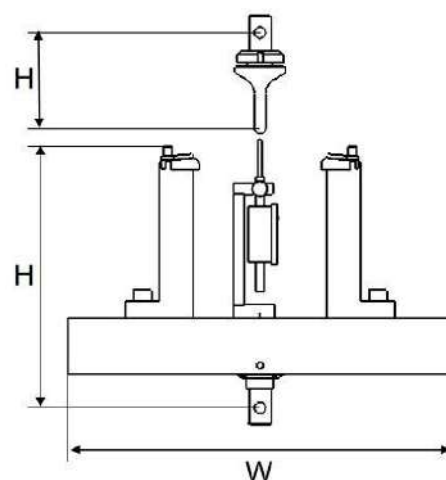
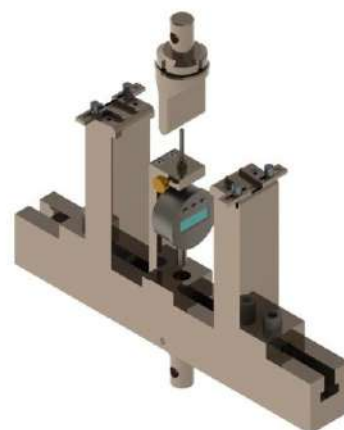


19. 3-point bending fixture | WZWA104A

Specifications

Application	Three-point bending test of polymer matrix composite materials and reinforced plastic samples
Maximum force	10kN
Weight	
Upper grip	0.5kg
Lower grip	9.2kg
Height (H)	
Upper grip	90mm
Lower grip	232mm
Grip width (W)	340mm
Working temperature	0°C~40°C
Standard	ASTMD7264、ISO14125、GB/T 9341
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (adjustable)	10~200mm
Loading nose	R5mm
Support roller	R2, R5mm

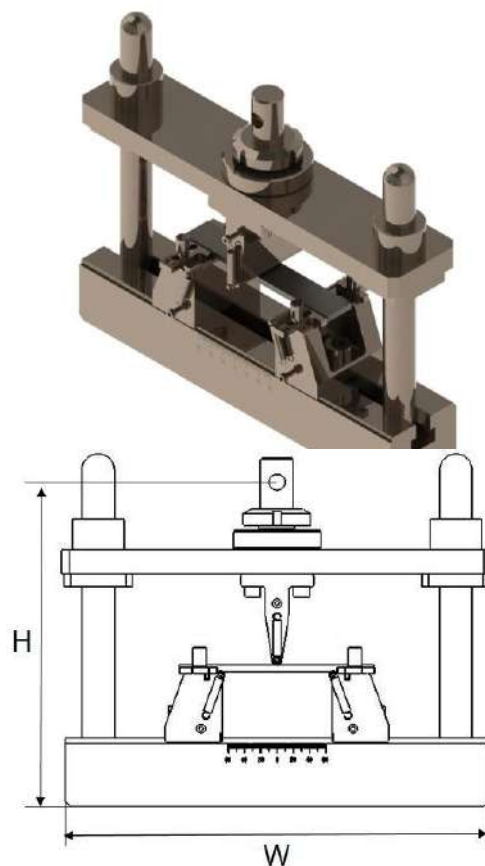
Note: the bending deformation of the samples can be directly measured with an optional digital indicator and other devices.



20. Short-beam shear test fixture | WZWA204D

Specifications

Application	Determination of interlaminar shear strength of high-modulus fiber-reinforced composite materials
Maximum force	20kN
Weight	8.9kg
Height (H)	200mm
Grip width (W)	260mm
Working temperature	-70°C~350°C
Standard	ASTM D2344, ISO14130 EN 2563, EN 2377, JC/T 773
Connection	Φ10mm pin
Specimen width	≤40mm
Span (adjustable)	6mm~50mm
Loading nose	R3mm
Support	R1.5mm



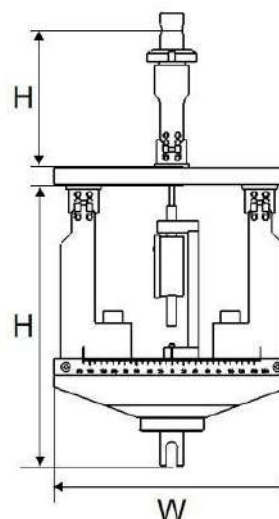
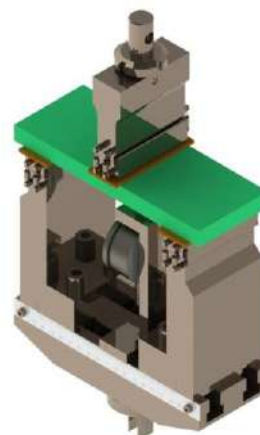
Optional spare parts

No.	Description	Radius mm
WZWA204D-14	Support roller2	R3
WZWA204D-15	Loading nose	R5

21. 3-point bending fixture | WZWA204E

Specifications

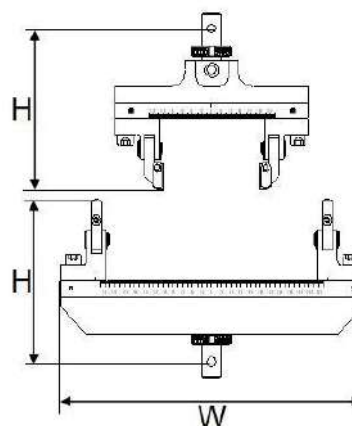
Application	Determination of shear properties of sandwich constructions of composite materials
Maximum force	20kN
Weight	
Upper grip	1.4kg
Lower grip	10.3kg
Height (H)	
Upper grip	117mm
Lower grip	240mm
Grip width (W)	200mm
Working temperature	0°C~40°C
Standard	ASTM C393
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (adjustable)	150mm
Specimen size	200 (L) mmx75 (W) mm
Note: the bending deformation of the samples can be directly measured with an optional digital indicator and other devices.	



22. 3/4-point bending fixture | WZWC204A

Specifications

Application	Determination of flexural properties of fiber-reinforced plastic composites
Maximum force	20kN
Weight	7kg
Height (H)	
Upper grip	154mm
Lower grip	220mm
Grip width (W)	310mm
Working temperature	0°C~40°C
Standard	ASTM D7264, ASTM D6272, ISO 14125
Support width	40mm
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Upper span	30~200mm
Lower span	30~280mm
Loading nose and support roller (3-point bending)	R3mm, R5mm
Loading nose and support roller (4-point bending)	R3mm
Note: the bending deformation of the samples can be directly measured with an optional digital indicator and other devices.	



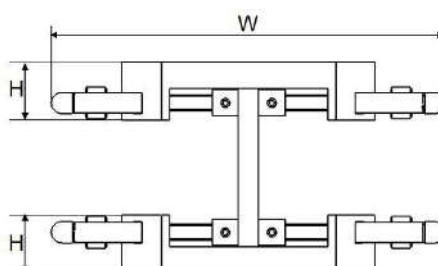
Optional spare parts

No.	Description	Radius mm
WZWC204A-02	Suppot	R2
WZWC204A-14	Support roller	R2

23. Edgewise compression fixture | WZYB303A

Specifications

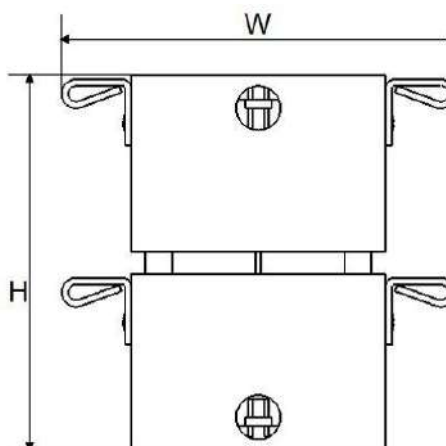
Application	Determination of edgewise compressive strength of sandwich constructions of composite
Maximum force	3kN
Weight	
Upper grip	0.9kg
Lower grip	0.9kg
Height (H)	
Upper grip	22mm
Lower grip	22mm
Grip width (W)	150mm
Working temperature	0°C~40°C
Standard	ASTM C364
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Clamping range	0~40mm
Specimen size	≥40(L)mm x ≤75(W)mm x ≤40(T)mm



24. Wedge compression fixture | WZYB204A

Specifications

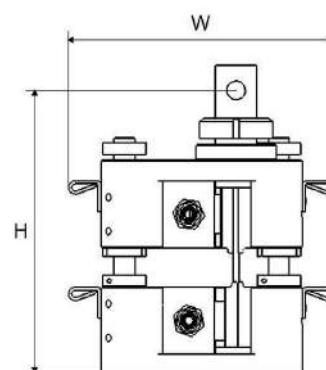
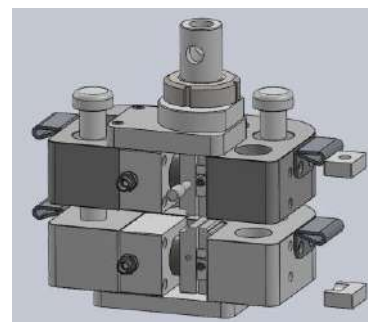
Application	Determination of compressive properties of polymer matrix composite materials
Maximum force	20kN
Weight	9.2kg
Height (H)	200mm
Grip width (W)	115mm
Working	-70°C~350°C
Standard	ASTM D3410, GB/T 5258 type A2
Clamping range	0~8mm
Specimen size	140(L)mm x 12(W)mm x 1~2(T)mm 110(L)mm x 10(W)mm x 2(T)mm



25. Hydraulic compression fixture | WZYB105C

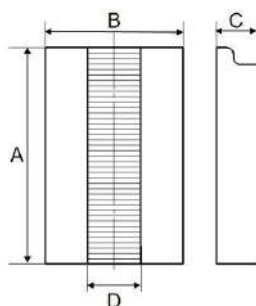
Specifications

Application	Determination of compressive properties of polymer matrix composite materials
Maximum force	100kN
Weight	32kg
Height (H)	302mm
Grip width (W)	230mm
Working temperature	0°C~40°C
Standard	ASTM D6641, ASTM D3410, ISO 14126, GB/T5258
Connection	Φ18mm pin
Flat jaw	2-10mm
Specimen hardness	Less than HRC24



Jaw face (Optional)

No.	Description	Height A mm	Width B mm	Thickness C mm	Specimen width D mm
WZYB105A-08	Fixed jaw face 2	63.5	40	12	10
WZYB105A-09	Fixed jaw face 3	63.5	40	12	12

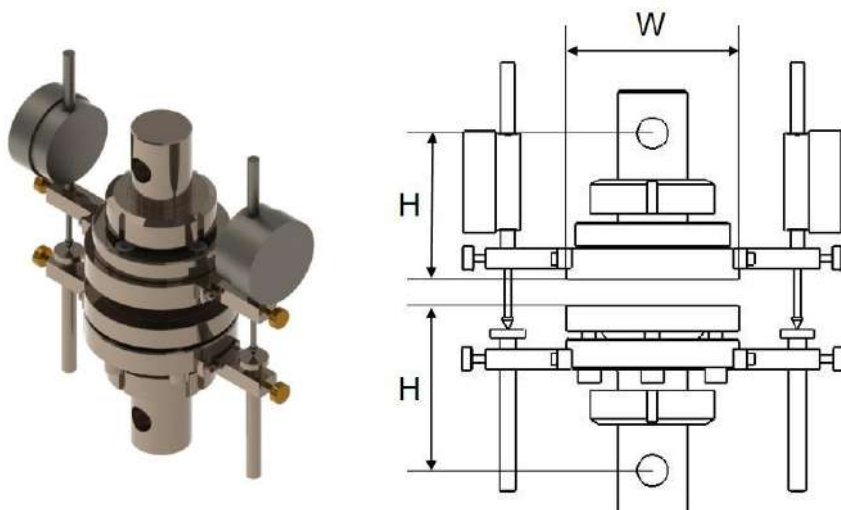


Jaw face

26. Compression fixture | WYA105G

Specifications

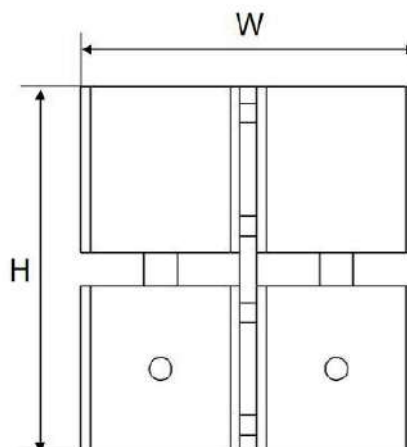
Application	Compression test for composite materials
Maximum force	100kN
Weight	
Upper grip	3.3kg
Lower grip	3.3kg
Height (H)	
Upper grip	85mm
Lower grip	96mm
Grip width (W)	Φ100mm
With spherical seat	Yes
Working temperature	0°C~40°C
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Note: the compression deformation of the samples can be directly measured with optional digital indicators and other devices.	



27. In-plane Compression fixture | WZYB204H

Specifications

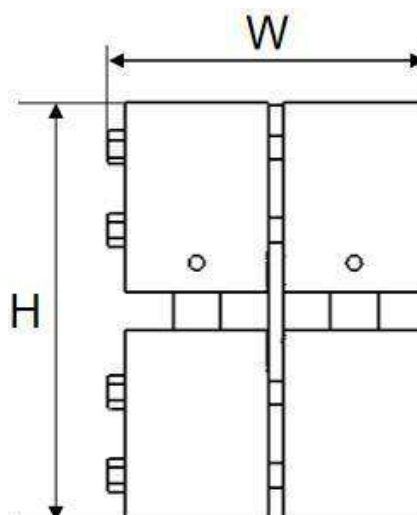
Application	Determination of in-plane compression properties of fiber-reinforced plastic
Maximum force	20kN
Weight	3.9kg
Height (H)	110mm
Grip width (W)	101mm
Working temperature	Ambient~80°C
Standard	GB/T 5258
Specimen size	110(L)mm x 10(W)mm x 2~10(T)mm



28. Compression fixture | WZYB204I

Specifications

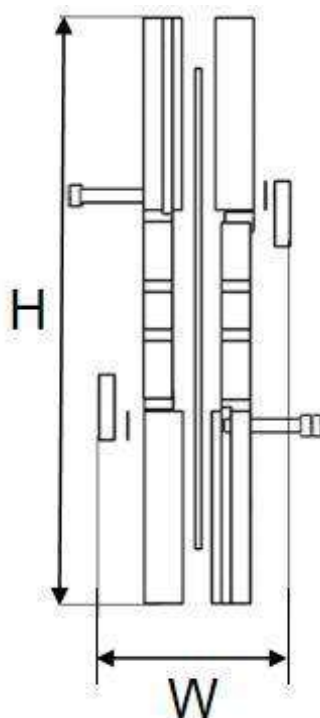
Application	Determination of compressive properties of polymer matrix composite materials
Maximum force	20kN
Weight	5.2kg
Height (H)	140mm
Grip width (W)	100mm
Working temperature	-70°C~350°C
Standard	ASTM D6641
Specimen size	140(L)mm x 12(W)mm x 1~4(T)mm
Clamping range	0~12.7mm



29. Open-hole compression fixture | WZYA104A

Specifications

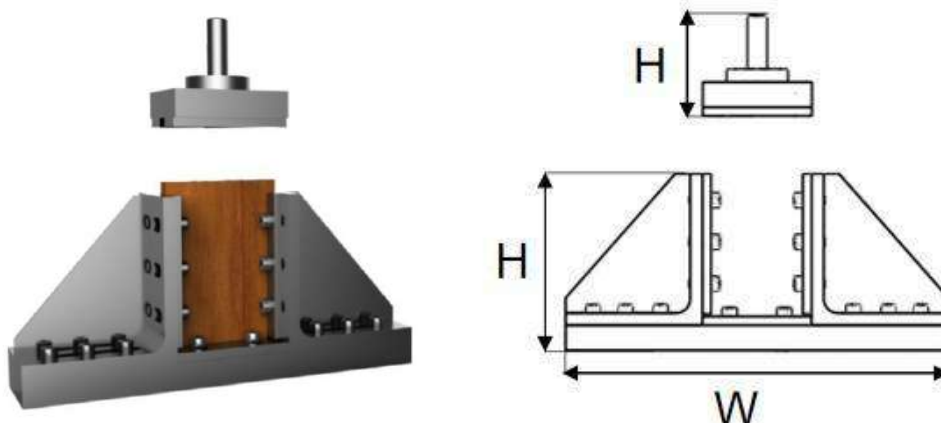
Application	Determination of open-hole compressive strength of of polymer matrix composite
Maximum force	≤10kN
Weight	4.8kg
Height (H)	300mm
Grip width (W)	100mm
Working temperature	-70℃~350℃
Standard	ASTM D5961、ASTM D6484
Specimen size	300 (L) mm x 36 (W) mm x 4 (T)



30. Compression fixture after impact | WZYB104A

Specifications

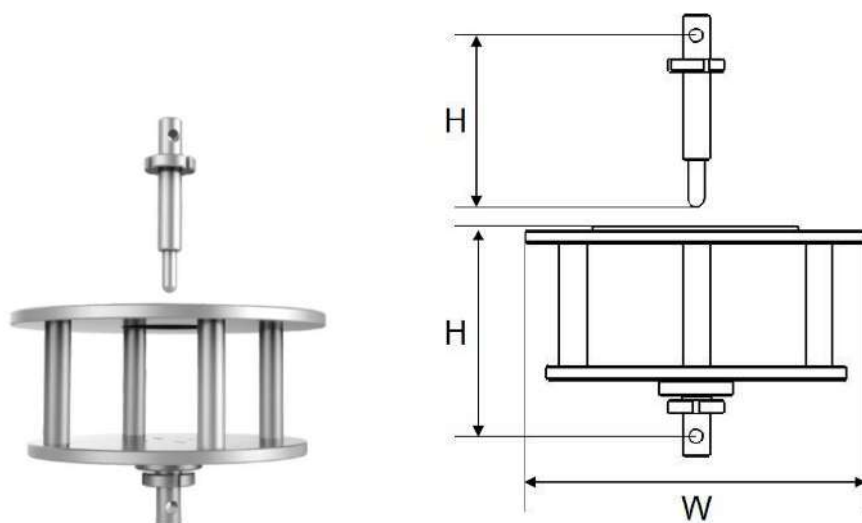
Application	Determination of compressive residual strength properties of damaged polymer matrix composite plates
Maximum force	$\leq 10\text{kN}$
Weight	
Upper grip	1.8kg
Lower grip	9.5kg
Height (H)	
Upper grip	95mm
Lower grip	160mm
Grip width (W)	350mm
Working temperature	$-70^{\circ}\text{C} \sim 350^{\circ}\text{C}$
Standard	ASTM D7137
Specimen size	150(H) mm x 100(W)mm x 4~6(T)mm
Clamping range	0~18mm



31. Puncture fixture | WZDP502E

Specifications

Application	Determination of puncture resistance for carbon fiber-reinforced plastic
Maximum force	≤500N
Weight	8.5kg
Height (H)	
Upper grip	126mm
Lower grip	155mm
Grip width (W)	250mm
Working temperature	-70°C~350°C
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Specimen diameter	≤Φ250mm
Specimen thickness	0~18mm
Probe diameter	Φ12mm

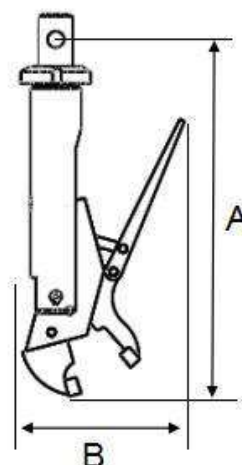


XIII Other grips and fixtures

1.Side action grip | WDSB502A

Specifications

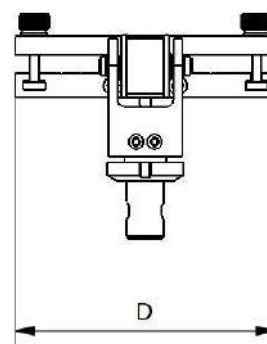
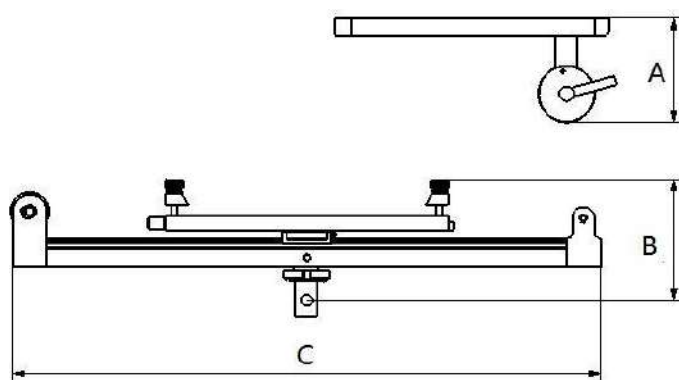
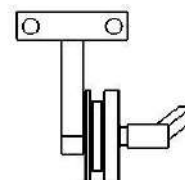
Application	Tension test of sponge sample and tear test of sole and upper of shoe.
Maximum force	≤500N
Weight	
Height (H)	1kg
Upper grip	1kg
Lower grip	
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	250mm
Width (B)	100mm
Jaw face width for sponge specimen	30mm
Jaw face width for the upper of shoe	40mm



2.90°peeling fixture | WZBA502A

Specifications

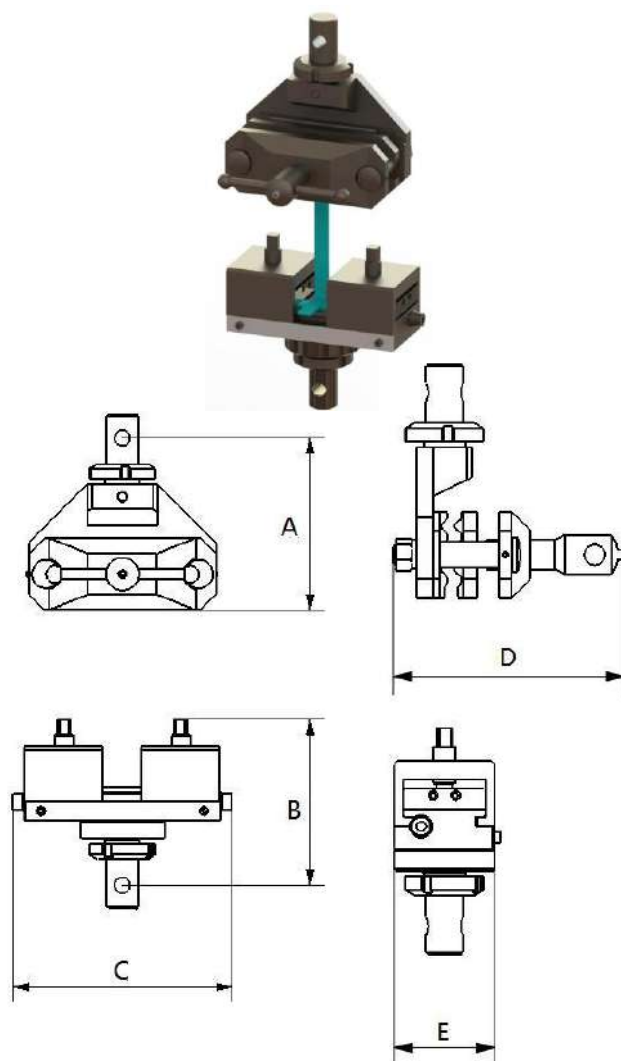
Application	Determination of peel adhesion properties for adhesive tapes
Maximum force	≤500N
Weight	3.66kg
Working temperature	Ambient
Standard	GB/T 2792, ISO 29862
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	92mm
Lower grip (B)	106mm
Base length (C)	520mm
Base width (D)	140mm



3. Peeling fixture | WZBB103A

Specifications

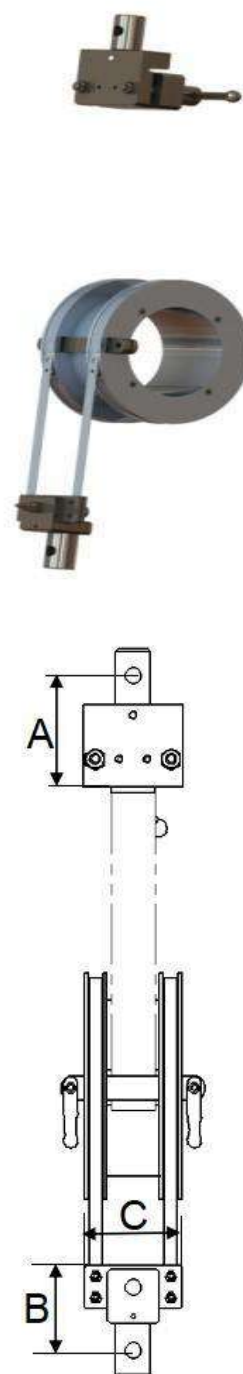
Application	Peeling test for geogrid
Maximum force	≤1kN
Weight	
Upper grip	2.23kg
Lower grip	2.29kg
Working temperature	Ambient
Standard	JTG E50
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	110mm
Lower grip (B)	106mm
Grip length (C)	140mm
Width	
Upper grip (D)	124mm
Lower grip (E)	54mm



4.Climbing drum peel test fixture | WZBG103A

Specifications

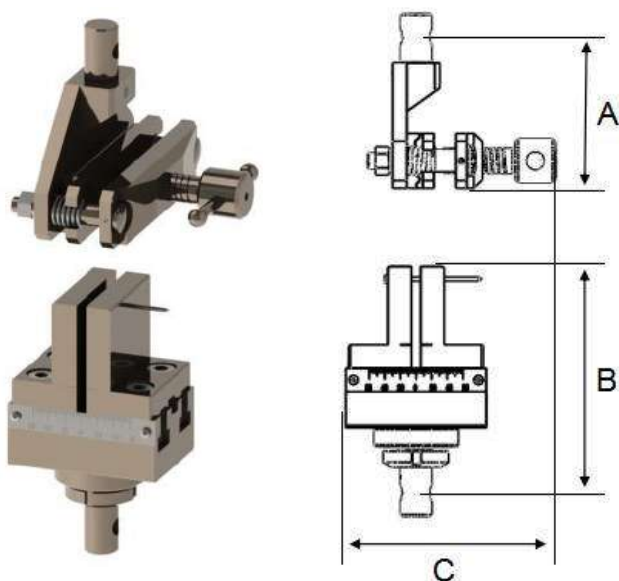
Application	Determination of the peel resistance of sandwich structure
Maximum force	≤1kN
Weight	
Upper grip	0.8kg
Lower grip	0.3kg
Working	Ambient
Standard	GB/T17748
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	67mm
Lower grip (B)	47.5mm
Width (C)	30mm



5.Tear fixture | WZDA502A

Specifications

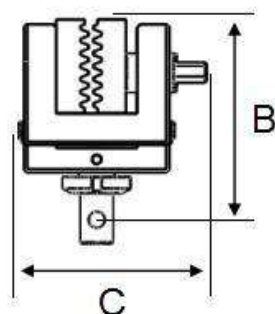
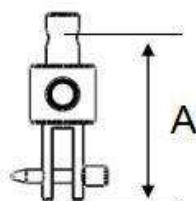
Application	Tear test for waterproof roll
Maximum force	≤500N
Weight	
Upper grip	2.1kg
Lower grip	3kg
Working temperature	Ambient
Standard	GB/T 328.18
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	97mm
Lower grip (B)	145mm
Width (C)	140mm



6.Tensile grip of eyes open buckle | WZDA204A

Specifications

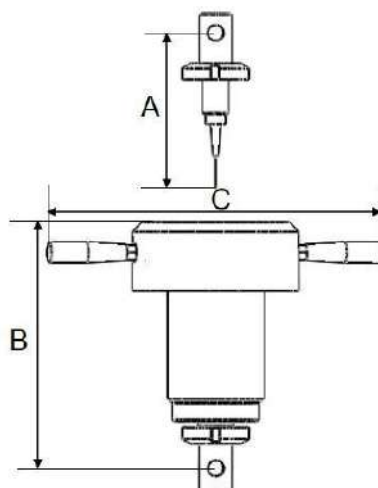
Application	Tension test for safety nets
Maximum force	≤20kN
Weight	
Upper grip	1kg
Lower grip	13kg
Working	Ambient
Standard	GB/T 5725-2009
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	101mm
Lower grip (B)	125mm
Width (C)	125mm



7.Puncture fixture of plastic film | WZDP502A

Specifications

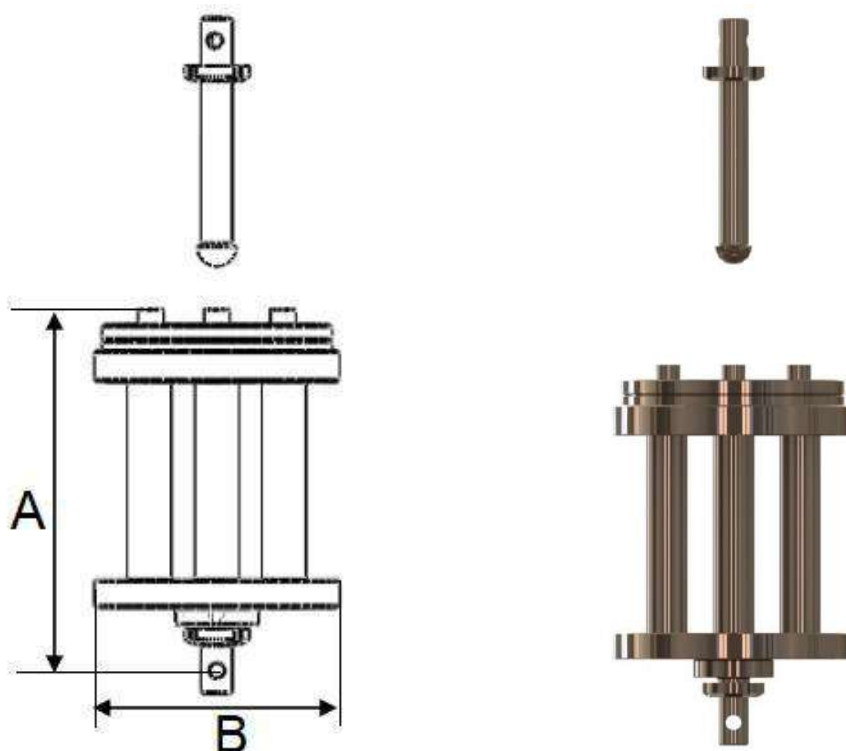
Application	Determination of puncture resistance properties of plastic film
Maximum force	≤500N
Weight	
Upper grip	0.21kg
Lower grip	3.07kg
Working temperature	Ambient
Standard	GB/T 21302-2007
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	100mm
Lower grip (B)	155mm
Width (C)	215mm
Inner diameter	Φ50mm
Probe	Φ1mm



8. Puncture fixture of non-woven fabric | WZDP103A

Specifications

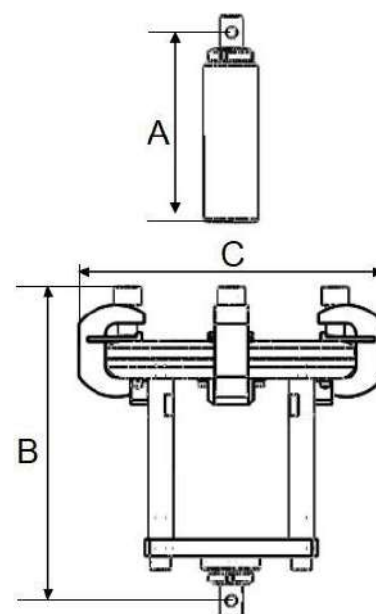
Application	Determination of bursting strength of textiles
Maximum force	≤1kN
Weight	10kg
Working temperature	Ambient
Standard	GB/T 19976-2005
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	250mm
Width (B)	160mm
Probe	Φ25mm, Φ38mm



9. Puncture fixture of geotextiles | WZDP503A

Specifications

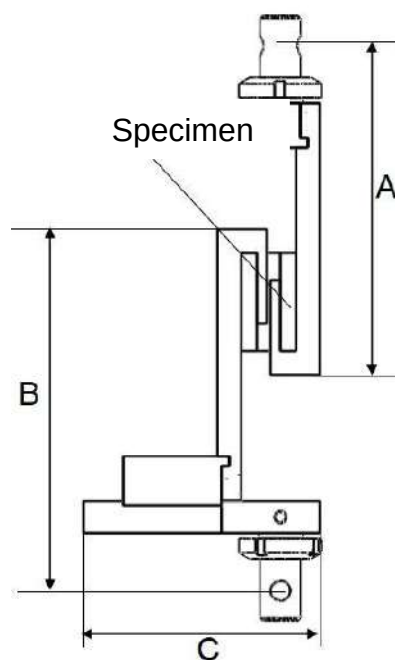
Application	Determination of puncture resistance properties of geotextiles
Maximum force	≤5kN
Weight	
Upper grip	2.4kg
Lower grip	15kg
Working	Ambient
Standard	GB/T 14800-2010, ISO 12236
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	175mm
Lower grip (B)	290mm
Width (C)	282mm
Inner diameter	Φ150mm, Φ50mm
Plunger	Φ50mm, Φ8mm



10. Shear fixture | WZJA203A

Specifications

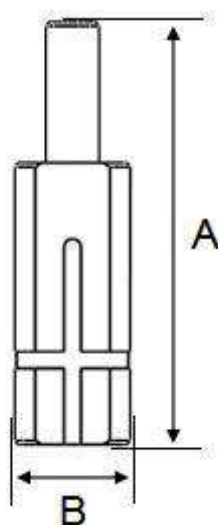
Application	Shear test for silicone sealants
Maximum force	≤2kN
Weight	
Upper grip	1kg
Lower grip	2kg
Working temperature	-20°C~+80°C
Standard	JGT 475-2015
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	168mm
Lower grip (B)	184mm
Width (C)	111mm



11. Tensile grip | WZJA203D

Specifications

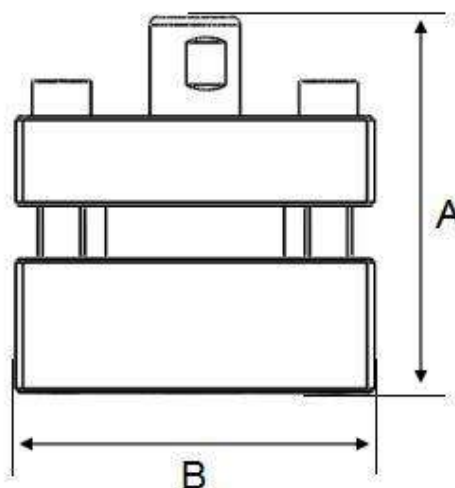
Application	Tension test for welded joint of steel wire
Maximum force	≤2kN
Weight	
Upper grip	1kg
Lower grip	1kg
Working temperature	Ambient
Standard	GB/T 33281-2016,GB/T26941.3
Height (A)	150mm
Height (B)	40mm
Specimen diameter	Φ0.5~Φ5mm



12. Shear fixture | WZJB104A

Specifications

Application	Shear test for aluminium-plastic composite Panel
Maximum force	≤10kN
Weight	3.9kg
Working temperature	Ambient
Standard	GB/T 17748
Height (A)	107mm
Height (B)	102mm
Specimen size	Longitudinal length≤100mm



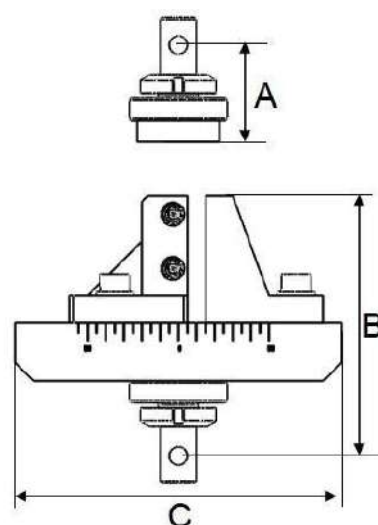
13. Compression shear fixture | WZJB104B

Specifications

Application	Compression shear test for adhesives of ceramic tiles
Maximum force	≤10kN
Weight	
Upper grip	0.8kg
Lower grip	7kg
Working temperature	Ambient
Standard	JC/T547-2005
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	55mm
Lower grip (B)	145mm
Width (C)	180mm



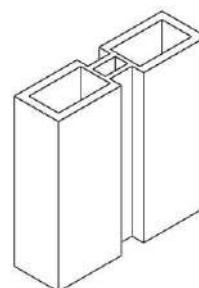
Specimen



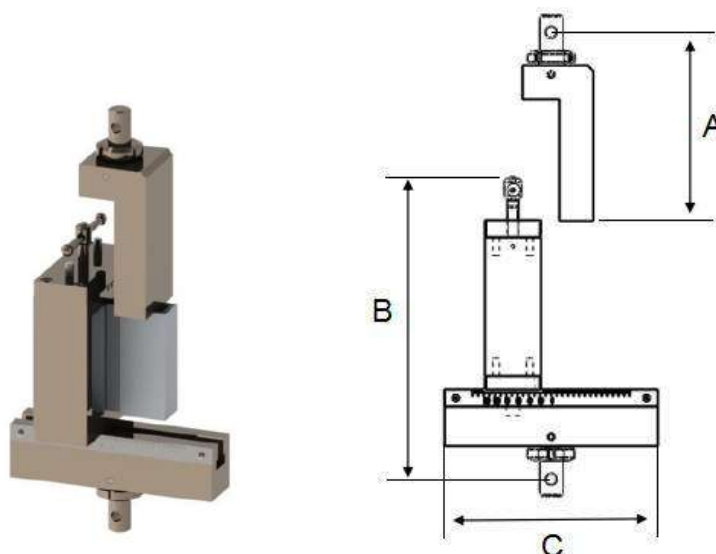
14. Longitudinal shear fixture | WZJB204A

Specifications

Application	Shear test for aluminum alloy thermal barrier profiles
Maximum force	≤20kN
Weight	
Upper grip	3kg
Lower grip	6.5kg
Working	Ambient
Standard	GB/T 28289-2012
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	168mm
Lower grip (B)	269mm
Width (C)	190mm
Specimen size	Longitudinal length≤100mm



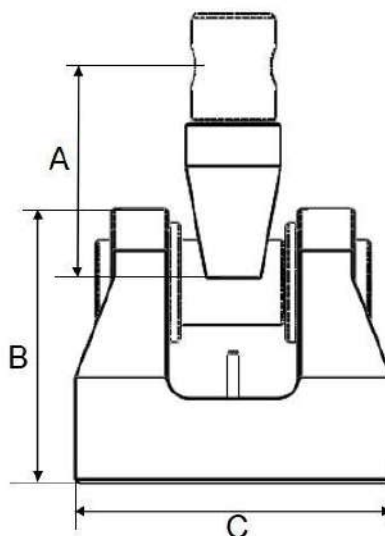
Specimen



15. Shear fixture | WZJB105A

Specifications

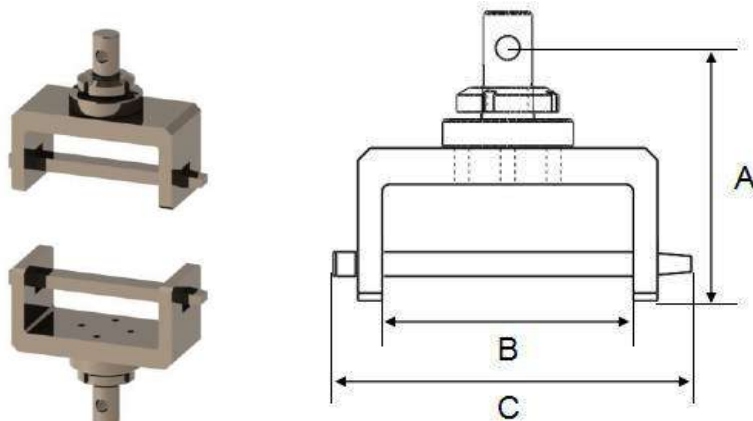
Application	Shear test for steel wire & rope
Maximum force	≤100kN
Weight	
Upper grip	1.69kg
Lower grip	10.63kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	97mm
Lower grip (B)	145mm
Width (C)	150mm
Specimen size	Φ4, Φ5, Φ6, Φ8



16. Tensile fixture | WZTA204A

Specifications

Application	Tension test for aluminum alloy profiles
Maximum force	≤20kN
Weight	
Upper grip	1.8kg
Lower grip	1.8kg
Working temperature	Ambient
Standard	GB/T 28289-2012
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height (A)	105mm
Test width (B)	104mm
Grip width (C)	148mm

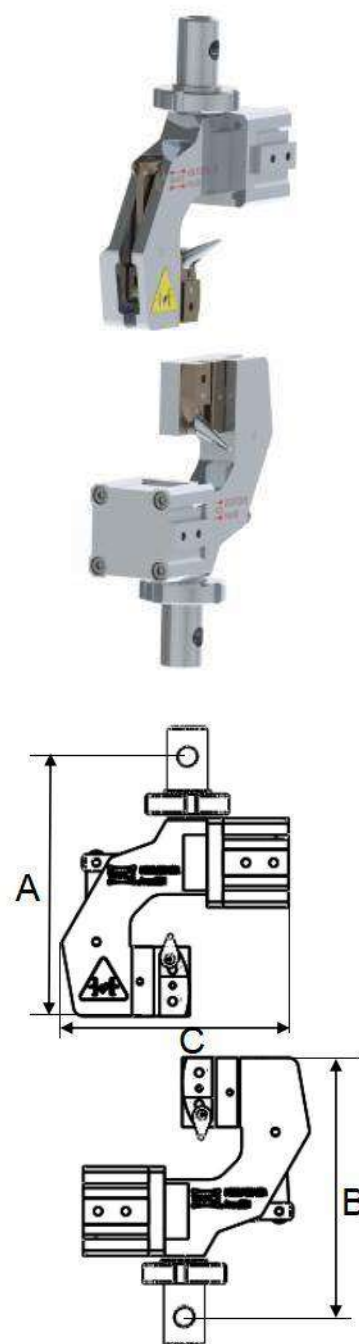


XIV WANCE TestStar® grips & fixtures

1. Pneumatic tensile grip | Snubbing | FCQA502A

Specifications

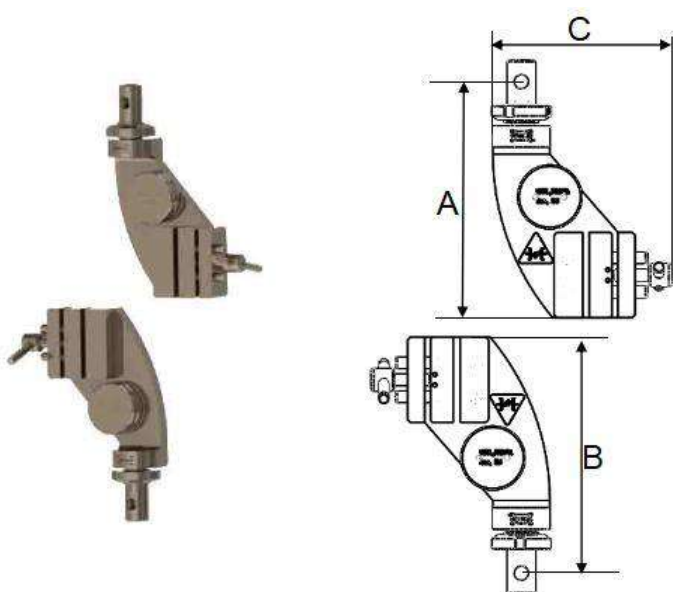
Application	Tension test for filament
Maximum force	≤500N
Grip weight	
Upper grip	0.56kg
Lower grip	0.56kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	140mm
Lower grip (B)	140mm
Width (C)	115mm
Specimen size	≤Φ1.5mm



2. Tensile grip | Manual snubbing | FCH203A

Specifications

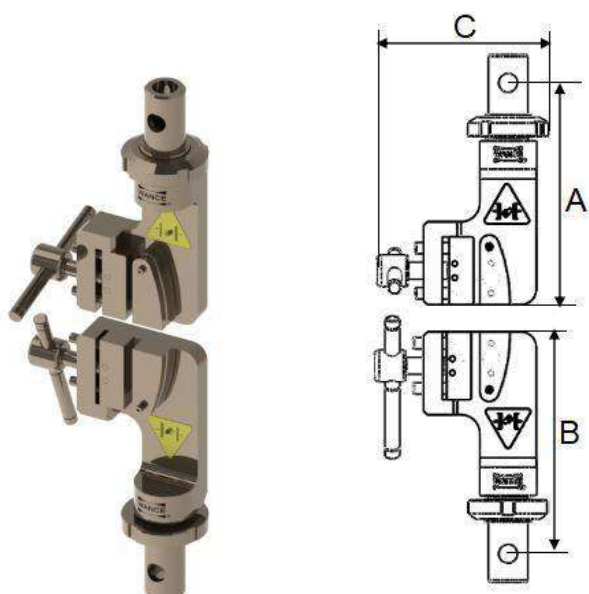
Application	Tension test for glass fiber, cotton thread, nylon cord
Maximum force	≤2kN
Grip weight	
Upper grip	1.7kg
Lower grip	1.7kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	165mm
Lower grip (B)	165mm
Grip width (C)	125mm
Specimen size	<500tex



3. Tensile grip | Snubbing | FCB502B

Specifications

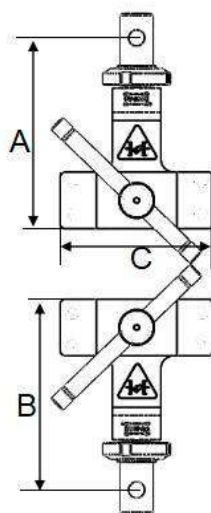
Application	Tension test for steel wire
Maximum force	≤500N
Grip weight	
Upper grip	0.7kg
Lower grip	0.7kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	115mm
Lower grip (B)	115mm
Grip width (C)	90mm
Jaw face	36 (H) mmx10 (W) mm
Specimen diameter	≤Φ1.5mm



4. Tensile grip | Side action | FDSD503A

Specifications

Application	Tension test for textile
Maximum force	≤5kN
Grip weight	
Upper grip	1.73kg
Lower grip	1.73kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	120mm
Lower grip (B)	120mm
Grip width (C)	95mm
Wave-profile jaw face	95mmx35mm
Specimen thickness	≤14mm

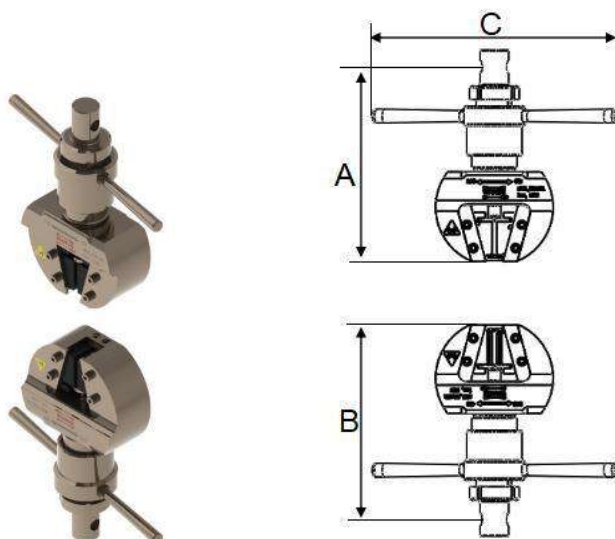


5. Wedge tensile grip | Wedge action | FXSA105A

Specifications

Application	Tension test for flat and round specimen of metal, composite
Maximum force	≤100kN
Grip weight	
Upper grip	15.3kg
Lower grip	15.3kg
Working temperature	Ambient
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height	
Upper grip (A)	290mm
Lower grip (B)	290mm
Grip width (C)	370mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa



Flat jaw faces (Optional)

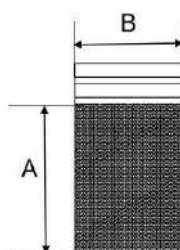
No.	Specimen thickness mm	Height A mm	Width B mm
FXSA105A-13	0~7	50	40
FXSA105A-14	7~14	50	40
FXSA105A-15	14~21	50	40

Note: All jaw faces' pitch is 1.5mm

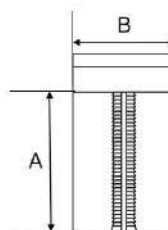
Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
FXSA105A-16	Φ4~9	50	40
FXSA105A-17	Φ9~14	50	40
FXSA105A-18	Φ14~19	50	40

Note: All jaw faces' pitch is 1.5mm



Flat jaw face



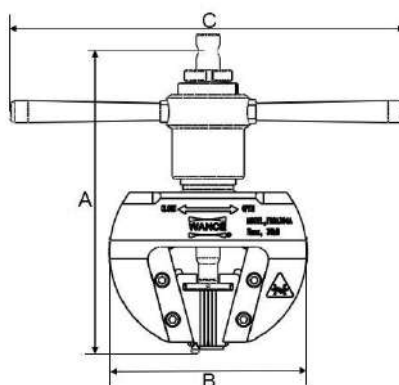
Vee jaw face

6. Wedge tensile grip | Wedge action | FXSA304A

Specifications

Application	Tension test for flat and round specimen of metal, composite
Maximum force	≤30kN
Grip weight	
Upper grip	13.5kg
Lower grip	13.5kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	255mm
Lower grip (B)	175mm
Grip width (C)	350mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa



Flat jaw faces (Optional)

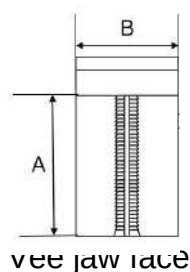
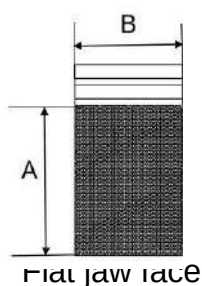
No.	Specimen thickness mm	Height A mm	Width B mm
FXSA105A-13	0~7	50	40
FXSA105A-14	7~14	50	40
FXSA105A-15	14~21	50	40

Note: All jaw faces' pitch is 1.5mm

Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
FXSA105A-16	Φ4~9	50	40
FXSA105A-17	Φ9~14	50	40
FXSA105A-18	Φ14~19	50	40

Note: All jaw faces' pitch is 1.5mm

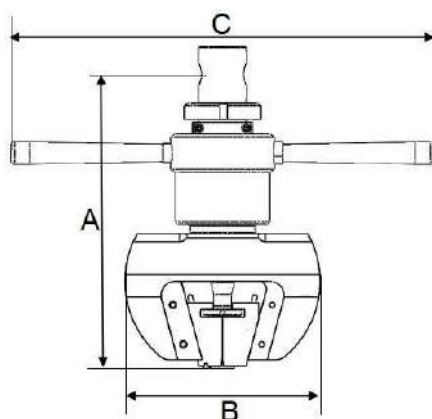


7. Wedge tensile grip | Wedge action | FXSA305A

Specifications

Application	Tension test for flat and round specimen of metal, composite
Maximum force	≤300kN
Grip weight	
Upper grip	38.5kg
Lower grip	38.5kg
Working temperature	Ambient
Connection	
Upper grip	Φ28
Lower grip	Φ28
Height (A)	348mm
Grip body width (B)	248mm
Overall width (C)	538mm

Note: Specimen hardness below 30HRC and tensile strength below 600MPa



Flat jaw faces (Optional)

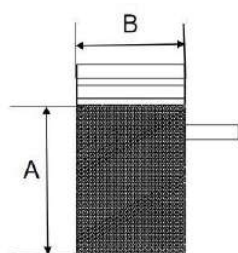
No.	Specimen thickness mm	Height A mm	Width B mm
FXSA305A-13	0~8	62	50
FXSA305A-14	8~16	62	50
FXSA305A-15	16~24	62	50
FXSA305A-16	24~32	62	50

Note: All jaw faces' pitch is 2.0mm

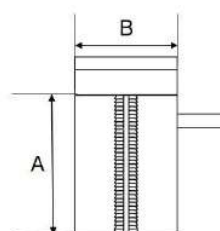
Vee jaw faces (Optional)

No.	Specimen diameter mm	Height A mm	Width B mm
FXSA305A-17	Φ4~9	62	50
FXSA305A-18	Φ9~16	62	50
FXSA305A-19	Φ16~23	62	50
FXSA305A-20	Φ23~30	62	50

Note: All jaw faces' pitch is 2.0mm



Flat jaw face

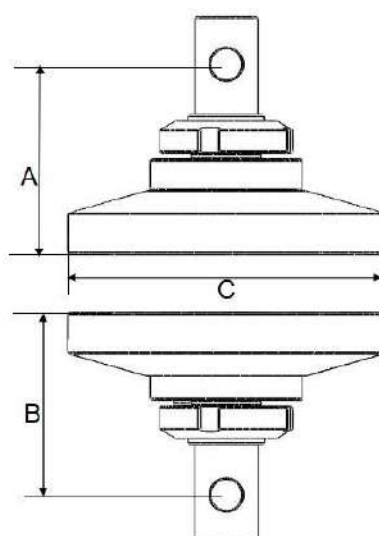


Vee jaw face

8. Wedge action | FYA204A

Specifications

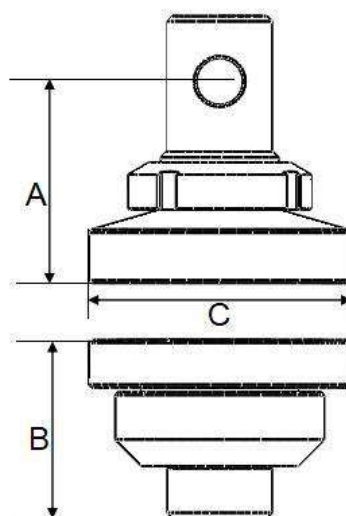
Application	Compression test for concrete, metal, plastic,
Maximum force	≤20kN
Grip weight	
Upper grip	1.4kg
Lower grip	1.4kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	70mm
Lower grip (B)	60mm
Diameter (C)	100mm



9. Compression fixture | FYA105A

Specifications

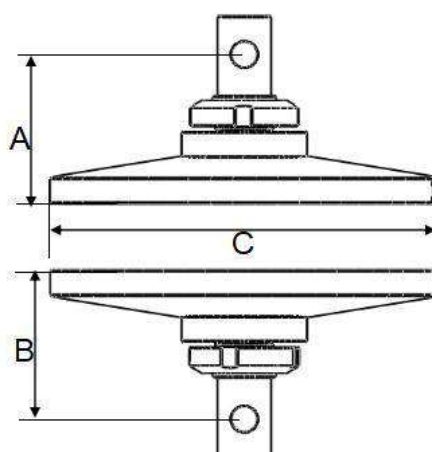
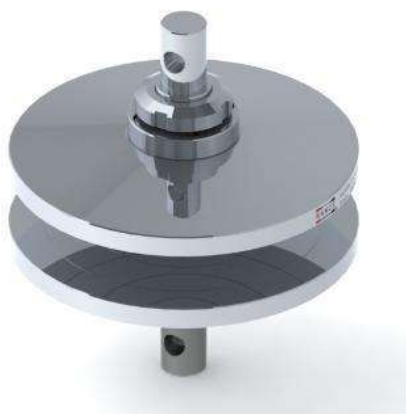
Application	Compression test for concrete, metal, plastic, composite etc
Maximum force	≤100kN
Grip weight	
Upper grip	2.5kg
Lower grip	2.4kg
Working temperature	Ambient
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height	
Upper grip (A)	75mm
Lower grip (B)	68mm
Diameter (C)	100mm
Sphere seated	Yes



10. Compression fixture | FYC502A

Specifications

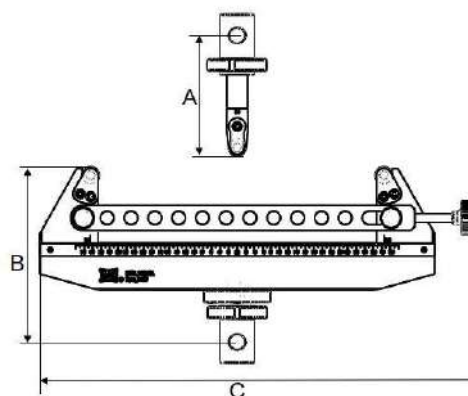
Application	Compression test for non-metallic material
Maximum force	≤500N
Grip weight	
Upper grip	1.5kg
Lower grip	1.5kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	55mm
Lower grip (B)	60mm
Diameter (C)	150mm



11. Bending fixture | 3-point bending | FWA105A

Specifications

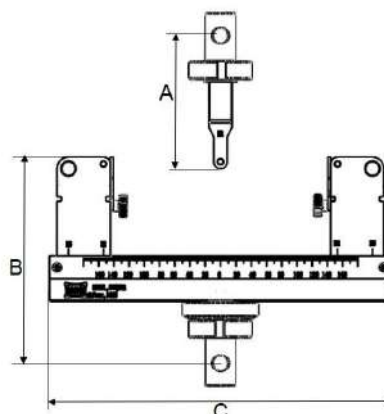
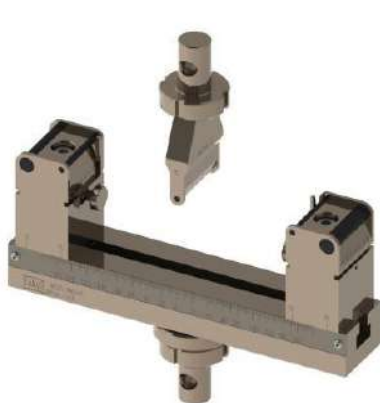
Application	Bending test for flat and round metallic specimens
Maximum force	≤100kN
Grip weight	
Upper grip	0.3kg
Lower grip	3.1kg
Working temperature	Ambient
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Span (Adjustable)	≤360mm
Height	
Upper grip (A)	140mm
Lower grip (B)	205mm
Maximum specimen width	80mm
Base width (C)	505mm
Loading roller	Φ20mm
Support roller	Φ20mm



12. Bending fixture | 3-point bending | FWA104A

Specifications

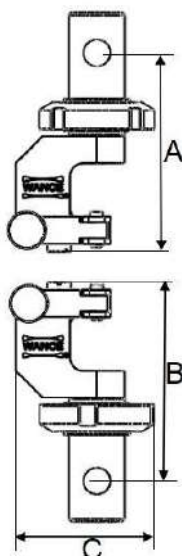
Application	Bending test for flat and round metallic specimens
Maximum force	≤10kN
Grip weight	
Upper grip	0.1kg
Lower grip	0.6kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Span (Ajustable)	≤160mm
Height	
Upper grip (A)	90mm
Lower grip (B)	140mm
Maximum specimen width	40mm
Base width (C)	505mm
Loading roller	R5mm, R2mm
Support roller	R5mm, R2mm



13. Tensile grip | Side action | FDSA102A

Specifications

Application	Tension test for spandex wire and other non-metal single wire
Maximum force	≤100N
Grip weight	
Upper grip	0.4kg
Lower grip	0.4kg
Working temperature	Ambient
Connection	
Upper grip	Φ10mm pin
Lower grip	Φ10mm pin
Height	
Upper grip (A)	75mm
Lower grip (B)	75mm
Overall width (C)	50mm
Specimen size	≤φ1.5mm
Jaw face size	10(H)mmx10(W)mm

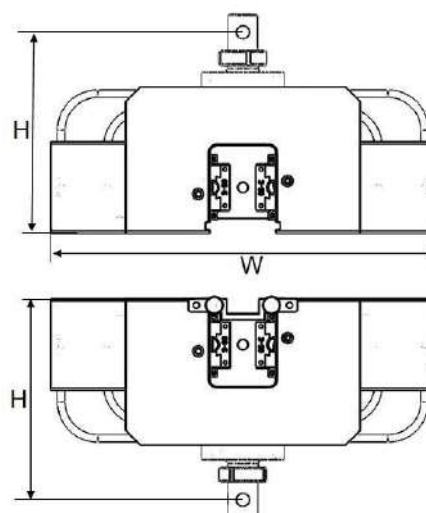
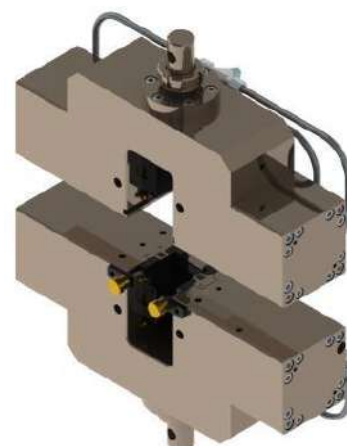


XV Dual side action/wedge hydraulic grips

1. Hydraulic tensile grip | Dual side action | WDYA105B

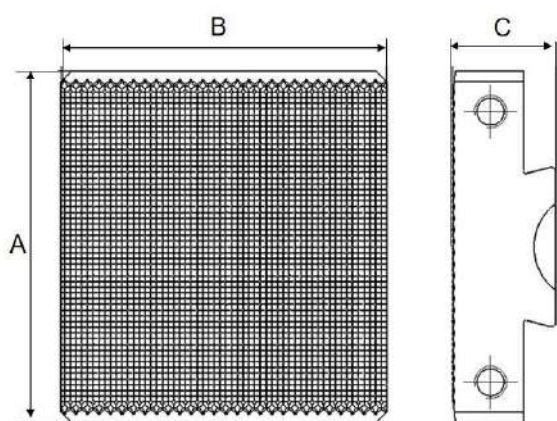
Specifications

Application	Tension test for flat and round specimen of metal, composite ect.
Maximum force	100kN
Grip weight	
Upper grip	80kg
Lower grip	80kg
Working temperature	Ambient
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height (H)	
Upper grip	275mm
Lower grip	275mm
Grip body width (W)	526mm
Specimen hardness	<HRC24
HPU	HPU200A

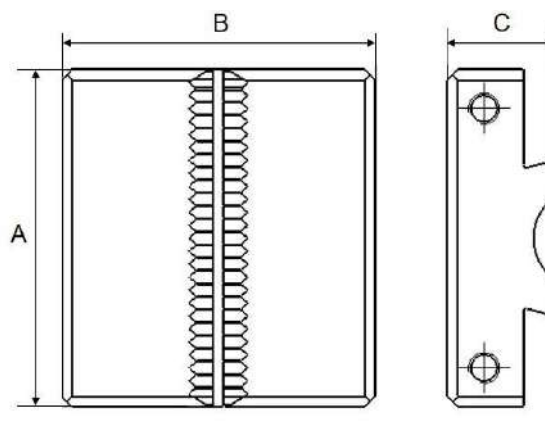


Jaw faces (Optional)

No.	Jaw face type	Specimen size (mm)	Height (A) mm	Width (B) mm	Thickness (C) mm
WDYA105B-21	Ordinary flat	0-20	65	60	19
WDYA105B-22	Fine pitch flat	0-20	65	60	19
WDYA105B-33	Vee	Φ6-16	65	60	20.5
WDYA105B-34	Vee	Φ16-26	65	60	20.5
WDYA105B-35	Coarse pitch	0-20	65	60	19



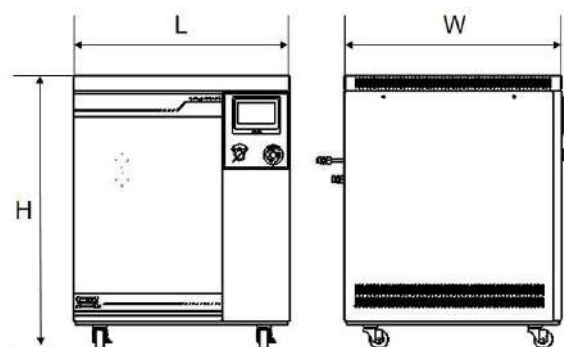
Flat jaw face



Vee jaw face

Hydraulic power unit

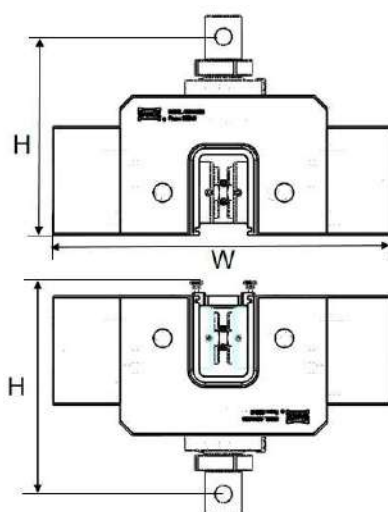
Model	HPU200A
Weight	89kg
Tank volume	30L
Dimension	580mm(L)x580mm(W)x700mm(H)
Power supply	3-phase, 380V/50Hz/1kW
Rated flow rate	2L/min
Max. pressure	23MPa



2. Hydraulic tensile grip | Dual side action | WDYA305C

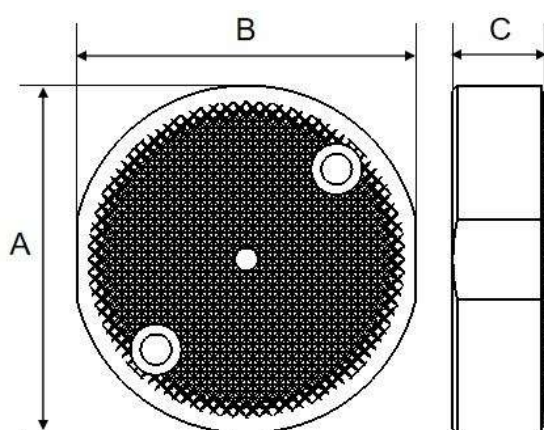
Specifications

Application	Tension test for flat and round specimen of metal, composite ect.
Maximum force	300kN
Grip weight	
Upper grip	150kg
Lower grip	150kg
Working temperature	Ambient
Connection	
Upper grip	Φ28mm pin
Lower grip	Φ28mm pin
Height (H)	
Upper grip	327mm
Lower grip	350mm
Grip body width (W)	560mm
Specimen hardness	<HRC24
HPU	HPU700A

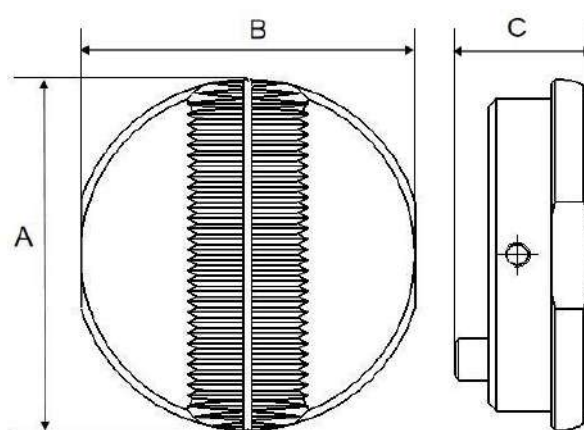


Jaw faces (Optional)

No.	Jaw face type	Specimen size mm	Height (A) mm	Width (B) mm	Thickness (C) mm
WDYA305C-14	Flat	0-30	75	73	20
WDYA305C-18	Vee	Φ6-20	84	80	25
WDYA305C-19	Vee	Φ20-36	84	80	25



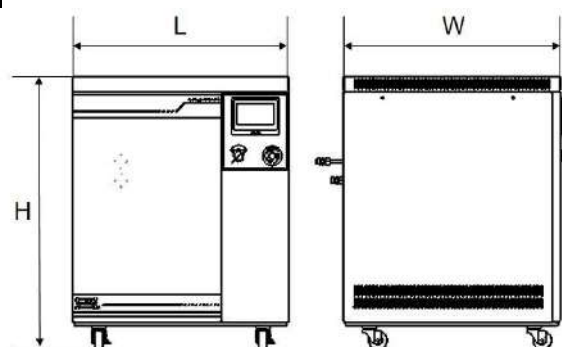
Flat jaw face



Vee jaw face

Hydraulic power unit

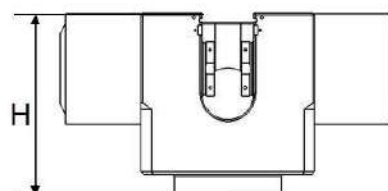
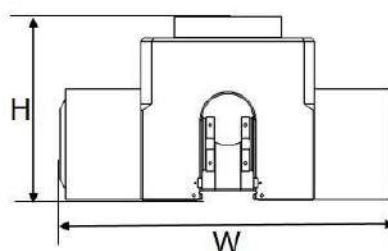
Model	HPU700A
Weight	89kg
Tank volume	30L
Dimension	580mm(L)x580mm(W)x700mm(H)
Power supply	3-phase, 380V/50Hz/4kW
Rated flow rate	7L/min
Max. pressure	30MPa



3. Hydraulic tensile grip | Dual side action | HUT605DPS.01

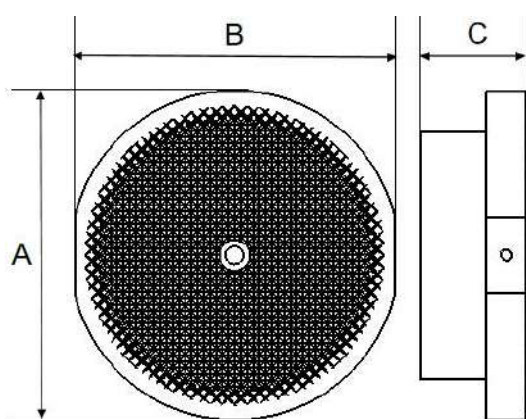
Specifications

Application	Tension test for flat and round specimen of metal
Maximum force	600kN
Grip weight	
Upper grip	243kg
Lower grip	243kg
Working temperature	Ambient
Height (H)	
Upper grip	340mm
Lower grip	340mm
Grip body width (W)	620mm
Specimen hardness	<HRC24
HPU	HPU141B

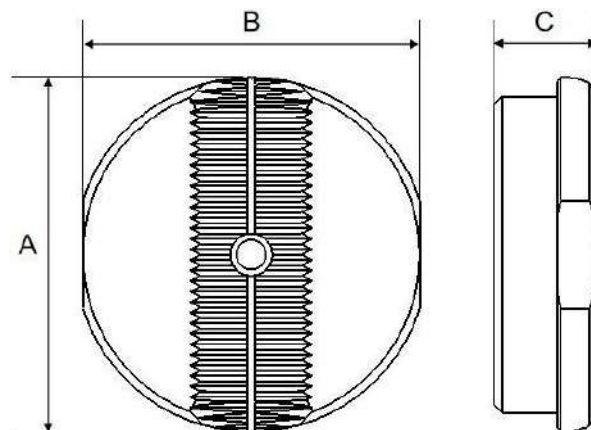


Jaw faces (Optional)

No.	Jaw face type	Specimen size mm	Height (A) mm	Width (B) mm	Thickness (C) mm
HUT605DPS.01-07	Flat	2-60	100	98	42
HUT605DPS.01-08	Vee	Φ10-20	100	98	42
HUT605DPS.01-09	Vee	Φ20-45	100	98	42
HUT605DPS.01-12	Vee	Φ6-16	100	98	42



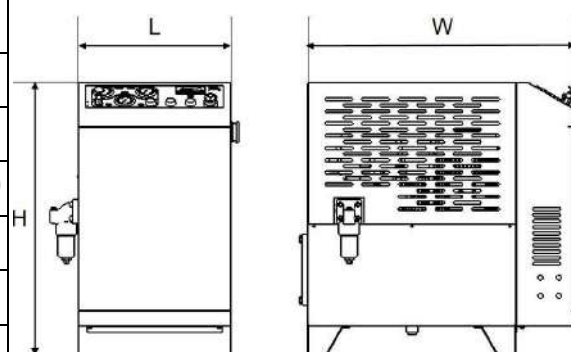
Flat jaw face



Vee jaw face

Hydraulic power unit

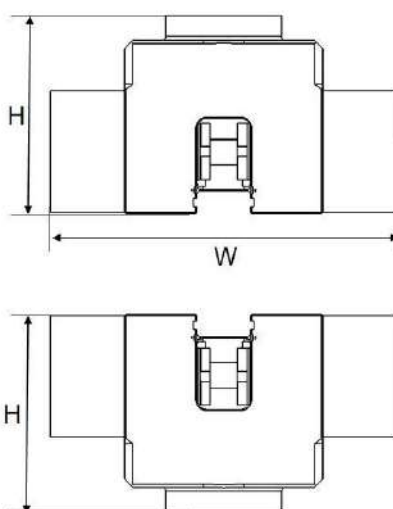
Model	HPU141B
Weight	130kg
Tank volume	98L
Dimension	550mm(L)x880mm(W)x900mm(H)
Power supply	3-phase 380V/50Hz/1.5kW
Rated flow rate	14.6L/min
Max. pressure	40MPa



4. Hydraulic tensile grip | Dual side action | HUT106DPS.01

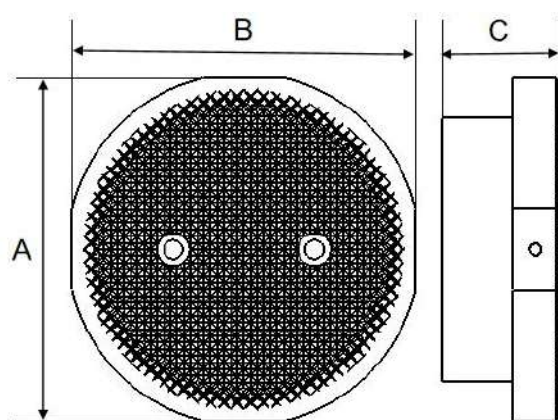
Specifications

Application	Tension test for flat and round specimen of metal
Maximum force	1000kN
Grip weight	
Upper grip	586kg
Lower grip	586kg
Working temperature	Ambient
Height (H)	
Upper grip	475mm
Lower grip	475mm
Grip body width (W)	838mm
Specimen hardness	<HRC24
HPU	HPU401B

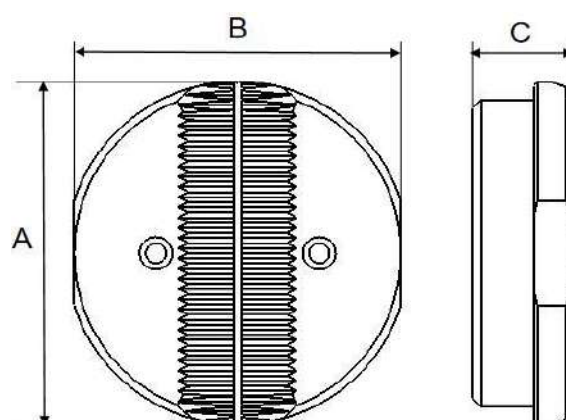


Jaw faces (Optional)

No.	Jaw face type	Specimen size mm	Height (A) mm	Width (B) mm	Thickness (C) mm
HUT106DPS-06	Flat	2-60	137.7	137.7	54.5
HUT106DPS-07	Vee	Φ30-60	140	137.7	55
HUT106DPS-08	Vee	Φ15-30	140	137.7	55



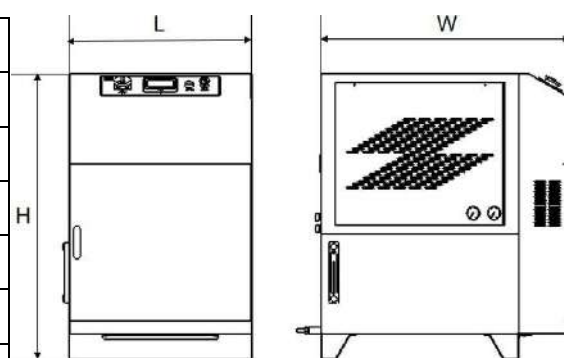
Flat jaw face



Vee jaw face

Hydraulic power unit

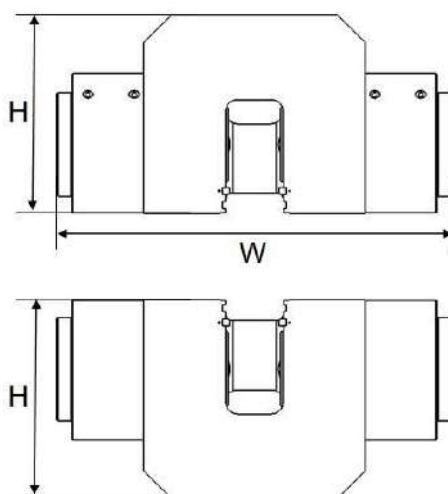
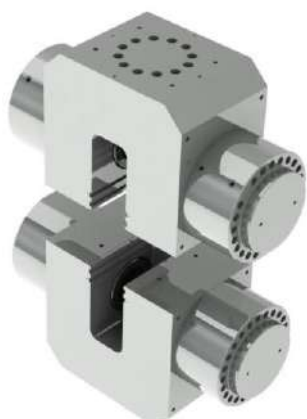
Model	HPU401B
Weight	214.5kg
Tank volume	140L
Dimension	700mm(L)x960mm(W)x1100mm(H)
Power supply	3-phase, 380V/50Hz/4kW
Rated flow	40L/min
Max. pressure	40MPa



5. Hydraulic tensile grip | Dual side action | HUT206DPS.01

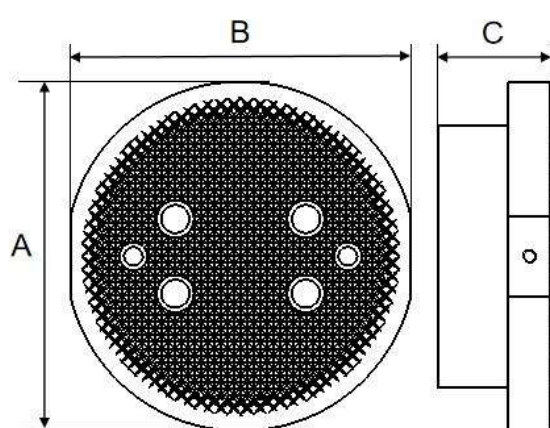
Specifications

Application	Tension test for flat and round specimen of metal
Maximum force	2000kN
Grip weight	
Upper grip	1445kg
Lower grip	1445kg
Working temperature	Ambient
Height (H)	
Upper grip	575mm
Lower grip	575mm
Grip body width (W)	1134mm
Specimen hardness	<HRC24
HPU	HPU401B

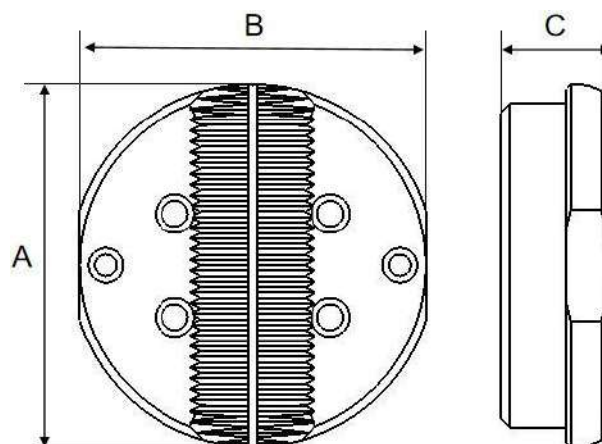


Jaw faces (Optional)

No.	Jaw face type	Specimen size mm	Height (A) mm	Width (B) mm	Thickness (C) mm
HUT206DPS-14	Flat	2-80	220	214.2	85
HUT206DPS-17	Vee	Φ5-15	220	216	85
HUT206DPS-18	Vee	Φ15-40	220	216	85
HUT206DPS-19	Vee	Φ40-100	220	216	85



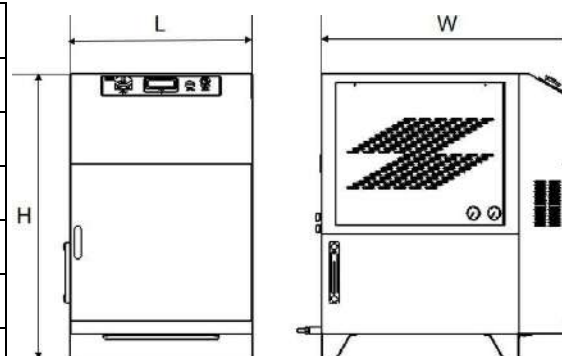
Flat jaw face



Vee jaw face

Hydraulic power unit

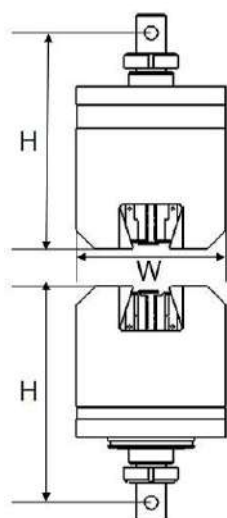
Model	HPU401B
Weight	214.5kg
Tank volume	140L
Dimension	700mm(L)x960mm(W)x1100mm(H)
Power supply	3-phase, 380V/50Hz/4kW
Rated flow rate	40L/min
Max. pressure	40MPa



6. Hydraulic tensile grip | Wedge action | WXYC105A

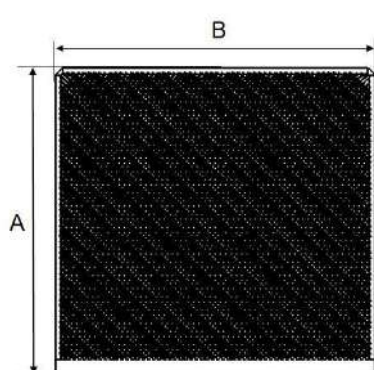
Specifications

Application	Tension test for flat and round specimen of metal
Maximum force	100kN
Grip weight	
Upper grip	45kg
Lower grip	45kg
Working temperature	Ambient
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Height (H)	
Upper grip	289mm
Lower grip	289mm
Grip body width (W)	200mm
Specimen hardness	<HRC24
HPU	HPU440

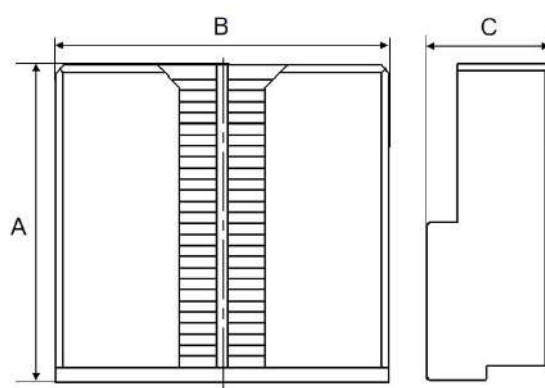


Jaw faces (Optional)

No.	Jaw face type	Specimen size mm	Height (A) mm	Width (B) mm	Thickness (C) mm
WXYC105A-14	Vee	Φ4-12	60	60	17.6
WXYC105A-15	Vee	Φ12-20	60	60	15.9
WXYC105A-16	Flat	0-8	60	60	18
WXYC105A-17	Flat	8-15	60	60	15



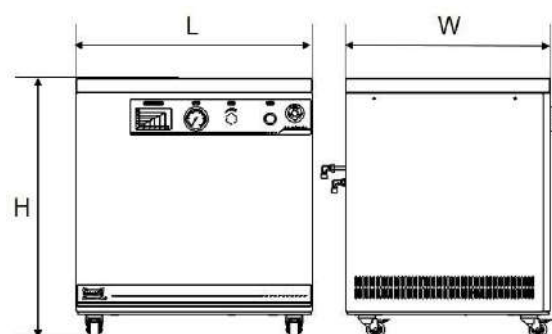
Flat jaw face



Vee jaw face

Hydraulic power unit

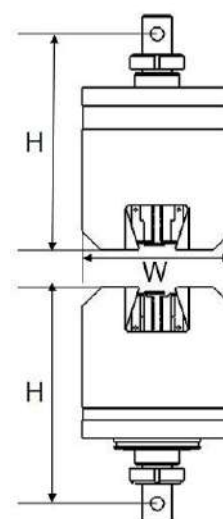
Model	HPU440
Weight	108kg
Tank volume	30L
Dimension	670mm(L)x580mm(W)x736mm(H)
Power supply	3-phase, 380V/50Hz/1kW
Rated flow	7L/min
Max. pressure	18MPa



7. Hydraulic tensile grip | Wedge action | WXYC305A

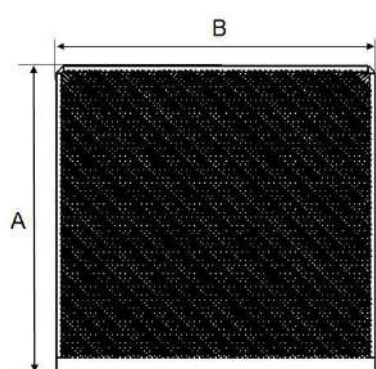
Specifications

Application	Tension test for flat and round specimen of metal, composite ect.
Maximum force	300kN
Grip weight	
Upper grip	93.4kg
Lower grip	93.4kg
Working temperature	Ambient
Connection	
Upper grip	Φ28mm pin
Lower grip	Φ28mm pin
Height (H)	
Upper grip	350mm
Lower grip	350mm
Grip body width (W)	270mm
Specimen hardness	<HRC24
HPU	HPU440

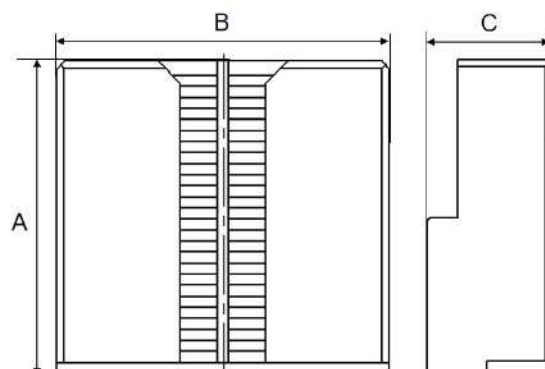


Jaw faces (Optional)

No.	Jaw face type	Specimen size mm	Height (A) mm	Width (B) mm	Thickness (C) mm
WXYC305A-13	Vee	$\Phi 6 \sim 16$	71	70	29
WXYC305A-14	Vee	$\Phi 16 \sim 26$	71	70	26
WXYC305A-15	Vee	$\Phi 26 \sim 36$	71	70	22.5
WXYC305A-16	Flat	0~6	71	70	29
WXYC305A-17	Flat	6~18	71	70	26
WXYC305A-18	Flat	18~30	71	70	20
WXYC305A-19	Vee type for deformed steel bar	$\Phi 6 \sim 16$	71	70	29
WXYC305A-20		$\Phi 16 \sim 26$	71	70	26
WXYC305A-21		$\Phi 26 \sim 36$	71	70	22.5



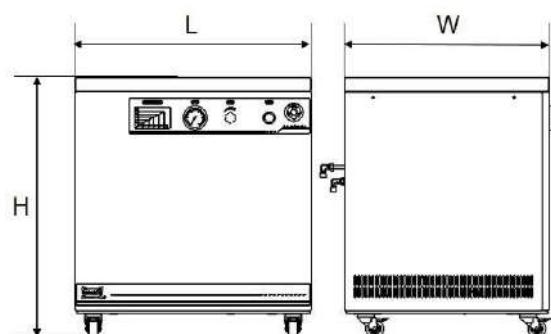
Flat jaw face



Vee jaw face

Hydraulic power unit

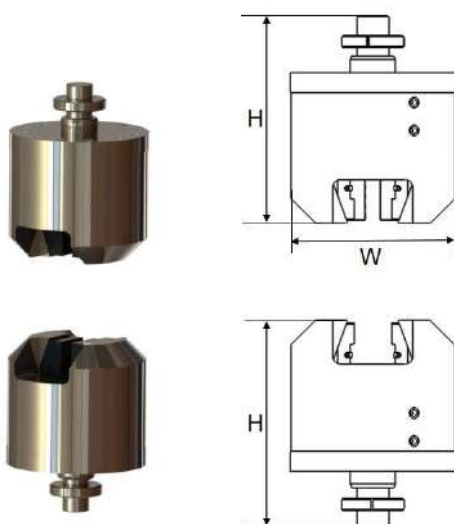
Model	HPU440
Weight	108kg
Tank volume	30L
Dimension	670mm(L)x580mm(W)x736mm(H)
Power supply	3-phase, 380V/50Hz/1kW
Rated flow	7L/min
Max. pressure	18MPa



8. Hydraulic tensile grip | Wedge action | WXYB605C

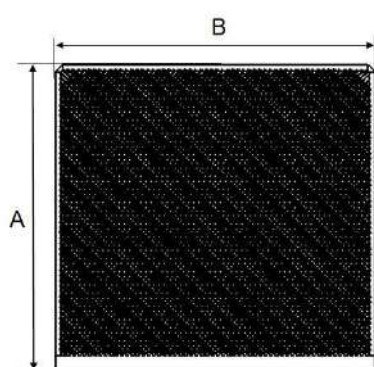
Specifications

Application	Tension test for flat and round specimen of metal, composite etc.
Maximum force	600kN
Grip weight	
Upper grip	162kg
Lower grip	162kg
Working temperature	Ambient
Height (H)	
Upper grip	416mm
Lower grip	416mm
Grip body width (W)	330mm
Specimen hardness	<HRC24
HPU	HPU440

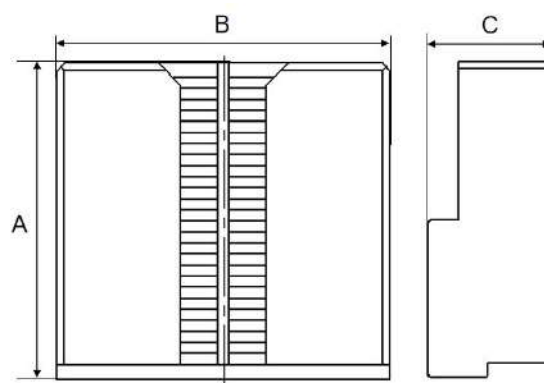


Jaw faces (Optional)

No.	Jaw face type	Specimen size mm	Height (A) mm	Width (B) mm	Thickness (C)
WXYB605C-06	Vee	Φ6-12	86	90	37
WXYB605C-07	Vee	Φ12-27	86	90	34
WXYB605C-08	Vee	Φ27-42	86	90	30
WXYB605C-09	Flat	0-6	86	90	37
WXYB605C-10	Flat	6-23	86	90	31.5
WXYB605C-11	Flat	23-40	86	90	23
WXYB605C-17	Vee type for deformed steel bar	Φ6-12	86	90	37
WXYB605C-18		Φ12-27	86	90	34
WXYB605C-19		Φ27-42	86	90	30



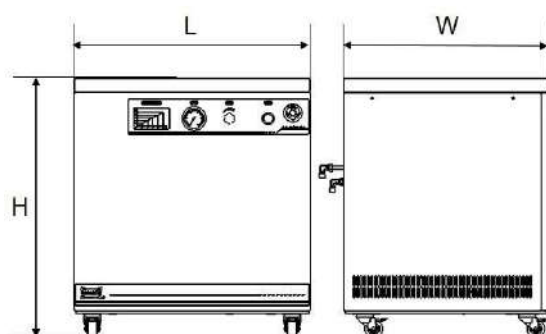
Flat jaw face



Vee jaw face

Hydraulic power unit

Model	HPU440
Weight	108kg
Tank volume	30L
Dimension	670mm(L)x580mm(W)x736mm(H)
Power supply	3-phase, 380V/50Hz/1kW
Rated flow	7L/min
Max. pressure	18MPa

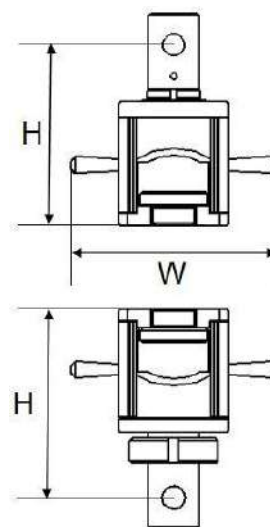
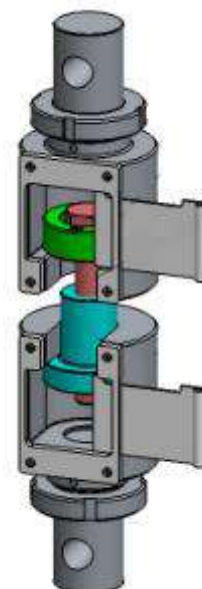


XVI Bolt and nut tensile grips

1. Bolt and nut tensile grip | WLA105A

Specifications

Application	Tension test for bolts and nuts
Maximum force	100kN
Grip weight	
Upper grip	9kg
Lower grip	9kg
Working temperature	Ambient
Standard	GB/T 3098.1-2010
Height (H)	
Upper grip	143mm
Lower grip	149mm
Connection	
Upper grip	Φ18mm pin
Lower grip	Φ18mm pin
Grip width (W)	165mm
Thread specification	M5, M6, M8, M8x1, M10, M10x1.25, M10x1.25, , M12x1, M12x1.25, M14, M14x1.5, M18, M18x1.5
The shortest length of bolt	$L \geq 2.5d$

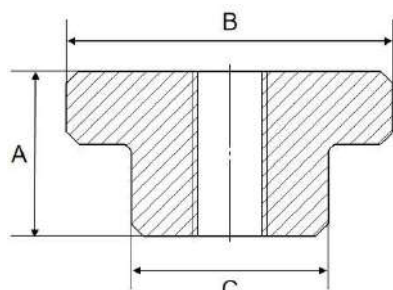


Thread bushing (Optional)

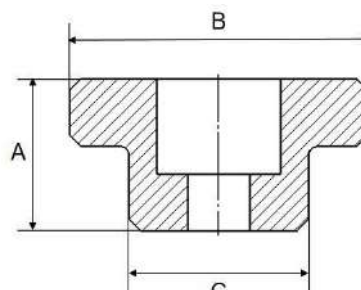
No.	Specification	A (mm)	B(mm)	C(mm)
WLA105A-27	M5	27	53	32
WLA105A-14	M6	27	53	32
WLA105A-09	M8	27	53	32
WLA105A-26	M8X1.0	27	53	32
WLA105A-08	M10	27	53	32
WLA105A-15	M12	27	53	32
WLA105A-17	M12X1.0	27	53	32
WLA105A-18	M12X1.25	27	53	32
WLA105A-16	M14	27	53	32
WLA105A-24	M14X1.5	27	53	32
WLA105A-10	M18X1.5	27	53	32

Bolt thimble (Optional)

No.	Specification	A (mm)	B(mm)	C(mm)
WLA105A-28	M5	27	53	32
WLA105A-19	M6	27	53	32
WLA105A-20	M8	27	53	32
WLA105A-21	M10	27	53	32
WLA105A-22	M12	27	53	32
WLA105A-23	M14	27	53	32
WLA105A-25	M18	27	53	32



Thread bushing

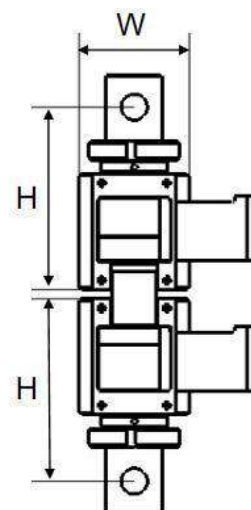
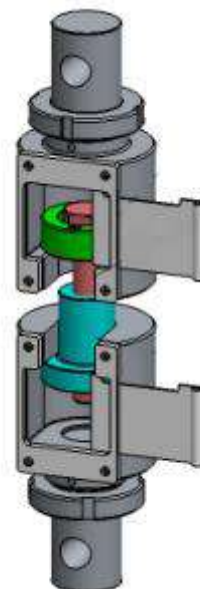


Bolt thimble

2. Bolt and nut tensile grip | WLA305C

Specifications

Application	Tension test for bolts and nuts
Maximum force	300kN
Grip weight	
Upper grip	11.6kg
Lower grip	11.6kg
Working temperature	Ambient
Standard	GB/T 3098.1-2010 GB/T 3098.2-2015
Height (H)	
Upper grip	197mm
Lower grip	197mm
Connection	
Upper grip	Φ28
Lower grip	Φ28
Grip width (W)	118mm
Thread specification	M3, M4, M5, M6, M8, M8×1, M10, M10×1, M10×1.25, M12, M12× 1.25, M12×1.5, M14, M14×1.5, M16, M16×1.5, M18, M18×1.5, M20, M20×1.5, M22,
The shortest length of bolt	$L \geq 2.5d$



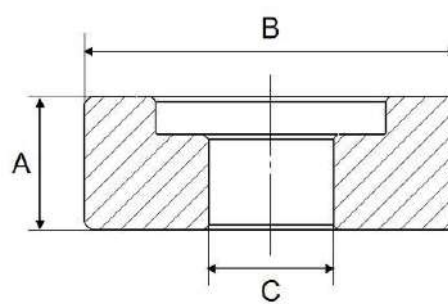
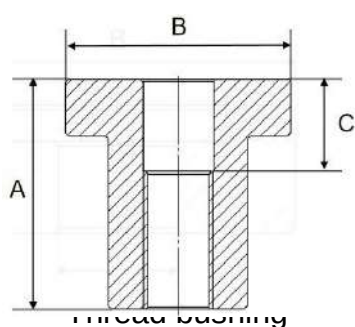
Thread bushing (Optional)

No.	Specification	A (mm)	B(mm)	C(mm)
WLA305C-07-01	M3	80	78	74
WLA305C-07-02	M4	80	78	72
WLA305C-07-03	M5	80	78	70
WLA305C-07-04	M6	80	78	68
WLA305C-07-05	M8X1	80	78	64
WLA305C-07-06	M8	80	78	64
WLA305C-07-07	M10X1	80	78	60
WLA305C-07-08	M10X1.25	80	78	60
WLA305C-07-09	M10	80	78	60
WLA305C-07-10	M12X1.25	80	78	56
WLA305C-07-11	M12X1.5	80	78	56
WLA305C-07-12	M12	80	78	56
WLA305C-07-13	M14X1.5	80	78	52
WLA305C-07-14	M14	80	78	52
WLA305C-07-15	M16X1.5	80	78	48
WLA305C-07-16	M16	80	78	48
WLA305C-07-17	M18X1.5	80	78	44
WLA305C-07-18	M18	80	78	44
WLA305C-07-19	M20X1.5	80	78	40
WLA305C-07-20	M20	80	78	40
WLA305C-07-21	M22X1.5	80	78	36
WLA305C-07-22	M22	80	78	36
WLA305C-07-23	M24X2	80	78	32
WLA305C-07-24	M24	80	78	32

Thread bushing (Optional)

No.	Specification	A (mm)	B(mm)	C(mm)
WLA305C-06-01	M3	22	78	3.5
WLA305C-06-02	M4	22	78	4.5
WLA305C-06-03	M5	22	78	5.5
WLA305C-06-04	M6	22	78	6.6
WLA305C-06-05	M8	22	78	9

WLA305C-06-06	M10	22	78	11
WLA305C-06-07	M12	22	78	13.5
WLA305C-06-08	M14	22	78	15.5
WLA305C-06-09	M16	22	78	17.5
WLA305C-06-10	M18	22	78	20
WLA305C-06-11	M20	22	78	22
WLA305C-06-12	M22	22	78	24
WLA305C-06-13	M24	24	78	26



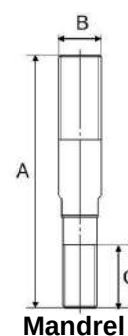
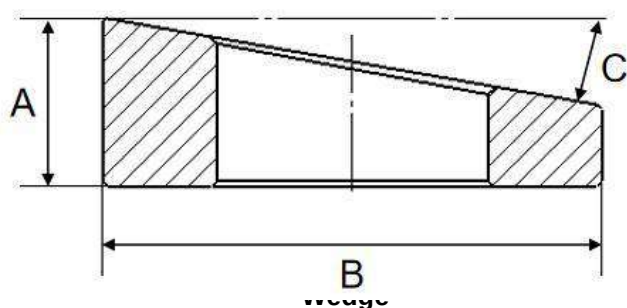
Wedge (Optional)

No.	Specification	A (mm)	B(mm)	C(°)
WLA305C-08-01	M3-4°	4	7	4
WLA305C-08-02	M3-6°	4	7	6
WLA305C-08-03	M3-10°	4	7	10
WLA305C-08-04	M4-4°	5	9	4
WLA305C-08-05	M4-6°	5	9	6
WLA305C-08-06	M4-10°	5	9	10
WLA305C-08-07	M5-4°	6	10	4
WLA305C-08-08	M5-6°	6	10	6
WLA305C-08-09	M5-10°	6	10	10
WLA305C-08-10	M6-4°	7	12	4

WLA305C-08-11	M6-6°	7	12	6
WLA305C-08-12	M6-10°	7	12	10
WLA305C-08-13	M8-4°	8	16	4
WLA305C-08-14	M8-6°	8	16	6
WLA305C-08-15	M8-10°	8	16	10
WLA305C-08-16	M10-4°	10	20	4
WLA305C-08-17	M10-6°	10	20	6
WLA305C-08-18	M10-10°	10	20	10
WLA305C-08-19	M12-4°	11	24	4
WLA305C-08-20	M12-6°	11	24	6
WLA305C-08-21	M12-10°	11	24	10
WLA305C-08-22	M14-4°	12	28	4
WLA305C-08-23	M14-6°	12	28	6
WLA305C-08-24	M14-10°	12	28	10
WLA305C-08-25	M16-4°	13	30	4
WLA305C-08-26	M16-6°	13	30	6
WLA305C-08-27	M16-10°	13	30	10
WLA305C-08-28	M18-4°	15	34	4
WLA305C-08-29	M18-6°	15	34	6
WLA305C-08-30	M18-10°	15	34	10
WLA305C-08-31	M20-4°	16	37	4
WLA305C-08-32	M20-6°	16	37	6
WLA305C-08-33	M20-10°	16	37	10
WLA305C-08-34	M22-4°	17	42	4
WLA305C-08-35	M22-6°	17	42	6
WLA305C-08-36	M22-10°	17	42	10
WLA305C-08-37	M24-4°	18	44	4
WLA305C-08-38	M24-6°	18	44	6
WLA305C-08-39	M24-10°	18	44	10

Mandrel (Optional)

No.	Specification	A (mm)	B(mm)	C(mm)
WLA305C-09-01	M3	77	M16	10
WLA305C-09-02	M4	77	M16	10
WLA305C-09-03	M5	77	M16	16
WLA305C-09-04	M6	77	M16	16
WLA305C-09-05	M8X1	77	M16	20
WLA305C-09-06	M8	77	M16	20
WLA305C-09-07	M10X1	77	M16	25
WLA305C-09-08	M10X1.25	77	M16	25
WLA305C-09-09	M10	77	M16	25
WLA305C-09-10	M12X1.25	77	M16	30
WLA305C-09-11	M12X1.5	77	M16	30
WLA305C-09-12	M12	77	M16	30
WLA305C-10-01	M14X1.5	115	M24	35
WLA305C-10-02	M14	115	M24	35
WLA305C-10-03	M16X1.5	115	M24	35
WLA305C-10-04	M16	115	M24	35
WLA305C-10-05	M18X1.5	115	M24	40
WLA305C-10-06	M18	115	M24	40
WLA305C-11-01	M20X1.5	180	M30	40
WLA305C-11-02	M20	180	M30	40
WLA305C-11-03	M22X1.5	180	M30	45
WLA305C-11-04	M22	180	M30	45
WLA305C-11-05	M24X2	180	M30	45
WLA305C-11-06	M24	180	M30	45



Chapter II

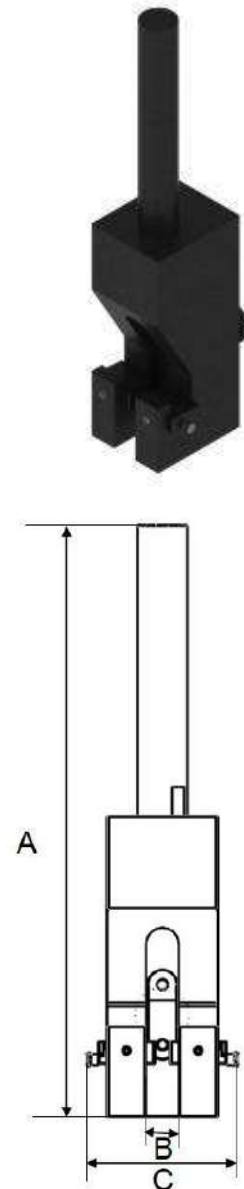
Grips and fixtures for hydraulic machine

I Tensile grips & fixtures

1. Tensile shear fixture | WJA106A

Specifications

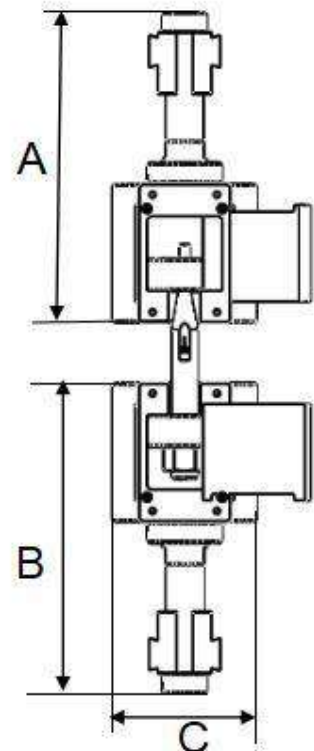
Application	Shear test for for steel welding mesh
Maximum force	≤1000kN
Grip weight	10kg
Connection	Clamped by upper hydraulic grip
Connecting rod diameter	Φ32mm
Grip length (A)	395mm
Groove width (B)	22mm
Grip width (C)	101mm
Working temperature	Ambient
Standard	GB/T 1499.3
Clamping mode	Suspended
Minimum test sapce	425mm
Specimen diameter	Φ6, Φ8, Φ10, Φ12, Φ16



2. Proof load test for nuts | WLA605A

Specifications

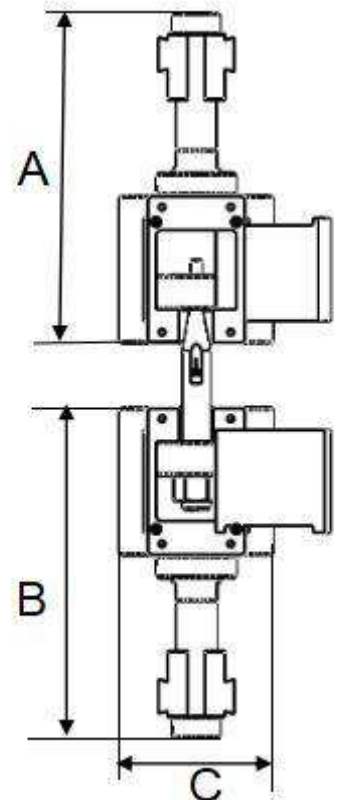
Application	Proof load test for nuts
Maximum force	≤600kN
Weight	
Upper grip	12kg
Lower grip	12kg
Connection	Clamped by hydraulic grip
Height	
Upper grip (A)	290mm
Lower grip (B)	290mm
Grip width (C)	67.5mm
Working temperature	Ambient
Standard	GB/T 3098.2-2010 ISO 898-2012
Clamping mode	Suspended
Nut property class	≤ 10
Specification for standard accessories	M6, M12, M16, M20
Specification for optional accessories	M5, M7, M8, M10, M14, M18, M22, M24, M27 and M5~M27 with fine pitch thread.



3. Proof load test for nuts | WLA206A

Specifications

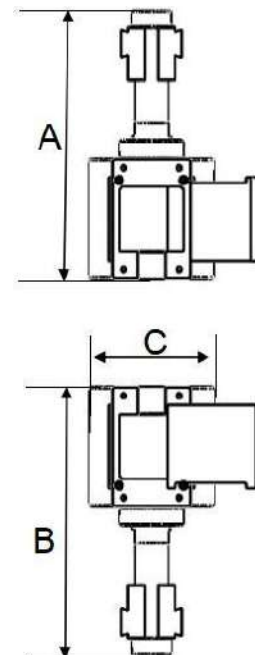
Application	Proof load test for nuts
Maximum force	≤2000kN
Weight	
Upper grip	24kg
Lower grip	24kg
Connection	Clamped by hydraulic grip
Height	
Upper grip (A)	375mm
Lower grip (B)	375mm
Grip width (C)	78mm
Working temperature	Ambient
Standard	GB/T 3098.2-2010 ISO 898-2012
Clamping mode	Suspended
Nut property class	≤ 10
Specification for standard accessories	M16, M20, M27, M36
Specification for optional accessories	M5, M6, M7, M8, M10, M12, M14, M18, M22, M24, M30, M33, M39 and M5~M39 with fine pitch thread.



4. Bolt and nut tensile grip | WLB605A

Specifications

Application	Tension, proof load and wedge load test for bolts and nuts
Maximum force	≤600kN
Weight	
Upper grip	12kg
Lower grip	12kg
Connection	Clamped by hydraulic grip
Height	
Upper grip (A)	290mm
Lower grip (B)	290mm
Grip width (C)	67.5mm
Working temperature	Ambient
Standard	GB/T 3098.2-2010 ISO 898-2012
Clamping mode	Suspended
Nut property class	≤ 10.9
Specification for standard accessories	M6, M12, M16, M20
Specification for optional accessories	M4, M5, M7, M8, M10, M14, M18, M22, M24, M27 and M4~M27 with fine pitch thread.



The shortest length of bolt specimen:

Specification	M4	M5	M6	M7	M8	M9	M10	M12
Specimen length (mm)	9	10	11	19	20	21	22	32
Specification	M14	M16	M18	M20	M22	M24	M27	
Specimen length (mm)	39	41	93	100	102	104	107	

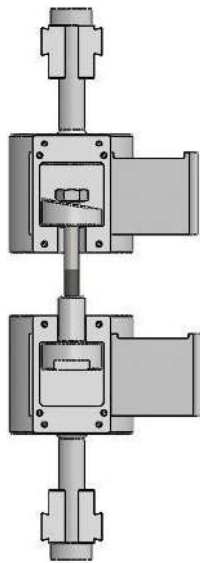


Fig.1 Wedge load

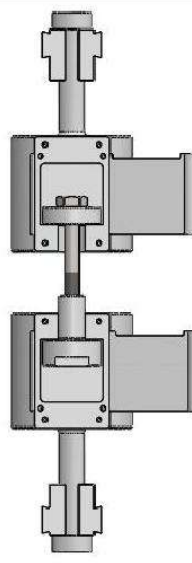


Fig.2 Bolt tension

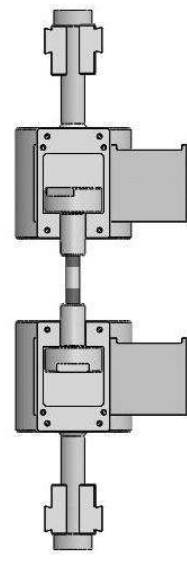
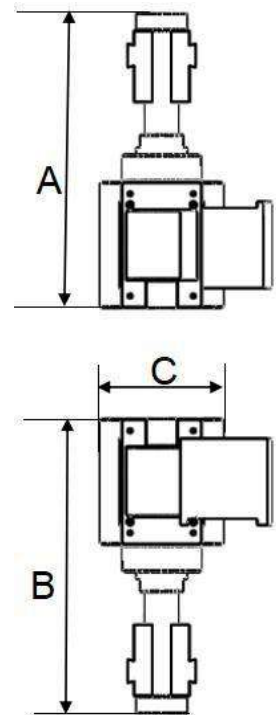


Fig.3 Stud tension

5. Bolt and nut tensile grip | WLB206A

Specifications

Application	Tension, proof load and wedge load test for bolts and nuts
Maximum force	≤2000kN
Weight	
Upper grip	24kg
Lower grip	24kg
Connection	Clamped by hydraulic grip
Height	
Upper grip (A)	375mm
Lower grip (B)	375mm
Grip width (C)	78mm
Working temperature	Ambient
Standard	GB/T 3098.2-2010 ISO 898-2012
Clamping mode	Suspended
Nut property class	≤ 12.9
Specification for standard accessories	M16, M120, M27, M36
Specification for optional accessories	M5, M6, M7, M8, M10, M12, M14, M18, M22, M24, M30, M33, M39 and M5~M39 with fine pitch thread.



The shortest length of bolt specimen:

Specification	M4	M5	M6	M7	M8	M9	M10	M12	M14	M16
Specimen length (mm)	9	10	11	19	20	21	22	42	49	51
Specification	M18	M20	M22	M24	M27	M30	M33	M36	M39	
Specimen length (mm)	103	110	112	114	117	130	133	136	139	

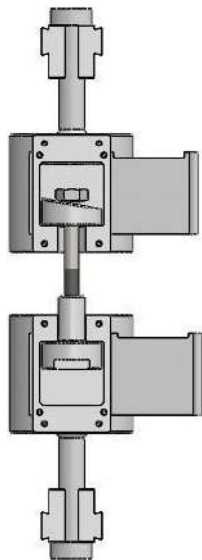


Fig.1 Wedge load

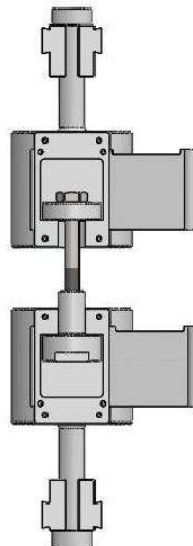


Fig.2 Bolt tension

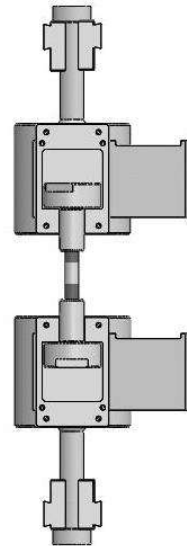


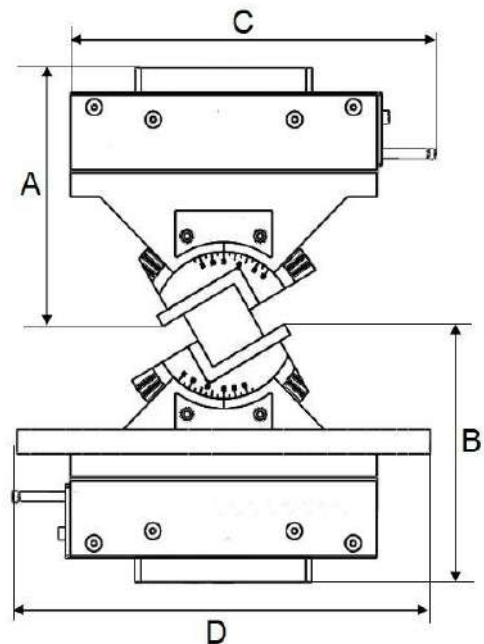
Fig.3 Stud tension

II Splitting fixture

1. Rock shear fixture | WJA206B

Specifications

Application	Shear test for rocks
Maximum force	≤2000kN
Weight	
Upper grip	26kg
Lower grip	28kg
Connection	
Upper grip	Flange
Lower grip	Positioning pin
Working temperature	Ambient
Standard	GB/T 23561.11
Height	
Upper grip (A)	210mm
Lower grip (B)	210mm
Width	
Upper grip (C)	310mm
Lower grip (D)	350mm
Minimum test space	450mm
Specimen size	Φ50×50mm
	50×50×50mm

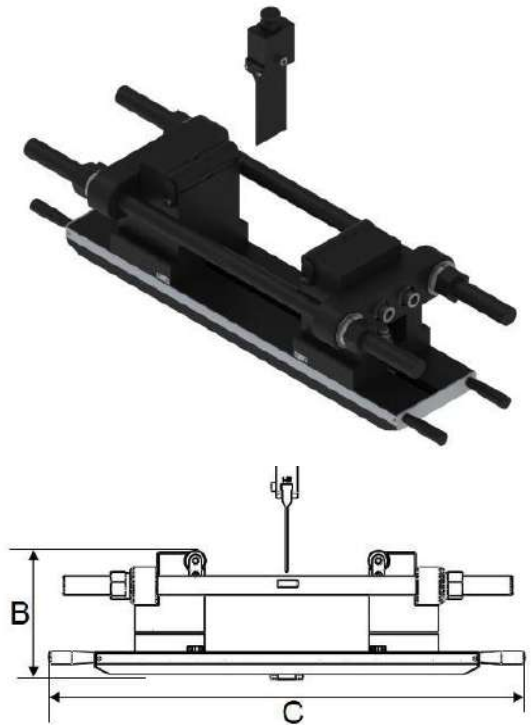


III Bending fixture

1. Bending fixture | WWA206A

Specifications

Application	Bending test for metal, composite, ceramic etc.
Maximum force	≤2000kN
Lower grip weight	86kg
Connection	
Upper grip	Fixing block
Lower grip	Positioning pin
Working temperature	Ambient
Standard	GB/T 232, GB1499.1, GB1499.2
Lower grip height (B)	225mm
Lower grip width (C)	846mm
Minimum test space	480mm
Mandrel diameter	Φ32, Φ60, Φ88, Φ160



Optional Mandrels:

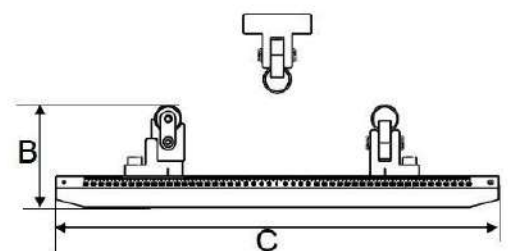
Φ1, Φ2, Φ3, Φ4, Φ5, Φ6, Φ6.5, Φ8, Φ10, Φ12, Φ13.5, Φ14, Φ15, Φ16, Φ16.5, Φ18, Φ19.5, Φ20, Φ21, Φ22, Φ22.5, Φ24, Φ25, Φ25.5, Φ27, Φ28, Φ28.5, Φ30, Φ31.5, Φ33, Φ34.5, Φ36, Φ38, Φ40, Φ42, Φ44, Φ46, Φ48, Φ50, Φ54, Φ56, Φ64, Φ66, Φ70, Φ72, Φ75, Φ80, Φ84, Φ90, Φ96, Φ98, Φ100, Φ108, Φ110, Φ112, Φ120, Φ125, Φ126, Φ128, Φ130, Φ132, Φ140, Φ144, Φ150, Φ154, Φ168, Φ175, Φ180, Φ192, Φ196, Φ200, Φ210, Φ216, Φ224, Φ240, Φ242, Φ250, Φ252, Φ256, Φ280

IV Flexure fixture

1. Flexure fixture | WWA206B

Specifications

Application	Flexure test for metal, composite, ceramic etc.
Maximum force	≤2000kN
Lower grip weight	23kg
Connection	
Upper grip	Fixing block and screw
Lower grip	Positioning pin
Working temperature	Ambient
Standard	GB/T2542, GB/T4111, JC/T 239
Lower grip height (B)	130mm
Lower grip width (C)	574mm
Minimum test space	280mm
Loading & support Roller 1	Φ35×210
Loading & support Roller 2	Φ30×160
Mandrel diameter	Φ32, Φ60, Φ88, Φ160



2. 4-point flexure fixture | WWB206A

Specifications

Application	Flexure test for composite, concrete, construction material
Maximum force	≤2000kN
Weight	
Upper grip	12kg
Lower grip	20kg
Connection	
Upper grip	Fixing block and screw
Lower grip	Positioning pin
Working temperature	Ambient
Standard	GB/T 50081
Height	
Upper grip (A)	157mm
Lower grip (B)	127mm
Lower grip width (C)	574mm
Lower span (adjustable)	60-480mm
Upper span (adjustable)	60-180mm
Minimum test space	450mm
Concrete specimen	150×150×600 150×150×550 100×100×400
Note: equipped with optional digital indicator and related device to measure elasticity modulus	

