



PLATES AND TOOLS FOR COMPRESSION TESTS AND “T” SLOTTED





Series PC.r (circular) – PC.c (square) – PCA.r (self-aligned) – PCp.c/AL (perforated)
– T-slotted - Push-out Test - Compression Test Fixture Bottle Caps...


Plates to perform **compressive strength tests** on materials being incorporated into a Universal Testing Machine.


Available built in **Aluminum** or **Steel** for use depending on the hardness of the material to be tested.


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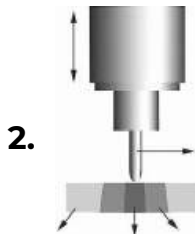
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ALUMINUM Compression Test Plates PC.r/Al series

Circular plates to carry out tests of resistance to compression of materials being coupled to a Universal Testing Machine.

Constructed of **Aluminum** for use with low hardness materials.



GENERAL INFORMATION

Circular compression plates, easy to use, designed to perform tests of resistance to compression of materials, containers, components... of metals, plastics, cardboard.... The compression plates are made of high quality Aluminum to perform compression tests with relatively soft materials, such as Papers, Cardboards, Plastics ...

When it comes to testing resistant and hard materials such as Metals, resistant Plastics, Rocks, Ceramics ..., we have a line of compression plates made of steel.

PC.c/Al - ALUMINUM Compression Plates

- Soft Samples, Cardboards, Plastics, etc.
- Maximum capacity depends on coupling size
- Anodized aluminum
- Temperature range: -70 ° C - + 180 ° C
- Flatness tolerance: ± 0.02 mm
- Weight of compression plate set (see page 5)
- Scope of supply: 1 pair of compression plates

Model	Dimensions	Coupling
PC.r/56-B-AL	56 mm	B*
PC.r/96-B-AL	96 mm	B*
PC.r/116-B-AL	116 mm	B*
PC.r/156-B-AL	156 mm	B*
PC.r/196-B-AL	196 mm	B*
PC.r/246-B-AL	246 mm	B*
PC.r/296-B-AL	296 mm	B*

* Other dimensions on request



STEEL Compression Test Plates PC.r/St series

When it comes to testing resistant and hard materials such as Metals, resistant Plastics, Rocks, Ceramics ..., we have a line of compression plates made of steel.



PC.c/St - STEEL Compression Plates

- Maximum capacity depends on coupling size
- Samples of Hard Materials, Plastic Metals, Rocks, etc.
- 58 HRC hardened steel, nickel plated
- Temperature range: -70 ° C to + 350 ° C
- Flatness tolerance: ± 0.02 mm
- Weights (see page 5)
- Scope of supply: 1 pair of compression plates

Item	Dimensions	Coupling
PC.r/56-B-St	56 mm	B*
PC.r/96-B-St	96 mm	B*
PC.r/116-B-St	116 mm	B*
PC.r/156-B-St	156 mm	B*
PC.r/196-B-St	196 mm	B*
PC.r/246-B-St	246 mm	B*
PC.r/296-B-St	296 mm	B*
PC.r/345-B-St	344 mm	B*

* Other dimensions on request



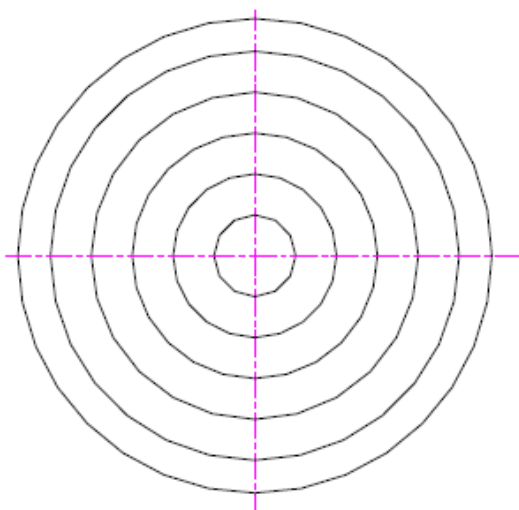
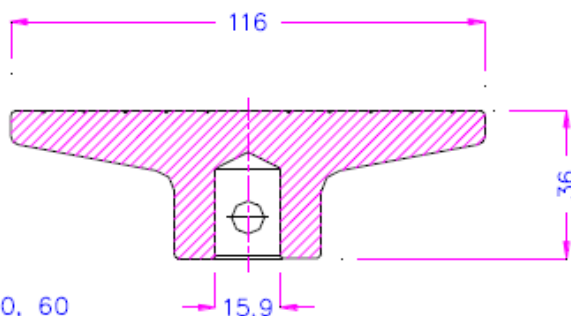
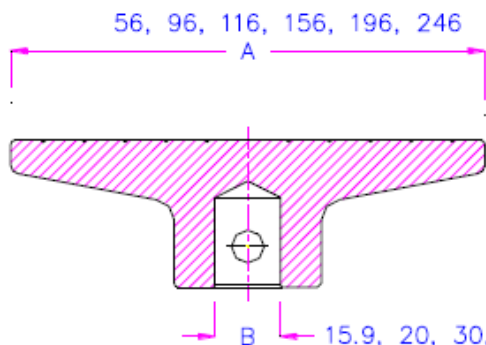
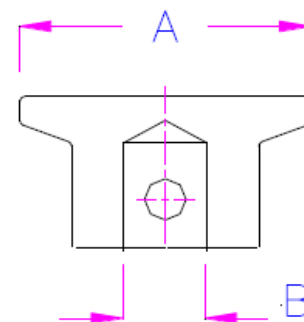
Description: PC.r/A-B

A Diameter of the plates [mm] 56, 96, 116, 156, 196...etc

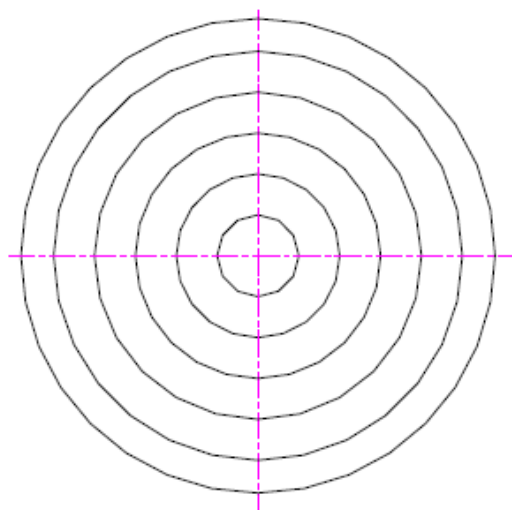
B* Coupling: Female = Af [mm] 15.9, 19.1, 20, 30, 31.8, 32, 36, 40...

(Adapter) Male = Am [mm] Am15.8, Am20, Am31.7

C Material: AL = Aluminium St = Steel



PC.r/A-B



PC.r/116-159

Examples:



PC.r-116-Af31.8-St
116mm diameter
31.8mm female adapter
Steel, nickel plated



PC.r-156-Am31.7-St
156mm diameter
Male adapter 31.7 mm
Steel, nickel plated

WEIGHTS:

Aluminum Plates:

Item no.:	Weight per plate (without pin)
PC.r -56-Af159-Al	0.096 kg
PC.r -56-Af20-Al	0.09 kg
PC.r -96-Af159-Al	0.22 kg
PC.r -96-Af20-Al	0.21 kg
PC.r -96-Af318-Al	0.46 kg
PC.r -96-Af38-Al	0.47 kg
PC.r -116-Af159-Al	0.39 kg
PC.r -116-Af20-Al	0.39 kg
PC.r -116-Af30-Al	0.56 kg
PC.r -116-Af318-Al	0.55 kg
PC.r -156-Af159-Al	0.64 kg
PC.r -156-Af20-Al	0.61 kg
PC.r -156-Af318-Al	0.98 kg
PC.r -156-Af36/18-Al	1.00 kg
PC.r -156-Af38/16-Al	0.98 kg
PC.r -196-Af159-Al	1.23 kg
PC.r -196-Af20-Al	1.20 kg
PC.r -196-Af318-Al	1.56 kg
PC.r -246-Af159-Al	1.86 kg
PC.r -246-Af20-Al	1.85 kg
PC.r -296-Af159-Al	3.00 kg

Steel Plates:

Item no.:	Weight per plate (without pin)
PC.r -56-Af159-St	0.27 kg
PC.r -56-Af20-St	0.26 kg
PC.r -56-Af30-St	0.66 kg
PC.r -56-Af318-St	0.83 kg
PC.r -56-Af40-St	0.58 kg
PC.r -96-Af159-St	0.60 kg
PC.r -96-Af20-St	0.58 kg
PC.r -96-Af318-St	1.44 kg
PC.r -96-Af36/18-St	1.43 kg
PC.r -96-Af38/16-St	1.22 kg
PC.r -96-Af50/25-St	4.11 kg
PC.r -96-Af60/25-St	2.95 kg
PC.r -96-Af60/30-35-St	3.25 kg
PC.r -116-Af159-St	1.00 kg
PC.r -116-Af20-St	1.04 kg
PC.r -116-Af30-St	1.85 kg
PC.r -116-Af318-St	1.55 kg
PC.r -116-Af36/18-St	1.72 kg
PC.r -116-Af38-St	1.68 kg
PC.r -116-Af40-St	1.67 kg
PC.r -116-Af60/25-St	2.96 kg
PC.r -116-Af60/30-35-St	3.09 kg
PC.r -156-Af159-St	2.03 kg
PC.r -156-Af20-St	1.94 kg
PC.r -156-Af30-St	2.42 kg
PC.r -156-Af318-St	2.93 kg
PC.r -156-Af36/18-St	2.85 kg
PC.r -156-Af38/16-St	2.54 kg
PC.r -156-Af40-St	2.7 kg
PC.r -156-Af50/25-St	3.82 kg
PC.r -156-Af60/25-St	5.00 kg
PC.r -156-Af60/30-30-St	5.12 kg
PC.r -156-Af60/30-35-St	4.92 kg
PC.r -196-Af159-St	3.30 kg
PC.r -196-Af20-St	3.44 kg
PC.r -196-Af318-St	4.60 kg
PC.r -196-Af38-St	4.00 kg
PC.r -196-Af40-St	4.50 kg
PC.r -196-Af50/25-St	7.02 kg
PC.r -196-Af60/25-St	6.55 kg
PC.r -196-Af60/30-30-St	6.92 kg
PC.r -196-Af60/30-35-St	6.76 kg
PC.r -246-Af318-St	7.77 kg

Ejemplos de Platos de Compresión personalizados:



PC.r/116-Af159-AL
with additional adapter



PC.r/156-Af38-Ni: Nickel
Plated Steel Plates
Temperature range
-70 °C to + 350 °C



PC.r/156-Am20- St



PC.r/196-Af30-St-M8
Steel plate with M8 thread



PC.r/20-Am12-St



PC.r/56-Af159-V2A



Examples of Plates PC.r

PC.r / 156-Af30-St
Diameter 156 mm
30 mm Female Adapter
Steel, black, hardened 58 HRC



PC.r/56-Af159-Ni
Diameter 56 mm
15.9mm female adapter
Steel, nickel-plated, hardened 58 HRC



PC.r-Q50-R1-Af20-St

For compression testing in cable management duct systems according to EN 61386-1



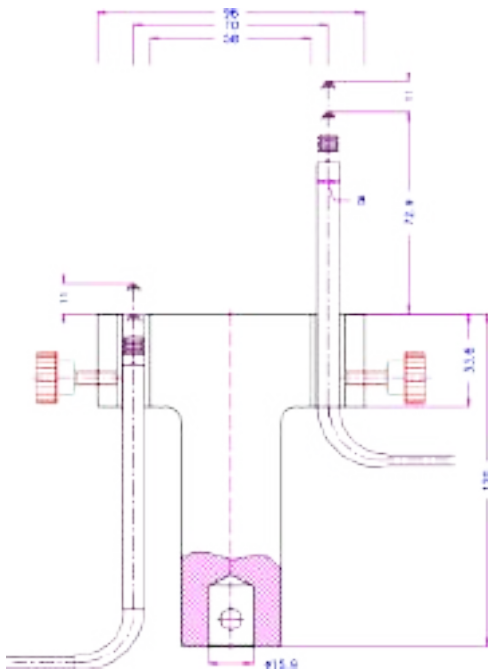
PC.r-Q50-R1-Af20-St

For compression testing in cable management duct systems according to EN 61386-1

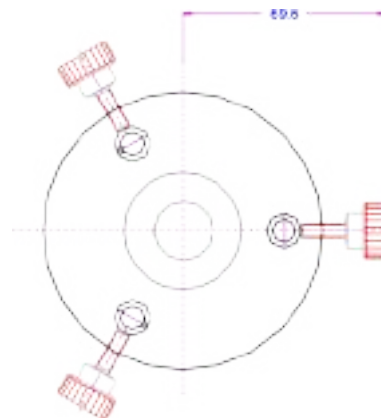


PC.r-096-Af318-TiNi

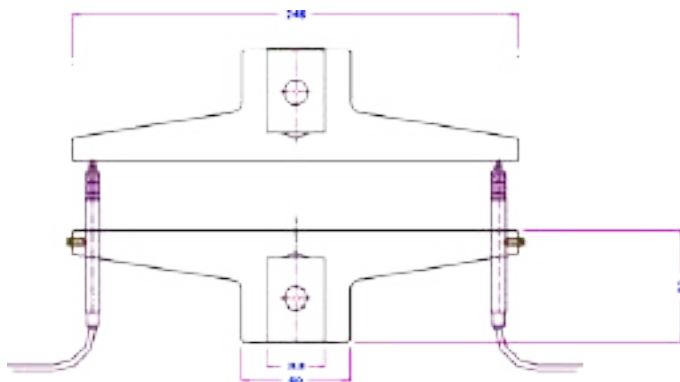
For compression test on Titanium nitride coating: extremely hard surface, wear resistant, temperature resistant up to +550 ° C



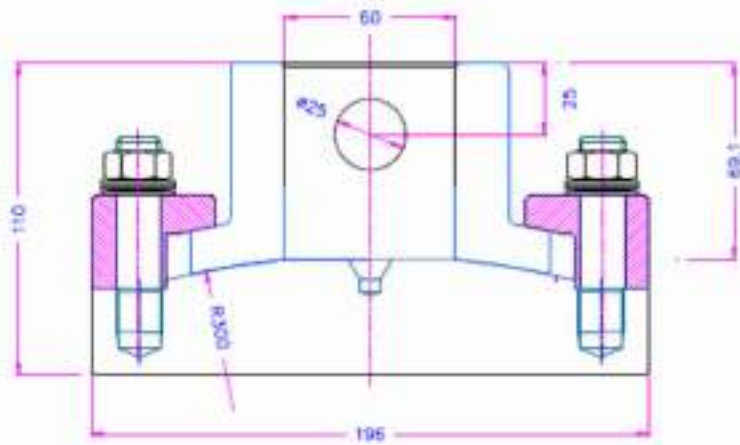
With 3 LVDT sensors



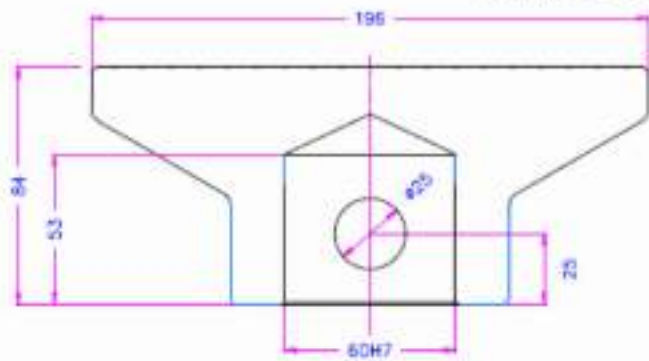
PC.r/96-LVDT



PC.r/246-318-LVTD

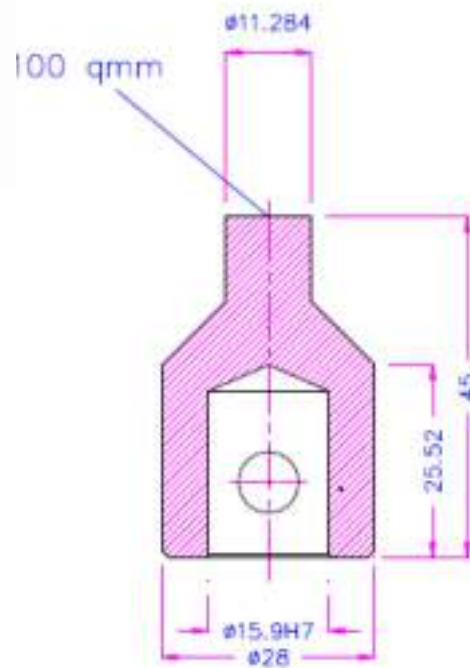


PCA.r/196-6025

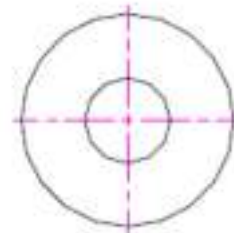


PC.r/196-6025

MOVABLE



100 mm²



PC.r/11.284 St



PC.r-156-Am35-H230+ITH6



PC.r-156-Am50+ITH6



PC.r-150-Am30.14+ITH6-D21-133



PC.r-096-Am15.9-H120+ITH6



PC-Af31.8-ASTM C1414

Small compression plates with folding guides to test the monotonic compressive strength of advanced ceramics in accordance with ASTM-C1424

Square Compression Test Plates PC.c series

Square plates for testing the compressive strength of materials coupled to a Universal Testing Machine.

Available built in **Aluminum** or **Steel** for use depending on the hardness of the material to be tested.

Also and for tests of spongy materials or that when compressing release air, line of **Perforated Aluminum** plates



GENERAL INFORMATION

Square compression plates, easy to use, designed to test the resistance to compression of materials, containers, components... of metals, plastics, cardboard.... The compression plates are made of high quality Aluminum to carry out compression tests with relatively soft materials, such as Papers, Cardboards, Plastics ...

When resistant and hard materials such as Metals, resistant Plastics, Rocks, Ceramics ... are tested, we have a line of compression plates made of steel.

PCc-AxB-C-AI (Aluminium plates)

PCc-L-AxB-C-L-AI (Perforated plates)

PCc-AxB-C-St (Steel plates)

A = small size **B**=Long size

C= adapter size

AI= Aluminium

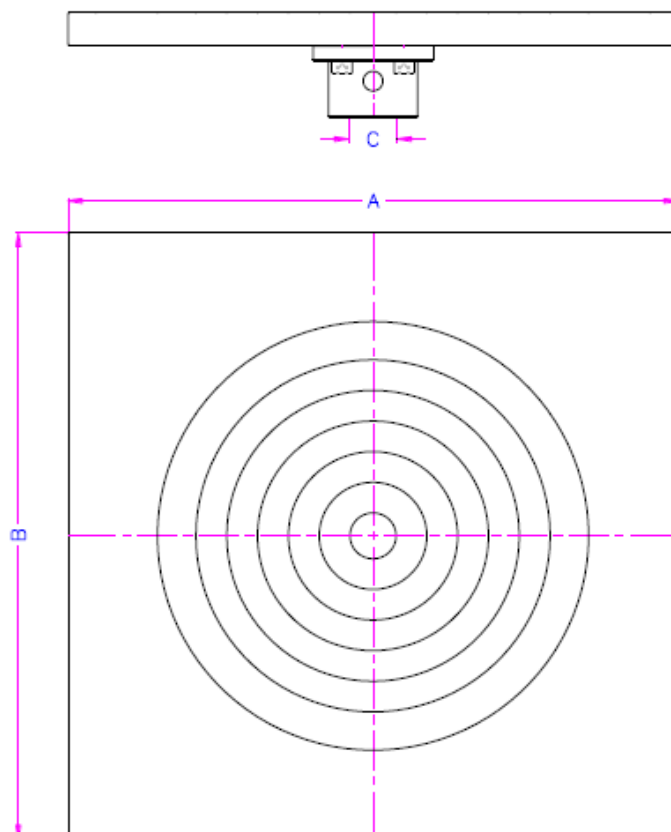
St= Steel

L= holes to let the air out

Standard coupling

Female (mm) 15.9, 19.1, 20, 30, 31.8, 32, 36,40...de Ø

Male (mm): 31.7 Further couplings on request



PC.c/Al ALUMINUM Compression Plates

- Soft Samples, Cardboards, Plastics, etc.
- Maximum capacity depends on coupling size
- Anodized aluminum
- Temperature range: -70 ° C - + 180 ° C
- Scope of supply: 1 pair of compression plates



Model	Dimensions	Weight/platen
PC.c/50-AL	50 x 50mm	0.20 kg
PC.c/100-AL	100 x 100mm	0.52 kg
PC.c/120-AL	120 x 120mm	0.78 kg
PC.c/120x180-AL	120 x 180mm	1.14 kg
PC.c/125x250-AL	125 x 250mm	1.73 kg
PC.c/150-AL	150 x 150mm	1.23 kg
PC.c/150x300-AL	150 x 300mm	2.35 kg
PC.c/200-AL	200 x 200mm	2.10 kg
PC.c/200x300-AL	200 x 300mm	3.39 kg
PC.c/250-AL	250 x 250mm	3.40 kg
PC.c/300-AL	300 x 300mm	4.35 kg
PC.c/350-AL	350 x 350mm	6.60 kg
PC.c/400-AL	400 x 400mm	8.70 kg

* Other dimensions on request



PC.c/St STEEL Compression Plates

- Samples of Hard Materials, Plastic Metals, Rocks, etc.
- Maximum capacity depends on coupling size
- Hardened steel 58 HRC
- Temperature range: -70 ° C - + 350 ° C
- Scope of supply: 1 par of compression plates



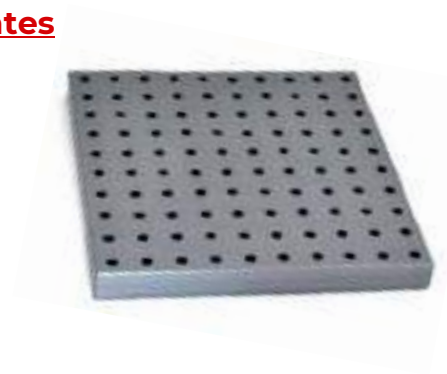
Model	Dimensions	Weight/platen
PC.c/100-St	100 x 100mm	1,54 kg
PC.c/196-St	196 x 196mm	6,60 kg
PC.c/246-St	246 x 246mm	10,40 kg
PC.c/296-St	296 x 296mm	13,60 kg
PC.c/396-St	396 x 396mm	33,00 kg

* Other dimensions on request



PCp.c/AL PERFORATED ALUMINUM Compression Plates

- For foam compression tests.
- Anodized aluminum
- Diameter of holes: 6mm spaced 20mm
- Temperature range: -70 ° C - + 180 ° C
- Maximum capacity depends on coupling size
- Scope of supply: 1 compression plate



Model	Dimensions	Weight/platen
PCp.c/150-L6x20	100 x 100mm	0,48 kg
PCp.c/120-L6x20	120 x 120mm	0,68 kg
PCp.c/150-L6x20	150 x 150mm	1,10 kg
PCp.c/150x220-L6x20	150 x 220mm	1,63 kg
PCp.c/200-L6x20	200 x 200mm	1,95 kg
PCp.c/300-L6x20	300 x 300mm	4,29 kg
PCp.c/390-L6x20	390 x 390mm	7,43 kg
PCp.c/400-L6x20	400 x 400mm	8,20 kg

* Other dimensions on request



"Self-aligning" Circular Compression Test Plates PCA.r series

Plates for testing the compressive strength of materials coupled to a Universal Testing Machine.

This line of compression plates has **correction** and self-alignment



GENERAL INFORMATION

Circular compression plates, easy to use, designed to test the resistance to compression of materials, containers, metal components, cement, plastics, with a correction system and self-alignment in order to have a perfect parallelism during the tests between both plates.

Spherically seats - The pan fits the specimen being tested for compression.

It is also possible to fix the plate at a required angle with 4 nuts.

PCA.r/k: for couplings between 12 - 25 mm Ø

PCA.r/g: for couplings between 30 - 40 mm Ø

- Applicable for samples of Metal, Cement, Concrete etc.
- Hardened steel 58 HRC, Phosphate Layer
- Temperature range: 0 ° C - + 280 ° C
Nickel plating: -70 ° C to +280 ° C (on request)

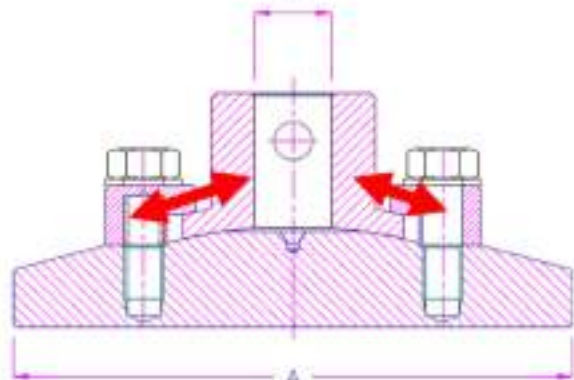
PCA.r/i: For couplings up to Ø 8 mm

For samples of lightweight materials (packaging materials etc.)

- Aluminium, anodized
- Temperature range: -70°C a +180°C

Order information

Scope of supply: 1 compression plate



PCA.r/i for adapters up to 8mm Ø

Model	Diameter	Weight	Radius
PCA.r/i-56	56mm	~60 g	50

PCA.r/i for adapters up to 12-25mm Ø

Modelo	Diameter	Weight	Radius
PCA.r/k-56	56 mm	~1,27 kg	100
PCA.r/k-96	96 mm	~1,40 kg	100
PCA.r/k-116	116 mm	~1,70 kg	100
PCA.r/k-156	156 mm	~2,70 kg	100
PCA.r/k-196	156 mm	~2,70 kg	100

PCA.r/i for adapters up to 30-50mm Ø

Model	Diameter	Weight	Radio
PCA.r/g-56	66 mm	~5,30 kg	200
PCA.r/g-96	96 mm	~6,10kg	200
PCA.r/g-116	116 mm	~6,50kg	200
PCA.r/g-156	156 mm	~7,10kg	200
PCA.r/g-196	196 mm	~7.4kg	200

PCA.r/i for adapters up to 50-60mm Ø

Model	Diameter	Weight	Radius
PCA.r/w-156	156 mm	~7,00 kg	300
PCA.r/w-196	296 mm	~9,80kg	300

PCA.r/i acoplamiento > 60mm de Ø

Model	Diameter	Weight	Radius
Bajo pedido			

Adaptador estándar versión gran ángulo

Af15.9 mm (otros bajo pedido)

Model	Diameter	Weight	Angle
PCA.r/b-100-AI	106 mm	~0,90 kg	± 15°
PCA.r/b-150-AI	150 mm	~1,50kg	± 15°
PCA.r/b-200-AI	200 mm	~2.1kg	± 15°
PCA.r/b-200-St	200 mm	~5.2kg	± 15°

Adapters for mounting the plate PCAr (self-aligning) on the plate PCc (fixed)

Model	Description
PCA.r-Af15.9-PCc	Adapter for mounting PCA.r-K on PCc , angle ± 1,5 °, coupling Af15,9 mm
PCA.r-Af15.9-PCc	Adapter for mounting PCA.r-G on PCc , angle ± 1,5 °, coupling Af15,9 mm
PCA.r-Af15.9-PCc	Adapter for mounting PCA.r-B on PCc , angle ± 15 °, coupling Af15,9 mm

Types i k g w Z b X:

- i** = very small
- k** = small
- g** = large
- w** = very large
- Z** = very large, pitch circle diameter
- B** = large angle
- X** = exotic solution

The PC.r plates are rigid (fixed) (self-aligning plates m

- i** = adapter 8, spherical radius R50
- k** = adapter 14-20, spherical radius R100
- g** = adapter 30-50, spherical radius R200
- w** = adapter 60-70, spherical radius R300, inner Ø of clamping ring
- Z** = adapter 80, spherical radius R300, inner Ø of clamping ring 125
- B** = ±15 ° giratorio, spherical radius b30 (30 mm Ø for Af159 y Af20; -t
- X** = with pitch circle, external spring (without Af o Am adapter)
- S** = with internal thread, external spring, exotic solution

Examples for other versions and special applications:



PCA.ri-56



PCA.r/K-116



PCA.rg-56



PCA.r/g-156-Am317



PCA.r/k-116-NI
Temperature range -70°C-280°



PCA.r/k-2



PCA.r / w-196-60-Ni
Af60
Adapter size 60
Surface Nickel



PCA.r/g-156-Am317
male adapter 31.7mm Ø



PCA.r/196-



PCA.r/g-396x596



PCA.r/k-D200-L6-20-AL



PCA.r/s-13



PCA.r/g-150x180



PCA.r/k-114x114-AL



PCA.r/i-100x100

PR.T Series T-Slotted Test Plates

Grooved plates in "T" that allow to fix samples and assemblies in different positions and that it is desired to test tensile, compression, bending, detachment, opening-closing automotive parts.... coupled to a Universal Testing Machine.

Available built in **Aluminium** or **Steel** for use depending on the hardness of the material to be tested.

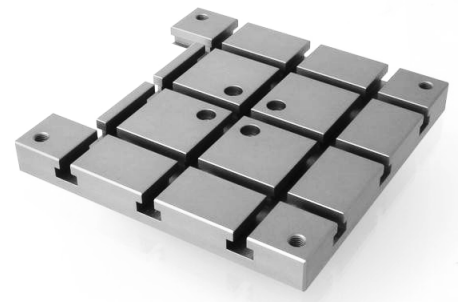


GENERAL INFORMATION

Easy-to-use square "T" slotted plates designed to accommodate samples or assemblies in different positions that can hardly be clamped in conventional jaws and thus be able to carry out tests of resistance to traction, compression, bending, adhesion, opening-closing of automotive parts.... The slotted plates are constructed of high quality Aluminum for testing relatively soft materials.

When you need to test resistant and hard materials such as Metals, resistant Plastics, we have a line of grooved plates in "T" made of Steel.

Article:	PR.T/AxB-AI (Aluminium Compression Plate) PR.T/AxB-St (Steel Compression Plate)	A = Width B = Long AI = Aluminium St = Steel
Coupling	- Female (mm): Af15.9, (5/8"), 20, 30, 31.8 (10/8"), 32, 36, 40 - Male [mm]: Am31.7 (others on request)	
Maximum load:	It depends on the size of the coupling, the material of the plate and the principle of force application	
Material:	- Aluminium, anodized - Nickel plated steel	
Temperature range:	- Aluminium: -70 to +180°C - Steel: -70 to +350 °C Other temperature ranges on request	
Scope of supply:	1 T-slotted plate	



Standard series PR.T / AI - in anodized ALUMINUM

MODEL	DIMENSIONS (AxB)	WEIGHT
PR.T/250-AL --	250x250 mm,	4,0 Kg
PR.T/220x400-AL	220x400 mm	5,6 Kg
PR.T/380x400-AL	380x400 mm	10,00 Kg

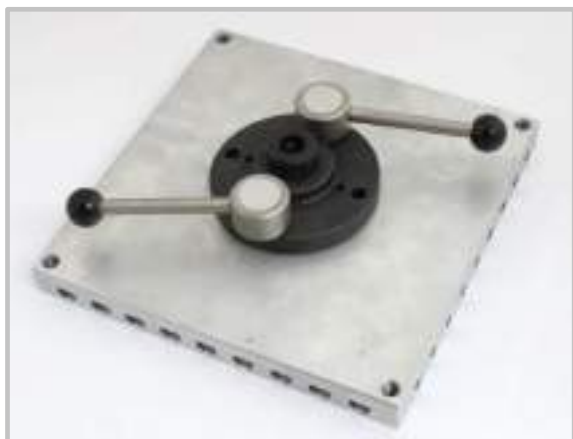
Standard series PR.T / St - in STEEL

MODEL	DIMENSIONS AXB	WEIGHT
PR.T/250-St	250x250 mm	11,7 Kg
PR.T/220x400-St	220x400 mm	16,3 Kg
PR.T/380x400-St	380x400 mm	26,3 Kg

* Other dimensions on request

PR.T/550x400-S17

(Special version)
Plates with diagonal grooves



PR.T/250-Af158-RTT

Rotary adapter



Use with threaded studs



Use with Universal Testing
Machines of 1 column



PR.T/250-St+HL86x30 + Mordaza manual serie MDM-5/100-ST

Special version for testing car batteries

Perimeter Compression Test Fixture circular bottle caps

Device for performing compressive strength tests on cork and polymeric stoppers coupled to a Universal Testing Machine.



GENERAL INFORMATION

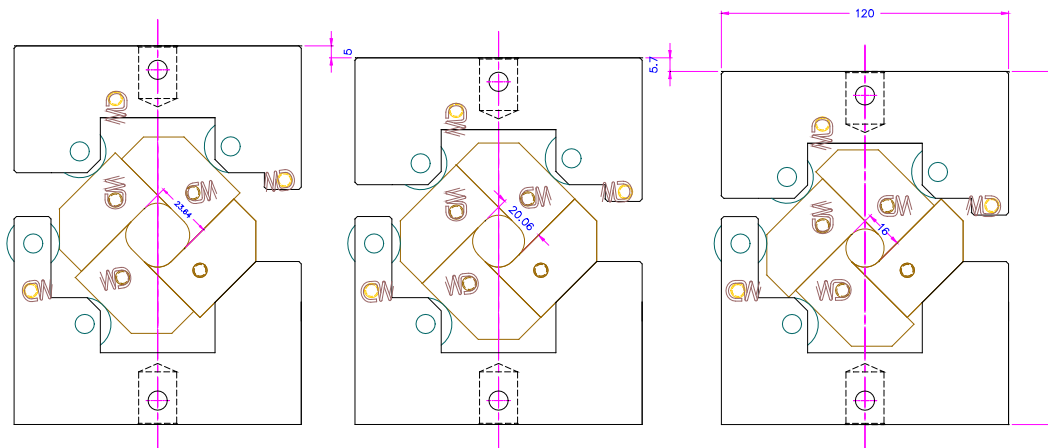
Compression fixture for testing Cork and polymeric Caps.

Housing the cap inside this device made of stainless steel, a compression test is performed by exerting a force along the entire length of the cap, thus determining its mechanical resistance, which will indicate the resistance of the cap during all processes to which it is subjected during the industrial capping process.

- Maximum test capacity of 10 kN
- Maximum test diameter 20 mm compressing up to 16 mm

Standard version made of stainless steel (photo above)

Special version with bearings (with lower friction forces) also made of stainless steel (lower diagram)



Testing Fixtures Push-out

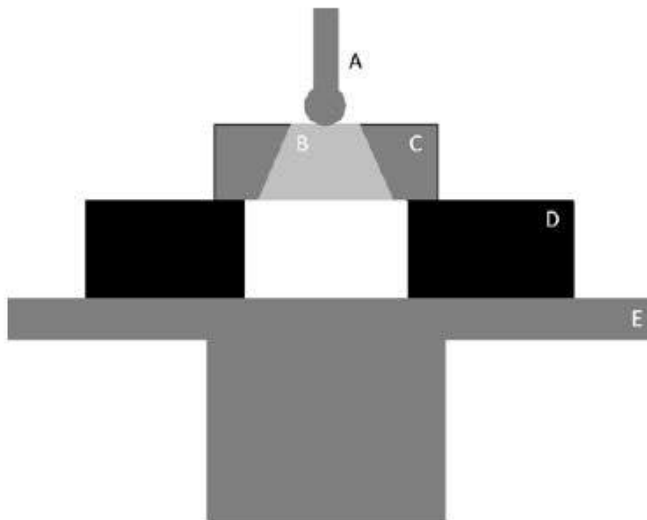
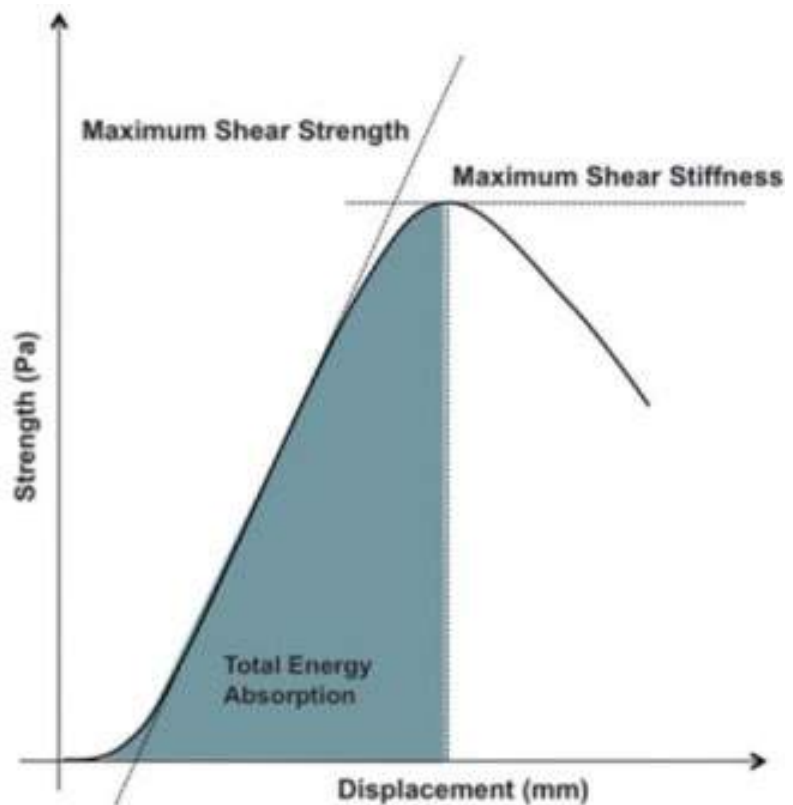
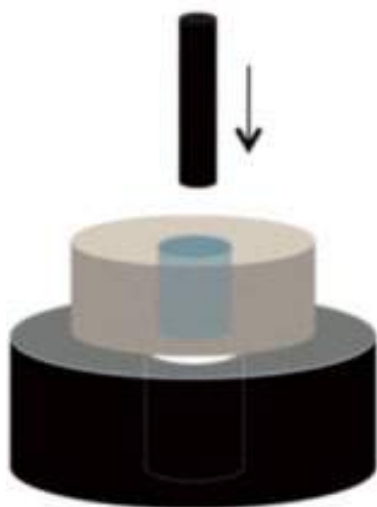
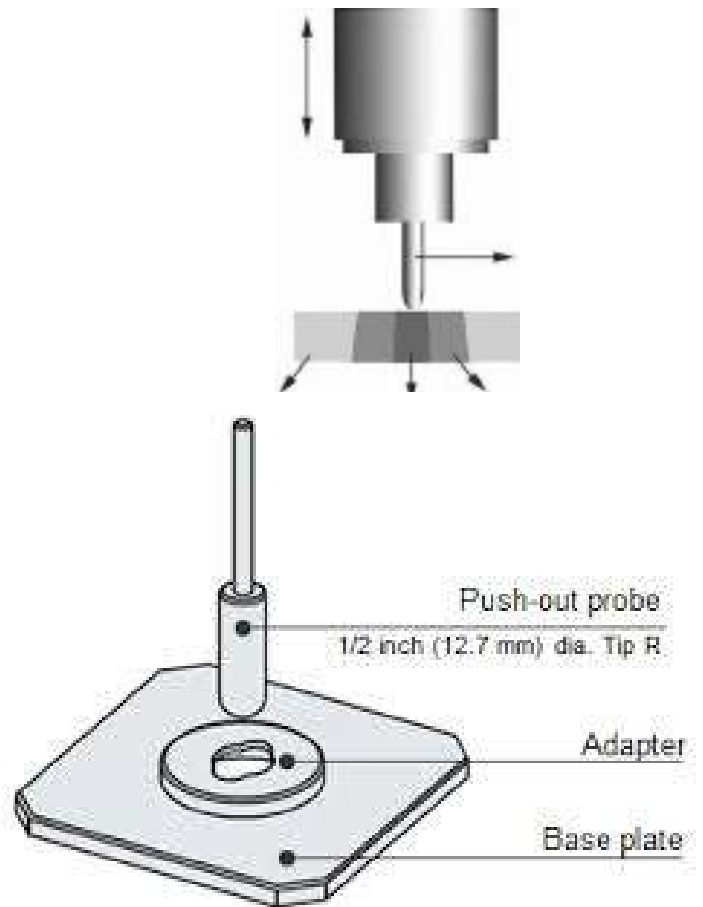
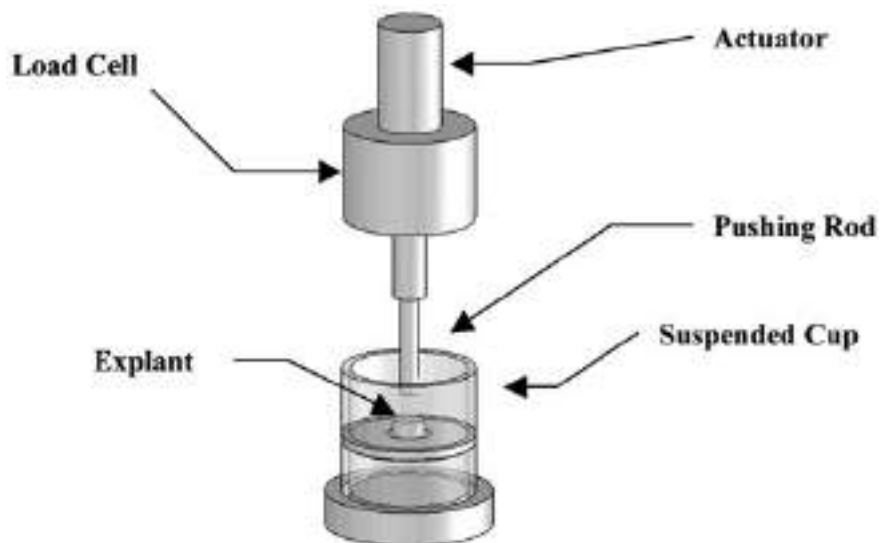
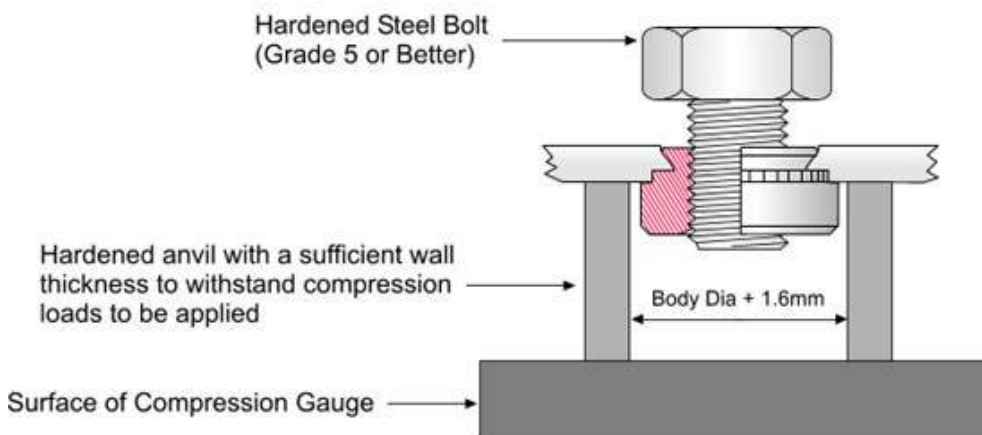
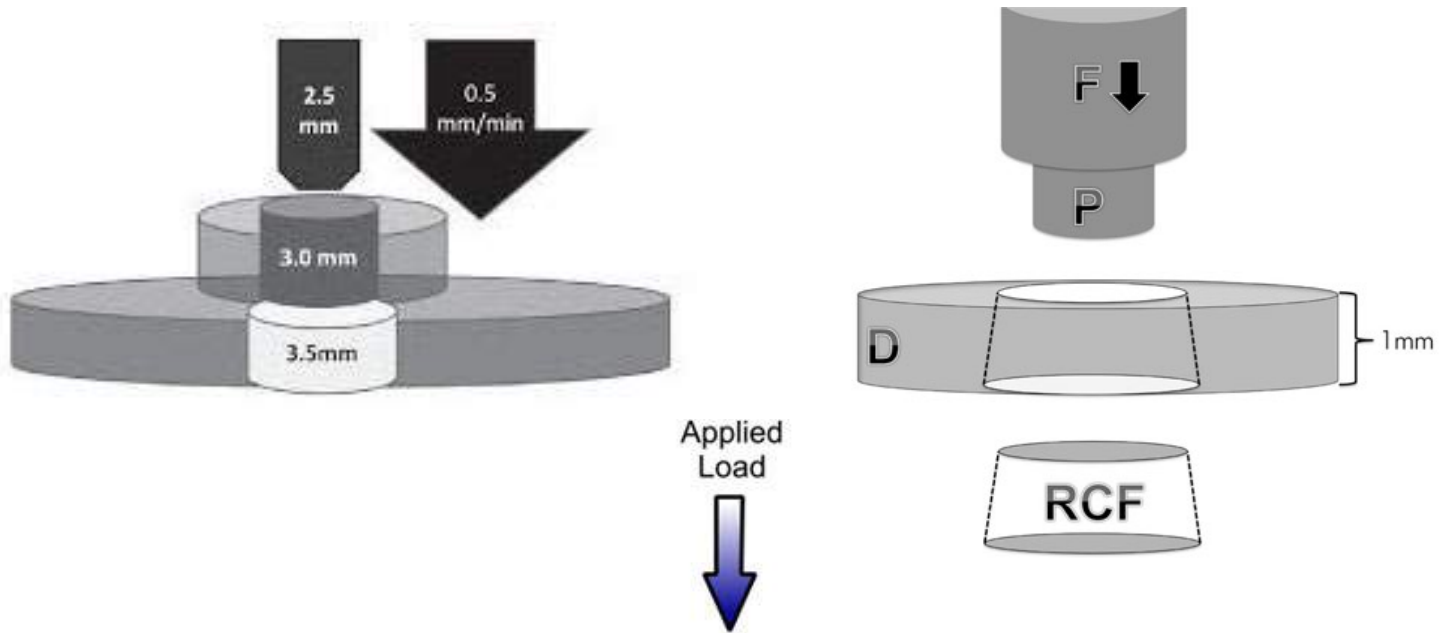


Figure 2. Schematic illustration of the metallic mold for push-out test. A: Sphere-shaped rod; B: Specimen; C: Metallic mold; D: Acrylic resin apparatus; E: Universal testing machine.





Recommended Testing Machines:



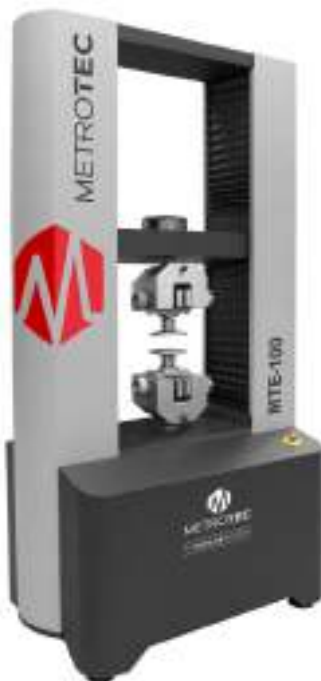
MTE-5 (to 5 kN)



MTE-25 (to 25 kN)



MTE-50 (to 50 kN)



MTE-100 (to 100 kN)



MTE-500 (to 500 kN)



MTE-300 (to 300 kN)