

Adapter Plate - Guidance for MultiFields Low Temperature Piezoelectric Positioners Interconnect

Positioner on the topside ↓	Linear16-z	Linear16-x	Linear25	Linear35	Rotator16	Rotator25	Rotator35	Goniometer25	Gonimeter35	Scanner16	Scanner25
Linear16-z			APLT.L16z	APLT.L16z		APLT.L16z	APLT.L16z	APLT.L16z			APLT.L16z
Linear16-x	✓	✓	✓	✓		✓	✓	✓	✓		APLT.L16x
Linear25			✓	✓			✓	*	*		*
Linear35				✓					*		
Rotator16						APLT.R16	APLT.R16	APLT.R16	APLT.R16		
Rotator25			✓	✓			*	*	*		*
Rotator35				✓					*		
Goniometer25			✓	✓			✓	✓	*		*
Goniometer35				✓					✓		
Scanner16	✓	✓	APLT.S16	APLT.S16				APLT.S16	APLT.S16		APLT.S16
Scanner25			✓	✓				✓	✓		
Positioner on the bottom ⇨	Linear16-z	Linear16	Linear25	Linear35	Rotator16	Rotator25	Rotator35	Goniometer25	Gonimeter35	Scanner16	Scanner25

This table gives a comprehensive guide for two same or different positioners connect to each other. The left column positioners are selected on topside, while the top row positioners are selected as the bottom one.

There are three conditions when two MultiFields Positioners Mount together, including

- (1) ✓ do not need extra plate to connect.
- (2) * do not need extra plate to connect. Though this mounting form is workable in specific cases, we don't recommend this connection arrangement.
- (3) "APLT.****" the part name of adapter plates needed to connect with each other.
- (4) "Blank-cell", means this mounting form should be avoid.

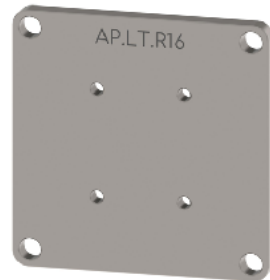
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Accessories - Adapter Plate - Interconnect

Piezoelectric Motion - Low temperature series - Accessories

Adapter plates designed for MultiFields piezoelectric motion units



Adapter Plates for MultiFields Piezoelectric Positioners

	Part Name	Discription
Linear16-z	AP.LT.L16z	Adapter Plate Used to mount Linear16-z on other MultiFields positioners
Linear16-x	AP.LT.L16x	Adapter Plate Used to mount Linear16-x on other MultiFields positioners
Rotator16	AP.LT.R16	Adapter Plate Used to mount Rotator16 on other MultiFields positioners
Scanner16	AP.LT.L25	Adapter Plate Used to mount Scanner16 on other MultiFields positioners

Adapter Plates are Used to Mount MultiFields Piezoelectric Positioners with Cross-mounting of Different Series Positioners.

1. All the adapter plates are fabricated by pure Ti metal.
2. Non-magnetic screws are included when you purchase the adapter plate set.

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Accessories - Adapter Plate - Vertical Orientation

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Adapter plates designed for mounting MultiFields motion units with vertical orientation



Adapter Plates are Used to Mount MultiFields Piezoelectric Positioners with Vertical Orientation.

1. All the adapter plates are fabricated by pure Ti metal.
2. Non-magnetic screws are included when you purchase the adapter plate set.
3. All the positioners, which are able to be used when it is tilted 90°, have been listed following. The absent ones mean they are not recommended to be tilted by 90°

Adapter Plates for MultiFields Piezoelectric Positioners

	Part Name	Discription
Linear16-z	APLT.L16z-v	Adapter Plates Used to Title Linear16-z by 90°
Linear16-x	APLT.L16x-v	Adapter Plates Used to Title Linear16-z by 90°
Rotator16	APLT.R16-v	Adapter Plates Used to Title Rotator16 by 90°
Linear25	APLT.L25-v	Adapter Plates Used to Title Linear25 by 90°
Linear35	APLT.L35-v	Adapter Plates Used to Title Linear35 by 90°
Rotator25	APLT.R25-v	Adapter Plates Used to Title Rotator25 by 90°
Rotator25.Optic	APLT.R25.Optic-v	Adapter Plates Used to Title Rotator25.Optic by 90°
Rotator35	APLT.R35-v	Adapter Plates Used to Title Rotator35 by 90°
Goniometer25	APLT.G25-v	Adapter Plates Used to Title Goniometer25 by 90°
Goniometer35	APLT.G35-v	Adapter Plates Used to Title Goniometer35 by 90°

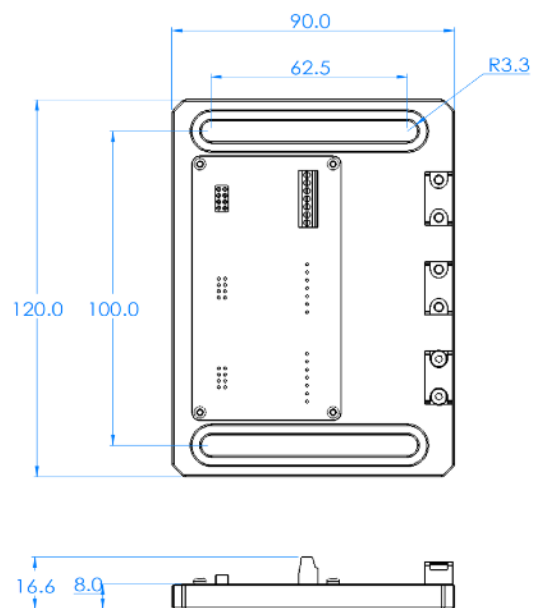
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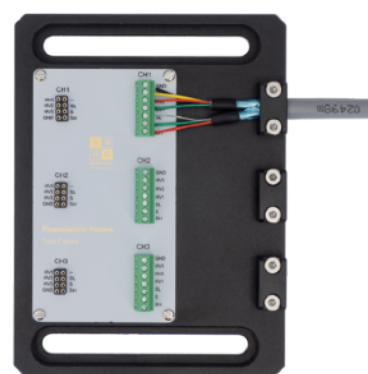
Accessories - Adapter Plate - PinsPlate

Piezoelectric Motion - Low temperature series - Accessories

An adapter for MultiFields LT Motion Units to directly connect on an optic table.



AP.LT.PinsPlate

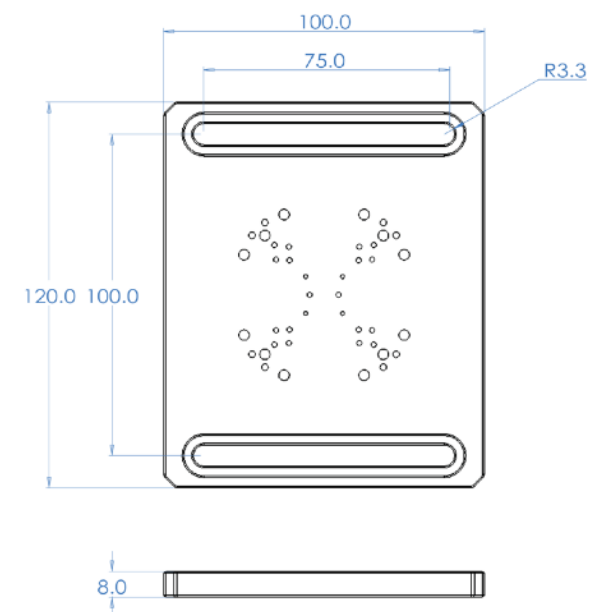


* Real photos of AP.LT.PinsPlate, the cable in photo is PMC.cable supplied by MultiFields

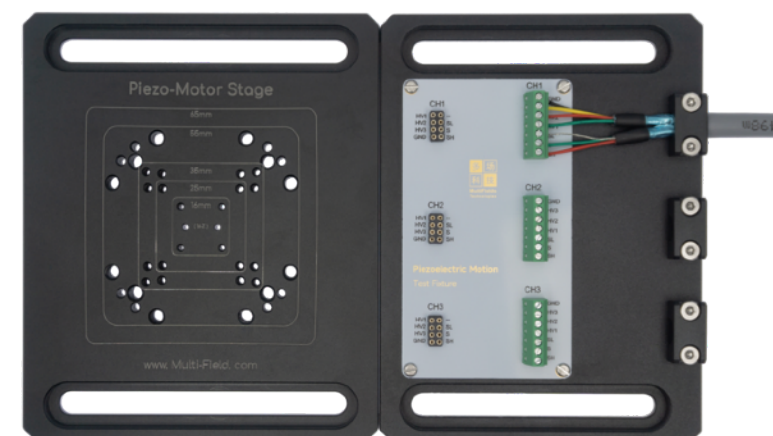
Accessories - Adapter Plate - Installation Plate

Piezoelectric Motion - Low temperature series - Accessories

An adapter for MultiFields LT Motion positioners to directly connect on an optic table.



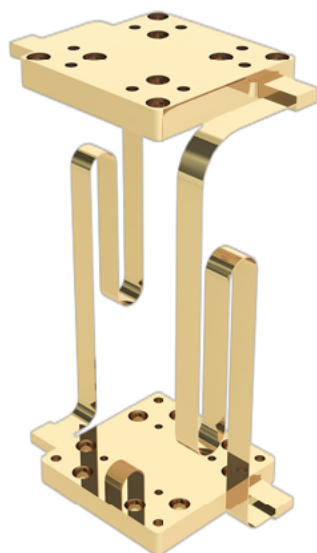
AP.LT.InstPlate



* Real photos, Combination of AP.LT.PinsPlate,

Accessories - Flexible Thermal Connection Set

Piezoelectric Motion - Low temperature series - Accessories



FTC##.L**

Flexible thermal connection set are used to keep sample cold when piezoelectric positions moving in vacuum environment . Higher thermal conductivity is always welcomed in low temperature experiments for a lower base temperature. And a flexible structure guarantees the device won't consumes excessive load capacity.

1. All the adapter plates are fabricated by pure non-magnetic metal.
2. Non-magnetic screws are included when you purchase the flexible thermal connection set.

Flexible Thermal Connection Set for Positioners

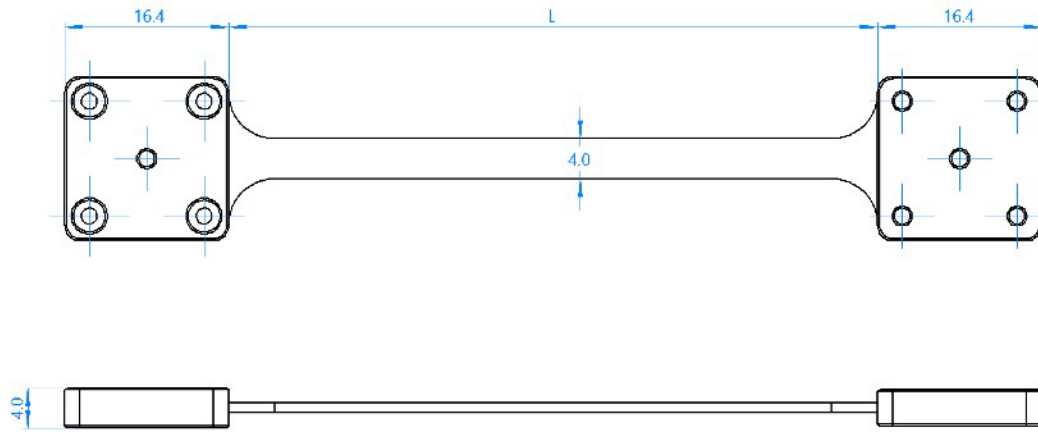
	FTC16.L**	FTC25.L**	FTC35.L**
Description	Designed for 16mm Linear and Scanner series stack	Designed for 25mm Linear and Scanner Series Stack	Designed for 35mm Linear, Goniometer and Scanner Series Stack
Size & Dimensions			
Footprint base plate	16 × 16 mm	25 × 25mm	35 × 35mm
Footprint top plate	16 × 16 mm	25 × 25mm	35 × 35mm
thickness, base plate	2.5 mm		
Thickness, top plate	4 mm		
Length copper coupling foil	35 mm; 65 mm; 100 mm version		
Working Conditions			
Temperature range	10 mK to 420 K		
Pressure conditions	Ambient, HV, UHV		
Use in magnetic field	max. 35 Tesla		
Cernox Sensor & Heater (optional)			
Temperature Range	1.6 K to 350 K		
Wires	Thermometers, 4 Pins; Heater, 2pins; Pure copper wires,36 awg		
Heater Resistance	50 Ohm		
Heater Power	Max. 50W		
Thermal Conductivity @300 K	FTC**.035mm, 40 mW/K FTC**.065mm, 29 mW/K FTC**.100mm, 16 mW/K		

Accessories - Flexible Thermal Connection Set

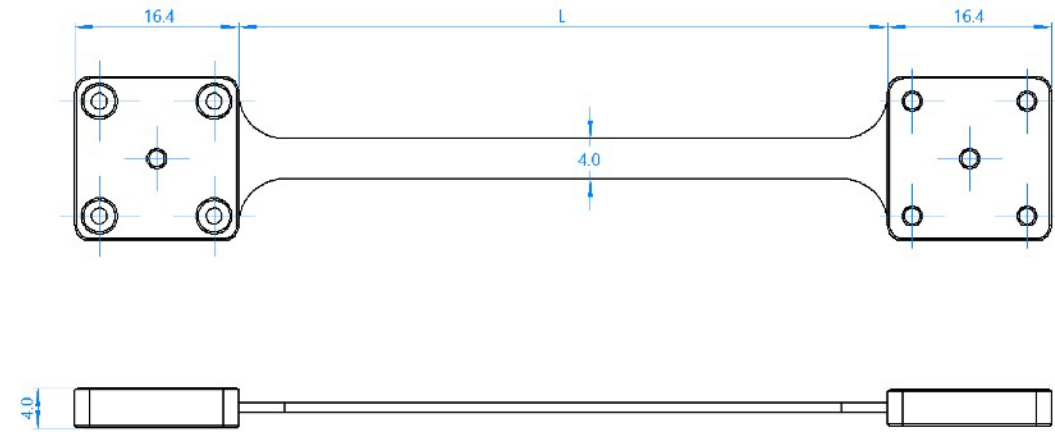
Piezoelectric Motion - Low temperature series - Accessories

2D Drawings with size and screw details

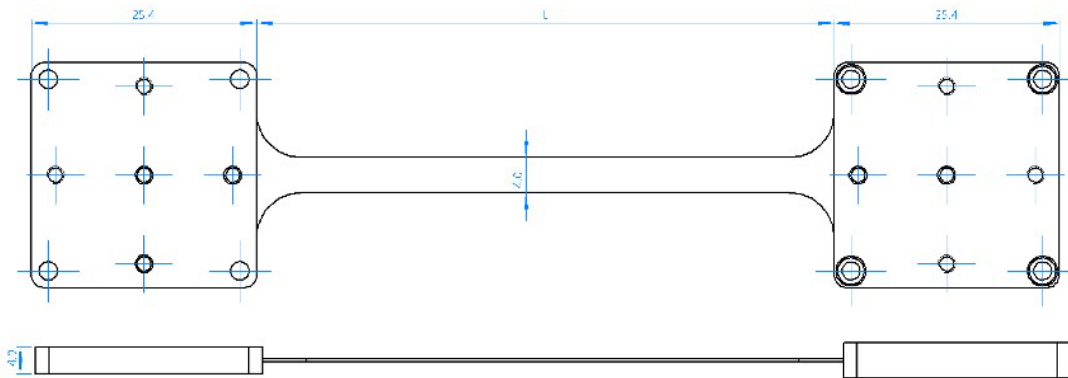
2D drawings



FTC16.L** series



FTC35.L** series



FTC25.L** series

FTC##. L**. xx. CX

##, top-plate fit 16,25 & 35mm series stage

** , length (mm) between base-plate and top-plate

xx, connected to cryogenics system cold-plate

CX, thermometer added

FTC16.L series**

- FTC16.L35.xx
- FTC16.L65.xx
- FTC16.L100.xx
- FTC16.L35.xx.CX
- FTC16.L65.xx.CX
- FTC16.L100.xx.CX

FTC25.L series**

- FTC25.L35.xx
- FTC25.L65.xx
- FTC25.L100.xx
- FTC25.L35.xx.CX
- FTC25.L65.xx.CX
- FTC25.L100.xx.CX

FTC35.L series**

- FTC35.L35.xx
- FTC35.L65.xx
- FTC35.L100.xx
- FTC35.L35.xx.CX
- FTC35.L65.xx.CX
- FTC35.L100.xx.CX

Accessories - ToolBox.Basic

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The basic version of ToolBox is supplied



PM.LT.ToolBox.Basic

ToolBox.Basic

items	Specification	Quantity	
1 Screws -BeCu	Compatible with 30 mK & 35 Tesla M1.6, M2 suitable	One set	
2 Connectors	Compatible with 30 mK & 35 Tesla	One set	
	PA - standard		2pins, 3pins and 4pins
	Peek - UHV compatible		4pins - BeCu pins, Peek main body
3 Tools	Multifunction screw driver Tweezers	One set	
4 USB-Driver	Manual, software etc.	1 pc	

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