

# 180 Degree Peel Test Fixture

## P180-200N/ P180-200N-BB

- Ideal for 180 degree peel test of adhesives such as tapes and sheets on board.
- Standard type P180-200N and Breadboard type P180-200N-BB are available
- Designed for peel test complying with a part of IEC, ISO and ASTM Standard



### P180-200N

- Complies with a part of IEC, ISO and ASTM Standard
- Standard type for testing with angle to 180 degree



Test Image (Adhesives tape)



### P180-200N-BB

- Enables fixing samples with a breadboard and clamps
- Ideal for 180 degree peel test of adhesives seats on board






Test Image (Printed circuit board)

Related Standard	
P180-200N/ P180-200N-BB	- <b>IEC 249-1:1982</b> Base materials for printed circuits. Part 1: Test methods (Partly) <b>IEC 326-2:1990</b> Printed boards. Part 2 Test methods (Partly) *1 (Corresponding Japanese standard: <b>JIS C5016:1994</b> )
P180-200N	- <b>ISO 29862:2018</b> Self adhesive tapes-Determination of peel adhesion properties (Partly) (Corresponding Japanese standard: <b>JIS Z0237:2022</b> ) - <b>Japanese Pharmacopoeia 18th Edition</b> :6.12 Methods of Adhesion Testing. “3.1.2.1 180 peel adhesive testing” (Partly) - <b>ASTM D3330:2010</b> Standard Test Method for Peel Adhesion of Pressure-Sensitive Tape (Partly)
<b>Applications</b>	- Sticker, adhesive tape, adhesive sheet, adhesive plaster, magnetic tape, foil laminated film *2 - Printed circuit board, screen protector film for panel, copper foil of circuit board, sheet for glass, thick coating film, adhesive sheet on board

\*1 We recommend 90 degree peel test for these standards. 180 degree peel test is acceptable if 90 degree peel is impossible.

\*2 P180-200N are suitable for these samples.

How to adhere test sample for P180-200N		
Take off the stainless panel and adhere test sample on it.	Fix the stainless panel by screws.	Grip the sample to get ready to start the peel test.
		

Specifications		
Model	P180-200N	P180-200N-BB
Peel length (Max)	150mm	See [Dimensions]
Sample Width (Max)	60mm	See [Dimensions]
Thickness of board (Max) *1	-	8mm
Capacity	0.5 to 200N	
Dimensions	See [Dimensions]	
Weight	Approx. 300g	
Compatible test*2 stand *	MX-500N-L, MX2-500N-L, MX2-500N-2L, MX-1000N-L, MX2-1000N-L, EMX-500N-L, EMX-1000N-L	

\*1 Only for P180-200N-BB. Four clampers and four knobs are included.

\*2 Contact us for compatibility of other models of test stands.

Available peel length depends on the model of test stand. Refer to below for details.

Test Stand	Peel length	
Model	P180-200N	P180-200N-BB
MX-500N-L	Approx. 70mm	Approx. 70mm
MX2-500N-L	Approx.70mm	Approx.70mm
MX2-500N-2L	Available for whole surface	Approx.150mm
MX-1000N-L	Available for whole surface	Approx.150mm
MX2-1000N-L	Available for whole surface	Approx.150mm
EMX-500N-L	Available for whole surface	Approx.150mm
EMX-1000N-L	Available for whole surface	Approx.150mm

### Examples of Product Configuration P180-200N

#### Example

**Code: 1P2005A**

Peel test up to 200N according to a part of IEC 249-1:1982, IEC 326-2:1990, JIS C5016:1994 and Japanese Pharmacopoeia. \*1 The statistic, such as average value, is calculated and converted to unit of adhesive strength by the force-time/displacement graphing software.

Force-Displacement Measurement Unit: FSA-0.5K2-200N-L-NEXT \*2  
(-L: Long stroke option / -NEXT: Downloadable Graphing Software Option)  
Optional Attachment: P180-200N  
Optional Attachment: FC-20 \*3  
Additional Function: Peel Testing Module 1 (Download Card Advanced)



#### Example

**Code: 1P2005B**

Peel test up to 200N according to a part of ISO 29862:2018, JIS Z0237:2022 and ASTM D3330:2010. The statistic, such as average value, is calculated and converted to unit of adhesive strength by the force-time/displacement graphing software.

Force-Displacement Measurement Unit: FSA-0.5K2-200N-2L-NEXT \*2  
(-2L: Long stroke option / -NEXT: Downloadable Graphing Software Option)  
Optional Attachment: P180-200N  
Optional Attachment: FC-20 \*3  
Additional Function: Peel Testing Module 1 (Download Card Advanced)



### Examples of Product Configuration P180-200N-BB

#### Example

**Code: 1P2007A**

Peel test up to 200N according to a part of IEC 249-1:1982, IEC 326-2:1990 and JIS C5016:1994. \*1 The statistic, such as average value, is calculated and converted to unit of adhesive strength by the force-time graphing software. Ideal for peel test of fixing samples with a bread board and clamps such as thick coating film and adhesive sheet on board

Digital Force Gauge: ZTS-200N  
Motorized Test Stand: MX2-500N-L \*2  
Optional Attachment: P180-200N-BB  
Optional Attachment: FC-21U \*3  
Optional Cable: CB-528  
Optional Software: Force Recorder Standard



#### Example

**Code: 1P2007B**

For simple peel test up to 200N.

Digital Force Gauge: DST-200N  
Motorized Test Stand: MX-500N-L \*2  
Optional Attachment: P180-200N-BB  
Optional Attachment: FC-21U \*3



\* Product configuration varies depending on the shape and characteristic of the sample, and measurement conditions.



\* The recommended capacity of force gauge varies depending on the expected force to be loaded.

\*1 90-degree peel test is recommended for JIS C5016:1994. 180-degree peel test is acceptable if 90 degree peel is impossible.

\*2 To ensure enough peel length, long stroke model of motorized test stand is strongly recommended.

\*3 Wide width model of film grip is necessary if the sample width is over 20mm.

**[Clamper and Knob]** The set of clamper and knob is available for replacement. \*

Model	Included Parts	Images	
<b>SCK-PRT</b>	Sample Clamper and Knob	 SCK-PRT	 Installation image

\* Only for **P180-200N-BB**.

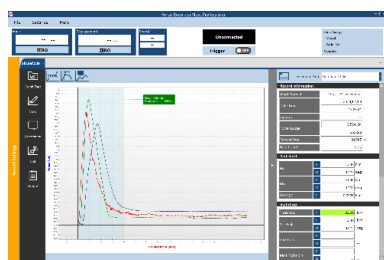
\* This set of parts is sold in two pairs per order, not sold individually.

Related Products		
<b>Spare Stainless Panel</b> <b>SSP-1608</b> Using this spare stainless panel, the tester can continue measurement without cleaning a panel after each measurement.	<b>Rubber Roller for Peel Test</b> <b>APR-97</b> It helps to stick samples on the panel with certain pressure, which improves accuracy of measurement results.	<b>Film Cutter</b> <b>FSC-1525</b> It is designed to cut paper or film in constant-width.
		
	Standard: JIS Z0237:2022(*1)	Standard Width 15mm JIS Z1707:1997(*1) JIS Z0238:1998(*1)
		Standard Width 1inch ATSM F88(*1)
<b>Guide Ruler for Adhesive Tape Peel Test</b> <b>GRP-50</b> It is designed to help correctly position the Adhesive Tapes for the Peel Tests with the Peel Test fixtures	<b>45 Degree Peel Test Fixture</b> <b>P45-50N</b> It is designed for peel test of cup film/paper lid to evaluate the open-easiness for food and medical packaging industry.	<b>90 Degree Peel Test Fixture</b> <b>P90-200N/P90-200N-EZ/</b> <b>P90-200N-BB</b> Fixture for 90-degree peel test of adhesive tape and the like.
		
<b>Film Grip</b> <b>FC-21/20/40/21U/41U/21UQ</b> Ideal for gripping thin samples such as film. A wide range of product models are available to fit your needs.	<b>Sample Plate for Adhesive Tape Peel Test</b> <b>ATP-50N</b> Plate jig for peel test of adhesive tapes which enables easy and fast sample set up just by sticking samples to it.	<b>180-degree High Speed Peeling Tester</b> <b>IPTS-20N/50N</b> Specialized peeling tester features high operability with a wide speed range up to 1500mm/min.
		

\*1 It complies with a part of the standard.

## [Related Software]

### Downloadable Graphing Software: Force Recorder Next series



▲ Force Recorder Next Professional

Peel Force Values	
OK	
Sample Width	24.00 mm
Peel Max	0.49 N/10mm
Peel Min	0.38 N/10mm
Peel Ave	0.436 N/10mm

▲ Peel Testing Module 1

High sampling rate of max. 2000Hz enables accurate graphing.

- Force Recorder Professional: for graphing force-time / force-displacement.
- Force Recorder Standard: for graphing force-time.
- Test condition presets: for effective recording / analysis of measurement results.
- Data editing: overlaying up to 10 graphs, etc., for results editing / analysis.
- Add Images / Comments function: useful for recording measurement data details.
- The Print Command allows images and statistics output in a file form: PDF/Word/Excel.

#### [Additional Function: Peel Testing Module 1 with Download Card Advanced]

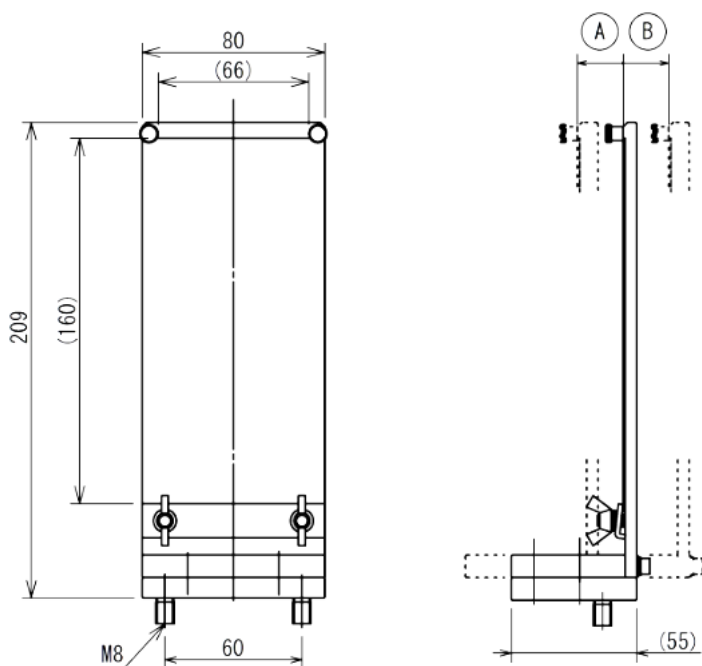
A function is available for additional installation at cost, for the Force Recorder Next series.

- The statistic, such as average value, is automatically calculated and converted to unit of adhesive strength after each measurement by entering sample width and other required details before measurement.
- Some pre-registered standards, such as ISO 29862:2007, are installed in the measurement conditions for easy configuration according to the individual requirements.

NOTE: An internet connection is required at all times to use all functions on the IMADA connected. For software online downloads, a purchase of a download card is required with a prior user/product registration on IMADA connected. Product registrations are limited for Next Series products (e.g. ZTA/ZTS Series with firmware version 5.00 or later). If the PC cannot be connected to the Internet, please use the CD version graphing software, Force Recorder series. Some specifications differ between the Force Recorder Next series and Force Recorder series. Please refer to the individual specification sheets for details.

## [Dimensions]

### P180-200N



[illegible]

A	+20mm
B	-20mm



6 / 6  
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