



PCE Instruments PCE-DFG FD 300 Force Path Adaptor Instruction Manual

[Home](#) » [PCE Instruments](#) » PCE Instruments PCE-DFG FD 300 Force Path Adaptor Instruction Manual 

Contents

- [1 PCE Instruments PCE-DFG FD 300 Force Path Adaptor](#)
- [2 Safety notes](#)
- [3 Safety symbols](#)
- [4 Specifications](#)
- [5 Optional accessories](#)
- [6 System description](#)
- [7 Assembly](#)
- [8 Warranty](#)
- [9 Disposal](#)
- [10 PCE Instruments' contact information](#)
- [11 Documents / Resources](#)
 - [11.1 References](#)
- [12 Related Posts](#)



PCE Instruments PCE-DFG FD 300 Force Path Adaptor



Safety notes

Please read this manual carefully and completely before you use the device for the first time. The device may only be used by qualified personnel and repaired by PCE Instruments personnel. Damage or injuries caused by non-observance of the manual are excluded from our liability and not covered by our warranty.

- The device must only be used as described in this instruction manual. If used otherwise, this can cause dangerous situations for the user and damage to the meter.
- The instrument may only be used if the environmental conditions (temperature, relative humidity, ...) are within the ranges stated in the technical specifications. Do not expose the device to extreme temperatures, direct sunlight, extreme humidity or moisture.
- Do not expose the device to shocks or strong vibrations.
- The case should only be opened by qualified PCE Instruments personnel.
- Never use the instrument when your hands are wet.
- You must not make any technical changes to the device.
- The appliance should only be cleaned with a damp cloth. Use only pH-neutral cleaner, no abrasives or solvents.
- The device must only be used with accessories from PCE Instruments or equivalent.
- Before each use, inspect the case for visible damage. If any damage is visible, do not use the device.
- Do not use the instrument in explosive atmospheres.
- The measurement range as stated in the specifications must not be exceeded under any circumstances.

- Non-observance of the safety notes can cause damage to the device and injuries to the user.
- We do not assume liability for printing errors or any other mistakes in this manual.
- We expressly point to our general guarantee terms which can be found in our general terms of business.
- If you have any questions, please contact PCE Instruments. The contact details can be found at the end of this manual.

Safety symbols

Safety-related instructions the non-observance of which can cause damage to the device or personal injury carry a safety symbol.

Symbol	Designation/description
	<p>General warning sign</p> <p>Make sure that you carry out the assembly in a safe environment and do not injure any persons.</p>
	<p>Warning: hand injuries</p> <p>When assembling the module, avoid body parts between the components to be assembled.</p>

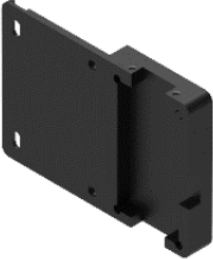


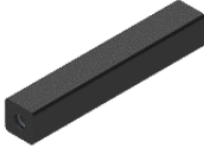
Specifications











Technical specifications of the measuring ruler

Specification	Description
Measurement range	-150 ... 150 mm / -5.91 ... 5.91 in
Resolution	0.01 mm / 0.0004 in
Accuracy	±0.03 mm / ±0.001 in
Operating conditions	Temperature: 0 ... +50 °C / 32 ... 122 °F
Storage conditions	Temperature: -20 ... +65 °C / -4 ... 149 °F Relative humidity: 10 ... 95 % RH, no n-condensing
Weight	360 g / 0.79 lbs
Power supply	3VCR 2032
Dimensions	394x40x10 mm / 15.51×1.57×0.39 in (H x W x D)

Delivery scope

- 1 x bracket (consisting of 11 components)
- 1 x mounting kit (consisting of 24 screws and 2 set screws)
- 1 x measuring system
- 1 x data cable
- 1 x USB pen drive with PCE-DFG FD software

1		2	
	1 x		1 x
3		4	
	1 x		2 x

5		6	
	2 x		2 x
7		8	
	2 x		1 x
9		10	
	8 x		16 x
11		12	
	2 x		2 x
13		14	
	1 x		1 x

Optional accessories

PCE-MTS 500

The measuring system PCE-DFG FD 300 has been specially designed for the material test stand PCE-MTS 500.

The measuring system can be easily mounted onto this material test stand.



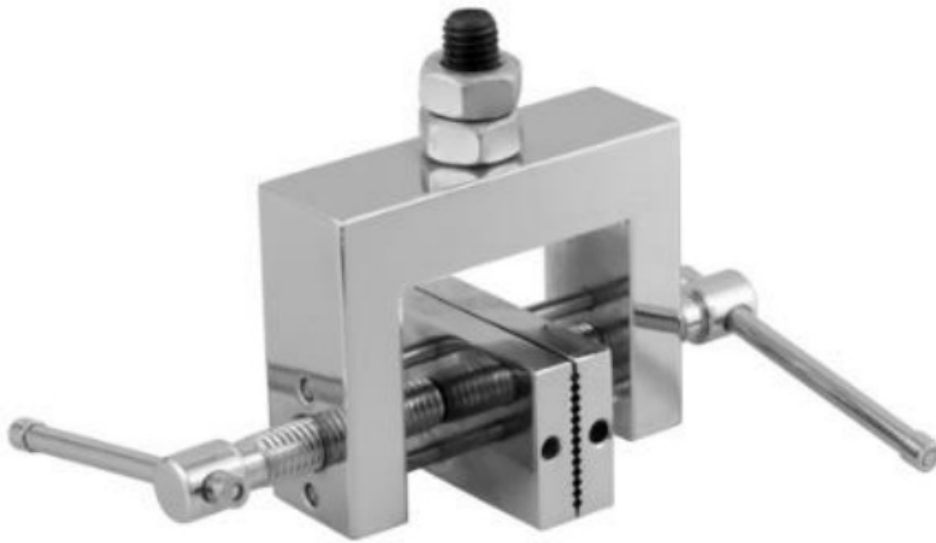
PCE-DFG N 5K

The PCE-DFG N 5K force gauge completes the system for determining a force-path curve. The external load cell of the meter can be clamped into the PCE-MTS 500 material test stand and connected to the PC via a USB interface. In this way, the data can be evaluated directly in the software supplied with the PCE-DFG FD 300 and paired with the data of the path measuring system.



PCE-SJJ015

The PCE-SJJ015 clamp holder can be mounted on the load cell of the PCE-DFG N 5K and on the mounting plate of the PCE-MTS 500 by means of the adaptor. In this way, flat tensile specimens can be integrated into the test setup in a very uncomplicated way.



System description

The PCE-DFG FD 300 is a useful addition to the PCE-MTS 500 material test stand in conjunction with a force gauge (e. g. PCE-DFG N 5K). With this add-on, force-path diagrammes and curves can be created. The included software provides you with an optimized interface for evaluating diagrams and graphs. This allows material tests with forces of up to 5000 N (500 kg) to be conducted.

Path measuring system



Measuring module



Display

1. ON/OFF key
2. ZERO key
3. HOLD key
4. ABS key
5. mm/in key

The function of the keys is explained in more detail in the user manual for the complete system which comes with the software.

Assembly

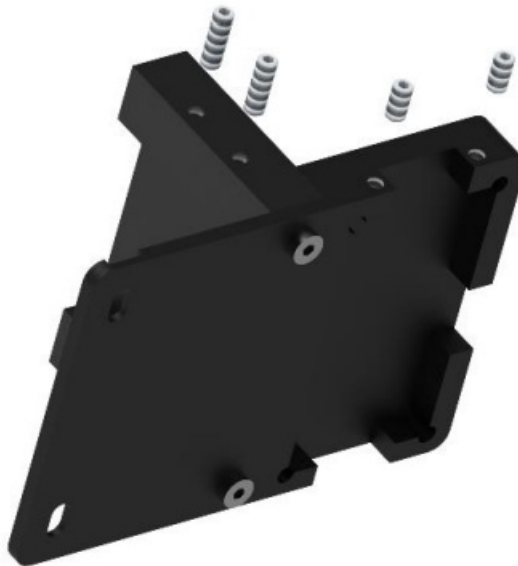
The following steps explain how to integrate the PCE-DFG FD 300 measuring system into the system of the PCE-MTS 500 test stand. First, check the delivery scope for completeness. A list of all components can be found in chapter 2.2 Delivery scope.

Assembling the bracket for the meter

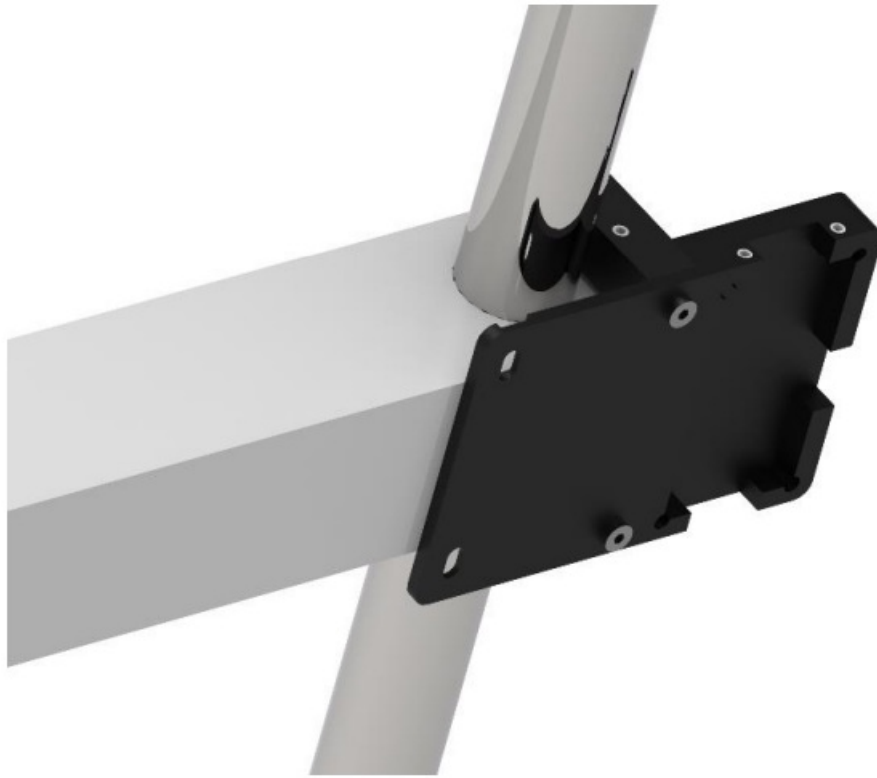
Attach component (1) to component (3) using two screws (component 10).



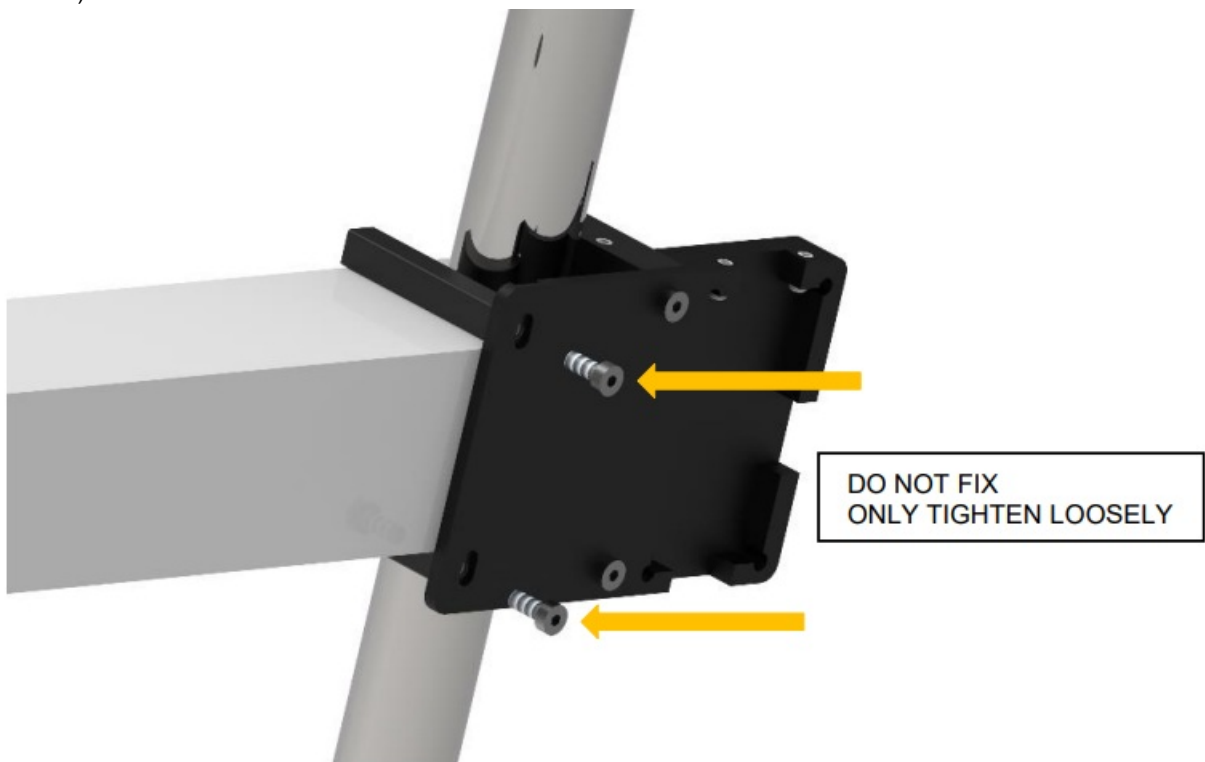
Pre-mount the set screws (components 11 + 12).



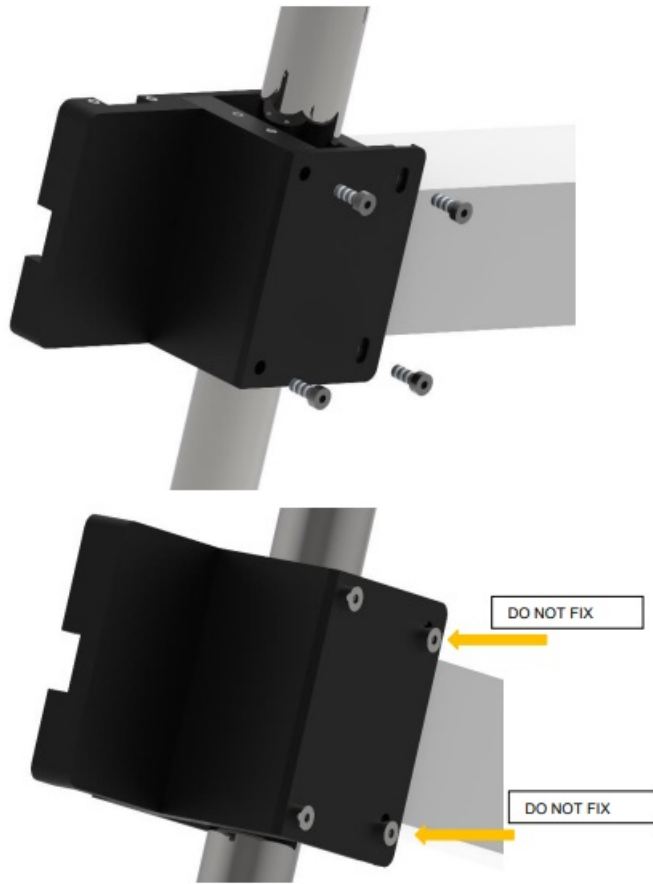
Attach the previously mounted module to the crossbeam of your PCE-MTS 500 test stand.



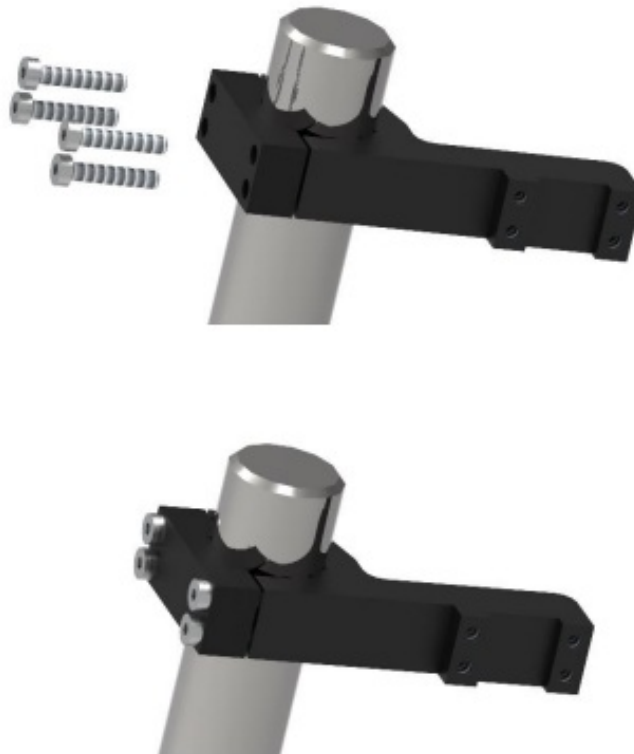
Insert component (4) into the groove of component (1) and fix them loosely with the help of two screws (component 10).



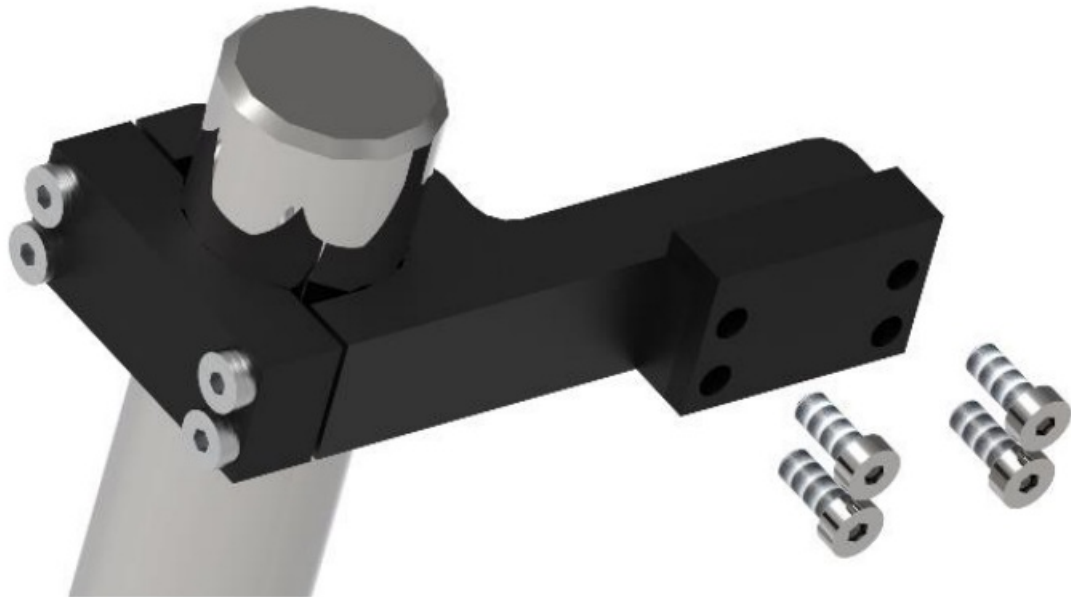
Screw component (2) onto the module from the back with 4 screws (component 10). Make sure those components (4) are properly placed in the groove of component (2). Again, do not yet fix the screws on components (4).



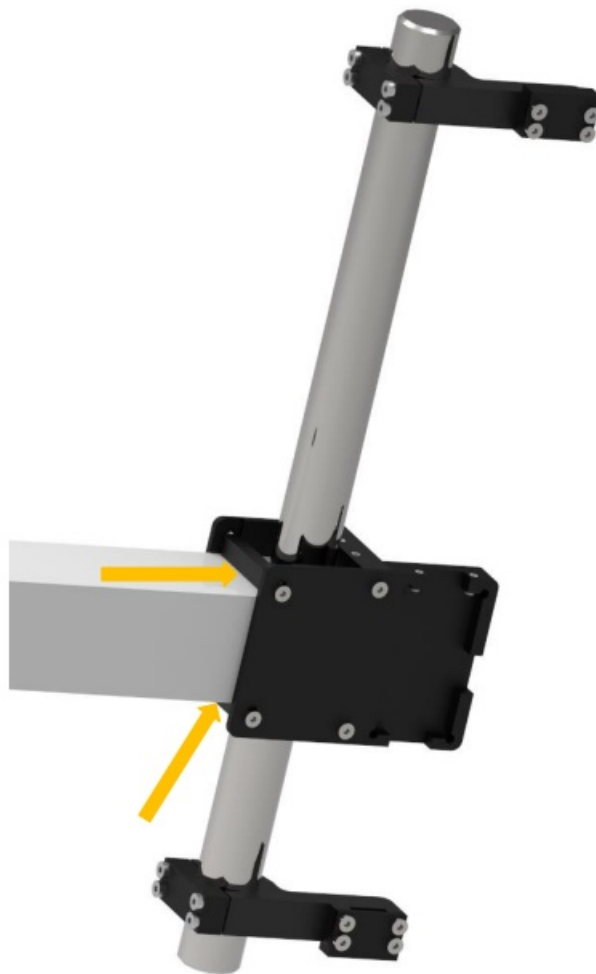
Now place component (5) on the rail of the PCE-MTS 500 test stand, above the module, attach component (6) to component (5), and fix both components with screws (component 9).



Attach component (7) to component (5) with the screws (component 10).

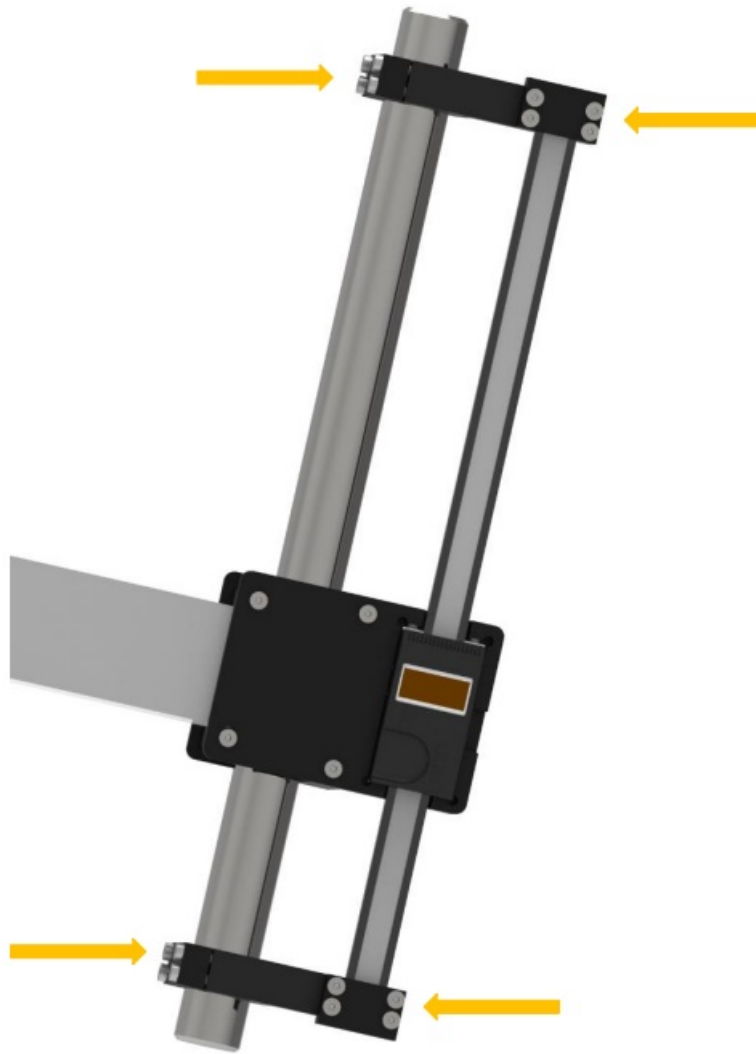


Now proceed in the same way below module (1) so that the module is attached to the PCE-MTS 500 test stand as follows. In addition, slide the two components (4) against the rail and fix the pre-fastened screws.

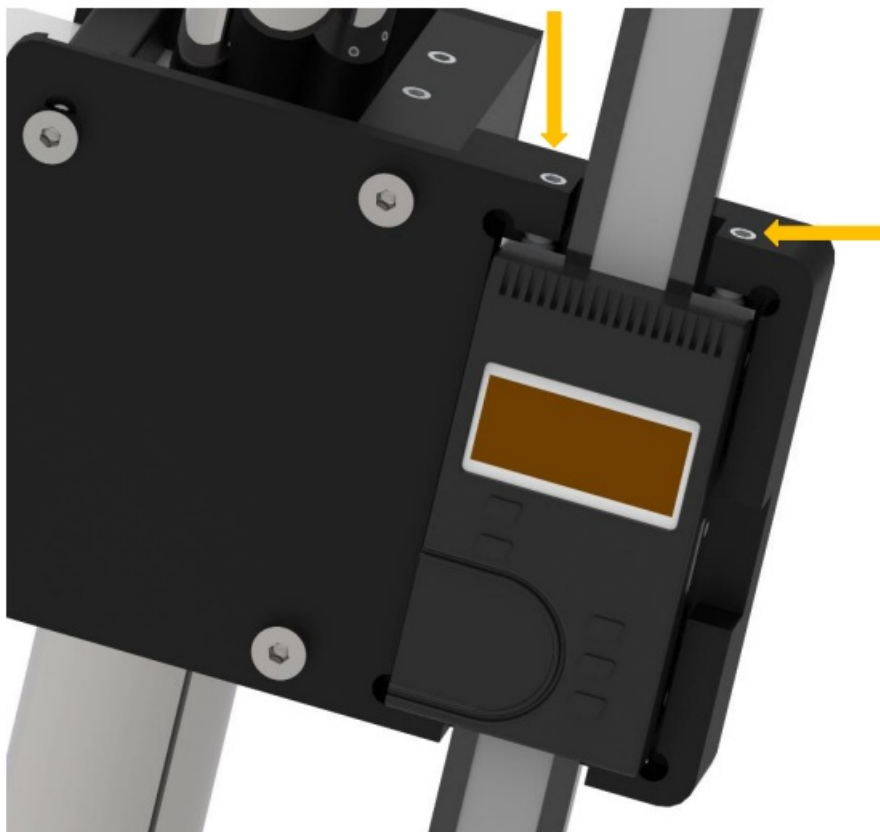


Integration of the meter into the module

Insert the measuring module (component 8) into the assembled module. Slide the lower holder and the upper holder onto the ends of the meter and tighten all screws (attachment to the rail and meter).



Now lock the measuring module vertically with the help of the pre-mounted set screws.



The PCE-DFG FD 300 is now ready for use and can be used as described in the user manual.

Warranty

You can read our warranty terms in our General Business Terms which you can find here: <https://www.pce-instruments.com/english/terms>.

Disposal

For the disposal of batteries in the EU, the 2006/66/EC directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose. In order to comply with the EU directive 2012/19/EU we take our devices back. We either re-use them or give them to a recycling company that disposes of the devices in line with the law. For countries outside the EU, batteries, and devices should be disposed of in accordance with your local waste regulations. If you have any questions, please contact PCE Instruments.

PCE Instruments' contact information

- Germany
- PCE Deutschland GmbH
- I'm Langel 26
- D-59872 Meschede
- Deutschland
- Tel.: +49 (0) 2903 976 99 0
- Fax: +49 (0) 2903 976 99 29 info@pce-instruments.com
- www.pce-instruments.com/deutsch
- United Kingdom
- PCE Instruments UK Ltd
- Unit 11 Southpoint Business Park Ensign Way, Southampton Hampshire
- United Kingdom, SO31 4RF
- Tel: +44 (0) 2380 98703 0
- Fax: +44 (0) 2380 98703 9
- info@pce-instruments.co.uk www.pce-instruments.com/english
- The Netherlands
- PCE Brookhuis B.V. Institutenweg 15
- 7521 PH Enschede
- Nederland
- Telefoon: +31 (0)53 737 01 92 info@pcebenelux.nl
- www.pce-instruments.com/dutch
- France
- PCE Instruments France EURL
- 23, rue de Strasbourg
- 67250 Soultz-Sous-Forets
- France
- Téléphone: +33 (0) 972 3537 17 Numéro de fax: +33 (0) 972 3537 18 info@pce-france.fr
- www.pce-instruments.com/french

- Italy
- PCE Italia s.r.l.
- Via Pesciatina 878 / B-Interno 6 55010 Loc. Gragnano
- Capannori (Lucca)
- Italia
- Telefono: +39 0583 975 114
- Fax: +39 0583 974 824
- info@pce-italia.it
- www.pce-instruments.com/italiano
- United States of America
- PCE Americas Inc.
- 1201 Jupiter Park Drive, Suite 8 Jupiter / Palm Beach
- 33458 FL
- USA
- Tel: +1 (561) 320-9162
- Fax: +1 (561) 320-9176
- info@pce-americas.com
- www.pce-instruments.com/us
- Spain
- PCE Ibérica S.L.
- Calle Mayor, 53
- 02500 Tobarra (Albacete) España
- Tel. : +34 967 543 548
- Fax: +34 967 543 542
- info@pce-iberica.es
- www.pce-instruments.com/espanol
- Turkey
- PCE Teknik Cihazları Ltd.Şti. Halkalı Merkez Mah.
- Pehlivan Sok. No.6/C
- 34303 Küçükçekmece – İstanbul Türkiye
- Tel: 0212 471 11 47
- Faks: 0212 705 53 93
- info@pce-cihazlari.com.tr
- www.pce-instruments.com/turkish
- User manuals in various languages (français, italiano, español, português, Nederlands, türk, polski, русский,) can be found by using our product search on: www.pce-instruments.com
- Specifications are subject to change without notice.

Documents / Resources



[PCE Instruments PCE-DFG FD 300 Force Path Adaptor](#) [pdf] Instruction Manual
PCE-DFG FD 300 Force Path Adaptor, PCE-DFG FD 300, Force Path Adaptor, Path Adaptor

References

- [France.fr : Actualités, destinations et infos du tourisme en France](#)
- [iberica.es](#)
- [Make an offer on the domain instruments.co.uk - Domains.co.uk](#)
- [Computer Instruments | Home](#)
- [Discover Italy: Official Tourism Website - Italia.it](#)
- [Industrial Measurement Products and Solutions | PCE Instruments](#)
- [PCE Deutschland GmbH Prüfgeräte vom Hersteller | PCE Instruments](#)
- [PCE Brookhuis B.V. | PCE Instruments](#)
- [PCE Americas Inc. : Test Instruments | PCE Instruments](#)
- [PCE Iberica S.L. Instrumentación | PCE Instruments](#)
- [PCE Instruments France | PCE Instruments](#)
- [PCE Italia s.r.l. / Strumenti di Misura | PCE Instruments](#)
- [PCE Teknik Cihazlar Paz. Tic. Ltd.Şti. | PCE Instruments](#)
- [PCE Americas Inc. : Test Instruments | PCE Instruments](#)
- [PCE Deutschland GmbH Prüfgeräte vom Hersteller | PCE Instruments](#)
- [PCE Americas Inc. : Test Instruments | PCE Instruments](#)