

FAPOS 2/2

Double platform fiber alignment system

Concept:

The FAPOS 2/2 series was developed especially for precision positioning of optical components, such as fiber coupling solutions.

Compact size and a modular design allow flexible and universal applications. In general the FAPOS consists of two different module parts. Side A can be adjusted using micrometer drives for mechanical motion in the x-, y- and z-directions. Side B can be equipped with a 3D TRITOR 100 or 3D TRITOR 38 element for the finest piezoelectric motion up to 100 µm.

Several accessories, such as fiber holders or holders for microobjectives, are available and can be mounted onto the top plate on both sides. In the image shown, side B is completed with an element for mechanical fiber rotation (a combination of parts no. O-105-00, O-205-00 and O-201-00).

Specials:

The FAPOS 2/2 series offers the user a high degree of flexibility. One or both sides of the FAPOS unit can be equipped with mechanical stages or with the piezoelectric 3D TRITOR stages in order to best suit the intended application.

All piezoelectric TRITOR 3D stages are available with an integrated closed loop feedback sensor system for the highest position stability and repeatability within the nanometer range.

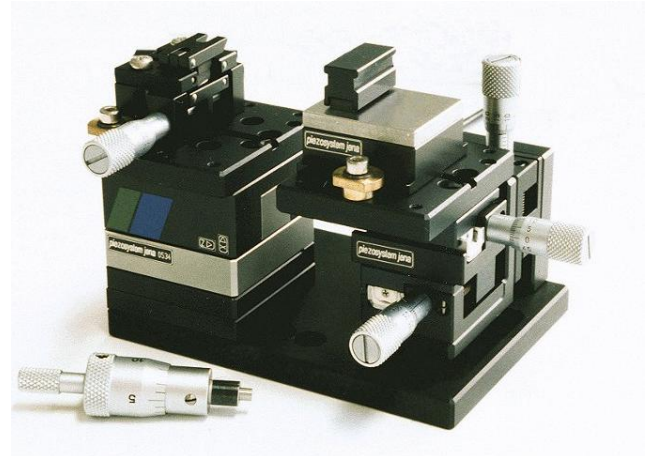


Image: FAPOS 2/2 P100

Product highlights:

- Three dimensional system for fiber alignment & positioning
- Compact dimensions
- Easy to use
- Mechanical motion in x, y, and z directions
- Travel range of 5 mm
- Side B with 3D piezoelectric motion for the highest requirements

Application:

- Fiber coupling
- Laser beam coupling
- Telecommunication
- Beam alignment

FAPOS 2/2

Overview of FAPOS series:

| name | part no. | side A | side B |
|---------------------------------------|----------|--|--|
| | | 3D mechanical motion micrometer screw drive | 3D piezoelectric motion piezo stage series TRITOR |
| FAPOS 2/2 | O-104-00 | 5mm | - |
| FAPOS 2/2 P40 | O-105-04 | 5mm | 38µm |
| FAPOS 2/2 P100 | O-105-00 | 5mm | 100µm |
| FAPOS 2/2 P40 SG closed loop | O-106-04 | 5mm | 32µm |
| FAPOS 2/2 P100 SG closed loop | O-106-05 | 5mm | 80µm |
| FAPOS 2/2 P100 CAP closed loop | O-105-06 | 5mm | 80µm |

Please note: Both sides of the FAPOS unit (A and B) can be equipped with the same units!
Please ask for a special part number !

Technical data:

side A

motion (x, y, z): 5 mm (micrometer drive - ball bearing guide)

Parameter:

scale division: 0.01 mm
positioning accuracy: < 1 µm
guide accuracy: < 1 µm

side B

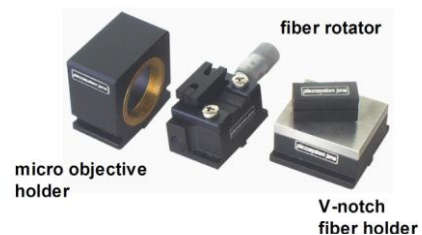
3D TRITOR 38 (x,y,z: 38µm)
3D TRITOR 100 (x, y, z: 100µm)
3D TRITOR 38 SG (x,y,z: 32µm)
3D TRITOR 100 SG (x,y,z: 80µm)
3D TRITOR 100 CAP (x,y,z: 80µm)

* technical specifications of the TRITOR 38 and

TRITOR 100 series are available on the TRITOR series data sheet

Accessories:

- part no. O-201-00: V-notch fiber holder
- part no. O-202-00: objective mount for microscope objectives
- part no. O-205-00: mechanical fiber rotator
- part no. O-206-00: piezoelectric fiber rotator



Recommended piezo stage controller unit:

NV 40/3 series piezo amplifier

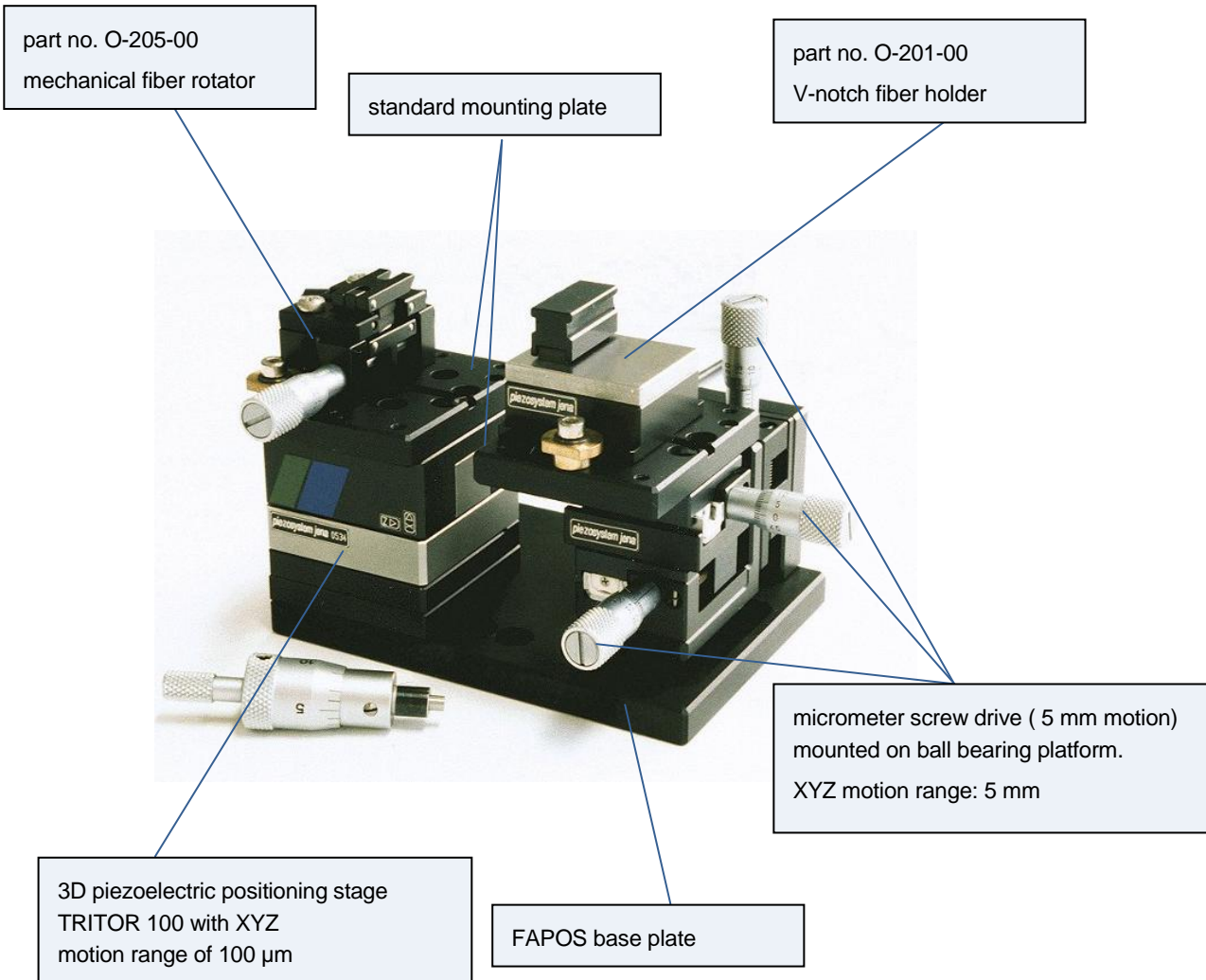
- 3 channel table top controller
- USB and RS 232 interface
- Display and Modulation input

(please see NV40/3
and NV 40/3 CLE data sheets for more information)



FAPOS 2/2

DEMO configuration FAPOS 2/2 P100 (part no. O-105-00 + accessories)



Please note: Both sides of the FAPOS unit (A and B) can be equipped with the same units! Please ask for a special part number!

Systems from the FAPOS 2/2 can built up to suit your special requirements!

Specifications subject to change without notice