

SpaceFAB



SF-3000 LS

- Six axes micro positioning system
- Compact, low profile system
- Travel ranges linear 50 x 50 x 12.7 mm
- Travel ranges rotation Rx, Ry, Rz 10°
- Load capacity 1 kg center mounted
- Automatic alignment
- Pivot point can be set by the customer
- User friendly software
- Can be used by any modern programming language
- Including software, controller and amplifiers

Software

- Pivot point can be set by the customer
- Digital display of position and orientation
- Control by Macro- language stored in own editor
- Jog mode

The SpaceFAB SF-3000 LS is a low cost alternative to PI miCos SpaceFAB SF-3000 BS and is especially designed for precision positioning. With one SpaceFAB SF-3000 LS all six degrees of freedom can be moved without additional positioning elements SpaceFAB SF-3000 LS was especially developed for easy alignment applications. Furthermore SpaceFAB SF-3000 LS is perfectly designed for micro- fabrication and biomedical. The core software used for the SpaceFAB SF-3000 LS is the PI miCos Motion Server. The Motion Server includes all the mathematical transformations so that the user can start movements directly by specifying the six coordinates x, y, z, Rx, Ry and Rz. The Motion Server can be used as a stand alone software or in combination with PI miCos or selfmade applications. These applications can be written in any modern programming language, the communication is done via TCP/ IP.

Specifications

SF-3000 LS						
Load Characteristics	F _x (N)	F _y (N)	F _z (N)	M _x (Nm)	M _y (Nm)	M _z (Nm)
2Phase-042	41760	10	1.5	0.1	0.1	0.1

Specifications

Travel Range	LinearX, Y, Z (mm)	50 x 50 x 12.7 *
	RotationRx, Ry, Rz (°)	10, 10, 10 *
Motor (Pitch 1 mm)		2Phasen-042
Speed max. X,Y, Z (mm/ sec)		10
Speed max. Rx, Ry, Rz (°/ sec)		6
Velocity Range (mm/ sec)		0.01 .. 10 **
Velocity Range (°/ sec)		0.01 .. 6 **
Weight (kg)		24
Bi- directional Repeatability	LinearX, Y, Z (µm)	± 5, ± 5, ± 5
	RotationRx, Ry, Rz (°)	± 0.011
Resolution calc. without load	LinearX, Y, Z (µm)	0.02
	RotationRx, Ry, Rz (°)	depending on the position of the pivot point
Resolution typical without load	LinearX, Y, Z (µm)	0.5
	RotationRx, Ry, Rz (°)	0.003
Current (A)		1.2
Voltage Range (V)		24
Stiffness, theoretical K _x , K _y , K _z (N/ µm)		on request
Material		Stainless steel, Aluminum black anodized

Order Information

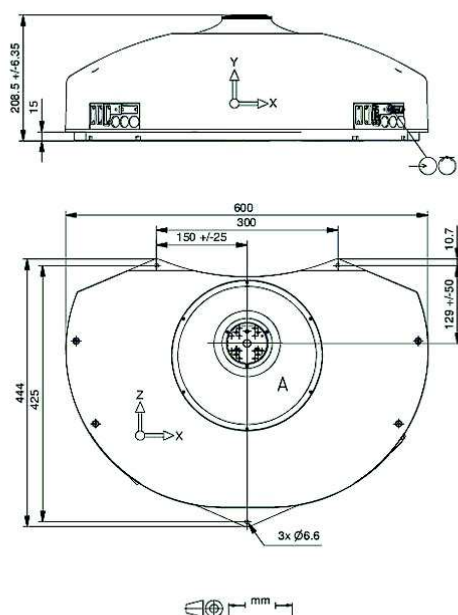
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SF-3000 LS SpaceFAB, 2- Phase Stepper Motor-042 (Pollux), Mechanical Limit Switches

All data are superseded by any new release.
 The newest release for data sheets is available for download at www.pi.ws.
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Drawings / Images

2Phase-042



Plateau

