MICOS

MOTION CONTROL & OPTICS   USA

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Page

◀◀ 1.006 ▶▶   **SpaceFAB** SF-3000

S y s t e m s

Key features

- High speed linear motor drive
- Six axes micro-robot-system
- Compact, low profile system
- Travel ranges linear 25.4x25.4x12.7 mm
- Travel ranges rotary Rx, Ry, Rz 10°
- Basic fiber alignment tools / contouring tools
- Alignment routines for arrayed fibers and components
- High speed
- High dynamic
- Pivot Point set by user anywhere in the space
- User friendly software (Motion Server)
- Easy to use with LabVIEW, Delphi, C++.
- Communication with TCP/IP
- Simulation Software

F A C T S

Load Characteristics	Fx (N)	Fy (N)	Fz (N)	kax (µrad/Nm)	kay (µrad/Nm)	kaz (µrad/Nm)
LM-005 ⚙	2.5	5	-*2.5	0.1	0.1	0.1

D E S C R I P T I O N

With one **SpaceFAB SF-3000** all six degrees of freedom can be moved without additional positioning elements. The low dead weight of the moving platform allows high-dynamic and precise positioning processes. SpaceFAB SF-3000 was especially developed for applications in fiber- optic alignment. Furthermore SpaceFAB SF-3000 is perfectly designed for fiber-fiber, fiber- waveguide

S O F T W A R E

Calculation of one motion path with collision detection

Random Definition of the Pivot Point inside or outside of the system

Graphic display of the robot from any view in multiple windows

and fiber- laser diode alignments. SpaceFAB SF-3000 are driven by high speed, backlash-free linear motors with a very quiet and dynamic smooth move. Using a controller a linear resolution up to 20 nm can be achieved. This system is equipped with turnkey drive and control electronics. With additionally integrated vision systems a complete turnkey sytem can be offered. SpaceFAB SF-3000 turnkey system is based on industrial PC, Pmac Controller and MICOS linear motor drive. Ideal in combination with other MICOS stages.

Digital display of position and orientation	
Control in absolute-, flange- or tool coordination system	
Control by Macro-language stored in own editor	
Control by 6D-space-mouse possible	

Technical data

Travel Range	
X, Y (mm)	25.4 x 25.4
Z (mm)	12.7
Rx, Ry (°)	10
Rz (°)	10
Velocity Range (mm/sec)	0.01 ... 100
Velocity Range (°/sec)	0.001 ... 50

Bi-directional Repeatability (µm)	
X, Y	+/- 0.5
Z	+/- 0.5

Bi-directional Repeatability (µrad)	
Rx, Ry	+/- 10
Rz	+/- 10

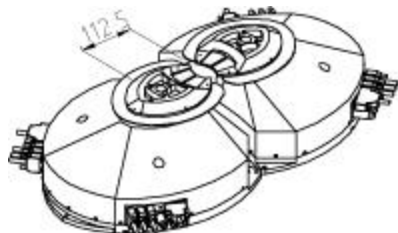| Speed max.	
LM-005	
X, Y (mm/sec)	100
Z (mm/sec)	100
Rx, Ry (°/sec)	50
Rz (°/sec)	50

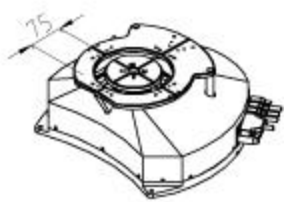| Material	
Weight (kg)	-*

Note: Fore more detailed informations, please contact us.
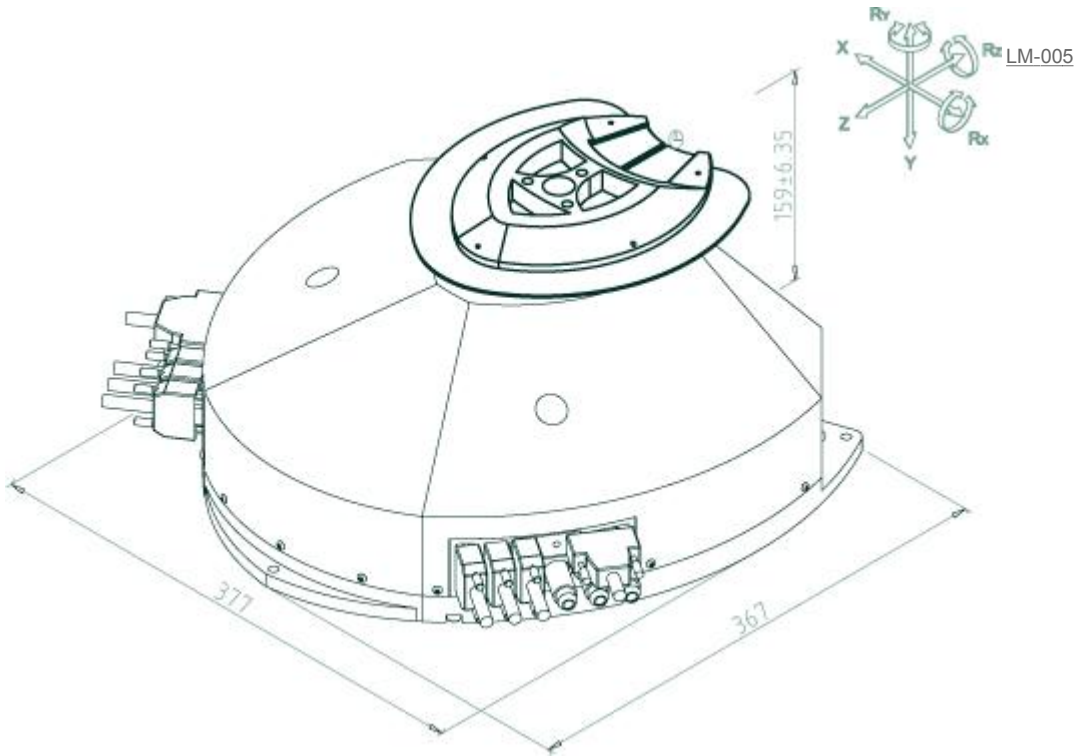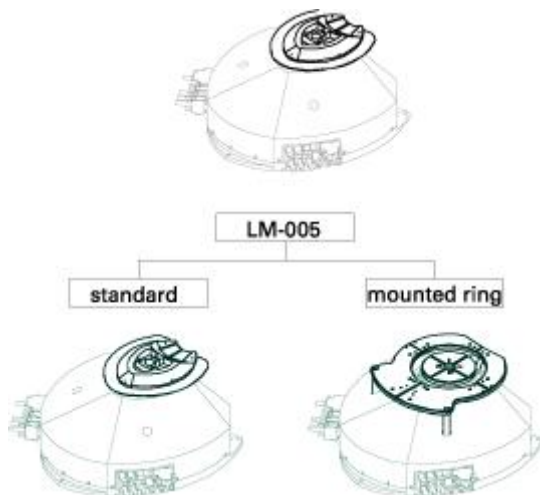For turned key solutions, please contact us.

SpaceFAB SYSTEMS

standard face to face

platform with fix mounted ring

LM-005

SpaceFAB SF-3000 Ordering information

LM-005

standard   mounted ring

| platform standard | 0 |
| platform with fix mounted ring | 1 |

| 6900-9- | 1 | 0 | 0 | |

Founded in 1990, MICOS specializes in the development, manufacturing and marketing of ultra-high precision positioning components and systems for research and industry. We are experts in vacuum, ultra-high vacuum, clean room, and extreme climate environments down to 77 Kelvin.