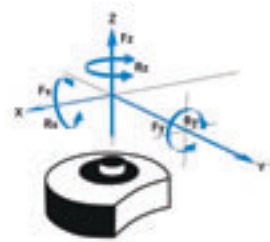
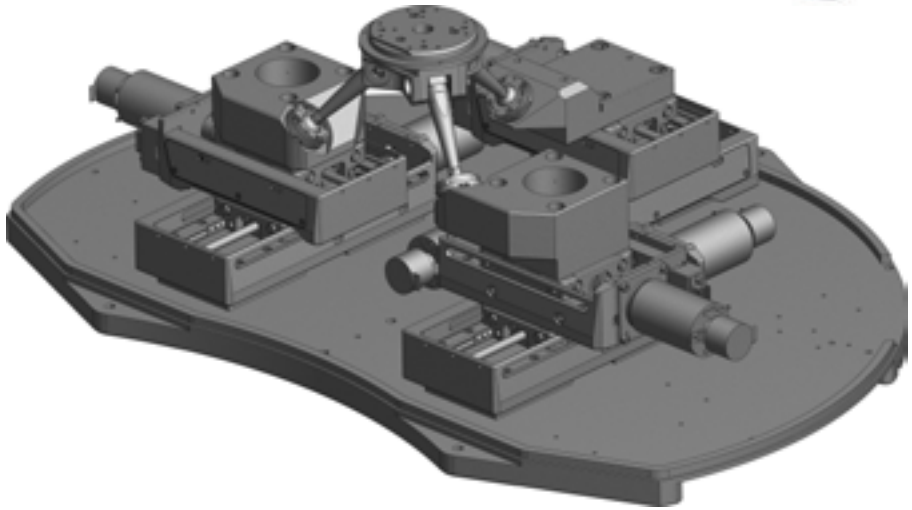
3.054 SpaceFAB SF-300 BS Vacuum

FACTS

Load characteristics	$Fx_{(N)}$	$Fy_{(N)}$	$Fz_{(N)}$	$Mx_{(Nm)}$	$My_{(Nm)}$	$Mz_{(Nm)}$
FV	5	5	30	0.2	0.2	0.2
HV	5	5	30	0.2	0.2	0.2
UHVG	5	5	30	0.2	0.2	0.2





KEY FEATURES

- Vacuum up to 10-9 hPa
- Six axes micro positioning system
- Compact, low profile system
- Travel ranges linear (X,Y,Z) 50x100x12.7 mm
- Travel ranges rotation Rx, Ry, Rz 10°x10°x10°
- Maximum speed 10 mm/sec
- Load capacity up to 3 kg center mounted
- Pivot Point can be set by the user
- User friendly software
- Can be used by any modern programming language
- Including software, controller and amplifiers

The SpaceFAB SF-300 BS Vacuum system can perform motions in all six degree of freedom. The low weight of the moving plattform allows highger dynamic positioning processes.The non-preload version can easily carry up to 3 kg center mounted load. The SpaceFAB SF-300 BS Vacuum is operarting in open or in closed loop and it can generate any arbitrary trajectory.

The SpaceFAB SF-300 BS Vacuum is equipped with a special 2-phase vacuum stepper motor.

TECHNICAL DATA

Travel range	
X, Y, Z (mm)	50 x 100 x 12.7 *
Rx, Ry, Rz (°)	10, 10, 10 *

Vacuum type	FV	HV	UHVG
Speed max. X, Y, Z (mm/sec)	10	2.5	2.5
Speed max. Rx, Ry, Rz (°/sec)	3	1.25	1.25
Velocity Range (mm/sec)	0.01...10	0.1...2.5	0.1...2.5
Velocity Range (°/sec)	0.01...1.25	0.01...1.25	0.01...1.25
Weight (kg)	23	23	23
Bi-directional Repeatability X, Y, Z (µm)	± 0.5, ± 0.5, ± 0.5	± 0.5, ± 0.5, ± 0.5	± 0.5, ± 0.5, ± 0.5
Bi-directional Repeatability Rx, Ry, Rz (°)	± 0.0011	± 0.001	± 0.001
Resolution, calc. without load X, Y, Z (µm)	0.2	0.2	0.2
Resolution, calc. without load (height platf.) Rx, Ry, Rz (°)	ppp.	ppp.	ppp.
Resolution typical without load X, Y, Z (µm)	0.0005	0.005	0.005
Resolution typical without load Rx, Ry, Rz (°)			
Current (A)			
Voltage Range (V)			

Stiffness, theoretical Kx, Ky, Kz (N/µm)	
Material	Aluminum or Stainless steel, suitable for vacuum

Vacuum Note: * = The maximum travel ranges in the different coordinate directions (X, Y, Z, RX, RY, RZ) are interdependent. The data for each axis in this table shows its maximum travel, where all other axes are at their zero positions. If the other linear or rotational coordinates are not zero, the available travel may be less.
** = leg speed.
ppp. = depending on the pivot point position.
ppp. = depending on the pivot point position.
Please see "GLOSSARY Vacuum Specification" for all vacuum specification.

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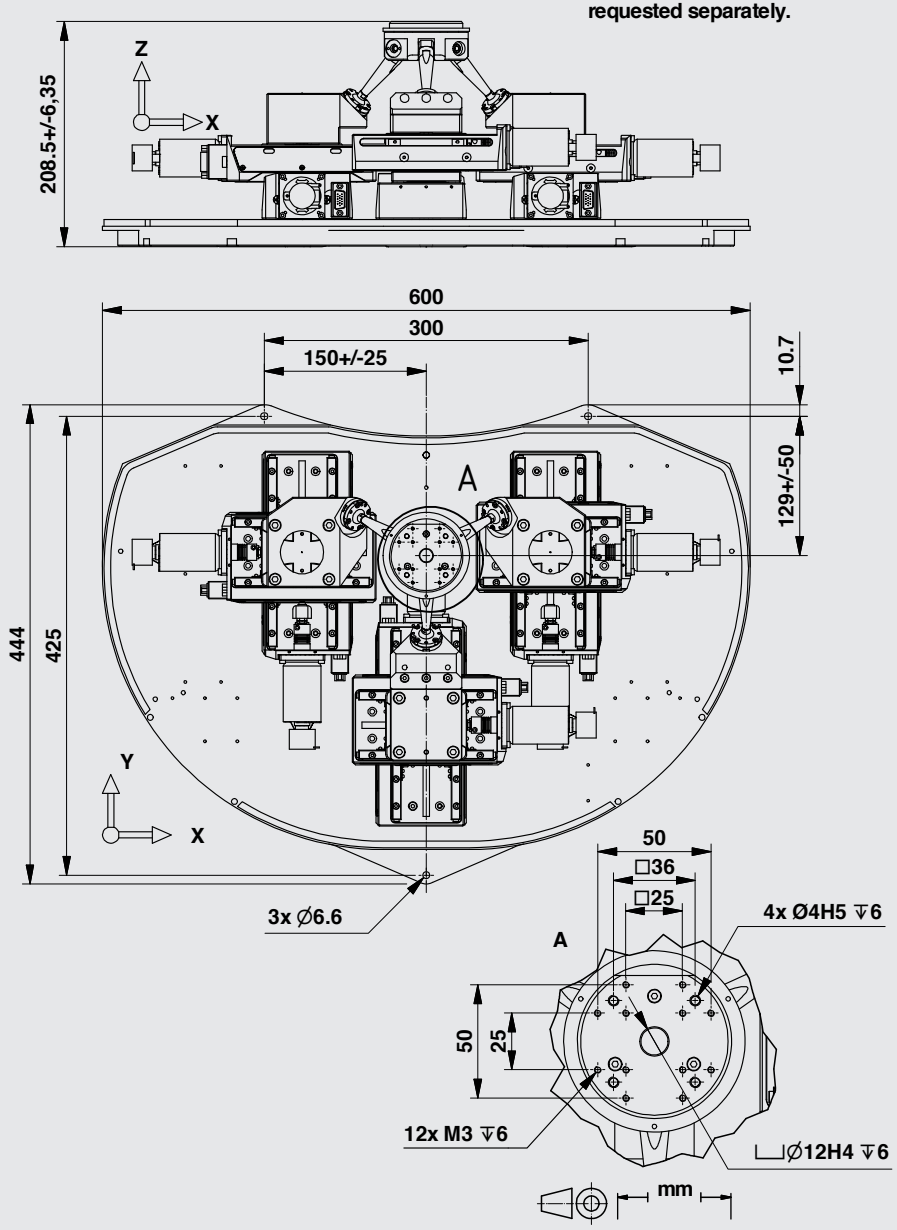
drawings for the corresponding vacuum class must be requested separately.



Order No.	6901-V-		1		0	0
FV	1					
HV	2					
UHVG	3					
open loop	0					
closed loop	1					