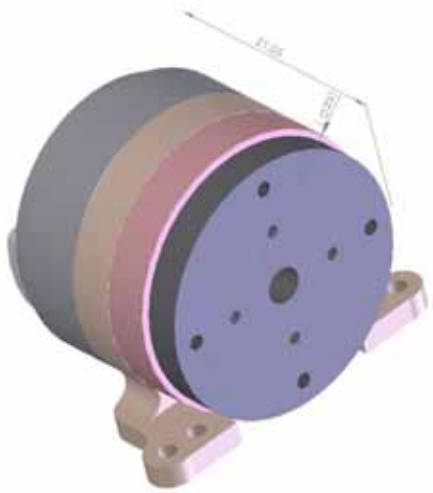
Rotation Piezo Stage →preliminary data sheet



Torque-master-table

- PiezoMotor driven system
- Travel range 360°
- Resolutio up to 129.600 counts (10”)
- Maximum operation speed 20 turns/min
- Force:strong 100mNm
- Ultra precise and robust design
- fast response.
- Material: Stainless steel,
- integrated magnetic 17 bit encoder
- desingned to transport other stages
- only ∅23*19mm

The torque-mater-table is a customized piezo motor with an adapted encoder systems developed by NANOS Instruments. The robust design with two ball bearings guarantee a smooth and highly accurate movement in the range of sub nanometers. The low currend encoder with high resolution is monted outsite. This results in practically zero drift with highest resolution. This stage is fitting with our other stages or goniometers, and can be combined as building blocks for a multi-axis stage. With it´s high force it is able to move also other stages with cabel and your probs. It is for it´s high torque a very tiny system

Specifications

torque-master-table			
Electronic	PMD101	MC101	LEGS-Drive®-Ultra
Travel range (°)	360	360	360
Force (mNm)	100	100	100
Load vertical on the center (kg)	2	2	2
max operation speed (°/s)	120	120	120
fast movement** (µm/ms)	on request	on request	on request
integrated sensor interpolated with the I-Modul	129600 (10”)	129600 (10”)	129600 (10”)
accuraty	on request	on request	on request
Bidirectional Repeatability (Encodercounts)	on request	on request	on request

* the MC101 and the LEGS-Drive®-Ultra Controller are able to oversample and filter the encoder sensor to higher the resolution. In this case short fast steps takes longer.
** Fast movement is possible for a short time with the LEGS-Drive®-Ultra Controller
note the maximum encoder sending frequence at highest resolution

latest releases avalible at www.nanos-instruments.de or call +49 40 85159439

Order code for this stage:

(please call for support, we will help you to find the right solution)

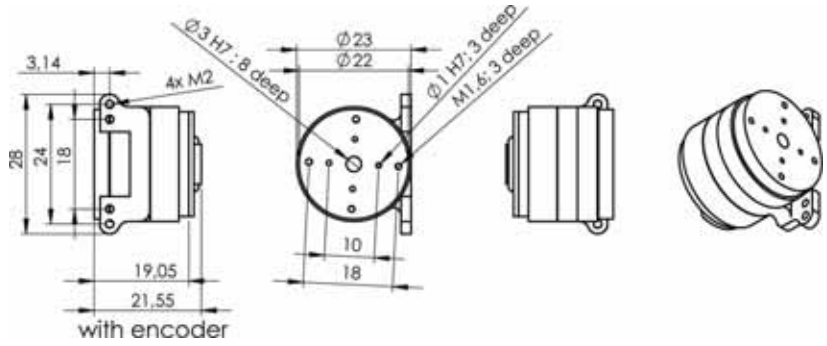
Torque-mater-table-S-A

S	0	(open loop without encoder)
	1	(with sensor and I-modul for AquadB and Z output)

A= Ambiente	N- normal
	HV vacuum down to 10^-6mbar

The order code could be for example: Torque-mater-table-1-N

Dimensions:



Applications:

fit together with the LPS-30 serie or the theta-table