



Rotator25-optic



Rotator35-Optic

"25mm Series"	"35mm Series"	Series defined by size	
Default: 1.4 K ~ 400 K; 1e-7 mbar; 35 Tesla Option1 - .ULT, lowest use temperature 30 mK; Option2 - .UHV, highest vacuum environment 2E-11 mbar;		Work Environment	1
30 × 23 × 14.5 mm	35 × 35 × 16.5 mm	Dimensions	2
360 ° endless		Travel Range	3
250 g	500 g	Max. Load	4
1.5 Ncm	2.5 Ncm	Dynamic Torque	5
3 °/s	10 °/s	Max. Velocity @300 K	6
Resistive Sensor		Encoder	7
320 °		Sensor Range	
10 m°		Sensor Resolution	
50 m°		Sensor Repeatability	
4 μ°	3 μ°	Fine Tune Resolution @ 2 K*	8
0.4 m°	0.3 m°	Step Size (min) @ 300 K*	9
Drive - 2 pins Sensor - 3 pins		Pins	10
Default: Pure Ti ULT: BeCu		Main Body	11
24 g	45 g	Weight	12

Fine Tune Resolution @2 K–Fine tune mode is a unique analog motion driven method, where piezo units are controlled by analog voltage signal, instead of continuous high frequency wave sequence. Because the resolution of the analog signal is very high, the stage can achieve sub-nano meter positioning accuracy.

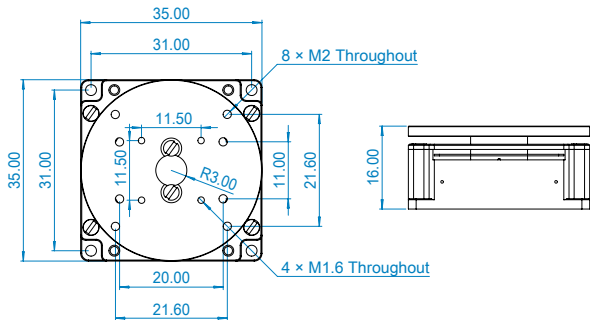
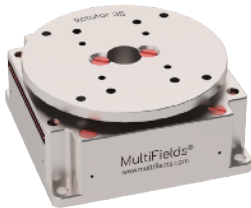
Step Size (min) @300 K–The open loop minimum incremental step size that the stage can move when it's doing stick-slip motion, driven by continuous high frequency wave sequence.

"35mm Series" – Rotator35-Optic (closed-loop)

High-performance rotary stage with Ø6-mm throughout aperture

- ➔ Features
- Compact design
 - 360 ° endless travel range
 - Ultra-high vacuum & low temperature compatible
 - 6-mm aperture
 - High load & high torque

➔ Picture & dimensions



➔ Specifications

Optional Versions ⇨		.HV (default)	.ULT	.UHV	.ULT.UHV
		.HV version, compatible with 1E-7 mbar .ULT version, used at He3 or dilution cryogenics systems .UHV version, compatible with 2E-11 mbar			
1	Footprint × hight	35 × 35 × 16.5 mm			
2	Clear aperture	6mm			
3	Weight	45 g			
4	Work environment	Temperature range: 1.4 ~ 400 K, Max. Magnetic field: 35 Tesla			
5	Option1 - 30 mK		✓		✓
6	Option2 - 2e-11 mbar			✓	✓
7	Mainbody	Pure Ti	BeCu	Pure Ti	BeCu
8	Wires	Phosphor Bronze Twisted Paired Wires, 20cm			
9	Pin materials	Polyster (glass fiber filled), BeCu		Peek, BeCu	
10	Pins number	Drive - 2 pins, Sensor - 3 pins			
11	Fine Tune Resolution @2 K*	3 μ°			
12	Step Size (min) @300 K*	0.3 m°			
13	Travel range	360 ° endless			
14	Max. Velocity @300 K	~ 10 °/s			
15	Max. Load	500 g			
16	Dynamic torque	2.5 Ncm			
17	Position encoder	Resistive Sensor			
18	Encoder range	320 °			
19	Sensor resolution	10 m°			

For detail drawing and 3D model please contact us.

Adapter Plate - Guidance for MultiFields Low Temperature Piezoelectric Positioners Interconnect

Positioner on the topside ⇓	Linear16-z	Linear16-x	Linear25	Linear35	Rotator16
Linear16-z			AP.LT.L16z	AP.LT.L16z	
Linear16-x	✓	✓	✓	✓	
Linear25			✓	✓	
Linear35				✓	
Rotator16					
Rotator25			✓	✓	
Rotator35				✓	
Goniometer25			✓	✓	
Goniometer35				✓	
Scanner16	✓	✓	AP.LT.S16	AP.LT.S16	
Scanner25			✓	✓	
Positioner on the bottom ⇐	Linear16-z	Linear16-x	Linear25	Linear35	Rotator16

This table gives a comprehensive guide for two same or different positioners connect to each other. The left column positioners are selected on topside, while the top row positioners are selected as the bottom one.

Rotator25	Rotator35	Goniometer25	Gonimeter35	Scanner16	Scanner25
AP.LT.L16z	AP.LT.L16z	AP.LT.L16z			AP.LT.L16z
✓	✓	✓	✓		AP.LT.L16x
	✓	*	*		*
			*		
AP.LT.R16	AP.LT.R16	AP.LT.R16	AP.LT.R16		
	*	*	*		*
			*		
	✓	✓	*		*
			✓		
		AP.LT.S16	AP.LT.S16		AP.LT.S16
		✓	✓		
Rotator25	Rotator35	Goniometer25	Gonimeter35	Scanner16	Scanner25

There are three conditions when two MultiFields Positioners Mount together, including

- (1) ✓ do not need extra plate to connect.
- (2) * do not need extra plate to connect. Though this mounting form is workable in specific cases, we don't recommend this connection arrangement.
- (3) "AP.LT.***" the part name of adapter plates needed to connect with each other.
- (4) "Blank-cell", means this mounting form should be avoid.