



Goniometer35-theta



Goniometer35-phi

"35mm Series"		Series defined by size	
Default: 1.4 K ~ 400 K; 1e-7 mbar; 35 Tesla Option1 - .ULT, lowest temperature 30 mK; Option2 - .UHV, highest vacuum environment 2E-11 mbar;		Work Environment	1
35 × 35 × 16 mm	35 × 35 × 16 mm	Dimensions	2
50 mm	66 mm	Rotation Center To Top Plate	3
12 °	10 °	Travel Range	4
500 g	500 g	Max. Load	5
3 N	3 N	Dynamic Force	6
Resistive Sensor		Encoder	7
12 °	10 °	Sensor Range	
0.5 m°		Sensor Resolution	
0.5 μ°		Fine Tune Resolution @ 2 K*	8
50 μ°		Step Size (min) @300 K*	9
Driven - 2 pins; Sensor - 3 pins		Pins	10
Default: Pure Ti; ULT: BeCu		Main Body	11
70 g	70 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.

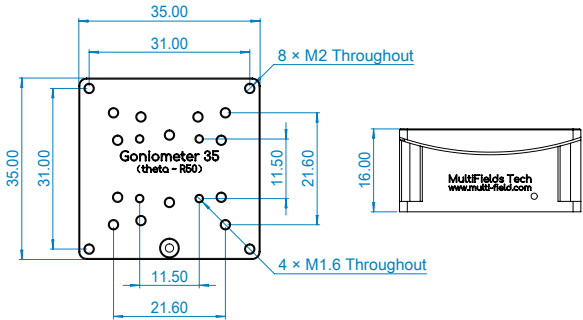
Step Size (min) @300 K–The open loop minimum increamental step size that the stage can move when it's doing stick-slip motion, driven by continuous high frequency wave sequence.

"35mm Series" – Goniometer35-theta (closed-loop)

Goniometer stage with closed-loop control

- ➔ Features
- High load
 - Long travel range
 - Common pivot with Goniometer35-phi for stacking
 - Ultra-high vacuum & low temperature compatible

➔ 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 mm			
2	Weight	70 g			
3	Work environment	Temperature range: 1.4 ~ 400 K, Max. Magnetic field: 35 Tesla			
4	Option1 - 30 mK		✓		✓
5	Option2 - 2e-11 mbar			✓	✓
6	Mainbody	Pure Ti	BeCu	Pure Ti	BeCu
7	Wires	Phosphor Bronze Twisted Paired Wires, 20cm			
8	Pin materials	Polyster (glass fiber filled), BeCu		Peek, BeCu	
9	Pins number	Driven - 2 pins, Sensor - 3 pins			
10	Fine Tune Resolution @2 K*	0.5 μ°			
11	Step Size (min) @300 K*	50 μ°			
12	Travel range	~ 12 °			
13	Max. Velocity @300 K	~ 1 °/s			
14	Max. Load	500 g			
15	Dynamic force	3 N			
16	Rotation center to top plate	50 mm			
17	Position encoder	Resistive Sensor			
18	Encoder range	12 °			
19	Sensor resolution	0.5 m°			

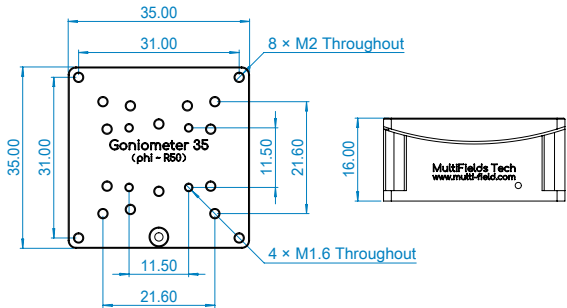
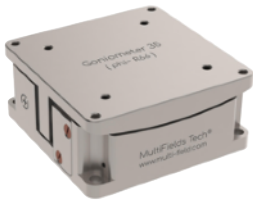
For detail drawing and 3D model please contact us.

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Goniometer stage with closed-loop control

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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 mm			
2	Weight	70 g			
3	Work environment	Temperature range: 1.4 ~ 400 K, Max. Magnetic field: 35 Tesla			
4	Option1 - 30 mK		✓		✓
5	Option2 - 2e-11 mbar			✓	✓
6	Mainbody	Pure Ti	BeCu	Pure Ti	BeCu
7	Wires	Phosphor Bronze Twisted Paired Wires, 20cm			
8	Pin materials	Polyster (glass fiber filled), BeCu		Peek, BeCu	
9	Pins number	Driven - 2 pins, Sensor - 3 pins			
10	Fine Tune Resolution @2 K*	0.5 μ°			
11	Step Size (min) @300 K*	50 μ°			
12	Travel range	~ 10 °			
13	Max. Velocity @300 K	~ 1 °/s			
14	Max. Load	500 g			
15	Dynamic force	3 N			
16	Rotation center to top plate	66 mm			
17	Position encoder	Resistive Sensor			
18	Encoder range	12 °			
19	Sensor resolution	0.5 m°			

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