RSB Rotation Stage

UHV Rotation Stage



Ultra-high vacuum compatible rotation stages intended for intermittent rotation of balanced loads or as a precision gearbox.

Manufactured with UHV compatible material and construction methods and featuring a preloaded worm drive for zero backlash, continuous rotation range and AML D35.1 UHV stepper motors.

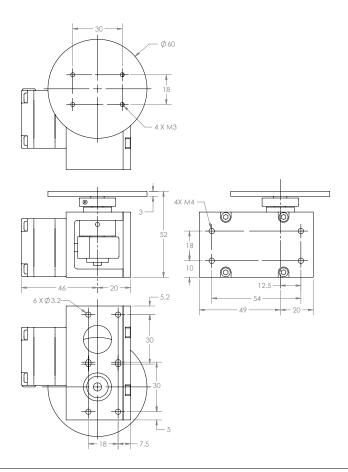


SPECIFICATIONS

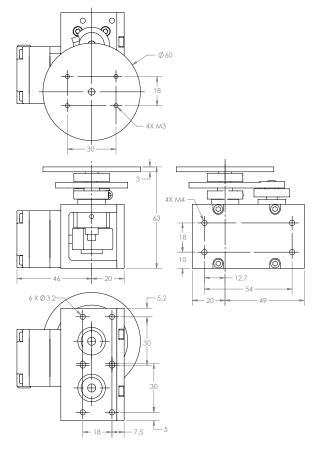
| Model | RSB10K | RSB20K | RSB30K | RSB90K |
|--------------------------------|-----------------------|---------------------|---------------------|---------------------|
| Resolution range | 360° | | | |
| Resolution in full steps | 0.036° | 0.018° | 0.012° | 0.004° |
| Steps per revolution | 10,000 | 20,000 | 30,000 | 90,000 |
| Maximum loaded speed | 1 kHz 10 sec/rev | 1 kHz 20 sec/rev | 1 kHz 30 sec/rev | 2 kHz 45 sec/rev |
| Centred load capacity (Normal) | 1 kg | | | |
| Backlash (Unloaded) | 0.04° | | | |
| Vacuum | 1 x 10 ⁻¹⁰ | | | |
| Maximum temperature | 200 °C | | | |
| Motor | D35.1 | | | |
| Mass including motor | 640 g | 710 g | 710 g | 940 g |

As standard RSB rotational stages are supplied lubricated with Nyetorr® 6300 low-vapour pressure (6 x 10^{-12} mbar) grease. Dry lubrication with molybdenum disulfide is available as an alternative option but this will reduce the expected life of the worm wheel.

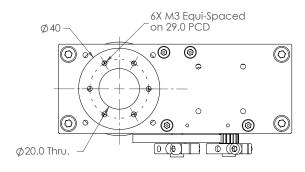
RSB10K

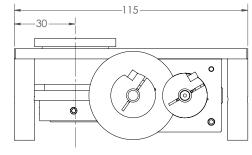


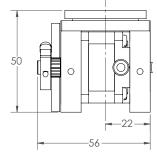
RSB20K / 30K

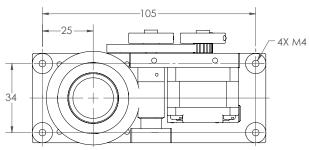


RSB90K















RSB10K RSB20K/30K RSB90K

ORDERING INFORMATION

| Order Code | | |
|------------|----------------------------------|--|
| RSB10K | 0.036° Resolution Rotation stage | |
| RSB20K | 0.018° Resolution Rotation stage | |
| RSB30K | 0.012° Resolution Rotation stage | |
| RSB90K | 0.004° Resolution Rotation stage | |

| Related Products | | |
|------------------|---------------------------------------|--|
| SMD3 | Stepper Motor Drive | |
| MLF18F | 18-way Electrical Feedthrough | |
| MLF18SMD3 | Non bakeable lead, 3m. MLF18F to SMD3 | |



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AML pursues a policy of continuous improvement and reserves the right to make detail changes to specifications without consultation. E and OE.

