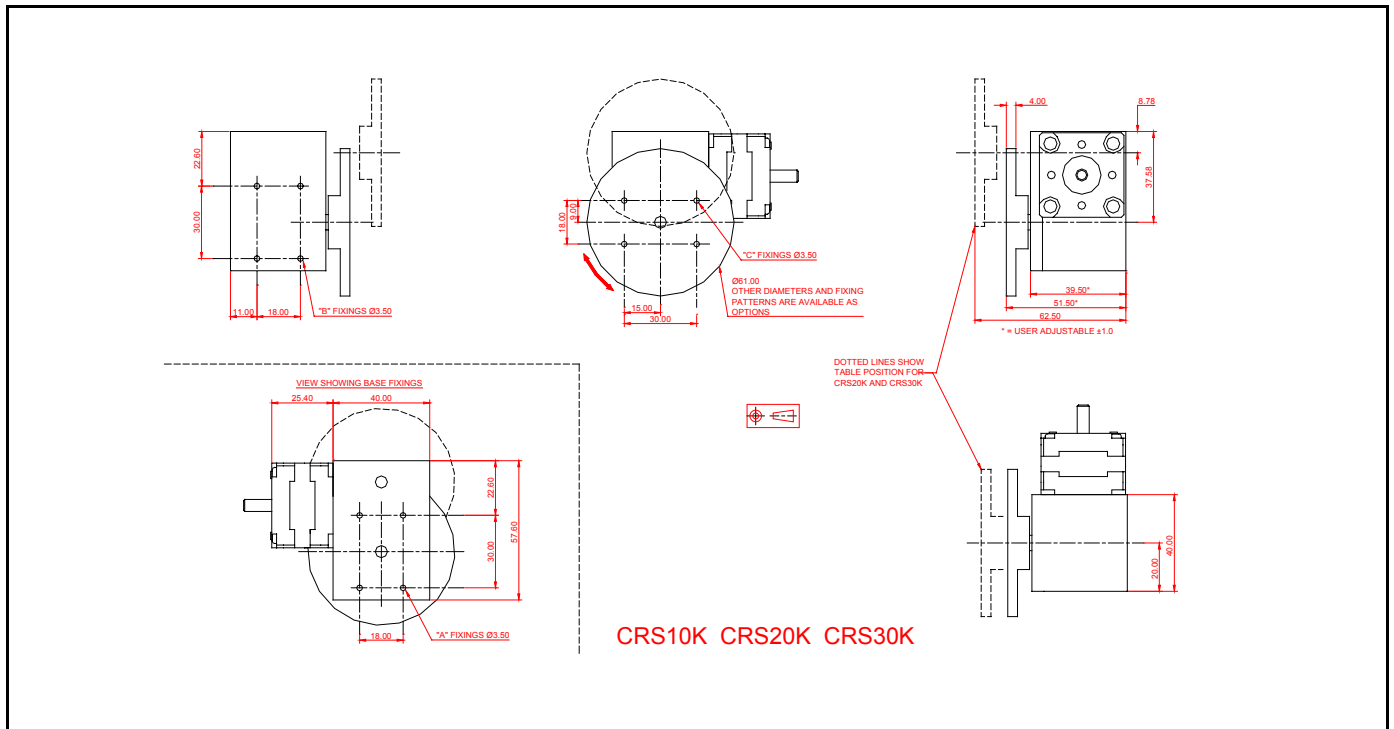


UHV ROTATION STAGES

MODELS CRS10K, CRS20K, CRS30K, CRS60K, CRS90K and CRS120K

Using the C14.1 motor these high-resolution rotation stages provide convenient, cost-effective and automated sample handling in UHV without the use of edge-welded bellows.

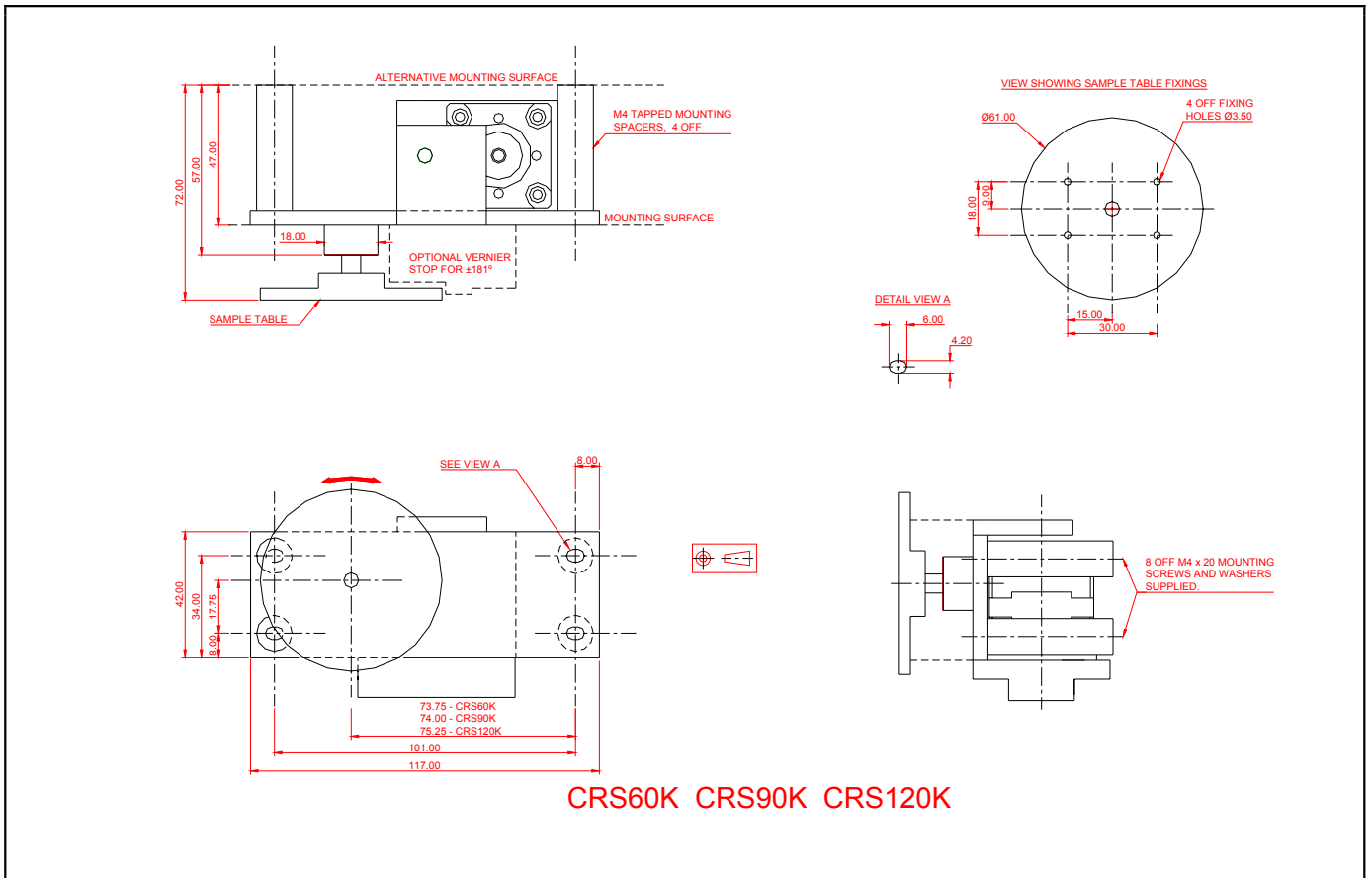


- ◆ Can be mounted in any position or orientation, independent of port locations.
- ◆ CRS10K/20K/30K can be mounted directly on various AML translation stages or stacked on another CRS without additional hardware. Standard fixing - hole patterns are provided on the side ("B"), base ("A") and rotating table ("C").
- ◆ Intended for intermittent rotation of balanced loads of up to 1kg or as a precision gearbox.
- ◆ Weight 600 to 900 grams, including motor.
- ◆ Resolution from 0.036° to 0.003° per step.
- ◆ Unloaded backlash is less than resolution.
- ◆ No lubricants. The life of the worm wheel can be extended by lubrication with Nyetorr® 5200 low-vapour pressure grease. Option 'G'.
- ◆ Uses AML C14.1 Vacuum Stepper Motor. A radiation-hard version of this motor is available.
- ◆ Simplified connection with AML wiring accessories. Can be supplied pre-wired to a vacuum connector for immediate connection to an AML MLF18F feedthrough.
- ◆ Suitable for use below 1×10^{-10} mB
- ◆ Bakeable to 200°C.
- ◆ Open construction with all internal spaces ventilated.
- ◆ Custom sample, stacking or offset plates, brackets, etc. to order.
- ◆ Vernier rotation stops with repeatability comparable to the resolution can be fitted to CRS60, 90 and 120K. All other positions can be found by indexing.

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AML

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Model	CRS10K	CRS20K	CRS30K	CRS60K	CRS90K	CRS120K
Resolution	0.036°	0.018°	0.012°	0.006°	0.004°	0.003°
Steps/rev	10000	20000	30000	60000	90000	120000
Weight, including motor	600g	670g	670g	900g	900g	900g
Recommended maximum loaded speed	1kHz 10sec/rev	1kHz 20sec/rev	1kHz 30sec/rev	2kHz 30sec/rev	2kHz 45sec/rev	2kHz 60sec/rev

Most mechanisms manufactured by AML are designed or adapted to customer requirements. Consult your AML distributor for components or a complete system to suit your application.

Ordering information:

CRSxxK

UHV Compact Rotation Stage

add suffix 'G' for Nyetorr® 5200 lubrication (at > 1x10⁻⁹ mBar)
add suffix 'V' for vernier rotation stops (60, 90 and 120K only)

C14.1

UHV Stepper Motor (see data sheet for motor options)

A C14.1 motor must be ordered with each stage. The motor and mechanism will be supplied assembled together and tested. The worm wheel is designed to wear and has an expected life of several hundred hours of motion. Replacements are inexpensive.

Related Products:

**SMD2
MLF18xx**

**Dual UHV Stepper Motor Drive.
Feedthroughs, leads and in-vacuum connectors**



sales: tectra GmbH, Reuterweg 65, D-60323 Frankfurt/M, Germany
tel.: +49-(0)69-720040, Fax +49-(0)69-720400,
info@tectra.de, www.tectra.de