

RSR Series Direct Drive Rotary Stages



The RSR is a low profile, high precision rotary stage driven directly by an integrated brushless motor in place of a mechanical worm gear or belt drive. Benefits include no backlash, better positioning sensitivity, higher speeds, smaller envelope, and no drive wear and maintenance. This makes the RSR's well suited for applications that require high rotational accuracy, excellent positioning sensitivity and repeatability, and fast move and settle times.

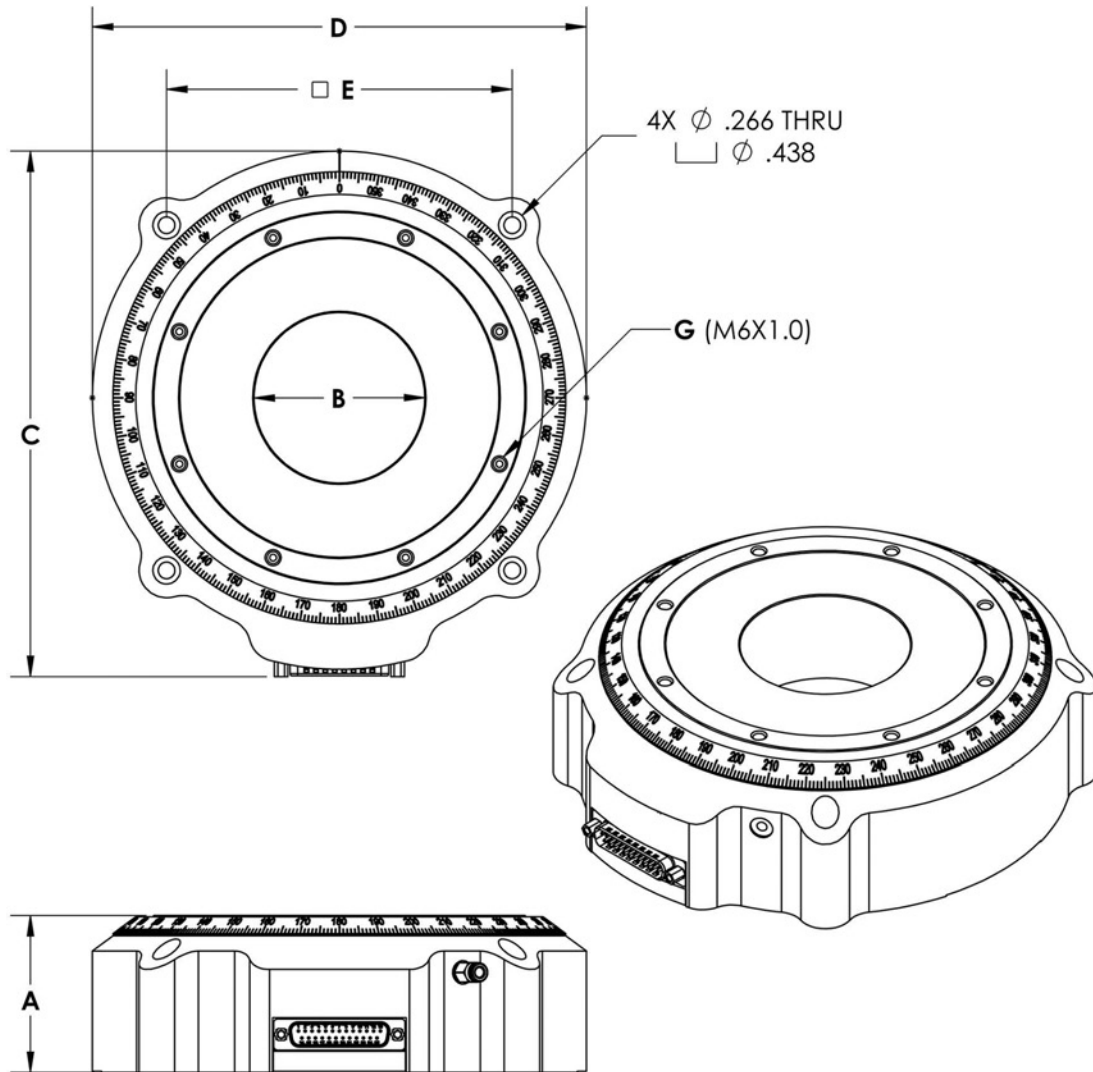
Position feedback is provided by a high resolution, hysteresis free, non-contact encoder mounted directly to the rotary stage hub. Multiple interpolation options are available with resolutions down to 0.021 arc-sec. For very high resolution feedback without sacrificing speed an encoder with an analog 1 volt p-p output is available for interpolation by the controller.

A preloaded, circular crossed roller bearing gives the RSR good stiffness and load capacity within a low profile. This precision bearing also gives the RSR its low axial radial runout errors, and low wobble errors.

To accommodate routing of wires or vacuum lines, or an optical pathway, the RSR has a large open aperture.

Available sizes: 50mm | 100mm | 150mm | 200mm | 300mm

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MODEL	DIAMETER	A DIMN	B DIMN	C DIMN	D DIMN	E DIMN	G PATTERN	Tc (Nm)	Tp (Nm)
RSR050LT	50MM	2.50"	0.75"	4.53"	4.21"	2.63"	6X Ø 1.58" BC	0.57	0.84
RSR050HT	50MM	3.17"	0.75"	4.53"	4.21"	2.63"	6X Ø 1.58" BC	2.20	2.88
RSR100LT	100MM	2.50"	1.73"	6.40"	5.89"	4.00"	8X Ø 3.54" BC	1.40	2.20
RSR100HT	100MM	3.17"	1.73"	6.40"	5.89"	4.00"	8X Ø 3.54" BC	5.20	6.60
RSR150LT	150MM	2.50"	2.72"	8.46"	7.86"	5.50"	8X Ø 5.51" BC	2.60	4.30
RSR150HT	150MM	3.17"	2.72"	8.46"	7.86"	5.50"	8X Ø 5.51" BC	10.00	13.10
RSR200LT	200MM	2.50"	3.82"	10.52"	9.83"	7.00"	8X Ø 7.48" BC	9.70	14.20
RSR200HT	200MM	3.17"	3.82"	10.52"	9.83"	7.00"	8X Ø 7.48" BC	15.70	21.70
RSR300LT	300MM	2.50"	5.75"	14.44"	13.41"	10.00"	8X Ø 11.42" BC	17.44	52.33
RSR300HT	300MM	3.17"	5.75"	14.33"	13.41"	10.00"	8X Ø 11.42" BC	TBD	TBD