Metric	Piezo	Lead Screw
Precision	0.3 um (datasheet)	1.5 um (computed)
Stiffness (how much will the weight move around when the bearing is tilted)	4 N/um (about 0.5um deformation with tilt of 30 degrees)	I'll ask them about this when they get back to me with the quote, but I suspect it will be quite small, especially since we'll be using an anti-backlash nut.
Open loop accuracy	? (probably very good)	7.62 um/inch (due to accuracy of lead screw manufacture)
Max Unbalance Torqe (assuming we were using perfect sensors for the balancing)	1.5 uNm (about 1/1000th of reaction wheel torque)	7.5 uNm (about 1/200th of reaction wheel torque)
Size (qualitative comparison)		For the same throw this would be an inch or two longer than the Piezo approach, but would not require room at the back for the shaft. Other dimensions similar
Weight (qualitative comparison)		Slightly heavier (10%-20%)
Maximum throw	3.5cm	Several feet
Max mass on vertical actuator	700g	2.5kg
Drive electronics	Non-standard & expensive	Standard & inexpensive
Costs		
Actuator	$772*3 = $2316 (4-5 week lead)	$64*3 = $192 (1-2 week lead)
Driver	$1101*1 = $1101 (4-5 week lead)	$30*3 = $90 (no lead)
Lead screw and nut	N/A	About $50*3 = 150 (waiting for quote, lead unknown but I think it's short)
Other materials	$100*1 = $100	$100*1 = $100
Machining time	14hr*84 $/hr = $1176	16hr*84$/hr = $1344
Total cost	$4693	$1876