

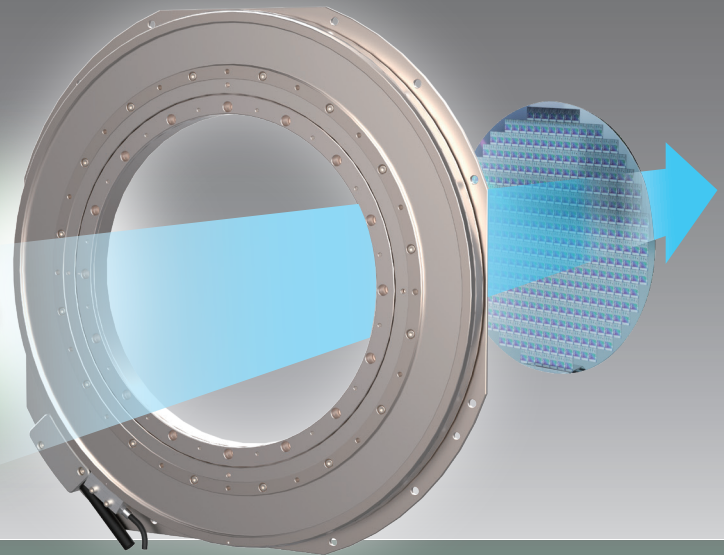
DMT Series

Ultra-thin Direct Drive Motor

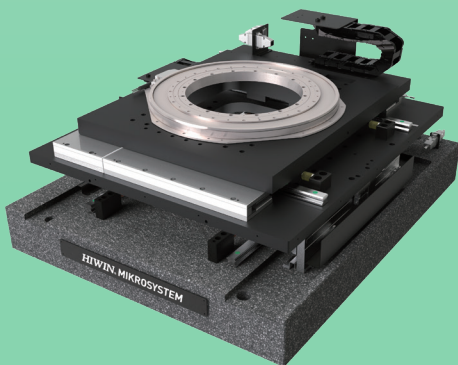
Fits from 4~12 inches wafer

New Debut

Hollow Shaft up to $\varnothing 140-340$ mm



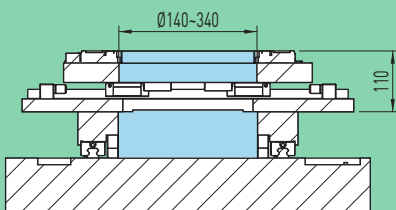
- ✓ Super large hollow
- ✓ Excellent positioning accuracy, velocity ripple
- ✓ No reduction mechanism, zero backlash
- ✓ High thrust force density, high rigidity design



Precision Large Hollow Positioning XY θ Platform

Excellent Structure Design

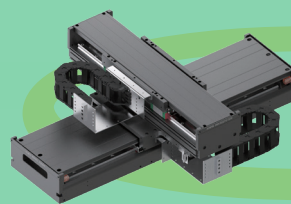
The XY θ positioning platform with low center of gravity, large hollow and high-precision positioning features are commonly used in double-sided application and backlight modules.



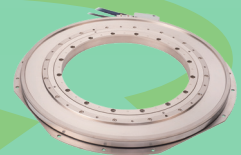
Space Saving

Low Center of Gravity

High Rigidity



Linear Motor Stages



Ultra-thin Direct Drive Motor
DMT series

Specifications

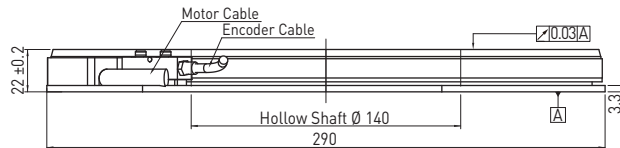
	Symbol	Unit	DMTB2	DMTF2	DMTK3
Motor power	-	W	334	438	487
Continuous torque	T_c	Nm	9.1	19	31
Continuous current	I_c	A _{rms}	2.6	2.6	2.6
Peak torque (Within 1s.)	T_p	Nm	30.4	63.6	110
Peak current (Within 1s.)	I_p	A _{rms}	8.7	8.7	8.7
Torque constant	K_t	Nm/A _{rms}	3.5	7.3	13.5
Electrical time constant	T_e	ms	0.7	0.7	0.7
Resistance (line to line at 25°C)	R_{25}	Ω	11.7	17.2	23.8
Inductance (line to line)	L	mH	8.6	12.3	16.7
Number of poles	$2p$	-	32	48	60
Back emf constant (line to line)	K_v	V _{rms} /(rad/s)	2	4.2	7.8
Motor constant (line to line at 25°C)	K_m	Nm/√W	0.8	1.4	2.3
Thermal resistance	R_{th}	K/W	0.63	0.43	0.33
Temperature sensor	-	-	PTC 100	PTC 100	PTC 100
Nominal input voltage	-	V _{DC}	500 (600 ¹⁾)	500 (600 ¹⁾)	500 (600 ¹⁾)
Inertia of rotating parts	J	kgm ²	0.04	0.13	0.4
Mass of motor	M_m	kg	6.5	9.3	20
Max. axial load	F_a	N	500	750	750
Max. moment load	M	Nm	50	75	75
Max. speed	-	rpm	350	220	100
Resolution	-	p/rev	3,686,400	4,319,232	4,324,800
Repeatability	-	arc-sec	±2	±1.5	±1.5
Accuracy	-	arc-sec	±20 / ±10 ¹⁾ / ±5 ¹⁾	±15 / ±10 ¹⁾ / ±5 ¹⁾	±15 / ±10 ¹⁾ / ±5 ¹⁾
Axial runout	R_a	mm	0.03	0.03	0.01
Radial runout	R_r	mm	0.03	0.03	0.01
Height	H	mm	22	22	30
Hollow shaft diameter	-	mm	140	240	340

Note : ¹⁾Optional

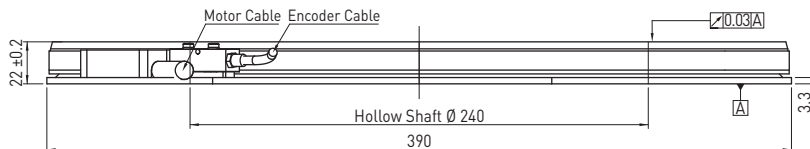
* All specifications in the table are in ±10% of tolerance except dimensions.

* The product should avoid environment with corrosive gas, cutting oil and metal powder.

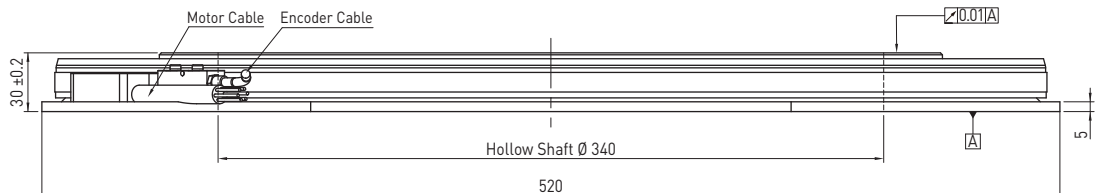
DMTB2



DMTF2



DMTK3



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