

OIntroduction

It has various stages (X Stage, XY Stage, Hollow Stage, Theta Stage, Rotary Stage, etc.) and controllers applied with its own technology, the Tiny Ultrasonic Linear Actuator (TULA). These stages can be produced in a wide range of applications for robots, automation equipment, medical devices, etc. In addition, the stage of PIEZO Technology Co., Ltd. has price competitiveness.

OStructure



$\underline{PT} - \underline{X} \ \underline{D} \ \underline{T} \ \underline{5} \ \underline{0} \ - \underline{S} \ \underline{0} \ \underline{5} \ \underline{C}$ (2) (3) (1) (4) (5) (6) (7)

① P :manufacturer			③ TULA Quantity			(5) Function			(6)Spec		
Piezo Technology			S	S 1ea (single)		S	Stroke				
			D	2ea (Double)		А	Angle		05	5mm	2 digita
	② Stage type		Q	4ea (Quad)					10	10mm	
X	X stage								15	15mm	Stroke
XY	XY stage		④ TULA Type			 Connect type 			060	60°	3 digits
н	Hollow stage		T25, T35, T35B, T50, T7			C Connect			300	300°	: Angle
ТН	Theta stage	L				F	FPCB				
R	Rotary stage										

OProduct Comparative table

	PT-XDT50-S05C	PT-XDT70-S10C	PT-XDT70-S15C	PT-XDT50-S06C (distribution model)	PT-XDT70-S10F	PT-HQT50-S04C	PT-THDT70-A300C
Real Stroke	5 mm	10 mm	15 mm	Gmm	10mm	4mm	295° (TBD)
Resolution	0.1µm with Incremental Encoding	0.1µm with Incremental Encoding	0.1µm with Incremental Encoding	0.1µm with Incremental Encoding	0.1µm with Incremental Encoding	0.1µm with Incremental Encoding	0.1µm with Incremental Encoding
Repeatability	± 2 µm	± 2 µm	± 2 µm	± 2 <i>µ</i> m	± 2 µm	± 2 <i>µ</i> m	± 2 <i>µ</i> m
Thrust Force	\leq 15 g	\leq 20 g	\leq 20 g	\leq 10 g	\leq 20 g	\leq 10 g	-
Holding Force	> 250 gf	> 250 gf	> 250 gf	150 ± 10gf	> 250 gf	> 250 gf	>50gfcm(TBD)
Speed (full stroke)	>10 mm/s	>10 mm/s	>10 mm/s	>10 mm/s	>10 mm/s	>10 mm/s	-
Driver	Multi channel Master(PMC2001) & Slave(PMC2002)	Multi channel Master(PMC2001) & Slave(PMC2002)	Multi channel Master(PMC2001) & Slave(PMC2002)	Driver All-in-One	One channel Drive board (PMC1804)	Multi channel Master(PMC2001) & Slave(PMC2002)	Multi channel Master(PMC2001) & Slave(PMC2002)

	Mechanical											
Full Stroke (Travel Length)	Real Stroke	Dimensions	Weight	Holding Force	Vertical Load (Thrust Force)	Horizontal Load	Speed (at real stroke)	Static Parallelism		Pitch And Yaw		
6.5 ± 0.2 mm	6 mm	31 x 24 x 10 m	n <5g	150 ±10gf	$\leq 10 \text{g}$ $\leq 20 \text{g}$		>10 mm/s	-		-		
Closed	Loop Perform	nance	Environment						Electrical			
Resolution	Repeatabilit	y Accuracy	Relative Humidity	Operating Temperature	Storage Temperature	Life Time	Life Controlle		Host Interface	Input Power		
0.1µm with Incremental Encoding	0.1µm with Incremental ± 2 µm Encoding		≤ 70%	0°C to +50°C	-30°C to +80°C	1 KK Cycle (at real Stroke)	PMC 1901		USB adapter From PC	DC 5V (USB 2.0 ↑)		





