

Features:

- A 2-phase stepping motor is mounted directly onto the shaft end of a Ct7 grade Rolled Ball Screw for compact and multipurpose product
- Ball Screw Shaft is ideally constructed to form the motor rotor shaft
- Flexible length can be provided by the end journal turning
- Stable mounting is secured by the exclusive Support Unit
- Accessories are also provided as mounting kit, such as nut block and motor plate



Specifications

Specification	PBA2TMB0801	PBA2TMB0802	PBA2TMB0805	PBA2TMB0812
Shaft Nominal Diameter	Ø8mm			
Lead (mm)	1	2	5	12
Travel (mm)	150			
Travel Per Pulse (µm)	5	10	25	60
Reference Thrust (N)	75	100	50	25
Mass (g)	350	400		
Repeatability (reference)	max ±0.01mm			
Lost Motion (reference)	max 0.01mm			
Motor Specifications				
Motor Size (mm)	42			
Rated Voltage (V)	DC 2.2			
Rated Current (A/phase)	2.0			
Winding Resistance (Ω)	1.1			
Holding Torque (Nm)	0.24			
Rotor Inertia (g·cm ²)	42			
Driving Method	2-phase bipolar			
Basic Step Angle	1.8°			
Recommended Driver	SD4030B2			
Operating Temperature	-20°C ~ 50°C			
Ball Screw Specifications				
Accuracy Grade	Equivalent to JIS Ct7			
Thread Direction	Right			
Axial Play	0.03mm or less			
Shaft Material	Stainless Steel			
Nut Material	Chrome-molybdenum Steel			
Surface Hardness	Min. HRC55 (thread area)			
Lubricant	KSS original grease MSG No. 2			
Recommended Accessories				
Motor Side Supporting Plate	MP-42A or MP-42B			
Exclusive Support Unit	SP-42S			
Nut Block	NB-0801R	NB-0802R	NB-0805R	NB-0812R

Reference about repeatability and lost motion represents value built-in to original actuator.

Travel per pulse represents the value for a full step.

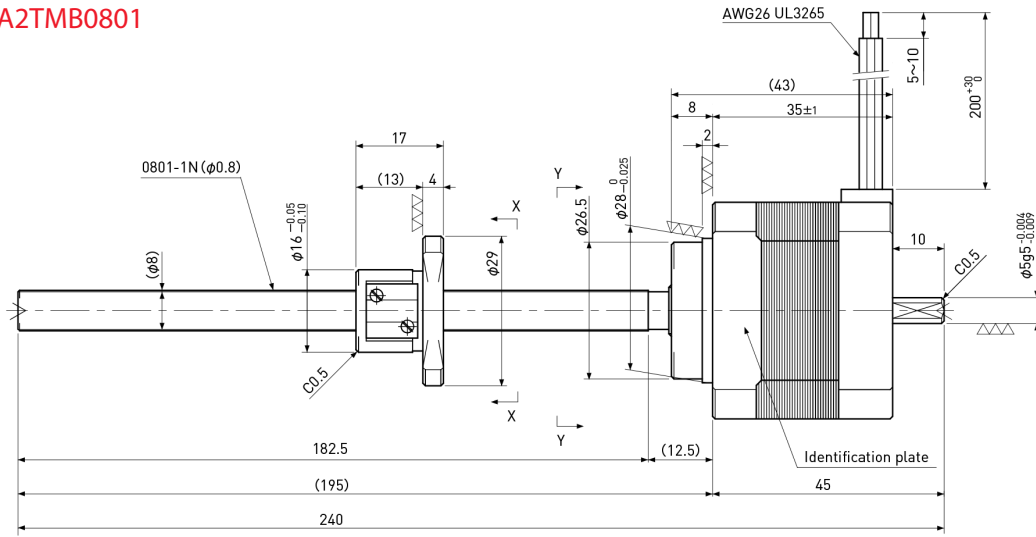
Acceleration/deceleration rate should be 50ms/kHz or more.

Reference thrust may vary depending on the operating condition.

Rotor Inertia includes ball screw shaft.

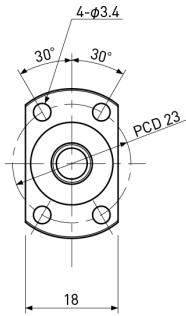
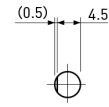
Motor characteristics will vary depending on driver type and operating conditions.

PBA2TMB0801

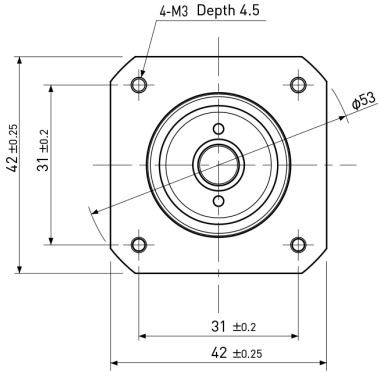


Motor wire

A	Red
Ā	Blue
B	Yellow
B̄	White

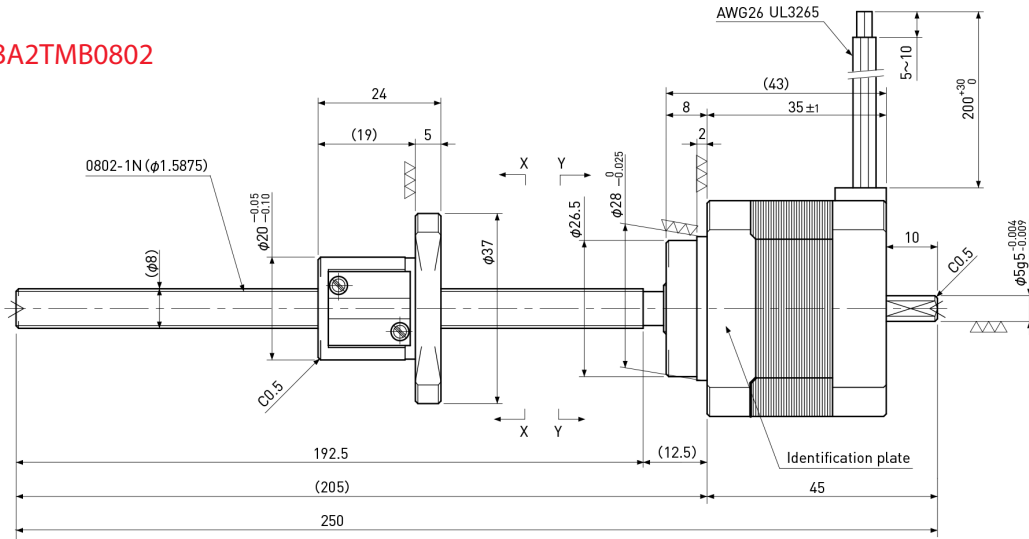


View X-X



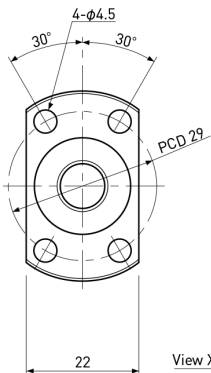
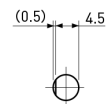
View Y-Y

PBA2TMB0802

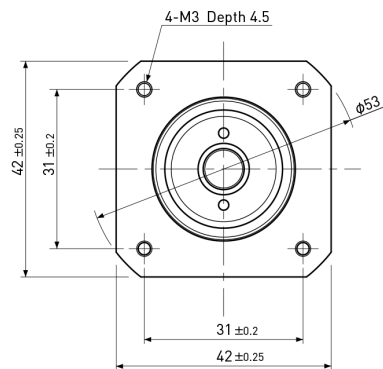


Motor wire

A	Red
Ā	Blue
B	Yellow
B̄	White



View X-X



View Y-Y

