

### Description:

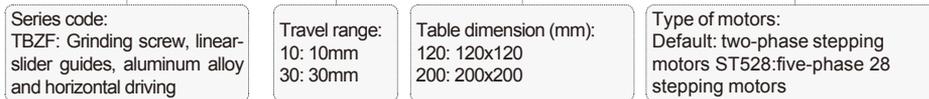
Zolix's TBZF series motorized vertical-motion stages are very suitable for usages in applications with requirements of middle or large size but high repetition rates. Good appearance and good wear-resistance are contributed by hard black anodic-oxidation aluminum-alloy body materials. Fine-grinding techniques for guide surface treatment is critical for providing customers higher motion accuracy. 1mm-or-2mm-lead-range grinding screws whose nuts are made of wear-resistant tin bronze constitute main parts of driving systems, working with standard two-phase stepping motors, to ensure higher resolution and positioning accuracy.

### Main characteristics:

- Fine-grinding screws whose nuts are made of wear-resistant tin bronze provide higher durability
- Wedge-type structure design to ensure higher rigidity and higher loading capability
- Smooth running comes from employing linear-slider guides

### Naming rules:

## TBZF 10-120 (-ST528)



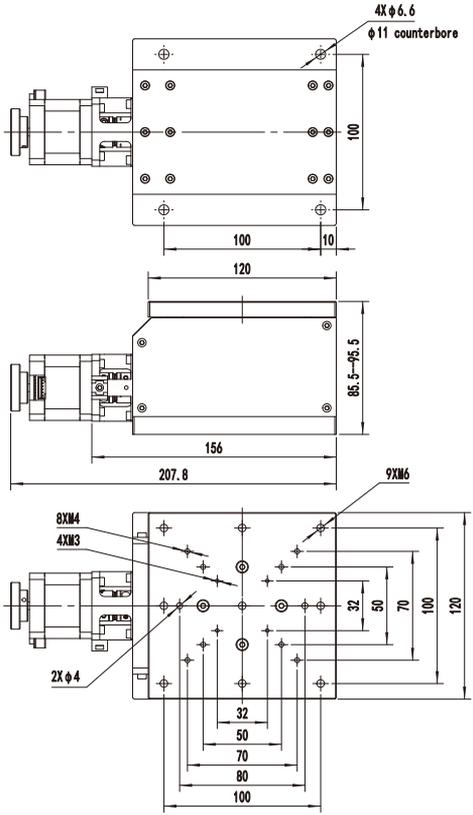
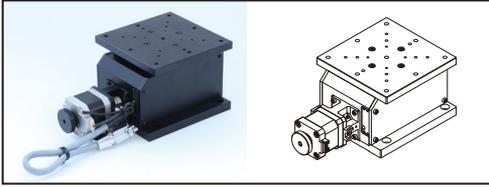
### Selection chart:

Model number		TBZF10-120	TBZF30-200
<b>Mechanical specifications</b>	Travel range(mm)	10	30
	Table dimensions(mm)	120×120	200×200
	Transmission mechanism	Grinding screw Φ8x1	Grinding screw Φ12x2
	Guides (guiding mechanism)	linear-slider guides	
	Main body materials and surface treatments	Black anodic-oxidation aluminum-alloy	
	Weight (Kg)	2.5	5
<b>Accuracy specifications</b>	Resolution (step/half-step) (μm)	1.82/0.91	6.49/3.245
	20-fine-subdivision resolution (μm)	0.091	0.325
	Highest speed (mm/s) *	6	6.5
	Repositioning accuracy (μm)	≤ ±2.5	
	Backlash clearance (μm)	≤5	
	Static parallelism (mm)	≤0.1	
<b>Electrical specifications</b>	Motor and its stepping angle (°)	Two-phase 42 stepping motor, 1.8	Two-phase 57 stepping motor, 1.8
	Model number of motor	Shinano, SST43D2126-10	Shinano, SST-59D3206
	Working current (A)	1.7	2.8
	Torque of motor (N·m)	0.456	1.44
	Model number of stepping driver (optional)	Moons, SR2	Moons, SR4
	Type of plugs for stages	1*DB9 (pin)	
	Type of connection cables	High flexible cables (Helukabel, Germany)	
	Length of cables for stages(m)	0.2	
	Position-limit sensors (built-in)	2*GP1S09xHCPI (Sharp, Japan)	
	Origin-point sensors (built-in)	1*GP1S09xHCPI (Sharp, Japan)	
	Voltage of power supply for sensors (V)	DC5~24V ±10%	
	Output for control	collector of NPN open-circuit output	
	Status of output ports	output ON when sensor is blocked	
<b>Operating load</b>	Horizontal direction (Kg)	10	20

\* Highest speed is measured with the conditions of zero-load and motors being worked at 600rpm

# Dimensions:

TBZF10-120



TBZF30-200

