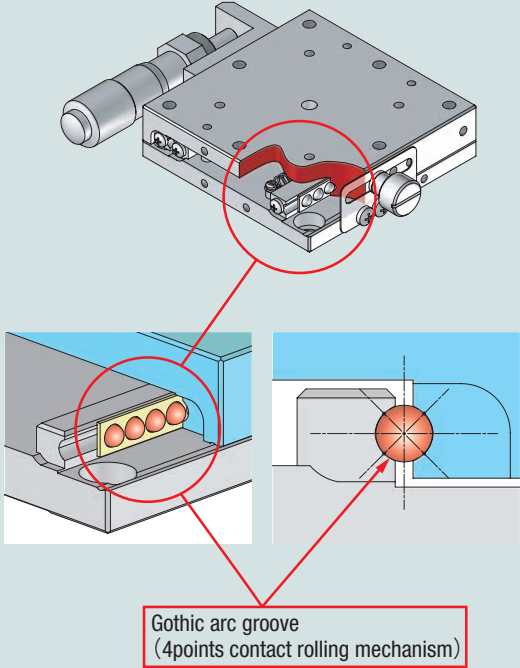


Linear Ball Guide (SS) Stage Guidance/Line-up

[Features]

- Thin structure stages which integrate the guide and main body.
- The combination of the stainless mainbody and gothic arc groove for a guide allows high rigidity and high accuracy. ※BXT series made by steel.
- Its wide specification line up helps cutomers improve productivity and quality.

Mechanism



Gothic arc groove
(4points contact rolling mechanism)

Feature

- Thin type Main body thickness :16mm
- High rigidity Load capacity :20kgf
- High precision Straightness :1μm

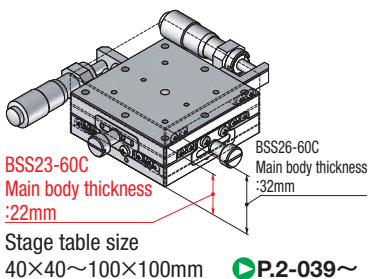
*Specification example in case of 60x60mm

Low price Low price linear ball guide BXT series ▶ P.2-015~

| Series | Stage table size (mm) | Travel distance per rotation (mm) | Load capacity (kgf) [N] | Main material | |
|---|-----------------------|-----------------------------------|-------------------------|---------------|------------|
| BXT series (Electroless nickel plating) | □40 | 0.5 | 10 [98] | Steel | |
| | □60 | | 20 [196] | | |
| BSS series (Electroless nickel plating) | □25 | 0.25~0.5 | 4 [39.2] | Stainless | |
| | □40 | | 10 [98] | | |
| | □50 | | 15 [147] | | |
| | □60 | 0.25~1.0 | 20 [196] | | |
| | □70 | | 23 [225.4] | | |
| | □80 | | 0.5~1.0 | | 27 [264.6] |
| | □100 | | | | 35 [343] |
| BSB series (Low temperature black chrome plating) | □25 | 0.25~0.5 | 4 [39.2] | Stainless | |
| | □40 | | 10 [98] | | |
| | □60 | 0.25~1.0 | 20 [196] | | |
| | □80 | | 27 [264.6] | | |
| BSL series (Long stroke) | 40×80 | 0.5~1.0 | 15 [147] | Stainless | |
| | 60×120 | | 20 [196] | | |

* Amount shows for single axis

XY thin type BSS23 series
Reduce 31% of thickness by integrated XY



Clamp on a operator's end

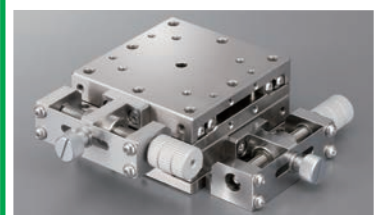
Control operation from the one-way direction



XY-axis ▶ P.2-035~

Multi mounting positioning

Can be mounted a variety of direction such as vertical, tilt and horizontal.



▶ P.2-037~

See page P.2-055~ for BHE(linear ball guide horizontal Z)

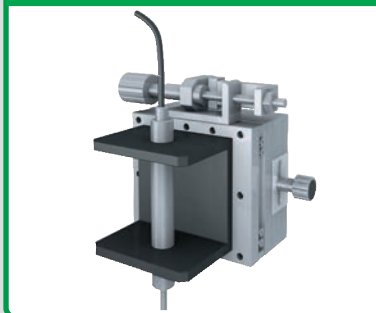
| Series | Stage table size (mm) | Stroke (X-axis/mm) | | | | | | Axis configuration · Listing page | | | | | | | |
|--------|-----------------------|--------------------|-----|-----|-----|-----|-----|-----------------------------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|
| | | ~5 | ~10 | ~15 | ~20 | ~30 | ~40 | ~50 | X | Thin type XY | XY | Z | XZ | XYZ thin | XYZ |
| BXT | □40 | ■ | ■ | | | | | | ● ▶ P.2-015~ | | ● ▶ P.2-043~ | ● ▶ P.2-053~ | | | |
| | □60 | ■ | ■ | | | | | | ● ▶ P.2-015~ | | ● ▶ P.2-043~ | ● ▶ P.2-053~ | | | |
| BSS | □25 | ■ | ■ | | | | | | ● ▶ P.2-017~ | | ● ▶ P.2-045~ | ● ▶ P.2-057 | ● ▶ P.2-058 | | ● ▶ P.2-060 |
| | □40 | ■ | ■ | ■ | | | | | ● ▶ P.2-019~ | ● ▶ P.2-039~ | ● ▶ P.2-047~ | ● ▶ P.2-057 | ● ▶ P.2-058 | ● ▶ P.2-059 | ● ▶ P.2-060 |
| | □50 | ■ | ■ | ■ | | | | | ● ▶ P.2-021~ | ● ▶ P.2-039~ | ● ▶ P.2-047~ | ● ▶ P.2-057 | ● ▶ P.2-058 | ● ▶ P.2-059 | ● ▶ P.2-060 |
| | □60 | ■ | ■ | ■ | | | | | ● ▶ P.2-023~ | ● ▶ P.2-039~ | ● ▶ P.2-049~ | ● ▶ P.2-057 | ● ▶ P.2-058 | ● ▶ P.2-059 | ● ▶ P.2-060 |
| | □70 | ■ | ■ | ■ | | | | | ● ▶ P.2-025~ | ● ▶ P.2-039~ | ● ▶ P.2-049~ | ● ▶ P.2-057 | ● ▶ P.2-058 | ● ▶ P.2-059 | ● ▶ P.2-060 |
| | □80 | ■ | ■ | ■ | ■ | | | | ● ▶ P.2-027~ | ● ▶ P.2-041~ | ● ▶ P.2-051~ | ● ▶ P.2-057 | ● ▶ P.2-058 | ● ▶ P.2-059 | ● ▶ P.2-060 |
| | □100 | ■ | ■ | ■ | ■ | ■ | | | ● ▶ P.2-029~ | ● ▶ P.2-041~ | ● ▶ P.2-051~ | | | | |
| BSB | □25 | ■ | ■ | | | | | | ● ▶ P.2-017~ | | ● ▶ P.2-045~ | ● ▶ P.2-057 | ● ▶ P.2-058 | | ● ▶ P.2-060 |
| | □40 | ■ | ■ | ■ | | | | | ● ▶ P.2-019~ | | ● ▶ P.2-047~ | ● ▶ P.2-057 | ● ▶ P.2-058 | | ● ▶ P.2-060 |
| | □60 | ■ | ■ | ■ | | | | | ● ▶ P.2-023~ | | ● ▶ P.2-049~ | ● ▶ P.2-057 | ● ▶ P.2-058 | | ● ▶ P.2-060 |
| | □80 | ■ | ■ | ■ | ■ | | | | ● ▶ P.2-027~ | | ● ▶ P.2-051~ | ● ▶ P.2-057 | ● ▶ P.2-058 | | ● ▶ P.2-060 |
| BSL | 40×80 | ■ | ■ | ■ | ■ | | | | ● ▶ P.2-031~ | | | | | | |
| | 60×120 | ■ | ■ | ■ | ■ | ■ | | | ● ▶ P.2-031~ | | | | | | |

Application example

Sample inspection table (Thin type XY)



Control the dispenser head

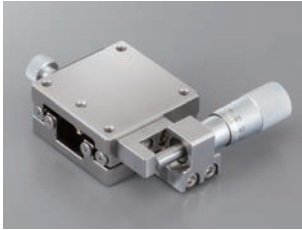


Sample inspection table (Integrated rotation stage)

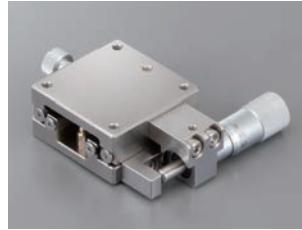


X-axis Linear Ball Guide BXT Series □40□60: BXT04013/BXT06013

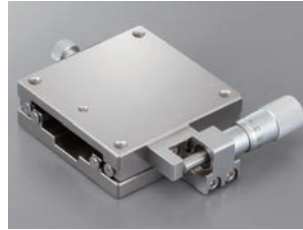
RoHS



BXT04013-CL



BXT04013-UL



BXT06013-CL



BXT06013-UL

1 Model
BXT04013-CL
Option code
1 2 3 4

1 Stage table size

| | |
|----|------|
| 04 | 40mm |
| 06 | 60mm |

2 Travel distance

| | |
|-----|------|
| 013 | 13mm |
|-----|------|

3 Feeding position

| | |
|---|-------------------------------------|
| C | Side |
| U | Side Vertically attached micrometer |

4 Operating position

| | |
|---|-----------------|
| L | L opposite hand |
| R | Opposite hand |

Manual linear stage

X

XY

Z

Horizontal Z

XZ

Horizontal XZ

XYZ

Horizontal XYZ

Goniometer

Rotary

Unit

Accessories

Linear Ball

Cross Roller

Dovetail

□25

□30

□40

□50

□60

□70

□80

□100

□120

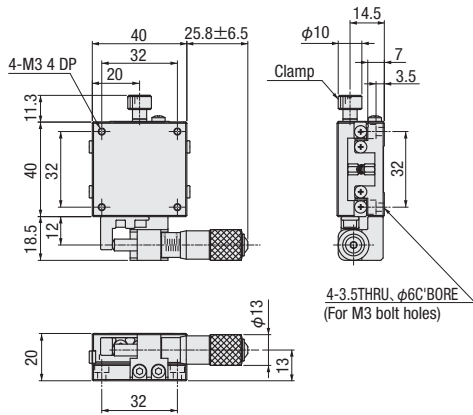
Other

2
015

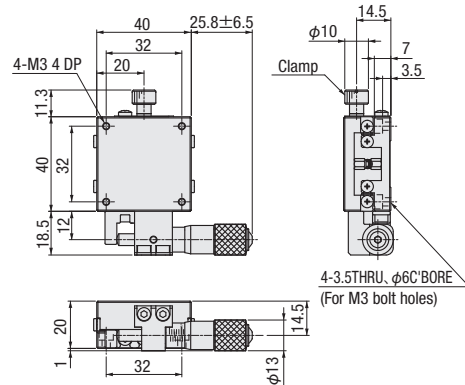
| SPEC | | |
|-------------------------------------|----------------------------------|----------------------------------|
| Model | BXT04013 | BXT06013 |
| Stage table size | 40×40mm | 60×60mm |
| Operation position | Side | Side |
| Travel distance | ±6.5mm | ±6.5mm |
| Minimum reading of micrometer | 10μm | 10μm |
| Travel guide | Linear ball guide | Linear ball guide |
| Load capacity | 10kgf [98N] | 20kgf [196N] |
| Travel accuracy | Straightness | 10μm |
| | Pitching | 30" |
| | Yawing | 25" |
| Moment rigidity | Pitch | 0.38"/N · cm |
| | Yaw | 0.35"/N · cm |
| | Roll | 0.21"/N · cm |
| Parallelism | 30μm | 30μm |
| Weight | 0.24kg | 0.44kg |
| Main material—Surface finishing | Steel—Electroless nickel plating | Steel—Electroless nickel plating |
| Provided screws (Hex socket screws) | 4 of M3—8 | 4 of M4—8 |

Dimensional outline drawings

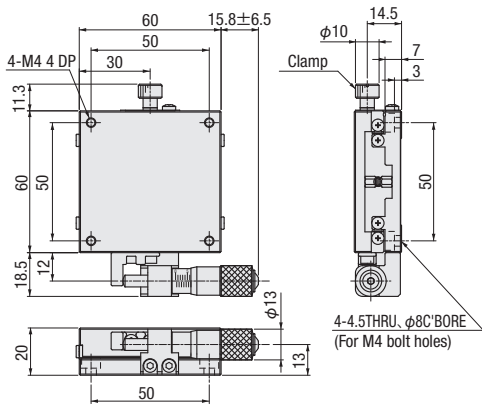
BXT04013-CL



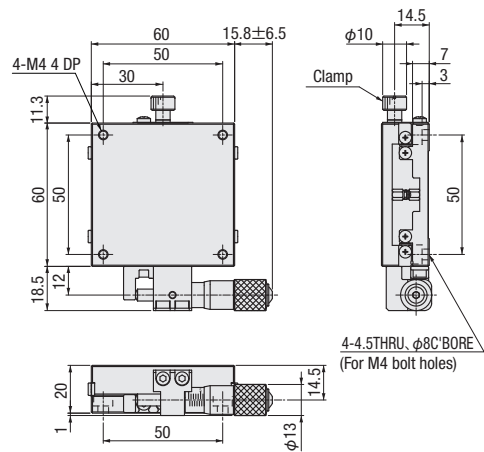
BXT04013-UL



BXT06013-CL



BXT06013-UL



| |
|----------------|
| X |
| XY |
| Z |
| Horizontal Z |
| XZ |
| Horizontal XZ |
| XYZ |
| Horizontal XYZ |
| Goniometer |
| Rotary |
| Unit |
| Accessories |

Linear Ball

Cross Roller

Dovetail

- 25
- 30
- 40
- 50
- 60
- 70
- 80
- 100
- 120
- Other

XY-axis Linear Ball Guide BYT Series □40□60: BYT04013/BYT06013

RoHS



BYT04013-CL



BYT06013-CL

1 Model
BYT04013-CL
Option code

1 Stage table size

| | |
|----|------|
| 04 | 40mm |
| 06 | 60mm |

2 Travel distance

| | |
|-----|------|
| 013 | 13mm |
|-----|------|

3 Operating position

| | |
|---|-----------------|
| L | L opposite hand |
| R | Opposite hand |

| SPEC | | |
|--|-------------------------------------|----------------------------------|
| Model | BYT04013 | BYT06013 |
| Stage table size | 40×40mm | 60×60mm |
| Operation position | Side | Side |
| Travel distance | ±6.5mm | ±6.5mm |
| Travel distance per rotation of feed screw | 0.5mm | 0.5mm |
| Minimum reading of micrometer | 10 μm | 10 μm |
| Travel guide | Linear ball guide | Linear ball guide |
| Load capacity | 9.8kgf [96N] | 19.6kgf [192.1N] |
| Travel accuracy | Straightness (Single axis accuracy) | 10 μm |
| | Pitching (Single axis accuracy) | 30" |
| | Yawing (Single axis accuracy) | 25" |
| Moment rigidity | Pitch | 0.59" /N · cm |
| | Yaw | 0.70" /N · cm |
| | Roll | 0.59" /N · cm |
| Parallelism | 60 μm | 60 μm |
| Weight | 0.48kg | 0.88kg |
| Main material—Surface finishing | Steel—Electroless nickel plating | Steel—Electroless nickel plating |
| Provided screws (Hex socket screws) | 4 of M3—8 | 4 of M4—8 |

Manual linear stage

X

XY

Z

Horizontal Z

XZ

Horizontal XZ

XYZ

Horizontal XYZ

Goniometer

Rotary

Unit

Accessories

Linear Ball

Cross Roller

Dovetail

□25

□30

□40

□50

□60

□70

□80

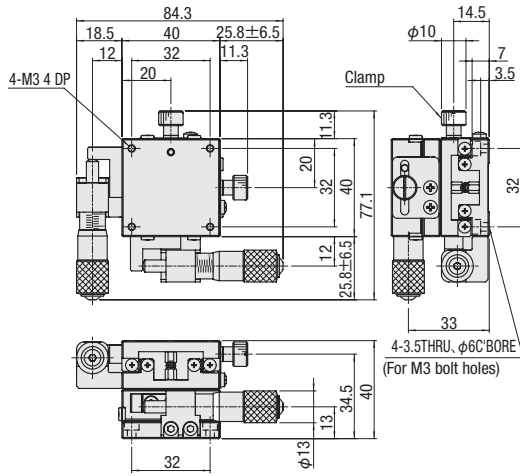
□100

□120

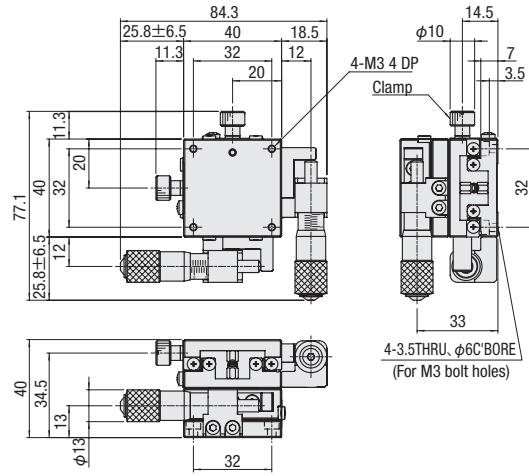
Other

Dimensional outline drawings

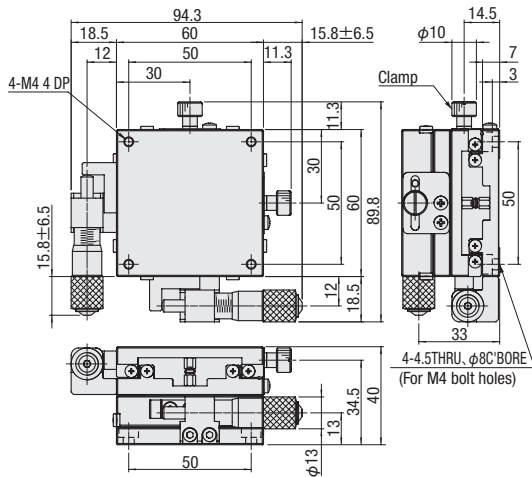
BYT04013-CL



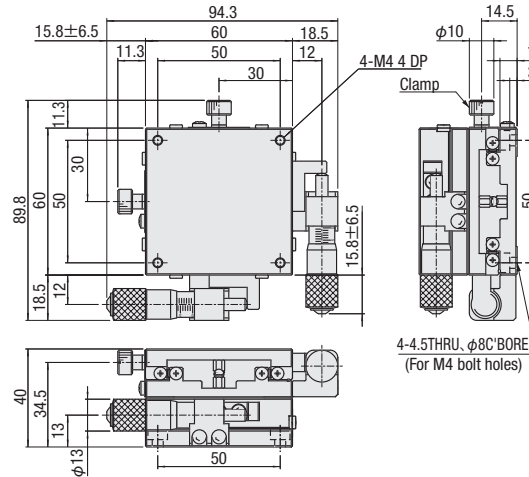
BYT04013-CR



BYT06013-CL



BYT06013-CR



Manual linear stage

X

XY

Z

Horizontal Z

XZ

Horizontal XZ

XYZ

Horizontal XYZ

Goniometer

Rotary

Unit

Accessories

Linear Ball

Cross Roller

Dovetail

25

30

40

50

60

70

80

100

120

Other

2

044

Z-axis Linear Ball Guide BZT Series □40□60: BZT04013/BZT06013

RoHS



BZT04013-UL



BZT06013-UL

Manual linear stage

X

XY

Z

Horizontal Z

XZ

Horizontal XZ

XYZ

Horizontal XYZ

Goniometer

Rotary

Unit

Accessories

Linear Ball

Cross Roller

Dovetail

□25

□30

□40

□50

□60

□70

□80

□100

□120

Other

1 Model
BZT04013-UL
 Option code
 1 2 3

1 Stage table size

| | |
|----|------|
| 04 | 40mm |
| 06 | 60mm |

2 Travel distance

| | |
|-----|------|
| 013 | 13mm |
|-----|------|

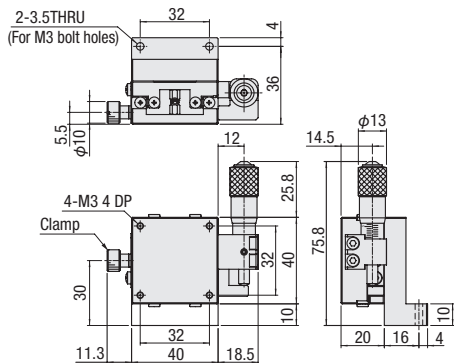
3 Operating position

| | |
|---|-----------------|
| L | L opposite hand |
| R | Opposite hand |

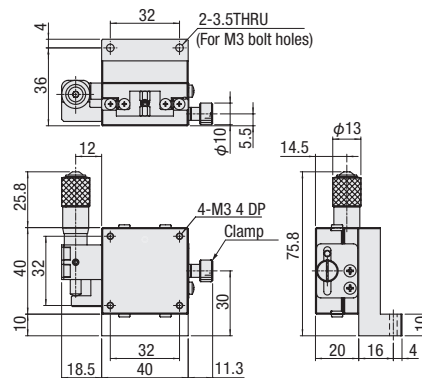
| SPEC | | |
|--|----------------------------------|----------------------------------|
| Model | BZT04013 | BZT06013 |
| Stage table size | 40×40mm | 60×60mm |
| Operation position | Side | Side |
| Travel distance | ±6.5mm | ±6.5mm |
| Travel distance per rotation of feed screw | 0.5mm | 0.5mm |
| Minimum reading of micrometer | 10μm | 10μm |
| Travel guide | Linear ball guide | Linear ball guide |
| Load capacity | 2.0kgf [19.6N] | 2.0kgf [19.6N] |
| Travel accuracy | Straightness | 10μm |
| | Pitching | 30" |
| | Yawing | 25" |
| Moment rigidity | Pitch | 0.38"/N · cm |
| | Yaw | 0.35"/N · cm |
| | Roll | 0.21"/N · cm |
| Parallelism | — | — |
| Weight | 0.42kg | 0.82kg |
| Main material—Surface finishing | Steel—Electroless nickel plating | Steel—Electroless nickel plating |
| Provided screws (Hex socket screws) | 2 of M3—16 | 2 of M4—16 |

Dimensional outline drawings

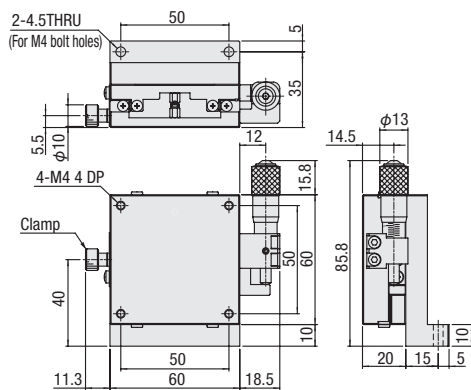
BZT04013-UL



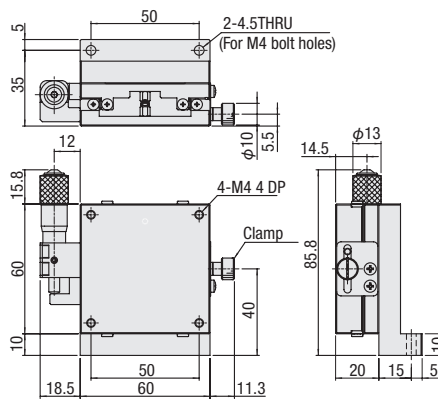
BZT04013-UR



BZT06013-UL



BZT06013-UR



Manual linear stage

X

XY

Z

Horizontal Z

XZ

Horizontal XZ

XYZ

Horizontal XYZ

Goniometer

Rotary

Unit

Accessories

Linear Ball

Cross Roller

Dovetail

25

30

40

50

60

70

80

100

120

Other

2

054