

This zoom lens is designed for use with Panasonic's applicable projectors.

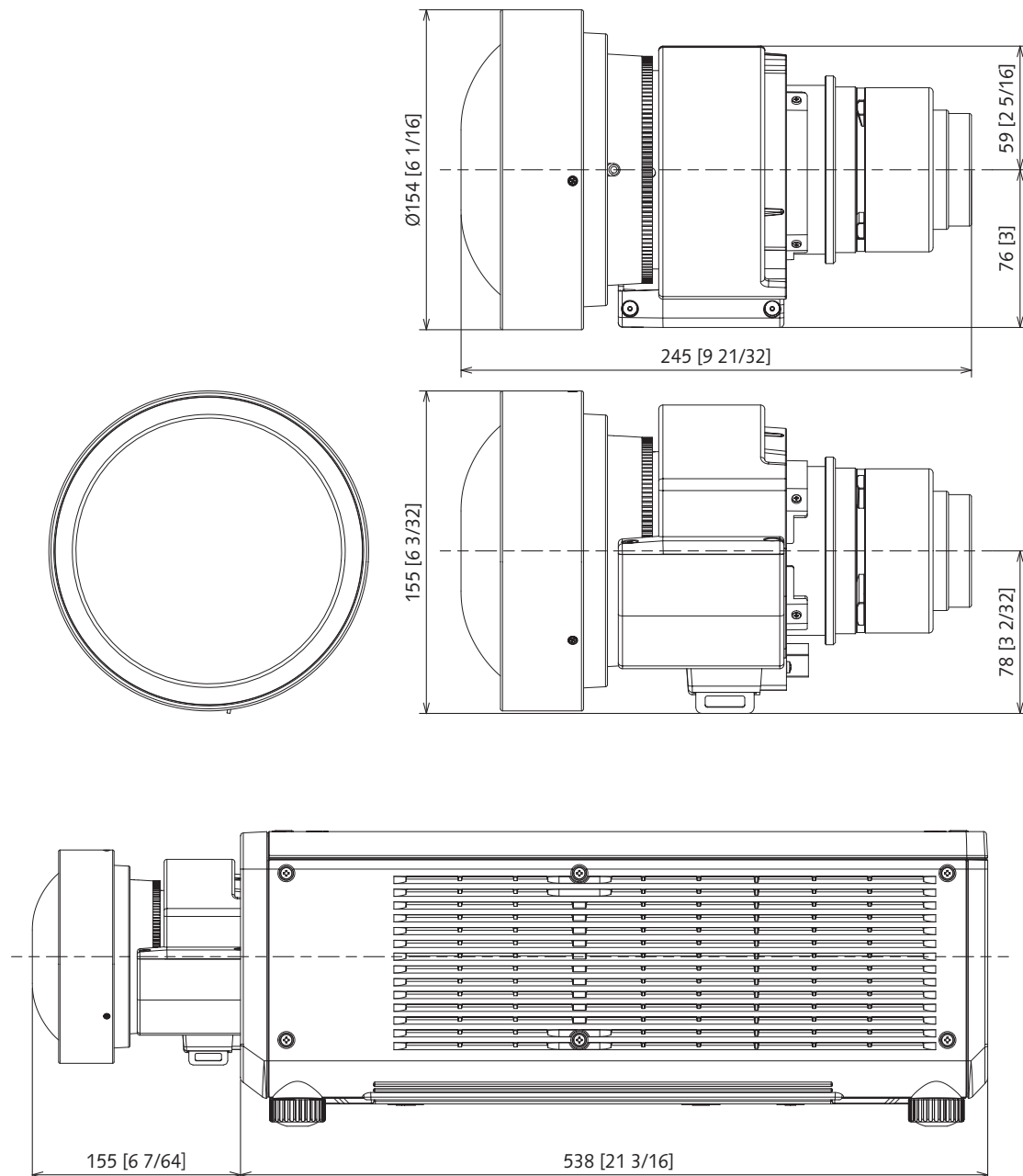
**Please use the lens only on the specified Panasonic projector.*

Specifications (Specifications subject to change without notice.)

| | | |
|----------------------|---|---------------------|
| F-number | 1.94 - 2.28 | |
| Focal distance (f) | 9.9 mm - 12.3 mm [3/6 - 15/32] | |
| Throw ratio | 0.550 - 0.690:1 (16:10 aspect ratio) | |
| | 0.550 - 0.690:1 (16:9 aspect ratio) | |
| | 0.660 - 0.830:1 (4:3 aspect ratio) | |
| Dimensions | Width | 154 mm [6 1/16 in] |
| | Height | 155 mm [6 3/32 in] |
| | Depth | 245 mm [9 21/32 in] |
| Weight | 2.6 kg (5.73 lbs) | |
| Applicable projector | PT-REQ12/PT-REQ10/PT-REQ80/PT-REZ12/PT-REZ10/PT-REZ80 | |

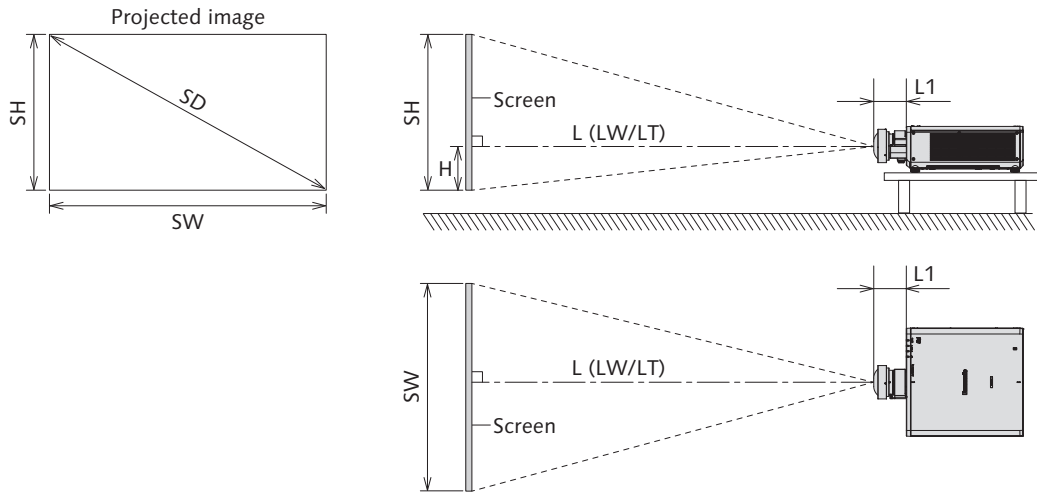
Dimensions

unit : mm [inch]
This illustration is not drawn to scale.



Dimensional relationship diagram

The dimensional relationship between the screen and the projector is shown below.



Note

- This illustration is prepared on the assumption that the projected image size and position have been aligned to fit full in the screen.
- This illustration is not drawn to scale.
- The values are approximate.

| | |
|----|---|
| SH | Projected image height |
| SW | Projected image width |
| SD | Projected image size |
| H | Distance from the lens center to the bottom edge of the projected image |
| L | Projection distance (distance from the front end of the projection lens to the screen) |
| | LW Minimum projection distance when the Zoom Lens is used |
| | LT Maximum projection distance when the Zoom Lens is used |
| L1 | Lens protrusion dimension (distance from the front surface of the projector to the front end of the projection lens) |

Unit : m

| Projector model | Dimension for L1 (approximate value) |
|----------------------------|--------------------------------------|
| PT-REQ12/PT-REQ10/PT-REQ80 | 0.155 |
| PT-REZ12/PT-REZ10/PT-REZ80 | |

Projection distance

A $\pm 5\%$ error in listed projection distances may occur.

When [SCREEN ADJUSTMENT] is used, distance is corrected to become smaller than the specified image size.

Screen aspect ratio 16:10

Unit: meters

| Projector model | | | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 |
|----------------------|--------|-------------|------------|--|-----------|--|
| Throw ratio | | | | 0.550 - 0.690:1 | | |
| Projected image size | | | | Projection distance (L) | | Height position (H) |
| Diagonal (SD) | | Height (SH) | Width (SW) | Min. (LW) | Max. (LT) | |
| m | inches | | | | | |
| 1.78 | 70 | 0.942 | 1.508 | 0.82 | 1.03 | 0.00 - 0.94 |
| 2.03 | 80 | 1.077 | 1.723 | 0.94 | 1.18 | 0.00 - 1.08 |
| 2.29 | 90 | 1.212 | 1.939 | 1.06 | 1.33 | 0.00 - 1.21 |
| 2.54 | 100 | 1.346 | 2.154 | 1.18 | 1.49 | 0.00 - 1.35 |
| 3.05 | 120 | 1.615 | 2.585 | 1.43 | 1.79 | 0.00 - 1.62 |
| 3.81 | 150 | 2.019 | 3.231 | 1.79 | 2.25 | 0.00 - 2.02 |
| 5.08 | 200 | 2.692 | 4.308 | 2.40 | 3.01 | 0.00 - 2.69 |
| 6.35 | 250 | 3.365 | 5.385 | 3.01 | 3.77 | 0.00 - 3.37 |
| 7.62 | 300 | 4.039 | 6.462 | 3.62 | 4.53 | 0.00 - 4.04 |
| 8.89 | 350 | 4.712 | 7.539 | 4.22 | 5.29 | 0.00 - 4.71 |
| 10.16 | 400 | 5.385 | 8.616 | 4.83 | 6.06 | 0.00 - 5.39 |
| 12.70 | 500 | 6.731 | 10.770 | 6.05 | 7.58 | 0.00 - 6.73 |
| 15.24 | 600 | 8.077 | 12.923 | 7.26 | 9.10 | 0.00 - 8.08 |
| 17.78 | 700 | 9.423 | 15.077 | 8.48 | 10.63 | 0.00 - 9.42 |

• The throw ratio is based on the value during projection with the projected image size of 2.54 m (100 in)

Screen aspect ratio 16:10

Unit: feet

| Projector model | | | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 |
|----------------------|--------|-------------|------------|--|-----------|--|
| Throw ratio | | | | 0.550 - 0.690:1 | | |
| Projected image size | | | | Projection distance (L) | | Height position (H) |
| Diagonal (SD) | | Height (SH) | Width (SW) | Min. (LW) | Max. (LT) | |
| m | inches | | | | | |
| 1.78 | 70 | 3.09 | 4.95 | 2.69 | 3.38 | 0.00 - 3.08 |
| 2.03 | 80 | 3.53 | 5.65 | 3.08 | 3.87 | 0.00 - 3.54 |
| 2.29 | 90 | 3.98 | 6.36 | 3.48 | 4.36 | 0.00 - 3.97 |
| 2.54 | 100 | 4.42 | 7.07 | 3.87 | 4.89 | 0.00 - 4.43 |
| 3.05 | 120 | 5.30 | 8.48 | 4.69 | 5.87 | 0.00 - 5.32 |
| 3.81 | 150 | 6.62 | 10.60 | 5.87 | 7.38 | 0.00 - 6.63 |
| 5.08 | 200 | 8.83 | 14.13 | 7.87 | 9.88 | 0.00 - 8.83 |
| 6.35 | 250 | 11.04 | 17.67 | 9.88 | 12.37 | 0.00 - 11.06 |
| 7.62 | 300 | 13.25 | 21.20 | 11.88 | 14.86 | 0.00 - 13.26 |
| 8.89 | 350 | 15.46 | 24.73 | 13.85 | 17.36 | 0.00 - 15.45 |
| 10.16 | 400 | 17.67 | 28.27 | 15.85 | 19.88 | 0.00 - 17.68 |
| 12.70 | 500 | 22.08 | 35.34 | 19.85 | 24.87 | 0.00 - 22.08 |
| 15.24 | 600 | 26.50 | 42.40 | 23.82 | 29.86 | 0.00 - 26.51 |
| 17.78 | 700 | 30.92 | 49.47 | 27.82 | 34.88 | 0.00 - 30.91 |

• The throw ratio is based on the value during projection with the projected image size of 2.54 m (100 in)

Screen aspect ratio 16:9

Unit: meters

| Projector model | | | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 |
|----------------------|--------|-------------|------------|--|-----------|--|
| Throw ratio | | | | 0.550 - 0.690:1 | | |
| Projected image size | | | | Projection distance (L) | | Height position (H) |
| Diagonal (SD) | | Height (SH) | Width (SW) | Min. (LW) | Max. (LT) | |
| m | inches | | | | | |
| 1.78 | 70 | 0.872 | 1.550 | 0.84 | 1.06 | -0.05 - 0.92 |
| 2.03 | 80 | 0.996 | 1.771 | 0.97 | 1.22 | -0.06 - 1.05 |
| 2.29 | 90 | 1.121 | 1.992 | 1.09 | 1.37 | -0.06 - 1.18 |
| 2.54 | 100 | 1.245 | 2.214 | 1.22 | 1.53 | -0.07 - 1.31 |
| 3.05 | 120 | 1.494 | 2.657 | 1.47 | 1.84 | -0.08 - 1.58 |
| 3.81 | 150 | 1.868 | 3.321 | 1.84 | 2.31 | -0.10 - 1.97 |
| 5.08 | 200 | 2.491 | 4.428 | 2.47 | 3.09 | -0.14 - 2.63 |
| 6.35 | 250 | 3.113 | 5.535 | 3.09 | 3.88 | -0.17 - 3.29 |
| 7.62 | 300 | 3.736 | 6.641 | 3.72 | 4.66 | -0.21 - 3.94 |
| 8.89 | 350 | 4.358 | 7.748 | 4.34 | 5.44 | -0.24 - 4.60 |
| 10.16 | 400 | 4.981 | 8.855 | 4.97 | 6.23 | -0.28 - 5.26 |
| 12.70 | 500 | 6.226 | 11.069 | 6.22 | 7.79 | -0.35 - 6.57 |
| 15.24 | 600 | 7.472 | 13.283 | 7.47 | 9.36 | -0.42 - 7.89 |
| 17.78 | 700 | 8.717 | 15.497 | 8.72 | 10.92 | -0.48 - 9.20 |

• The throw ratio is based on the value during projection with the projected image size of 2.54 m (100 in)

Screen aspect ratio 16:9

Unit: feet

| Projector model | | | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 |
|----------------------|--------|-------------|------------|--|-----------|--|
| Throw ratio | | | | 0.550 - 0.690:1 | | |
| Projected image size | | | | Projection distance (L) | | Height position (H) |
| Diagonal (SD) | | Height (SH) | Width (SW) | Min. (LW) | Max. (LT) | |
| m | inches | | | | | |
| 1.78 | 70 | 2.86 | 5.09 | 2.76 | 3.48 | -0.16 - 3.02 |
| 2.03 | 80 | 3.27 | 5.81 | 3.18 | 4.00 | -0.20 - 3.45 |
| 2.29 | 90 | 3.68 | 6.54 | 3.58 | 4.50 | -0.20 - 3.87 |
| 2.54 | 100 | 4.09 | 7.26 | 4.00 | 5.02 | -0.23 - 4.30 |
| 3.05 | 120 | 4.90 | 8.72 | 4.82 | 6.04 | -0.26 - 5.18 |
| 3.81 | 150 | 6.13 | 10.90 | 6.04 | 7.58 | -0.33 - 6.46 |
| 5.08 | 200 | 8.17 | 14.53 | 8.10 | 10.14 | -0.46 - 8.63 |
| 6.35 | 250 | 10.21 | 18.16 | 10.14 | 12.73 | -0.56 - 10.79 |
| 7.62 | 300 | 12.26 | 21.79 | 12.21 | 15.29 | -0.69 - 12.93 |
| 8.89 | 350 | 14.30 | 25.42 | 14.24 | 17.85 | -0.79 - 15.09 |
| 10.16 | 400 | 16.34 | 29.05 | 16.31 | 20.44 | -0.92 - 17.26 |
| 12.70 | 500 | 20.43 | 36.32 | 20.41 | 25.56 | -1.15 - 21.56 |
| 15.24 | 600 | 24.51 | 43.58 | 24.51 | 30.71 | -1.38 - 25.89 |
| 17.78 | 700 | 28.60 | 50.84 | 28.61 | 35.83 | -1.58 - 30.18 |

• The throw ratio is based on the value during projection with the projected image size of 2.54 m (100 in)

Screen aspect ratio 4:3

Unit: meters

| Projector model | | | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 |
|----------------------|--------|-------------|------------|--|-----------|--|
| Throw ratio | | | | 0.660 - 0.830:1 | | |
| Projected image size | | | | Projection distance (L) | | Height position (H) |
| Diagonal (SD) | | Height (SH) | Width (SW) | Min. (LW) | Max. (LT) | |
| m | inches | | | | | |
| 1.78 | 70 | 1.067 | 1.422 | 0.93 | 1.17 | 0.00 - 1.07 |
| 2.03 | 80 | 1.219 | 1.626 | 1.07 | 1.34 | 0.00 - 1.22 |
| 2.29 | 90 | 1.372 | 1.829 | 1.21 | 1.51 | 0.00 - 1.37 |
| 2.54 | 100 | 1.524 | 2.032 | 1.34 | 1.69 | 0.00 - 1.52 |
| 3.05 | 120 | 1.829 | 2.438 | 1.62 | 2.03 | 0.00 - 1.83 |
| 3.81 | 150 | 2.286 | 3.048 | 2.03 | 2.55 | 0.00 - 2.29 |
| 5.08 | 200 | 3.048 | 4.064 | 2.72 | 3.41 | 0.00 - 3.05 |
| 6.35 | 250 | 3.810 | 5.080 | 3.41 | 4.27 | 0.00 - 3.81 |
| 7.62 | 300 | 4.572 | 6.096 | 4.10 | 5.14 | 0.00 - 4.57 |
| 8.89 | 350 | 5.334 | 7.112 | 4.79 | 6.00 | 0.00 - 5.33 |
| 10.16 | 400 | 6.096 | 8.128 | 5.47 | 6.86 | 0.00 - 6.10 |
| 12.70 | 500 | 7.620 | 10.160 | 6.85 | 8.59 | 0.00 - 7.62 |
| 15.24 | 600 | 9.144 | 12.192 | 8.23 | 10.31 | 0.00 - 9.14 |
| 17.78 | 700 | 10.668 | 14.224 | 9.60 | 12.04 | 0.00 - 10.67 |

• The throw ratio is based on the value during projection with the projected image size of 2.54 m (100 in)

Screen aspect ratio 4:3

Unit: feet

| Projector model | | | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 | | PT-REQ12/PT-REQ10/PT-REQ80 PT-REZ12/PT-REZ10/PT-REZ80 |
|----------------------|--------|-------------|------------|--|-----------|--|
| Throw ratio | | | | 0.660 - 0.830:1 | | |
| Projected image size | | | | Projection distance (L) | | Height position (H) |
| Diagonal (SD) | | Height (SH) | Width (SW) | Min. (LW) | Max. (LT) | |
| m | inches | | | | | |
| 1.78 | 70 | 3.50 | 4.67 | 3.05 | 3.84 | 0.00 - 3.51 |
| 2.03 | 80 | 4.00 | 5.34 | 3.51 | 4.40 | 0.00 - 4.00 |
| 2.29 | 90 | 4.50 | 6.00 | 3.97 | 4.95 | 0.00 - 4.50 |
| 2.54 | 100 | 5.00 | 6.67 | 4.40 | 5.55 | 0.00 - 4.99 |
| 3.05 | 120 | 6.00 | 8.00 | 5.32 | 6.66 | 0.00 - 6.00 |
| 3.81 | 150 | 7.50 | 10.00 | 6.66 | 8.37 | 0.00 - 7.51 |
| 5.08 | 200 | 10.00 | 13.33 | 8.92 | 11.19 | 0.00 - 10.01 |
| 6.35 | 250 | 12.50 | 16.67 | 11.19 | 14.01 | 0.00 - 12.50 |
| 7.62 | 300 | 15.00 | 20.00 | 13.45 | 16.86 | 0.00 - 14.99 |
| 8.89 | 350 | 17.50 | 23.33 | 15.72 | 19.69 | 0.00 - 17.49 |
| 10.16 | 400 | 20.00 | 26.67 | 17.95 | 22.51 | 0.00 - 20.01 |
| 12.70 | 500 | 25.00 | 33.33 | 22.47 | 28.18 | 0.00 - 25.00 |
| 15.24 | 600 | 30.00 | 40.00 | 27.00 | 33.83 | 0.00 - 29.99 |
| 17.78 | 700 | 35.00 | 46.67 | 31.50 | 39.50 | 0.00 - 35.01 |

• The throw ratio is based on the value during projection with the projected image size of 2.54 m (100 in)

Calculation of the projection distance

To use a projected image size not listed in this manual, check the projected image size SD (m) and use the respective formula to calculate the value.

The unit of all the formulae is m. (Values obtained by the following calculation formulae contain a slight error.)
 When calculating the value using image size designation (value in inches), multiply the value in inches by 0.0254 and substitute it into SD in the formula.

Screen aspect ratio 16:10

Unit: m

| Projector model | Projection distance (L) formula | |
|----------------------------|---------------------------------|------------------------------|
| | Min. (LW) | Max. (LT) |
| PT-REQ12/PT-REQ10/PT-REQ80 | $=0.4787 \times SD - 0.0322$ | $=0.5998 \times SD - 0.0376$ |
| PT-REZ12/PT-REZ10/PT-REZ80 | | |

Screen aspect ratio 16:9

Unit: m

| Projector model | Projection distance (L) formula | |
|----------------------------|---------------------------------|------------------------------|
| | Min. (LW) | Max. (LT) |
| PT-REQ12/PT-REQ10/PT-REQ80 | $=0.4920 \times SD - 0.0322$ | $=0.6165 \times SD - 0.0376$ |
| PT-REZ12/PT-REZ10/PT-REZ80 | | |

Screen aspect ratio 4:3

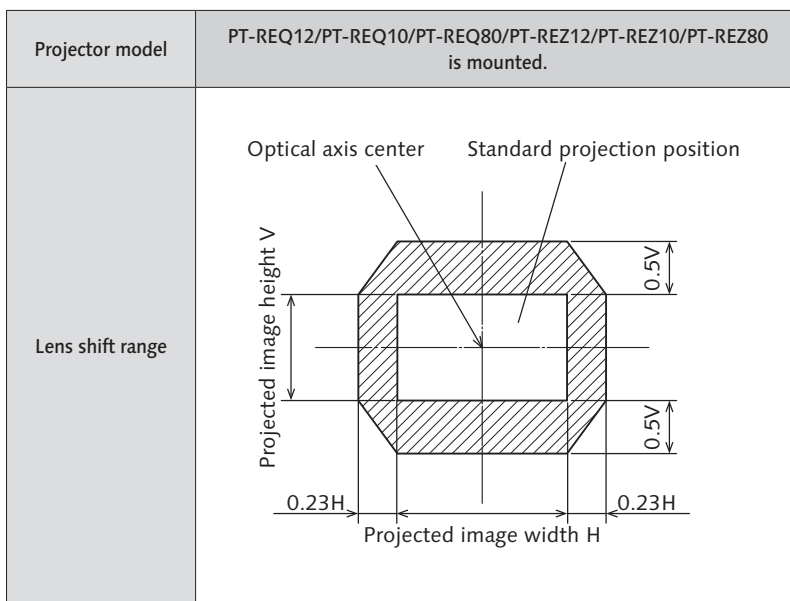
Unit: m

| Projector model | Projection distance (L) formula | |
|----------------------------|---------------------------------|------------------------------|
| | Min. (LW) | Max. (LT) |
| PT-REQ12/PT-REQ10/PT-REQ80 | $=0.5420 \times SD - 0.0322$ | $=0.6791 \times SD - 0.0376$ |
| PT-REZ12/PT-REZ10/PT-REZ80 | | |

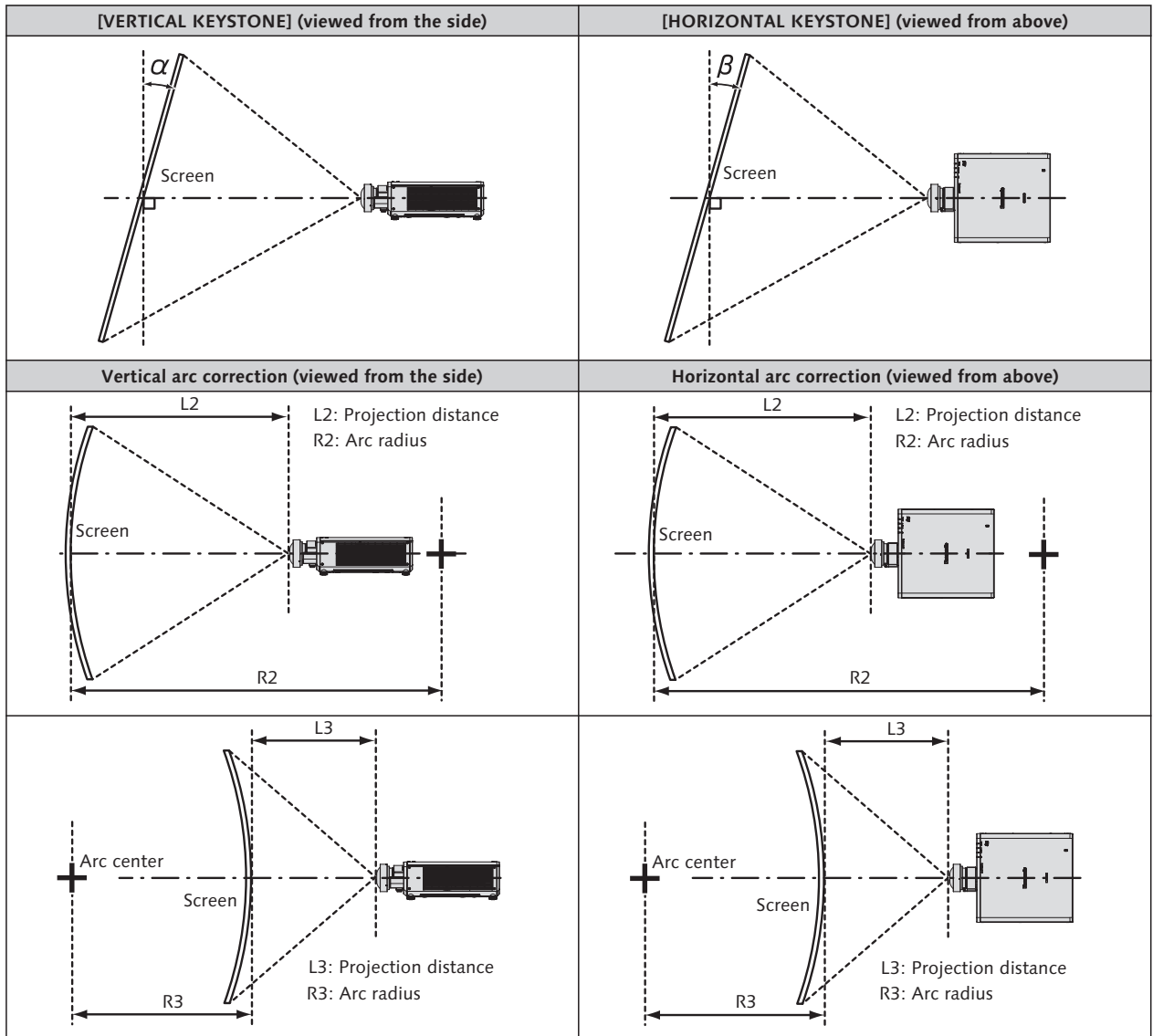
Adjustment range by the lens position shift (optical shift)

Based on the standard projection position using the optical axis shift function, the projection position can be adjusted in the range shown in the following figure.

Following figure shows the adjustment range when the projector is installed on the floor.



[SCREEN ADJUSTMENT] projection range



| Projector model | Only [KEYSTONE] used | | [KEYSTONE] and [CURVED CORRECTION] used together | | | | Only [CURVED CORRECTION] used | |
|----------------------------------|---|--|--|--|---------------------|---------------------|-------------------------------|---------------------|
| | Vertical keystone correction angle α (°) | Horizontal keystone correction angle β (°) | Vertical keystone correction angle α (°) | Horizontal keystone correction angle β (°) | Min. value of R2/L2 | Min. value of R3/L3 | Min. value of R2/L2 | Min. value of R3/L3 |
| PT-REQ12 PT-REQ10 PT-REQ80 | ±10 | ±5 | - | - | - | - | - | - |
| PT-REZ12 PT-REZ10 PT-REZ80 | | | | | | | | |