

Fixed Focus Lens

This fixed-focus lens is designed for use with Panasonic's applicable projectors.
Project in tight spaces from very short throw-distances.

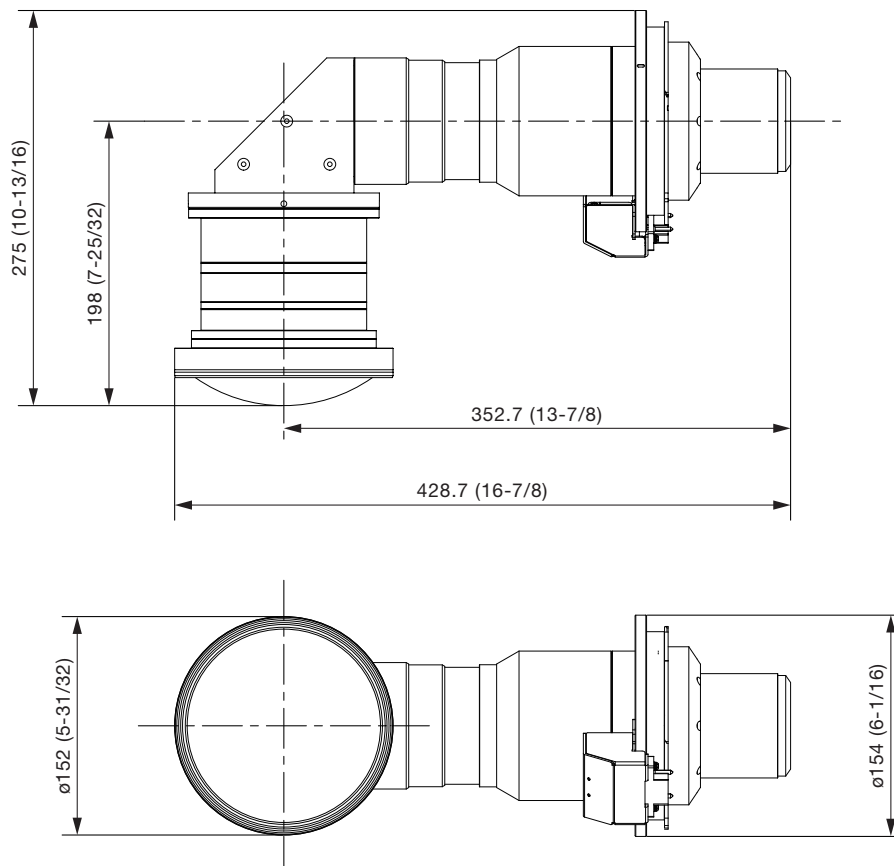
NOTE: Please use the lens only on the specified Panasonic projector.

Specifications

F value:	2.5
Focal Length (f):	8.0 mm (5/16 inches)
Throw ratio:	0.397:1 for PT-RQ32K/RQ22K/RQ13K (16:10 aspect ratio) 0.370:1 for PT-RZ31K/RZ21K/RZ12K/DZ21K2/DZ13K/DZ10K (16:10 aspect ratio) 0.401:1 for PT-RS30K/RS20K/RS11K/DS20K2/DS12K (4:3 aspect ratio) 0.413:1 for PT-DW17K2/DW11K (16:9 aspect ratio)
Auto Lens Identification function	Compatible models : PT-RQ32K/RZ31K/RS30K/RQ22K/RZ21K/RS20K
Dimensions (W × H × D):	275 × 154 × 428.7 mm (10-13/16 × 6-1/16 × 16-7/8 inches)
Weight:	Approximately 8.0kg (17.6 lbs)
Applicable projector	[Group A] PT-RQ22K/RZ21K/RS20K [Group B] PT-RQ32K/RZ31K/RS30K [Group C] PT-RQ13K/RZ12K/RS11K [Group D] PT-DZ21K2/DS20K2/DW17K2/DZ16K2 [Group E] PT-DZ13K/DS12K/DW11K/DZ10K

NOTE: Use of optional lens attachment ET-PLF20 may reduce lens vibration for some installation environments when using Group B or Group C projectors.

Dimensions

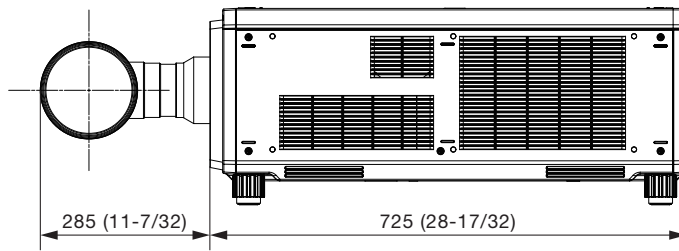


unit : mm (inch)

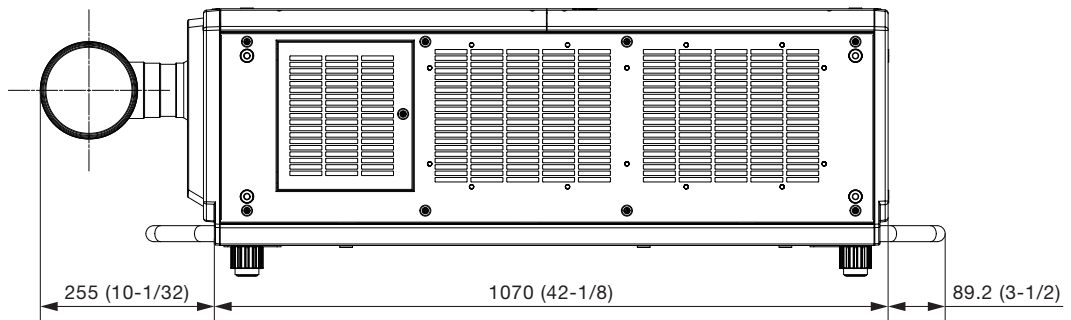
NOTE: This illustration is not drawn to scale.

NOTE: Weights and dimensions shown are approximate. Specifications subject to change without notice.

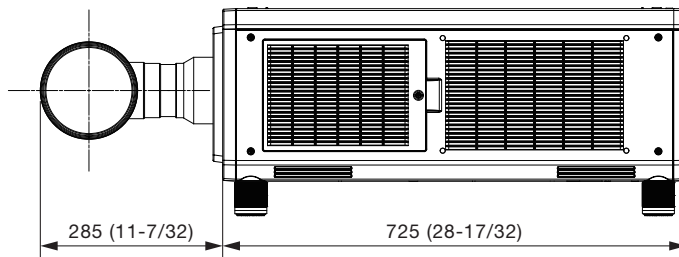
[Group A] PT-RQ22K/RZ21K/RS20K



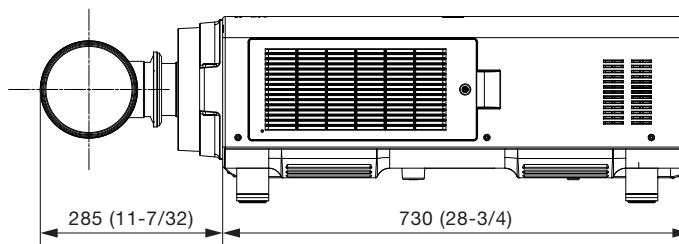
[Group B] PT-RQ32K/RZ31K/RS30K



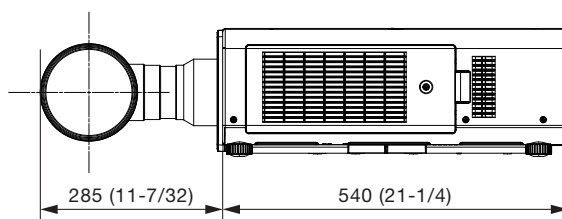
[Group C] PT-RQ13K/RZ12K/RS11K



[Group D] PT-DZ21K2/DS20K2/DW17K2/DZ16K2



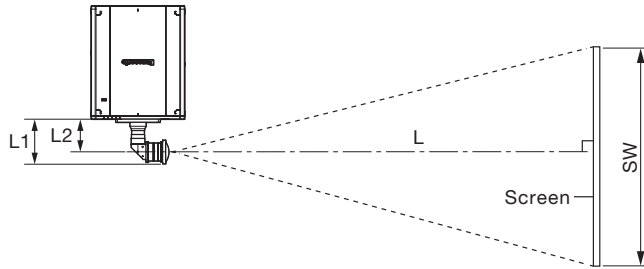
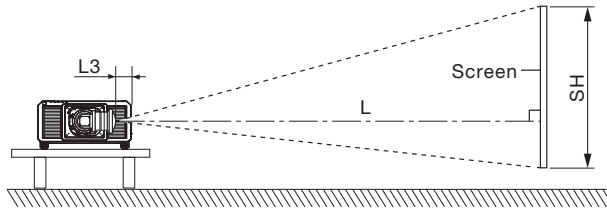
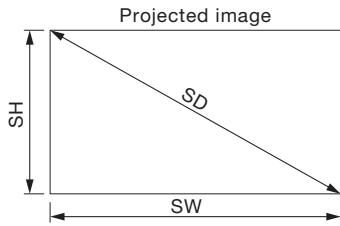
[Group E] PT-DZ13K/DS12K/DW11K/DZ10K



unit : mm (inch)
NOTE: This illustration is not drawn to scale.

NOTE: Weights and dimensions shown are approximate. Specifications subject to change without notice.

Projection relationships



NOTE

- This diagram assumes that the size and position of the projected image will be adjusted so that the image fills the entire screen.
- This illustration is not drawn to scale.
- The values are approximate.

(Unit: m)

L	Projection distance
L1	Distance from front of projector to edge of lens
L2	Distance from front of projector to center of lens
L3	Distance from side of projector to center of lens
SH	Projected image height
SW	Projected image width
SD	Projected image size

Projector model	L1	L2	L3
PT-RQ32K/RZ31K/RS30K	0.26	0.18	0.15
PT-RQ22K/RZ21K/RS20K	0.29	0.21	0.10
PT-RQ13K/RZ12K/RS11K			0.09
PT-DZ21K2/DS20K2/DW17K2/DZ16K2			0.11
PT-DZ13K/DS12K/DW11K/DZ10K			0.07

Projection distance

Aspect ratio 16:10

unit: meters (feet)

Projection size (Diagonal) [SD]	Projection size (Height) [SH]	Projection size (Width) [SW]	PT-RQ32K/RQ22K/RQ13K (2560×1600) Throw ratio[0.397:1] [L]	PT-RZ31K/RZ21K/RZ12K/DZ21K2/DZ13K/DZ10K (1920×1200) Throw ratio[0.370:1] [L]
5.080 m / 200"	2.692 (8.83)	4.308 (14.13)	1.71 (5.61)	1.59 (5.22)
6.350 m / 250"	3.365 (11.04)	5.385 (17.67)	2.12 (6.96)	2.01 (6.59)
7.620 m / 300"	4.039 (13.25)	6.462 (21.20)	2.56 (8.40)	2.42 (7.94)
8.890 m / 350"	4.712 (15.46)	7.539 (24.73)	3.11 (10.20)	2.84 (9.32)
10.160 m / 400"	5.385 (17.67)	8.616 (28.27)	3.55 (11.65)	3.25 (10.66)
12.700 m / 500"	6.731 (22.08)	10.770 (35.33)	4.44 (14.57)	4.08 (13.39)
15.240 m / 600"	8.077 (26.50)	12.923 (42.40)	5.33 (17.49)	4.91 (16.11)

Fixed Focus Lens

Aspect ratio 16:9

unit: meters (feet)

Projection size (Diagonal) [SD]	Projection size (Height) [SH]	Projection size (Width) [SW]	PT-RQ32K/RQ22K/RQ13K (2560×1440) Throw ratio [0.398:1]		PT-RZ31K/RZ21K/RZ12K/DZ21K2/DZ13K/DZ10K (1920×1080) Throw ratio[[0.370:1]			
			[L]		[L]			
5.080 m / 200"	2.491 (8.17)	4.428 (14.53)	1.76	(5.77)	1.64	(5.38)		
6.350 m / 250"	3.113 (10.21)	5.535 (18.16)	2.18	(7.15)	2.06	(6.76)		
7.620 m / 300"	3.736 (12.26)	6.641 (21.79)	2.63	(8.63)	2.49	(8.17)		
8.890 m / 350"	4.358 (14.30)	7.748 (25.42)	3.20	(10.50)	2.92	(9.58)		
10.160 m / 400"	4.981 (16.34)	8.855 (29.05)	3.65	(11.97)	3.34	(10.96)		
12.700 m / 500"	6.226 (20.43)	11.069 (36.32)	4.56	(14.96)	4.19	(13.75)		
15.240 m / 600"	7.472 (24.51)	13.283 (43.58)	5.48	(17.98)	5.05	(16.57)		
Projection size (Diagonal) [SD]	Projection size (Height) [SH]	Projection size (Width) [SW]	PT-RS30K/RS20K/RS11K/DS20K2/DS12K (1400×788) Throw ratio[0.402:1]		PT-DW17K2/DW11K (1366×768) Throw ratio[0.413:1]		PT-DZ16K2 (1920×1080) Throw ratio[0.370:1]	
			[L]		[L]		[L]	
5.080 m / 200"	2.491 (8.17)	4.428 (14.53)	1.78	(5.84)	1.82	(5.97)	1.64	(5.38)
6.350 m / 250"	3.113 (10.21)	5.535 (18.16)	2.24	(7.35)	2.30	(7.55)	2.06	(6.76)
7.620 m / 300"	3.736 (12.26)	6.641 (21.79)	2.70	(8.86)	2.77	(9.09)	2.49	(8.17)
8.890 m / 350"	4.358 (14.30)	7.748 (25.42)	3.16	(10.37)	3.24	(10.63)	2.92	(9.58)
10.160 m / 400"	4.981 (16.34)	8.855 (29.05)	3.62	(11.88)	3.72	(12.20)	3.34	(10.96)
12.700 m / 500"	6.226 (20.43)	11.069 (36.32)	4.55	(14.93)	4.66	(15.29)	4.19	(13.75)
15.240 m / 600"	7.472 (24.51)	13.283 (43.58)	5.47	(17.95)	5.61	(18.41)	5.05	(16.57)

Aspect ratio 4:3

unit: meters (feet)

Projection size (Diagonal) [SD]	Projection size (Height) [SH]	Projection size (Width) [SW]	PT-RQ32K/RQ22K/RQ13K (2133×1600) Throw ratio [0.479:1]		PT-RZ31K/RZ21K/RZ12K/DZ21K2/DZ13K/DZ10K (1600×1200) Throw ratio[0.446:1]			
			[L]		[L]			
5.080 m / 200"	3.048 (10.00)	4.064 (13.33)	1.94	(6.36)	1.81	(5.94)		
6.350 m / 250"	3.810 (12.50)	5.080 (16.67)	2.45	(8.04)	2.28	(7.48)		
7.620 m / 300"	4.572 (15.00)	6.096 (20.00)	2.95	(9.68)	2.75	(9.02)		
8.890 m / 350"	5.334 (17.50)	7.112 (23.33)	3.45	(11.32)	3.22	(10.56)		
10.160 m / 400"	6.096 (20.00)	8.128 (26.67)	3.96	(12.99)	3.69	(12.11)		
12.700 m / 500"	7.620 (25.00)	10.160 (33.33)	4.96	(16.27)	4.63	(15.19)		
15.240 m / 600"	9.144 (30.00)	12.192 (40.00)	5.97	(19.59)	5.56	(18.24)		
Projection size (Diagonal) [SD]	Projection size (Height) [SH]	Projection size (Width) [SW]	PT-RS30K/RS20K/RS11K/DS20K2/DS12K (1400×1050) Throw ratio[0.401:1]		PT-DW17K2/DW11K (1024×768) Throw ratio[0.554:1]		PT-DZ16K2 (1440×1080) Throw ratio[0.497:1]	
			[L]		[L]		[L]	
5.080 m / 200"	3.048 (10.00)	4.064 (13.33)	1.63	(5.35)	2.25	(7.38)	2.02	(6.63)
6.350 m / 250"	3.810 (12.50)	5.080 (16.67)	2.05	(6.73)	2.83	(9.28)	2.54	(8.33)
7.620 m / 300"	4.572 (15.00)	6.096 (20.00)	2.47	(8.10)	3.41	(11.19)	3.06	(10.04)
8.890 m / 350"	5.334 (17.50)	7.112 (23.33)	2.90	(9.51)	3.99	(13.09)	3.58	(11.75)
10.160 m / 400"	6.096 (20.00)	8.128 (26.67)	3.32	(10.89)	4.56	(14.96)	4.10	(13.45)
12.700 m / 500"	7.620 (25.00)	10.160 (33.33)	4.17	(13.68)	5.72	(18.77)	5.15	(16.90)
15.240 m / 600"	9.144 (30.00)	12.192 (40.00)	5.01	(16.44)	6.88	(22.57)	6.19	(20.31)

Fixed Focus Lens

Calculation of the projection distance

Aspect ratio 16:10

unit: meters

PT-RQ32K/RQ22K/RQ13K	$L (m) = (\text{diagonal screen size in inches}) \times 0.0089 - 0.0664$
PT-RZ21K/RZ31K/RZ12K/DZ21K2/DZ13K/DZ10K	$L (m) = (\text{diagonal screen size in inches}) \times 0.0083 - 0.0664$

Aspect ratio 16:9

unit: meters

PT-RQ32K/RQ22K/RQ13K	$L (m) = (\text{diagonal screen size in inches}) \times 0.0091 - 0.0664$
PT-RZ21K/RZ31K/RZ12K/DZ21K2/DZ13K/DZ10K	$L (m) = (\text{diagonal screen size in inches}) \times 0.0085 - 0.0664$
PT-RS20K/RS30K/RS11K/DS20K2/DS12K	$L (m) = (\text{diagonal screen size in inches}) \times 0.0092 - 0.0664$
PT-DW17K2/DW11K	$L (m) = (\text{diagonal screen size in inches}) \times 0.0095 - 0.0664$
PT-DZ16K2	$L (m) = (\text{diagonal screen size in inches}) \times 0.0085 - 0.0664$

Aspect ratio 4:3

unit: meters

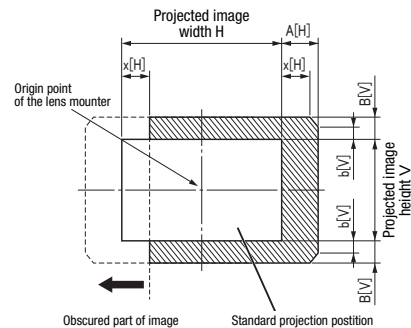
PT-RQ32K/RQ22K/RQ13K	$L (m) = (\text{diagonal screen size in inches}) \times 0.0101 - 0.0664$
PT-RZ21K/RZ31K/RZ12K/DZ21K2/DZ13K/DZ10K	$L (m) = (\text{diagonal screen size in inches}) \times 0.0094 - 0.0664$
PT-RS20K/RS30K/RS11K/DS20K2/DS12K	$L (m) = (\text{diagonal screen size in inches}) \times 0.0085 - 0.0664$
PT-DW17K2/DW11K	$L (m) = (\text{diagonal screen size in inches}) \times 0.0116 - 0.0664$
PT-DZ16K2	$L (m) = (\text{diagonal screen size in inches}) \times 0.0104 - 0.0664$

Shift range

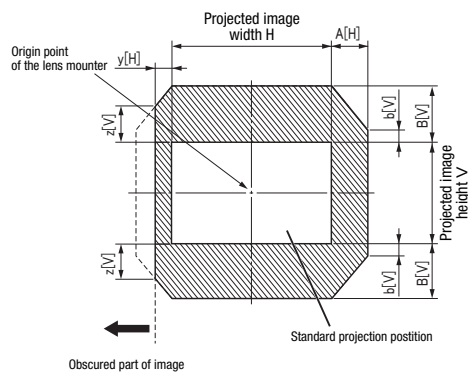
Optical axis shift function allows to shift the position of a projected image as shown below.

Projector model	A	B	b	x
PT-RZ31K	0.25	0.24	0.12	0.18
PT-DZ21K2		0.45		0.05
PT-RQ32K	0.29	0.35	0.15	0.15
PT-RS30K	0.3	0.3	0.1	0.15
PT-DZ16K2	0.2	0.48	0.15	0.05

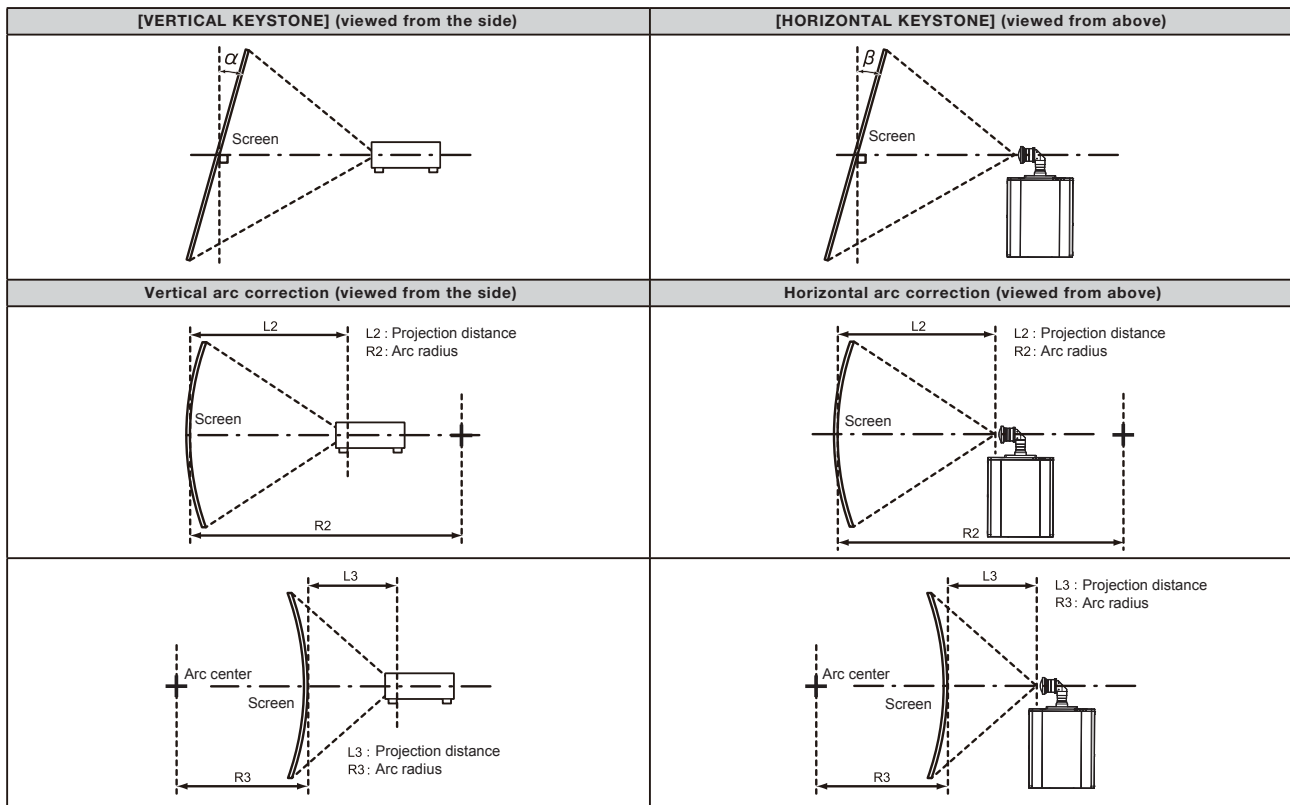
*Part of the image will be obscured when in the home position (standard projection position).



Projector model	A	B	b	y	z
PT-RZ21K	0.25	0.55	0.12	0	0.55
PT-RZ12K				0.05	0.45
PT-DZ13K				0.18	0.24
PT-DZ10K	0.29	0.59	0.15	0.18	0.24
PT-RQ22K				0.05	0.50
PT-RQ13K	0.3	0.5	0.1	0.09	0.45
PT-RS20K				0.05	0.43
PT-RS11K				0.05	0.43
PT-DS12K				0.25	0.15
PT-DS20K2	0.3	0.7	0.2	0	0.5
PT-DW17K2				0	0.7
PT-DW11K				0.27	0.25



Keystone correction range



Standard status

Projector Model No.	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 3/L3	Min. value of R2/L2	Min. value of R3/L3
PT-RQ32K/RQ22K/RQ13K	± 8	± 5	-	-	-	-	-	-
PT-RZ31K/RZ21K/RZ12K	± 8	± 5	-	-	-	-	-	-
PT-RS30K/RS20K/RS11K	± 8	± 5	-	-	-	-	-	-
PT-DZ21K2/DS20K2/DW17K2/DZ16K2	± 8	± 5	-	-	-	-	-	-
PT-DZ13K/DS12K/DZ10K	± 8	± 5	-	-	-	-	-	-
PT-DW11K	-	-	-	-	-	-	-	-

When using the optional upgrade kit (ET-UK20)

Projector Model No.	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 3/L3	Min. value of R2/L2	Min. value of R3/L3
PT-RQ32K/RQ22K/RQ13K	± 8	± 5	-	-	-	-	-	-
PT-RZ31K/RZ21K/RZ12K	± 8	± 5	-	-	-	-	-	-
PT-RS30K/RS20K/RS11K	± 8	± 5	-	-	-	-	-	-
PT-DZ21K2/DS20K2/DW17K2/DZ16K2	± 8	± 5	-	-	-	-	-	-
PT-DZ13K/DS12K/DZ10K	± 8	± 5	-	-	-	-	-	-
PT-DW11K	-	-	-	-	-	-	-	-