

Specifications

Range of adjustment	Horizontal swing angle	±5°
	Vertical tilt angle	±5°
	Horizontal tilt angle	±5°
	Vertical slide amount	Image size between 2.03 m [80 in] ¹ and 2.29 m [90 in]: -10 mm – +10 mm [-13/32 in – +13/32 in] Image size between 2.29 m [90 in](exclusive) and 3.05 m [120 in]: -10 mm – +40 mm [-13/32 in – +1 9/16 in]
	Forward/backward slide amount	0 mm – 270 mm [0 in – 10 5/8 in]
	Horizontal slide amount	-41 mm – 49 mm [-1 5/8 in – 1 15/16 in] ²
External dimensions	Width	491 mm – 519 mm [19-11/32 in – 20-7/16in]
	Height	210 mm – 245 mm [8-9/32 in – 9-21/32in]
	Depth	395 mm – 665 mm [15-9/16 in – 26-3/16in]
Weight	Approx. 8 kg (17.64 lbs)	
Weight Capacity	15 kg (33.1 lbs)	

1 For the aspect ratio of 4:3, it is 1.78 m [70 in].

2 The horizontal slide range includes a middle portion that cannot slide.

Applicable projectors

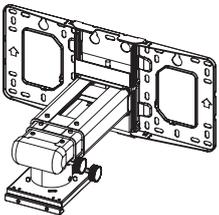
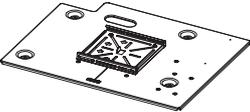
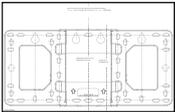
PT-CMZ50

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

Structural components (ET-WBC100)

This is a wall mount bracket (Model No.: ET-WBC100) for installing the projector to a wall.

Parts name	Form (number of parts)	Applications
Wall mount bracket	 x 1	This wall mount bracket is installed to the wall to support the entire product. In addition to forward/backward and vertical slide adjustment, it allows vertical and horizontal tilt adjustment and horizontal swing adjustment of the projector.
Mount cover	 Mount cover (L) x 1 Mount cover (R) x 1	These are attached to the wall mount bracket.
Projector mount bracket kit	 x 1	This is used to install the projector to the wall mount bracket. It consists of a projector mount bracket and a connecting plate. It allows horizontal slide adjustment of the projector.
Screws	 x 4 Screw with captive washer (M6x16)	Used to secure the projector mount bracket kit to the projector.
	 x 4 Flanged screw (M4x10)	Used to secure the projector mount bracket kit to the wall mount bracket.
Projector dropprevention kit	 x 1 Screw with captive washer (M6x16)	Prevents the projector from falling. Use one of the two wire ropes.
	 x 1 Wire rope (3.0 mm [1/8 in] wire diameter, 750 mm [29 17/32 in] length)	
	 x 1 Wire rope (3.0 mm [1/8 in] wire diameter, 660 mm [25 31/32 in] length)	
	 x 1 Flat washer (M6)	
Template sheet	 x 1	Used to determine positions of the screw holes for securing the wall mount bracket to the wall.

- Store small parts in an appropriate manner, and keep them away from children.
- Tightening torque for the screw is M4: 1.25 ± 0.2 N·m (excluding the flanged screws), M6: 4 ± 0.5 N·m.
- When tightening up the screws, use a tool such as a torque screwdriver. Do not use electric screwdrivers or impact screwdrivers.

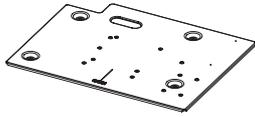
Attention

- Installation work should only be carried out by the certified personnel.
- Do not install in a location that is not strong enough.
- Read the "Installation Instructions" thoroughly and then perform the operation correctly and safely.
- If products are no longer being used, they should be dismantled and removed by the certified personnel as soon as possible.
- Dispose of the packaging materials properly after taking the product out of it.

Structural components (ET-PKC300B)

This projector mount bracket (Model No.: ET-PKC300B) is included in wall mount bracket (Model No.: ET-WBC100.)

This is a projector mount bracket (Model No.: ET-PKC300B) used to replace the projector mount bracket of an existing wall mount bracket.

Parts name	Form (number of parts)	Applications
Projector mount bracket	 x 1	This is used to install the projector to the wall mount bracket.
Screws	 x 4 Screw with captive washer (M6x16)	These are used to secure the projector mount bracket to the projector.
	 x 5 Screw with captive washer (M4x14)	These are used to secure the connecting plate, which is removed from the existing wall mount bracket, to the projector mount bracket.
Projector dropprevention kit	 x 1 Screw with captive washer (M6x16)	Prevents the projector from falling. Use one of the two wire ropes.
	 x 1 Wire rope (3.0 mm [1/8 in] wire diameter, 750 mm [29 17/32 in] length)	
	 x 1 Wire rope (3.0 mm [1/8 in] wire diameter, 660 mm [25 31/32 in] length)	
	 x 1 Flat washer (M6)	

- Store small parts in an appropriate manner, and keep them away from children.
- Tightening torque for the screw is M4: 1.25 ± 0.2 N·m (excluding the flanged screws), M6: 4 ± 0.5 N·m.
- When tightening up the screws, use a tool such as a torque screwdriver. Do not use electric screwdrivers or impact screwdrivers.

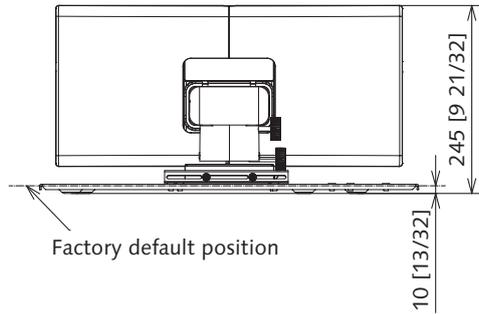
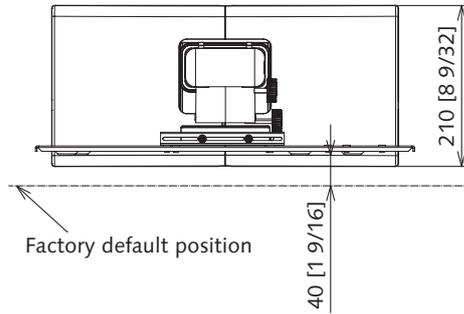
Attention

- Dispose of the packaging materials properly after taking the product out of it.

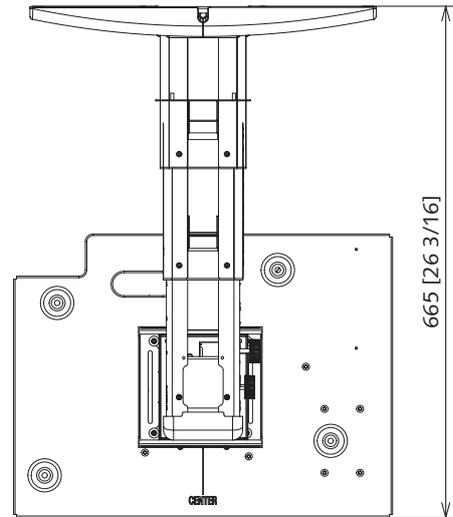
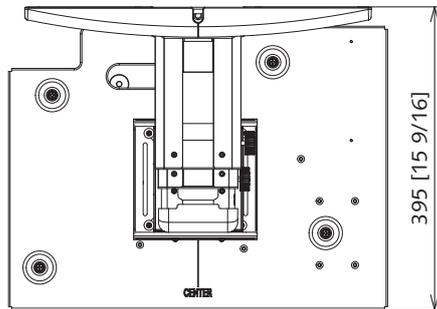
Dimensions

(Unit : mm [inch])

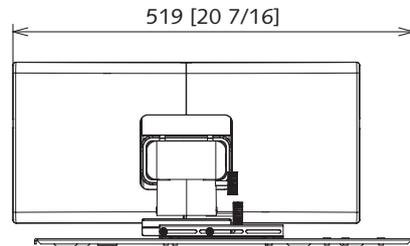
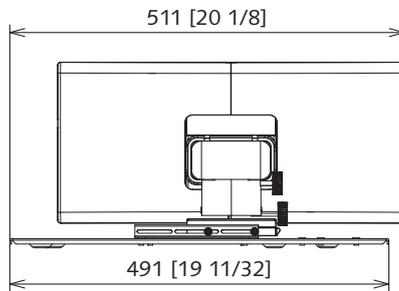
Vertical slide



Forward/backward slide



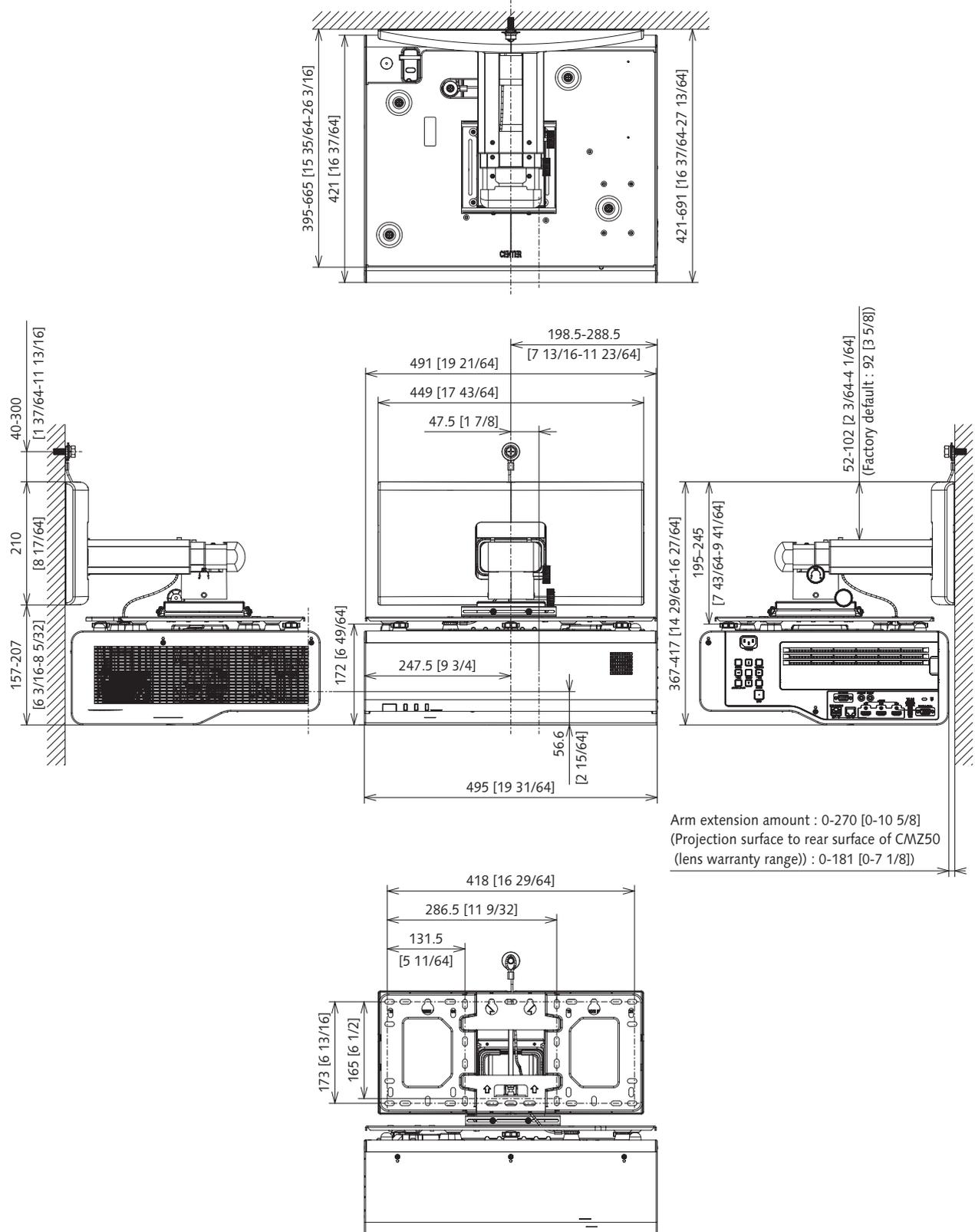
Horizontal slide



ET-WBC100/ET-PKC300B

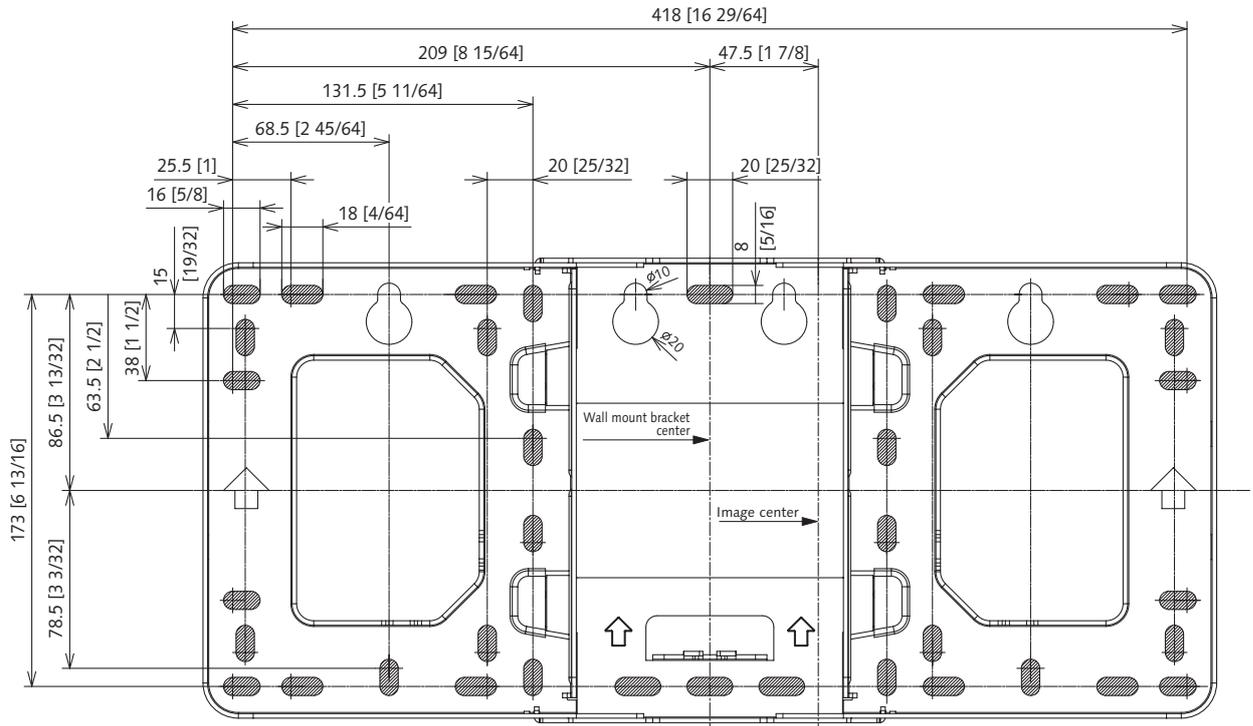
The illustration shows the ET-WBC100 mounted on PT-CMZ50.

(Unit : mm [inch])



Dimension of screw holes used for securing the wall mount bracket.

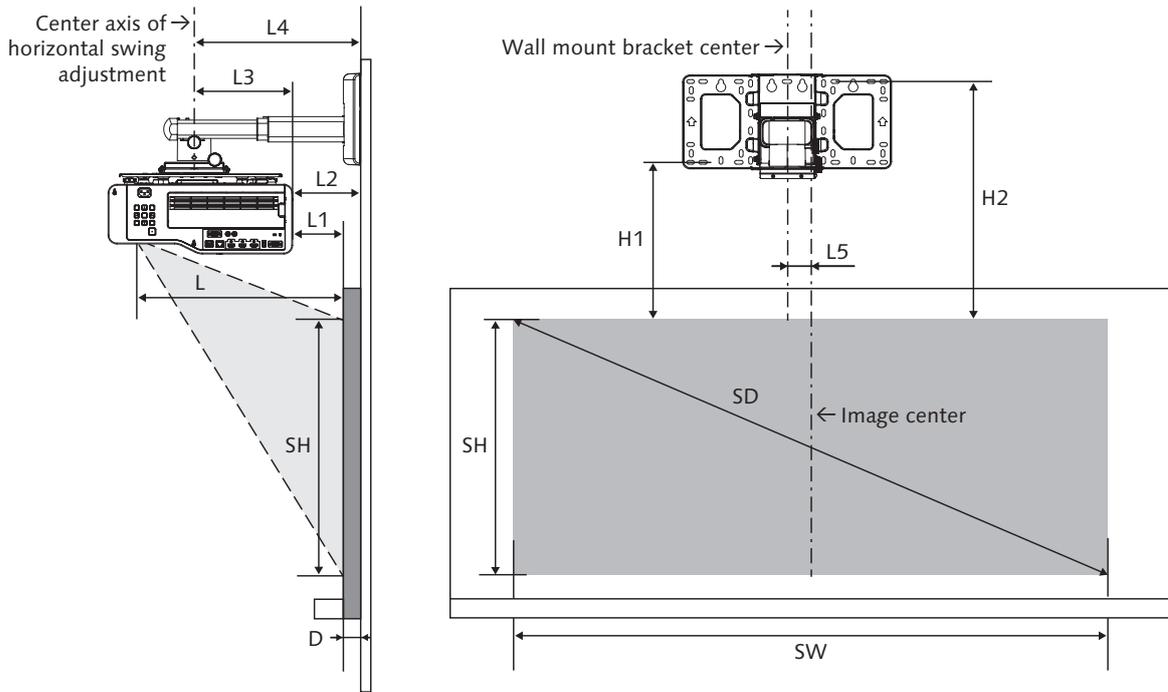
(Unit : mm [inch])



The dimensional relationship between the screen and projector is shown below. Determine the installation position on the wall based on the "Dimensional relationship diagram" and the "Dimensional relationship". The projected image size can be adjusted by changing the distance between the screen and the projector.

Dimensional relationship diagram

<For PT-CMZ50>



Note

- The illustrations of projectors in this manual are for informational purposes only. The appearance may differ from the actual product.
- This drawing is not in exact scale.

SH	Projected image height
SW	Projected image width
SD	Projected image size
L	Projection distance (distance from the screen surface to the mirror reflection surface ¹)
D	Distance from the wall surface to the screen surface
L1	Distance from the screen surface to the back surface of the projector
L2	Distance from the back surface of the projector to the wall surface
L3	Distance (225 mm [8-27/32 in]) from the center axis of horizontal swing adjustment to the back surface of the projector
L4	Distance from the wall surface to the center axis of horizontal swing adjustment
L5	Distance (47.5 mm [1-7/8 in]) from the image center to the wall mount bracket center
H1	Distance from the top edge of the projected image to the center of screw holes (on the lower side) used for securing the wall mount bracket
H2	Distance from the top edge of the projected image to the center of screw holes (on the upper side) used for securing the wall mount bracket

¹ The mirror reflection surface cannot be seen from the outside because it is located inside the projector.

Attention

- To prevent obstruction of the intake and exhaust vents, install the projector with a clearance from walls and objects. For details about the required distance from surrounding walls and objects, refer to the operating instructions for your projector. If you are installing the projector in a sealed space, be sure to provide additional air conditioning equipment and ventilation equipment. Insufficient ventilation will result in an accumulation of heat and may activate the projector's protection circuit.
- Avoid setting up in places which are subject to sudden temperature changes, such as near an air conditioner or lighting equipment (studio lamps, etc.).

Dimensional relationship

To use a projected image size not listed in the tables, check the projected image size SD (m) and calculate the value using the formulas provided in "Formulas for calculating dimensions".

<For PT-CMZ50>

Dimensions in the tables are values when Digital Zoom Extender function is disabled by setting the [POSITION] menu → [SCREEN ADJUSTMENT] → [DIGITAL ZOOM EXTENDER] to [OFF] on the projector.

Unit: m

Projected image size [Aspect ratio 16:10]				L	L1	H1 ¹	H2 ¹
SD		SH	SW				
2.03	[80 in]	1.077	1.723	0.41	0.010	0.346	0.519
2.16	[85 in]	1.144	1.831	0.43	0.033	0.358	0.531
2.29	[90 in]	1.212	1.939	0.46	0.055	0.370	0.543
2.41	[95 in]	1.279	2.046	0.48	0.078	0.381	0.554
2.54	[100 in]	1.346	2.154	0.50	0.10	0.393	0.566
2.79	[110 in]	1.481	2.369	0.55	0.15	0.417	0.590
3.05	[120 in]	1.615	2.585	0.59	0.19	0.441	0.614

Projected image size (Aspect ratio 16:9)				L	L1	H1 ¹	H2 ¹
SD		SH	SW				
2.03	[80 in]	0.996	1.771	0.42	0.020	0.407	0.580
2.16	[85 in]	1.058	1.882	0.44	0.043	0.422	0.595
2.29	[90 in]	1.121	1.992	0.47	0.067	0.438	0.611
2.41	[95 in]	1.183	2.103	0.49	0.090	0.453	0.626
2.54	[100 in]	1.245	2.214	0.51	0.11	0.469	0.642
2.79	[110 in]	1.370	2.435	0.56	0.16	0.500	0.673
3.05	[120 in]	1.494	2.657	0.61	0.21	0.532	0.705

Projected image size (Aspect ratio 4:3)				L	L1	H1 ¹	H2 ¹
SD		SH	SW				
1.78	[70 in]	1.067	1.422	0.41	0.007	0.344	0.517
1.91	[75 in]	1.143	1.524	0.43	0.032	0.358	0.531
2.03	[80 in]	1.219	1.626	0.46	0.058	0.371	0.544
2.16	[85 in]	1.295	1.727	0.48	0.083	0.384	0.557
2.29	[90 in]	1.372	1.829	0.51	0.11	0.398	0.571
2.41	[95 in]	1.448	1.930	0.54	0.13	0.411	0.584
2.54	[100 in]	1.524	2.032	0.56	0.16	0.425	0.598
2.79	[110 in]	1.676	2.235	0.61	0.21	0.451	0.624

1 Values in the tables are based on the factory default height position of the arm.

Formulas for calculating dimensions

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

Values obtained with the following formulas 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.

<For PT-CMZ50>

Aspect ratio	16:10	16:9	4:3
Screen height (SH)	$=0.530 \times SD$	$=0.490 \times SD$	$=0.6 \times SD$
Screen width (SW)	$=0.848 \times SD$	$=0.872 \times SD$	$=0.8 \times SD$
Projection distance (L)	$=0.1782 \times SD + 0.0485$	$=0.1831 \times SD + 0.0485$	$=0.2017 \times SD + 0.0485$
Distance from screen surface to back surface of the projector (L1)	$=0.0100 + (L-0.4105)$		
Distance from back surface of the projector to wall surface (L2)	$=L1 + D$		
Distance from wall surface to center axis of horizontal swing adjustment (L4)	$= L1 + L3 + D \text{ or } = 0.0100 + (L-0.4105) + L3 + D$		
Distance from top edge of projected image to center of screw holes (on lower side) used for securing the wall mount bracket (H1)	$=0.0933 \times SD + 0.1564$	$=0.1231 \times SD + 0.1564$	$=0.1056 \times SD + 0.1564$
Distance from top edge of projected image to center of screw holes (on the upper side) used for securing the wall mount bracket (H2)	$=0.0933 \times SD + 0.3294$	$=0.1231 \times SD + 0.3294$	$=0.1056 \times SD + 0.3294$