

Product Discontinuation

Smart Camera

FHV7H Series



Recommended Replacement

Smart Camera

FHV7X Series



[Final order entry date]

The end of September, 2024

[Date of The Last Shipping]

The end of July, 2025

[Scheduled date of maintenance close]

The end of March, 2030

[Caution on recommended replacement]

Processing performances such as processing time of processing item and communication response time will change because of replacement with the recommended replacement.

The operation of the equipment may be affected by it.

When replacing, please check the operation of the equipment.

About available application software versions

Only Ver.6.51 or later application software can be used with the recommended replacement.

Do not downgrade it to Ver.6.40 or earlier version.

If you are using customization software

Customized software designed for the product discontinuation cannot be operated with the recommended replacement. Please contact our sales department.

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
FHV7X Series	**	**	**	**	*	*	**

** : Compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
FHV7H-C004-C	FHV7X-C004-C
FHV7H-C004-H06	FHV7X-C004-H06
FHV7H-C004-H06-MC	FHV7X-C004-H06-MC
FHV7H-C004-H06-W	FHV7X-C004-H06-W
FHV7H-C004-H19	FHV7X-C004-H19
FHV7H-C004-H19-MC	FHV7X-C004-H19-MC
FHV7H-C004-H19-W	FHV7X-C004-H19-W
FHV7H-C004-S06	FHV7X-C004-S06
FHV7H-C004-S06-MC	FHV7X-C004-S06-MC
FHV7H-C004-S06-W	FHV7X-C004-S06-W
FHV7H-C004-S09	FHV7X-C004-S09
FHV7H-C004-S09-MC	FHV7X-C004-S09-MC
FHV7H-C004-S09-W	FHV7X-C004-S09-W
FHV7H-C004-S12	FHV7X-C004-S12
FHV7H-C004-S12-MC	FHV7X-C004-S12-MC
FHV7H-C004-S12-W	FHV7X-C004-S12-W
FHV7H-C004-S16	FHV7X-C004-S16
FHV7H-C004-S16-MC	FHV7X-C004-S16-MC
FHV7H-C004-S16-W	FHV7X-C004-S16-W
FHV7H-C004-S25	FHV7X-C004-S25
FHV7H-C004-S25-MC	FHV7X-C004-S25-MC
FHV7H-C004-S25-W	FHV7X-C004-S25-W
FHV7H-C016-C	FHV7X-C016-C
FHV7H-C016-H06	FHV7X-C016-H06
FHV7H-C016-H06-MC	FHV7X-C016-H06-MC
FHV7H-C016-H06-W	FHV7X-C016-H06-W
FHV7H-C016-H19	FHV7X-C016-H19
FHV7H-C016-H19-MC	FHV7X-C016-H19-MC
FHV7H-C016-H19-W	FHV7X-C016-H19-W
FHV7H-C016-S06	FHV7X-C016-S06
FHV7H-C016-S06-MC	FHV7X-C016-S06-MC
FHV7H-C016-S06-W	FHV7X-C016-S06-W
FHV7H-C016-S09	FHV7X-C016-S09
FHV7H-C016-S09-MC	FHV7X-C016-S09-MC
FHV7H-C016-S09-W	FHV7X-C016-S09-W
FHV7H-C016-S12	FHV7X-C016-S12
FHV7H-C016-S12-MC	FHV7X-C016-S12-MC
FHV7H-C016-S12-W	FHV7X-C016-S12-W
FHV7H-C016-S16	FHV7X-C016-S16
FHV7H-C016-S16-MC	FHV7X-C016-S16-MC
FHV7H-C016-S16-W	FHV7X-C016-S16-W
FHV7H-C016-S25	FHV7X-C016-S25
FHV7H-C016-S25-MC	FHV7X-C016-S25-MC
FHV7H-C016-S25-W	FHV7X-C016-S25-W
FHV7H-C032-C	FHV7X-C032-C
FHV7H-C032-H06	FHV7X-C032-H06
FHV7H-C032-H06-MC	FHV7X-C032-H06-MC

Product discontinuation	Recommended replacement
FHV7H-C032-H06-W	FHV7X-C032-H06-W
FHV7H-C032-H19	FHV7X-C032-H19
FHV7H-C032-H19-MC	FHV7X-C032-H19-MC
FHV7H-C032-H19-W	FHV7X-C032-H19-W
FHV7H-C032-S06	FHV7X-C032-S06
FHV7H-C032-S06-MC	FHV7X-C032-S06-MC
FHV7H-C032-S06-W	FHV7X-C032-S06-W
FHV7H-C032-S09	FHV7X-C032-S09
FHV7H-C032-S09-MC	FHV7X-C032-S09-MC
FHV7H-C032-S09-W	FHV7X-C032-S09-W
FHV7H-C032-S12	FHV7X-C032-S12
FHV7H-C032-S12-MC	FHV7X-C032-S12-MC
FHV7H-C032-S12-W	FHV7X-C032-S12-W
FHV7H-C032-S16	FHV7X-C032-S16
FHV7H-C032-S16-MC	FHV7X-C032-S16-MC
FHV7H-C032-S16-W	FHV7X-C032-S16-W
FHV7H-C032-S25	FHV7X-C032-S25
FHV7H-C032-S25-MC	FHV7X-C032-S25-MC
FHV7H-C032-S25-W	FHV7X-C032-S25-W
FHV7H-C050-C	FHV7X-C050-C
FHV7H-C063R-C	FHV7X-C063R-C
FHV7H-C063R-H06	FHV7X-C063R-H06
FHV7H-C063R-H06-MC	FHV7X-C063R-H06-MC
FHV7H-C063R-H06-W	FHV7X-C063R-H06-W
FHV7H-C063R-H19	FHV7X-C063R-H19
FHV7H-C063R-H19-MC	FHV7X-C063R-H19-MC
FHV7H-C063R-H19-W	FHV7X-C063R-H19-W
FHV7H-C063R-S06	FHV7X-C063R-S06
FHV7H-C063R-S06-MC	FHV7X-C063R-S06-MC
FHV7H-C063R-S06-W	FHV7X-C063R-S06-W
FHV7H-C063R-S09	FHV7X-C063R-S09
FHV7H-C063R-S09-MC	FHV7X-C063R-S09-MC
FHV7H-C063R-S09-W	FHV7X-C063R-S09-W
FHV7H-C063R-S12	FHV7X-C063R-S12
FHV7H-C063R-S12-MC	FHV7X-C063R-S12-MC
FHV7H-C063R-S12-W	FHV7X-C063R-S12-W
FHV7H-C063R-S16	FHV7X-C063R-S16
FHV7H-C063R-S16-MC	FHV7X-C063R-S16-MC
FHV7H-C063R-S16-W	FHV7X-C063R-S16-W
FHV7H-C063R-S25	FHV7X-C063R-S25
FHV7H-C063R-S25-MC	FHV7X-C063R-S25-MC
FHV7H-C063R-S25-W	FHV7X-C063R-S25-W
FHV7H-C120R-C	FHV7X-C120R-C
FHV7H-M004-C	FHV7X-M004-C
FHV7H-M004-H06	FHV7X-M004-H06
FHV7H-M004-H06-IR	FHV7X-M004-H06-IR
FHV7H-M004-H06-MC	FHV7X-M004-H06-MC
FHV7H-M004-H06-R	FHV7X-M004-H06-R
FHV7H-M004-H06-W	FHV7X-M004-H06-W

Product discontinuation	Recommended replacement
FHV7H-M004-H19	FHV7X-M004-H19
FHV7H-M004-H19-IR	FHV7X-M004-H19-IR
FHV7H-M004-H19-MC	FHV7X-M004-H19-MC
FHV7H-M004-H19-R	FHV7X-M004-H19-R
FHV7H-M004-H19-W	FHV7X-M004-H19-W
FHV7H-M004-S06	FHV7X-M004-S06
FHV7H-M004-S06-IR	FHV7X-M004-S06-IR
FHV7H-M004-S06-MC	FHV7X-M004-S06-MC
FHV7H-M004-S06-R	FHV7X-M004-S06-R
FHV7H-M004-S06-W	FHV7X-M004-S06-W
FHV7H-M004-S09	FHV7X-M004-S09
FHV7H-M004-S09-IR	FHV7X-M004-S09-IR
FHV7H-M004-S09-MC	FHV7X-M004-S09-MC
FHV7H-M004-S09-R	FHV7X-M004-S09-R
FHV7H-M004-S09-W	FHV7X-M004-S09-W
FHV7H-M004-S12	FHV7X-M004-S12
FHV7H-M004-S12-IR	FHV7X-M004-S12-IR
FHV7H-M004-S12-MC	FHV7X-M004-S12-MC
FHV7H-M004-S12-R	FHV7X-M004-S12-R
FHV7H-M004-S12-W	FHV7X-M004-S12-W
FHV7H-M004-S16	FHV7X-M004-S16
FHV7H-M004-S16-IR	FHV7X-M004-S16-IR
FHV7H-M004-S16-MC	FHV7X-M004-S16-MC
FHV7H-M004-S16-R	FHV7X-M004-S16-R
FHV7H-M004-S16-W	FHV7X-M004-S16-W
FHV7H-M004-S25	FHV7X-M004-S25
FHV7H-M004-S25-IR	FHV7X-M004-S25-IR
FHV7H-M004-S25-MC	FHV7X-M004-S25-MC
FHV7H-M004-S25-R	FHV7X-M004-S25-R
FHV7H-M004-S25-W	FHV7X-M004-S25-W
FHV7H-M016-C	FHV7X-M016-C
FHV7H-M016-H06	FHV7X-M016-H06
FHV7H-M016-H06-IR	FHV7X-M016-H06-IR
FHV7H-M016-H06-MC	FHV7X-M016-H06-MC
FHV7H-M016-H06-R	FHV7X-M016-H06-R
FHV7H-M016-H06-W	FHV7X-M016-H06-W
FHV7H-M016-H19	FHV7X-M016-H19
FHV7H-M016-H19-IR	FHV7X-M016-H19-IR
FHV7H-M016-H19-MC	FHV7X-M016-H19-MC
FHV7H-M016-H19-R	FHV7X-M016-H19-R
FHV7H-M016-H19-W	FHV7X-M016-H19-W
FHV7H-M016-S06	FHV7X-M016-S06
FHV7H-M016-S06-IR	FHV7X-M016-S06-IR
FHV7H-M016-S06-MC	FHV7X-M016-S06-MC
FHV7H-M016-S06-R	FHV7X-M016-S06-R
FHV7H-M016-S06-W	FHV7X-M016-S06-W
FHV7H-M016-S09	FHV7X-M016-S09
FHV7H-M016-S09-IR	FHV7X-M016-S09-IR
FHV7H-M016-S09-MC	FHV7X-M016-S09-MC

Product discontinuation	Recommended replacement
FHV7H-M016-S09-R	FHV7X-M016-S09-R
FHV7H-M016-S09-W	FHV7X-M016-S09-W
FHV7H-M016-S12	FHV7X-M016-S12
FHV7H-M016-S12-IR	FHV7X-M016-S12-IR
FHV7H-M016-S12-MC	FHV7X-M016-S12-MC
FHV7H-M016-S12-R	FHV7X-M016-S12-R
FHV7H-M016-S12-W	FHV7X-M016-S12-W
FHV7H-M016-S16	FHV7X-M016-S16
FHV7H-M016-S16-IR	FHV7X-M016-S16-IR
FHV7H-M016-S16-MC	FHV7X-M016-S16-MC
FHV7H-M016-S16-R	FHV7X-M016-S16-R
FHV7H-M016-S16-W	FHV7X-M016-S16-W
FHV7H-M016-S25	FHV7X-M016-S25
FHV7H-M016-S25-IR	FHV7X-M016-S25-IR
FHV7H-M016-S25-MC	FHV7X-M016-S25-MC
FHV7H-M016-S25-R	FHV7X-M016-S25-R
FHV7H-M016-S25-W	FHV7X-M016-S25-W
FHV7H-M032-C	FHV7X-M032-C
FHV7H-M032-H06	FHV7X-M032-H06
FHV7H-M032-H06-IR	FHV7X-M032-H06-IR
FHV7H-M032-H06-MC	FHV7X-M032-H06-MC
FHV7H-M032-H06-R	FHV7X-M032-H06-R
FHV7H-M032-H06-W	FHV7X-M032-H06-W
FHV7H-M032-H19	FHV7X-M032-H19
FHV7H-M032-H19-IR	FHV7X-M032-H19-IR
FHV7H-M032-H19-MC	FHV7X-M032-H19-MC
FHV7H-M032-H19-R	FHV7X-M032-H19-R
FHV7H-M032-H19-W	FHV7X-M032-H19-W
FHV7H-M032-S06	FHV7X-M032-S06
FHV7H-M032-S06-IR	FHV7X-M032-S06-IR
FHV7H-M032-S06-MC	FHV7X-M032-S06-MC
FHV7H-M032-S06-R	FHV7X-M032-S06-R
FHV7H-M032-S06-W	FHV7X-M032-S06-W
FHV7H-M032-S09	FHV7X-M032-S09
FHV7H-M032-S09-IR	FHV7X-M032-S09-IR
FHV7H-M032-S09-MC	FHV7X-M032-S09-MC
FHV7H-M032-S09-R	FHV7X-M032-S09-R
FHV7H-M032-S09-W	FHV7X-M032-S09-W
FHV7H-M032-S12	FHV7X-M032-S12
FHV7H-M032-S12-IR	FHV7X-M032-S12-IR
FHV7H-M032-S12-MC	FHV7X-M032-S12-MC
FHV7H-M032-S12-R	FHV7X-M032-S12-R
FHV7H-M032-S12-W	FHV7X-M032-S12-W
FHV7H-M032-S16	FHV7X-M032-S16
FHV7H-M032-S16-IR	FHV7X-M032-S16-IR
FHV7H-M032-S16-MC	FHV7X-M032-S16-MC
FHV7H-M032-S16-R	FHV7X-M032-S16-R
FHV7H-M032-S16-W	FHV7X-M032-S16-W
FHV7H-M032-S25	FHV7X-M032-S25

Product discontinuation	Recommended replacement
FHV7H-M032-S25-IR	FHV7X-M032-S25-IR
FHV7H-M032-S25-MC	FHV7X-M032-S25-MC
FHV7H-M032-S25-R	FHV7X-M032-S25-R
FHV7H-M032-S25-W	FHV7X-M032-S25-W
FHV7H-M050-C	FHV7X-M050-C
FHV7H-M063R-C	FHV7X-M063R-C
FHV7H-M063R-H06	FHV7X-M063R-H06
FHV7H-M063R-H06-IR	FHV7X-M063R-H06-IR
FHV7H-M063R-H06-MC	FHV7X-M063R-H06-MC
FHV7H-M063R-H06-R	FHV7X-M063R-H06-R
FHV7H-M063R-H06-W	FHV7X-M063R-H06-W
FHV7H-M063R-H19	FHV7X-M063R-H19
FHV7H-M063R-H19-IR	FHV7X-M063R-H19-IR
FHV7H-M063R-H19-MC	FHV7X-M063R-H19-MC
FHV7H-M063R-H19-R	FHV7X-M063R-H19-R
FHV7H-M063R-H19-W	FHV7X-M063R-H19-W
FHV7H-M063R-S06	FHV7X-M063R-S06
FHV7H-M063R-S06-IR	FHV7X-M063R-S06-IR
FHV7H-M063R-S06-MC	FHV7X-M063R-S06-MC
FHV7H-M063R-S06-R	FHV7X-M063R-S06-R
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FHV7H-M063R-S09	FHV7X-M063R-S09
FHV7H-M063R-S09-IR	FHV7X-M063R-S09-IR
FHV7H-M063R-S09-MC	FHV7X-M063R-S09-MC
FHV7H-M063R-S09-R	FHV7X-M063R-S09-R
FHV7H-M063R-S09-W	FHV7X-M063R-S09-W
FHV7H-M063R-S12	FHV7X-M063R-S12
FHV7H-M063R-S12-IR	FHV7X-M063R-S12-IR
FHV7H-M063R-S12-MC	FHV7X-M063R-S12-MC
FHV7H-M063R-S12-R	FHV7X-M063R-S12-R
FHV7H-M063R-S12-W	FHV7X-M063R-S12-W
FHV7H-M063R-S16	FHV7X-M063R-S16
FHV7H-M063R-S16-IR	FHV7X-M063R-S16-IR
FHV7H-M063R-S16-MC	FHV7X-M063R-S16-MC
FHV7H-M063R-S16-R	FHV7X-M063R-S16-R
FHV7H-M063R-S16-W	FHV7X-M063R-S16-W
FHV7H-M063R-S25	FHV7X-M063R-S25
FHV7H-M063R-S25-IR	FHV7X-M063R-S25-IR
FHV7H-M063R-S25-MC	FHV7X-M063R-S25-MC
FHV7H-M063R-S25-R	FHV7X-M063R-S25-R
FHV7H-M063R-S25-W	FHV7X-M063R-S25-W
FHV7H-M120R-C	FHV7X-M120R-C

[Body color]

<p>Product discontinuation Model FHV7H Series</p>	<p>Recommendable replacement Model FHV7X Series</p>
<p>Model FHV7H Series / Model FHV7X Series Black</p> <div data-bbox="683 331 986 712" data-label="Image"> </div>	

[Dimensions]

Product discontinuation Model FHV7H Series	Recommendable replacement Model FHV7X Series
<p>Model FHV7H Series / Model FHV7X Series 110 mm x 68.5 mm x 55.5 mm</p>	
<p>• FHV7□-□□□□-C</p> <p>OPTICAL AXIS</p> <p>Mounting screw holes (The tolerance: ± 0.1 mm) Recommend tightening torque: 2.3N·m</p> <p>(Unit: mm)</p>	<p>• FHV7□-□□□□-S□□</p> <p>OPTICAL AXIS</p> <p>Mounting screw holes (The tolerance: ± 0.1 mm) Recommend tightening torque: 2.3N·m</p> <p>(Unit: mm)</p>
<p>• FHV7□-□□□□-H06</p> <p>OPTICAL AXIS</p> <p>Mounting screw holes (The tolerance: ± 0.1 mm) Recommend tightening torque: 2.3N·m</p> <p>(Unit: mm)</p>	<p>• FHV7□-□□□□-H19</p> <p>OPTICAL AXIS</p> <p>Mounting screw holes (The tolerance: ± 0.1 mm) Recommend tightening torque: 2.3N·m</p> <p>(Unit: mm)</p>
<p>• FHV7□-□□□□-S□□-□□, FHV7□-□□□□-H□□-□□</p> <p>OPTICAL AXIS</p> <p>Mounting screw holes (The tolerance: ± 0.1 mm) Recommend tightening torque: 2.3N·m</p> <p>(Unit: mm)</p>	

[Wire connection]

Product discontinuation Model FHV7H Series	Recommendable replacement Model FHV7X Series	
Model FHV7H Series / Model FHV7X Series		
No.	Name	Description
1	Imaging unit	Captures images.
2	Connector for I/O cable or smart camera data unit cable	Use this connector when connecting the smart camera with a power supply or an external device using an I/O cable. Moreover, use this when connecting the smart camera with its data unit using its data unit cable. Dedicated I/O cable: FHV-VD□ Dedicated smart camera data unit cable: FHV-VU□
3	Connector for Ethernet cable	Use this connector when connecting the smart camera with a personal computer and so on using an Ethernet cable. Dedicated Ethernet cable: FHV-VN□
4	Connector for external lighting	Use this connector when connecting an external lighting and the external lighting controller. Connectable external lighting controller: FL-TCC□ and FLV-TCC□ Connectable external lighting: FL-MD□MC
5	Connector to attach microSD card	Use this connector to attach a microSD card. Do not extract/insert the microSD card during processing. Otherwise, measurement time may be influenced or data may be broken.
6	Operation indicator	PWR (Green) Lights while power is supplied.
		RUN (Green) Lights when switching to the layout in which the RUN signal output is set ON.
		LINK (Yellow) Lights when connected with Ethernet equipment and blinks during communication.
		BUSY (Green) Lights while processing is in progress.
		OR (Yellow) Lights when the overall judgment output signal is ON.
		ERR (Red) Lights when an error occurs.
7	SD ACCESS (Yellow)	Lights when accessing to the microSD card.
8	Connector for lighting module (white)	Use this connector when mounting the lighting module.
9	Connector for lens module (Black)	Use this connector when mounting the lens module.
10	Mounting screw holes	Use them to screw up the smart camera. Recommended tightening torque : 2.3N·m

[Mounting dimensions]

Product discontinuation Model FHV7H Series	Recommendable replacement Model FHV7X Series
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Model FHV7H Series / Model FHV7X Series

Precautions for Correct Use

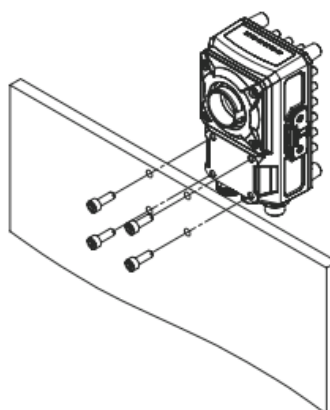
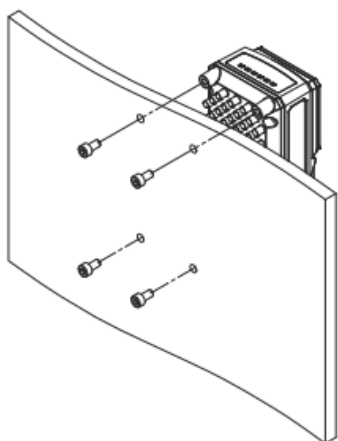
Tightening torque: 2.3 N·m

- When mounting from the back side:

Mounting screw hole depth: Effective depth 6 mm

- When mounting from the front side:

Mounting screw hole depth: Effective depth 4 mm



When Installing Using the Mounting Fixture

1 Attach the mounting fixture (FHV-XMT-7) to the back of the camera.

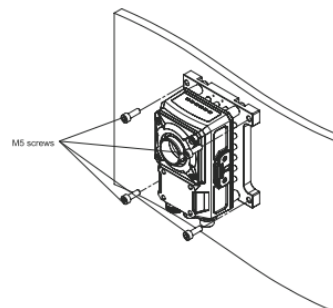
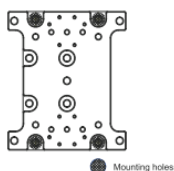
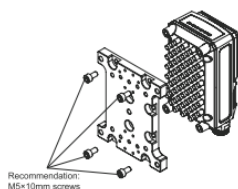
Recommended mounting screw size: M5 x 10 mm

Tightening torque: 2.3 N·m

* M5 screws for mounting are not included with this product. Please provide or purchase them separately.

2 Attach the mounting fixture to the desired position.

* M5 screws for mounting are not included with this product. Please provide or purchase them separately.



When Installing Using the Mounting Fixture on the Front

1 Attach the mounting fixture (FHV-XMT-7) to the front.

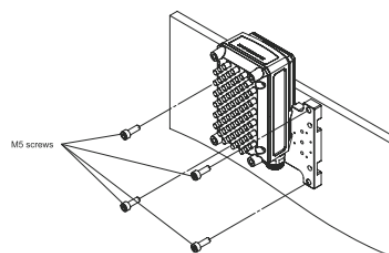
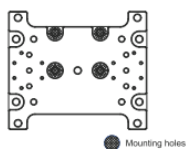
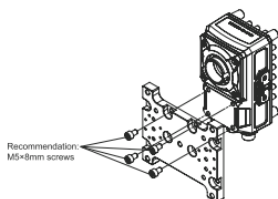
Recommended mounting screw size: M5 x 8 mm

Tightening torque: 2.3 N·m

* M5 screws for mounting are not included with this product. Please provide or purchase them separately.

2 Attach the mounting fixture to the desired position for mounting.

* M5 screws for mounting are not included with this product. Please provide or purchase them separately.



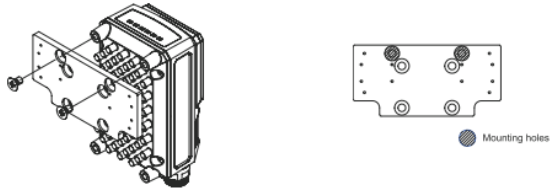
[Mounting dimensions]

Product discontinuation Model FHV7H Series	Recommendable replacement Model FHV7X Series
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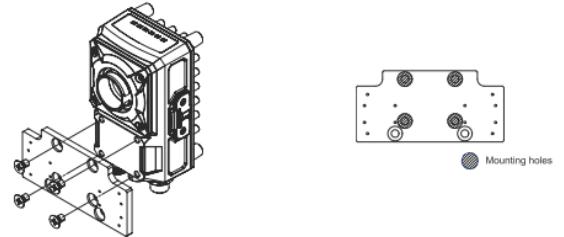
When Connecting the Smart Camera to a Lighting Controller

1. Attach the lighting controller mounting fixture (FHV-XMT-7-TCC) to the Smart Camera.
Tightening torque: 2.3 N·m
Screws: M5 × 8 mm countersunk head screw

- When attaching the mounting fixture to the back side:

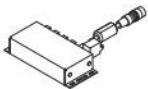


- When attaching the mounting fixture to the front side:

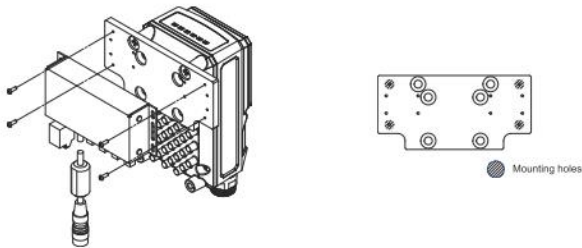


2. Attach the lighting controller.
Tightening torque: 0.15 N·m
Screws: M5 × 8 mm countersunk head screw

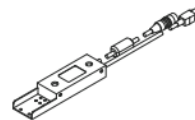
- When using FL-TCC1PS and 1ch to 4ch common type of FLV-TCC
Note: When using FL-TCC1PS, be sure to use the relay cable FHV-VFLX-GD.



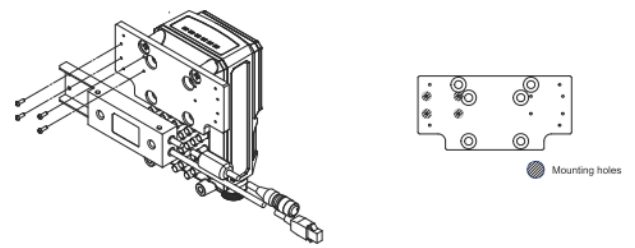
- When attaching the mounting fixture to the back side:



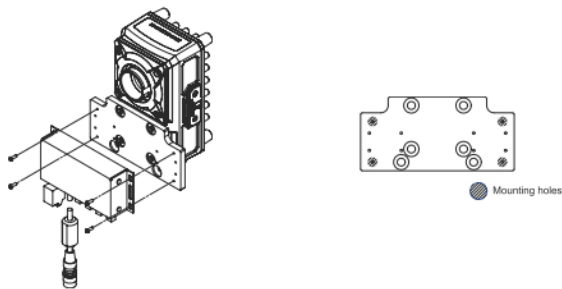
When using 1ch type of FL-TCC Series



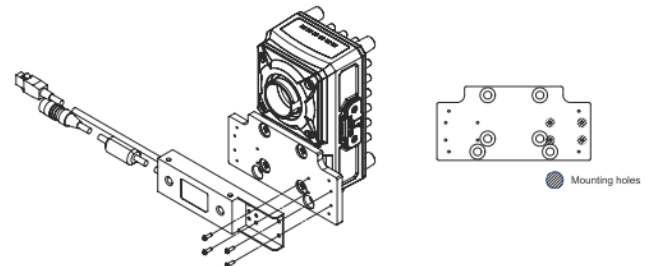
- When attaching the mounting fixture to the back side:



- When attaching the mounting fixture to the front side:



- When attaching the mounting fixture to the front side:



[Characteristics]

Item		Product discontinuation Model FHV7H Series	Recommendable replacement Model FHV7X Series
Main Functions			
Operati on Mode	Standard	Yes	
	Double Speed Multi-input	Yes	
	Non-stop adjustment mode	Yes	
Parallel Processing		Yes	
Possible Number of Captured Images		FHV7[]-[]004: 256 FHV7[]-[]016: 64 FHV7[]-[]032: 36 FHV7[]-[]050: 25 FHV7[]-[]063R: 19 FHV7[]-[]120R: 10	
Possible Number of Logging Images to Sensor Controller		FHV7[]-[]004: 214 FHV7[]-[]016: 52 FHV7[]-[]032: 25 FHV7[]-[]050: 15 FHV7[]-[]063R: 12 FHV7[]-[]120R: 5	FHV7[]-[]004: 645 FHV7[]-[]016: 161 FHV7[]-[]032: 79 FHV7[]-[]050: 50 FHV7[]-[]063R: 39 FHV7[]-[]120R: 19
Possible Number of Scenes		128*1	
Operating on UI		Remote Operation Tool	
Setup		Create the processing flow using Flow editing.	
Language		Japanese, English, Simplified Chinese, Traditional Chinese, Korean, Ger- man, French, Spanish, Italian, Vietnamese, Polish	
Imaging			
CMOS Image elements		FHV7[]-[]004: 1/2.9-inch equivalent FHV7[]-[]016: 1/2.9-inch equivalent FHV7[]-[]032: 1/1.8-inch equivalent FHV7[]-[]050: 2/3-inch equivalent FHV7[]-[]063R: 1/1.8-inch equivalent FHV7[]-[]120R: 1/1.7-inch equivalent	
Color/Monochrome		FHV7[]-M[] [] [] []: Monochrome FHV7[]-C[] [] [] []: Color	
Effective pixels (HxV)		FHV7[]-[]004: 720 x 540 FHV7[]-[]016: 1440 x 1080 FHV7[]-[]032: 2048 x 1536 FHV7[]-[]050: 2448 x 2048 FHV7[]-[]063R: 3072 x 2048 FHV7[]-[]120R: 4000 x 3000	
Pixel size		FHV7[]-[]004: 6.9 x 6.9um FHV7[]-[]016: 3.45 x 3.45um FHV7[]-[]032: 3.45 x 3.45um FHV7[]-[]050: 3.45 x 3.45um FHV7[]-[]063R: 2.4 x 2.4um FHV7[]-[]120R: 1.85 x 1.85um	

Item	Product discontinuation Model FHV7H Series	Recommendable replacement Model FHV7X Series
Imaging area H×V (opposing corner)	FHV7[]-[]004: 5.0 x 3.8mm (6.3mm) FHV7[]-[]016: 5.0 x 3.8mm (6.3mm) FHV7[]-[]032: 7.1 x 5.3mm (8.9mm) FHV7[]-[]050: 8.5 x 7.1mm (11.1mm) FHV7[]-[]063R: 7.4 x 5.0mm (8.9mm) FHV7[]-[]120R: 7.4 x 5.6mm (9.3mm)	
Shutter system	FHV7[]-[]004: Global Shutter FHV7[]-[]016: Global Shutter FHV7[]-[]032: Global Shutter FHV7[]-[]050: Global Shutter FHV7[]-[]063R: Rolling shutter (Global reset mode compatible) FHV7[]-[]120R: Rolling shutter (Global reset mode compatible)	
Shutter function	FHV7[]-[]004: Electronic shutter: Shutter speed can be set from 1 μs to 100 ms. FHV7[]-[]016: Electronic shutter: Shutter speed can be set from 1 μs to 100 ms. FHV7[]-[]032: Electronic shutter: Shutter speed can be set from 1 μs to 100 ms. FHV7[]-[]050: Electronic shutter: Shutter speed can be set from 1 μs to 100 ms. FHV7[]-[]063R: Electronic shutter: Shutter speed can be set from 55 μs to 100 ms. FHV7[]-[]120R: Electronic shutter: Shutter speed can be set from 84 μs to 100 ms.	
Partial function	FHV7[]-[]004: 4 to 540 lines (4-line increments) FHV7[]-[]016: 4 to 1080 lines (4-line increments) FHV7[]-[]032: 4 to 1536 lines (4-line increments) FHV7[]-[]050: 4 to 2048 lines (4-line increments) FHV7[]-[]063R: 4 to 2048 lines (4-line increments) FHV7[]-[]120R: 4 to 3000 lines (4-line increments)	
Frame rate (image acquisition time)	FHV7[]-[]004: 430fps (2.3ms) FHV7[]-[]016: 224fps (4.5ms) FHV7[]-[]032: 55fps (18.0ms) FHV7[]-[]050: 35fps (28.0ms) FHV7[]-[]063R: 59fps (16.7ms) FHV7[]-[]120R: 19fps (25.0ms)	
Lens mounting	C mount	
Field of view, Installation distance	Selecting a lens according to the field of view and installation distance	
External Interface		
Serial Communication		RS-232C × 1
Ethernet Communi- cation	Protocol	Non-procedure (TCP/UDP)
	I/F	1000BASE-T × 1
EtherNet/IP Communication		Yes (Target/Ethernet port)
PROFINET Communication		<ul style="list-style-type: none"> • Yes (Slave/Ethernet port) • Conformance class A
EtherCAT Communication		N/A
Parallel I/O		NPN/PNP common
Parallel I/F		High-speed input: 1 General input: 3 High-speed output: 1 General output: 4
Encoder Interface		N/A
Monitor Interface		N/A

Item		Product discontinuation Model FHV7H Series	Recommendable replacement Model FHV7X Series
	USB I/F	None	
	SD Card I/F	microSD card: SDHC×1	
Indicator Lamps			
	Main	PWR: Green, RUN: Green, LINK: Yellow, BUSY: Green, OR: Yellow, ERR: Red	
	SD Card	SD ACCESS: Yellow	
Supply Voltage		21.6 VDC to 26.4 VDC (When an I/O cable with 20 m is connected, it is 24.0 VDC to 26.4 VDC.)	
Current consumption		<ul style="list-style-type: none"> · With lighting modules: 4.2 A or less · Without lighting modules: <ul style="list-style-type: none"> - With lighting or lighting controllers: 2.1 A or less - With lighting or lighting controllers: 0.6 A or less 	
Built-in FAN		N/A	
Usage Environment			
Ambient temperature range		Operating: 0 to +40°C, Storage: -25 to +65°C (with no icing or condensation)	
Ambient humidity range		Operating & Storage: 35 to 85% (With no condensation)	
Ambient atmosphere		No corrosive gases	
Vibration tolerance		Oscillation frequency: 10 to 150Hz, Half amplitude: 0.35 mm, Vibration direction: X/Y/Z, Sweep time: 8 minute/count, Sweep count: 10 With standard lens modules, FHV-LEM-S: Half amplitude: 0.15 mm (Others are the same as above.)	
Shock resistance		Impact force: 150 m/s ² , Test direction: 6 directions, three times each (up/down, front/behind, left/right)	
Noise immunity	Fast Transient Burst	<ul style="list-style-type: none"> · DC power Direct infusion: 2kV, Pulse rising: 5 ns, Pulse width: 50 ns, Burst continuation time: 15 ms/0.75 ms, Period: 300 ms, Application time: 1 min. · I/O line Coupling clamp: 1kV, Pulse rising: 5 ns, Pulse width: 50 ns, Burst continuation time: 15 ms/0.75 ms, Period: 300 ms, Application time: 1 min. 	
Grounding		Class D grounding (100 Ω or less grounding resistance) * Existing the third class grounding	
External Features			
Dimensions		110 mm × 68.5 mm × 55.5 mm (HxWxD)	
Weight		Approx. 670 g	
Degree of protection		With lighting modules or waterproof hoods: IEC60529 - IP67 (except a connector cap removed) Other than the above: IEC60529 - IP40	
Case material		Aluminum die-casting (ADC12)	
Accessories		<ul style="list-style-type: none"> · Connector cap for Ethernet cable (mounted on the body): 1 · Connector cap for an external lighting (mounted on the body): 1 · C mount cap (mounted on the body): 1 · C mount cover (mounted on the body): 1 · Instruction sheet: 1 · Membership registration: 1 · General Compliance Information and Instructions for EU: 1 	

*1. The number of scenes can be increased up to 1,024 with the Conversion scene group data tool.

[Operation ratings / Operation methods]

Product discontinuation Model FHV7H Series	Recommendable replacement Model FHV7X Series
<p>Model FHV7H Series / Model FHV7X Series</p> <p>No major changes. For details on how to operate, please refer to the following manual.</p> <ul style="list-style-type: none"> • Smart Camera Setup Manual (Z408) • Vision System User's Manual (Z365) • Vision System User's Manual (Communications Settings) (Z342) • Vision System Operation Manual (Sysmac Studio) (Z343) • Vision System Processing Item Function Reference Manual (Z341) 	

Specifications and prices in this product news are as of the issue date and are subject to change without notice.
 Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.