

## Product Discontinuation Notice

Issue Date  
March, 2023

### Product Discontinuation

High-speed Digital CCD Cameras



**FZ-SHC**  
**FZ-SH**

Pedestal



**FZ-SH-XLC**

### Recommended Replacement

High-speed Digital CMOS Cameras



**FH-SCX**  
**FH-SMX**

Pedestal



**FZ-S-XLC**

#### [ Final order entry date ]

The end of March, 2024.

#### [ Date of The Last Shipping ]

The end of April, 2024.

#### [ Scheduled date of maintenance close ]

The end of March, 2027.

#### [ Caution on recommended replacement ]

Shortening of measurement time can be expected.

Since the external dimensions are different, please review the installation environment.

In addition, the functions/performances of the cameras are different.

Since the measurement processing time, image brightness, etc. will change according to the customer's usage environment, please perform performance verification in advance before use.

A software upgrade is required for the FH Sensor Controller (FH Series).

Please use Ver6.11 or later.

**[ Difference from discontinued product ]**

Recommended replacement Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
FH-SCX	**	--	**	*	--	--	**
FH-SMX	**	--	**	*	--	--	**
FZ-SH-XLC	**	--	-	*	-	-	-

\*\* : Compatible

\* : The change is a little/Almost compatible

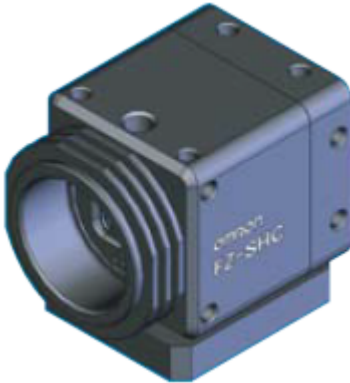

-- : Not compatible

- : No corresponding specification

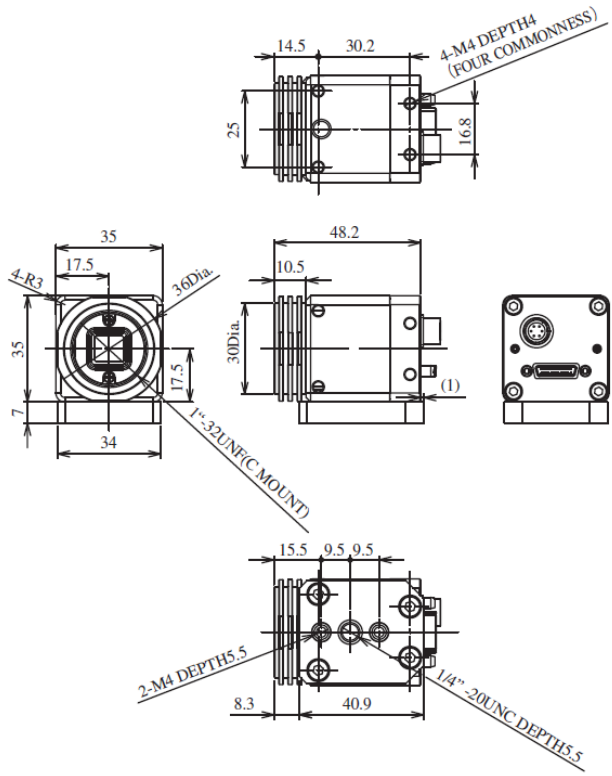
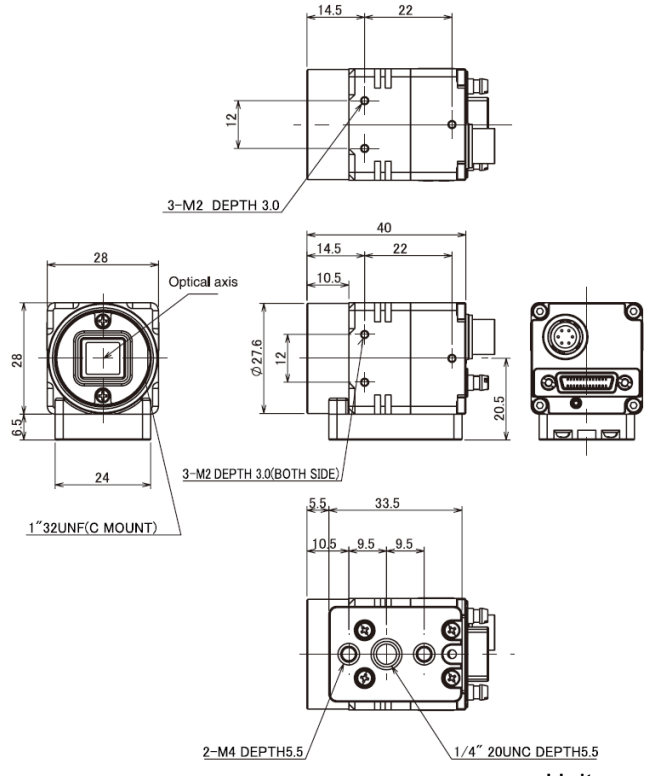
**[ Product Discontinuation and recommended replacement ]**

Product discontinuation	Recommended replacement
FZ-SHC	FH-SCX
FZ-SH	FH-SMX
FZ-SH-XLC	FZ-S-XLC

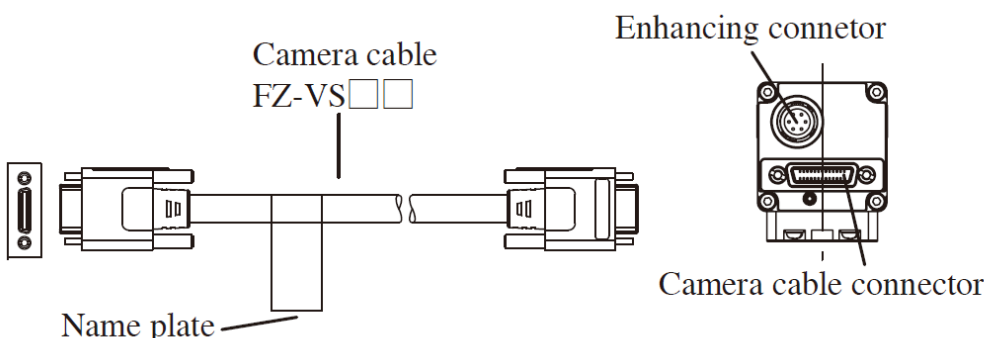
[ Body color ]

Product discontinuation Model FZ-SHC, FZ-SH	Recommendable replacement Model FH-SCX, FH-SMX
Black 	Black 

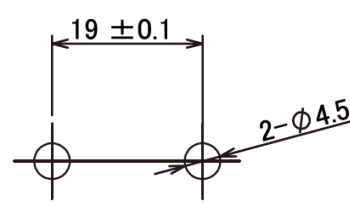
[ Dimensions ]

Product discontinuation Model FZ-SHC, FZ-SH	Recommendable replacement Model FH-SCX, FH-SMX
W: 35mm D: 48.2mm H: 42mm  <p>(Unit:mm)</p>	W: 28mm D: 40mm H: 34.5mm  <p>Unit : mm</p>

[ Wire connection ]

Product discontinuation Model FZ-SHC, FZ-SH	Recommendable replacement Model FH-SCX, FH-SMX
<p>No change</p>  <p>Camera cable FZ-VS</p> <p>Enhancing connector</p> <p>Camera cable connector</p> <p>Name plate</p>	

[ Mounting dimensions ]

Product discontinuation Model FZ-SHC, FZ-SH	Recommendable replacement Model FH-SCX, FH-SMX
<p>No change in mounting hole dimensions However, the height of the center of the optical axis is increased by 4 mm. Please adjust the installation position or inspection range.</p>  <p>19 ± 0.1</p> <p>2-φ4.5</p> <p>MOUNTING SCREW HOLES</p>	

## [ Characteristics ]

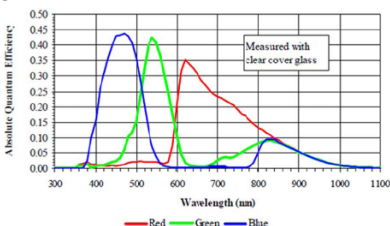
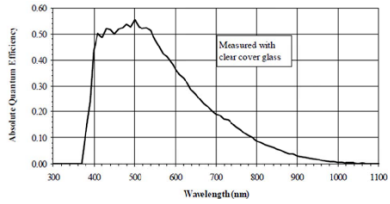
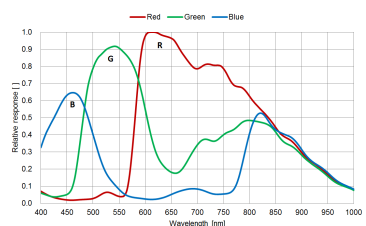
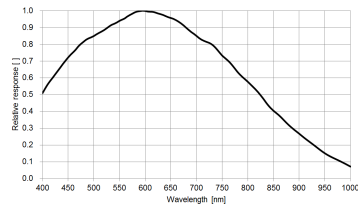
## ○General specifications

Item	Product discontinuation Model FZ-SHC, FZ-SH	Recommendable replacement Model FH-SCX, FH-SMX
Power consumption	3.6 W max. (12 VDC)	1.6 W max. (13 VDC)
Vibration resistance	10 to 150Hz: half-amplitude: 0.35mm:(maximum acceleration: 50m/s <sup>2</sup> ), 10 times for 8 minutes each in 3 directions	
Shock resistance	Shock resistance 150m/s <sup>2</sup> , 3 times each in 6 directions	
Ambient Temperature	Operating: 0 to 40 °C Storage: -25 to 65 °C with no icing nor condensation	Operating: 0 to 50 °C Storage: -20 to 65 °C with no icing nor condensation
Ambient humidity	Operating and storage: 35% to 85% with no condensation	
Ambient environment	No corrosive gases	
Degree of protection	IEC60529 IP20	IEC60529 IP40
Materials	Case: Aluminum Camera base: PC/ABS Mount screw: brass	
Weight	Approx.105 g (including base)	Approx.48 g (including base)
Accessories	<ul style="list-style-type: none"> <li>• Instruction Sheet</li> <li>• General Compliance Information and Instructions for EU</li> </ul>	
Cable length	Standard mode: 15m max *Only Standard mode	Standard mode: 15 m max. High speed mode: 5 m max.

## ○Performance specifications

Item	Product discontinuation Model FZ-SHC, FZ-SH	Recommendable replacement Model FH-SCX, FH-SMX
Image element	1/3 inch CCD	1/2.9 inch CMOS
Effective pixels	640(H)×480(V)	720(H)×540(V)
Pixel size	7.4(μm)×7.4(μm)	6.9(μm)×6.9(μm)
Scanning method	Non-interlace mode	
Synchronization	Internal Sync.	
Frame rate	Standard mode: 204fps *Only Standard mode	Standard mode: 261.7fps High-speed mode: 523.6fps
Partial function	12 to 480 lines (2 lines each)	4 to 540 lines (4 lines each)
Video output	Digital 10bit	Digital 8bit
Gain	0 ~ 18.34dB	0 ~ 24dB
Shutter speed	20μs ~ 100,000μs	1μs ~ 100,000μs
Lens mounting	C mount (Recommended Mode : 3Z4S-LE SV-V Series)	

[ Operation ratings ]

Item	Product discontinuation Model FZ-SHC, FZ-SH	Recommendable replacement Model FH-SCX, FH-SMX
<b>Spectral sensitivity characteristic</b>	<p><b>FZ-SHC</b></p>  <p><b>FZ-SH</b></p> 	<p><b>FH-SCX</b></p>  <p><b>FH-SMX</b></p> 
<b>Mirror an image</b>	Without function	With function
<b>Multi-slope</b>	Without function	Without function
<b>Binning setting</b>	With function (Only monochrome)	Without function

[ Operation methods ]

Product discontinuation Model FZ-SHC, FZ-SH	Recommendable replacement Model FH-SCX, FH-SMX
<p><b>No change</b></p> <p>For details on the operation method, refer to the following manual.</p> <ul style="list-style-type: none"> <li>• Vision System User's Manual (Z365)</li> <li>• Vision System Hardware Setup Manual (Z366)</li> <li>• Vision System Processing Item Function Reference Manual (Z341)</li> </ul>	

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.