

Product DiscontinuationImage Sensor
Small Digital CCD Cameras**FZ-SF****FZ-SFC****FZ-SP****FZ-SPC****Recommended Replacement**Image Sensor
High-speed Small Digital CMOS Cameras**FH-SMX01-SFL**

(Scheduled for release in August 2026)

FH-SCX01-SFL

(Scheduled for release in August 2026)

FH-SMX01-SFS

(Scheduled for release in August 2026)

FH-SCX01-SFS

(Scheduled for release in August 2026)

[Final order entry date]

The end of May, 2027

The discontinuation date is subject to change due to the availability of parts and materials. Thank you for your understanding in advance.

[Date of The Last Shipping]

The end of August, 2027

[Caution on recommended replacement]

Please review and verify the installation environment and settings regarding the following points:

1. Changes to the Installation Environment (External Dimensions/Mounting Dimensions)

The replacement camera has different external and mounting dimensions. Please review the installation location to ensure sufficient space and adjust mounting hardware to match the new dimensions.

2. Changes to Measurement Area Settings (Pixels/Resolution)

The effective pixel count and pixel size are different, resulting in a change in the image resolution. Please reconfigure the measurement area based on the current scene data.

3. Image Adjustment and Processing Time Verification (Performance/Functionality)

The camera's brightness and contrast characteristics are different.

Please adjust the image brightness (shutter speed, gain, lighting, etc.) to suit your environment. Also, please re-verify the overall "measurement processing time" of the system.

Note that using the replacement camera will result in a faster frame rate, which can improve measurement processing time.

Using the replacement camera requires a system software update for the controller unit (FH series). Only Ver6.73 and later are compatible.

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
FH-SMX01-SFL	*	--	**	--	--	--	**
FH-SCX01-SFL	*	--	**	--	--	--	**
FH-SMX01-SFS	*	--	**	--	--	--	**
FH-SCX01-SFS	*	--	**	--	--	--	**

** : Compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
FZ-SF	FH-SMX01-SFL
FZ-SFC	FH-SCX01-SFL
FZ-SP	FH-SMX01-SFS
FZ-SPC	FH-SCX01-SFS

[Body color]

Product discontinuation Model FZ-SF/FZ-SFC	Recommendable replacement Model FH-SMX01-SFL/FH-SCX01-SFL
●Camera head 	(The head unit and amplifier unit are connected by a cable) Amplifier unit, base side 
●Camera amplifier 	Amplifier unit, back of base 

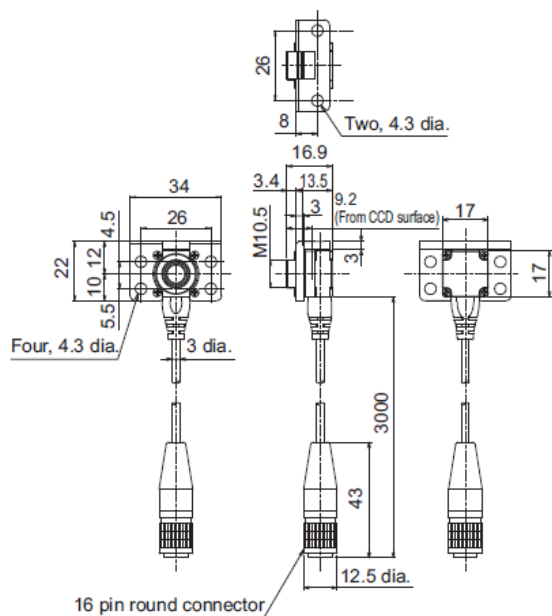
Product discontinuation Model FZ-SP/FZ-SPC	Recommendable replacement Model FH-SMX01-SFS/FH-SCX01-SFS
●Camera head  ●Camera amplifier 	(The head unit and amplifier unit are connected by a cable) Amplifier unit, base side  Amplifier unit, back of base 

[Dimensions]

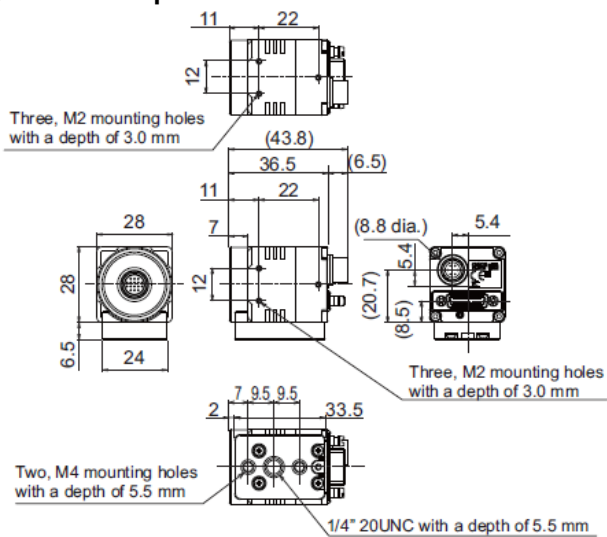
Product discontinuation

Model FZ-SF/FZ-SFC

● Camera head

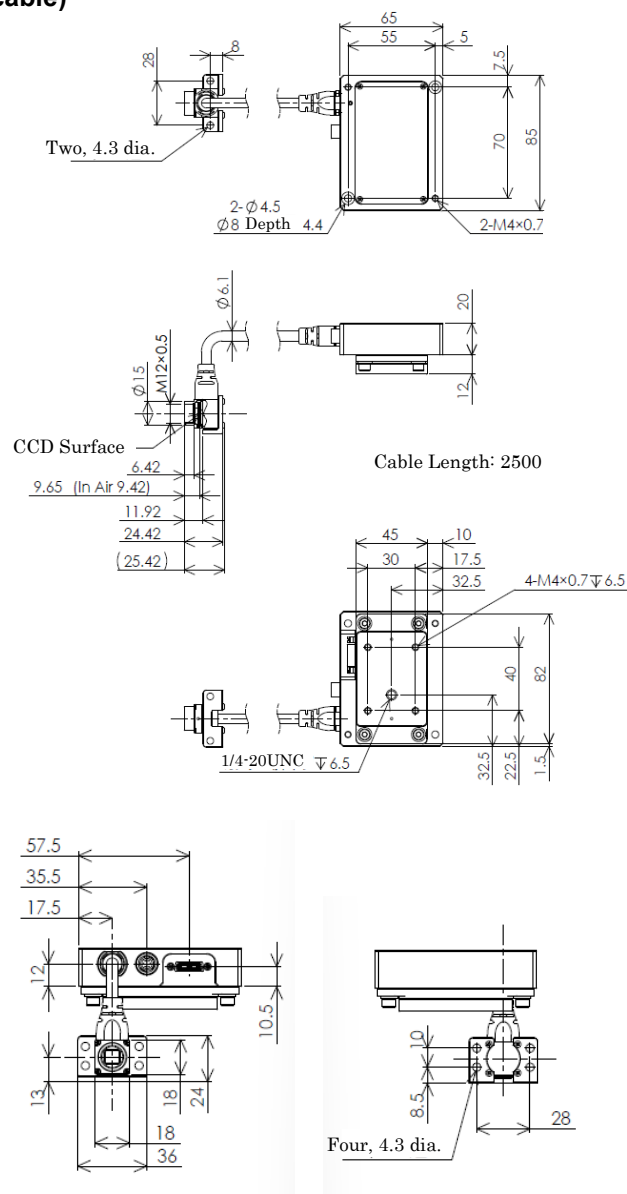


●Camera amplifier



Recommendable replacement
Model FH-SMX01-SFL/FH-SCX01-SFL

(The head unit and amplifier unit are connected by a cable)

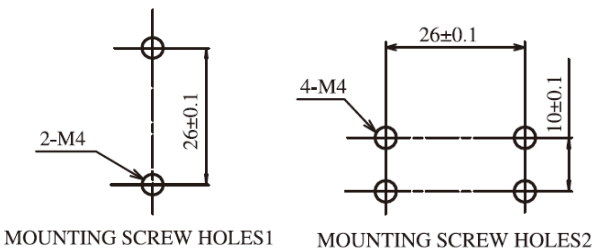
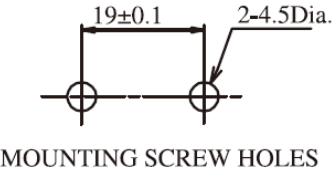
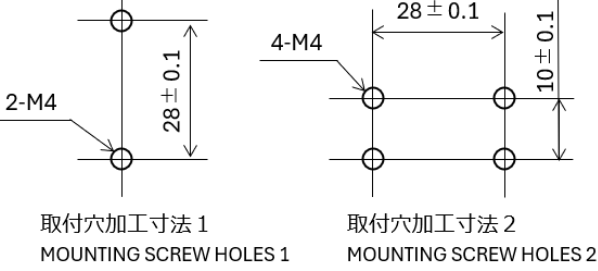
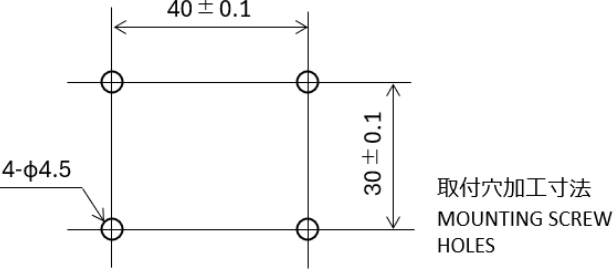


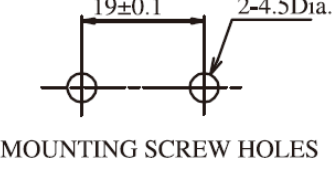
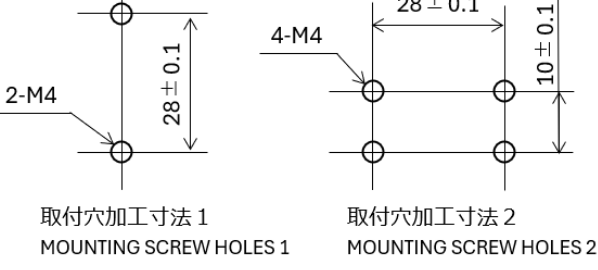
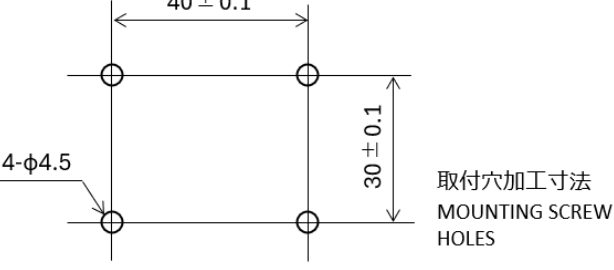
Product discontinuation Model FZ-SP/FZ-SPC	Recommendable replacement Model FH-SMX01-SFS/FH-SCX01-SFS
● Camera head ● Camera amplifier	(The head unit and amplifier unit are connected by a cable)

[Wire connection]

Product discontinuation Model FZ-SF/FZ-SFC Model FZ-SP/FZ-SPC	Recommendable replacement Model FH-SMX01-SFL/FH-SCX01-SFL Model FH-SMX01-SFS/FH-SCX01-SFS
● Connecting the camera amplifier and camera cable Using the Camera cable FZ-VS□□(sold separately), connect the connector on the back of the camera and the camera connector on Sensor Controller FH series. * The camera cable is polarized, so, make sure that the end bearing a name plate is connected to the Controller.	

[Mounting dimensions]

Product discontinuation Model FZ-SF/FZ-SFC	Recommendable replacement Model FH-SMX01-SFL/FH-SCX01-SFL
●Camera head  MOUNTING SCREW HOLES1 MOUNTING SCREW HOLES2 ●Camera amplifier  MOUNTING SCREW HOLES	●Head Unit  取付穴加工寸法 1 取付穴加工寸法 2 MOUNTING SCREW HOLES 1 MOUNTING SCREW HOLES 2 ●Amplifier Unit  取付穴加工寸法 MOUNTING SCREW HOLES

Product discontinuation Model FZ-SP/FZ-SPC	Recommendable replacement Model FH-SMX01-SFS/FH-SCX01-SFS
●Camera head  MOUNTING SCREW HOLES ●Camera amplifier  MOUNTING SCREW HOLES	●Head Unit  取付穴加工寸法 1 取付穴加工寸法 2 MOUNTING SCREW HOLES 1 MOUNTING SCREW HOLES 2 ●Amplifier Unit  取付穴加工寸法 MOUNTING SCREW HOLES

[Characteristics]
○General specifications

Item	Product discontinuation Model FZ-SF/FZ-SFC Model FZ-SP/FZ-SPC	Recommendable replacement Model FH-SMX01-SFL/FH-SCX01-SFL Model FH-SMX01-SFS/FH-SCX01-SFS
Power consumption	3.4 W max. (13 VDC)	2.0 W max. (13 VDC)
Vibration resistance	10 to 150Hz: half-amplitude: 0.35mm:(maximum acceleration: 50m/s ²), 10 times for 8 minutes each in 3 directions	
Shock resistance	Shock resistance 150m/s ² , 3 times each in 6 directions	
Ambient Temperature	Operating: 0 to 50 °C(Head) Operating: 0 to 45 °C(Amplifier) Storage: -25 to 65 °C with no icing nor condensation	Operating: 0 to TBD (Head) Operating: 0 to 50 °C(Amplifier) Storage: -25 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 and Weight (Camera head)	●FZ-SF/FZ-SFC Case: Aluminum alloy (A5056) Base: MC nylon Cap: Silicon rubber 70g (including bracket) ●FZ-SP/FZ-SPC Case: Aluminum alloy (A5056) Bracket: PC/GF Cap: Silicon rubber 70g (including base)	●Head unit Case: Aluminum alloy (A6061) Base: MC nylon Mount protection: Masking tape ●Amplifier unit Cover: Stainless (SUS304) Case: Aluminum alloy (A6061) Base: Polycarbonate ABS + A6061
Materials and Weight (Camera amplifier)	Cover: Galvanized sheet iron Case: Aluminum die case alloy (ADC-12) Base: Polycarbonate ABS 60g (including base)	460g (Total of head unit and amplifier unit)
Cable length	Standard mode : 15m max *Only Standard mode	High-speed mode : 5m max Standard mode : 15m max

○Performance specifications

Item	Product discontinuation Model FZ-SF/FZ-SFC Model FZ-SP/FZ-SPC	Recommendable replacement Model FH-SMX01-SFL/FH-SCX01-SFL Model FH-SMX01-SFS/FH-SCX01-SFS
Image element	1/3 inch CCD	1/2.9 inch CMOS
Effective pixels	659(H) × 494(V)	1440(H) × 1080(V)
Pixel size	7.4(μm) × 7.4(μm)	3.45(μm) × 3.45(μm)
Shutter type	Global shutter	
Synchronization	Internal Sync.	
Frame rate	Standard mode : 80 fps (12.5ms) *Only Standard mode	High-speed mode : 154.6fps (6.5ms) Standard mode : 67.8fps (14.7ms)
Number of lines to be read	12 to 480 lines (2 lines each)	4 to 1080 lines (4 lines each)
Gain	-6 ~ 24dB	0 ~ 24dB
Shutter speed	20μs ~ 100,000μs	20μs ~ 100,000μs
Lens mounting	Special mount (M10.5, P0.5mm)	S mount (M12, P0.5mm)

[Operation ratings]

Item	Product discontinuation Model FZ-SF/FZ-SFC Model FZ-SP/FZ-SPC	Recommendable replacement Model FH-SMX01-SFL/FH-SCX01-SFL Model FH-SMX01-SFS/FH-SCX01-SFS
Reverse conversion	Without function	With function
Binning setting	With function (Only FZ-SF, FZ-SP)	Without function

[Operation methods]

Product discontinuation Model FZ-SF/FZ-SFC Model FZ-SP/FZ-SPC	Recommendable replacement Model FH-SMX01-SFL/FH-SCX01-SFL Model FH-SMX01-SFS/FH-SCX01-SFS
No change For details on the operation method, refer to the following manual. •Vision System Hardware Setup Manual (Z366) •Vision System User's Manual (Z365) •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.
 The information on the recommended substitute products from other companies is what our company is aware of as of the issuance of this notice. Regarding the end of production timing for the recommended alternative product, the possibility of continuing supply, the specifications, compatibility, and others, as well as other details, please inquire with your business partner and make your own decision at your company on whether to adopt the recommended alternative product.