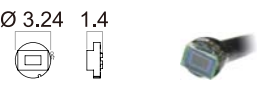
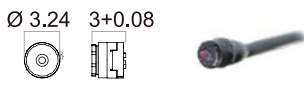
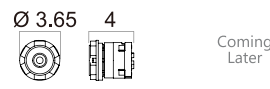
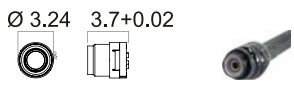
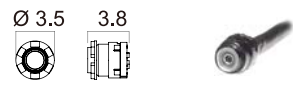
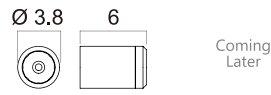
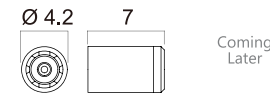
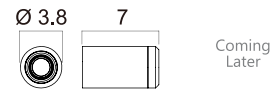
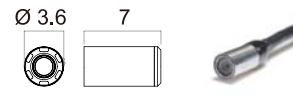
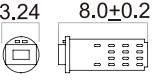
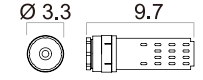
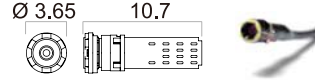
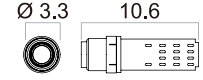
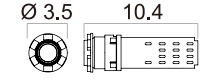

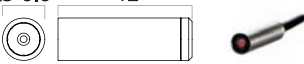
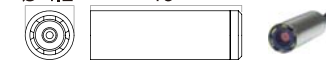

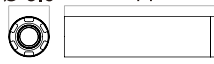

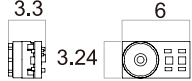
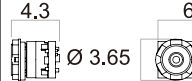

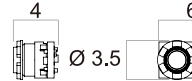
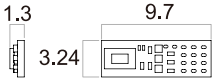
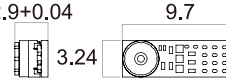


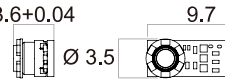


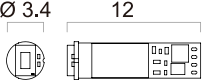
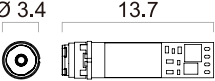

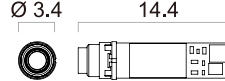
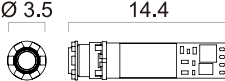
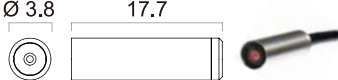
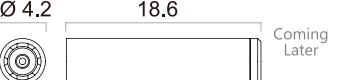
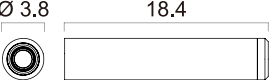
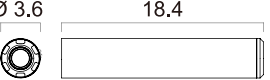
FK / K Series

		No Lens	65°	65° (with LED)	120°	120° (with LED)
Front View	B164B03 Board type	Ø 3.24 1.4 	Ø 3.24 3+0.08 	Ø 3.65 4  Coming Later	Ø 3.24 3.7+0.02 	Ø 3.5 3.8 
	T164B03 Tube Type	N/A	Ø 3.8 6  Coming Later	Ø 4.2 7  Coming Later	Ø 3.8 7  Coming Later	Ø 3.6 7 

FY / Y / FX / X Series

		No Lens	65°	65° (with LED)	120°	120° (with LED)
Front View	B164B03 Board Type	3.24 8.0+0.2  Coming Later	Ø 3.3 9.7  Coming Later	Ø 3.65 10.7 	Ø 3.3 10.6  Coming Later	Ø 3.5 10.4  Coming Later
	T164B03 Tube type	N/A  Coming Later	Ø 3.8 12  Coming Later	Ø 4.2 13  Coming Later	Ø 3.6 13  Coming Later	Ø 3.6 14  Coming Later
Side View	BL164B03 Board Type (Components on both sides)	1.6 3.24 6  Coming Later	3.3 3.24 6  Coming Later	4.3 3.24 6  Coming Later	4 3.24 6  Coming Later	4 3.24 6  Coming Later
	BL164B03S Board Type (Components on single side)	1.3 3.24 9.7  Coming Later	2.9+0.04 3.24 9.7  Coming Later	3.9 3.24 9.7  Coming Later	3.6+0.04 3.24 9.7  Coming Later	3.6+0.04 3.24 9.7 

FT / T Series

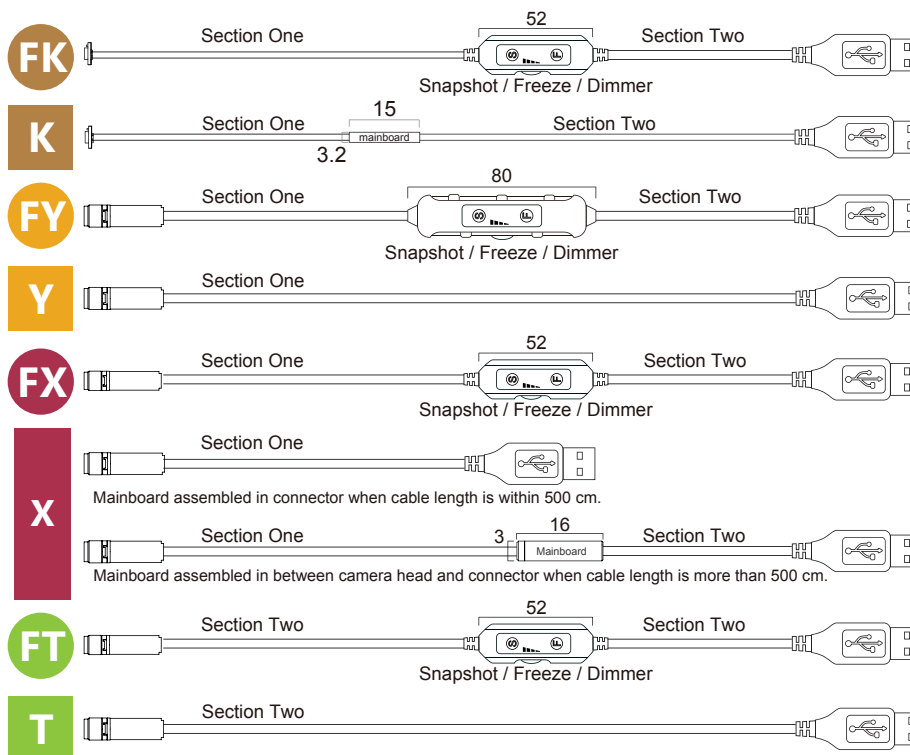
		No Lens	65°	65° (with LED)	120°	120° (with LED)
Front View	B164B03 Board type	Ø 3.4 12  Coming Later	Ø 3.4 13.7  Coming Later	Ø 3.65 14.6  Coming Later	Ø 3.4 14.4  Coming Later	Ø 3.5 14.4  Coming Later
	T164B03 Tube Type	N/A	Ø 3.8 17.7  Coming Later	Ø 4.2 18.6  Coming Later	Ø 3.8 18.4  Coming Later	Ø 3.6 18.4  Coming Later

Series Information

Series	FK	K	FY	Y	FX	X	FT	T
Snapshot and Freeze Frame	Support	N/A	Support	N/A	Support	N/A	Support	N/A
Interface	USB 2.0		USB 3.0		USB 2.0			
Frame Rate	15~30 fps		60 fps		15~30 fps			
Feature	Short Camera Head		Low Temperature			Advance		
Camera Shape	Round Shape		T Shape		Rectangle Shape		T Shape	
Orientation	Front View		Front View		Side View		Front View	

Series Compare	Series	164A	164B
	Pixel Size (μm)	1.116 × 1.116	1.12 × 1.12
	Image Area (mm)	1.446 × 0.91	1.43 × 0.81

Resolution	1280 x 720	
Video Format	MJPEG / YUV	
Image Sensor	1/11" Digital CMOS Camera Module	
Pixel Size (μm)	1.12 × 1.12	
Image Area (mm)	1.43 × 0.81	
Scan Mode	Progressive	
Storage Temperature	-30 to 60 Degree C	
Working Temperature	-10 to 45 Degree C	
Lens (Specify Which Lens)	31	2.88 mm / F 2.0 (H= 27°; V= 16°; D= 31°) 2.88 mm / F 4.8
	63	1.33 mm / F 2.0 (H= 56°; V= 33°; D= 63°) 1.33 mm / F 4.0
	65	1.32 mm / F 2.0 1.32 mm / F 3.5 (H= 57°; V= 33°; D= 65°) 1.32 mm / F 4.0
	109	0.92 mm / F 4.5 (H=91°; V=47°; D=109°)
	120	0.878 mm / F 5.0 (H=95°;V=56°;D=120°)
Power Source	DC 5V (USB)	
Power Current	160 mA 190 mA (with LED)	
Operating System	Windows XP, Windows Vista, Window 7 Windows 8, Windows 10, Linux, Mac OSX	



Section One (Max. 15 Pin)

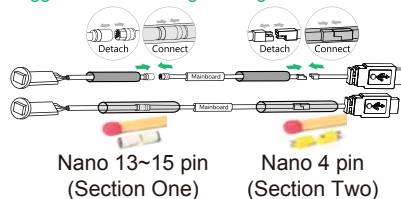
OD (mm)	Length (cm)	Series
1.5 AWG#38 EN-13C	10~100	FY Y
	10~250	FK K FX X
1.7 AWG#36 EN-13C	10~70	FY Y
	10~200	FK K FX X
1.9 AWG#36 EN-15C	10~150	FY Y
	10~400	FK K FX X
2.8 AWG#32 EN-15C	10~200	FY Y
	10~400	FK K FX X

Section Two (Max. 7 Pin)

OD (mm)	Length (cm)	Series
0.35 Enameled Wires	10~150	
0.9 AWG#42 EN-9C	10~200	
1.4 AWG#28 EN-4C	10~1000	
1.4 AWG#30 EN-4C	10~600	T
1.6 AWG#28 EN-4C	10~1000	FT
1.7 AWG#36 EN-9C	10~200	X
2.8 AWG#30 EN-7C	10~400	FX
3.6 AWG#28 EN-7C	10~1000	K
3.6 AWG#28 EN-11C	10~250	FK
5.0 AWG#24 EN-9C	10~1500	Y FY
6.2 AWG#28 EN-11C	10~200	FK K FX X FT T

Detachable Nano Connectors (Customize Option)
Specifically designed to overcome the big size of connector and camera head.





✓ With detachable Nano connectors
A bigger size tube can go through the thin cable from halfway.



✗ Without detachable Nano connectors
Camera head cannot go through the bigger tube.



FYD-B164B03LH-65

SERIES	CONNECTOR	CAMERA BODY	DISPLAY	LED	LENS			
USB 3.0 FY Low Temperature Y Low Temperature USB 2.0 FK Short Camera Head K Short Camera Head FX Low Temperature X Low Temperature FT Advance T Advance * F Snapshot and Freeze Frame	UVC Signal D USB Type A M USB Micro-B (OTG) T USB Type C I USB Mini Type B Connector Information  USB Type A  USB Micro-B  USB Type C  USB Mini-B	Front View B Board Type VB Board Type + Dimmer T Tube Type V Tube Type + Dimmer Side View BL Board Type VBL Board Type + Dimmer	All Type 164B03 Color 164BM3 B/W Board Type 164B03S Color 164BM3S B/W FY Y FX X * S Side View Signal Board	LH High-Intensity White LED L8 IR 850 nm LED L9 IR 940 nm LED	Code 31 63 65 109 120	Secification 2.88 mm / F 2.0 2.88 mm / F 4.8 1.33 mm / F 2.0 1.33 mm / F 4.0 1.32 mm / F 2.0 1.32 mm / F 3.5 1.32 mm / F 4.0 0.92 mm / F 4.5 0.878 mm / F 5.0	Thread M 3.5 x P 0.25 M 3.5 x P 0.2 M 2.8 x P 0.2 M 2.2 x P 0.25 Ø 2.9	View Angle 31° 63° 65° 109° 120°

* IR 940nm or IR 850nm LED is suggested to choose B/W camera type.
 * Camera with LED light source is suggested to use lens with larger F-Stop number.

FK / K Series (120 Degree Lens)



(Tube Type)

FY / Y / FX / X Series (65 Degree Lens)



B164B03LH-65
(Board Type)

Camera Parameter Adjustable (MISUMI APP)

Camera parameter can be adjusted on the smartphone via the Misumi app and PC viewer software AMCAP.

MISUMI APP

ANDROID APP ON Google Play

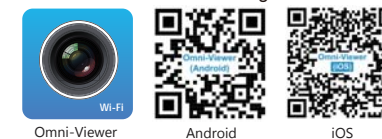
NOTE for MISUMI APP:
 UVC Camera does not support Android 10

All MISUMI UVC Camera are Compatible With MP-WF580KP (WiFi DVR)

For example:
 Our extremely lightweight 1920 x1080 (1080p) 1/6" CMOS UVC glasses camera is compatible with MP-WF580KP (WiFi DVR).

Supports **H.264 video format** input, loop recording, snapshot functions.
 Supports max memory 128 GB (micro SD).

Users can view live streaming video via a smartphone.



About MP-WF580KP:
 It deliver the best 1080p live streaming performance when using H.264 camera.
 When using MJPEG cameras, it can only live stream at resolutions of 720p and below.
 MJPEG cameras delivers the best live streaming performance at 640 x 480 resolution.