

# USB 3.0 Model



**Description** USB3.0 Compact CMOS Camera.

**Features** Sony CMOS [Pregius] adopted cameras are lined up High resolution, high speed CMOS sensors adopted Compact, robust and easy to attach.  
\*Pregius is a trademark of Sony Corporation.



## Product Lineup

USB3 Vision	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	-	Available	Available	Available	Available	
Resolution	0.4M	1.3M	1.6M	2M	2.3M	2.3M	3.2M	3.2M	4M	5M	5M	5M	8.9M	8.9M	12M	12M	
Model No.	Monochrome	STC-MBS43U3V	STC-MBE132U3V	STC-MBS163U3V	STC-MBCM200U3V	STC-MBS231U3V	STC-MBS241U3V	STC-MBS312U3V	STC-MBS322U3V	STC-MBCM401U3V	STC-MBS500U3V	STC-MBS510U3V	STC-MBA5MUSB3	STC-MBS881U3V (in preparation)	STC-MBS891U3V	STC-MBS122BU3V (in preparation)	STC-MBS123BU3V
	Color	STC-MCS43U3V	STC-MCE132U3V	STC-MCS163U3V	STC-MCCM200U3V	STC-MCS231U3V	STC-MCS241U3V	STC-MCS312U3V	STC-MCS322U3V	STC-MCCM401U3V	STC-MCS500U3V	STC-MCS510U3V	STC-MCA5MUSB3	STC-MCS881U3V (in preparation)	STC-MCS891U3V	STC-MCS122BU3V (in preparation)	STC-MCS123BU3V
	Monochrome near-infrared				STC-MBCM200U3V-NIR					STC-MBCM401U3V-NIR							
Frame Rate	527.1fps	60fps	238fps	167fps	41.6fps	163fps	55.6fps	121fps	89fps	35.7fps	75.7fps	14fps	32.2fps	42.3fps	23.4fps	30.5fps	
Effective Pixels	720x540	1280x1024	1440x1080	2048x1088	1920x1200	1920x1200	2048x1536	2048x1536	2048x2048	2448x2048	2448x2048	2592x1944	4096x2160	4096x2160	4096x3000	4096x3000	
Sensor Size	1/2.9"	1/1.8"	1/2.9"	2/3"	1/1.2"	1/1.2"	1/1.8"	1/1.8"	1"	2/3"	2/3"	1/2.5"	1"	1"	1.1"	1.1"	
Cell Size (H x V, μm)	6.9 x 6.9	5.3 x 5.3	3.45 x 3.45	5.5 x 5.5	5.86 x 5.86	5.86 x 5.86	3.45 x 3.45	3.45 x 3.45	5.5 x 5.5	3.45 x 3.45	3.45 x 3.45	2.2 x 2.2	3.45 x 3.45	3.45 x 3.45	3.45 x 3.45	3.45 x 3.45	
Imaging Area (H x V x D, mm)	4.97 x 3.72	5.4 x 6.8 x 8.7	4.97 x 3.72	5.984 x 11.264 x 12.755	7.03 x 11.25 x 13.4	7.03 x 11.25 x 13.4	5.29 x 7.06	5.29 x 7.06	11.264 x 15.930	7.06 x 8.44	7.06 x 8.44	4.28 x 5.7 x 7.13	7.45 x 14.13	7.45 x 14.13	10.35 x 14.13	10.35 x 14.13	
Sensor	Monochrome	IMX287	EV76C560	IMX273	CMV2000	IMX249	IMX174	IMX265	IMX252	CMV4000	IMX264	IMX250	MT9P031	IMX267	IMX255	IMX304	IMX253
	Color	IMX287	EV76C560	IMX273	CMV2000	IMX249	IMX174	IMX265	IMX252	CMV4000	IMX264	IMX250	MT9P031	IMX267	IMX255	IMX304	IMX253
Lens Mount	C-Mount	CS-Mount	C-Mount	C-Mount	C-Mount	C-Mount	C-Mount	C-Mount	C-Mount	C-Mount	C-Mount	CS-Mount	C-Mount	C-Mount	C-Mount	C-Mount	

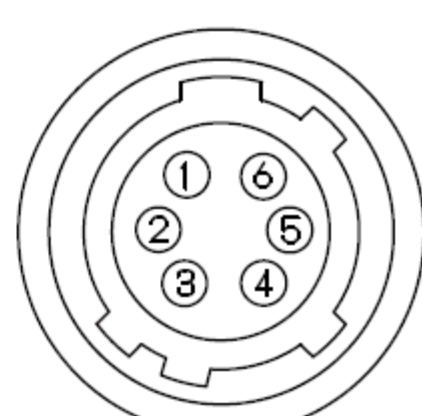
## External Connector Specifications

External Link Connectors	USB: USB 3.0 MicroB type, I/O signals: HR10A-7R-6PB (Hirose) or equivalent
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- ▶ The power supply of this connector is for the output signal, and **not for the camera. The camera power supply is supplied in +5V from the USB path via the USB connector.** In addition, it does not affect the voltage for the input signal.
- ▶ 8.9M, 12M cameras may not have sufficient supply power with USB bus supply only depending on PC spec. We recommend you to use external power.

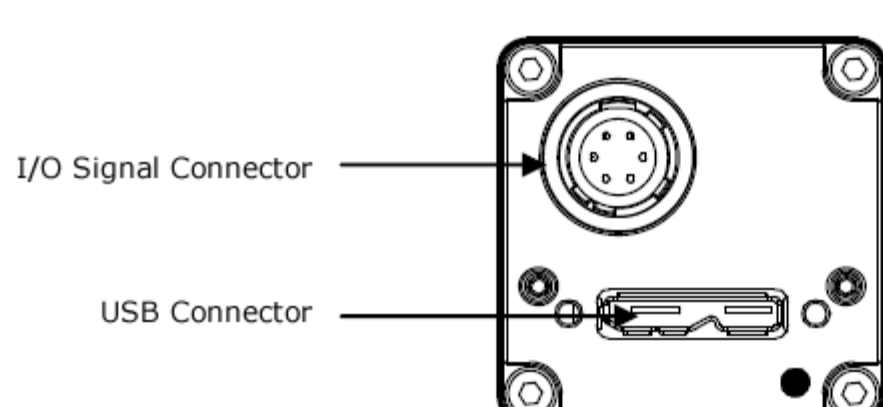
## Pin Assignments

Pin No.	Signal Name	I/O	Signal Voltage	
			Low	High
1	GND for I/O signal	-	0V	
2	Output 2(I03)	OUT	0.8V or lower	+3.3 - +24V
3	Output 1 (I02)	OUT	0.8V or lower	+3.3 - +24V
4	Input 2(I01)	IN	0.7V or lower	+2.5 - +5V
5	Input 1(I00)	IN	0.7V or lower	+2.5 - +5V
6	Power supply for output signal (IO_VCC)	-	+3.3 to +24 Vdc	



Rear view

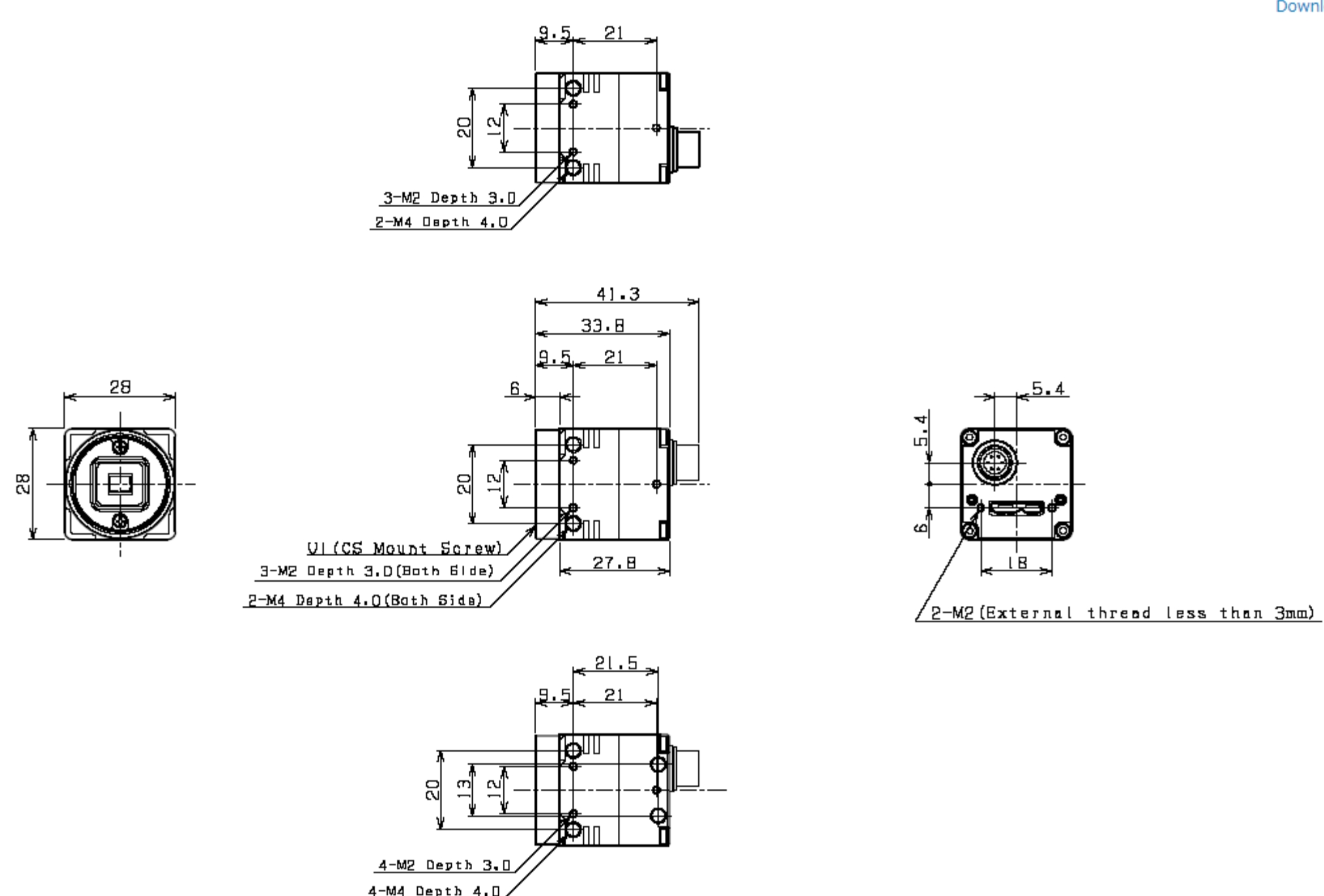
\*Please use an HR10A-7P-6S (Hirose) equivalent on the cable-side.  
\*Example shown for reference.



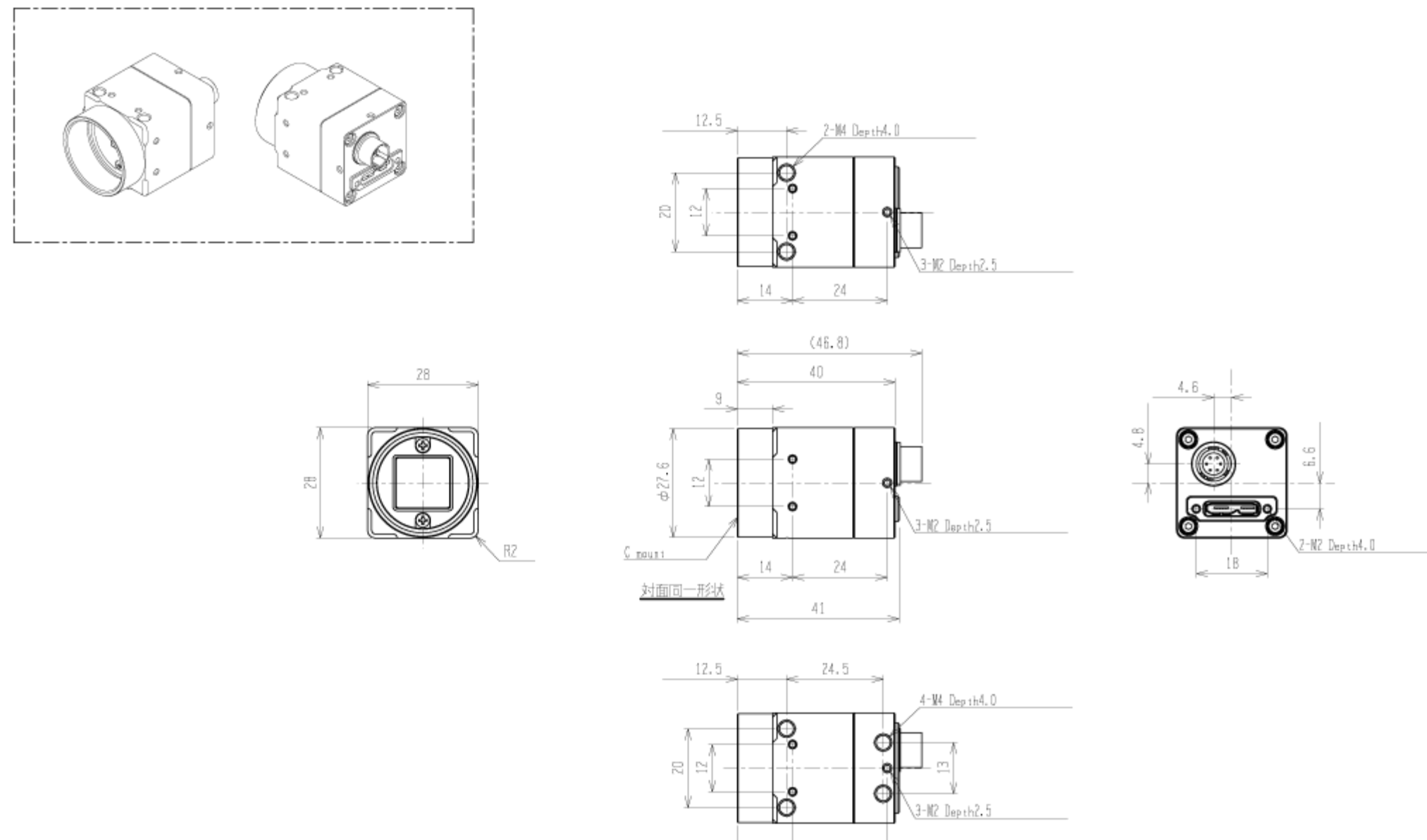
## External View

STC-MBE/MCE132U3V  
STC-MBA/MCA5MUSB3

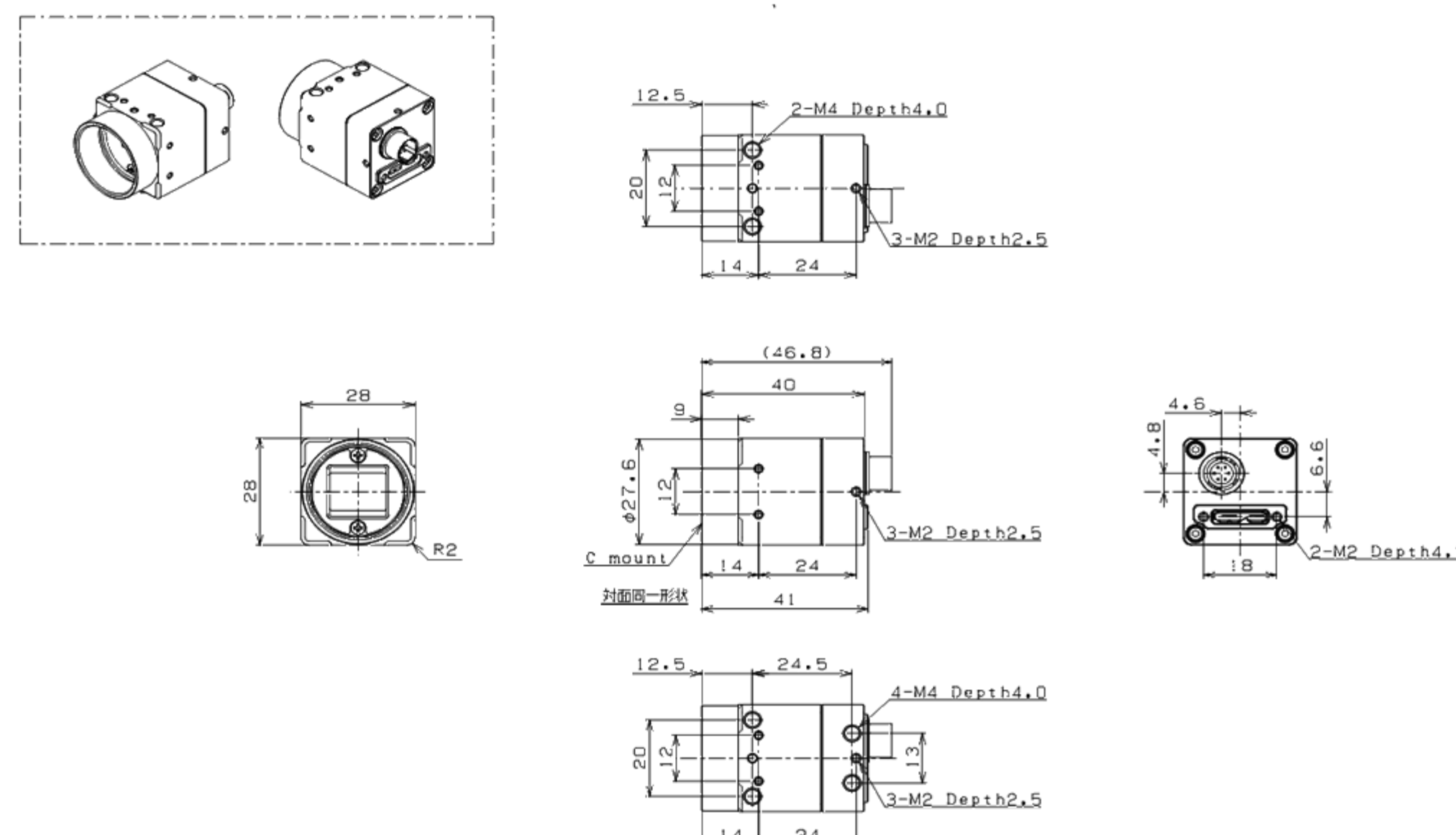
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STC-MBCM/MCCM200U3V  
STC-MBCM/MCCM401U3V



STC-MBS/MCS43U3V  
STC-MBS/MCS163U3V  
STC-MBS/MCS241U3V  
STC-MBS/MCS231U3V  
STC-MBS/MCS322U3V  
STC-MBS/MCS312U3V  
STC-MBS/MCS510U3V  
STC-MBS/MCS500U3V



STC-MBS/MCS881U3V  
STC-MBS/MCS891U3V  
STC-MBS/MCS122BU3V  
STC-MBS/MCS123BU3V

