



Unit: mm
*NO Lens holder

Specification

Model	1M13220IR-M2.8	1M13220AR-M2.8	1M13235IR-M2.8
Filter type	IR cut 650 ±10mm	AR	IR cut 650 ±10mm
Sensor type		1/8.32"	
EFL (mm)		1.32mm	
Aperture F/no	2.0	2.0	3.5
Image Circle		Ø2.36mm	
Chief Ray Angle		< 32.8°	
Field Angle (D x H x V)		75.0° : 41.1° : 62.7°	
Total Track		2.00mm(object 60cm)	
Mount		M2.8 x P0.2	
Diameter of lens (mm)		ø 3.5	
TV distortion		<1%	
Application	for color camera	for B/W camera	for camera with LED and focus distance around 5~10 cm

There are cameras apply to the lens.

Camera Model	Image View	Image Circle	Image Sensor	Pixel Size	Resolution	Camera Size
M _X -B20906U	up view	2.09mm	1/9" color	1.4x1.4um	1280 x 720 (720p)	6(W) x 21(L)
M _X -B20906D	down view	2.09mm	1/9" color	1.4x1.4um	1280 x 720 (720p)	6(W) x 21(L)
M _X -B20904	front view	2.09mm	1/9" color	1.4x1.4um	1280 x 720 (720p)	3.4(D)x16.3
T _X -B20903	front view	2.09mm	1/9" color	1.4x1.4um	1280 x 720 (720p)	3.2(H) x 13(L) x 3.5(D)
T _X -BL20903	left side view	2.09mm	1/9" color	1.4x1.4um	1280 x 720 (720p)	3.2(W) x 12(L)
T _X -B20903U	up view	2.09mm	1/9" color	1.4x1.4um	1280 x 720 (720p)	3.2(W) x 12(L)
T _X -B20908R	front view	2.09mm	1/9" color	1.4x1.4um	1280 x 720 (720p)	8.6(D)
X _X -B20903	front view	2.09mm	1/9" color	1.4x1.4um	1280 x 720 (720p)	3.2(D)x16.3

* click model to more information

Connector



USB A type



Micro USB B



USB type C

Model code

M_X-
T_X-
X_X-

MD-
TD-
XD-

MM-
TM-
XM-

MI-
TI-
XI-