Eyepiece Tube to C-Mount Adapter

3.1 23.2mm Eyepiece to C-mount Adjustable Microscope Eyepiece Adapter

AMA Specifications

Article Code	Picture	Model	Description	
108001		AMA037	1. Available Size for 18 mm Field 18X0.37mm 2. Fit to 1/4”~1/3” Size Sensor 3. 0.37X Magnification 4. Manually Focusable 5. Parfocal with the Eyepiece 6. Dia.23.2mm Eyepiece Tube to C-Mount	
108002		AMA050	1. Available Size for 18 mm Field 18X0.50mm 2. Fit to 1/2”~2/3” Size Sensor 3. 0.50X Magnification 4. Manually Focusable 5. Parfocal with the Eyepiece 6. Dia.23.2mm Eyepiece Tube to C-Mount	
108003		AMA075	1. Available Size for 18 mm Field 18X0.75mm 2. Fit to 1/1.8”~1” Size Sensor 3. 0.75X Magnification 4. Manually Focusable 5. Parfocal with the Eyepiece 6. Dia.23.2mm Eyepiece Tube to C-Mount	
108004		AMA100	1. Available Size for 18 mm Field 18X1.00mm 2. Fit to 1”~1.1” Size Sensor 3. 1X Magnification 4. Manually Focusable 5. Parfocal with the Eyepiece 6. Dia.23.2mm Eyepiece Tube to C-Mount	

*To cover the field, the sensor size should be smaller than the available size. experts will help you to select the correct Adapter for your ordered microscope camera. What you need to do is to select the right camera model.

3.2 23.2mm Eyepiece to C-mount Fixed Microscope Eyepiece Adapter

FMA Specifications

Article Code	Picture	Model	Description	
108005		FMA037	1. Available Size for 18 mm Field 18X0.37mm 2. Fit to 1/4”~1/3” Size Sensor 3. 0.37X Magnification 4. Dia.23.2mm Eyepiece Tube to C-Mount	
108006		FMA050	1. Available Size for 18 mm Field 18X0.50mm 2. Fit to 1/2”~2/3” Size Sensor 3. 0.50X Magnification 4. Dia.23.2mm Eyepiece Tube to C-Mount	
108007		FMA075	1. Available Size for 18 mm Field 18X0.75mm 2. Fit to 1/1.8”~1” Size Sensor 3. 0.75X Magnification 4. Dia.23.2mm Eyepiece Tube to C-Mount	
1080081		FMA100	1. Available Size for 18 mm Field 18X1.00mm 2. Fit to 1” Size Sensor 3. 1.00X Magnification 4. Dia.23.2mm Eyepiece Tube to C-Mount	

*To cover the field, the sensor size should be smaller than the available size. experts will help you to select the correct Adapter for your ordered microscope camera. What you need to do is to select the right camera model.

3.3 31.75mm Eyepiece to C-mount Adjustable Telescope Eyepiece Adapter

ATA Specifications

Article Code	Picture	Model	Description	
108008		ATA037	1. Fit to 1/4" ~ 1/3" Size Sensor 2. 0.37X Magnification 3. Manually Focusable 4. Parfocal with the Eyepiece 5. C-Mount to Dia.31.75mm eyepiece tube	
108009		ATA050	1. Fit to 1/2" ~ 2/3" Size Sensor 2. 0.50X Magnification 3. Manually Focusable 4. Parfocal with the Eyepiece 5. C-Mount to Dia.31.75mm eyepiece tube	
108010		ATA075	1. Fit to 1/1.8" ~ 1" Size Sensor 2. 0.75X Magnification 3. Manually Focusable 4. Parfocal with the Eyepiece 5. C-Mount to Dia.31.75mm eyepiece tube	

*To cover the field, the sensor size should be smaller than the available size. experts will help you to select the correct Adapter for your ordered microscope camera. What you need to do is to select the right camera model.

3.4 31.75mm Eyepiece to C-mount Fixed Telescope Eyepiece Adapter

FTA Specifications

Article Code	Picture	Model	Description	
108011		FTA037	1. Fit to 1/4" ~ 1/3" Size Sensor 2. 0.37X Magnification 3. C-Mount to Dia.31.75mm eyepiece tube	
108012		FTA050	1. Fit to 1/2" ~ 2/3" Size Sensor 2. 0.50X Magnification 3. C-Mount to Dia.31.75mm eyepiece tube	
108013		FTA075	1. Fit to 1/1.8" ~ 1" Size Sensor 2. 0.75X Magnification 3. C-Mount to Dia.31.75mm eyepiece tube	

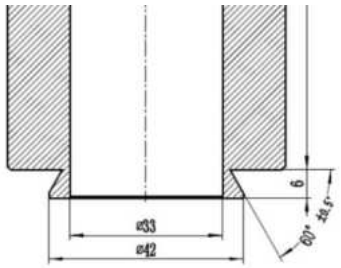
*To cover the field, the sensor size should be smaller than the available size. experts will help you to select the correct Adapter for your ordered telescope camera. What you need to do is to select the right camera model.

4 Olympus, Leica, Nikon, Zeiss Phototube to X-Mount Adapter

4.1 Olympus TV Adapter

4.1.1 Characteristic

- Convert the Olympus trinocular microscope phototube/head/port (have standard 42 mm，1.65 inch inner diameter for the insertion end to phototube) to traditional C-Mount type(25.4 mm or 1 inch diameter with 32 threads per inch), T2 mount type(M42x0.75 mm metric thread) or M52 mount type(M52x0.75mm metric thread);
- With different built-in reduction lens (2.25X, 1.5X,1.2X,1X, 0.8X,0.63X, 0.5X, 0.35X) for achieving better field of view from microscope trinocular head(suitable for 2.7”, 1.8”, 4/3”, 1”, 2/3”, 1/1.8”, 1/2”, 1/2.5”, 1/3” or 1/4” inch CCD or CMOS sensor chips);
- Can be installed in UIS trinocular tube such as : BX series, BX2 series, CX series, CX2 series, MX series;
- Build of material: anodized aluminum;
- Telecentric optics with low light deficiency;
- Parfocal with different microscope objective lenses;
- Diffraction limited MTF;
- Aperture totally coupled with UIS microscope objective’s exit pupil;
- The profile of one end of the adapter connecting to the microscope:



4.1.2 Specifications

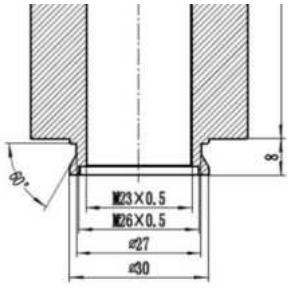
Model	Photo	Magnification	Sensor Size	Mount Type
AL225XM52 U-TV2.25XM52		2.25X	2.7”,1.8”, 4/3”, 1”	M52
AL150XT2 U-TV1.5XT2		1.5X	1.8”, 4/3”, 1”, 2/3”	T2-Mount

AL120XT2 **U-TV1.2XT2**		1.2X	4/3",1"	T2-Mount
AL100XC **U-TV1X-2/U-CAMD3**		1.0X	1", 2/3"	C-Mount
AL080XC **U-TV0.80XC**		0.80X	1",2/3"	C-Mount
AL063XC **U-TV0.63XC**		0.63X	2/3",1/1.8",1/2"	C-Mount
AL050XC **U-TV0.5XC-3**		0.50X	1/1.8",1/2",1/2.5"	C-Mount
AL035XC **U-TV0.35XC-2**		0.35X	1/3",1/4", 1/5"	C-Mount
Supported Microscope	Specially designed for Olympus CKX, CX，BX，MX，STM，SZX，IX，GX(GX41) series microscopes			

4.2 Zeiss 95 Series Microscope TV Adapter

4.2.1 P95 Series Zeiss Characteristic

- Convert the Zeiss trinocular microscope phototube/head/port (have standard ISO 30 mm, 1.18 inch inner diameter for the insertion end to phototube) to traditional C-Mount type(25.4 mm or 1 inch diameter with 32 threads per inch), T2 mount type(M42x0.75 mm metric thread) or M52 mount type(M52x0.75mm metric thread);
- With different built-in reduction lens (2.25X, 1.5X,1.2X,1X, 0.8X,0.63X, 0.5X, 0.35X) for achieving better field of view from microscope trinocular head(suitable for 2.7", 1.8", 4/3", 1", 2/3", 1/1.8", 1/2", 1/2.5", 1/3" or 1/4" inch CCD or CMOS sensor chips);
- Can be installed in Zeiss UIS trinocular tube such as:Zeiss PrimoStar series and Zeiss Primo vert series
- Build of material: anodized aluminum;
- Telecentric optics with low light deficiency;
- Parfocal with different microscope objective lenses;
- Diffraction limited MTF;
- Aperture totally coupled with UIS microscope objective's exit pupil;
- The profile of one end of the adapter connecting to the microscope:



4.2.2 Specifications for the P95 series adapter

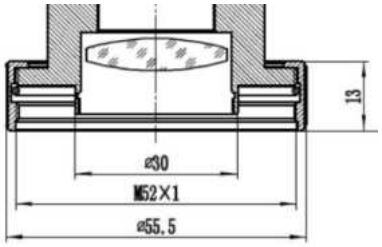
Model	Photo	Magnification	Sensor Size	Mount Type
P95-M52-2.7" 2.25X CSP225XM52		2.25X	2.7",1.8", 4/3", 1"	M52
P95-T2-1.8" 1.5X CSP150XT2		1.5X	1.8", 4/3", 1",2/3"	T2-Mount

CSP120XT2 P95-T2 4/3" 1.2x		1.2X	4/3"，1"	T2-Mount
CSP100XC P95-C 1" 1.0x		1X	1", 2/3"	C-Mount
CSP080XC P95-C 1" 0.8x(New)		0.8X	1",2/3"	C-Mount
CSP065XC P95-C 2/3" 0.65x		0.65X	2/3",1/1.8",1/2"	C-Mount
CSP050XC P95-C 1/2" 0.50x		0.5X	1/1.8",1/2",1/2.5"	C-Mount
CSP035XC P95-C 1/3" 0.35x		0.35X	1/3",1/4"，1/5"	C-Mount
Supported Microscope	Specially designed for Zeiss Primo Star series , Zeiss Primo vert series			

4.3 Zeiss 60N-C, 60N-T2 Series TV Adapter

4.3.1 60N-C, 60N-T2 60N-M52 Series TV Adapter Characteristic for Zeiss Microscope

- Convert the Zeiss trinocular microscope phototube/head/port (have standard M52x1mm outer diameter for the insertion end to phototube) to traditional C-Mount type(25.4 mm or 1 inch diameter with 32 threads per inch), T2 mount type(M42x0.75 mm metric thread) or M52 mount type(M52x0.75mm metric thread);
- With different built-in reduction lens (2.25X, 1.5X,1.2X,1X, 0.8X,0.63X, 0.5X, 0.35X) for achieving better field of view from microscope trinocular head(suitable for 2.7”, 1.8”, 4/3”, 1”, 2/3”, 1/1.8”, 1/2”, 1/2.5”, 1/3” or 1/4” inch CCD or CMOS sensor chips);
- Can be installed in Zeiss UIS trinocular tube such as Axio series microscope;
- Build of material: anodized aluminum;
- Telecentric optics with low light deficiency;
- Parfocal with different microscope objective lenses;
- Diffraction limited MTF;
- Aperture totally coupled with UIS microscope objective’s exit pupil;
- The profile of one end of the adapter connecting to the microscope:



4.3.2 Specifications for the 60N-M52, 60N-C or 60N-T2 series adapter

Model	Photo	Magnification	Sensor Size	Mount Type
CSN225XM52 60N-M52 2.7” 2.25X		2.25X	2.7”,1.8”, 4/3”, 1”	M52
CSN150XT2 60N-T2 1.8" 1.5x		1.5X	1.8”, 4/3”, 1”,2/3”	T2-Mount

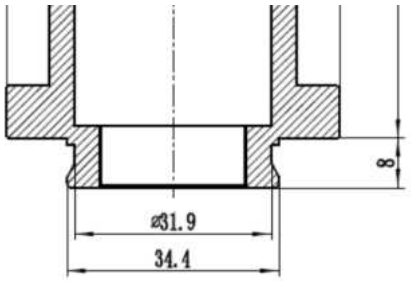
CSN120XT2 60N-T2 4/3" 1.2x		1.20X	1", 4/3"	T2-Mount
CSN100XC 60N-C 1" 1.0x		1.0X	1", 2/3"	C-Mount
CSN080XC 60N-C 1"0.8x		0.80X	1",2/3"	C-Mount
CSN063XC 60N-C 2/3" 0.63x		0.63X	2/3",1/1.8",1/2"	C-Mount
CSN050XC 60N-C 1/2" 0.5x		0.50X	1/1.8",1/2",1/2.5"	C-Mount
Supported Microscope	Axio Examiner.A1; Axio Examiner.D1; Axio Examiner.Z1; Axio Imager Vario; Axio Imager.A1; Axio Imager.A1m; Axio Imager.A2; Axio Imager.A2m; Axio Imager.D1; Axio Imager.D1 for epi-fluorescence with ApoTome equipment; Axio Imager.D1m; Axio Imager.D2; Axio Imager.D2m; Axio Imager.M1 (Axio Imager.M1 for KS ELISPOT); Axio Imager.M1m; Axio **Imager**.M2; Axio Imager.M2m; Axio Imager.Z1; Axio Imager.Z1 + ApoTome; Axio Imager.Z1m; Axio Imager.Z2; Axio Imager.Z2m; Axio Lab.A1; Axio Lab.A1 FL-LED; Axio Lab.A1 MAT; Axio Lab.A1 Pol; Axio Observer.A1; Axio Observer.A1 Entry; Axio Observer.D1; Axio Observer.D1 Entry; Axio Observer.D1 Mid Range; Axio Observer.Z1; Axio Observer.Z1 High End; Axio Scope.A1; Axio Scope.A1 Pol; Axio Scope.A1 Vario; Axio Vert.A1; Axio Vert.A1 FL; Axio Vert.A1 FL-LED; Axio Vert.A1 MAT; Axio Zoom.V16; PALM CombiSystem Rel. 4.2; PALM MicroBeam; PALM MicroBeam Rel.4.2; PALM MicroTweezers Rel.4.2; Stemi 508 doc; Stemi 508 trino; SteREO Discovery.V12; SteREO Discovery.V8; SteREO Lumar.V12;			

The Primo Star Camera

4.4 LEICA TV Adapter

4.4.1 Characteristic

- Convert the LEICA trinocular microscope phototube/head/port (have standard 34.4 mm,1.35 inch inner diameter for the insertion end to phototube) to traditional C-Mount type(25.4 mm or 1 inch diameter with 32 threads per inch), T2 mount type(M42x0.75 mm metric thread) or M52 mount type(M52x0.75mm metric thread);
- With different built-in reduction lens (2.25X, 1.5X,1.2X,1X, 0.8X,0.63X, 0.5X, 0.35X) for achieving better field of view from microscope trinocular head(suitable for 2.7", 1.8", 4/3", 1", 2/3", 1/1.8", 1/2", 1/2.5", 1/3" or 1/4" inch CCD or CMOS sensor chips);
- Can be installed in UIS trinocular tube such as: specially designed for LEICA DM series biology microscopes and industrial microscopes;
- Build of material: stainless steel material;
- Telecentric optics with low light deficiency;
- Parfocal with different microscope objective lenses;
- Diffraction limited MTF;
- Aperture totally coupled with LEICA UIS microscope objective's exit pupil;
- The profile of one end of the adapter connecting to the microscope:



4.4.2 Specifications

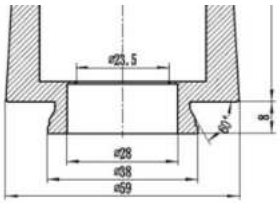
Model	Photo	Magnification	Sensor Size	Mount Type
HM52 2.25X **LK225XM52**		2.25X	2.7",1.8", 4/3", 1"	M52
HT2 1.5X **LK150XT2**		1.5X	1.8", 4/3", 1",2/3"	T2-Mount
11541510-120 LK120XT2 HT2 1.2X(New)		1.2X	4/3", 1"	T2 Mount

11541510 LK100XC HC 1.0X		1.0X	1”, 2/3”	C-Mount
11541510-080 LK080XC HC 0.80X		0.8X	1”, 2/3”	C-Mount
11541543 LK070XC HC 0.7X		0.7X	2/3”,1/1.8”,1/2”	C-Mount
11541544 LK055XC HC-0.55X		0.55X	1/1.8”,1/2”,1/2.5”	C-Mount
11541512 LK035XC HC-0.35X		0.35X	1/2.5”,1/3”,1/4”	C-Mount
Supported Microscope	Specially designed for LEICA DM series biology microscopes and industrial microscopes			

4.5 NIKON TV Adapter

4.5.1 Characteristic

- Convert the NIKON trinocular microscope phototube/head/port (have standard 38 mm, 1.50-inch inner diameter for the insertion end to phototube) to traditional C-Mount type(25.4 mm or 1 inch diameter with 32 threads per inch), T2 mount type(M42x0.75 mm metric thread) or M52 mount type(M52x0.75mm metric thread);
- With different built-in reduction lens (2.25X, 1.5X,1.2X,1X, 0.8X,0.63X, 0.5X, 0.35X) for achieving better field of view from microscope trinocular head(suitable for 2.7", 1.8", 4/3", 1", 2/3", 1/1.8", 1/2", 1/2.5", 1/3" or 1/4" inch CCD or CMOS sensor chips);
- Can be installed in UIS trinocular tube such as : NIKON E100/E200, Ni/Ci series, Eclipse LV100N, 50i/55i/80i/90i series
- Upright: Alphaphot-2, Eclipse series(requires YT-tube), Labophot-2,Optiphot-2, Optiphot 100S/150/200/300;
- Metallurgical: EPIPHOT 300/200;
- Measuring: MM-40/MM-60;
- Inverted: Diaphot 200/300, TS100-F, TE2000;
- Build of material: stainless steel material for the C-Mount end and spray-painted aluminum for the phototube end;
- Telecentric optics with low light deficiency;
- Parfocal with different microscope objective lenses;
- Diffraction limited MTF;
- Aperture totally coupled with UIS microscope objective's exit pupil;
- The profile of one end of the adapter connecting to the microscope:



4.5.2 Specification

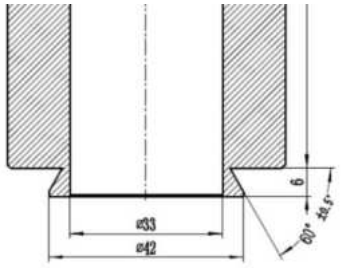
Model	Photo	Magnification	Sensor Size	Mount Type
NK225XM52 MBB42225		2.25X	2.7",1.8", 4/3", 1"	M52
NK150XT2 MBB42150		1.5X	1.8", 4/3", 1",2/3"	T2-Mount

MQD42120(New) NK120XT2 MBB42120		1.2X	4/3”,1”	T2-Mount
MQD42000 NK100XC MBB42000		1.0X	1”, 2/3”	C-Mount
MQD42080 NK080XC MBB42080		0.8X	1”,2/3”	C-Mount
MQD42070 NK070XC MBB42070		0.7X	2/3”,1/1.8”,1/2”	C-Mount
MQD42055 NK055XC MBB42055		0.55X	1/1.8”,1/2”,1/2.5”	C-Mount
MQD42035 NK035XC MBB42035		0.35X	1/2.5”,1/3”,1/4”	C-Mount
Supported Microscope	Can be installed in UIS trinocular microscope such as : NIKON E100/E200, Ni/Ci series, Eclipse LV100N, 50i/55i/80i/90i series Upright: Alphaphot-2, Eclipse series, Labophot-2, Optiphot-2, Optiphot 100S/150/200/300； Metallurgical: EPIPHOT 300/200; Measuring: MM-40/MM-60; Inverted: Diaphot 200/300, TS100-F, TE2000；			

4.6 HUVITZ TV Adapter

4.6.1 Characteristic

- Convert the HUVITZ trinocular microscope phototube/head/port (have standard 42 mm，1.65 inch inner diameter for the insertion end to phototube) to traditional C-Mount type(25.4 mm or 1 inch diameter with 32 threads per inch), T2 mount type(M42x0.75 mm metric thread) or M52 mount type(M52x0.75mm metric thread);
- With different built-in reduction lens (2.25X, 1.5X,1.2X,1X, 0.8X,0.63X, 0.5X, 0.35X) for achieving better field of view from microscope trinocular head(suitable for 2.7”, 1.8”, 4/3”, 1”, 2/3”, 1/1.8”, 1/2”, 1/2.5”, 1/3” or 1/4” inch CCD or CMOS sensor chips);
- Can be installed in UIS trinocular tube such as : HRM series, HSZ series microscope;
- Build of material: anodized aluminum;
- Telecentric optics with low light deficiency;
- Parfocal with different microscope objective lenses;
- Diffraction limited MTF;
- Aperture totally coupled with UIS microscope objective’s exit pupil;
- The profile of one end of the adapter connecting to the microscope:



4.6.2 Specifications

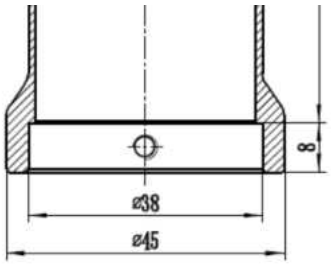
Model	Photo	Magnification	Sensor Size	Mount Type
HSZ-M52P2.25X		2.25X	2.7”,1.8”, 4/3”, 1”	M52
HSZ-T2P1.5X		1.5X	1.8”, 4/3”, 1”, 2/3”	T2-Mount

HSZ-T2P1.2X		1.2X	4/3”,1”	T2-Mount
HSZ-CP1X		1X	1”, 2/3”	C-Mount
HSZ-CP0.80X		0.80X	1”,2/3”	C-Mount
HSZ-CP0.63X		0.63X	2/3”,1/1.8”,1/2”	C-Mount
HSZ-CP0.5X		0.5X	1/1.8”,1/2”,1/2.5”	C-Mount
HSZ-CP0.35X		0.35X	1/3”,1/4”， 1/5”	C-Mount
Supported Microscope	Specially designed for HUVITZ HRM series, HSZ series microscopes			

4.7 Labomed TV Adapter

4.7.1 Characteristic

- Convert the Labomed trinocular microscope phototube/head/port (have standard 38 mm, 1.50 inch outer diameter for the insertion end to phototube) to traditional C-Mount type(25.4 mm or 1 inch diameter with 32 threads per inch);
- With different built-in reduction lens (1X, 0.63X, 0.5X, 0.35X) for achieving better field of view from microscope trinocular head(suitable for 1", 2/3", 1/1.8", 1/2", 1/2.5", 1/3" or 1/4" inch CCD or CMOS sensor chips);
- Can be installed in UIS trinocular tube such as : LB series microscope;
- Build of material: anodized aluminum;
- Telecentric optics with low light deficiency;
- Parfocal with different microscope objective lenses;
- Diffraction limited MTF;
- Aperture totally coupled with UIS microscope objective's exit pupil;
- The profile of one end of the adapter connecting to the microscope:



4.7.2 Specifications

Model	Photo	Magnification	Sensor Size	Mount Type
LB1.0X		1X	1", 2/3"	C-Mount
LB0.75X		0.75X	2/3",1/1.8",1/2"	C-Mount
LB0.65X		0.65X	1/1.8",1/2",1/2.5"	C-Mount

LB0.50X		0.5X	1/2.3,1/2.5",1/3"	C-Mount
LB0.35X		0.35X	1/2.5",1/3",1/4"	C-Mount
Supported Microscope	Specially designed for Labomed LB series microscopes			

5 Microscope 23.2 to 30, 30.5, 30.75 Eyepiece Converter

5.1 The Basic Characteristic of the Eyepiece Converter

- The Eyepiece converter can make the 23.2 mm camera Adapter to different size microscope and telescope eyepiece holder. The FMA and AMA end size is 23.2mm and can be directly inserted into the 23.2mm microscope eyepiece holder;
- For 23.2 eyepiece holder, no extra converter is needed for the microscope;
- The 23.2mm to 30.0mm converter is needed to connecting the 23.2mm camera Adapter to the 30 mm eyepiece holder microscope;
- The 23.2mm to 30.5mm converter is needed to connecting the 23.2mm camera Adapter to the 30.5 mm eyepiece holder microscope;
- The 23.2mm to 31.75mm converter is needed to connecting the 23.2mm camera Adapter to the 31.75 mm eyepiece holder microscope;
- For 31.75~~ mm eyepiece holder, user can directly use 31.75mm FMA and AMA for their C-mount Camera.~~

5.2 Specification of the Eyepiece Converter

Order Code	Picture	Model	Characteristic
108015		MET2323000	Dia.23.2mm to 30.0mm Converter
108016		MET2323050	Dia.23.2mm to 30.5mm Converter
108017		MET2323175	Dia.23.2mm to 31.75mm Converter

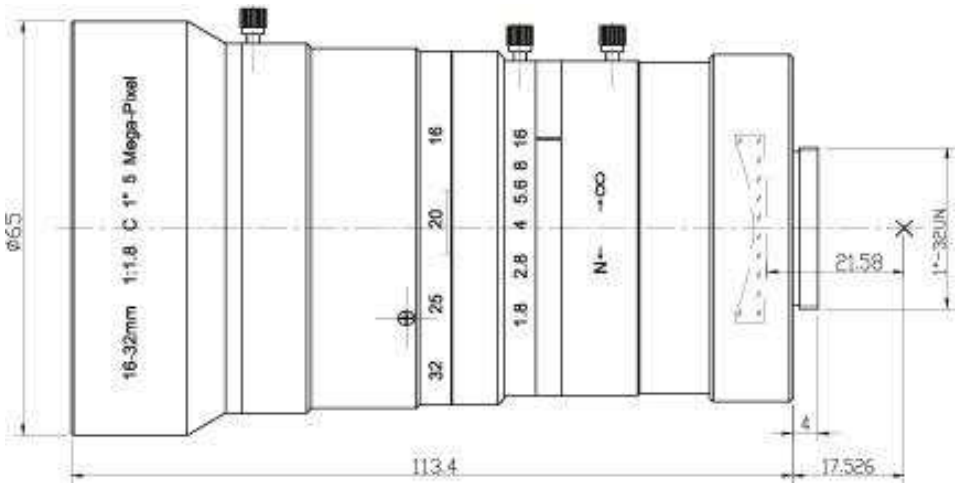
6 Lens for Machine Vision

6.1 TP-1632ZL5M (16mm~32mm, 1” Format)

6.1.1 Specification

Resolution:	150lp/mm
Format :	1 "
Mount :	C
Focal Length :	16 ~ 32mm
F/No:	F1.8~F16
Iris Type :	Manual Iris
Horizontal of view :	53.2° ~ 27.5°
Distortion :	±1%
Focusing range :	∞ ~ 0.3m
Coating Range:	400nm~950nm
Filter Thread:	M62 x 0.75mm
Dimension:	℄ 66 x 113.35mm
Weight:	619g

6.1.2 Drawing and Optical Performance



6.2 TPWA Series Lens with CS-mount

Model No.	Focal Length	Aperture	Mount	Format	FOV	Dimensions	M.O.D(m)	Weight(g)	Remarks
TPF-F02116	2.1mm	2.0	CS	1/3″	151°	Φ30*16.7mm	0.2	45	
TPF-F02516	2.5mm	2.0	CS	1/3″	140°	Φ30*19mm	0.2	45	
TPF-F02816	2.8mm	2.0	CS	1/3″	138°x104°x74°	Φ30*17.7mm	0.2	38	

6.3 TP3MP Series Lens with CS-mount

Model No.	Focal Length	Aperture	Mount	Format	FOV	Dimensions	M.O.D(m)	Weight(g)	Remarks
TPF-F02512IR3MP	2.5mm	1.2	CS	1/2.5″	115°x109°x90°	Φ28*23.6mm	0.2	32.6	全金属
TPF-F02812IR3MP	2.8mm	1.2	CS	1/2.5″	110°x104°x90°	Φ28*23.6mm	0.2	32.6	全金属
TPF-F0412IR3MP	4.0mm	1.2	CS	1/2.5″	76°	Φ28*30.0mm	0.2	44.6	全金属
TPF-F0612IR3MP	6.0mm	1.2	CS	1/2.5″	49.8°	Φ30*32.5mm	0.2	49.2	全金属
TPF-F0812IR3MP	8.0mm	1.2	CS	1/2.5″	35°	Φ30*32.5mm	0.2	49.2	全金属
TPF-F2512IR3MP	25mm	1.2	CS	1/2.5″	16.7°	Φ30*32.2mm	0.2	54	全金属

6.4 TP2MP Series Lens with CS-mount

Model No.	Focal Length	Aperture	Mount	Format	FOV	Dimensions	M.O.D(m)	Weight(g)	Remarks
TPF-F0411IR2MP	4mm	F1.2	CS	1/2.″	80°	Φ30*30.0mm	0.2	49.5	全金属
TPF-F4080HD	4mm	F1.2	CS	1/2.7″	82.6°	Φ28*31.5mm	0.2m	48	
TPF-F0611IR2MP	6mm	1.2	CS	1/2.″	54°	Φ30*30.0mm	0.2	50.5	
TPF-F6080HD	6mm	F1.2	CS	1/2.7″	54°	Φ28*31.5mm	0.2m	50.5	
TPF-F0811IR2MP	8mm	1.2	CS	1/2.″	40°	Φ30*30.0mm	0.2	48.4	全金属
TPF-F1211IR2MP	12mm	1.2	CS	1/2.″	28°5′	Φ30*30.0mm	0.2	49.5	全金属
TPF-F1611IR2MP	16mm	1.2	CS	1/2.″	23°	Φ30*30.0mm	0.2	33.0	全金属

6.5 TP1MP Series Lens with CS-mount

Model No.	Focal Length	Aperture	Mount	Format	FOV	Dimensions	M.O.D(m)	Weight(g)	Remarks
TPF-F0412IR	4.0mm	1.2	CS	1/3″	63.8°	Φ30*35mm	0.2	49.5	全金属
TPF-F0612IR	6.0mm	1.2	CS	1/3″	45.3°	Φ30*33mm	0.2	45.5	全金属
TPF-F0812IR	8.0mm	1.2	CS	1/3″	34°.12’	Φ30*34mm	0.2	48.4	全金属
TPF-F1212IR	12mm	1.2	CS	1/3″	17°42’	Φ30*32mm	0.2	33	全金属
TPF-F1612IR	16mm	1.2	CS	1/3″	17°42’	Φ30*32mm	0.2	33	全金属
TPF-F0814IR	8mm	1.4	CS	1/3″	34°42’	Φ30*26.5mm	0.2	33.5	全金属
TPF-F2514IR	25mm	1.4	CS	1/3″	13°7’	Φ30*36mm	0.2	47	全金属
TPF-F1214IR	12mm	1.4	CS	1/3″	23°30’	Φ28*25.2mm	0.2	27.6	全金属
TPF-F0414IR	4.0mm	1.4	CS	1/3″	63.8°	Φ30*30.15mm	0.2	38.5	全金属
TPF-F0614IR	6.0mm	1.4	CS	1/3″	44.5°	Φ30*32mm	0.2	36	全金属
TPF-F1614IR	16mm	1.4	CS	1/3″	17°1’	Φ30*32mm	0.3	36.5	全金属
TPF-F2514IR-C	25mm	1.4	C	1/2″	63.8°	Φ30*31mm	0.2	47	全金属

6.6 FA-A Series Machine Vision Lens (1/1.9” 6M Resolution)

6.6.1 Characteristic

- Compatible with 6M resolutions sensor
- The minimum F# is 2.8， support the maximum 1/1.9” sensor
- Super low distortion and high relative illumination
- Optimized for machine vision illumination light and sensor
- Smart structure, high seismic resistance, high and low temperature work stability
- Multilayer broadband coating ensures high transmittance and low stray light of visible and near infrared light
- Support ultra-short work distance, the different working distances are optimized to ensure the lens's optimal performance

6.6.2 Specifications (7)

Model	EFFL (mm)	F# Number	Optical Distortion	FOV			Minimum Working Distance(m)	Filter Thread	Interface
				D	H	V			
FA-A0628M-6MP	6	F2.8-F16	-1.50%	73.5°	62.8°	44.5°	0.035	~	C
FA-A0828M-6MP	8	F2.8-F16	-0.96%	58.5°	49.3°	34.0°	0.04	M27*0.5	C
FA-A1228M-6MP	12	F2.8-F16	-0.38%	41.2°	34.4°	23.4°	0.06	M27*0.5	C
FA-A1628M-6MP	16	F2.8-F16	-0.08%	31.0°	25.7°	17.5°	0.07	M27*0.5	C
FA-A2528M-6MP	25	F2.8-F16	-0.02%	19.8°	16.3°	10.9°	0.15	M25.5*0.5	C
FA-A3528M-6MP	35	F2.8-F16	-0.02%	13.8°	11.3°	7.6°	0.18	M27*0.5	C
FA-A5028M-6MP	50	F2.8-F16	0.11%	9.7°	8.0°	5.4°	0.30	M25.5*0.5	C

6.6.3 Lens Layout

6.7 FA-B Series Machine Vision lens (2/3” 6M Resolution)

6.7.1 Lens Characteristic

- Compatible with 6M resolutions sensor
- The minimum F# is 2.0， support the maximum 2/3” sensor
- Super low distortion to ensure high measurement accuracy
- Compact structure, can be integrated to compact apparatus
- High performance price ratio

6.7.2 Specifications (6)

Model	EFFL(mm)	F# Number	Optical Distortion	FOV			Minimum Working Distance(m)	Filter Thread	Interface
				D	H	V			
FA-B0824M-5MP	8	F2.4-F16	-2.06%	70.2°	58.1°	44.5°	0.03	~	C
FA-B1220M-5MP	12	F2.0-F16	-1.01%	48.8°	40.2°	30.6°	0.08	~	C
FA-B1620M-5MP	16	F2.0-F16	-0.28%	37.8°	30.8°	23.5°	0.10	M27*0.5	C
FA-B2520M-5MP	25	F2.0-F16	-0.88%	23.5°	18.8°	14.2°	0.15	M27*0.5	C
FA-B3520M-5MP	35	F2.0-F16	-0.09%	17.8°	14.3°	10.8°	0.20	M27*0.5	C
FA-B5028M-5MP	50	F2.8-F16	0.04%	12.5°	10.1°	7.5°	0.35	M27*0.5	C

6.7.3 Lens Layout

6.8 FA-C Series Machine Vision Lens(1” 10M Resolution)

6.8.1 Lens Characteristic

- Compatible with 10M resolutions sensor
- The minimum F# is 2.8， support the maximum 1” sensor
- Super low distortion and high relative illumination
- Optimized for machine vision illumination light and sensor
- Smart structure, high seismic resistance, high and low temperature work stability
- Multilayer broadband coating ensures high transmittance and low stray light of visible and near infrared light
- Support ultra-short work distance, the different working distances are optimized to ensure the lens's optimal performance

6.8.2 Specifications(5)

Model	EFFL(mm)	F# Number	Optical Distortion	FOV			Minimum Working Distance(m)	Filter Thread	Interface
				D	H	V			
FA-C1228M-12MP	12	F2.8-F16	-1.79%	70.5°	59.8°	46.2°	0.10	~	C
FA-C1628M-12MP	16	F2.8-F16	-1.30%	54.8°	44.9°	33.9°	0.08	M35.5*0.5	C
FA-C2528M-12MP	25	F2.8-F16	0.40%	36.7°	29.6°	22.1°	0.12	M35.5*0.5	C
FA-C3528M-12MP	35	F2.8-F16	-0.21%	26.7°	21.4°	15.9°	0.18	M35.5*0.5	C
FA-C5028M-12MP	50	F2.8-F16	-0.05%	18.9°	15.1°	11.2°	0.28	M35.5*0.5	C

6.8.3 Lens Layout

6.9 FA-D and FA-E Series Telecentric Lens

6.9.1 Lens Characteristic

- FA-D is compatible with 2/3” sensor， FA-E is compatible with 1/2“ sensor
- Object space telecentric design
- High resolution, high contrast and high relative illumination
- Ultra low distortion and suite for high accuracy measurement and alignment
- Standard C-mount interface

6.9.2 Specifications (18)

Model	Magnification	WD (mm)	Sensor Size	DOF (mm)	Resolution (um)	Optical Distortion	Telecentricity	F#	TTL（mm）	Max Diameter (mm)	Coaxial Illumination
FA-D-05-110	0.5	110	2/3"	2.98	12	≤0.05%	≤0.1°	9.3	120.5	35	√
FA-D-08-65	0.8	65	2/3"	1.25	8.3	≤0.10%	≤0.1°	10	89.7	26	
FA-D-08-130	0.8	130	2/3"	1.4	9.4	≤0.10%	≤0.1°	11.2	117.1	28	√
FA-D-1-65	1	65	2/3"	0.8	7.5	≤0.10%	≤0.1°	11	79.9	26	√
FA-D-1-110	1	110	2/3"	0.88	7.4	≤0.05%	≤0.1°	11	128.4	30	√
FA-D-2-65	2	65	2/3"	0.2	4.5	≤0.10%	≤0.1°	13.2	80.0	26	√
FA-D-2-110	2	110	2/3"	0.27	4.5	≤0.05%	≤0.1°	13.6	130.4	30	√
FA-D-4-110	4	110	2/3"	0.11	3.7	≤0.05%	≤0.1°	22	110.2	30	
FA-E-05-110	0.5	110	1/2"	2.9	25.4	≤0.50%	≤0.1°	18.8	46.2	16	
FA-E-05-65	0.5	65	1/2"	2	8.5	≤0.10%	≤0.1°	6.5	68.0	16	
FA-E-08-65	0.8	65	1/2"	2.9	20	≤0.10%	≤0.1°	23.9	76.0	16	√
FA-E-08-130	0.8	130	1/2"	2.9	20	≤0.10%	≤0.1°	23.5	97.1	18	√
FA-E-1-65	1	65	1/2"	1.1	10	≤0.20%	≤0.1°	14.9	80.0	16	√
FA-E-1-110	1	110	1/2"	1.5	13.2	≤0.10%	≤0.1°	19.7	109.8	18	√
FA-E-2-65	2	65	1/2"	0.33	5.6	≤0.10%	≤0.1°	16.7	80.1	16	
FA-E-2-110	2	110	1/2"	0.7	12.9	≤0.20%	≤0.1°	31.7	73.8	16	
FA-E-3-110	3	110	1/2"	0.3	7.65	≤0.10%	≤0.1°	34.2	117.1	16	√
FA-E-4-110	4	110	1/2"	0.18	6.1	≤0.10%	≤0.1°	36.3	132.5	16	√

FA-D is compatible with 2/3” sensor， FA-E is compatible with 1/2“ sensor

6.9.3 Lens Layout