

**FUJIFILM**  
Value from Innovation



Focused on the Future

**FUJINON**

TELEVISION LENSES & CINE LENSES  
2024

# Television Lenses

Fujifilm has been engaged in the development and production of TV Lenses for over 50 years. FUJINON TV Lenses have supported image creation throughout the world with our own unique technologies such as, optical design development, advanced manufacturing capabilities and exceptional quality. All FUJINON lenses are intentionally designed keeping in mind the optical, mechanical and electronic requirements of visual creators. Making use of our highly accurate design, manufacturing and assembly skills, Fujifilm will continue to develop unique products, and answer the diverse needs of videographers worldwide.

**4K**  
ULTRA HD

**HD**  
HIGH-DEFINITION

## FUJINON Lens Model Explanation

### Studio/Field Box Lenses

1 2 3 4 5 6 7 8 9  
**UA 107 x 8.4 B E SM - T 35 K**

1	Camera Image Sensor Format	<b>UA</b>	4K-UHD 2/3" Sensor Format
		<b>XA</b>	HD 2/3" Sensor Format
		<b>HA</b>	2/3" Sensor Format
2	Zoom Ratio		
3	Wide End of Focal Length		
4	Bayonet Mount		
5	Extender	<b>E</b>	with Extender
6	Lens Control Type	<b>SM</b>	Servo / Manual Module Interchangeable
		<b>S</b>	Servo Only
7	Lens Type	<b>S/T</b>	Field Lens with OS-TECH
		<b>F</b>	Studio Lens
8	Lens Mount	<b>35/45</b>	For Studio Standard Camera Mount (BTA Type)
9	Special Function	<b>E</b>	with 1.2x Extender
		<b>K</b>	with AF

### ENG / EFP Portable Lenses

1 2 3 4 5 6 7 8  
**UXS 20s x 9.5 B E RD - UK**

1	ENG / EFP Portable Lens Category	<b>U</b>	UHD Premier Series
		<b>H</b>	High Definition Premier Series
		<b>Z</b>	High Definition Select Series
		<b>X</b>	High Definition eXceed Series
2	Camera Image Sensor Format	<b>A</b>	2/3" Sensor Format
		<b>S</b>	1/2" Sensor Format
		<b>T</b>	1/3" Sensor Format
3	Zoom Ratio		
4	Wide End of Focal Length		
5	Bayonet Mount		
6	Extender	<b>E</b>	with Extender
7	Lens Control Type	<b>RM</b>	Zoom Servo, Focus Manual
		<b>RD</b>	Zoom Servo, Focus Servo
		<b>MD</b>	Remote Control
8	Drive Unit Type	<b>M</b>	Digital Drive Unit / Zoom Servo, Focus Manual
		<b>S</b>	Digital Drive Unit / Zoom Servo, Focus Servo
		<b>U</b>	Digital Drive Unit / Zoom Servo, Focus Servo, with OS-TECH
		<b>G</b>	Digital Drive Unit / Zoom Servo, Focus Servo, with OS-TECH, Extender Remote
		<b>T</b>	Digital Drive Unit / Zoom Servo, Focus Servo, with Quick Frame
		<b>K</b>	eXceed Drive Unit / Zoom Servo, Focus Manual
		<b>DSD</b>	Remote Control Drive Unit / Video Control (Zoom, Focus, Iris)
		<b>O</b>	without Digital Drive Unit

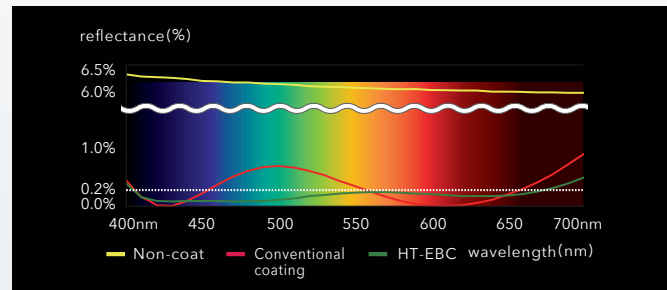


# FUJINON Lens Technology

All large-diameter elements designed for broadcast lenses are the end result of our state of the art optical performance and high quality manufacturing technologies.

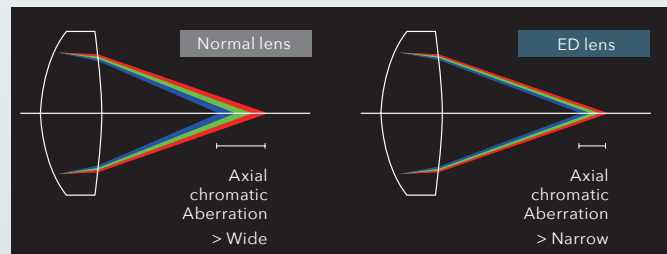
## HT-EBC Coating (High Transmittance Electron Beam Coating)

HT-EBC (High Transmittance Electron Beam Coating) is the multi layer coating technology developed to enhance the many high performance lens elements used in broadcast lenses. Lenses with HT-EBC boast high transmittance and low reflectivity over a broad wavelength band. Thanks to the coating, flare and ghost are decreased and realizing high edge to edge transmittance.



## ED-Glass (Extra-Low Dispersion)

By employing ED Glass elements, it is possible to significantly reduce chromatic aberrations. In addition, the reduced chromatic aberration is consistent from the center to the edge producing a superior image with high contrast and sharpness.



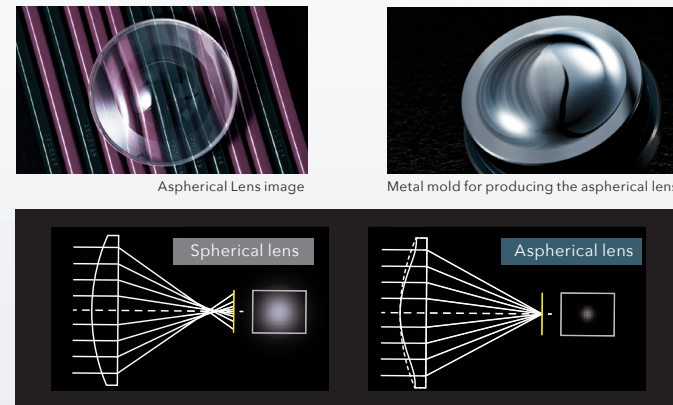
## Technology for 8K

Fujifilm has been doing research and development for 8K Super Hi-Vision lenses. The Super Hi-Vision system offers an image beyond ultra high definition with 4,320 scanning lines and 33,000,000 pixels, 16 times that of the High-Vision system. A lens developed for Super Hi-vision must feature extremely high resolution as compared to current lenses. Current 4K High-Vision lenses can not meet the Super Hi-Vision resolution requirement. Thanks not only to our optical design and production technology but also to our latest optical simulation programs and special materials; Fujifilm has been able to achieve 8K optical performance. At the same time, current lens operability is possible by minimizing the lens size and by employing an electronically controlled drive unit. Currently, the 8K Super Hi-Vision lenses being tested under real shooting conditions with plans for their future introduction.



## Aspherical Lens

Aspherical lens developed by Fujifilm's own technology will suppress various aberrations such as distortion and spherical aberrations effectively.



## Calcium Fluorite

It equipped fluorite which has high optical performance to broadcast lens. Contribute to suppress chromatic aberrations.

## Design Concept

In addition, Fujifilm has employed ergonomic design principles for all operational parts based upon input from talented camera operators. All lenses are also designed to reduce the use of hazardous materials that could pollute the environment. One example is the use of eco-glass, which does not contain toxic substances.

## Award of FUJINON Lens

### Emmy Award

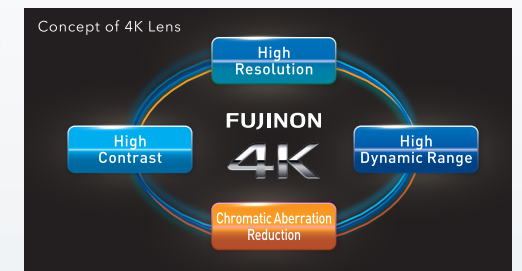
- 1996 Development of a TV Lens Adapted to CCD
- 2005 Developing High-Performance Lenses Adapted to Hi-Vision
- 2009 Precision Focus Technology
- 2017 Development of cine zoom lenses



## 4K Ultra HD 2/3" Lenses for Broadcast -UA Series-

### Introducing the New Expanded 4K Broadcast Lens Lineup from FUJINON.

4K demands a higher dimension of performance, and the expanded FUJINON 4K broadcast lens lineup meets the challenge. Extending the limits of "High Resolution", "High Contrast", "Chromatic Aberration Reduction" and "High Dynamic Range", FUJINON's cutting-edge optical technology presents the next standard in optical performance - image quality that exceeds the high expectations of imaging professionals.



#### High Resolution

Resolution that matches the ultra-fine pitch of 4K pixels results in crisp and crystal clear images.

#### High Contrast

Superb image sharpness is achieved by improving MTF even for low-frequency objects that are generally common in the image.

#### Chromatic Aberration Reduction

The combination of fluorite ED (extra low dispersion) and super ED lens elements minimizes color fringing and delivers clear, crisp images.

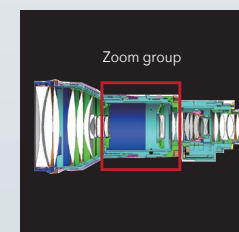
#### High Dynamic Range

To take full advantage of the expanded dynamic range offered by HDR cameras, we rigorously suppress flare and faithfully transmit the important "blacks" in video image rendering.

### Key technology

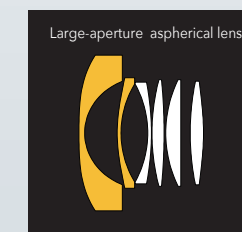
#### 1. Multi-group zoom system

By employing a multi-group zoom structure, aberrations are suppressed over the entire zoom range from wide angle to telephoto, realizing high image quality.



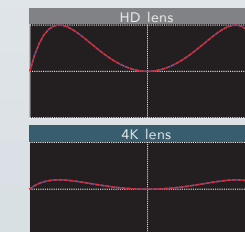
#### 2. Large-aperture aspherical lens

Using a high-precision large-aperture aspherical lens element ensures high MTF to the very edges of the image.



#### 3. Improved surface accuracy

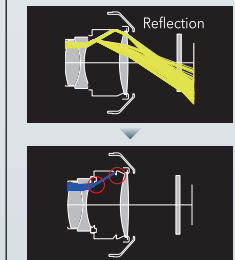
Development of new polishing techniques and improvements in measurement precision achieve surface accuracy more than three times higher than that of HD, contributing to higher image quality.



### Key technology

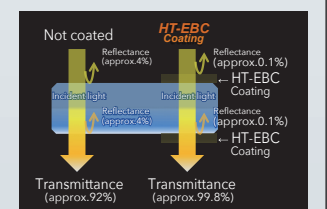
#### 4. Development of new barrel design

Optimizing the shape of the lens barrel interior as well as its surface treatment effectively suppresses ghosting and flares.



#### 5. New coating system

Adopting HT-EBC coating technology that achieves a low 0.2% reflection or less over a wide spectrum of wavelengths keeps surface reflection of the lens to the absolute minimum and makes it possible to render truer "blacks". In addition, camera adjustment is easier because the transmittance balance is improved from the shortest to the longest visible wavelengths.



## Natural bokeh achieved with nine iris blades

By adopting nine iris blades, FUJINON 4K lenses achieve a nearly circular aperture. This makes it possible to render images taking full advantage of a softer, more natural bokeh.

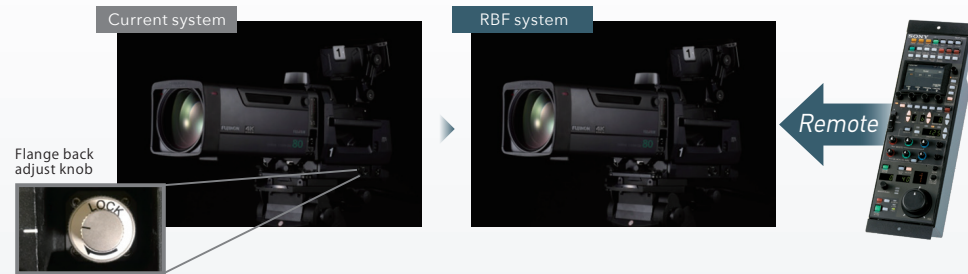


Six iris blades

Nine iris blades

## Remote Back Focus (RBF)

RBF enables precise remote control of back focus adjustments via the camera or robotic control panel while viewing a large video monitor in a studio production control room or mobile unit. During set up or if the shooting environment changes due to temperature, etc., the lens can be adjusted remotely at great distances, making more efficient shooting possible.



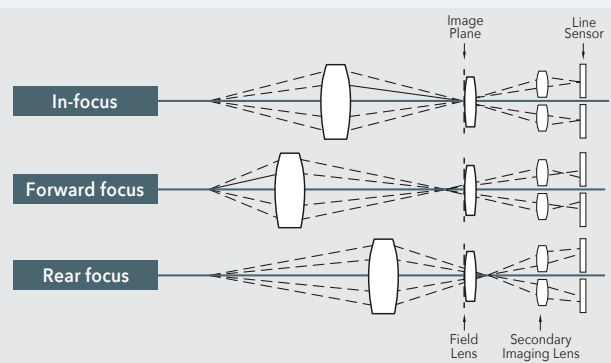
## Advanced Focus System



The AF system uses FUJINON's proprietary phase detection system, enabling instant focusing without having to search for focus. This increases accuracy even in situations where focus is difficult to determine in the viewfinder. When shooting video, the operator can concentrate on zooming without worrying about focus control.



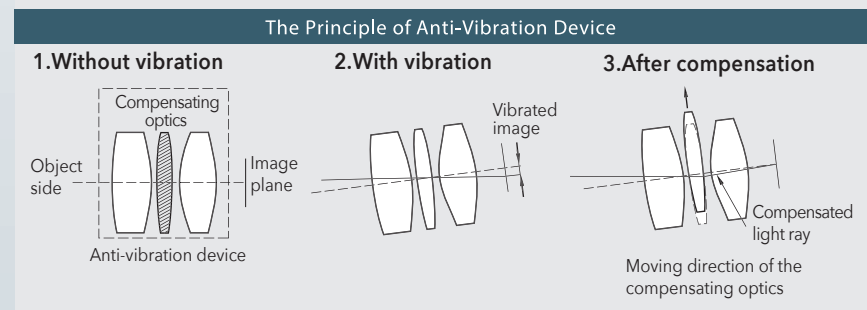
UA107x8.4 BESM AF



## Optical Stabilized Technology



OS-TECH features "The Optical Shift System" where a shift correction signal is generated to optically compensate for vibration according to the amount of the movement detected. This system responds quickly and reduces the phenomenon to a minimum allowing for a natural looking image. The conveniently located control allows the operator to switch the anti-vibration system on and off.



## Breathing Compensation Technology(BCT)

Breathing Compensation Technology(BCT) synchronizes zoom movement with the focus movement to automatically correct for changes in the angle of view, thereby minimizing breathing and keeping the image size constant. BCT function eliminates the need to reset the angle of view after focusing, providing a high level of operability.

## Quick Zoom



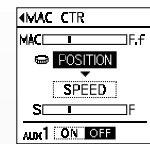
Quick Zoom is a function to temporarily zoom to a telephoto position simply by pressing and holding a switch. Releasing the switch returns the lens to its original position. Since it moves at maximum speed from the originating position to the telephoto end, it enables quick focus checks and fine tuning—helpful support for the user during video production.

## Macro Function

Macro function can be activated from the ERD-50A-D01. As the focus position and speed is adjustable from the LCD panel, it can also be used to create natural bokeh scene effectively.

	Macro ON
UA27x6.5BESM	0.05m
UA70x8.7BESM	0.3m
UA107x8.4BESM	0.3m
UA125x8BESM	0.3m
HZK25-1000mm	0.7m

\*From front lens at wide end

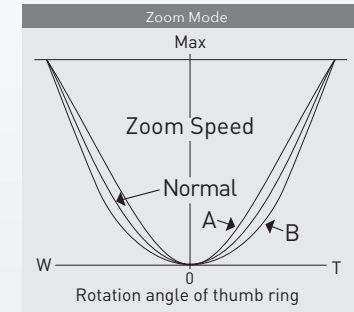


Zoom Rate Demand Unit ERD-50A-D01

## Zoom/Focus Mode Selection Function

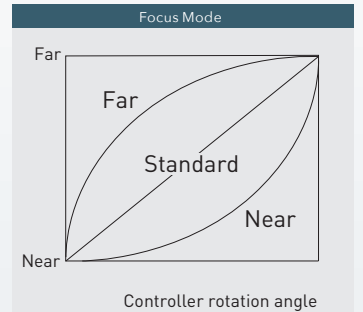
### Zoom Mode Selection

The zoom demand makes it possible to select one of three different curves for how zoom speed varies according to the rotation angle of the thumb ring.



### Focus Mode Selection

The focus demand makes it possible to select one of three curves for subject distance depending on the rotation angle of the focus knob. By setting to "Far" (infinity) or "Near" (close-in), it is possible to fine-tune the focus on the infinity side or the near side.



## One Shot Preset

Zoom and focus can be preset at a selected position and stored in advance. One touch of the switch during shooting will instantly return to the stored position. This function is convenient when making frequent use of memorized positions during studio shoots or sports broadcasts.

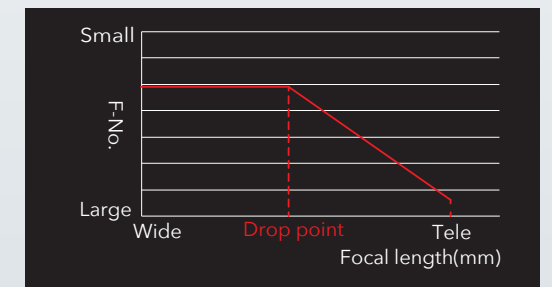
## Virtual Connector

The DIGIPOWER drive unit features built-in high resolution 16 bit encoders as standard for highly accurate positioning in virtual studio, robotic and other applications.



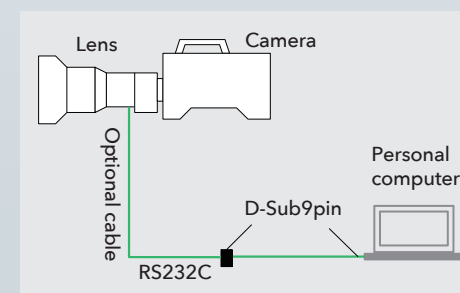
## F-Number Hold

When a broadcast TV lens zooms from wide angle to telephoto, F-drop occurs, which causes the open F value to become dark. F-No. Hold limits the zoom position to a point before F-drop begins, making it possible to reduce the workload during video production.



## Serial Communication Control

Because the drive system is digital, this enables control of zoom, focus, and iris through a serial communication interface on a PC. It also enables read-out of their respective position information, making this digital system an extremely powerful tool in a wide range of operating environments.



## Quick Frame (Optional)

Quick Frame allows for quick manual framing of a shot without the need to select the operation. Adjusting the zoom manually or automatically disengages the servo, which is then automatically re-engaged, when the manual zoom operation is stopped.



# Duvo Series



## Achieving high optical performance, producing a cinematic visual expression

Aberrations are controlled thoroughly to achieve superior optical performance. In addition, while Duvo series is a high magnification zoom lens, it achieves F2.8 with Duvo box and T2.9 with Duvo portable at the wide end, producing cinematic visual expression with a beautiful bokeh effect.



\*This photo is for illustrative purposes.

## Features that support comfortable shooting and editing

- 01 Features "Breathing Compensation Technology (BCT)" which automatically corrects focus breathing to produce natural footage maintaining the subject being filmed in a constant size during changes in focus.
- 02 Features "Remote Back Focus (RBF)" which enables the control of the Flange Focal Distance from the control panel of the camera or robotic system.
- 03 Compatible with the Cooke /i + ZEISS eXtended Data\* system, enabling the recording of lens metadata (focus, zoom, and iris position) and lens distortion and shading corrections.  
\* Compatible only with Duvo Portable

## Achieving comfortable shooting with zoom and focus demands

Lens controls can be used in the same style as broadcast lenses involving zoom and focus demands. It also supports multi-camera operations for efficient live production. The lens can be connected to a cinema style wireless lens controller as well and the focus ring on Duvo Portable has a gear pitch of 0.8M for easy integration with cinema industry standard accessories.



# Duvo

### Commitment to "Duvo"

"Duvo" is a coined term combining Latin words Duo (=Dual) and Vivo (=Live). It represents the series' "two-faceted nature with cinema- and broadcast-lens characteristics" and "compatibility with two types of mainstream large sensors for cinema cameras".

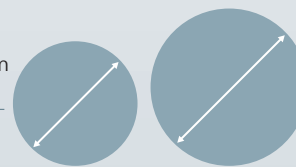
## Dual format Expander allows coverage of both Super35mm and Large Format camera sensors

Duvo series is equipped with an internal 1.5x expander\* that widens the image circle while maintaining the peak optical performance. Even with a full frame-equivalent sensor, you can shoot with the same angle of view as a super 35mm sensor, expanding the range of cameras that can be used.

\*When combined with a super 35mm sensor, it can be used as a 1.5x extender, extending the telephoto reach of the lens by 50%.

Super 35mm equivalent

Diagonal 28.5mm



Large Format equivalent

Diagonal 41.3mm

## Diverse shooting style expanded with box and portable lenses

The three lenses are covering a wide range of focal lengths from 14mm to 1000mm. It enables a variety of shooting styles, such as telephoto shooting with the Duvo Box's 40x zoom and shooting with shoulder-mounted operation or Steadicam thanks to Duvo Portable's compact and lightweight design.

Focal length	Super 35mm*	14	24	225	100	300	1000
	2/3"	5.4	9.2	9.6	39	116	385
Duvo Box	Duvo25-1000mm						
Duvo Portable	Duvo24-300mm						
	Duvo14-100mm						

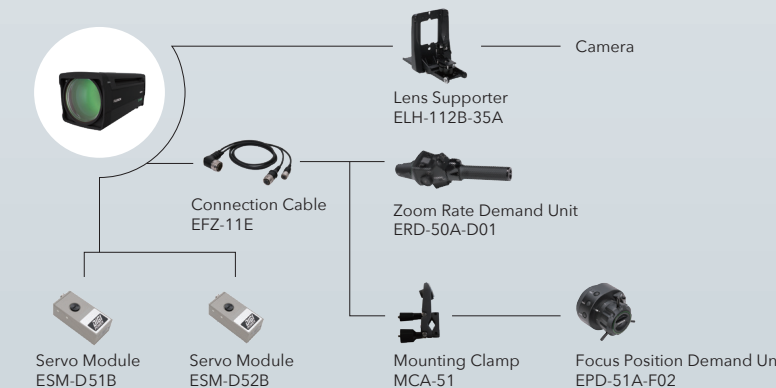
\*Sensor size:24.90 x 14.00



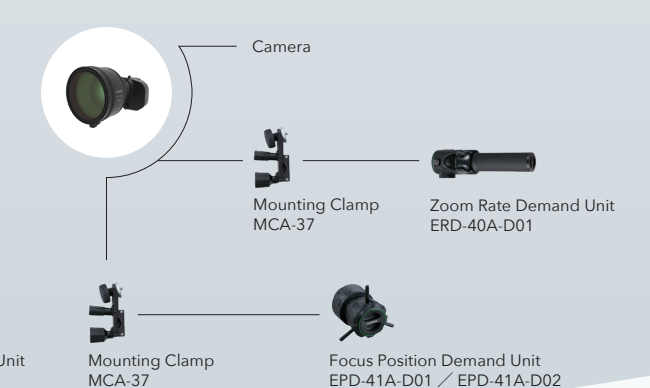
Model Name	Duvo14-100mm	Duvo24-300mm	Duvo25-1000mm
Focal Length	14-100mm (1x) 21-150mm (1.5x)	24-300mm (1x) 36-450mm (1.5x)	25-1000mm (1x) 37.5-1500mm (1.5x)
Zoom Ratio	7.1x	12.5x	40x
Expander	1.5x	1.5x	1.5x
T-No. / F-No.	T2.9(14-75mm) / T3.9(100mm)	T2.9(24-207mm) / T4.2(300mm)	F2.8(25-465mm) / F5.0(1000mm)
Minimum Object Distance (M.O.D.) from front lens	0.28m	0.88m	3.5m
Approx. Size	266.9mm	270.5mm	669mm
Approx. Mass	2.54kg	2.95kg	28.0kg
Front Diameter	114mm	114mm	-

### System Diagram

#### Duvo Box



#### Duvo Portable



## 2/3" Studio / Field Box Lenses

Horizontal Field of View (16:9)	73	62	59	58	56	54	3.1	1.0	0.9	0.8	0.8	0.6	0.6
Focal Length (mm) 2/3"	6.5	8	8.4	8.7	9	9.5	180	525	610	720	732	900	1000
UA80x9													
UA125x8													
UA27x6.5													
UA70x8.7													
UA107x8.4													
XA55x9.5													
XA77x9.5													

## ENG/EFP Portable Lenses (2/3"4K, 2/3"HD)

Horizontal Field of View (16:9)	94	82	64	63	62	59	54	53	45	39	32	10	9.3	8.7	5.5	4.2	4.0	3.3	3.2	3.1	2.9	1.9	1.3	1.3	1.0	0.9			
Focal Length (mm)	4.5	5.5	7.6	7.8	8	8.5	9.5	9.7	11.5	13.5	16.5	54	59	63	100	130	137	167	170	175	176	187	288	410	413	437	570	621	
UA13x4.5																													
UA22x8																													
UA24x7.8																													
UA46x9.5																													
UA46x13.5																													
UA14x4.5																													
UA18x5.5																													
UA18x7.6																													
UA23x7.6																													
HA25x11.5																													
HA25x16.5																													
HA42x9.7																													
HA42x13.5																													
ZA12x4.5																													
ZA17x7.6																													
ZA22x7.6																													
XA20x8.5																													

## ENG/EFP Portable Lenses (1/3"HD)

Horizontal Field of View (16:9)	60	58	3.9	3.2
Focal Length (mm)	4.5	4.7	77	94
XT17x4.5				
XT20x4.7				

## 4K Plus Premier Series

Flagship series with surpassing 4K optical performance



Model Name	UA80x9BESM 1.2x EXT	UA125x8BESM
Focal Length (1x)(1.2x)(2x)	9.720mm/10.8-864mm/18-1440mm	8-1000mm /- / 16-2000mm
Zoom Ratio	80 x	125x
Extender	1.2 x 2 x	2 x
Maximum Relative Aperture (F-No.)	1:1.7 (9-350mm) 1:3.5 (720mm)	1:1.7(8-340mm) 1:5.0(1000mm)
Minimum Object Distance (M.O.D.) from Front Lens	3.7m	3.0m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 9mm 3501mm x 1968mm 720mm 46mm x 26mm (1.2x) 10.8mm 3009mm x 1692mm 864mm 39mm x 22mm (2x) 18mm 1816mm x 1021mm 1440mm 23mm x 13mm	(1x) 8mm 3198mm x 1799mm 1000mm 27mm x 15mm (2x) 16mm 1677mm x 943mm 2000mm 14mm x 8mm
Angular Field of View 16:9 Aspect Ratio	(1x) 9mm 56.1° x 33.3° 720mm 0.8° x 0.4° (1.2x) 10.8mm 47.9° x 28.0° 864mm 0.6° x 0.4° (2x) 18mm 29.8° x 17.0° 1440mm 0.4° x 0.2°	(1x) 8mm 61.9° x 37.2° 1000mm 0.55° x 0.31° (2x) 16mm 33.4° x 19.1° 2000mm 0.27° x 0.15°
Approx. Size	258 x 264 x 610mm(H x W x L)	258 x 264 x 635mm(H x W x L)
Approx. Mass	23.5kg	26.6kg

## 4K Premier Series

Excellent 4K optical performance for versatile shooting scene



Model Name	UA27x6.5BESM	UA70x8.7BESM
Focal Length (1x)(2x)	6.5-180mm / 13-360mm	8.7mm-610mm / 17.4mm-1220mm
Zoom Ratio	27 x	70 x
Extender	2 x	2 x
Maximum Relative Aperture (F-No.)	1:1.5(6.5-123mm) 1:2.2(180mm)	1:1.7(8.7-340mm) 1:3.05(610mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.6m	3.05m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 6.5mm 1063 x 597mm 180mm 38 x 21mm (2x) 13mm 529 x 297mm 360mm 20 x 11mm	(1x) 8.7mm 2935mmx1651mm 610mm 44mmx25mm (2x) 17.4mm 1537mmx865mm 1220mm 23mmx13mm
Angular Field of View 16:9 Aspect Ratio	(1x) 6.5mm 72.8° x 45.0° 180mm 3.1° x 1.7° (2x) 13mm 40.5° x 23.4° 360mm 1.5° x 0.9°	(1x) 8.7mm 57.7°x34.4° 610mm 0.9°x0.5° (2x) 17.4mm 30.8°x17.6° 1220mm 0.5°x0.3°
Approx. Size	258 x 264 x 536mm(H x W x L)	258x264x610mm(H x W x L)
Approx. Mass	22.8kg	23.8kg



Model Name	UA107x8.4BESM	UA107x8.4BESM AF
Focal Length (1x)(2x)	8.4-900mm / 16.8-1800mm	8.4-900mm / 16.8-1800mm
Zoom Ratio	107 x	107 x
Extender	2 x	2 x
Maximum Relative Aperture (F-No.)	1:1.7 (8.4-340mm) 1:4.5 (900mm)	1:1.7(8.4-340mm) 1:4.5(900mm)
Minimum Object Distance (M.O.D.) from Front Lens	3.05m	3.05m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 8.4mm 3053mm x 1717mm 900mm 30mm x 17mm (2x) 16.8mm 1594mm x 896mm 1800mm 15mm x 9mm	(1x) 8.4mm 3052mm x 1717mm 900mm 30mm x 17mm (2x) 16.8mm 1594mm x 896mm 1800mm 15mm x 9mm
Angular Field of View 16:9 Aspect Ratio	(1x) 8.4mm 59.4° x 35.6° 900mm 0.6° x 0.3° (2x) 16.8mm 31.9° x 18.2° 1800mm 0.3° x 0.2°	(1x) 8.4mm 59.4°x35.6° 900mm 0.6°x0.3° (2x) 16.8mm 31.9°x18.2° 1800mm 0.3°x0.2°
Approx. Size	258 x 264 x 610mm(H x W x L)	258 x 264 x 670mm(H x W x L)
Approx. Mass	23.9kg	26.0kg



## Studio / Field Box Lenses



Model Name	XA55x9.5BESM			XA77x9.5BESM		
Focal Length (1x)/(2x)	9.5-525mm / 19-1050mm			9.5-732mm / 19.0-1464mm		
Zoom Ratio	55 x			77 x		
Extender	2 x			2 x		
Maximum Relative Aperture (F-No.)	1:1.7(9.5mm-308mm) 1:2.9(525mm)			1 : 1.7(9.5-335mm) 1 : 3.8(732mm)		
Minimum Object Distance (M.O.D.) from Front Lens	3.0m			2.7m		
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x)			(2x)		
	9.5mm	2782 x 1564mm	51 x 29mm	19mm	1406 x 790mm	26 x 15mm
Angular Field of View 16:9 Aspect Ratio	(1x)			(2x)		
	9.5mm	53.6° x 31.7°	1° x 0.6°	19mm	28.3° x 16.1°	0.5° x 0.3°
Approx. Size	253 x 253 x 876mm(HxWxL)			253 x 253 x 656.4mm(HxWxL)		
Approx. Mass	24.8kg			22.4kg		

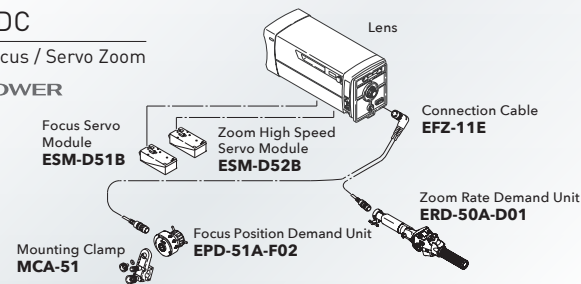
\*XA55x9.5BESM without lens supporter model is also available.

## Studio/Field Lens System Configuration

### SS-21DC

Servo Focus / Servo Zoom

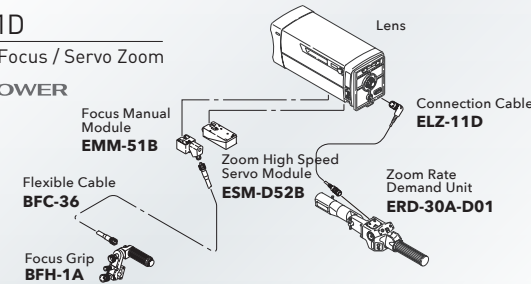
DIGIPOWER



### MS-31D

Manual Focus / Servo Zoom

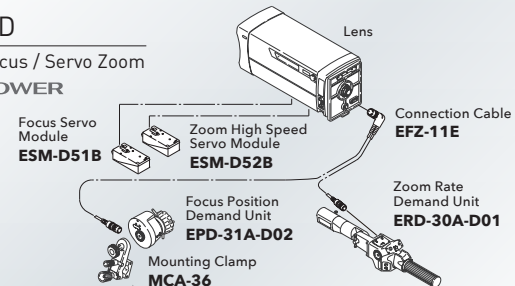
DIGIPOWER



### SS-31D

Servo Focus / Servo Zoom

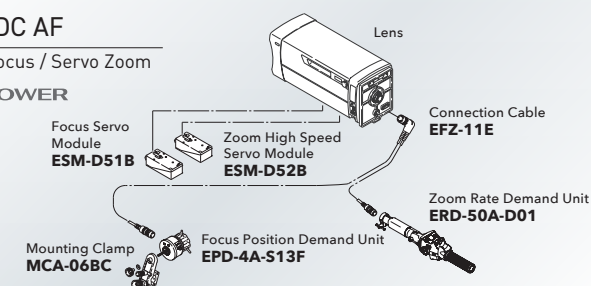
DIGIPOWER



### SS-21DC AF

Servo Focus / Servo Zoom

DIGIPOWER



## Control Accessories List

Lens Focus/Zoom Drive Unit	Servo Digital	Description	Model Name
Focus	Manual	Zoom High Speed Module	ESM-D52B
	Digital	Focus Servo Module	ESM-D51B
		Manual Focus/Zoom Module	EMM-51B
Zoom	Manual	Focus Position Demand Unit	EPD-51A-F02
		Mounting Clamp for EPD-51A-F02	MCA-51
		Mounting Clamp for EPD-31A-D02	MCA-36
	Digital	AF Focus Position Demand Unit	EPD-4A-S13F
		Mounting Clamp	MCA-06BC
		Manual Focus Grip	BFH-1A
Zoom	Servo	Zoom Rate Demand Unit	ERD-50A-D01
	Digital	Zoom Rate Demand Unit	ERD-30A-D01
	Manual	Zoom Manual Handle (For HD) Only	BZH-2A

Other	Description	Model Name
	Connection Cable (Y Cable for Full-Servo Kit)	EFZ-11E
	Connection Cable (Cable for Semi-Servo Kit)	ELZ-11D
	Flexible Cable	BFC-36
	OS-TECH Controller	EA-12A-05BD
	Lens Supporter (For BTA Mount)	ELH-112B-35A
	Protection Glass (UA27)	EPF-196A
	Protection Glass (UA70,80,107)	EPF-226C
	Protection Glass (UA125)	EPF-241

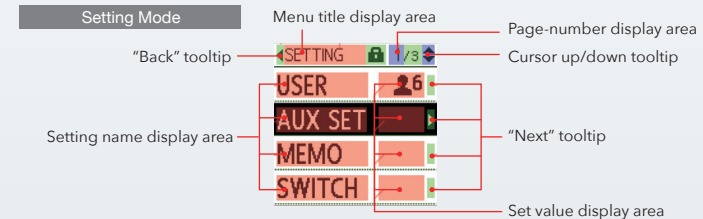
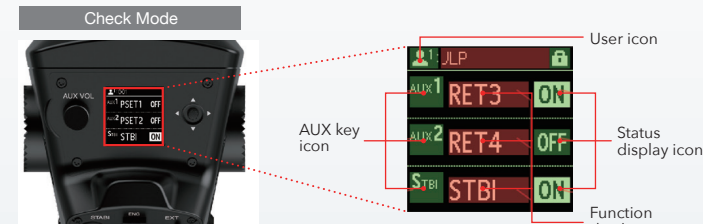
## Box Lens Zoom Demand

ERD-50A-D01



### Large LCD Monitor

With a large, highly visible, LCD monitor, it is possible to easily check the setting status and change various settings.



### Main functions Accessible via the LCD Monitor

Store user-defined setting	RBF adjustment	Zoom pattern
AUX setting	Zoom limit setting	Preset memory operation
Zoom curve setting	LCD backlight setting	Breathing Compensation Technology (BCT) on/off

## Box Lens Focus Demand

EPD-51A-F02



### AUX Assignment

The three AUX switches can be assigned various functions.

Switch position	Functions	Setting of AUX Switches		
		AUX 1	AUX 2	AUX 3
0	OFF (No Action)	○	○	○
1	Return Switch 1			
2	Return Switch 2			
3	Return Switch 3			
4	Intercomm control			
5	Optical Stabiliser ON/OFF Select			
6	Focus Preset			
7	Extender Select			
8	AutoFocus Action Switch			
9	Reserved (No Action)			

○: Default setting

### Focus Preset

Previously-saved focus positions can be restored at the touch of a button.

### More Controls and Features Accessible from the Demand Unit

#### Remote Back Focus (RBF) Control \*1

Adjust the flange focal length using the AUX VOL knob on the demand unit.

#### Optical Stabilizer On/Off \*1

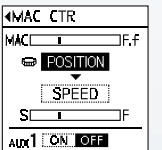
Turn the optical stabilizer function of a lens on or off using the assigned AUX button.

#### Iris Control \*1

Control iris using the AUX VOL knob on the demand unit.

#### Macro Function \*1

Turn the macro function of a lens on or off using the assigned AUX button. Focus position and speed is adjustable to create natural bokeh scene.



#### Auto Focus \*1

Turn the Auto Focus on or off using the assigned AUX button.

#### More RET Switches

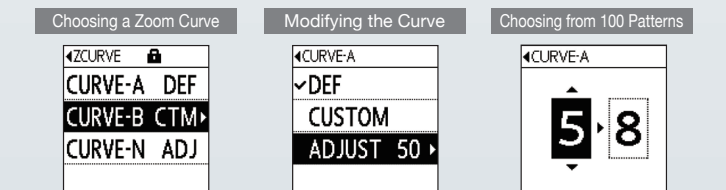
Assign return controls to the RET1 and RET2 switches on the grip or to the AUX1 and AUX2 switch on the side.

\*1 Available only with the lenses that support its function

## Zoom Curve

The rates at which the lenses zoom responds to the operator's control can be chosen from three curves-"A", "Normal", and "B"-each of which offers a further choice of a hundred different patterns.\*2 Use the LCD monitor to customize zoom curves to suit any subject from concerts to live sporting events. Settings can be saved and recall via the LCD monitor.

\*2. Available with updated FUJINON UA107x8.4 BESM and UA125x8 BESM lenses.

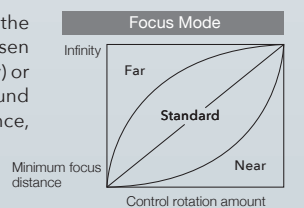


## One-Shot Preset

Previously-saved zoom positions can be recalled using a button on the demand unit, a useful feature for studio recording, live sports, or other situations that call for lots of pre-determined camera angles.

## Focus Mode

How focus distance changes in response the position of the focus demand can be chosen from three patterns. Selecting "Far (infinity) or "Near" allows focus to be fine-tuned around the maximum or minimum focus distance, respectively.



## 4K Plus Premier Series

Flagship series with surpassing 4K optical performance



Model Name	UA13x4.5BERD		UA22x8BERD	
Focal Length (1x)/(2x)	4.5-59mm / 9-118mm		8.0-176mm / 16-352mm	
Zoom Ratio	13 x		22 x	
Extender	2 x		2 x	
Maximum Relative Aperture (F-No.)	1:1.8 (4.5-41mm) 1:2.6 (59mm)		1:1.8 (8-124mm) 1:2.55 (176mm)	
Minimum Object Distance (M.O.D.) from Front Lens	0.3m		0.85m	
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 4.5mm 744mm x 418mm 59mm 54mm x 30mm	(2x) 9mm 367mm x 206mm 118mm 28mm x 16mm	(1x) 8mm 905mm x 509mm 176mm 43mm x 24mm	(2x) 16mm 472mm x 265mm 352mm 22mm x 12mm
Angular Field of View 16:9 Aspect Ratio	(1x) 4.5mm 93.6° x 61.8° 59mm 9.3° x 5.2°	(2x) 9mm 56.1° x 33.3° 118mm 4.7° x 2.6°	(1x) 8mm 61.9° x 37.2° 176mm 3.1° x 1.8°	(2x) 16mm 33.4° x 19.1° 352mm 1.6° x 0.9°
Filter Thread	M127 x 0.75 (Filter attaches to the lens hood)		M127 x 0.75 (Filter attaches to the lens hood)	
Approx. Size	Φ95 x 253mm (ΦxLength)		Φ110 x 241.5mm (ΦxLength)	
Approx. Mass	2.28kg (without lens hood)		2.55kg (without lens hood)	



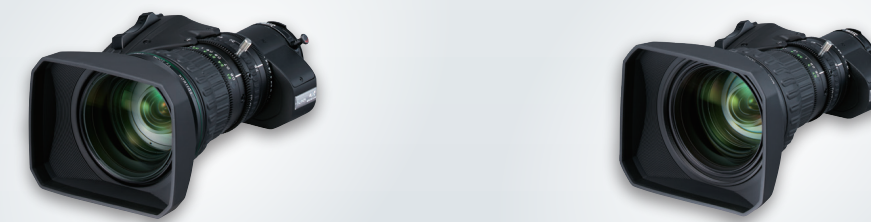
Model Name	UA24x7.8BERD		UA46x9.5BERD		UA46x13.5BERD	
Focal Length (1x)/(2x)	7.8-187mm / 15.6-374mm		9.5mm-437mm / 19-874mm		13.5mm-621mm / 27-1242mm	
Zoom Ratio	24 x		46 x		46 x	
Extender	2 x		2 x		2 x	
Maximum Relative Aperture (F-No.)	1:1.8(7.8-118mm) 1:2.85(187mm)		1:2.0(9.5mm-224mm) 1:3.9(437mm)		1:2.8(13.5mm-316mm) 1:5.5(621mm)	
Minimum Object Distance (M.O.D.) from Front Lens	0.8m		2.8m		2.8m	
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 7.8mm 883mm x 496mm 187mm 38mm x 21mm	(2x) 15.6mm 459mm x 258mm 374mm 20mm x 11mm	(1x) 9.5mm 2653mmx1491mm 437mm 59mmx33mm	(2x) 19mm 1331x748mm 874mm 30x17mm	(1x) 13.5mm 1886mmx1060mm 621mm 42mmx24mm	(2x) 27mm 936mmx526mm 1242mm 21mmx12mm
Angular Field of View 16:9 Aspect Ratio	(1x) 7.8mm 63.2° x 38.1° 187mm 2.9° x 1.7°	(2x) 15.6mm 34.2° x 19.6° 374mm 1.5° x 0.8°	(1x) 9.5mm 53.6°x31.7° 437mm 1.3°x0.7°	(2x) 19mm 28.3°x16.1° 874mm 0.6°x0.4°	(1x) 13.5mm 39.1°x22.6° 621mm 0.9°x0.5°	(2x) 27mm 20.1°x11.4° 1242mm 0.4°x0.2°
Filter Thread	M95 x 1 / M107 x 1 (Filter attaches to the lens hood)		M127 x 0.75		M127 x 0.75	
Approx. Size	Φ100 x 220.5mm (ΦxLength)		Φ146.5 x 345.8(ΦxLength)		Φ146.5 x 364.2(ΦxLength)	
Approx. Mass	1.98kg (without lens hood)		5.7kg(without lens hood)		5.8kg(without lens hood)	

## 4K Premier Series

Excellent 4K optical performance for versatile shooting scene



Model Name	UA14x4.5BERD		UA18x5.5BERD	
Focal Length (1x)/(2x)	4.5-63mm / 9-126mm		5.5-100mm / 11-200mm	
Zoom Ratio	14 x		18 x	
Extender	2 x		2 x	
Maximum Relative Aperture (F-No.)	1:1.8 (4.5-41mm) 1:2.8(63mm)		1:1.8(5.5-62mm) 1:2.9(100mm)	
Minimum Object Distance (M.O.D.) from Front Lens	0.3m		0.4m	
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 4.5mm 744mm x 418mm 63mm 51mm x 29mm	(2x) 9mm 365mm x 205mm 126mm 27mm x 15mm	(1x) 5.5mm 800mm x 450mm 100mm 44mm x 25mm	(2x) 11mm 395mm x 222mm 200mm 22mm x 12mm
Angular Field of View 16:9 Aspect Ratio	(1x) 4.5mm 93.6° x 61.8° 63mm 8.7° x 4.9°	(2x) 9mm 56.1° x 33.3° 126mm 4.4° x 2.5°	(1x) 5.5mm 82.2° x 52.2° 100mm 5.5° x 3.1°	(2x) 11mm 47.1° x 27.5° 200mm 2.7° x 1.5°
Filter Thread	M127 x 0.75 (Filter attaches to the lens hood)		M127 x 0.75 (Filter attaches to the lens hood)	
Approx. Size	Φ95 x 238.5mm (ΦxLength)		Φ95 x 240.5mm (ΦxLength)	
Approx. Mass	2.21kg (without lens hood)		2.04kg (without lens hood)	



Model Name	UA18x7.6BERD		UA23x7.6BERD	
Focal Length (1x)/(2x)	7.6-137mm / 15.2-274mm		7.6-175mm / 15.2-350mm	
Zoom Ratio	18x		23x	
Extender	2 x		2 x	
Maximum Relative Aperture (F-No.)	1:1.8(7.6-102mm) 1:2.4(137mm)		1:1.8(7.6-119mm) 1:2.65(175mm)	
Minimum Object Distance (M.O.D.) from Front Lens	0.6m		0.8m	
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 7.6mm 696mm x 392mm 137mm 41mm x 23mm	(2x) 15.2mm 362mm x 204mm 274mm 21mm x 12mm	(1x) 7.6mm 915mm x 514mm 175mm 41mm x 23mm	(2x) 15.2mm 473mm x 266mm 350mm 21mm x 12mm
Angular Field of View 16:9 Aspect Ratio	(1x) 7.6mm 64.5°x39° 137mm 4°x2.3°	(2x) 15.2mm 35°x20.1° 274mm 2°x1.1°	(1x) 7.6mm 64.5°x39° 175mm 3.1°x1.8°	(2x) 15.2mm 35°x20.1° 350mm 1.6°x0.9°
Filter Thread	M82x0.75		M95x1 / M107x1(Filter attaches to lens hood)	
Approx. Size	Φ85x204mm(ΦxLength)		Φ100x221.4mm(ΦxLength)	
Approx. Mass	1.74kg (without lens hood)		1.95kg (without lens hood)	

# ENG / EFP Portable Lenses

## Premier Series

Premier Series lenses are designed to complement and enhance the quality of HDTV systems. Great consideration in the design and development of these high-end HD lenses has been taken to incorporate the highest optical and mechanical specifications while ensuring unmatched performance in the most rugged and demanding of production environments.



**HD** HIGH-DEFINITION 2/3"

Model Name	HA25x11.5BERD	HA25x16.5BERD
Focal Length (1x)/(2x)	11.5–288mm / 23–576mm	16.5–413mm / 33–826mm
Zoom Ratio	25 x	25 x
Extender	2 x	2 x
Maximum Relative Aperture (F-No.)	1 : 2 (11.5–206mm) 1 : 2.8 (288mm)	1 : 2.8 (16.5–289mm) 1 : 4 (413mm)
Minimum Object Distance (M.O.D.) from Front Lens	2.2m	2.2m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 11.5mm 1740 x 978mm 288mm 70 x 39mm (2x) 23mm 870 x 489mm 576mm 35 x 20mm	(1x) 16.5mm 1213 x 682mm 413mm 49 x 27mm (2x) 33mm 606 x 341mm 826mm 24 x 14mm
Angular Field of View 16:9 Aspect Ratio	(1x) 11.5mm 45.3° x 26.4° 288mm 1.9° x 1.1° (2x) 23mm 23.6° x 13.4° 576mm 1° x 0.5°	(1x) 16.5mm 32.4° x 18.6° 413mm 1.3° x 0.7° (2x) 33mm 16.5° x 9.3° 826mm 0.7° x 0.4°
Filter Thread	M107 x 1 / M127 x 0.75 (Filter attaches to the lens hood.)	M107 x 1 / M127 x 0.75 (Filter attaches to the lens hood.)
Approx. Size	Φ110 x 265mm(ΦxLength)	Φ110 x 278mm(ΦxLength)
Approx. Mass	2.81kg (without lens hood)	2.9kg (without lens hood)



**HD** HIGH-DEFINITION 2/3"

Model Name	HA42x9.7BERD	HA42x13.5BERD
Focal Length (1x)/(2x)	9.7–410mm / 19.4–820mm	13.5–570mm / 27–1140mm
Zoom Ratio	42 x	42 x
Extender	2 x	2 x
Maximum Relative Aperture (F-No.)	1 : 2 (9.7–225mm) 1 : 3.7 (410mm)	1 : 2.8 (13.5–307mm) 1 : 5.2 (570mm)
Minimum Object Distance (M.O.D.) from Front Lens	2.8m	2.8m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 9.7mm 2619 x 1472mm 410mm 64 x 36mm (2x) 19.4mm 1339 x 753mm 820mm 33 x 19mm	(1x) 13.5mm 1888 x 1061mm 570mm 45 x 25mm (2x) 27mm 944 x 530mm 1140mm 22 x 13mm
Angular Field of View 16:9 Aspect Ratio	(1x) 9.7mm 52.6° x 31.1° 410mm 1.3° x 0.8° (2x) 19.4mm 27.8° x 15.8° 820mm 0.7° x 0.4°	(1x) 13.5mm 39.1° x 22.6° 570mm 1° x 0.5° (2x) 27mm 20.1° x 11.4° 1140mm 0.5° x 0.3°
Filter Thread	M127 x 0.75	M127 x 0.75
Approx. Size	Φ130 x 338.5mm(ΦxLength)	Φ130 x 357.5mm(ΦxLength)
Approx. Mass	5.3kg (without lens hood)	5.4kg (without lens hood)

## SELECT Series

Select Series lenses are designed to meet the high performance needs of the next generation of cost-effective high performance HD camera systems. Fujifilm's unique Select Series concept for HDTV lenses was directly derived from our high-end Premier Series technology.



**HD** HIGH-DEFINITION 2/3"

Model Name	ZA12x4.5BERD	ZA17x7.6BERD	ZA22x7.6BERD
Focal Length (1x)/(2x)	4.5–54mm / 9–108mm	7.6–130mm / 15.2–260mm	7.6–167mm / 15.2–334mm
Zoom Ratio	12 x	17 x	22 x
Extender	2 x	2 x	2 x
Maximum Relative Aperture (F-No.)	1 : 1.8 (4.5–41mm) 1 : 2.4 (54mm)	1 : 1.8 (7.6–102mm) 1 : 2.3 (130mm)	1 : 1.8 (7.6–120mm) 1 : 2.5 (167mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.3m	0.6m	0.8m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 4.5mm 757 x 425mm 54mm 59 x 33mm (2x) 9mm 373 x 210mm 108mm 31 x 17mm	(1x) 7.6mm 696 x 392mm 130mm 43 x 24mm (2x) 15.2mm 362 x 204mm 260mm 22 x 12mm	(1x) 7.6mm 915 x 514mm 167mm 43 x 24mm (2x) 15.2mm 473 x 266mm 334mm 22 x 12mm
Angular Field of View 16:9 Aspect Ratio	(1x) 4.5mm 93.6° x 61.8° 54mm 10.1° x 5.7° (2x) 9mm 56.1° x 33.3° 108mm 5.1° x 2.9°	(1x) 7.6mm 64.5° x 39° 130mm 4.2° x 2.4° (2x) 15.2mm 35° x 20.1° 260mm 2.1° x 1.2°	(1x) 7.6mm 64.5° x 39° 167mm 3.3° x 1.8° (2x) 15.2mm 35° x 20.1° 334mm 1.6° x 0.9°
Filter Thread	M127 x 0.75 (Filter attaches to the lens hood.)	M82 x 0.75	M95 x 1 / M107 x 1 (Filter attaches to the lens hood.)
Approx. Size	Φ95 x 237.5mm(ΦxLength)	Φ85 x 203mm(ΦxLength)	Φ100 x 220.4mm(ΦxLength)
Approx. Mass	2.07kg (without lens hood)	1.74kg (without lens hood)	1.92kg (without lens hood)

\*BRM/BRD type are also available. For more information, please contact nearest our FUJIFILM office.

## eXceed Series

eXceed series lenses are designed to compliment a new generation of cost-effective HD camera systems, extracting the most performance with the greatest value.



**HD** HIGH-DEFINITION 2/3"

Model Name	XA20s x 8.5BRM	XA20s x 8.5BERM
Focal Length (1x)/(2x)	8.5–170mm/-	8.5–170mm / 17–340mm
Zoom Ratio	20 x	20 x
Extender	-	2 x
Maximum Relative Aperture (F-No.)	1 : 1.8 (8.5–113mm) 1 : 2.7 (170mm)	1 : 1.8 (8.5–113mm) 1 : 2.7 (170mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.9m	0.9m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 8.5mm 910 x 511mm 170mm 47 x 26mm (2x) -	(1x) 8.5mm 910 x 511mm 170mm 47 x 26mm (2x) 17mm 469 x 264mm 340mm 24 x 13mm
Angular Field of View 16:9 Aspect Ratio	(1x) 8.5mm 58.9° x 35.2° 170mm 3.2° x 1.8° (2x) -	(1x) 8.5mm 58.9° x 35.2° 170mm 3.2° x 1.8° (2x) 17mm 31.5° x 18° 340mm 1.6° x 0.9°
Filter Thread	M82 x 0.75	M82 x 0.75
Approx. Size	Φ85 x 180.8mm(ΦxLength)	Φ85 x 200.8mm(ΦxLength)
Approx. Mass	1.5kg (without lens hood)	1.6kg (without lens hood)

## 1/3" Series

### eXceed Series



Model Name	XT17s×4.5BRM	XT20s×4.7BRM
Focal Length (1x)/(2x)	4.5–77mm / –	4.7–94mm / –
Zoom Ratio	17 ×	20 ×
Extender	–	–
Maximum Relative Aperture (F-No.)	1 : 1.6 (4.5–77mm)	1 : 1.4 (4.7–88mm) 1 : 1.5 (94mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.95m	0.9m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 4.5mm 999 × 562mm 77mm 60 × 34mm	(1x) 4.7mm 901 × 506mm 94mm 47 × 26mm
Angular Field of View 16:9 Aspect Ratio	(1x) 4.5mm 60.3° × 36.2° 77mm 3.9° × 2.2°	(1x) 4.7mm 58.2° × 34.7° 94mm 3.2° × 1.8°
Filter Thread	M82 × 0.75	M82 × 0.75
Approx. Size	Φ85 × 175.6mm(ΦxLength)	Φ85 × 189.8mm(ΦxLength)
Approx. Mass	1.28kg (without lens hood)	1.48kg (without lens hood)

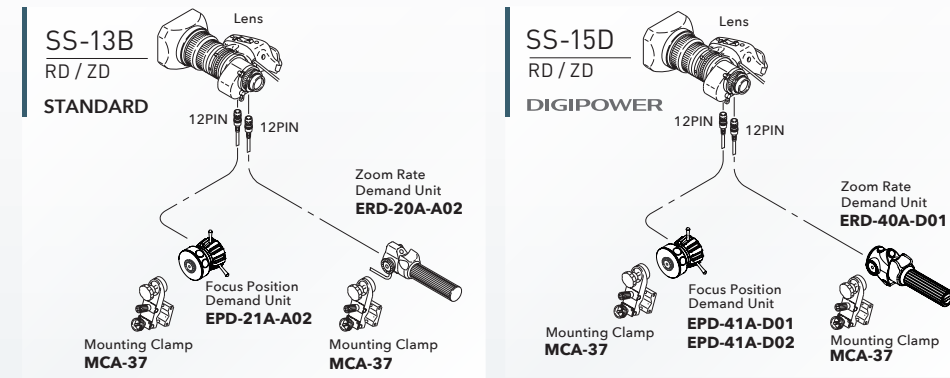
## Remote Control Lenses



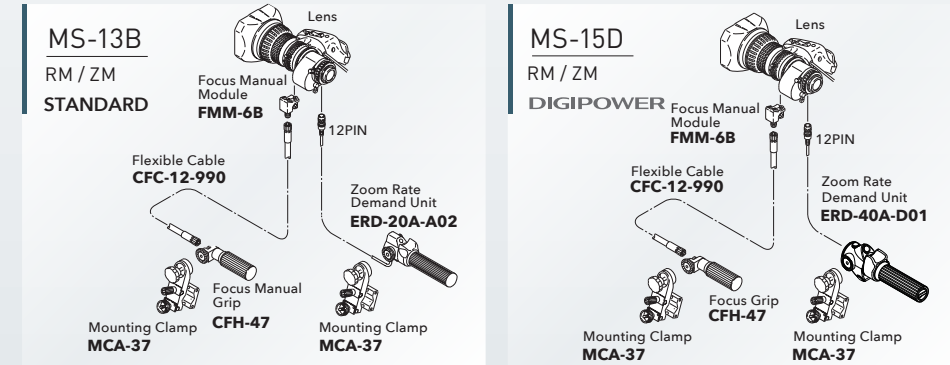
Model Name	XA20s×8.5BMD	XA20s×8.5BEMD
Focal Length (1x)/(2x)	8.5–170mm / –	8.5–170mm / 17–340mm
Zoom Ratio	20 ×	20 ×
Extender	–	2 ×
Maximum Relative Aperture (F-No.)	1:1.8(8.5–113mm) 1:2.7(170mm)	1:1.8(8.5–113mm) 1:2.7(170mm)
Minimum Object Distance (M.O.D.)	0.9m	0.9m
Object Dimensions at M.O.D. 16.9 Aspect Ratio	(1x) 8.5mm 910 × 511mm 170mm 47 × 26mm	(1x) 8.5mm 910 × 511mm 17mm 469 × 264mm 170mm 47 × 26mm 340mm 24 × 13mm
Angular Field of View 16.9 Aspect Ratio	(1x) 8.5mm 58.9° × 35.2° 170mm 3.2° × 1.8°	(1x) 8.5mm 58.9° × 35.2° 17mm 31.5° × 18° 170mm 3.2° × 1.8° 340mm 1.6° × 0.9°
Filter Thread	M82 × 0.75	M82 × 0.75
Approx. Size	Φ85 × 180.8mm(ΦxLength)	Φ85 × 180.8mm(ΦxLength)
Approx. Mass	1.5kg (without lens hood)	1.6kg (without lens hood)

## ENG/EFP Portable Lens System Configuration

### Full-Servo Control Kit (Servo Focus / Servo Zoom)



### Semi-Servo Control Kit (Manual Focus / Servo Zoom)



## Digital Zoom Demand

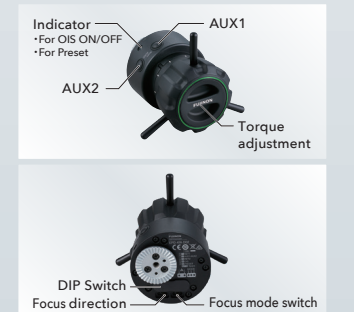
### ERD-40A-D01



	DIP No.	Function
AUX1	1-1	OIS(Alternate)
	1-2	Preset Zoom
	1-3	Preset Z+F
	1-4	EXT
	1-5	INCOM(ENG)
	1-6	INCOM(PD)
Zoom Mode Switch	1-7	Z curve select
	1-8	Z curve select
RET2/AUX SEL	2-1	RET2 ↔ AUX2
RET1	2-2	ON/OFF
	2-3	ON/OFF
AUX2	2-4	VTR(REC)
	2-5	EXT
	2-6	INCOM(ENG)
	2-7	INCOM(PD)
	2-8	OIS(Alternate)

## Digital Focus Demand

### EPD-41A-D01/ D02

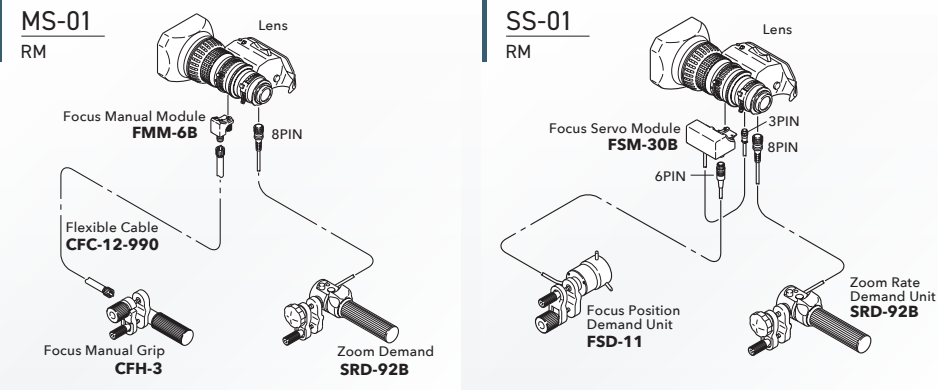


	DIP No.	Function
AUX1	1	RET1
	2	AUX1 ↔ AUX2
	3	RET2
AUX2	4	OIS
	5	PRESET

## Control Accessories Compatibility (Premier Series, Select Series and Broadcast Lenses)

Focus	Manual	Description	Model Name
Focus	Manual	Focus Grip	CFH-47
		Mounting Clamp	MCA-37
		Flexible Cable	CFC-12-990
		Focus Manual Module	FMM-6B
Focus	Servo	Digital Focus Position Demand Unit	FMM-3D (for 46x series, 42x series)
		Mounting Clamp	MCA-37
		Focus Position Demand Unit	EPD-41A-D01 / D02
		Digital Shot Box	ESB-6C-E12B
		Mounting Clamp	MCA-06BC
Zoom	Servo	Digital Zoom Rate Demand Unit	ERD-40A-D01
		Mounting Clamp	MCA-37
		Zoom Rate Demand Unit	ERD-20A-A02
Other		VTR Control Unit	VRS-20
		Return Control Unit	EXT-30
		Lens Supporter	ALH-127A-01A (for 46x series, for 42x series)
		External OS-TECH Adapter	TS-P58A (HA14, HA18, HA23, HA25, HA42)
		OS-TECH Control Unit	EA-12A-03BA
		Extension Cable For Focus Position Demand Unit/Zoom Rate Demand Unit	ECE-1000(1m) / ECE-10000(10m)
		2x Extender Change Unit (Motor Drive)	ECU-2C
		ECU Adapter(for UA13x / UA24x with RBF / HP12x)	ECU-2AD

## eXceed Series System Configuration



## Control Accessories Compatibility

XA20s × 8.5 BE RM

			RM
	Description	Model Name	Standard
Focus	Manual	Focus Grip	CFH-3
		Flexible Cable	CFC-12-990
	Servo	Focus Manual Module	FMM-6B
		Focus Servo Module	FSM-30B
		Focus Position Demand Unit	FSD-11
Zoom	Servo	Zoom Rate Demand Unit	SRD-92B
Other		For 12PIN Lens Cable	ECE-R22



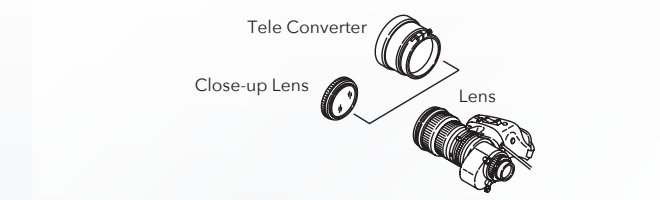
## Mount Adapters

Model Name	Camera	Lens	Note
ACM-17	1/3" Bayonet Mount	2/3" Bayonet Mount	Angle of view is approx. 1.6x shifted to tele side
ACM-21	SONY PMW-300	2/3" Bayonet Mount	Angle of view is approx. 1.4x shifted to tele side



## Optical Accessories for Portable Lenses

Optical accessories expand the capabilities of FUJINON TV lenses.



### Tele Converter **TCV**

▶Focal length is multiplied by the magnification of the converter on the telephoto side. ▶Zooming possible. ▶The F-No. on the master lens remains unchanged. ▶M.O.D. is increased. ▶Loss of picture edges will occur toward the wide angle side of the zoom range.



### Close-up Lens **CL**

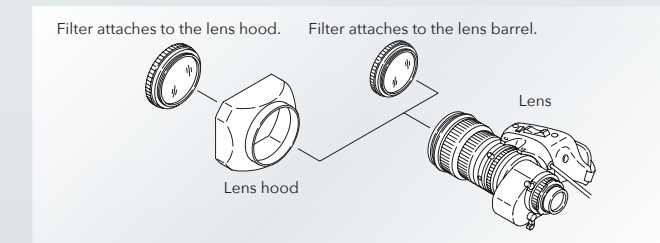
▶Close-up lens provides a shorter minimum focusing distance between lens and object. ▶Ideal for copy stand or other close up work.



LENS		UA18x7.6 HA18x7.6 ZA17x7.6	UA24x7.8 UA23x7.6 HA23x7.6 ZA22x7.6
Front Lens Diameter		Ø85	Ø100
Model Name	Magnification	Approx. Mass(kg)	
TCV-U100	1.5×	1.00	●
Model Name	Object Distance	Approx. Mass(kg)	
UCL-8082SC	0.8m	0.28	● M82×0.75

## Effects Filter

Attach to filter screw portion of the zoom lens.



### Protection Filter **EPF**

Professional protect filter offers superior protection against dust, moisture and scratches and can permanently remain on the lens.



LENS	UA18x7.6 HA18x7.6 ZA17x7.6 XA20s×8.5 XS20s×6.3 XT17s×4.5 XT20s×4.7	UA24x7.8 UA23x7.6 HA23x7.6 ZA22x7.6	HA25x11.5 HA25x16.5	UA13x4.5 UA14x4.5 UA18x5.5 UA22x8 HA14x4.5 HA18x5.5 ZA12x4.5 HP12x7.6	UA46x9.5 UA46x13.5 HA42x9.7 HA42x13.5
Lens Barrel Filter Thread Size	M82×0.75	M95×1	M107×1	—	M127×0.75
Hood Filter Thread Size	—	M107×1	M127×0.75	M127×0.75	—
Model Name					
EPF-82	●				
EPF-95		●			
EPF-107		●	●		
EPF-127			●	●	●

# Premista Series



*Living Large Capture Your Cinematic Vision*

## Overwhelming Quality and a Wide Range of Focal Lengths

### Superb Optical Performance Delivering the Full Benefits of a Large Format Sensor

Adopting large diameter aspherical elements, Premista achieves stunning optical quality and low distortion from the center to the corner, capturing both the feeling and texture of the subjects. Furthermore, by combining newly developed focus and zoom systems, they deliver clean and sharp imagery with minimum color aberrations regardless of zoom position or distance from the subject, which rivals the performance of a prime lens.

### Performs Well with High Dynamic Range for Expanding the Visual Expression

Unwanted flare and ghosts are well suppressed thanks to in-house optical calculation software. Premista performs well with the high dynamic range of a large format sensor. The color is natural and neutral due to the choice of glass elements and coatings. It's matched with Fujifilm's current cine lens lineup to simplify color grading that is required when using a combination of multiple lenses.

### Covering the Frequently-used Range of Focal Lengths from 19-250mm with 3 Lenses

The lineup includes a standard zoom lens (28-100mm), telephoto zoom lens (80-250mm) and wide-angle zoom lens (19-45mm). Combining these three lenses, they cover the most frequently used focal lengths of 19-250mm. Premista also features a constant T2.9 aperture (through 200mm on the telephoto zoom). Unlike when using a prime lens, they save both time and cost caused by changing lenses frequently.



### Tobias A. Schliessler, ASC

"I've been a fan of the FUJINON Zoom lenses since my first experience on Lone Survivor, where I used the 19-90mm Cabrio and the Premier zooms for the first time, I have since used them on all on my spherical feature films and commercials. I am happy to have the Premista for my large format work. The lens has the same contrast, sharpness, color characteristics, quality, and lack of lens breathing as the Premier zooms."

## Premista Series

Horizontal Field of View (16:9)		86.9	65.5	43.6	25.4	20.4	8.2
Focal Length	Large format*1	19	28	45	80	100	250
	S35mm Format*2	13	19	31	55	68	171
	2/3" Format Equivalent	5.1	7.5	12.0	21.3	26.6	66.6
Premista19-45mm T2.9							
Premista28-100mm T2.9							
Premista80-250mm T2.9-3.5							

\*1 Sensor size:36x24 \*2 Sensor size:27.45x15.44



## Excellent Usability for Professional Use

### Combining Lightweight and High Durability

The Premista design combines both a lightweight of 3.3kg (19-45mm) / 3.8kg (28-100mm,80-250mm) and compact size as well as the renowned durability that FUJINON lenses are known for even in the harshest of professional conditions. These zoom lenses are especially convenient when used on a crane or a helicopter where it is difficult to access the lens.

### Accurate and Comfortable Operation to Assist Film Crews

The focus ring features a rotation of a full 280 degrees to facilitate precise focusing even with a shallow depth-of-field. In addition, a Flange Focal Distance adjustment function with a hex set screw is standard in order to easily achieve optimum camera and lens matching, thereby bringing out the lenses' full optical performance even if there are sudden changes of temperature.

### Efficient Work Flow Compatible with ZEISS eXtended Data\*1

The Premista series is compatible with the "ZEISS eXtended Data" system developed by ZEISS based on the open/8® Technology\*2 standard. It enables the recording of lens metadata (focus, zoom, and iris position) and lens distortion and shading corrections.\*3

- \*1 Available via firmware update.
- \*2 8® is a registered trademark of Cooke Optics Limited used with permission.
- \*3 Compatible devices are required depending on the cameras to be used.



Model Name	Premista 19-45mmT2.9	Premista 28-100mmT2.9	Premista 80-250mmT2.9-3.5
Focal Length	19-45mm	28-100mm	80-250mm
Aperture	T2.9	T2.9	T2.9(80-200mm) / T3.5(250mm)
Lens Mount	PL mount	PL mount	PL mount
Compatible Image Size (diagonal)	46.3mm	46.3mm	46.3mm
Close Focus	0.6m / 2ft	0.8m / 2ft 7in	1.5m / 4ft 11in
Angular Field of View (HxV)	19mm : 94.3° × 59.2° 45mm : 48.9° × 27.0°	28mm : 72.4° × 42.2° 100mm : 23.1° × 12.3°	80mm : 28.7° × 15.4° 250mm : 9.4° × 4.9°
Angular Field of View (HxV)	19mm : 86.9° × 64.6° 45mm : 43.6° × 29.9°	28mm : 65.5° × 46.4° 100mm : 20.4° × 13.7°	80mm : 25.4° × 17.1° 250mm : 8.2° × 5.5°
Angular Field of View (HxV)	19mm : 71.7° × 44.2° 45mm : 33.9° × 19.5°	28mm : 52.2° × 30.8° 100mm : 15.6° × 8.8°	80mm : 19.5° × 11.0° 250mm : 6.3° × 3.5°
Focus Rotation	280°	280°	280°
Zoom Rotation	120°	120°	120°
Iris Rotation	48°	48°	48°
Iris Blades	13	13	13
Front Diameter	114mm	114mm	114mm
Length (approx.)	228mm / 9in	255mm / 10in	255mm / 10in
Weight (approx.)	3.3kg / 7.3lbs.	3.8kg / 8.4lbs.	3.8kg / 8.4lbs.

\*4 Aspect ratio 1:1.90 \*5 Aspect ratio 1:1.50 \*6 Aspect ratio 1:1.78

# ZK XK MK Series

## Exceptional Lens Design Delivers Outstanding Optical Performance

FUJINON Cine Lenses deliver outstanding optical performance thanks to the combination of fluorite elements, extra-low-dispersion (ED) glass and large-aperture aspheric lenses to suppress aberrations. Image resolution from edge to edge has been dramatically improved while minimizing distortion and fluctuations in angle of view during focusing. In addition, variations in optical performance are reduced when zooming, providing superb images over the entire zoom range from wide to telephoto. Plus, our unique HT-EBC coating achieves high transmittance and low reflectance, enabling an image expression with rich color reproduction.



### 9-Blade Iris for Natural Bokeh\*1

ZK XK MK

In developing the 9-blade diaphragm for these FUJINON Cine Lenses, extensive simulations were performed to optimize the number and shape of the blades to render out-of-focus areas more naturally. Light generated when shooting point light sources are more circular, making it possible to render a more pleasing, natural bokeh.

\*1 The Premista series uses a 13-blade diaphragm to provide a even more natural bokeh based on the latest technology.

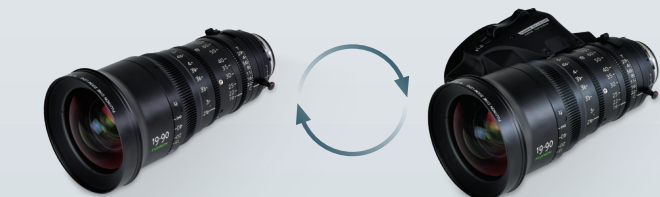
### Detachable Digital Servo Grip\*2

ZK XK

ZK and XK Series lenses feature an advanced "Detachable" drive unit, a first in the Light Weight Zoom category. These lenses feature hybrid technologies from both our broadcast and cine lenses.

With the drive unit attached, these lenses can be operated like traditional ENG TV lenses thanks to the same interface and accessories. This is exceptionally helpful in simplifying and reducing set up time. Therefore, it is not necessary to use more complicated cine lens drive systems.

\*2 Mounted as standard in ZK14-35mm T2.9, ZK19-90mm T2.9, ZK85-300mm T2.9-4.0 and XK20-120mm T3.5; optional on the ZK25-300mm T3.5-3.85.



Cinema style

Broadcast style

Horizontal Field of View (16:9)	89	72	69.2	64	58	43	27.9	25.4	18	17	12	10.5	5	
Focal Length	535mm Format*	14	19	18	20	25	35	50	55	85	90	120	135	300
	2/3" Format Equivalent	4.9	6.6	6.9	7.7	8.7	12	19.3	21.2	30	31	46.3	52.1	104
ZK2.5x14(14-35mm) T2.9														
ZK4.7x19(19-90mm) T2.9														
ZK3.5x85(85-300mm) T2.9-4.0														
ZK12x25(25-300mm) T3.5-3.85														
XK6x20(20-120mm) T3.5														
MK18-55mm T2.9														
MK50-135mm T2.9														

\*Sensor size ZK: 27.45x15.44 XK/MK: 24.84x13.97

### Mechanical design for good manual operability

ZK XK MK

FUJINON Cine lenses are designed by emphasizing good manual operability.

Operation is smooth with free of torque changes and jerkiness.

Smooth focusing with no torque variation or friction helps accurate focus adjustment.

### Power supply

ZK XK

The power for the servo drive unit is available via a hot-shoe mount or external power supply.\*1

For the external power supply, you can connect to the camera (12 pin) or power-supply box (XLR 4 pin / D-tap) by optional cables.

### Equipped 16 bit encoder

ZK XK

16bit encoder provides accurate information of zoom, focus and iris settings, which matches highprecision virtual systems.

### Lens-data communication system

ZK XK

FUJINON Cine lenses support ARRI LDS system and Cooke /i Technology, which are widely employed in cinema cameras. It allows users to transmit the data of the lens position to the camera and thus to enhance the efficiency of operation.\*2

\*1 Power supply for the lens varies according to the type of camera.

\*2 Lens-data communication system is available with the drive unit attached. Cameras need to be compatible with the communication system.

## ZK Cabrio Series



Model Name	ZK14-35mm T2.9	ZK85-300mm T2.9-4.0	ZK19-90mm T2.9
Application	35mm PL Mount Camera	35mm PL Mount Camera	35mm PL Mount Camera
Focal Length	14-35mm	85-300mm	19-90mm
Zoom Ratio	2.5 x	3.5 x	4.7 x
T-No.	T2.9	T2.9(85-218mm) T4.0(300mm)	T2.9
Compatible Image Size(diagonal)	Maximum 31.5mm	Maximum 31.5mm	Maximum 31.5mm
Iris Blades	9	9	9
M.O.D.from Image Planes	0.6m / 2ft	1.2m / 3ft 11in	0.85m / 2ft 9in
Object Dimensions at M.O.D.	14mm 701 x 394mm	85mm 274 x 154mm	19mm 917 x 516mm
1.78:1 Aspect Ratio**	35mm 275 x 155mm	300mm 79 x 44mm	90mm 193 x 109mm
Angular Field of View	14mm 88.9° x 57.7°	85mm 18.3° x 10.4°	19mm 71.7° x 44.2°
1.78:1 Aspect Ratio**	35mm 42.8° x 24.9°	300mm 5.2° x 2.9°	90mm 17.3° x 9.8°
Focus Rotation	200°	200°	200°
Zoom Rotation	120°	120°	120°
Approx. Size	Φ114 x 231mm(ΦxLength)	Φ114 x 249mm(ΦxLength)	Φ114 x 226mm(ΦxLength)
Approx. Mass	2.9kg (with Drive Unit) / 2.4kg (without Drive Unit)	3.1kg (with Drive Unit) / 2.6kg (without Drive Unit)	2.8kg (with Drive Unit) / 2.3kg (without Drive Unit)

## XK Cabrio Series

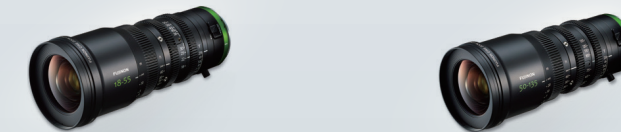


\*Now Available without drive unit

Model Name	ZK25-300mm T3.5-3.85
Application	35mm PL Mount Camera
Focal Length	25-300mm
Zoom Ratio	12 x
T-No.	T3.5(25-273mm) T3.85(300mm)
Compatible Image Size(diagonal)	Maximum 31.5mm
Iris Blades	9
M.O.D.from Image Planes	1.2m / 3ft 11in
Object Dimensions at M.O.D.	25mm 937 x 527mm
1.78:1 Aspect Ratio**	300mm 77 x 43mm
Angular Field of View	25mm 57.5° x 34.3°
1.78:1 Aspect Ratio**	300mm 5.2° x 2.9°
Focus Rotation	280°
Zoom Rotation	120°
Approx. Size	Φ136 x 401mm(ΦxLength)
Approx. Mass	8.4Kg (without optional Drive Unit)

Model Name	XK20-120mm T3.5
Application	35mm PL Mount Camera
Focal Length	20-120mm
Zoom Ratio	6 x
T-No.	T3.5
Compatible Image Size(diagonal)	Maximum 28.5mm
Iris Blades	9
M.O.D.from Image Planes	1.1m / 3ft 7in
Object Dimensions at M.O.D.	20mm 1109 x 624mm
1.78:1 Aspect Ratio**	120mm 182 x 102mm
Angular Field of View	20mm 63.7° x 38.5°
1.78:1 Aspect Ratio**	120mm 11.8° x 6.7°
Focus Rotation	200°
Zoom Rotation	90°
Approx. Size	Φ114 x 239mm(ΦxLength)
Approx. Mass	2.9kg (with Drive Unit) / 2.4kg (without Drive Unit)

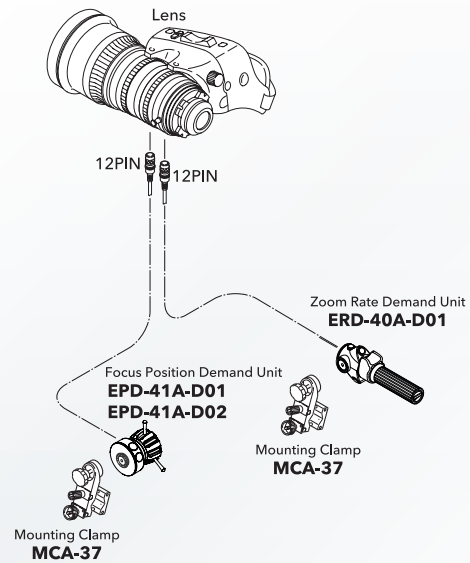
## MK Series



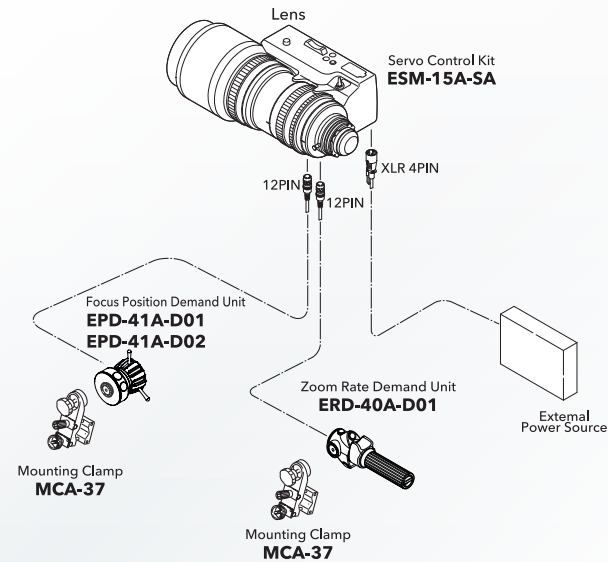
Model Name	MK18-55mm T2.9	MK50-135mm T2.9
Application	Super 35mm/APS-C E-mount Camera	Super 35mm/APS-C E-mount Camera
Focal Length	18-55mm	50-135mm
Zoom Ratio	3.0 x	2.7 x
T-No.	T2.9	T2.9
Compatible Image Size(diagonal)	Maximum 28.5mm	Maximum 28.5mm
Iris Blades	9	9
M.O.D.from Image Planes	0.85m/2ft 9in	1.2m/3ft 11in
Object Dimensions at M.O.D.	18mm 924mm x 520mm	50mm 534mm x 300mm
1.78:1 Aspect Ratio**	55mm 291mm x 164mm	135mm 196mm x 110mm
Angular Field of View	18mm 69.2° x 42.4°	50mm 27.9° x 15.9°
1.78:1 Aspect Ratio**	55mm 25.5° x 14.5°	135mm 10.5° x 5.9°
Focus Rotation	200°	200°
Zoom Rotation	90°	90°
Approx. Size	Φ85mm x 206mm(ΦxLength)	Φ85mm x 206mm(ΦxLength)
Approx. Mass	980g	980g

## Servo Control Kit

ZK14-35mm T2.9 / ZK19-90mm T2.9 /  
ZK85-300mm T2.9-4.0 / XK20-120mm T3.5



ZK25-300mm T3.5-3.85



\*Connection cable for external power source is necessary when the power source (over 10V, 1A) can't be supplied from a camera.

## Control Accessories List

	Description	Model Name
Focus Demand	Digital Focus Position Demand	EPD-41A-D01 / D02
	Mounting Clamp	MCA-37
Zoom Demand	Digital Zoom Demand (Featured Iris Remote Control)	ERD-40A-D01
	Mounting Clamp	MCA-37
Other	Lens Hood for ZK4.7x19, ZK3.5x85	HS-304A-114
	Lens Hood for ZK2.5x14	HS-304B-114
	Digital Servo Module (Designed for ZK12x25)	ESM-15A-SA
	Power Source Cable (Lens:20pin - Camera:12pin), L=120cm	SA-206M-1R2
	Power Source Cable (Lens:20pin - Camera:12pin), L=40cm	SA-206M-R40

## FUJINON Lens Maintenance

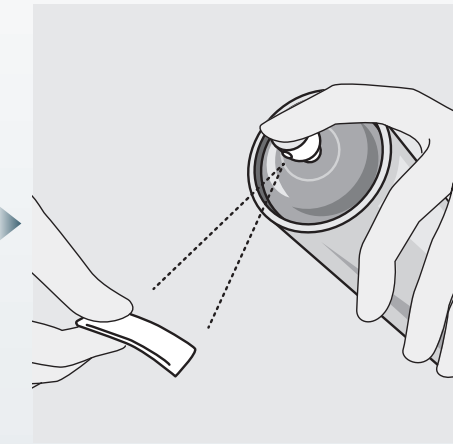
Maintaining high performance levels far into the future

### Lens Cleaning

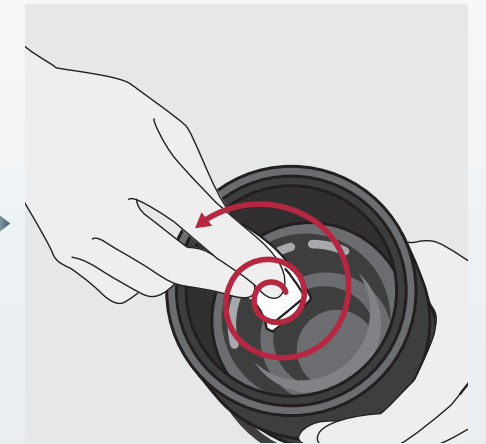
Use commonly available lens cleaner and lens cleaning paper.



First, remove the lens cover and brush the dust from the lens surface with a soft brush or blower brush.



Fold the lens paper into an appropriate size and moisten a part of it with lens cleaner.



Gently wipe the lens with the moistened lens paper in a circular motion, from the center to the edges. Take a dry piece of lens paper and wipe until all smears disappear.

### Moisture Removal

If water seeps through to the inner part of the lens, quickly wipe all remaining water on the outer part of the lens with a dry cloth. Next, place the lens into a sealable vinyl bag with a drying agent, seal the bag and allow to completely dehumidify.

### Storage

If the lens will not be used for some time, please store it away from high temperatures, high humidity and corrosive gases. High temperatures and high humidity are particular causes of mold. Mold is able to thrive in temperatures of between 20-28°C and between 60-80% humidity levels.

### Caution

The lens consists of an optical unit and a power unit. Both units are held in place with screws. Please DO NOT unscrew the units. If the units are separated, the mechanism of the power unit will require realignment.

If you encounter any problems during use,  
please contact your sales representative or our Service Center.

We recommend that lenses be inspected on a regular basis at least once a year to maintain high performance over the long term.



# FUJINON

