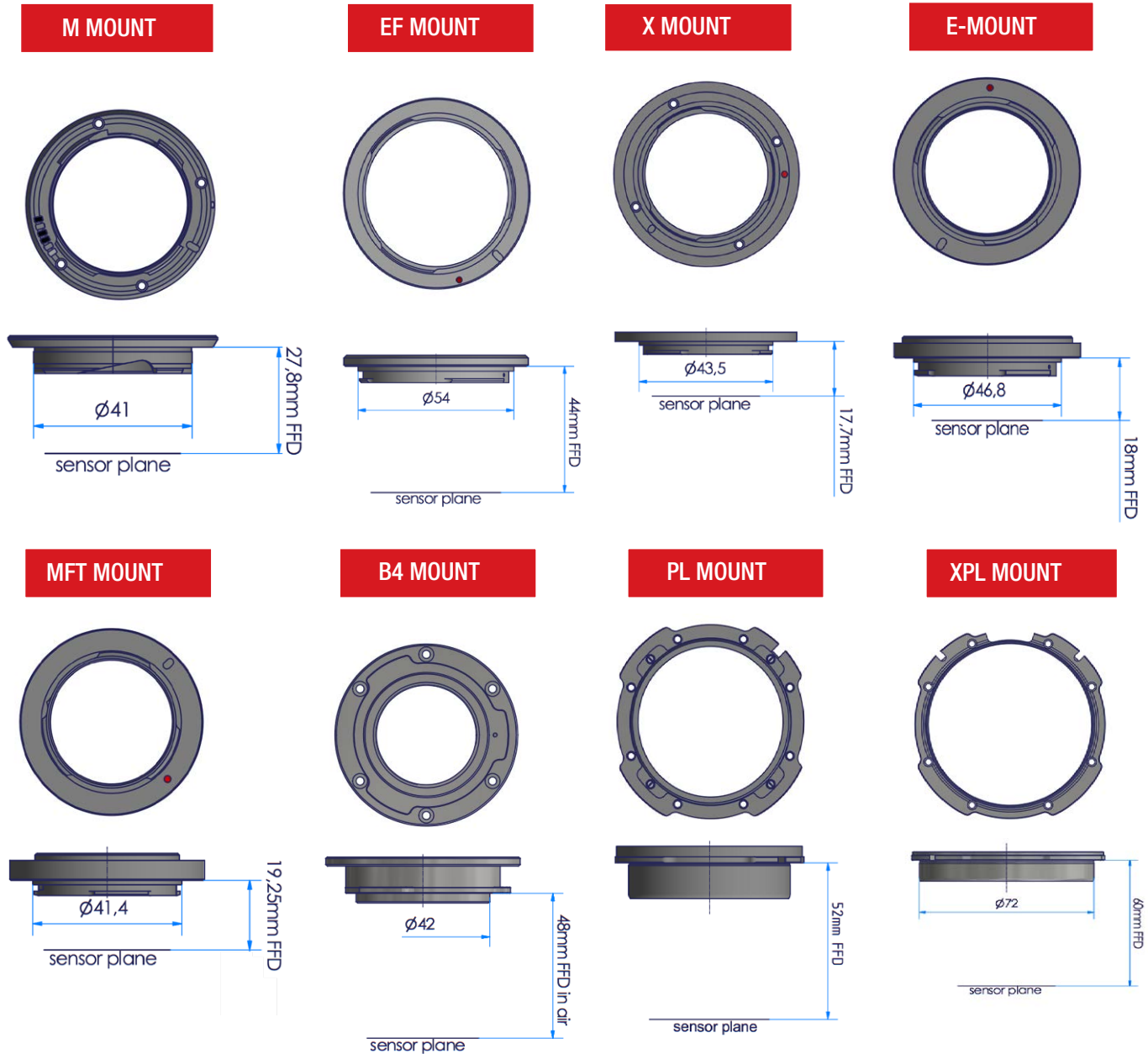


# Camera Lens Mount Charts by IB/E Optics

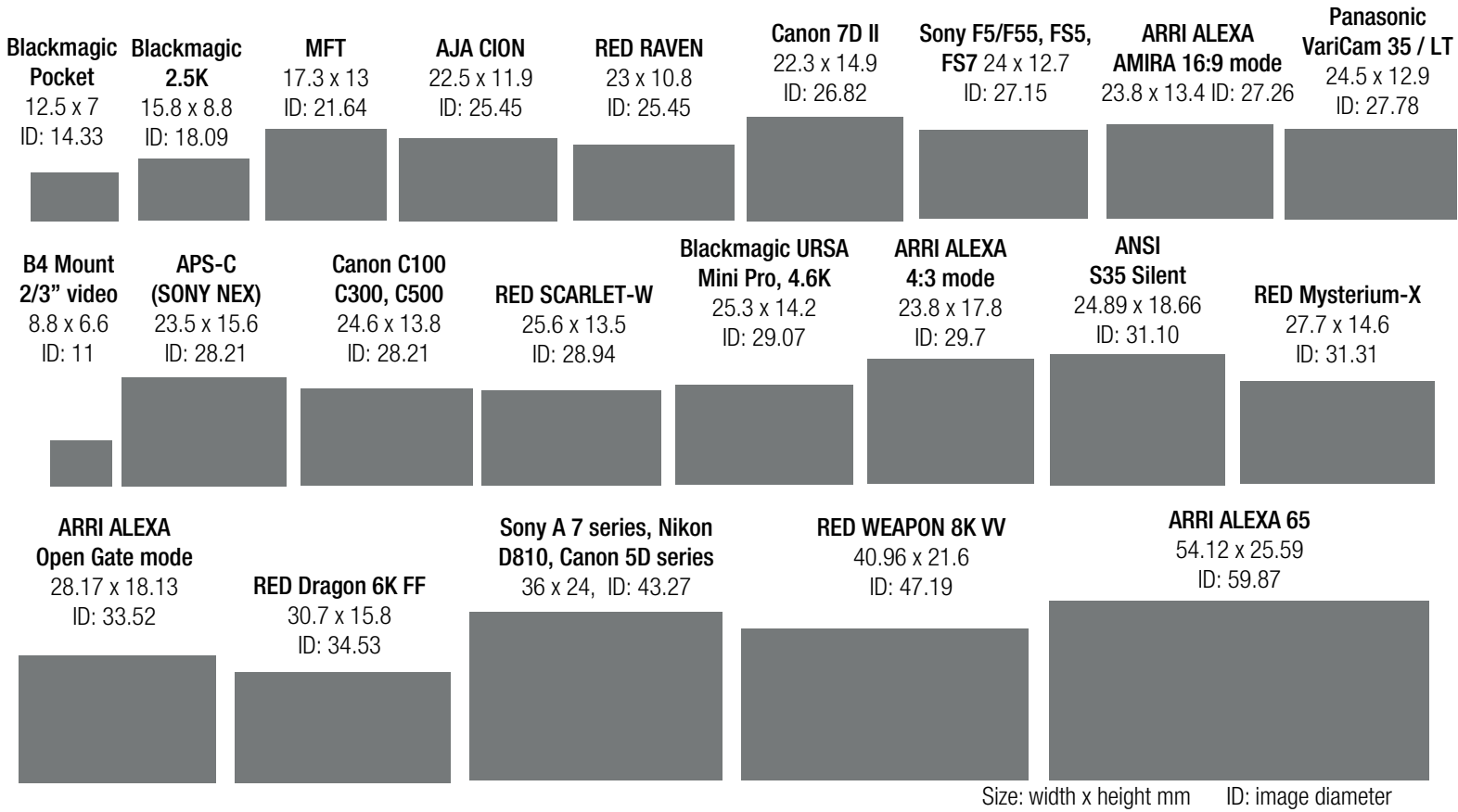
FDTimes has been obsessed with lens mounts lately. Thanks to IB/E Optics for the charts on these 2 pages.



Mount	Flange Focal Depth (FFD) [mm]	Inside Diameter of Mount (ID) [mm]
Fujifilm X-series	17.7	~ 43.5
Sony E-mount	18	46.1
Canon EOS M-mirrorless	18	47
Hasselblad XCD	18.3	61
Sony FZ mount (on F55/F5)	19	~ 64
MFT (Micro Four Thirds)	19.25	~ 38
Leica SL	20	51
Fujifilm GX Medium Format	26.7	~ 63
Leica M	27.8	44
Panavision SP 70 (Primo 70)	40	~66
Canon EF	44	54

Mount	Flange Focal Depth (FFD) [mm]	Inside Diameter of Mount (ID) [mm]
Nikon F	46.5	44
Leica R	47	49
Éclair CA-1 bayonet	48	46
ARRI PL	52	54
Leica S	53	~ 66.5
Panavision PV	57.15	49.5
ARRI XPL (Alexa 65)	60	72
Hasselblad H	61.63	~67.5
Mitchell BNCR	61.468	68
ARRI Maxi PL (765)	73.5	64
Hasselblad 500/200	74.9	69
B4 Mount	48	55

# Sensor Size Comparisons of Still & Motion Picture Cameras



## Macro VV T2.9 Raptor lenses for Large Format

There are 3 Macro VV T2.9 Raptor lenses from IB/E Optics: 100mm, 150mm and 180mm. Image circle diameter is 55mm with a PL mount to cover Full Frame, VistaVision, RED W8K, and beyond. With an XPL mount, they cover the 60mm image circle of Alexa 65.

IB/E Optics has measured shading (brightness from center to the edges) with 20% brightness as the cut-off. The worst case scenario is usually at infinity. For this specification all Raptor Macro lenses cover up to 52mm without restriction over the entire the focus range. The 150mm covers the full ALEXA 65 sensor without restriction and the 100mm and 180mm cover the ALEXA 65 sensor at close focus macro area, but not quite at infinity. See chart on page 4.



Manufacturer: IB/E Optics:

[www.ibe-optics.com](http://www.ibe-optics.com)

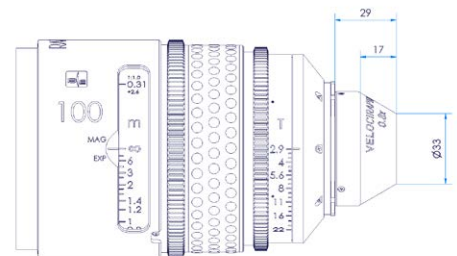
Band Pro is the exclusive distributor:

[bandpro.com](http://bandpro.com)

## 0.8x Velociraptor



The IB/E Velociraptor is a 0.8x Speed Booster rear attachment for Raptor Macro lenses. It reduces the image circle from 46.6 mm to 36 mm for ANSI S35 Silent and RED Dragon 6K format coverage. The maximum aperture of the Raptor is boosted from T2.9 to T2.3.



## How a Large Format Lens (like an Alexa 65 or IB/E Optics Raptor) covers various Sensor Sizes

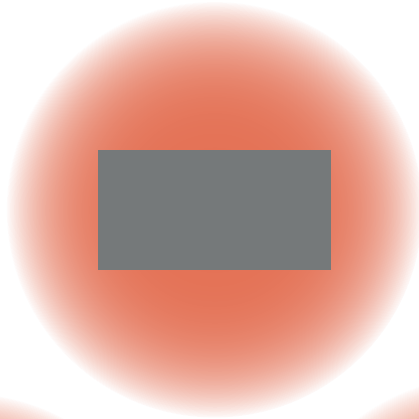
### ANSI S35 Silent

24.89 x 18.66  
ID: 31.10



### RED Dragon 6K FF

30.7 x 15.8  
ID: 34.53



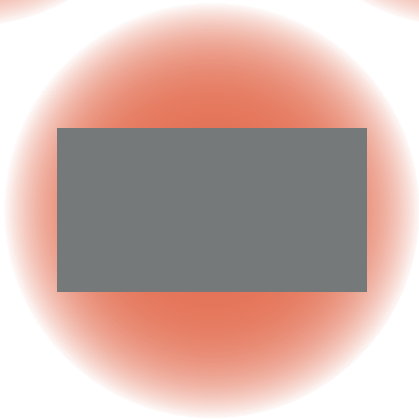
### Sony A7 series, Canon 5D series, Nikon D810

36 x 24  
ID: 43.27



### RED Weapon 8K VV

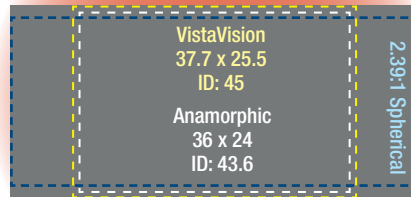
40.96 x 21.6  
ID: 47.19



Why are the edges soft? Because an image circle rarely has a sharp, defined circumference.

### IB/E Raptor XPL coverage on ARRI Alexa 65

54.12 x 25.59 ID: 59.87



Alexa 65 Spherical Widescreen  
54.12 x 22.64

### ARRI ALEXA 65

54.12 x 25.59  
ID: 59.87

Raptor max. image diameter:  
55 mm (with PL mount)  
60 mm (with XPL mount)

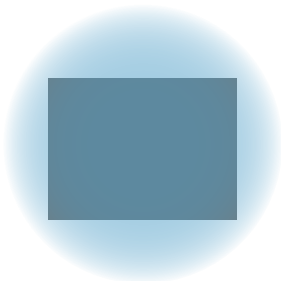


## How a Raptor with 0.8x Velociraptor covers various Sensor Sizes

Velociraptor reduces the image circle from 46.6 mm to 36 mm and boosts maximum aperture of the Raptor from T2.9 to T2.3.

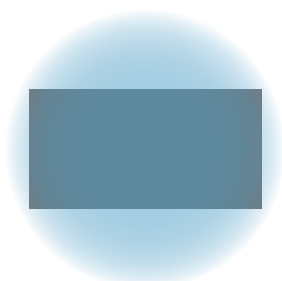
### ANSI S35 Silent

24.89 x 18.66  
ID: 31.10



### RED Dragon 6K FF

30.7 x 15.8  
ID: 34.53



### Sony A7 series, Canon 5D series, Nikon D810

36 x 24  
ID: 43.27



### RED Weapon 8K VV

40.96 x 21.6  
ID: 47.19



### ARRI ALEXA 65

54.12 x 25.59  
ID: 59.87



# Macro VV T2.9 Raptor lenses

IB/E Optics and Band Pro have 3 Macro VV T2.9 Raptor lenses: 100mm, 150mm and 180mm.

Their image circle diameter is 55mm with a PL mount to cover Full Frame, VistaVision, RED W8K, and beyond. With an XPL mount, they cover the 60mm image circle of Alexa 65 (tests are underway to determine edge shading with all focal lengths at all apertures.)

The lens mount is UMS PL—Universal Mount System—familiar to users of IB/E Extenders, Expanders, and Conversion kits. It quickly converts, without tools, between PL, Canon EF, Nikon F, Sony E and MFT mounts.

Band Pro Film & Digital is the exclusive worldwide distributor of IB/E Raptors.

[www.bandpro.com](http://www.bandpro.com)  
[www.ibe-optics.com](http://www.ibe-optics.com)

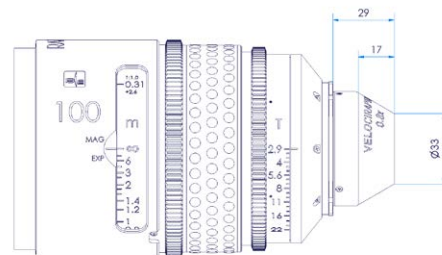


## IB/E Optics VV Raptor Macro Primes

- Focal lengths: 100, 150, 180 mm
- Aperture: T2.9-T22
- Focus Rotation: 300 degrees
- MOD (100/150/180 lens): 12.3"/15"/18.5"
- Max. Aperture at Inf & MOD: T5.3
- Iris Rotation: 70°
- Iris Blades: 9
- Industry Standard Gear pitch: 0.8 MOD
- Image Circle: 46.6 mm
- Length Flange to Front 100, 150: 145 mm / 5.7"
- Length Flange to Front 180: 200 mm / 7.9"
- Front Diameter all 3 lenses: 95 mm
- Weight (kg) 100, 150, 180: 1.5/1.9/2.9 kg
- Close Focus Magnification: 1:1
- UMS PL Mount (converts to F, EF, Sony E, etc)
- Adjustable flange focal distance (no shims)
- At 1:1 magnification, you only lose 1⅓ stops.

## IB/E 0.8x Velociraptors

Raptor with Velociraptor 0.8x Speed Booster rear attachment. It reduces the image circle from 46.6 mm to 36 mm for ANSI S35 Silent and RED Dragon 6K format coverage. It also boosts the maximum aperture from T2.9 to T2.3.



## IB/E 1.4xV and 2xV Extenders

Below: chart of Raptors, effective focal lengths, recommended format coverage and maximum image circles. Macro 100 with 1.4x and 2.0x is grayed out because you'd use 150 and 180 instead. AbelCine is the distributor of IB/E Extenders. [abelcine.com](http://abelcine.com)

	Raptor Macro 100	Raptor Macro 150	Raptor Macro 180	Max. image circle (mm)	Recommended Format
PL	T2.9/100mm	T2.9/150mm	T2.9/180mm	52 mm	VV
XPL	T2.9/100mm (macro only)	T2.9/150mm	T2.9/180mm (macro only)	60 mm	ALEXA65
0.8x	T2.3/80mm	T2.3/120mm	T2.3/145mm	36 mm	S35
1.4x	T4.1/140mm	T4.1/210mm	T4.1/250mm	52 mm	VV
2.0x	T5.8/200mm	T5.8/300mm	T5.8/360mm	52 mm	VV



L-R: Velociraptor 0.8x, 1.4xV Extender and 2xV Extender. The VVx1.4 and VVx2 extender increase the focal length only and not the image circle. They are designed for VistaVision format.

## LED Ring Light for Raptors

This is very good! An LED Ring Light for Raptors. Ring light strobes have been common on still photo macros—but rarely seen in cine. The IB/E Ring Light clamps onto the 95mm front diameter of the Raptor. Since it's often difficult to find space to light a 1:1 macro product shot, this new Ring Light helps a lot.

