



TS-93001V5

Comparison Chart of W.D. when using 15° Monitor and 1/2° Camera with Front Converter Lens.

	Normal	EX 2.0x	EX 3.0x	EX 4.0x	EX 6.0x
0.400x	11.3 x 15.0	5.5 x 7.5	3.7 x 5.0	2.8 x 3.7	1.97 x 2.5
0.133x	37.5 x 50.0	18.7 x 25.0	12.5 x 16.6	9.4 x 12.5	6.2 x 8.3
W.D.	200	95	55	35	23



TS-93002

Comparison Chart of W.D. when using 15° Monitor and 1/2° Camera with Front Converter Lens.

	Normal	EX 2.0x	EX 3.0x	EX 4.0x	EX 6.0x
0.800x	6.0x8.0	3.0x4.0	2.0x2.7	1.5x2.0	1.0x1.3
0.100x	52.5x70.0	26.3x35.0	17.5x23.3	13.1x17.5	8.7x11.6
W.D.	200	82	50	35	17



TS-93003

Comparison Chart of W.D. when using 15° Monitor and 1/2° Camera with Front Converter Lens.

	Normal	EX 2.0x	EX 3.0x	EX 4.0x	EX 5.0x	EX 6.0x	EX 8.0x	EX 10x
5.200x	0.9x1.2	0.45x0.6	0.3x0.4	0.23x0.3	0.15x0.2	1.42x1.9	2.1x2.8	2.65x3.5
0.650x	7.5x10.0	3.75x5.0	2.5x3.0	1.87x2.5	1.25x1.67	11.2x15	16.9x22.5	21.7x29.0
W.D.	35	25	15	12	8	50	75	100



TS-93005

Comparison Chart of W.D. when using 15° Monitor and 1/2° Camera with Front Converter Lens.

	Normal	EX 0.5x	EX 2.0x	EX 3.0x	EX 1.5x	EX 2.0x	EX 3.0x	EX 5.0x	EX 10x
6.400x	0.8x1.0	1.6x2.2	0.4x0.53	0.26x0.33	0.36x.7	0.40x0.53	0.26x0.33	0.16x0.24	0.2x0.25
0.800x	6.3x8.3	12.6x16.8	3.25x4.25	2.16x2.83	4.35x7	3.25x4.25	2.16x2.83	1.3x1.7	1.5x2.2
W.D.	83.0	107.9	46.9	31.0	83.0	83.0	83.0	83.0	46.9



TS-93006

Comparison Chart of W.D. when using 15° Monitor and 1/2° Camera with Front Converter Lens.

	Normal	EX 2.0x	EX 3.0x	EX 4.0x	EX 6.0x
4.000x	1.2x1.6	0.8x1.0	0.6x0.8	0.42x0.53	0.2x0.32
0.500x	9.6x12.8	6.4x8.53	4.8x6.4	3.21x4.26	1.92x2.56
W.D.	132.20	132.20	132.20	132.20	132.20



TS-93007

Comparison Chart of W.D. when using 15° Monitor and 1/2° Camera with Front Converter Lens.

	Normal	EX 2.0x	EX 3.0x	EX 4.0x	EX 6.0x
2.000x	2.4x3.2	1.5x2.13	1.2x1.6	0.8x1.05	0.48x0.64
0.250x	19.2x25.6	12.8x17.1	9.6x12.8	6.4x8.53	3.84x5.12
W.D.	249.65	249.65	249.65	249.65	249.65



TS-93002

Comparison Chart of W.D. when using 15° Monitor and 1/2° Camera with Front Converter Lens.

	Normal	EX 2.0x	EX 3.0x	EX 4.0x	EX 6.0x
3.000x	1.6x2.1	1.06x1.4	0.8x1.05	0.53x0.7	0.32x0.42
0.380x	12.6x16.8	8.4x11.2	6.3x8.4	4.2x5.6	2.52x3.36
W.D.	170.1	170.1	170.1	170.1	170.1

Image Size: 1/2", 1/3" & 1/4"
 Lens Construction: 6 Groups - 7 Elements
 Optical Magnification: min. 0.133x / max. 0.400x
 Zoom Ratio: 3x ±5%
 Focal Length: min. mag. 27.190mm / max. mag. 58.528mm
 Back Focal Length: min. 21.997mm / max. 72.448mm
 Field of View: min. 21.997mm / max. 175.976mm ±5%
 Aperture: F/7.5 - 8.3
 Dimensions: min. mag. 36.233 x 46.571mm (61.143mm dia.) / max. mag. 61.57mm ±5%
 Object to Image Distance: 281.663mm
 Working Distance: 200mm ±5%
 Weight: 103g.

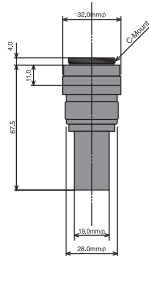


Image Size: 1/2", 1/3" & 1/4"
 Lens Construction: 7 Groups - 10 Elements with All Multi Coated
 Optical Magnification: min. 0.100x / max. 0.800x
 Zoom Ratio: 8x ±5%
 Focal Length: min. 21.997mm / max. 72.448mm
 Back Focal Length: min. 21.997mm / max. 175.976mm ±5%
 Aperture: F/7.5 - 8.3
 Dimensions: min. mag. 48.212 x 64.510mm (81.034mm dia.) / max. mag. 5.997 x 7.982mm (9.985mm dia.)
 Object to Image Distance: 316.619mm
 Working Distance: 200mm ±5%
 Weight: 103g.

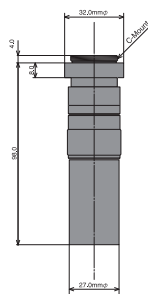


Image Size: 1/2", 1/3" & 1/4"
 Lens Construction: 7 Groups - 10 Elements with All Multi Coated
 Optical Magnification: min. 0.100x / max. 0.800x
 Zoom Ratio: 8x ±5%
 Focal Length: min. 21.997mm / max. 72.448mm
 Back Focal Length: min. 21.997mm / max. 175.976mm ±5%
 Aperture: F/7.5 - 8.3
 Dimensions: min. mag. 48.212 x 64.510mm (81.034mm dia.) / max. mag. 5.997 x 7.982mm (9.985mm dia.)
 Object to Image Distance: 316.619mm
 Working Distance: 200mm ±5%
 Weight: 103g.

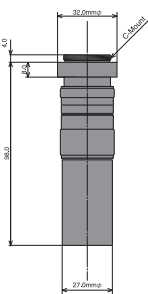


Image Size: 1/2", 1/3" & 1/4"
 Lens Construction: 9 Groups - 12 Elements
 Optical Magnification: min. 0.650x / max. 5.200x
 Zoom Ratio: 8x ±5%
 Focal Length: min. 3.6 x 9.64mm / max. 0.92 - 1.23mm
 Dimensions: 112.7 x 30mm dia.
 Object to Image Distance: 165.63mm ±2mm
 Aperture: F/22 - 25
 Working Distance: 200mm ±2mm
 Weight: 90g.

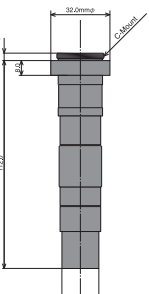


Image Size: 1/2", 1/3" & 1/4"
 Lens Construction: 10 Groups - 16 Elements (with All Multi Coated)
 Optical Magnification: min. 0.600x / max. 6.400x
 Zoom Ratio: 8x ±5%
 Depth of Field View (at Open): min. 0.3mm / max. 0.02mm
 Resolution Power (L/mm): max. 100 lines / min. 30 lines
 Dimensions: 156mm x 40.0mm dia.
 Object to Image Distance: 249.2mm ±2mm
 Working Distance: 65.0mm ±2mm
 Weight: 300g.

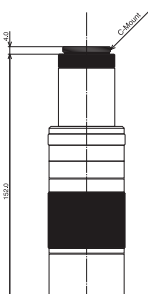


Image Size: 1/2", 1/3" & 1/4"
 Lens Construction: 10 Groups - 16 Elements (with All Multi Coated)
 Optical Magnification: min. 0.500x / max. 4.000x
 Zoom Ratio: 8x ±5%
 Resolution Power (L/mm): max. 100 lines / min. 40 lines
 Dimensions: 156mm x 40mm dia.
 Object to Image Distance: 298.2mm ±2mm
 Working Distance: 132.20mm ±1mm
 Weight: 300g.

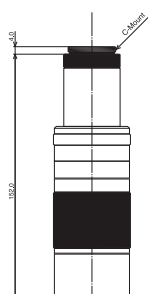


Image Size: 1/2", 1/3" & 1/4"
 Lens Construction: 10 Groups - 15 Elements (with All Multi Coated)
 Optical Magnification: min. 0.250x / max. 2.000x
 Zoom Ratio: 8x ±5%
 Depth of Field View: min. 2.42mm / max. 0.30mm
 Resolution Power (L/mm): max. 120 lines / min. 40 lines
 Dimensions: 156mm x 40mm dia.
 Object to Image Distance: 411.6mm +/2.0mm
 Working Distance: 249.44 +/1.0mm
 Weight: 300g.

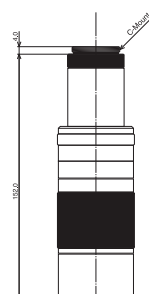


Image Size: 1/2", 1/3" & 1/4"
 Lens Construction: 10 Groups - 15 Elements (with All Multi Coated)
 Optical Magnification: min. 0.380x / max. 3.000x
 Zoom Ratio: 8x ±5%
 Depth of Field View: min. 2.42mm / max. 0.30mm
 Resolution Power (at OPEN): max. 120 lines / min. 40 lines
 Dimensions: 156mm x 40mm dia.
 Object to Image Distance: 433.4mm +/2.0mm
 Working Distance: 170.1mm +/1.0mm
 Weight: 300g.

