

Distortionless Macro Lens

Model		VS-LDA4			
Focal Length(f)		4 mm (4.14)			
Maximum Aperture Ratio		1: 2.0			
Optical Mag. Range		$(\infty) \times 0.01 \sim \times 0.04$			
Optical Mag.		$\times 0.01$	$\times 0.016$	$\times 0.03$	$\times 0.04$
FOV (V x H)	2/3"	-			
	1/2"	480.0 $\times$ 640.0	300.0 $\times$ 400.0	160.0 $\times$ 213.3	120.0 $\times$ 160.0
	1/3"	360.0 $\times$ 480.0	225.0 $\times$ 300.0	120.0 $\times$ 160.0	90.0 $\times$ 120.0
WD		403.2 mm	247.9 mm	127.2 mm	92.7 mm
O/I (Object & Imager distance)		449.7 mm	294.5 mm	173.9 mm	139.4 mm
Working F/# *Value at Iris open		2.1	2.1	2.1	2.1
TV Distortion (1/2")		-0.23 %	-0.23 %	-0.24 %	-0.24 %
Operation of Iris & Zoom		Manual (Lock Screw M2)			
Wavelength		Visible			
Mount		C-Mount			
Flange Back		17.526 mm			
Sensor Size (max.)		1/2"			
Filter Thread		M 27 P= 0.5			
Weight (approx.)		49 g			
Dimension		ϕ 29.5 (max.) $\times$ L = 29.0 ($\times 0.01$) $\sim$ 29.2 ($\times 0.04$) mm			

Distortionless Macro Lens

Model		VS-LDA6.5			
Focal Length(f)		6.5 mm (6.7)			
Maximum Aperture Ratio		1: 2.2			
Optical Mag. Range		$(\infty) \times 0.01 \sim \times 0.06$			
Optical Mag.		$\times 0.01$	$\times 0.02$	$\times 0.04$	$\times 0.06$
FOV (V x H)	2/3"	-			
	1/2"	480.0 $\times$ 640.0	240.0 $\times$ 320.0	120.0 $\times$ 160.0	80.0 $\times$ 160.7
	1/3"	360.0 $\times$ 480.0	180.0 $\times$ 240.0	90.0 $\times$ 120.0	60.0 $\times$ 80.0
WD		653.2 mm	318.4 mm	151.0 mm	95.2 mm
O/I (Object & Imager distance)		696.6 mm	361.9 mm	194.6 mm	138.9 mm
Working F/# *Value at Iris open		2.3	2.3	2.3	2.3
TV Distortion (1/2")		0.16 %	0.09 %	-0.05 %	-0.18 %
Operation of Iris & Zoom		Manual (Lock Screw M2)			
Wavelength		Visible			
Mount		C-Mount			
Flange Back		17.526 mm			
Sensor Size (max.)		1/2"			
Filter Thread		M 27 P= 0.5			
Weight (approx.)		40 g			
Dimension		ϕ 29.5 (max.) $\times$ L = 25.9 ($\times 0.01$) $\sim$ 26.2 ($\times 0.06$) mm			

Distortionless Macro Lens

Model		VS-LDA10			
Focal Length(f)		10 mm (10.25)			
Maximum Aperture Ratio		1: 2.2			
Optical Mag. Range		(∞) × 0.03 ~ × 0.10			
Optical Mag.		× 0.03	× 0.05	× 0.08	× 0.10
FOV (V x H)	2/3"	-			
	1/2"	160.0 × 213.3	96.0 × 128.0	60.0 × 80.0	48.0 × 64.0
	1/3"	120.0 × 160.0	72.0 × 96.0	45.0 × 60.0	36.0 × 48.0
WD		330.2 mm	193.5 mm	116.7 mm	91.0 mm
O/I (Object & Imager distance)		375.0 mm	238.5 mm	162.0 mm	136.5 mm
Working F/# *Value at Iris open		2.3	2.3	2.4	2.4
TV Distortion (1/2")		0.03 %	0.01 %	-0.02 %	-0.04 %
Operation of Iris & Zoom		Manual (Lock Screw M2)			
Wavelength		Visible			
Mount		C-Mount			
Flange Back		17.526 mm			
Sensor Size (max.)		1/2"			
Filter Thread		M 27 P= 0.5			
Weight (approx.)		42 g			
Dimension		ϕ 29.5 (max.) × L = 27.3 (×0.03) ~ 28.0 (×0.10) mm			

Distortionless Macro Lens

Model		VS-LDA15			
Focal Length(f)		15 mm (15.01)			
Maximum Aperture Ratio		1: 2.0			
Optical Mag. Range		(∞) × 0.03 ~ × 0.15			
Optical Mag.		× 0.03	× 0.06	× 0.10	× 0.15
FOV (V x H)	2/3"	236.7 × 280.0	118.3 × 140.0	71.0 × 84.0	47.3 × 56.0
	1/2"	160.0 × 213.3	80.0 × 106.7	48.0 × 64.0	32.0 × 42.7
	1/3"	120.0 × 160.0	60.0 × 80.0	36.0 × 48.0	24.0 × 32.0
WD		489.2 mm	239.0 mm	138.9 mm	88.9 mm
O/I (Object & Imager distance)		536.2 mm	286.4 mm	186.9 mm	137.7 mm
Working F/# *Value at Iris open		2.1	2.1	2.1	2.2
TV Distortion (2/3")		-0.01 %	-0.02 %	-0.05 %	-0.09 %
Operation of Iris & Zoom		Manual (Lock Screw M2)			
Wavelength		Visible			
Mount		C-Mount			
Flange Back		17.526 mm			
Sensor Size (max.)		2/3"			
Filter Thread		M 27 P= 0.5			
Weight (approx.)		46 g			
Dimension		φ 30.5 (max.) × L = 29.5 (×0.03) ~ 31.3 (×0.15) mm			

Distortionless Macro Lens

Model		VS-LDA20			
Focal Length(f)		20 mm (20.71)			
Maximum Aperture Ratio		1: 2.0			
Optical Mag. Range		× 0.04 ~ × 0.22			
Optical Mag.		× 0.04	× 0.08	× 0.15	× 0.22
FOV (V x H)	2/3"	177.5 × 210.0	88.8 × 105.0	47.3 × 56.0	32.3 × 38.2
	1/2"	120.0 × 160.0	60.0 × 80.0	32.0 × 42.7	21.8 × 29.1
	1/3"	90.0 × 120.0	45.0 × 60.0	24.0 × 32.0	16.4 × 21.8
WD		510.3 mm	251.3 mm	130.5 mm	86.6 mm
O/I (Object & Imager Distance)		558.8 mm	300.6 mm	181.3 mm	138.8 mm
Working F/# *Value at Iris Open		2.1	2.2	2.3	2.3
TV Distortion (2/3")		-0.01 %	-0.05 %	-0.12 %	-0.17 %
Operation of Iris & Zoom		Manual (Lock Screw M2)			
Wavelength		Visible			
Mount		C-Mount			
Flange Back		17.526 mm			
Sensor Size (max.)		2/3"			
Filter Thread		M 27 P= 0.5			
Weight (approx.)		47 g			
Dimension		ϕ 30.5 (max.) × L = 31.0 (×0.04) ~ 34.7 (×0.22) mm			

Distortionless Macro Lens

Model		VS-LDA25			
Focal Length(f)		25 mm (25.50)			
Maximum Aperture Ratio		1: 2.0			
Optical Mag. Range		× 0.05 ~ × 0.25			
Optical Mag.		× 0.05	× 0.1	× 0.20	× 0.25
FOV (V x H)	2/3"	142.0 × 168.0	71.0 × 84.0	35.5 × 42.0	28.4 × 33.6
	1/2"	96.0 × 128.0	48.0 × 64.0	24.0 × 32.0	19.2 × 25.6
	1/3"	72.0 × 96.0	36.0 × 48.0	18.0 × 24.0	14.4 × 19.2
WD		508.2 mm	253.2 mm	125.7 mm	100.2 mm
O/I (Object & Imager Distance)		559.2 mm	305.5 mm	180.5 mm	156.3 mm
Working F/# *Value at Iris Open		2.1	2.2	2.4	2.6
DOF at PCoC ϕ 0.04mm		67.2 mm	17.6 mm	4.8 mm	3.3 mm
TV Distortion (2/3")		0.06 %	0.02 %	-0.04 %	-0.06 %
Operation of Iris & Zoom		Manual (Lock Screw M2)			
Wavelength		Visible			
Mount		C-Mount			
Flange Back		17.526 mm			
Sensor Size (max.)		2/3"			
Filter Thread		M 27 P= 0.5			
Weight (approx.)		49 g			
Dimension		ϕ 30.5 (max.) × L = 33.5 (×0.05) ~ 38.6 (×0.25) mm			

Distortionless Macro Lens

Model		VS-LDA30			
Focal Length(f)		30 mm (30.00)			
Maximum Aperture Ratio		1: 2.0			
Optical Mag. Range		× 0.08 ~ × 0.23			
Optical Mag.		× 0.08	× 0.10	× 0.20	× 0.23
FOV (V x H)	2/3"	88.8 × 105.0	71.0 × 84.0	35.5 × 42.0	30.9 × 36.5
	1/2"	60.0 × 80.0	48.0 × 64.0	24.0 × 32.0	20.9 × 27.8
	1/3"	45.0 × 60.0	36.0 × 48.0	18.0 × 24.0	15.7 × 20.9
WD		381.6 mm	307.2 mm	160.2 mm	141.5 mm
O/I (Object & Imager distance)		431.1 mm	356.7 mm	209.7 mm	191.0 mm
Working F/# *Value at Iris open		2.4	2.4	2.7	2.8
TV Distortion (2/3")		0.08 %	0.05 %	-0.04 %	-0.06 %
Operation of Iris & Zoom		Manual (Lock Screw M2)			
Wavelength		Visible			
Mount		C-Mount			
Flange Back		17.526 mm			
Sensor Size (max.)		2/3"			
Filter Thread		M 27 P= 0.5			
Weight (approx.)		47 g			
Dimension		ϕ 30.5 (max.) × L = 32 mm			

Distortionless Macro Lens

Model		VS-LDA35			
Focal Length(f)		35 mm (35.04)			
Maximum Aperture Ratio		1: 1.9			
Optical Mag. Range		× 0.3 ~ × 0.5			
Optical Mag.		× 0.30	× 0.35	× 0.40	× 0.50
FOV (V x H)	2/3"	23.7 × 28.0	20.3 × 24.0	17.8 × 21.0	14.2 × 16.8
	1/2"	16.0 × 21.3	13.7 × 18.3	12.0 × 16.0	9.6 × 12.8
	1/3"	12.0 × 16.0	10.3 × 13.7	9.0 × 12.0	7.2 × 9.6
WD		142.9 mm	126.2 mm	113.7 mm	96.1 mm
O/I (Object & Imager Distance)		196.9 mm	182.0 mm	171.2 mm	157.1 mm
Working F/# *Value at Iris Open		2.5	2.6	2.7	2.9
DOF at PCoC ϕ 0.04mm		2.2 mm	1.7 mm	1.4 mm	0.9 mm
TV Distortion (2/3")		0.02 %	0.01 %	0.01 %	0.00 %
Operation of Iris & Zoom		Manual (Lock Screw M2)			
Wavelength		Visible			
Mount		C-Mount			
Flange Back		17.526 mm			
Sensor Size (max.)		2/3"			
Filter Thread		M 27 P= 0.5			
Weight (approx.)		58 g			
Dimension		ϕ 30.5 (max.) × L = 36.5 (× 0.30) ~ 43.5 (× 0.50) mm			

Distortionless Macro Lens

Model		VS-LDA50			
Focal Length(f)		50 mm (48.48)			
Maximum Aperture Ratio		1: 2.5			
Optical Mag. Range		× 0.10 ~ × 0.25			
Optical Mag.		× 0.10	× 0.15	× 0.20	× 0.25
FOV (V x H)	2/3"	71.0 × 84.0	47.3 × 56.0	35.5 × 42.0	28.4 × 33.6
	1/2"	48.0 × 64.0	32.0 × 42.7	24.0 × 32.0	19.2 × 25.6
	1/3"	36.0 × 48.0	24.0 × 32.0	18.0 × 24.0	14.4 × 19.2
WD		512.4 mm	350.8 mm	270.0 mm	221.5 mm
O/I (Object & Imager distance)		574.9 mm	415.7 mm	337.4 mm	291.3 mm
Working F/# *Value at Iris open		2.7	2.8	2.9	3.1
TV Distortion (2/3")		0.03 %	0.02 %	0.01 %	0.00 %
Operation of Iris & Zoom		Manual (Lock Screw M2)			
Wavelength		Visible			
Mount		C-Mount			
Flange Back		17.526 mm			
Sensor Size (max.)		2/3"			
Filter Thread		M 27 P= 0.5			
Weight (approx.)		76 g			
Dimension		ϕ 30.5 (max.) × L = 45.0 (×0.10) ~ 52.3 (×0.25) mm			

Distortionless Macro Lens

Model		VS-LDA75			
Focal Length(f)		75 mm (73.98)			
Maximum Aperture Ratio		1: 3.8			
Optical Mag. Range		× 0.15 ~ × 0.35			
Optical Mag.		× 0.15	× 0.20	× 0.30	× 0.35
FOV (V x H)	2/3"	47.3 × 56.0	35.5 × 42.0	23.7 × 28.0	20.3 × 24.0
	1/2"	32.0 × 42.7	24.0 × 32.0	16.0 × 21.3	13.7 × 18.3
	1/3"	24.0 × 32.0	18.0 × 24.0	12.0 × 16.0	10.3 × 13.7
WD		527.5 mm	404.2 mm	280.9 mm	245.6 mm
O/I (Object & Imager distance)		616.0 mm	496.4 mm	380.5 mm	348.9 mm
Working F/# *Value at Iris Open		4.1	4.2	4.4	4.5
TV Distortion (2/3")		0.03 %	0.02 %	0.00 %	-0.01 %
Operation of Iris & Zoom		Manual (Lock Screw M2)			
Wavelength		Visible			
Mount		C-Mount			
Flange Back		17.526 mm			
Sensor Size (max.)		2/3"			
Filter Thread		M 27 P= 0.5			
Weight (approx.)		92 g			
Dimension		ϕ 30.5 (max.) × L = 71.0 (×0.15) ~ 85.8 (×0.35) mm			