

The Specification of Collimating Lens for Resolution

2021-08-22

OneStone

Model Name	CL-130	CL-924C	CL-1216C	CL-1220C-t1D	CL-825	F175-120-0.1D	CL-830
Typical Model Name	F100-64	F120-90C	F120-120C	F120-120C-t1D	F175-80	F175-120-0.1D	F200-80
Picture							
The Range of Wavelength	Visible	Visible	Visible	Visible	Visible	Visible	Visible
Effective Focal Length	97.8mm	110.5 ~ 129.5mm	116.5 ~ 157.7mm	117.5 ~ 133.5mm	174.0mm	175.7mm	198.8mm
Interchangeable Lens System	No	Yes	Yes	Yes	No	No	No
Sub Lenses		0.0D, 0.5D, 1.0D 1.5D, 2.0D, 2.5D	0.0D, 0.5D, 1.0D 1.5D, 2.0D, 2.5D	0.0D, 0.5D, 1.0D			
Setting Jig	No	No	No	No	No	No	Yes
Inspectable FOV	64°	90°	120°	120°	80°	120°	80°
Exit Pupil Size	Φ5.0mm	Φ4.0mm	Φ3.0mm	Φ3.0mm	Φ4.0mm	Φ3.0mm	Φ4.5mm
Exit Pupil Position (Optics)	30.0mm	24.0mm	16.35mm	20.0mm	25.0mm	18.6mm	30.0mm
Exit Pupil Position (Mecha)	22.376mm	20.881mm	12.05mm	15.5mm	19.86mm	15.0mm	24.9mm
Lens Assy Size	Φ90.0mm X L68.49mm	Φ140.0mm X L74.5mm	Φ200.0mm X L120.6mm	Φ195.0mm X L95.1mm	Φ98mm X L44.5mm	Φ140.0mm X L73.42mm	Φ95.0mm X L47.0mm
Weight	0.87kg	1.66kg	2.69kg	3.55kg	0.50kg	2.77kg	0.62kg
The Range of Object Distance	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	800mm ~ Infinity	400mm ~ Infinity	2m ~ Infinity	400mm ~ Infinity
The Range of Working Distance	54.6 ~ 75.0mm	18.0 ~ 35.5mm	16.45 ~ 30.54mm	24.57 ~ 29.90mm	95.4 ~ 150.0mm	73.73 ~ 87.69mm	97.0 ~ 165.0mm
The Range of Chart Size (Dia)	Φ93.0 ~ Φ110.0mm	Φ184.0 ~ Φ220.7mm	Φ347.1 ~ Φ400.2mm	Φ373.4 ~ Φ401.5mm	Φ207.0 ~ Φ290.9mm	Φ544.63 ~ Φ602.60mm	Φ224.9 ~ Φ332.1mm

Model Name	CL-919	CL-7530	CL-8030	CL-825IR	CL-853C	CL-921D	CL-1021D
Typical Model Name	F220-90	F300-75	F300-80	F300-80IR	F300-85C	F300-90D	F300-100D
Picture							
The Range of Wavelength	Visible	Visible	Visible	850nm, 940nm	Visible	Visible	Visible
Effective Focal Length	217.7mm	295.5mm	296.0mm	286.8mm	298.2 ~ 327.1mm	299.9 ~ 339.7mm	299.9 ~ 339.7mm
Interchangeable Lens System	No	No	No	No	Yes	Yes	Yes
Sub Lenses					0.0D, 0.5D, 1.0D 1.5D, 2.0D	0.67D, 1.0D, 1.33D 1.67D, 2.0D, 2.5D	0.67D, 1.0D, 1.33D 1.67D, 2.0D, 2.5D
Setting Jig	Yes	No	No	No	No	Yes	No
Inspectable FOV	90°	75°	80°	80°	85°	90°	100°
Exit Pupil Size	Φ4.5mm	Φ5.0mm	Φ5.0mm	Φ4.0mm	Φ5.0mm	Φ4.5mm	Φ4.5mm
Exit Pupil Position (Optics)	19.0mm	30.0mm	30.0mm	25.0mm	30.0mm	21.0mm	21.0mm
Exit Pupil Position (Mecha)	16.6mm	24.907mm	24.907mm	21.0mm	28.01mm	18.63mm	18.168mm
Lens Assy Size	Φ90.0mm X L37.0mm	Φ151.0mm X L66.0mm	Φ151.0mm X L64.8mm	Φ94.0mm X L41.5mm	Φ147.0mm X L71.0mm	Φ121.0mm X L54.9mm	Φ130.0mm X L54.8mm
Weight	0.38kg	1.34kg	1.33kg	0.44kg	1.97kg	0.91kg	1.00kg
The Range of Object Distance	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity
The Range of Working Distance	92.6 ~ 167.65mm	122.4 ~ 250.3mm	122.0 ~ 250.6mm	106.7 ~ 223.6mm	64.3 ~ 207.6mm	110.6 ~ 226.2mm	110.6 ~ 226.2mm
The Range of Chart Size (Dia)	Φ275.9 ~ Φ440.8mm	Φ224.9 ~ Φ379.9mm	Φ278.5 ~ Φ476.7mm	Φ274.1 ~ Φ487.5mm	Φ187.1 ~ Φ546.5mm	Φ354.2 ~ Φ598.3mm	Φ421.9 ~ Φ713.8mm

Model Name	CL-921IR	CL-925CM	CL-1218C	CL-1223C	CL-720	CL-930C	CL-736
Typical Model Name	F320-90IR	F320-90CM	F320-120C	F350-120C	F400-70	F400-90C	F415-70
Picture							
The Range of Wavelength	850nm, 940nm	Visible	Visible	Visible	Visible	Visible	Visible
Effective Focal Length	336.2 ~ 337.2mm	319.9 ~ 399.9mm	300.0 ~ 380.0mm	350.1 ~ 421.6mm	388.3mm	405.1 ~ 504.9mm	415.1mm
Interchangeable Lens System	No	Yes	Yes	Yes	No	Yes	No
Sub Lenses		0.0D, 0.5D, 1.0D 1.5D, 2.0D, 2.5D	0.0D, 0.5D, 1.0D 1.5D, 2.0D, 2.5D	0.0D, 0.5D, 1.0D 1.5D, 2.0D, 2.5D		0.0D, 0.5D, 1.0D 1.5D, 2.0D, 2.5D	
Setting Jig	No	No	No	No	No	No	No
Inspectable FOV	90°	90°	120°	120°	70°	90°	70°
Exit Pupil Size	Φ4.5mm	Φ14.0mm	Φ4.0mm	Φ4.5mm	Φ4.0mm	Φ7.0mm	Φ15.0mm
Exit Pupil Position (Optics)	21.0mm	25.444mm	18.0mm	23.0mm	20.0mm	30.0mm	35.6mm
Exit Pupil Position (Mecha)	18.63mm	23.0mm	14.04mm	17.35mm	16.73mm	27.0mm	34.1mm
Lens Assy Size	Φ121.0mm X L54.9mm	Φ200.0mm X L120.5mm	Φ144.0mm X L57.86mm	Φ190.0mm X L83.9mm	Φ89.0mm X L38.0mm	Φ148mm X L65.3mm	Φ190.8mm X L128.0mm
Weight	0.84kg	6.1kg	1.33kg	3.58kg	0.24kg	1.86kg	3.48kg
The Range of Object Distance	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	350mm ~ Infinity	400mm ~ Infinity	350mm ~ Infinity	400mm ~ Infinity
The Range of Working Distance	112.8 ~ 257.3mm	63.7 ~ 194.3mm	124.67 ~ 233.49mm	87.6 ~ 248.2mm	142.2 ~ 329.2mm	102.5 ~ 305.5mm	63.3 ~ 263.4mm
The Range of Chart Size (Dia)	Φ355.7 ~ Φ673.4mm	Φ355.3 ~ Φ635.5mm	Φ638.2 ~ Φ1050.0mm	Φ610.5 ~ Φ1225.2mm	Φ108.2 ~ Φ551.5mm	Φ382.0 ~ Φ809.6mm	Φ273.6 ~ Φ586.4mm

Model Name	CL-929	F500-100-t1D	CL-730W, CL-730	F1500-30-VS	F1500-30-IR
Typical Model Name	F430-90	F500-100-t1D	F800-68W, F800-68	F1500-30-VS	F1500-30-IR
Picture					
The Range of Wavelength	Visible	Visible	Visible	Visible	785 ~ 840nm
Effective Focal Length	428.7mm	500.0mm	799.3mm	1474.4mm	1500.1mm
Interchangeable Lens System	No	No	No	No	No
Sub Lenses					
Setting Jig	Yes	No	No	No	No
Inspectable FOV	90°	100°	68°	32.5°	32.5°
Exit Pupil Size	Φ5.0mm	Φ11.0mm	Φ5.0mm	Φ28.0mm	Φ28.0mm
Exit Pupil Position (Optics)	28.8mm	30.0mm	30.0mm	100.0mm	100.0mm
Exit Pupil Position (Mecha)	26.1mm	25.5mm	28.0mm	98.10mm	98.10mm
Lens Assy Size	Φ115.0mm X L46.0mm	Φ190mm X L88.45m	Φ69.0mm X L21.7mm	Φ128.0mm X L90.0mm	Φ128.0mm X L90.0mm
Weight	0.803kg	3.69kg	0.18kg	1.75kg	1.75kg
The Range of Object Distance	350mm ~ Infinity	800mm ~ Infinity	400mm ~ Infinity	10m ~ Infinity	10m ~ Infinity
The Range of Working Distance	125.92 ~ 355.33mm	195.6 ~ 381.9mm	234.1 ~ 772.6mm	1180.34 ~ 1370.75mm	1199.55 ~ 1396.22mm
The Range of Chart Size (Dia)	Φ372.8 ~ Φ868.0mm	Φ706.8 ~ Φ1201.5mm	Φ361.6 ~ Φ1083.3mm	Φ754.0 ~ Φ861.1mm	Φ765.5 ~ Φ876.2mm