

The Specification of Collimating Lens for Resolution

OneStone

2020-10-30

Model Name	CL-130	CL-924C	CL-825	CL-830	CL-919	CL-7530	CL-8030
Typical Model Name	F100-64	F120-90C	F175-80	F200-80	F220-90	F300-75	F300-80
Picture							
The Range of Wavelength	Visible	Visible	Visible	Visible	Visible	Visible	Visible
Effective Focal Length	97.8mm	110.5 ~ 129.5mm	174.0mm	198.8mm	217.7mm	295.5mm	296.0mm
Interchangeable Lens System	No	Yes	No	No	No	No	No
Sub Lenses		0.0D, 0.5D, 1.0D 1.5D, 2.0D, 2.5D					
Setting Jig	No	No	No	Yes	Yes	No	No
Pupil Motion Circle							
Inspectable FOV	64°	90°	80°	80°	90°	75°	80°
Exit Pupil Size	Φ5.0mm	Φ4.0mm	Φ4.0mm	Φ4.5mm	Φ4.5mm	Φ5.0mm	Φ5.0mm
Exit Pupil Position (Optics)	30.0mm	24.0mm	25.0mm	30.0mm	19.0mm	30.0mm	30.0mm
Exit Pupil Position (Mecha)	22.376mm	20.881mm	19.86mm	24.9mm	16.6mm		24.907mm
Lens Ass'y Size	Φ90.0mm X L68.49mm	Φ140.0mm X L74.5mm	Φ98mm X L44.5mm	Φ95.0mm X L47.0mm	Φ90.0mm X L37.0mm	Φ151.0mm X L66.0mm	Φ151.0mm X L64.8mm
Weight	0.87kg	1.66kg	0.50kg	0.62kg	0.38kg	1.34kg	1.33kg
The Range of Object Distance	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity
The Range of Working Distance	54.6 ~ 75.0mm	18.0 ~ 35.5mm	95.4 ~ 150.0mm	97.0 ~ 165.0mm	92.6 ~ 167.65mm	122.4 ~ 250.3mm	122.0 ~ 250.6mm
The Range of Chart Size (Dia)	Φ93.0 ~ Φ110.0mm	Φ184.0 ~ Φ220.7mm	Φ207.0 ~ Φ290.9mm	Φ224.9 ~ Φ332.1mm	Φ275.9 ~ Φ440.8mm	Φ224.9 ~ Φ379.9mm	Φ278.5 ~ Φ476.7mm

Model Name	CL-825IR	CL-853C	CL-921D	CL-1021D	CL-921IR	CL-925CM	CL-1216C
Typical Model Name	F300-80IR	F300-85C	F300-90D	F300-100D	F320-90IR	F320-90CM	F120-120C
Picture							
The Range of Wavelength	850nm, 940nm	Visible	Visible	Visible	850nm, 940nm	Visible	Visible
Effective Focal Length	286.8mm	298.2 ~ 327.1mm	299.9 ~ 339.7mm	299.9 ~ 339.7mm	336.2 ~ 337.2mm	319.9 ~ 399.9mm	116.5 ~ 157.7mm
Interchangeable Lens System	No	Yes	Yes	Yes	No	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		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	Yes	No	No	Yes	Yes
Pupil Motion Circle						Φ14.0mm	
Inspectable FOV	80°	85°	90°	100°	90°	90°	120°
Exit Pupil Size	Φ4.0mm	Φ5.0mm	Φ4.5mm	Φ4.5mm	Φ4.5mm	Φ4.0mm	Φ3.0mm
Exit Pupil Position (Optics)	25.0mm	30.0mm	21.0mm	21.0mm	21.0mm	25.444mm	16.35mm
Exit Pupil Position (Mecha)	21.0mm	28.01mm	18.63mm	18.168mm	18.63mm	23.0mm	12.05mm
Lens Ass'y Size	Φ94.0mm X L41.5mm	Φ147.0mm X L71.0mm	Φ121.0mm X L54.9mm	Φ130.0mm X L54.8mm	Φ121.0mm X L54.9mm	Φ200.0mm X L120.5mm	Φ200.0mm X L120.6mm
Weight	0.44kg	1.97kg	0.91kg	1.00kg	0.84kg		2.69kg
The Range of Object Distance	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity
The Range of Working Distance	106.7 ~ 223.6mm	64.3 ~ 207.6mm	110.6 ~ 226.2mm	110.6 ~ 226.2mm	112.8 ~ 257.3mm	63.7 ~ 194.3mm	16.45 ~ 30.54mm
The Range of Chart Size (Dia)	Φ274.1 ~ Φ487.5mm	Φ187.1 ~ Φ546.5mm	Φ354.2 ~ Φ598.3mm	Φ421.9 ~ Φ713.8mm	Φ355.7 ~ Φ673.4mm	Φ355.3 ~ Φ635.5mm	Φ347.1 ~ Φ400.2mm

Model Name	CL-1218C	CL-1223C	CL-720	CL-930C	CL-736	CL-730, CL-730W
Typical Model Name	F320-120C	F350-120C	F400-70	F400-90C	F415-70	F800-68, F800-68W
Picture						
The Range of Wavelength	Visible	Visible	Visible	Visible	Visible	Visible
Effective Focal Length	300.0 ~ 380.0mm	350.1 ~ 421.6mm	388.3mm	405.1 ~ 504.9mm	415.1mm	799.3mm
Interchangeable Lens System	Yes	Yes	No	Yes	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 1.5D, 2.0D, 2.5D		
Setting Jig	No	No	No	No	No	No
Pupil Motion Circle						
Inspectable FOV	120°	120°	70°	90°	70°	68°
Exit Pupil Size	Φ4.0mm	Φ4.5mm	Φ4.0mm	Φ7.0mm	Φ15.0mm	Φ5.0mm
Exit Pupil Position (Optics)	18.0mm	23.0mm	20.0mm	30.0mm	35.6mm	30.0mm
Exit Pupil Position (Mecha)	14.04mm	17.35mm	16.73mm	27.0mm	34.1mm	28.0mm
Lens Ass'y Size	Φ144.0mm X L57.86mm	Φ190.0mm X L83.9mm	Φ89.0mm X L38.0mm	Φ148mm X L65.3mm	Φ190.8mm X L128.0mm	Φ69.0mm X L21.7mm
Weight	1.33kg	3.58kg	0.24kg	1.86kg	3.48kg	0.18kg
The Range of Object Distance	400mm ~ Infinity	350mm ~ Infinity	400mm ~ Infinity	350mm ~ Infinity	400mm ~ Infinity	400mm ~ Infinity
The Range of Working Distance	124.67 ~ 233.49mm	87.6 ~ 248.2mm	142.2 ~ 329.2mm	102.5 ~ 305.5mm	63.3 ~ 263.4mm	234.1 ~ 772.6mm
The Range of Chart Size (Dia)	Φ638.2 ~ Φ1050.0mm	Φ610.5 ~ Φ1225.2mm	Φ108.2 ~ Φ551.5mm	Φ382.0 ~ Φ809.6mm	Φ273.6 ~ Φ586.4mm	Φ361.6 ~ Φ1083.3mm