

Cobra Series Liquid Lenses

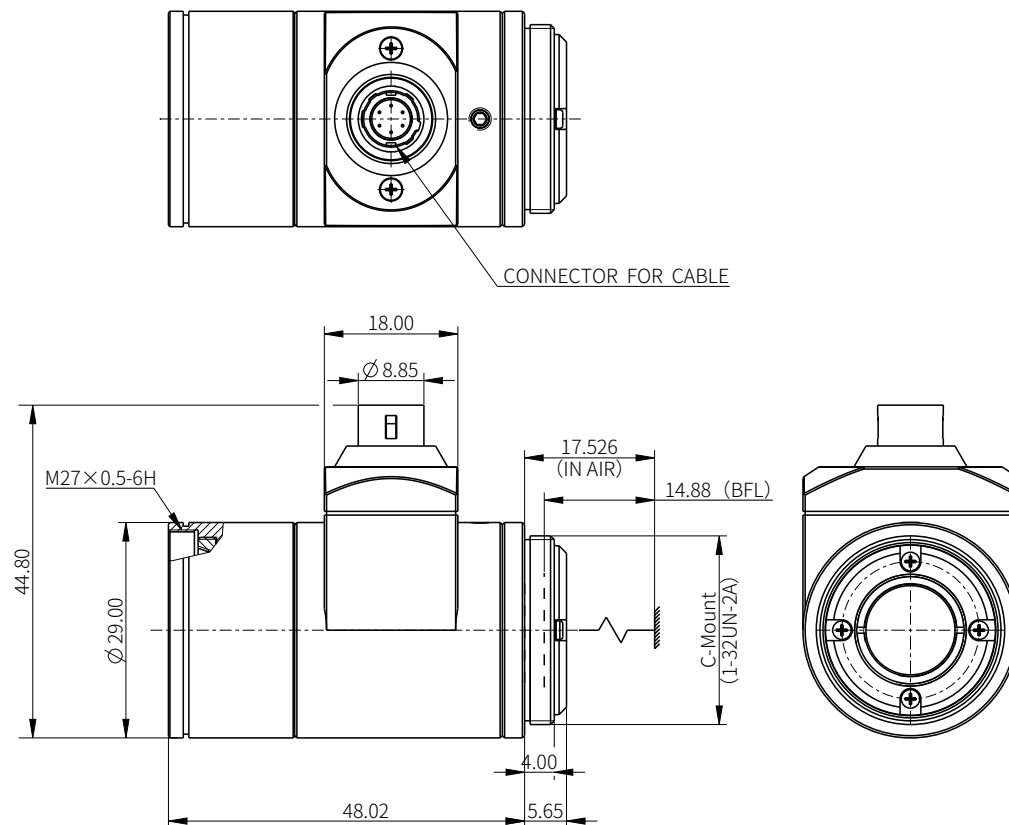
#OPT-COB1656-LQL E.F.L.= 16 mm F5.6



● Specifications

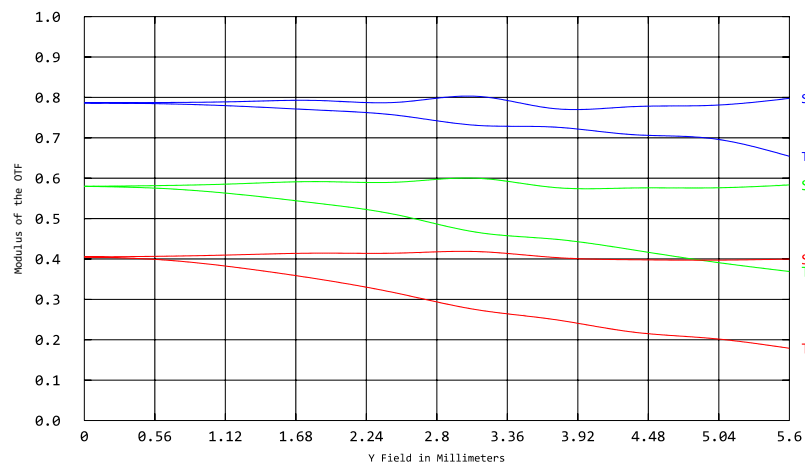
Effective Focal Length (mm)		16
Sensor ø(mm)		11 (2/3")
F NO.		F5.6
FOV Angle	Diagonal (11 mm)	37.94°
	Horizontal(8.8 mm)	30.75°
	Vertical (6.6 mm)	23.31°
Wavelength Range (nm)		435~656
Relative Illumination		>80%
Working Distance (mm)		100~∞
Working Distance without current (mm)		300
Distortion (at WD 300)		<0.35%
Max. Chief Ray Angle		<5°
Flange Focal Distance (mm)		17.526
Back Focal Length (mm)		14.88
Mount		C-Mount
Connector Type		6-pin Hirose connector
Size (mm)		L48.02×W29.00×H44.80
Total Track Length (Liquid Lens included) (mm)		65.546
Focus Tunable Lens Specifications		EL-3-10-VIS-26D-FPC
Focal Power Range at 20°C (dpt)		-13~+13
Wavefront Error at 525 nm (vertical/horizontal) (λRMS)		<0.2 / <0.2
Working Temperature		-20°C~+65°C
Storage Temperature		-50°C~+85°C
Temperature Compensation		No

● Mechanical drawings



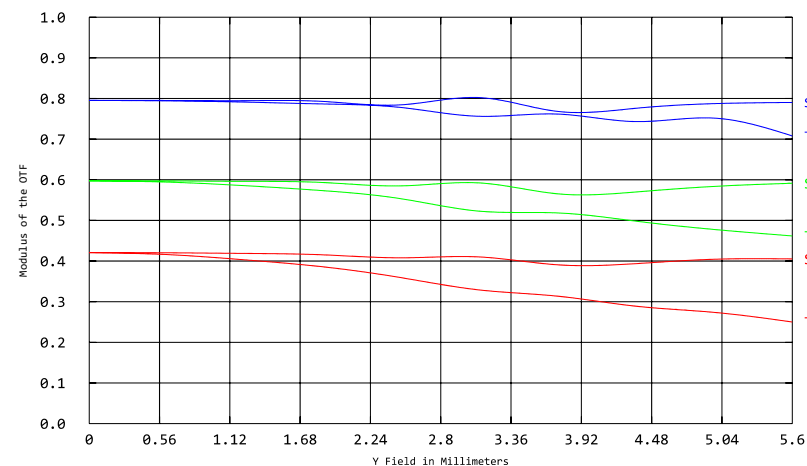
● Modulation Transfer Function(MTF)

W.D. = 200 mm



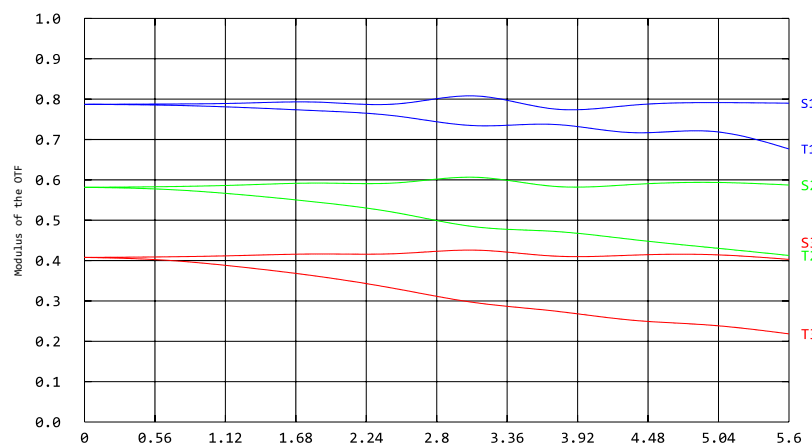
☒ S1 — Sagittal: 50 lp/mm ☒ S2 — Sagittal: 100 lp/mm ☒ S3 — Sagittal: 150 lp/mm
☒ T1 — Tangential: 50 lp/mm ☒ T2 — Tangential: 100 lp/mm ☒ T3 — Tangential: 150 lp/mm

W.D. = 400 mm



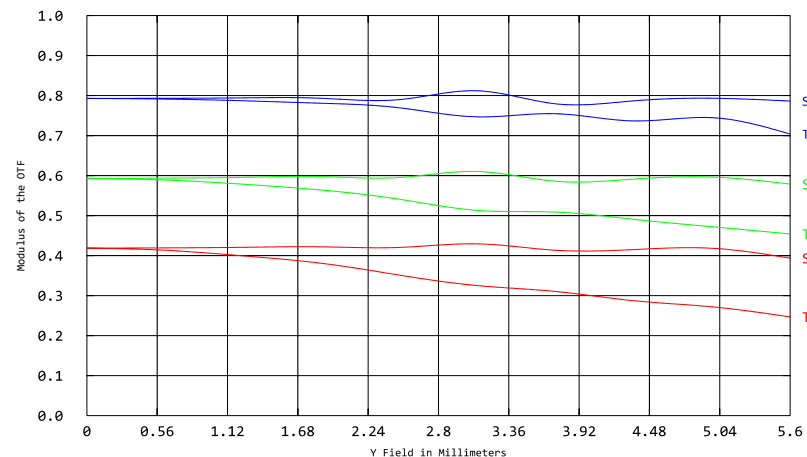
☒ S1 — Sagittal: 50 lp/mm ☒ S2 — Sagittal: 100 lp/mm ☒ S3 — Sagittal: 150 lp/mm
☒ T1 — Tangential: 50 lp/mm ☒ T2 — Tangential: 100 lp/mm ☒ T3 — Tangential: 150 lp/mm

W.D. = 300 mm



☒ S1 — Sagittal: 50 lp/mm ☒ S2 — Sagittal: 100 lp/mm ☒ S3 — Sagittal: 150 lp/mm
☒ T1 — Tangential: 50 lp/mm ☒ T2 — Tangential: 100 lp/mm ☒ T3 — Tangential: 150 lp/mm

W.D. = 500 mm



☒ S1 — Sagittal: 50lp/mm ☒ S2 — Sagittal: 100lp/mm ☒ S3 — Sagittal: 150lp/mm
☒ T1 — Tangential: 50lp/mm ☒ T2 — Tangential: 100lp/mm ☒ T3 — Tangential: 150lp/mm