

Cobra Series Fixed Focal Length Lenses **NEW**



Product Features

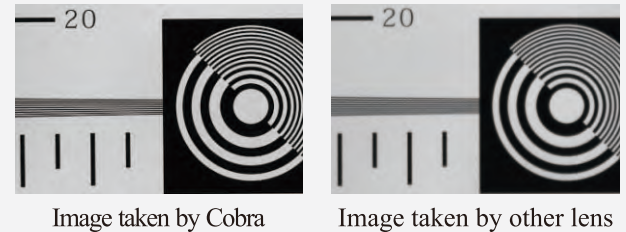
- **Compact design**
Ø29mm diameter compatible with camera size; lens total length less than 42mm^[1]
 - **High resolution**
Compatible with cameras which pixel size $\geq 2.2\mu\text{m}$ and max. $1/1.8''(\text{Ø}9\text{mm})$ ^[2] sensor; resolution up to 230 lp/mm in full FOV
 - **Wide spectrum range**
400-1000nm optical coating spectrum; compatible with VIS and NIR.
 - **Low distortion**
TV distortion $< 0.2\%$
 - **High Relative Illumination**
Chief ray angle $< 5^\circ$, matching with cameras enables to realize high evenness image.
- [1] OPT-COB5028 lens total length $< 62\text{mm}$
[2] The sensor size of applicable cameras to OPT-COB2528, OPT-COB3528 and OPT-COB5028B is up to $2/3''$ (Ø11mm).

Selection Guide

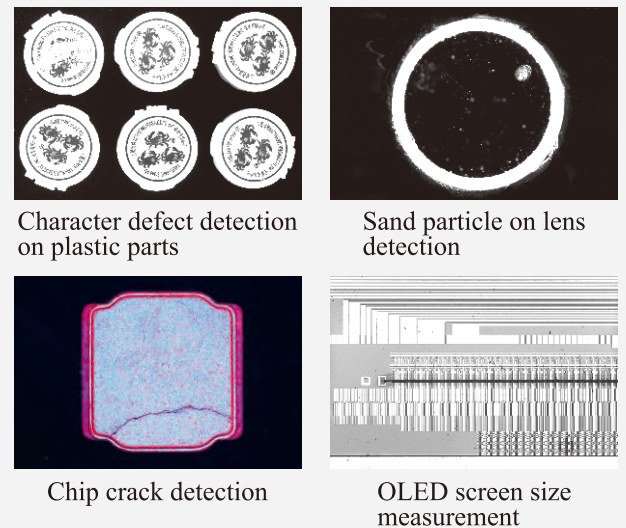
OPT-COB0828

- F#: 2.8
- Focal length: 8mm
- Cobra series lenses
- C-Mount
- Brand name

Resolution Comparison



Application Cases



Model Table

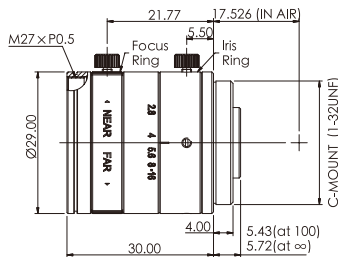
No.	Model	Focal length (mm)	Aperture	Image circle Ø (mm)	Resolution (μm)	TV Distortion	WD (mm)	Back Focal Length (mm)		Mag. at MOD	Chief Ray Angle	Filter thread (mm)	Weight (kg)
1	OPT-COB0828	8	F2.8-F16	9	2.2	$< 0.18\%$ at WD300	100-∞	12.99 at WD100	12.34 at ∞	0.071X at WD100	$< 5^\circ$	M27*P0.5	0.05
2	OPT-COB1228	12	F2.8-F16	9	2.2	$< 0.16\%$ at WD300	100-∞	14.00 at WD100	12.76 at ∞	0.101X at WD100	$< 5^\circ$	M27*P0.5	0.06
3	OPT-COB1628	16	F2.8-F16	9	2.2	$< 0.10\%$ at WD300	100-∞	15.76 at WD100	13.57 at ∞	0.135X at WD100	$< 5^\circ$	M27*P0.5	0.06

Model Table

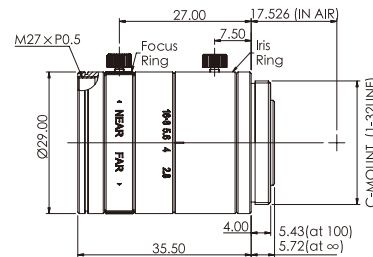
No.	Model	Focal length (mm)	Aperture	Image circle Ø (mm)	Resolution (μm)	TV Distortion	WD (mm)	Back Focal Length (mm)		Mag. at MOD	Chief Ray Angle	Filter thread (mm)	Weight (kg)
4	OPT-COB2528	25	F2.8-F16	11	2.2	< 0.15% at WD300	150-∞	16.63 at WD150	12.65 at ∞	0.159X at WD150	< 5°	M27*P0.5	0.05
5	OPT-COB3528	35	F2.8-F16	11	2.2	< 0.20% at WD350	210-∞	18.39 at WD210	12.87 at ∞	0.161X at WD210	< 5°	M27*P0.5	0.06
6	OPT-COB5028	50	F2.8-F22	9	2.2	< 0.01% at WD300	250-2000	18.11 at WD250	18.11 at WD2000	0.222X at WD250	< 5°	M27*P0.5	0.08
7	OPT-COB5028B	50	F2.8-F22	11	2.2	< 0.07% at WD500	400-∞	20.56 at WD400	13.67 at ∞	0.136X at WD400	< 5°	M27*P0.5	0.06

Dimensions (mm)

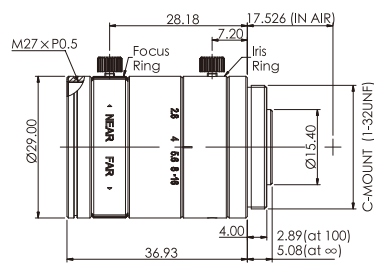
1. OPT-COB0828



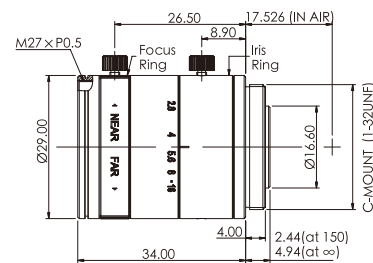
2. OPT-COB1228



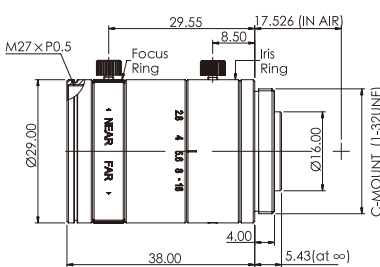
3. OPT-COB1628



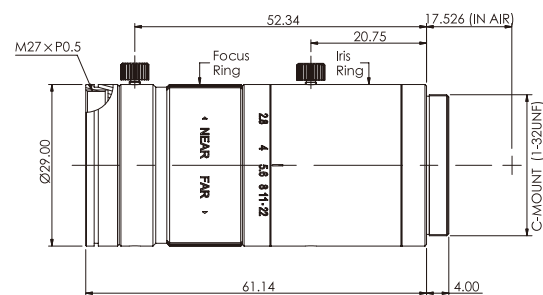
4. OPT-COB2528



5. OPT-COB3528



6. OPT-COB5028



7. OPT-COB5028B

