

Cobra Ruggedized Fixed Focal Length Lenses



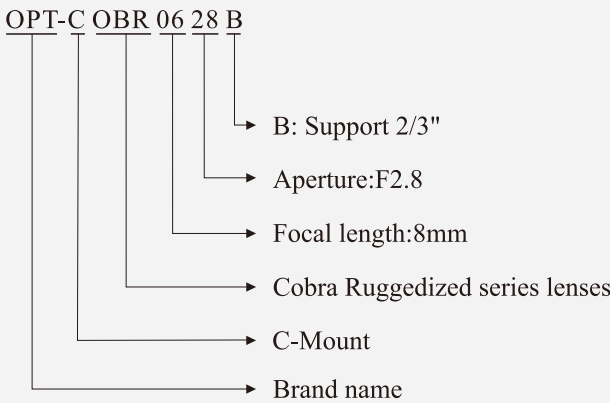
Product Features

- Good stability: the use of special structural design can maintain stable performance in harsh industrial environments, to ensure that after shock and vibration, its optical pointing and positioning can remain stable.
- Compact structure design: The lens uses a compact structure design, the size of the whole series is less than $\varnothing 26 \times 42.59$ mm^[1], which can meet the use of small space.
- High resolution: full field resolution up to 200 lp/mm, chip size $\leq 2/3''$ ($\varnothing 11$ mm)^[2].

[1] : The size of COBR0628B is $\varnothing 62 \times 57.39$ mm.

[2] : The OPT-COBR0828, OPT-COBR1228, and OPT-COBR1628 can be matched chips to cameras with a sensor of up to 1/1.8"($\varnothing 9$ mm).

Selection Guide



Resolution Comparison

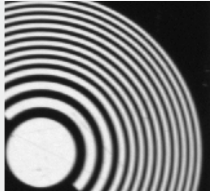


Image taken by other lens

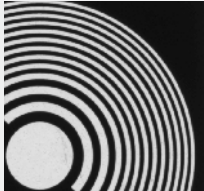
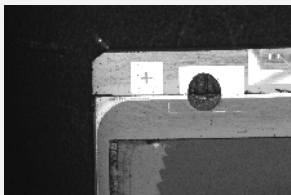
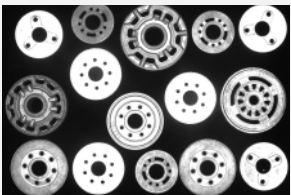


Image taken by Cobra Ruggedized

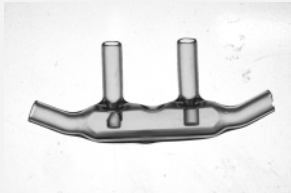
Application Cases



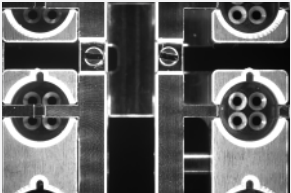
Dispensing position - Locate MAR point



Identify and classify shock absorber rings



Defect detection of medical supplies



Fixture socket outer ring profile positioning

Model Table

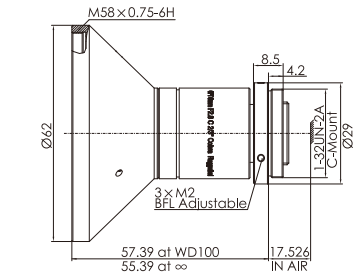
No.	Model	Aperture	Focal Length (mm)	Working Distance (mm)	Mag.	Sensor Ø (mm)	TV Distortion	Back Focal Length (mm)	Resolution (μm)	Chief Ray Angle	Filter Thread (mm)	Weight (kg)
1	COBR0628B	F2.8	6	100~∞	0.048X at WD 100	11(2/3")	< 0.46% at WD 250	12.77 at WD 100 12.41 at ∞	2.40	< 7°	M58×0.75-6H	0.18
2	COBR0640B	F4.0	6	100~∞	0.048X at WD 100	11(2/3")	< 0.46% at WD 250	12.77 at WD 100 12.41 at ∞	2.40	< 7°	M58×0.75-6H	0.18
3	COBR0656B	F5.6	6	100~∞	0.048X at WD 100	11(2/3")	< 0.46% at WD 250	12.77 at WD 100 12.41 at ∞	3.13	< 7°	M58×0.75-6H	0.18
4	COBR0680B	F8.0	6	100~∞	0.048X at WD 100	11(2/3")	< 0.46% at WD 250	12.77 at WD 100 12.41 at ∞	4.00	< 7°	M58×0.75-6H	0.18
5	COBR0611B	F11	6	100~∞	0.048X at WD 100	11(2/3")	< 0.46% at WD 250	12.77 at WD 100 12.41 at ∞	5.00	< 7°	M58×0.75-6H	0.18

Model Table

No.	Model	Aperture	Focal Length (mm)	Working Distance (mm)	Mag.	Sensor Ø (mm)	TV Distortion	Back Focal Length (mm)	Resolution (μm)	Chief Ray Angle	Filter Thread (mm)	Weight (kg)
6	COBR0616B	F16	6	100~∞	0.048X at WD 100	11(2/3")	< 0.46% at WD 250	12.77 at WD 100 12.41 at ∞	7.14	< 7°	M58×0.75-6H	0.18
7	COBR0828	F2.8	8	100~∞	0.071X at WD 100	9(1/1.8")	< 0.18% at WD 300	12.99 at WD 100 12.34 at ∞	2.20	< 5°	M25×0.5-6g	0.06
8	COBR0840	F4.0	8	100~∞	0.071X at WD 100	9(1/1.8")	< 0.18% at WD 300	12.99 at WD 100 12.34 at ∞	2.38	< 5°	M25×0.5-6g	0.06
9	COBR0856	F5.6	8	100~∞	0.071X at WD 100	9(1/1.8")	< 0.18% at WD 300	12.99 at WD 100 12.34 at ∞	2.63	< 5°	M25×0.5-6g	0.06
10	COBR0880	F8.0	8	100~∞	0.071X at WD 100	9(1/1.8")	< 0.18% at WD 300	12.99 at WD 100 12.34 at ∞	3.33	< 5°	M25×0.5-6g	0.06
11	COBR0811	F11	8	100~∞	0.071X at WD 100	9(1/1.8")	< 0.18% at WD 300	12.99 at WD 100 12.34 at ∞	4.55	< 5°	M25×0.5-6g	0.06
12	COBR0816	F16	8	100~∞	0.071X at WD 100	9(1/1.8")	< 0.18% at WD 300	12.99 at WD 100 12.34 at ∞	5.56	< 5°	M25×0.5-6g	0.06
13	COBR1228	F2.8	12	100~∞	0.101X at WD 100	9(1/1.8")	< 0.16% at WD 300	14.00 at WD 100 12.76 at ∞	2.20	< 5°	M25×0.5-6g	0.06
14	COBR1240	F4.0	12	100~∞	0.101X at WD 100	9(1/1.8")	< 0.16% at WD 300	14.00 at WD 100 12.76 at ∞	2.38	< 5°	M25×0.5-6g	0.06
15	COBR1256	F5.6	12	100~∞	0.101X at WD 100	9(1/1.8")	< 0.16% at WD 300	14.00 at WD 100 12.76 at ∞	2.63	< 5°	M25×0.5-6g	0.06
16	COBR1280	F8.0	12	100~∞	0.101X at WD 100	9(1/1.8")	< 0.16% at WD 300	14.00 at WD 100 12.76 at ∞	3.33	< 5°	M25×0.5-6g	0.06
17	COBR1211	F11	12	100~∞	0.101X at WD 100	9(1/1.8")	< 0.16% at WD 300	14.00 at WD 100 12.76 at ∞	4.55	< 5°	M25×0.5-6g	0.06
18	COBR1216	F16	12	100~∞	0.101X at WD 100	9(1/1.8")	< 0.16% at WD 300	14.00 at WD 100 12.76 at ∞	5.00	< 5°	M25×0.5-6g	0.06
19	COBR1628	F2.8	16	100~∞	0.135X at WD 100	9(1/1.8")	< 0.10% at WD 300	15.76 at WD 100 13.57 at ∞	2.20	< 5°	M25×0.5-6g	0.06
20	COBR1640	F4.0	16	100~∞	0.135X at WD 100	9(1/1.8")	< 0.10% at WD 300	15.76 at WD 100 13.57 at ∞	2.38	< 5°	M25×0.5-6g	0.06
21	COBR1656	F5.6	16	100~∞	0.135X at WD 100	9(1/1.8")	< 0.10% at WD 300	15.76 at WD 100 13.57 at ∞	2.63	< 5°	M25×0.5-6g	0.06
22	COBR1680	F8.0	16	100~∞	0.135X at WD 100	9(1/1.8")	< 0.10% at WD 300	15.76 at WD 100 13.57 at ∞	3.33	< 5°	M25×0.5-6g	0.06
23	COBR1611	F11	16	100~∞	0.135X at WD 100	9(1/1.8")	< 0.10% at WD 300	15.76 at WD 100 13.57 at ∞	4.55	< 5°	M25×0.5-6g	0.06
24	COBR1616	F16	16	100~∞	0.135X at WD 100	9(1/1.8")	< 0.10% at WD 300	15.76 at WD 100 13.57 at ∞	5.88	< 5°	M25×0.5-6g	0.06
25	COBR2528B	F2.8	25	150~∞	0.159X at WD 150	11(2/3")	< 0.15% at WD 300	16.63 at WD 150 12.65 at ∞	2.20	< 5°	M25×0.5-6g	0.05
26	COBR2540B	F4.0	25	150~∞	0.159X at WD 150	11(2/3")	< 0.15% at WD 300	16.63 at WD 150 12.65 at ∞	2.38	< 5°	M25×0.5-6g	0.05
27	COBR2556B	F5.6	25	150~∞	0.159X at WD 150	11(2/3")	< 0.15% at WD 300	16.63 at WD 150 12.65 at ∞	2.63	< 5°	M25×0.5-6g	0.05
28	COBR2580B	F8.0	25	150~∞	0.159X at WD 150	11(2/3")	< 0.15% at WD 300	16.63 at WD 150 12.65 at ∞	3.33	< 5°	M25×0.5-6g	0.05
29	COBR2511B	F11	25	150~∞	0.159X at WD 150	11(2/3")	< 0.15% at WD 300	16.63 at WD 150 12.65 at ∞	5.00	< 5°	M25×0.5-6g	0.05
30	COBR2516B	F16	25	150~∞	0.159X at WD 150	11(2/3")	< 0.15% at WD 300	16.63 at WD 150 12.65 at ∞	7.14	< 5°	M25×0.5-6g	0.05
31	COBR3528B	F2.8	35	210~∞	0.161X at WD 210	11(2/3")	< 0.20% at WD 350	18.39 at WD 210 12.87 at ∞	2.20	< 5°	M25×0.5-6g	0.06
32	COBR3540B	F4.0	35	210~∞	0.161X at WD 210	11(2/3")	< 0.20% at WD 350	18.39 at WD 210 12.87 at ∞	2.38	< 5°	M25×0.5-6g	0.06
33	COBR3556B	F5.6	35	210~∞	0.161X at WD 210	11(2/3")	< 0.20% at WD 350	18.39 at WD 210 12.87 at ∞	2.63	< 5°	M25×0.5-6g	0.06
34	COBR3580B	F8.0	35	210~∞	0.161X at WD 210	11(2/3")	< 0.20% at WD 350	18.39 at WD 210 12.87 at ∞	3.33	< 5°	M25×0.5-6g	0.06
35	COBR3511B	F11	35	210~∞	0.161X at WD 210	11(2/3")	< 0.20% at WD 350	18.39 at WD 210 12.87 at ∞	5.00	< 5°	M25×0.5-6g	0.06
36	COBR3516B	F16	35	210~∞	0.161X at WD 210	11(2/3")	< 0.20% at WD 350	18.39 at WD 210 12.87 at ∞	7.14	< 5°	M25×0.5-6g	0.06
37	COBR5028B	F2.8	50	400~∞	0.136X at WD 400	11(2/3")	< 0.07% at WD 500	20.56 at WD 400 13.67 at ∞	2.20	< 5°	M25×0.5-6g	0.07
38	COBR5040B	F4.0	50	400~∞	0.136X at WD 400	11(2/3")	< 0.07% at WD 500	20.56 at WD 400 13.67 at ∞	2.38	< 5°	M25×0.5-6g	0.07
39	COBR5056B	F5.6	50	400~∞	0.136X at WD 400	11(2/3")	< 0.07% at WD 500	20.56 at WD 400 13.67 at ∞	2.63	< 5°	M25×0.5-6g	0.07
40	COBR5080B	F8.0	50	400~∞	0.136X at WD 400	11(2/3")	< 0.07% at WD 500	20.56 at WD 400 13.67 at ∞	3.33	< 5°	M25×0.5-6g	0.07
41	COBR5011B	F11	50	400~∞	0.136X at WD 400	11(2/3")	< 0.07% at WD 500	20.56 at WD 400 13.67 at ∞	5.00	< 5°	M25×0.5-6g	0.07
42	COBR5016B	F16	50	400~∞	0.136X at WD 400	11(2/3")	< 0.07% at WD 500	20.56 at WD 400 13.67 at ∞	7.14	< 5°	M25×0.5-6g	0.07

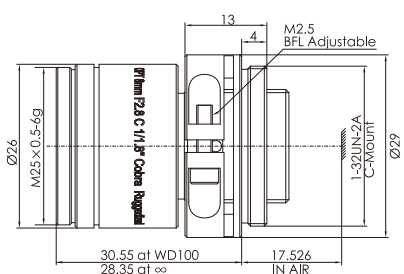
Dimensions (mm)

1.OPT-COBR0628B



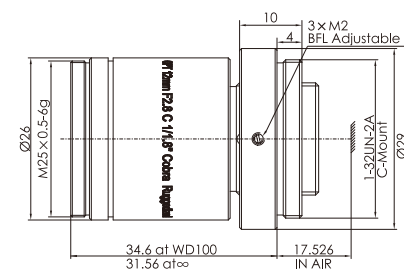
Note: Same size as COBR0640B、COBR0656B、
COBR0680B、COBR0611B、COBR0616B.

2.OPT-COBR0828



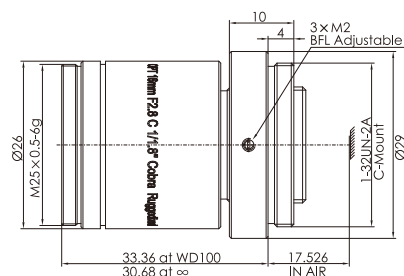
Note: Same size as COBR0840、COBR0856、
COBR0880、COBR0811、COBR0816.

3.OPT-COBR1228



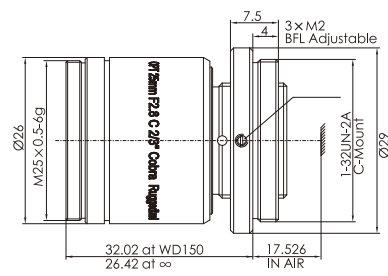
Note: Same size as COBR1240、COBR1256、
COBR1280、COBR1211、COBR1216.

4.OPT-COBR1628



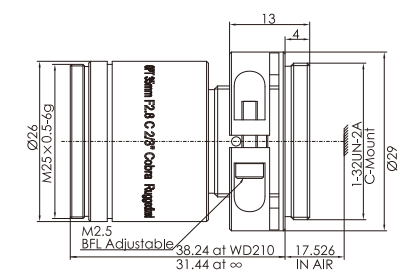
Note: Same size as COBR1640、COBR1656、
COBR1680、COBR1611、COBR1616.

5.OPT-COBR2528B



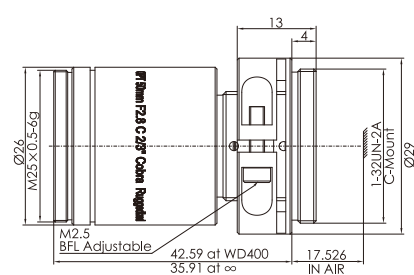
Note: Same size as COBR2540B、COBR2556B、
COBR2580B、COBR2511B、COBR2516B.

6.OPT-COBR3528B



Note: Same size as COBR3540B、COBR3556B、
COBR3580B、COBR3511B、COBR3516B.

7.OPT-COBR5028B



Note: Same size as COBR5040B、COBR5056B、
COBR5080B、COBR5011B、COBR5016B.