

# 1/1.8" ~ 4/3" C-MOUNT

HOT

C-MOUNT



## C-MOUNT FIXED FA LENSES

These days, C Mount lenses are still the most common type in industrial image processing, esp. in factory automation. Mostly they are used with digital cameras like USB, Fire\_Wire, Gig-E and Smart Cameras.

LEM series is an advanced industrial lens product researched and developed by ContrastTech Co., Ltd, which catering to the demands of recent market environment.

The quality of our lens is guaranteed by refined optical glasses, mature coating process and advanced optical structure.

Developed with high cost-performance ratio, the quality and performance are quite competitive with foreign counterparts.

## PRODUCT FEATURES

1. Suitable for 5 mega up to 10 mega pixels sensors.
2. High resolution at whole range of WD and excellent brightness.
3. Robust design, suitable for most machine vision applications.
4. Professional MTF optimization
5. Lockable focus and iris screws prevent movement during vibrations or shocks.
6. High cost-performance ratio

*Subject to change without prior notice.*

For latest specifications and availability, please contact our sales representatives or visit our website: [www.contrasttech.com](http://www.contrasttech.com)

### 1/1.8" C-MOUNT FIXED LENSES

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View (deg.)	TV Distortion (%)	Filter Size	Format (")	Type
LEM0420	4.0	F2.0	0.1	D:94.0° H:82.9° V:66.5°	<0.5%	-	1/1.8"	Standard
LEM0620	6.0	F2.0	0.1	D:64.5° H:54.1° V:41.9°	<0.1%	M25.5× 0.5	1/1.8"	Standard
LEM0820	8.0	F2.0	0.1	D:56.0° H:46.8° V:36.0°	<0.1%	M25.5× 0.5	1/1.8"	Standard
LEM1220	12.0	F2.0	0.1	D:40.7° H:33.0° V:24.3°	<0.3%	M25.5× 0.5	1/1.8"	Standard
LEM1620	16.0	F2.0	0.1	D:30.3° H:24.7° V:18.2°	<0.1%	M25.5× 0.5	1/1.8"	Standard
LEM2520	25.0	F2.0	0.1	D:19.0° H:13.6° V:11.3°	<0.1%	M25.5× 0.5	1/1.8"	Standard
LEM3520	35.0	F2.0	0.2	D:12.24° H:8.8° V:7.0°	<0.1%	M25.5× 0.5	1/1.8"	Standard
LEM5028	50.0	F2.8	0.3	D:10.2° H:8.2° V:6.1°	<0.05%	-	1/1.8"	Standard
LEM7528	75.0	F2.8	0.5	D:5.84° H:5.4° V:4.04°	<0.05%	-	1/1.8"	Standard
LEM0616MP5	6.0	F1.6	0.1	D:71.7° H:60.1° V:46.6°	<0.54%	M34× 0.5	1/1.8"	Standard
LEM01414FE	1.4	F1.4	0.08	D:185° H:185° V:185°	<0.25%	-	1/2"	Fisheye

### 2/3" C-MOUNT FIXED LENSES

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View (deg.)	TV Distortion (%)	Filter Size	Mega pixels	Type
LEM0518MP10	5.0	F1.8	0.1	D:95.45° H:66.85° V:82.7°	<5%	M62× 0.75	10	Standard
LEM0814CBMP8	8.0	F1.4	0.1	D:61.7° H:56.3° V:43.7°	<0.1%	M37× 0.5	8	Standard
LEM1216CBMP8	12.0	F1.6	0.15	D:46.6° H:39° V:30.3°	<0.8%	M30.5× 0.5	8	Standard
LEM1614CBMP8	16.0	F1.4	0.3	D:37.3° H:30.3° V:23°	<0.1%	M30.5× 0.5	8	Standard
LEM2514CBMP8	25.0	F1.4	0.3	D:24.6° H:20° V:15°	<0.2%	M30.5× 0.5	8	Standard
LEM3514CBMP8	35.0	F1.4	0.2	D:17.3° H:13.9° V:10.4°	<0.8%	M37× 0.5	8	Standard
LEM5014CBMP8	50.0	F1.4	0.3	D:13.04° H:10.46° V:7.86°	<0.8%	M37× 0.5	8	Standard

### 1"~1.1" C-MOUNT FIXED LENSES

Part name	Focal Length (mm)	Aperture (F/#)	Range of WD (m)	Angle of View (deg.)	Filter Size	TV Distortion (%)	Mega pixels	Type
LEM7528MP5	75	F2.8	0.6m ~ ∞	11.4°× 9.2°× 4.8°	M34× 0.5	<0.07%	5	Standard
LEM1214CB-H1	12.5	F1.4	0.1m ~ ∞	66.3°× 54.5°× 42°	M46× 0.75	<1.8%	5	Standard
LEM5014CB-H1	50	F1.4	0.3m ~ ∞	17.14°× 13.86°× 10.4°	M46× 0.75	<0.1%	5	Standard
LEM7518CB-H1	75	F1.8	0.7m ~ ∞	12.2°× 9.8°× 7.4°	M55× 0.75	<0.05%	5	Standard
LEM0814CE-H1	8	F1.4	0.2m ~ ∞	88°× 70.5°× 53°	-	<1.5%	5	Standard
LEM1216CE-H1	12	F1.6	1.0m ~ ∞	68.8°× 57.1°× 44.1°	M52× 0.75	<1.5%	5	Standard
LEM1616CE-H1	16	F1.6	1.0m ~ ∞	54.3°× 44.2°× 33.5°	M37× 0.5	<1.0%	5	Standard
LEM2220CE-H1	22	F2.0	0.4m ~ ∞	40°× 32°× 24°	-	<1.0%	5	Standard
LEM2516CE-H1	25	F1.6	1.0m ~ ∞	36.2°× 29.0°× 21.8°	M39× 0.5	<1.0%	5	Standard
LEM3514CE-H1	35	F1.4	1.0m ~ ∞	25.7°× 20.7°× 15.6°	M39× 0.5	<1.0%	5	Standard
LEM0618CBMP9-H1	6	F1.8	0.1m ~ ∞	107.5°× 95.4°× 78.4°	-	<2.3%	9	Standard
LEM0814CBMP9-H1	8	F1.4	0.1m ~ ∞	89.5°× 77.1°× 61.8°	-	<5%	9	Standard
LEM1214CBMP9-H1	12	F1.4	0.1m ~ ∞	64.44°× 53.6°× 41.8°	M40.5× 0.5	<0.5%	9	Standard
LEM1614CBMP9-H1	16	F1.4	0.1m ~ ∞	50.0°× 41.76°× 33.68°	M40.5× 0.5	<0.3%	9	Standard
LEM2514CBMP9-H1	25	F1.4	0.1m ~ ∞	34.94°× 28.7°× 22.06°	M40.5× 0.5	<0.1%	9	Standard
LEM3514CBMP9-H1	35	F1.4	0.15m ~ ∞	23.92°× 19.28°× 14.32°	M40.5× 0.5	<0.1%	9	Standard
LEM5016CBMP9-H1	50	F1.6	0.3m ~ ∞	18.0°× 14.6°× 11.7°	M40.5× 0.5	<0.1%	9	Standard
LEM7518CBMP9-H1	75	F1.8	0.8m ~ ∞	12.2°× 9.8°× 7.4°	M52× 0.75	<0.05%	9	Standard

### 4/3" C-MOUNT FIXED LENSES

Part name	Focal Length (mm)	Aperture (F/#)	Range of WD (m)	Angle of View (deg.)	Filter Size	Mega pixels	Weight (g)	Type
LEM08528CD-H2	8.5	2.8	0.5m ~ ∞	107.38°× 94.89°× 77.93°	M77× 0.5	12		Standard
LEM1220CD-H2	12	2.0	0.15m ~ ∞	89.02°× 75.46°× 61.08°	M77× 0.75	10	447	Standard
LEM1620CD-H2	16	2.0	0.1m ~ ∞	72.92°× 60.92°× 47.28°	-	10	338	Standard
LEM2520CD-H2	25	2.0	0.15m ~ ∞	49.7°× 40.6°× 31°	M46× 0.75	10	251	Standard
LEM3520CD-H2	35	2.0	0.2m ~ ∞	36.6°× 29.6°× 22.4°	M40.5× 0.5	10	173	Standard
LEM5020CD-H2	50	2.0	0.3m ~ ∞	25.9°× 20.9°× 15.7°	M40.5× 0.5	10	170	Standard

# 1/1.8" C-Mount Fixed Lenses

1. Suitable for 2-3 megapixels sensors
2. Lockable focus and iris screws prevent movement during vibrations or shocks.
3. Compact design
4. TV distortion less than 1%



## LEM0420

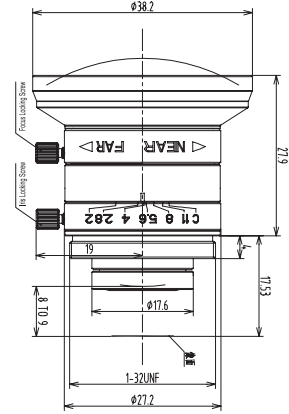


Image Size (inch)	1/1.8"
Focal Length (mm)	4.0
Aperture, F/#	2~Close
M.O.D.	0.1m
FOV(°)	94°×82.9°×66.5°
Distortion(TV)	<0.5%
Flange back	17.526mm in air
Back focus	8.7mm in air
Filter screw size	-
Front/Rear Effective Dia.	Front Ø35mm Rear Ø7mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## LEM0620

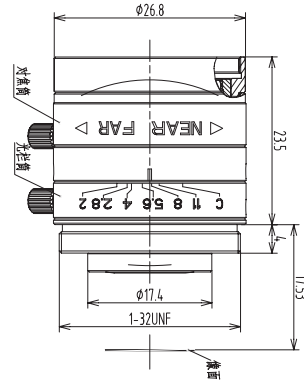


Image Size (inch)	1/1.8"
Focal Length (mm)	6.0
Aperture, F/#	2~Close
M.O.D.	0.1m
FOV(°)	69.8°×59.6°×46°
Distortion(TV)	<0.1%
Flange back	17.526mm in air
Back focus	11.6mm in air
Filter screw size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø18.12mm Rear Ø5.81mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## LEM0820

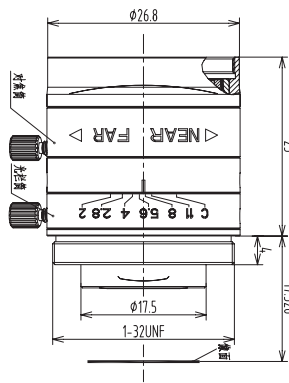


Image Size (inch)	1/1.8"
Focal Length (mm)	8.0
Aperture, F/#	2~Close
M.O.D.	0.1m
FOV(°)	56.0°×46.8°×36.0°
Distortion(TV)	<0.1%
Flange back	17.526mm in air
Back focus	11.4mm in air
Filter screw size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø20.1mm Rear Ø6mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## LEM1220

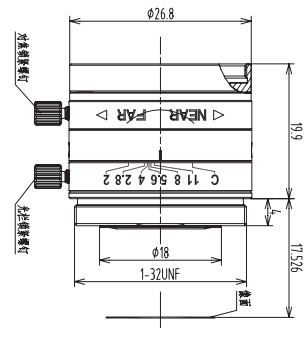


Image Size (inch)	1/1.8"
Focal Length (mm)	12.0
Aperture, F/#	2~Close
M.O.D.	0.1m
FOV(°)	40.7°×33.0°×24.3°
Distortion(TV)	<0.3%
Flange back	17.526mm in air
Back focus	12.5mm in air
Filter screw size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø15.2mm Rear Ø6mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## LEM1620

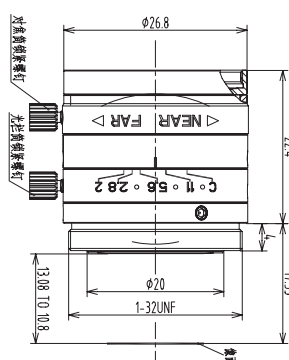


Image Size (inch)	1/1.8"
Focal Length (mm)	16.0
Aperture, F/#	2~Close
M.O.D.	0.1m
FOV(°)	30.3°×24.7°×18.2°
Distortion(TV)	<0.1%
Flange back	17.526mm in air
Back focus	12.7mm in air
Filter screw size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø15.2mm Rear Ø6mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## LEM2520

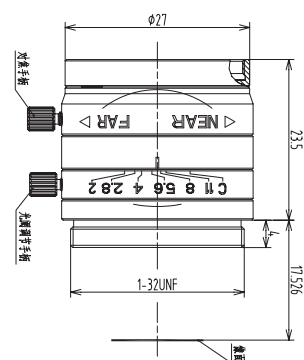


Image Size (inch)	1/1.8"
Focal Length (mm)	25.0
Aperture, F/#	2~Close
M.O.D.	0.1m
FOV(°)	19.0°×13.6°×11.3°
Distortion(TV)	<0.1%
Flange back	17.526mm in air
Back focus	13.7mm in air
Filter screw size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø15.2mm Rear Ø6.6mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## LEM3520

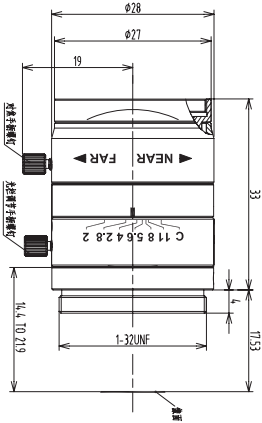


Image Size (inch)	1/1.8"
Focal Length (mm)	35.0
Aperture, F/#	2~Close
M.O.D.	0.2m
FOV(°)	12.24°×8.8°×7.0°
Distortion(TV)	<0.1%
Flange back	17.526mm in air
Back focus	19mm in air
Filter screw size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø15.7mm Rear Ø8.5mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## LEM5028

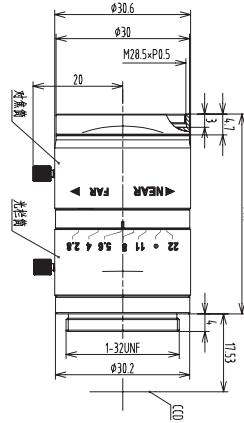


Image Size (inch)	1/1.8"
Focal Length (mm)	50.0
Aperture, F/#	2.8~Close
M.O.D.	0.3m
FOV(°)	10.2°×8.2°×6.1°
Distortion(TV)	<0.05%
Flange back	17.526mm in air
Back focus	17.4-27.1mm in air
Filter screw size	-
Front/Rear Effective Dia.	Front Ø17.4mm Rear Ø8mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## LEM7528

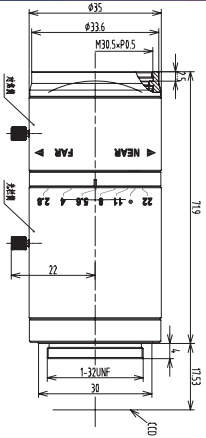


Image Size (inch)	1/1.8"
Focal Length (mm)	75.0
Aperture, F/#	2.8~Close
M.O.D.	0.5m
FOV(°)	5.84°×5.4°×4.04°
Distortion(TV)	<0.05%
Flange back	17.526mm in air
Back focus	42.2-55.5mm in air
Filter screw size	-
Front/Rear Effective Dia.	Front Ø24mm Rear Ø14.5mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## LEM0616MP5

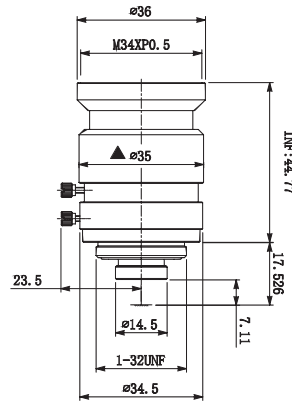


Image Size (inch)	1/1.8"
Focal Length (mm)	6.0
Aperture, F/#	1.6~Close
M.O.D.	0.1m
FOV(°)	71.7°×60.1°×46.6°
Distortion(TV)	<0.54%
Flange back	17.526mm in air
Back focus	7.94mm in air
Filter screw size	M34×P0.5
Front/Rear Effective Dia.	Front Ø21.56mm Rear Ø10.1mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## LEM01414-FE

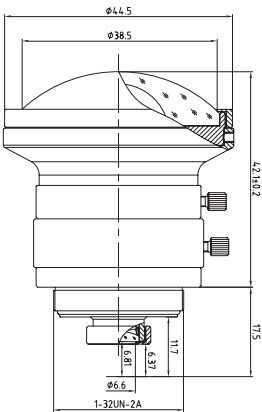


Image Size (inch)	1/2"
Focal Length (mm)	1.4
Aperture, F/#	1.4~Close
M.O.D.	0.08m
FOV(°)	185°×185°×185°
Distortion(TV)	-
Flange back	17.526mm in air
Back focus	6.81mm in air
Filter screw size	-
Front/Rear Effective Dia.	Front Ø38.5mm Rear Ø6.6mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C