

## 29MP Fixed Focal Length Lenses

Compatible with 8K line scan cameras



### Product Features

- **High resolution**  
Up to 100 lp/mm (full FOV)
- **Large format sensor**  
Compatible with 29MP camera, and line scan camera up to 8K with 5μm pixel size
- **Low distortion**  
Total distortion < 0.9%, and min. distortion as low as 0.03%

### Resolution Comparison

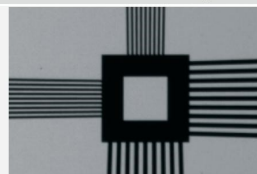


Image taken by  
OPT 29MP Lens

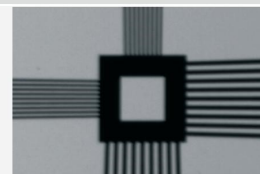
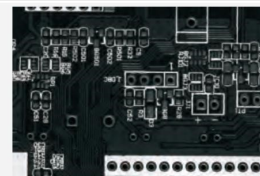


Image taken by other lens

### Application Cases



Surface inspection for  
beverage can



OCR for PCB



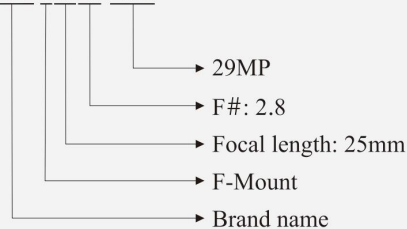
OCR for plastic parts



Dent detection on bearing

### Selection Guide

OPT-F2528-29M

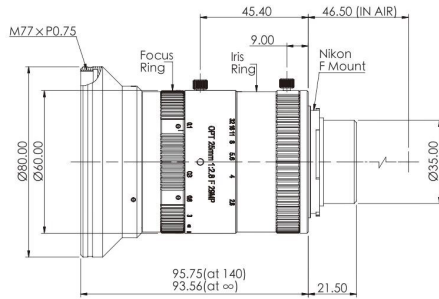


### Model Table

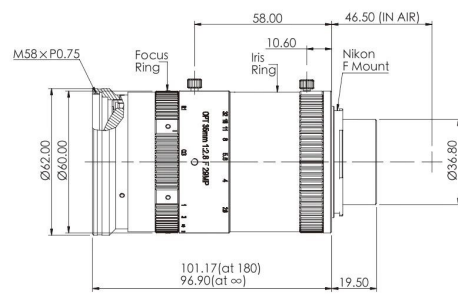
| No | Model         | Focal length (mm) | Aperture range | WD (mm) | Filter thread (mm) | Distortion | Back focal length (mm) | Weight (kg) | Sensor format | FOV angle (H×V×D) |        |        |
|----|---------------|-------------------|----------------|---------|--------------------|------------|------------------------|-------------|---------------|-------------------|--------|--------|
| 1  | OPT-F2528-29M | 25                | F2.8-F32       | 140~∞   | M77*P0.75          | <0.9%      | 26.4                   | 0.71        | 1"            | 28.72°            | 21.74° | 35.49° |
|    |               |                   |                |         |                    |            |                        |             | 4/3"          | 39.60°            | 30.22° | 48.46° |
|    |               |                   |                |         |                    |            |                        |             | 44mm          | 70.29°            | 55.67° | 82.70° |
| 2  | OPT-F3528-29M | 35                | F2.8-F32       | 180~∞   | M58*P0.75          | <0.4%      | 27.9                   | 0.65        | 1"            | 20.72°            | 15.62° | 25.75° |
|    |               |                   |                |         |                    |            |                        |             | 4/3"          | 28.84°            | 21.83° | 35.64° |
|    |               |                   |                |         |                    |            |                        |             | 44mm          | 53.39°            | 41.33° | 64.30° |
| 3  | OPT-F5028-29M | 50                | F2.8-F32       | 180~∞   | M58*P0.75          | <0.2%      | 36.1                   | 0.59        | 1"            | 14.59°            | 10.97° | 18.18° |
|    |               |                   |                |         |                    |            |                        |             | 4/3"          | 20.41°            | 15.38° | 25.36° |
|    |               |                   |                |         |                    |            |                        |             | 44mm          | 38.78°            | 29.58° | 47.50° |
| 4  | OPT-F7528-29M | 75                | F2.8-F32       | 300~∞   | M58*P0.75          | <0.03%     | 35.8                   | 0.58        | 1"            | 9.75°             | 7.32°  | 12.18° |
|    |               |                   |                |         |                    |            |                        |             | 4/3"          | 13.69°            | 10.29° | 17.06° |
|    |               |                   |                |         |                    |            |                        |             | 44mm          | 26.41°            | 19.96° | 32.69° |

## Dimensions (mm)

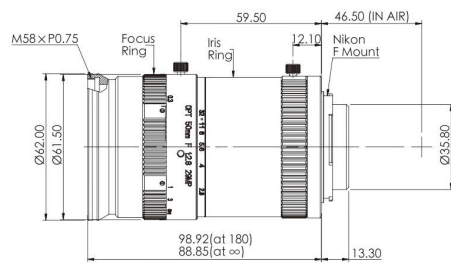
1.OPT-F2528-29M



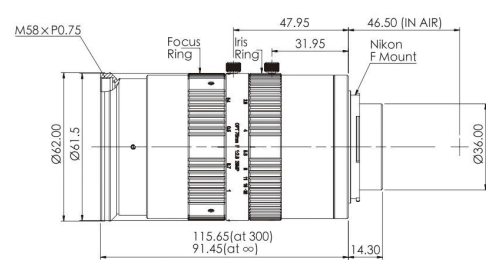
2.OPT-F3528-29M



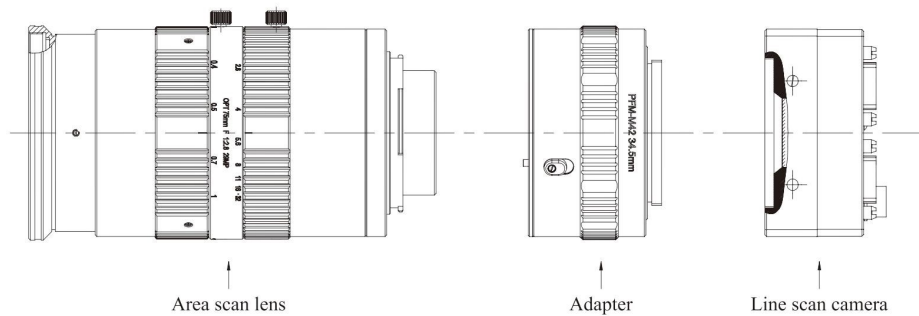
3.OPT-F5028-29M



4.OPT-F7528-29M



## Diagram of Connecting of Area Scan Lens and Line Scan Camera



- Notes: If the format and resolution of lenses are applicable, the area scan lenses can apply to line scan cameras. The imaging format of 29MP series lenses is 44mm, for which 29MP series lenses can apply to 4k7μm or 8k5μm line scan cameras. The diagram above is about 29MP lens connecting with line scan camera by adaptor. The Flange Back Length of F-mount lenses is 46.5mm, of line scan cameras is FBLc. The length of adaptor is 46.5-FBLc.