



PMS-LLA003-2540M

4K 25mm Line Scan Industrial Lens

High-resolution line-scan optics with a maximum 32 mm image circle, 7 μm resolution, <0.1% distortion and 0.015X-0.05X reference magnification

Ø32 mm Image Circle

7 μm Resolution

<0.1% Distortion

M42 / M72 Mount

KEY FEATURES

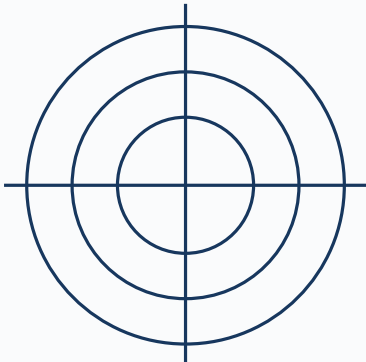
- High-resolution optical design with a maximum Ø32 mm image circle
- Compatible with 7 μm line-scan cameras
- High uniformity, <0.1% distortion and 7 μm optical resolution
- Long-working-distance configurations for wide line fields of view

TECHNICAL PARAMETERS

Parameter	0.015X	0.030X	0.050X
Model	PMS-LLA003-2540M	PMS-LLA003-2540M	PMS-LLA003-2540M
Maximum Image Circle	Ø32 mm	Ø32 mm	Ø32 mm
Resolution	7 μm	7 μm	7 μm
Aperture	F4.0-F16	F4.0-F16	F4.0-F16
Focal Length	25 mm	25 mm	25 mm
Distortion	<0.1%	<0.1%	<0.1%
Relative Illumination	65%	65%	65%
Working Distance	1740 mm	870 mm	520 mm
Conjugate Distance	1826.4 mm	952 mm	607.3 mm
Mount Options	M42 / M72	M42 / M72	M42 / M72

Selection note: A 4096-pixel line sensor with 7 μm pixels has an active line length of about 28.7 mm, which fits within the Ø32 mm image circle. Approximate object-side line field equals active sensor length divided by magnification.

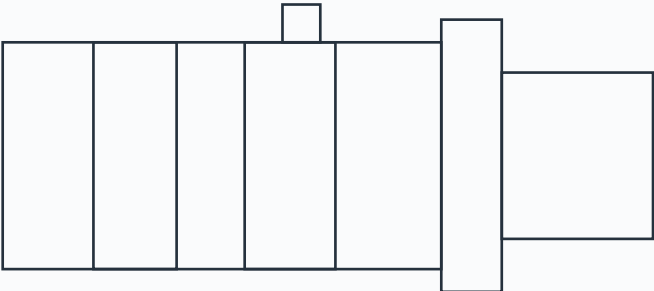
MECHANICAL INTEGRATION REFERENCE



Front View

Object-Side Barrel Ø42 mm

M42 Mount Reference

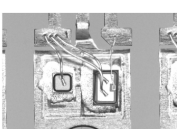


Reference optical length: 80.4 ± 5.0 mm

M42 × P1.0 configuration shown; M72 option available

Exact flange dimensions should be confirmed before installation

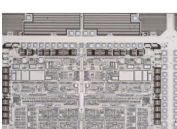
TYPICAL APPLICATIONS



Defect Inspection



Surface Texture & Color



PCB Defect Inspection



Circuit Trace Inspection

Manufacturer-Direct Selection Support

Provide the camera model, active line length, pixel size, required line field of view, working distance, line rate, mount and smallest defect. POMEAS can review lens-camera compatibility before quotation.