High Resolution Macro Zoom Lens

- High resolution and compact design
- Suitable for 1/1.8" mega pixel cameras
- High resolution and compact design
- High contrast and low distortion
- Improve uniformity of brightness for coaxial illumination
- Magnification and working distance can be converted to 0.21x - 18x, WD40 - 332mm by using converters

**HMZ Series**

**HMZ0745** (Manual Zoom/Straight type)

**HMZ0745C** (Manual Zoom/Co-axial type)

**HMZ0745C-SM** (Motorized Zoom/Co-axial type)

<table>
<thead>
<tr>
<th>Lens</th>
<th>Front Converter</th>
<th>Rear Converter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Magnification</td>
<td>WD with converter</td>
</tr>
<tr>
<td>HMZ0745</td>
<td>0.7x - 4.5x</td>
<td></td>
</tr>
<tr>
<td>HMZ0745C</td>
<td>0.7x - 4.5x</td>
<td></td>
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</tbody>
</table>

*Indicated specifications are design values.

*Resolution indicates a theoretical resolution at a wavelength of 550nm.

*Depth of field is calculated assuming a horizontal 320 TV resolution using 1/2" camera (permissible circle of confusion 40 μ).
Low Magnification Zoom Lens with Co-axial Illumination

Built-in co-axial illumination
Suitable for various applications, inspection of wafer, IC chip, etc...

- 10x Zoom (0.2x - 2.0x)
- Compact design of 10x zoom ratio
- Reduce relative illumination
- High resolution at the whole magnification
- Motorized zoom type is available
- Long WD, 227mm

8.0x Compact Macro Zoom Lens

Compact and wide zoom ratio, suitable for inspection of various objects

- Long WD, 180mm
- Focus function is available
- φ29mm, suitable for small and limited spaces

6.0x Zoom Lens

Suitable for high speed applications

- WD500mm - ∞
  - Macro photography: Possible to use at WD10mm by pulling a macro lever
  - Large aperture, suitable for high speed camera

**TLZ Series**

**Low Magnification Zoom Lens with Co-axial Illumination**

**TLZ0220C (Manual Zoom)**

- Magnification: 0.2x - 2.0x
- Depth of field: 13.1mm - 0.45mm
- WD: 227mm
- Resolution: 7.6μ - 22.4μ
- Object side NA: 0.015 - 0.044mm

**TLZ0220C-SM (Motorized Zoom)**

- Magnification: 0.2x - 2.0x
- Depth of field: 13.1mm - 0.45mm
- WD: 227mm
- Resolution: 7.6μ - 22.4μ
- Object side NA: 0.015 - 0.044mm

(Wiring Diagram) TLZ0220C-SM

**NEW**

**CMZ0540-2**

**6.0x Zoom Lens**

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