

TECHSPEC® 52mm Telecentric Backlight Illuminator



52mm Telecentric Backlight Illuminator, #62-760

Stock **#62-760** **20+ In Stock**

⊖ 1 ⊕ C\$1,204⁰⁰

ADD TO CART

Volume Pricing	
Qty 1+	C\$1,204.00 each
Need More?	Request Quote

Note: This item requires accessories for use | [Learn More](#)

Product Downloads

General

Specialty **Type of Illumination:**

Note:
Adjustable aperture. Only compatible with in-line lights from PID #3859

Edmund Optics® **Manufacturer:**

Backlight **Geometry:**

Physical & Mechanical Properties

65.00 Diameter (mm):

193.80 Length (mm):

8 Light Mount Inner Diameter (mm):

Optical Properties

52 Beam Diameter (mm):

Threading & Mounting

M62 x 0.75 Filter Thread:

Regulatory Compliance

[View](#) Certificate of Conformance:

Product Details

TECHSPEC® Telecentric Backlight Illuminators use the optical design principal of telecentricity to illuminate objects with truly collimated light and produce high contrast, silhouetted images. Standard backlights are diffuse to avoid hot spots, but these diffuse reflections can also reduce edge contrast. TECHSPEC® Telecentric Backlight Illuminators have collimated light rays (not diffuse) to increase edge contrast, thereby increasing measurement accuracy. Used in combination with a telecentric imaging lens, these illuminators are ideal for machine vision applications that require accurate measurements and are compatible with 8mm coaxial LEDs or 1/4" (0.312") fiber optic light guides.

Note: Additional light source and light source power supply required for operation.

Unique twin-ring mounting clamps ([#56-870](#) and [#56-871](#)) are also available separately.

- Optically Collimated Light for Increased Edge Contrast
- Superior Collimation Ideal for use with Telecentric Lenses
- Easily Compatible with 8mm Coaxial LEDs or 1/4" (0.312") Fiber Light Guides

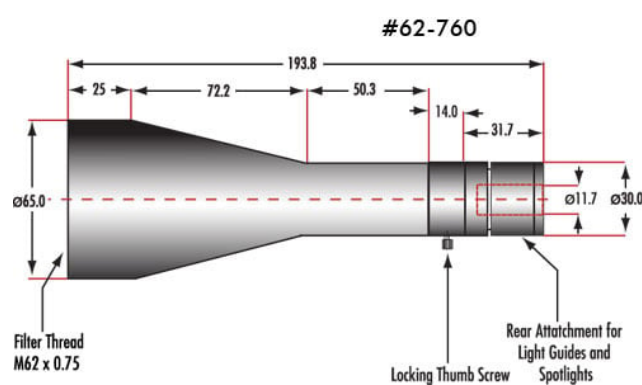
TECHSPEC® Telecentric Backlight Illuminators use the optical design principal of telecentricity to illuminate objects with truly collimated light and produce high contrast, silhouetted images. Standard backlights are diffuse to avoid hot spots, but these diffuse reflections can also reduce edge contrast. TECHSPEC® Telecentric Backlight Illuminators have collimated light rays (not diffuse) to increase edge contrast, thereby increasing measurement accuracy. Used in combination with a telecentric imaging lens, these illuminators are ideal for machine vision applications that require accurate measurements and are compatible with 8mm coaxial LEDs or 1/4" (0.312") fiber optic light guides.

Note: Additional light source and light source power supply required for operation.

Technical Information

- [Why Use Telecentric Illumination?](#)
- [Importance of Numerical Aperture \(NA\) Matching](#)

Technical Information



WHY USE TELECENTRIC ILLUMINATION?

- Increased edge contrast compared to conventional backlight illumination
- Ideal for precise measurement applications
- Superior detection of small defects, measurement accuracy, and repeatability
- Increased distance between illumination source and object



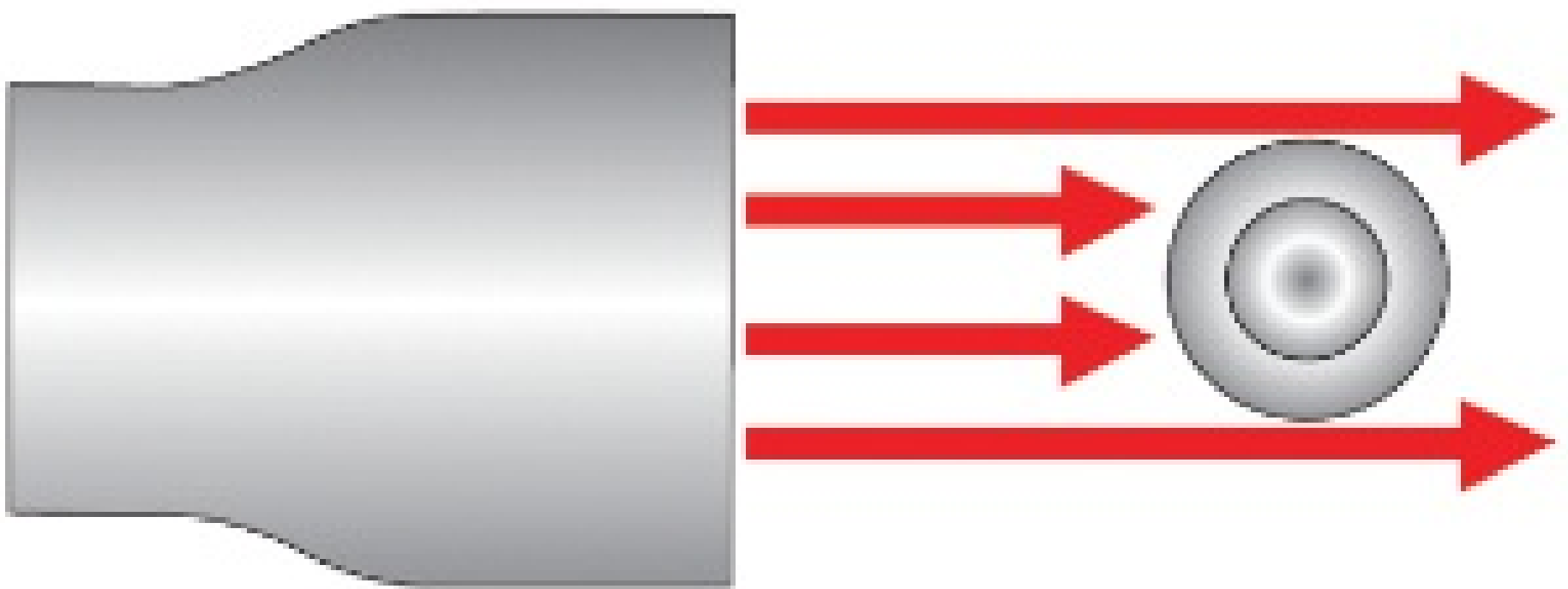
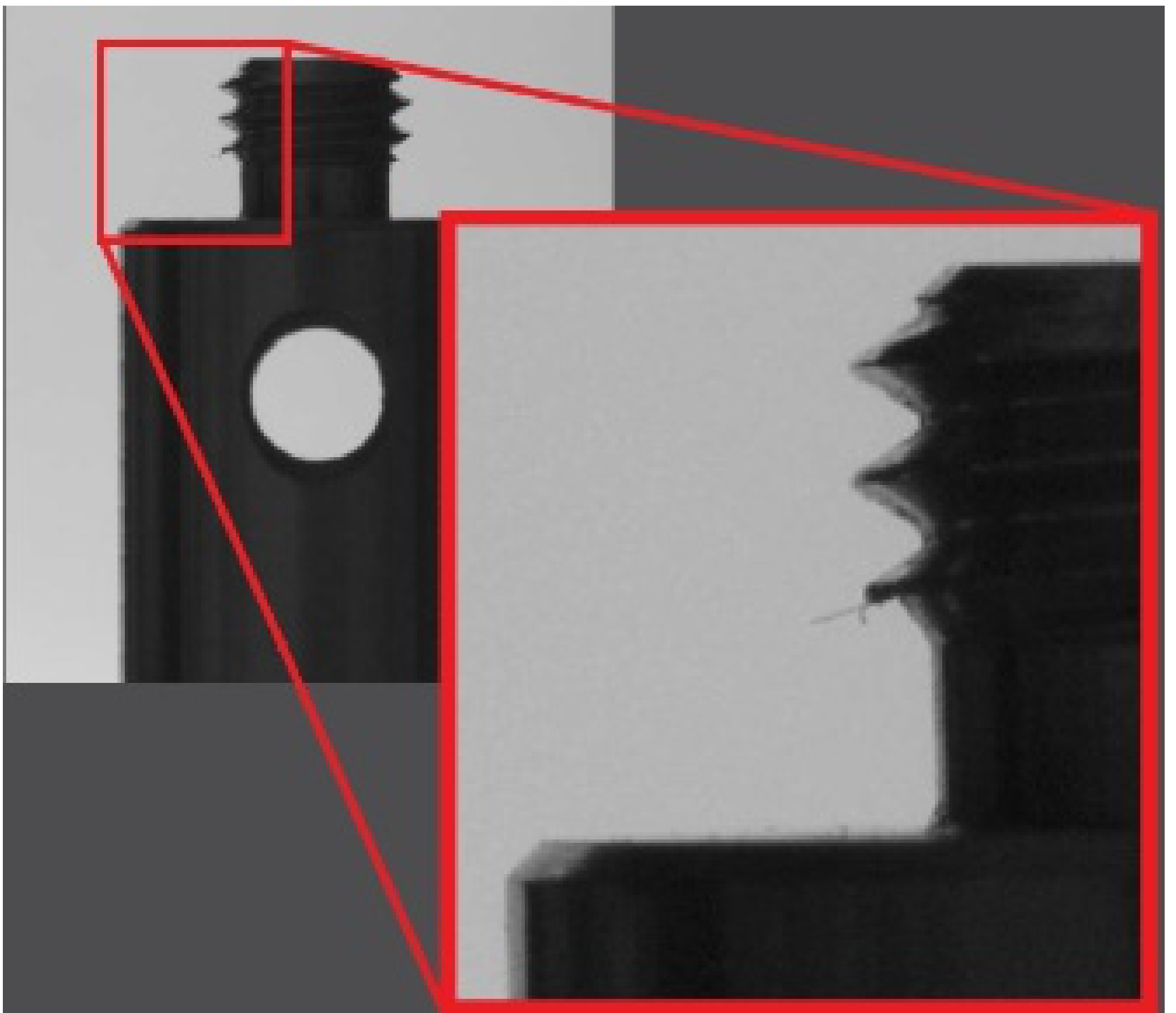


Figure 1: Comparison of the edge contrast achieved using telecentric illumination (left) and conventional backlighting (right). The collimated light rays from the telecentric illuminator lead to a high contrast silhouette while diffuse reflections from the standard backlight lead to blurred edges.

