## **Dolan-Jenner**®

# **MA31 Series**

# Ringlight

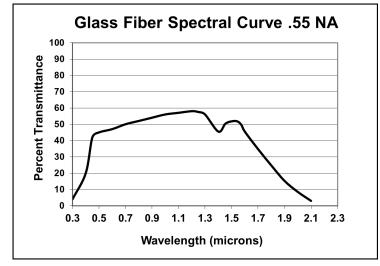
Dolan-Jenner's mini annular ring lights provide excellent uniformity, intense shadow-free on—axis lighting and are especially useful when imaging or inspecting highly reflective objects. The mini ring light Illumination Systems provide high intensity illumination at the highest magnification and long working distances without light adjustment when refocusing or when zoom features are used. The fiber optic system will eliminate the clutter and head radiation of multiple conventional light sources.

Type MA31 is a mini-annular fiber optic for low power objectives of standard compound microscopes having a maximum diameter of 1.55 inches (39mm). This unit provides brilliant, cool 360 degrees' incident illumination at working distances of 2.7 to 4.5 inches (69 to 114mm) to expand the capabilities of the microscope in viewing, inspection, and photography of opaque specimens. Fits objective lenses 28 to 39mm diameter.

To further reduce specular reflections from shiny surfaces, ring lights can be used in combination with a polarizer and analyzer.



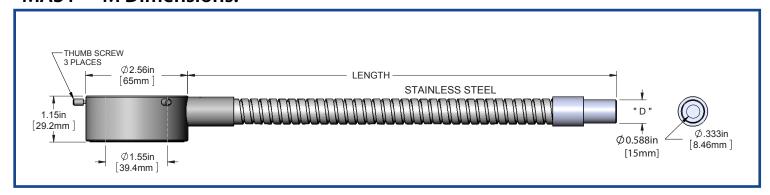
| PRODUCT S                           | PRODUCT SPECIFICATIONS      |  |  |  |
|-------------------------------------|-----------------------------|--|--|--|
| Fiber Material                      | Borasilicate Glass          |  |  |  |
| Numerical Aperture                  | 0.55 nominal                |  |  |  |
| Acceptance (cone) Angle             | 68 degrees nominal          |  |  |  |
| Fiber Bundle Diameter               | 0.333"                      |  |  |  |
| Temperature Rating                  | 225°F                       |  |  |  |
| Packing Fraction                    | 82% nominal                 |  |  |  |
| Sheathing Material                  | Stainless Steel Metal Hose  |  |  |  |
| Bend Radius                         | 3.0"                        |  |  |  |
| Ring Light Head Housing<br>Material | Black Anodized Aluminum     |  |  |  |
| Input End Ferrule Material          | 303 Stainless Steel         |  |  |  |
| Mounting Type                       | 3 No-mar Thumbscrews        |  |  |  |
| RoHS                                | Non Applicable              |  |  |  |
| Accessories (Optional)              | MA31-PLZ Analyzer Polarizer |  |  |  |
| Warranty                            | 12 Months                   |  |  |  |





| Fits: 28- 38mm Objectives • Mounting: 3 Thumb Screws • Working Distance: 2.73in. – 4.5in. |              |                 |                    |   |   |                          |  |
|---|--------------|-----------------|--------------------|---|---|--------------------------|--|
| Model   | Part #       | Cable<br>Length | End Tip<br>Dia."D" | Light Source Adapter<br>.590 (15mm) Input | Light Source Adapter<br>1.00 (25mm) Input | Optional Polarizer       |  |
| MA3136  | SK5303       | 36              | .562               | N/A                                       | SX-10, MX-10                              | MA31-PLZ<br>010090570000 |  |
| MA3136M   | 700008190036 | 36              | .588               | Direct Fit                                | SX-13                                     |                          |  |
| MA3148  | SK53030048   | 48              | .562               | N/A                                       | SX-10, MX-10                              |                          |  |
| MA3160  | SK53030060   | 60              | .562               | N/A                                       | SX-10, MX-10                              |                          |  |
| MA3172  | SK53030072   | 72              | .562               | N/A                                       | SX-10, MX-10                              |                          |  |
| MA3172M   | 700008190072 | 72              | .588               | Direct Fit                                | SX-13                                     |                          |  |

#### MA31 - - M Dimensions:



## MA31 - - Dimensions:

