



Quad Randomized and Calibrated Bundle, A21045



Single Randomized Bundle, A08031.40R



Single Bundle, A08031.60D

# Randomized and Calibrated Bundles

Designed to increase uniformity of light output for Machine Vision applications.

## Features

- Fibers are randomized to improve spot uniformity.
  - For specific uniformity requirements, calibrated outputs on dual and quad bundles were designed to be interchangeable for Machine Vision inspection applications. Interchangeability was achieved by maintaining light intensity within 10% bundle to bundle.
- We assure consistency by adding a 12" (305)\* randomized common end at the input. This extra 12" (305) of fiber scrambles the light, distributing any hot or cold spots from the lamp throughout each of the legs. Then, each one of the legs is calibrated so the output from each leg is within 5% of each other.
- Tight bending radius for easy routing.
  - A variety of standard sizes include single, dual, and quad configurations. See chart on left for part numbers and specifications.
  - Multi-leg bundles are illuminated with one light source.
  - Standard input accepts our Dichroic color filters, diffusers and fits all ColdVision Series light sources.
  - The standard output ferrules accept spot lenses which accept polarizing caps. (See Accessories section of the product catalog for more details.)
  - Custom configurations are available. Lead time is required.
  - Manufactured in the USA.

| Randomized and Calibrated Bundles  |               |                             |                         |                 |               |
|--|---------------|-----------------------------|-------------------------|-----------------|---------------|
| Part No.   | Configuration | Active Input Fiber Diameter | Distal Ferrule Diameter | Tubing Diameter | Bundle Length |
| <b>Randomized Bundles</b>  |               |                             |                         |                 |               |
| A08031.40R   | Single        | .30"(8)                     | .393" (10)              | 47"(12)         | 40"(1016)     |
| A08031.60R   | Single        | .30"(8)                     | .393" (10)              | 47"(12)         | 60"(1524)     |
| A08031.80R   | Single        | .30"(8)                     | .393" (10)              | 47"(12)         | 80"(2032)     |
| <b>Randomized and Calibrated Bundles - 12"(305) Common Bundle Length</b> |               |                             |                         |                 |               |
| A21040   | Dual          | .36"(9)                     | .393" (10)              | .60"(15)        | 48"(1219)     |
| A21045   | Quad          | .51" (13)                   | .393" (10)              | .83"(21)        | 48"(1219)     |
| A21050   | Dual          | .43" (11)                   | .393" (10)              | .67"(17)        | 48"(1219)     |

Dimensions in ( ) are in mm

# Randomized and Calibrated Bundles

Dimensions in ( ) are in mm

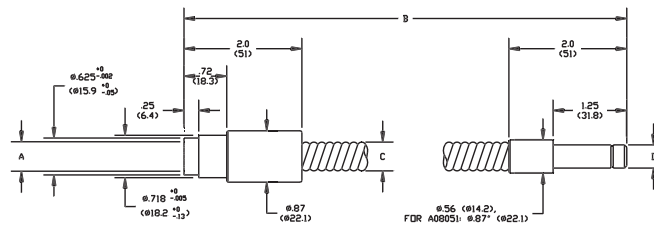
Ringlight Input: Black Anodized Aluminum

Bundle Sheathing: PVC Covered Metal Tubing

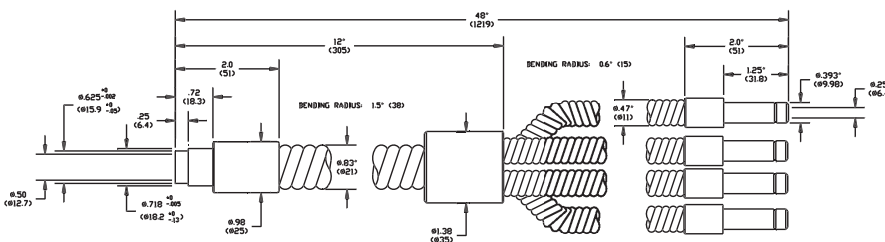
**Warning:** This product is manufactured with glass fiber. Not for use in cable/hose carrier. Call SCHOTT to discuss moving cable/hose carrier applications.

## Matrix for A08031.40R - A08031.80R

| Part No.   | A         | B          | C         | Bend Radius | D          |
|------------|-----------|------------|-----------|-------------|------------|
| A08031.40R | .30" (78) | 40" (1016) | .47" (12) | .6" (15)    | .393" (10) |
| A08031.60R | .30" (78) | 60" (1524) | .47" (12) | .6" (15)    | .393" (10) |
| A08031.80R | .30" (78) | 80" (2032) | .47" (12) | .6" (15)    | .393" (10) |



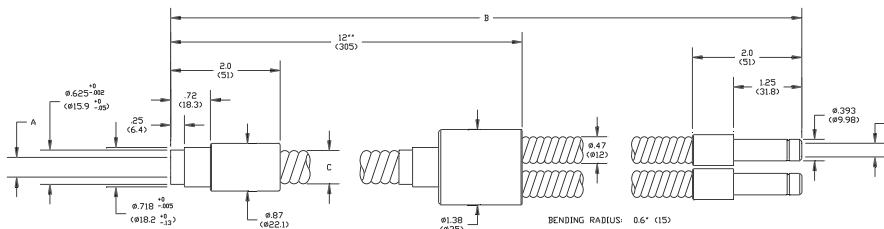
A08031.40R - A08031.80R  
Single Randomized Bundles



A21040 & A21050  
Dual Randomized & Calibrated Bundles

## Matrix for A21040 & A21050

| Part No. | A         | B          | C         | Bend Radius | D          |
|----------|-----------|------------|-----------|-------------|------------|
| A21040   | .36" (9)  | 48" (1219) | .60" (15) | 1.0" (25)   | .25" (6.4) |
| A21050   | .43" (11) | 48" (1219) | .67" (17) | 1.2" (30)   | .30" (7.6) |



A08545  
Quad Flexible Bundles