

## FSMA CONNECTOR SERIES

Fiber Optics



The FSMA connector portfolio offers high-precision solutions for demanding fiber-optic and high-power laser applications. Available in various configurations, the connectors combine excellent centricity, optimized fiber alignment, and application-specific cooling concepts.

Depending on the version, features include free-standing fibers with a defined air gap, retractable fiber positioning, copper ferrules for enhanced heat dissipation, and adhesive screw technology for maximum alignment accuracy. Standard housing options in ARCAP or copper, with stainless steel available upon request, as well as different nut and strain-relief configurations, ensure flexibility for a wide range of medical, industrial, and photonic applications. Together, these variants provide reliable performance, precision, and durability in challenging operating environments.

### FEATURES

- / High-precision fiber alignment for superior optical performance and repeatable coupling
- / Optimized thermal management for high-power laser applications
- / Flexible configuration options and robust design for reliable integration across demanding applications.

### APPLICATIONS

- / Medical
- / Industry
- / Defense and Aerospace
- / Optical measurement and sensing

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## SPECIFICATIONS

| Article             | HP-FSMA Standard             | HP-FSMA Copper   | HP-FSMA ARCAP                | HP-FSMA ARCAP/Copper |
|---------------------|------------------------------|------------------|------------------------------|----------------------|
| Material            | ARCAP                        | ARCAP            | ARCAP                        | ARCAP                |
| Ferrule hole Ø      | 130-1500 µm                  | 130-1500 µm      | 130-1500 µm                  | 130-1500 µm          |
| Ferrule material    | ARCAP, opt. stain-less steel | Copper           | ARCAP, opt. stain-less steel | Copper inlay & ARCAP |
| Screw               | Knurl or hexagon             | Knurl or hexagon | Knurl or hexagon             | Knurl or hexagon     |
| Fiber free standing | Option                       | Option           | Option                       | Option               |
| Mating Cycles       | No                           | Yes              | Yes                          | Yes                  |
| Operation Temp.     | -40°C / +85°C(*)             | -40°C / +85°C(*) | -40°C / +85°C(*)             | -40°C / +85°C(*)     |
| Storage Temp.       | -40°C / +85°C                | -40°C / +85°C    | -40°C / +85°C                | -40°C / +85°C        |

(\*) Up to +300°C, depending on the adhesive and assembly method

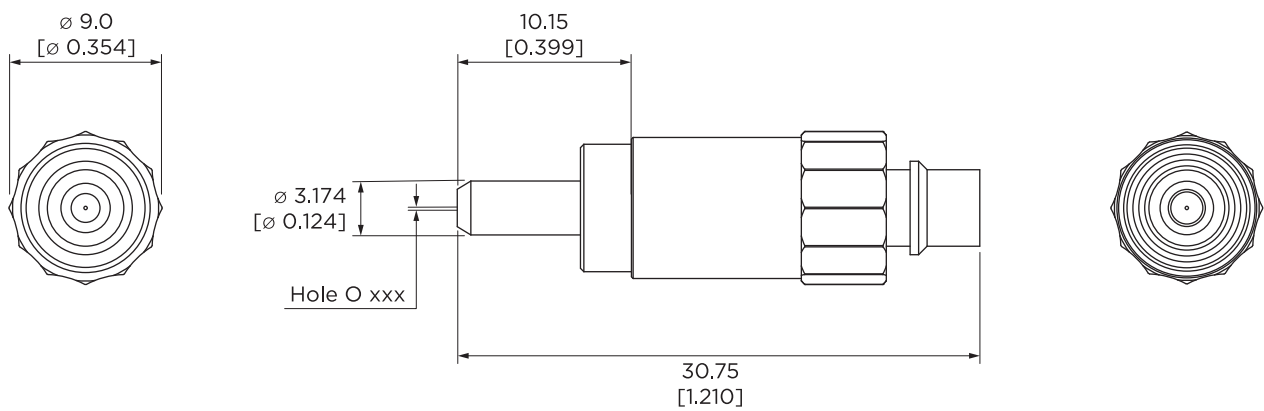
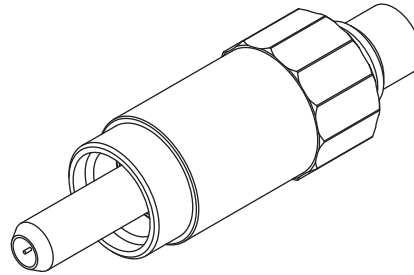
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## TECHNICAL DRAWINGS

### HP-FSMA Standard or Copper



Units: mm [inch]

Dimensions are in millimeters - [inches] and are for reference only.

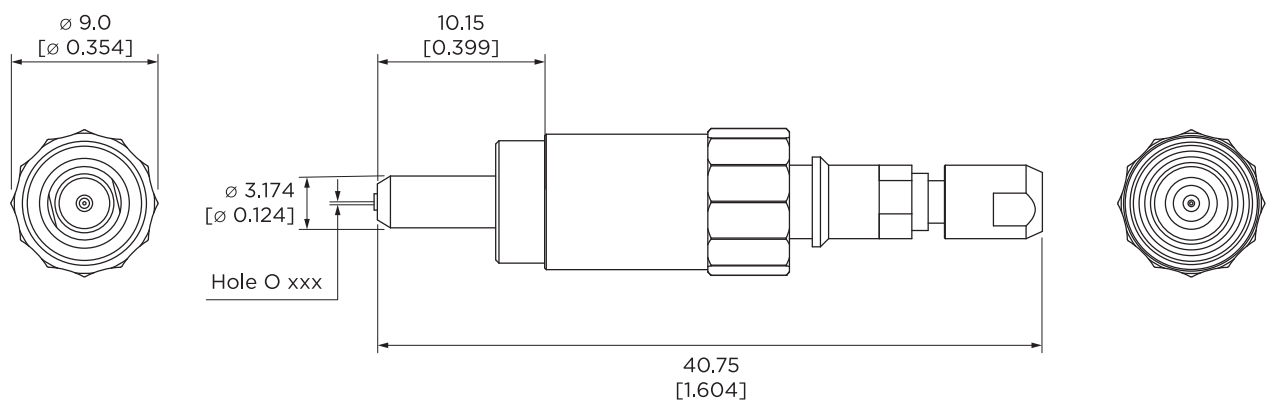
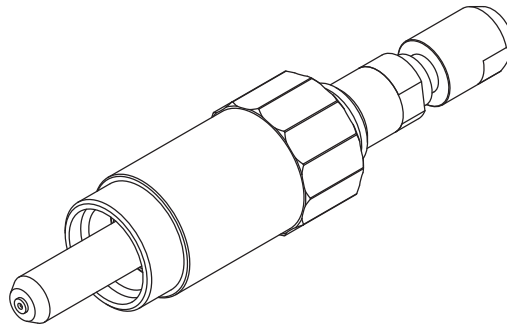
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## HP-FSMA ARCAP



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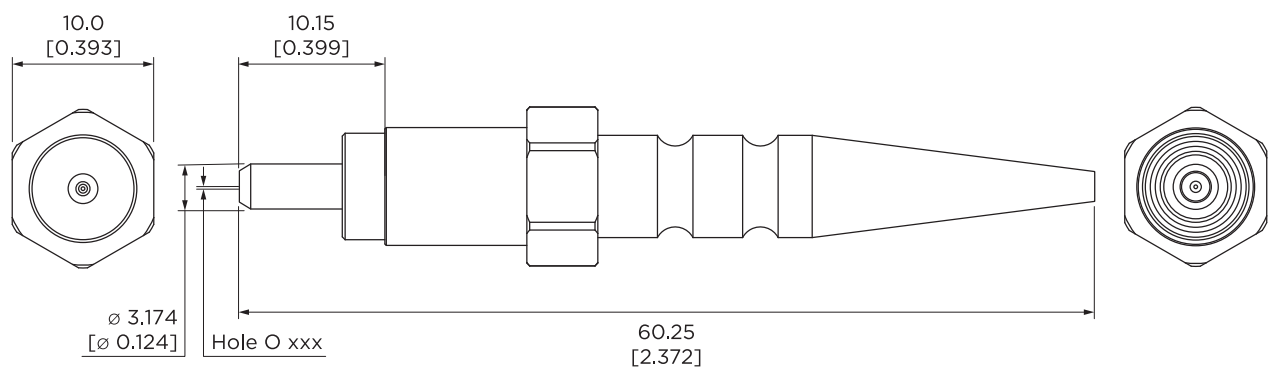
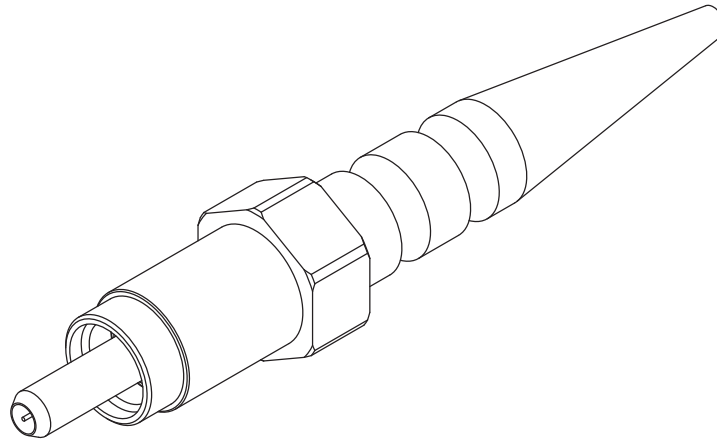
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## HP-FSMA ARCAP / Copper



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## ORDERING CODE

|             | Material         | Screw    | Ferrule Ø  | Ferrule         | Length  | Feature 1 | Feature 2 |
|-------------|------------------|----------|------------|-----------------|---------|-----------|-----------|
| <b>FSMA</b> | <b>X</b>         | <b>X</b> | <b>X</b>   | <b>X</b>        |         |           |           |
|             | AC<br>ACL<br>STS | KN<br>HX | 130 - 1500 | AC<br>ACL<br>CU | 30 - 60 | FS<br>CS  | AS<br>SRB |

|     |   |                 |    |   |                    |     |   |                    |
|-----|---|-----------------|----|---|--------------------|-----|---|--------------------|
| AC  | = | ARCAP           | KN | = | Knurl              | SRB | = | Strain relief boot |
| ACL | = | ARCAP           | HX | = | Hexagon            |     |   |                    |
| STS | = | Stainless steel | FS | = | Freestanding fiber |     |   |                    |
| CU  | = | Copper          | CS | = | Centricity Screw   |     |   |                    |

Example: FSMA-AC-KN-245-CU-60-CS-SRB

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## ORDERING INFORMATION

Products can be ordered directly from LASER COMPONENTS or its representatives.

For a complete listing of representatives, visit our website at [www.lasercomponents.com](http://www.lasercomponents.com)

Custom designed products are available on request.



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