



# MEDICAL SPECIALTY

**Amphenol is a leading provider of Fiber Optic connectors and assemblies used in the Medical Industry today. The Amphenol Medical Specialty Product line is comprised of a complete series of connector assemblies and accessories that allow customers to basically pick and choose different options for their individual needs. The product offering includes a variety of connectors used in medical procedures, like Tattoo and Hair removal, Urology, Arthroscopy, Angioplasty and Cosmetic surgery. The Medical products are also used in power deliveries, diagnostics and custom fiber interfaces.**

Amphenol Fiber Optic Products has continued to develop new connector designs by incorporating new concepts and ideas with our customers. One new concept is the development of the Amphenol Custom RFID solution that ensures Medical probes are being used correctly. Another technology is the Hybrid connector design which is one connector that has a combination of both a fiber optic and an electrical connector all in one. These are just examples of Amphenol providing next generation solutions to the medical market.

Amphenol Fiber Optic Products is a premier designer and manufacturer of ophthalmic surgical consumable probes and connector interfaces for surgical laser equipment, as well as supplying assemblies that are used in non-invasive monitor capabilities

and connector interfaces for the treatment of vascular diseases. Amphenol Fiber Optic Products will continue to build key relationships with our Medical engineering groups and offer solutions to our customer needs. We will also showcase our state of the art manufacturing capabilities to gain valuable insight to the medical and industrial markets.

Amphenol Fiber Optic Products prides itself on producing the highest quality connectors and is committed to achieve Total Quality performance in meeting the requirements of all our customers. Total Quality Performance means understanding who our customer is, what their requirements are, and to continually improve in order to meet those requirements without error, on time, every time.





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*The Experience and Reliability that Matter*

## Standard SMA

Amphenol Fiber Optic Products was a pioneer in developing the first industry standard fiber optic interconnect system by introducing the SMA connector.

The 905 series was the first fiber optic interconnect system to gain industry-wide acceptance. Today, Amphenol Fiber Optic Products continues to support these markets with a wide variety of standard and custom SMA connectors and accessories.

The SMA connector family utilizes a threaded coupling nut system for mating and de-mating.

Available with zirconia or stainless steel ferrules with custom hole size, the SMA is an excellent choice for a robust, cost competitive and reliable system. Amphenol's long standing history and development of the SMA product ensures exceptional quality and long term reliability. We continue to support further development and improvement with our standard and custom product offerings.



### Features and Benefits

Stainless Steel Ferrules available in custom precision drilled optical fiber hole sizes for specialized applications

Custom stainless steel ferrule tip configurations available for high power laser delivery

Able to be sterilized through autoclave

Compatible with RFID Integrated Technology

Strain relief boots and dust caps available with medical grade material

### Specifications

Insertion Loss (Zirconia Ferrule):  
128um to 144um  $\leq 1.0$ dB typical

Insertion loss (Stainless Steel): 128um to 144um  $\leq 2.0$ dB typical

Tolerance for Stainless Steel Ferrule Holes:  
125um to 149um:  $+5/-0$ um

Tolerance for Stainless Steel Ferrule Holes:  
150um to 249um:  $+10/-0$ um

Tolerance for Stainless Steel Ferrule Holes:  
250um to 1499um:  $+15/-0$ um

Tolerance for Stainless Steel Ferrule Holes:  
1500um to 2300um:  $+25/-0$ um

### Applications

Medical Specialty

Data Communications

Industrial

Military

### Industry Compliance

RoHS compliant

Meets IEC 61754-22 International standard; Part 22 Type F-SMA connector



## Standard SMArt

Amphenol's SMArt connector family utilizes a threaded coupling nut system for mating and de-mating.

Available with zirconia ferrules with custom hole size, the SMArt connector is an excellent choice for a robust, cost competitive and reliable system.

Amphenol's long standing history and development of the SMA product ensures exceptional quality and long term reliability.

We continue to support further development and improvement with our standard and custom product offerings.



### Features and Benefits

Ceramic (Zirconia) Ferrules are available in custom molded optical hole sizes for specialized applications

Ceramic (Zirconia) Ferrule tip configurations are available for high power laser delivery

Able to be sterilized through autoclave

Strain relief boots and dust caps available with medical grade material

Compatible with RFID Integrated Technology

### Specifications

Insertion Loss (Zirconia Ferrule):  
128um to 144um  $\leq 1.0$ dB typical

Typical Zirconia Ferrule Hole sizes: 126um, 128um, 142um, 144um, 201um & 206um

Typical Zirconia Ferrule Hole Tolerance: +2 to 10um/-0um

### Applications

Medical Specialty

Data Communications

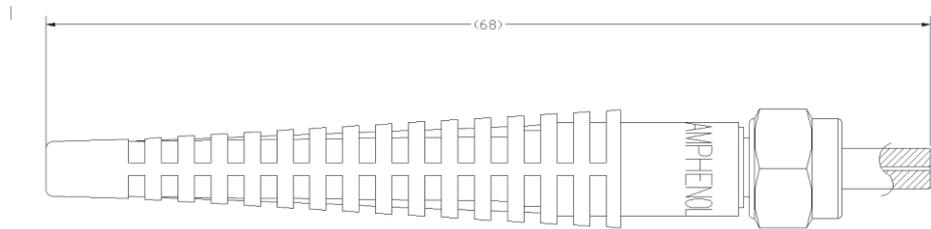
Industrial

Military

### Industry Compliance

Meets IEC 61754-22 International standard; Part 22 Type F-SMA connector

RoHS compliant



## Ordering Information

Part Number	Description
905-405-5001-P	905 SMART CONNECTOR, 128 $\mu$ m
905-405-5001HP	905 SMART CONNECTOR, 128 $\mu$ m, HEX NUT
905-405-5002-P	905 SMART CONNECTOR, 126 $\mu$ m
905-400-5007-P	905 SMART CONNECTOR, 144 $\mu$ m
905-400-5007HP	905 SMART CONNECTOR, 144 $\mu$ m, HEX NUT

\*Please call customer service for additional configurations

# Standard Tight Tolerance SMA

The Tight Tolerance SMA connector family utilizes a threaded coupling nut system for mating and de-mating.

Available with stainless steel ferrules with custom hole size, the SMA is an excellent choice for a robust, cost competitive and reliable system.

Amphenol's long standing history and development of the SMA product ensures exceptional quality and long term reliability.

We continue to support further development and improvement with our SMA connectors and custom product offerings. Amphenol Fiber Optic Products was a pioneer in developing the first industry standard fiber optic interconnect system by introducing the SMA Connector.

Today Amphenol Fiber Optic Products continues to support these markets with a wide variety of standard and custom SMA connectors and accessories.



## Features and Benefits

Stainless Steel Ferrules available in custom precision drilled optical fiber hole sizes for specialized applications

Custom stainless steel ferrule tip configurations available for high power laser delivery

Able to be sterilized through autoclave

Strain relief boots and dust caps available with medical grade material

Compatible with RFID Integrated Technology

## Specifications

Insertion Loss (Zirconia Ferrule):  
128um to 144um  $\leq 1.0\text{dB}$  typical

Insertion loss (Stainless Steel): 128um to 144um  $\leq 2.0\text{dB}$  typical

Tolerance for Stainless Steel Ferrule Holes:  
125um to 149um:  $+5/-0\text{um}$

Tolerance for Stainless Steel Ferrule Holes:  
150um to 249um:  $+5/-0\text{um}$

Tolerance for Stainless Steel Ferrule Holes:  
250um to 599um:  $+5/-0\text{um}$

Tolerance for Stainless Steel Ferrule Holes:  
600um to 2300um:  $+10/-10\text{um}$

## Applications

Medical Specialty

Data Communications

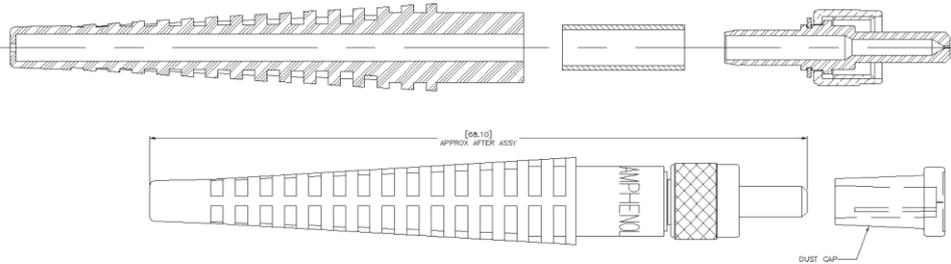
Industrial

Military

## Industry Compliance

RoHS compliant

Meets IEC 61754-22 International standard; Part 22 Type F-SMA connector



## Ordering Information

Part Number	Description
905-158-50170-P	905 SMA TIGHT TOLERANCE CONNECTOR, 170µm
905-158-50170HP	905 SMA TIGHT TOLERANCE CONNECTOR, 170µm, HEX NUT
905-158-50435-P	905 SMA TIGHT TOLERANCE CONNECTOR, 435µm
905-158-50435HP	905 SMA TIGHT TOLERANCE CONNECTOR, 435µm, HEX NUT
905-158-51600-P	905 SMA TIGHT TOLERANCE CONNECTOR, 1600µm
905-158-51600HP	905 SMA TIGHT TOLERANCE CONNECTOR, 1600µm, HEX NUT

\*Please call customer service for additional configurations

# Plastic SMA

The Plastic SMA connector family utilizes a threaded coupling nut system for mating and de-mating. Available with only plastic ferrule/bodies with custom hole sizes, the SMA is an excellent choice for a robust, cost competitive and reliable system.

Amphenol's long standing history and development of the SMA product ensures exceptional quality and long term reliability.

We continue to support further development and improvement with our standard and custom product offerings.

Amphenol's long standing history and development of the SMA product ensures exceptional quality and long term reliability. We continue to support further development and improvement with our standard and custom product offerings.



## Features and Benefits

Plastic Ferrule/Bodies are available in custom precision optical hole sizes for specialized applications

Plastic connector has typical hole sizes of 1000um, 750um, 500um & 436um

Plastic connector can be ordered with Plastic or Stainless Steel Knurl Nut

## Specifications

Tolerance for Plastic Holes: 125um to 499um:  
+10/-0um

Tolerance for Plastic Holes: 500um to 1000um:  
+20/-0um

## Applications

Plastic Optic Fiber	Medical Specialty
Data Communicatio	Industrial

## Industry Compliance

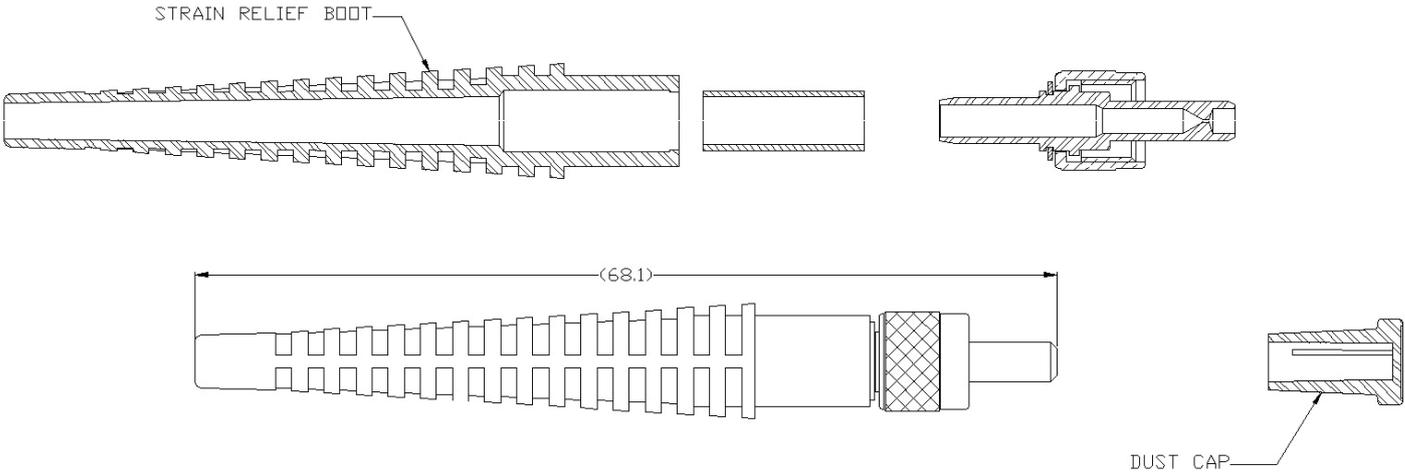
RoHS compliant



### Ordering Information

Part Number	Description
905-149-5001-P	905 SMA PLASTIC, 1000µm, KNURL NUT
905-149-5001HP	905 SMA PLASTIC, 1000µm, HEX NUT
905-149-5101-P	905 SMA PLASTIC, 500µm, KNURL NUT

\*Please call customer service for additional configurations



# FiberGrip® SMA

The 905 SMA FiberGrip® Connector is a simple to use, epoxyless, interconnect solution for markets where High-Power Delivery is required.

This two-piece connector is designed as a safe and cost effective alternative that allows for efficient ease of use during termination.

Amphenol's 905 SMA FiberGrip® Connector is designed for high power applications.

The connector ferrule is made from stainless steel allowing the ferrule to act as a heat sink, pulling the heat quickly from the fiber, when used.



Damage threshold on these types of connectors will vary based on launch conditions and operational wavelength. The front body of the connector is a stainless steel ferrule that is designed with a custom, high-tolerance, application specific hole diameter. The rear body contains the proprietary fiber retention system designed to carefully secure the optical fiber, without the risk of damage, to the connector.

## Features and Benefits

- Quick and Safe Epoxyless Termination
- Designed for use with High Power Medical Laser Delivery Systems
- Can withstand Autoclave and ETO Sterilization process
- Custom Optical Fiber Hole Sizes and Ferrule Tip configurations
- Strain relief boots and dust caps available with medical grade material
- Compatible with RFID Integrated Technology

## Specifications

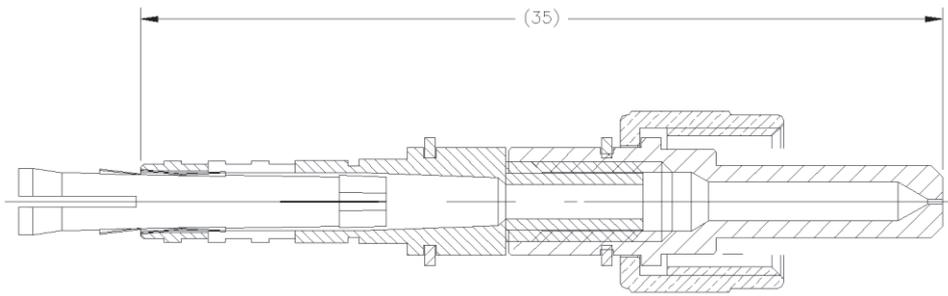
- Tolerance for Stainless Steel Ferrule Holes: 125um to 149um: +5/-0um
- Tolerance for Stainless Steel Ferrule Holes: 150um to 249um: +10/-0um
- Tolerance for Stainless Steel Ferrule Holes: 250um to 1499um: +15/-0um
- Tolerance for Stainless Steel Ferrule Holes: 1500um to 2300um: +25/-0um
- Retention value is dependent upon the specific size and type of the optical fiber
- Retention can reach values of 20 lb. and higher - Amphenol will determine retention values

## Applications

- Medical Specialty
- Data Communications
- Industrial
- Military

## Industry Compliance

RoHS compliant



## Ordering Information

Part Number	Description
905-40230-0270P	905 FIBERGRIP SMA, 230µm, KNURL NUT
905-40230-0270H	905 FIBERGRIP SMA, 230µm, HEX NUT
905-40640-1040P	905 FIBERGRIP SMA, 640µm, KNURL NUT
905-40640-1040H	905 FIBERGRIP SMA, 640µm, HEX NUT
905-41050-1400P	905 FIBERGRIP SMA, 1050µm, KNURL NUT
905-41050-1400H	905 FIBERGRIP SMA, 1050µm, HEX NUT

\*Please call customer service for additional configurations

## Damage Resistant SMA

The 905 SMA Damage Resistant Connector is a simple to use interconnect solution for markets where high power delivery is required. Amphenol's Damage Resistant Connectors are designed for high power applications and utilize air gap ferrule technology.

The air gap ferrule technology eliminates energy absorbing materials near the fiber end face such as epoxies, connector materials, and coatings. The connector ferrules can be made of stainless steel, beryllium copper, or other customer specified material. The ferrule is used as a heat sink, pulling the heat quickly away from the fiber.

Damage threshold on these types of connectors will vary based on launch conditions and operational wavelength. Amphenol's accelerated design and development cycle allows for rapid response to the client's custom requirements. Amphenol Fiber Optic Products is dedicated to supporting each customer by providing exceptional quality and long-term reliability of the SMA connector.



### Features and Benefits

Stainless Steel Ferrules available in custom precision drilled optical fiber hole sizes for specialized applications

Custom stainless steel ferrule tip configurations available for high power laser delivery

Strain relief boots and dust caps available with medical grade material

Compatible with RFID Integrated Technology

### Specifications

Insertion loss (Stainless Steel): 128um to 144um  $\leq 2.0\text{dB}$  typical

Tolerance for Stainless Steel DR Ferrule Holes  $\leq 128\text{um}$   $+5/-0\text{um}$

Tolerance for Stainless Steel DR Ferrule Holes  $128 < D \leq 460\text{um}$ :  $+10/-0\text{um}$

Tolerance for Stainless Steel DR Ferrule Holes  $460 < D \leq 1200\text{um}$ :  $+15/-0\text{um}$

### Applications

Medical Specialty

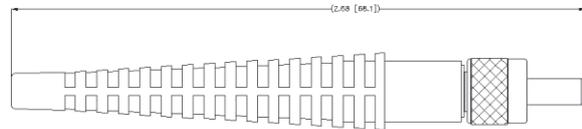
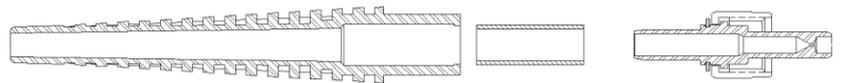
Data Communications

Industrial

Military

### Industry Compliance

RoHS compliant



## Ordering Information

Part Number	Description
905-151-50128-P	905 DR TIP SMA, 128µm, KNUURL NUT
905-151-50128HP	905 DR TIP SMA, 128µm, HEX NUT
905-151-50231-P	905 DR TIP SMA, 231µm, KNUURL NUT
905-151-50231HP	905 DR TIP SMA, 231µm, HEX NUT
905-151-50445-P	905 DR TIP SMA, 445µm, KNUURL NUT
905-151-50445HP	905 DR TIP SMA, 445µm, HEX NUT
905-151-50625-P	905 DR TIP SMA, 625µm, KNUURL NUT
905-151-50625HP	905 DR TIP SMA, 625µm, HEX NUT

\*Please call customer service for additional configurations

# Damage Resistant Tight Tolerance SMA

The 905 Tight Tolerance SMA Damage Resistant Connector is a simple to use interconnect solution for markets where high power delivery is required.

Amphenol's Damage Resistant Connectors are designed for high power applications and utilize air gap ferrule technology. The air gap ferrule technology eliminates energy absorbing materials near the fiber end face such as epoxies, connector materials, and coatings. The connector ferrules can be made of stainless steel, beryllium copper, or other customer specified material.

The ferrule is used as a heat sink, pulling the heat quickly away from the fiber. Damage threshold on these types of connectors will vary based on launch conditions and operational wavelength.

Amphenol's accelerated design and development cycle allows for rapid response to the client's custom requirements. Amphenol Fiber Optic Products is dedicated to supporting each customer by providing exceptional quality and long-term reliability of the SMA connector.



## Features and Benefits

Stainless Steel Ferrules available in custom precision drilled optical fiber hole sizes for specialized applications

Custom stainless steel ferrule tip configurations available for high power laser delivery

Can withstand Autoclave and ETO Sterilization process

Strain relief boots and dust caps available with medical grade material

Compatible with RFID Integrated Technology

## Specifications

Insertion loss (Stainless Steel): 128um to 144um  $\leq 2.0\text{dB}$  typical

Tolerance for Stainless Steel DR Ferrule Holes  $\leq 128\text{um}$   $+5/-0\text{um}$

Tolerance for Stainless Steel DR TT Ferrule Holes:  $128 < D \leq 599\text{um}$ :  $+5/-0\text{um}$

Tolerance for Stainless Steel DR TT Ferrule Holes:  $600 < D \leq 1200\text{um}$ :  $+10/-0\text{um}$

## Applications

Medical Specialty

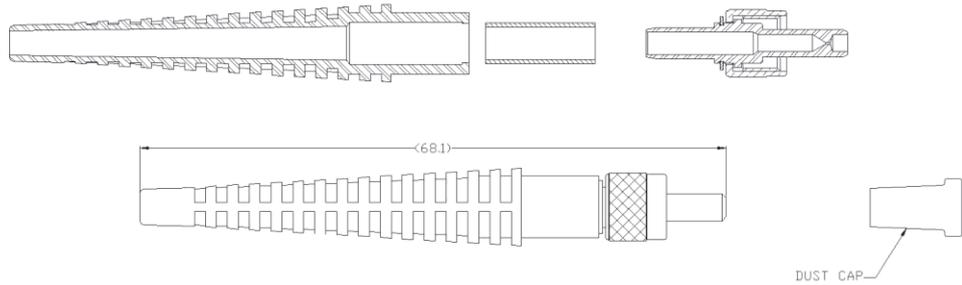
Data Communications

Industrial

Military

## Industry Compliance

RoHS compliant



## Ordering Information

Part Number	Description
905-189-50128-P	905 DR TIGHT TOLERANCE, 128µm, SMA CONNECTOR
905-189-50128HP	905 DR TIGHT TOLERANCE, 128µm, HEX, SMA CONNECTOR
905-189-50445-P	905 DR TIGHT TOLERANCE, 445µm, SMA CONNECTOR
905-189-50445HP	905 DR TIGHT TOLERANCE, 445µm, HEX, SMA CONNECTOR
905-189-50625-P	905 DR TIGHT TOLERANCE, 625µm, SMA CONNECTOR
905-189-50625HP	905 DR TIGHT TOLERANCE, 625µm, HEX, SMA CONNECTOR

\*Please call customer service for additional configurations

# DR Beryllium Copper FiberGrip® SMA

The 905 SMA Damage Resistant Beryllium Copper FiberGrip® Connector is a simple to use, epoxyless, interconnect solution for markets where High-Power Delivery is required.

This two-piece connector is designed as a safe and cost effective alternative that allows for efficient ease of use during termination. Amphenol's 905 SMA Damage Resistant Beryllium Copper FiberGrip® Connector is designed for high power applications and utilizes air gap ferrule technology. The air gap ferrule technology eliminates energy absorbing materials near the fiber end epoxies, connector materials and coatings.

The connector ferrules is made from Beryllium Copper allowing the ferrule to act as a heat sink, pulling the heat quickly away from the fiber, when used. Damage threshold on these types of connectors will vary based on launch conditions and operational wavelength. The front body of the connector is a Beryllium Copper ferrule that is designed with a custom, high-tolerance, application-specific hole diameter.



## Features and Benefits

- Quick and Safe Epoxyless Termination
- Designed for use with High Power Medical Laser Delivery Systems
- Can withstand Autoclave and ETO Sterilization process
- Custom Optical Fiber Hole Sizes and Ferrule Tip configurations
- Strain relief boots and dust caps available with medical grade material
- Compatible with RFID Integrated Technology

## Specifications

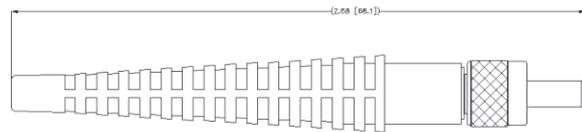
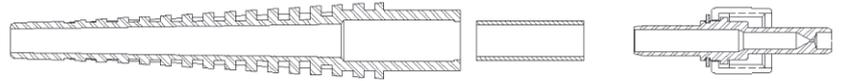
- Tolerance for Beryllium Copper Ferrule Holes: 125um to 149um: +5/-0um
- Tolerance for Beryllium Copper Ferrule Holes: 150um to 249um: +10/-0um
- Tolerance for Beryllium Copper Ferrule Holes: 250um to 1499um: +15/-0um
- Tolerance for Beryllium Copper Ferrule Holes: 1500um to 2300um: +25/-0um
- Retention value is dependent upon the specific size and type of the optical fiber
- Retention can reach values of 20 lb. and higher - Amphenol will determine retention values

## Applications

- Medical Specialty
- Data Communications
- Industrial
- Military

## Industry Compliance

- RoHS compliant



## Ordering Information

Part Number	Description
905-20270-0400L	CONN, SMA, 270/440µm, FG, BERY COPPER DAM RES
905-20630-0950L	CONN, SMA, 630/750µm, FG, BERY COPPER DAM RES
905-21050-1400L	CONN, SMA, 1050/1400µm, FG, BERY COPPER DAM RES

\*Please call customer service for additional configurations

# Damage Resistant FiberGrip® SMA

The 905 SMA Damage Resistant FiberGrip® Connector is a simple to use, epoxyless, interconnect solution for markets where High-Power Delivery is required. This two-piece connector is designed as a safe and cost effective alternative that allows for efficient ease of use during termination.

Amphenol's Damage Resistant FiberGrip® Connector is designed for high power applications and utilizes air gap ferrule technology. The air gap ferrule technology eliminates energy absorbing materials near the fiber end face such as epoxies, connector materials, and coatings.

The connector ferrules can act as a heat sink pulling the heat quickly away from the fiber.

Damage threshold on these types of connectors will vary based on launch conditions and operational wavelength. The front body of the connector is a ferrule that is designed with a custom, high-tolerance, application specific hole diameter. Stainless steel, beryllium copper, or other customer specified material.



## Features and Benefits

- Quick and Safe Epoxyless Termination
- Designed for use with High Power Medical Laser Delivery Systems
- Can withstand Autoclave and ETO Sterilization process
- Custom Optical Fiber Hole Sizes and Ferrule Tip configurations
- Strain relief boots and dust caps available with medical grade material
- Compatible with RFID Integrated Technology

## Specifications

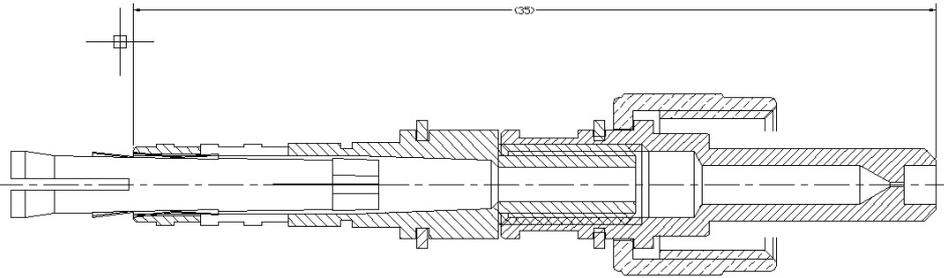
- Tolerance for Stainless Steel Ferrule Holes: 125um to 149um: +5/-0um
- Tolerance for Stainless Steel Ferrule Holes: 150um to 249um: +10/-0um
- Tolerance for Stainless Steel Ferrule Holes: 250um to 1499um: +15/-0um
- Tolerance for Stainless Steel Ferrule Holes: 1500um to 2300um: +25/-0um
- Retention value is dependent upon the specific size and type of the optical fiber
- Retention can reach values of 20 lb. and higher - Amphenol will determine retention values

## Applications

- Medical Specialty
- Data Communications
- Industrial
- Military

## Industry Compliance

- RoHS compliant



## Ordering Information

Part Number	Description
905-20230-0270P	905 FIBERGRIP SMA, 230µm, KNURL NUT
905-20230-0270H	905 FIBERGRIP SMA, 230µm, HEX NUT
905-20640-1040P	905 FIBERGRIP SMA, 640µm, KNURL NUT
905-20640-1040H	905 FIBERGRIP SMA, 640µm, HEX NUT
905-21050-1400P	905 FIBERGRIP SMA, 1050µm, KNURL NUT
905-21050-1400H	905 FIBERGRIP SMA, 1050µm, HEX NUT

\*Please call customer service for additional configurations

# Beryllium Copper FiberGrip® SMA

The 905 SMA Beryllium Copper FiberGrip® Connector is a simple to use, epoxyless, interconnect solution for markets where High-Power Delivery is required. This two-piece connector is designed as a safe and cost effective alternative that allows for efficient ease of use during termination.

Amphenol's 905 SMA Beryllium Copper FiberGrip® Connector is designed for high power applications. The connector ferrule is made from Beryllium Copper allowing the ferrule to act as a heat sink, pulling the heat quickly away from the fiber, when used.

Damage threshold on these types of connectors will vary based on launch conditions and operational wavelength. The front body of the connector is a Beryllium Copper ferrule that is designed with a custom, high-tolerance, application specific hole diameter.



## Features and Benefits

- Quick and Safe Epoxyless Termination
- Designed for use with High Power Medical Laser Delivery Systems
- Can withstand Autoclave and ETO Sterilization process
- Custom Optical Fiber Hole Sizes and Ferrule Tip configurations
- Strain relief boots and dust caps available with medical grade material
- Compatible with RFID Integrated Technology

## Specifications

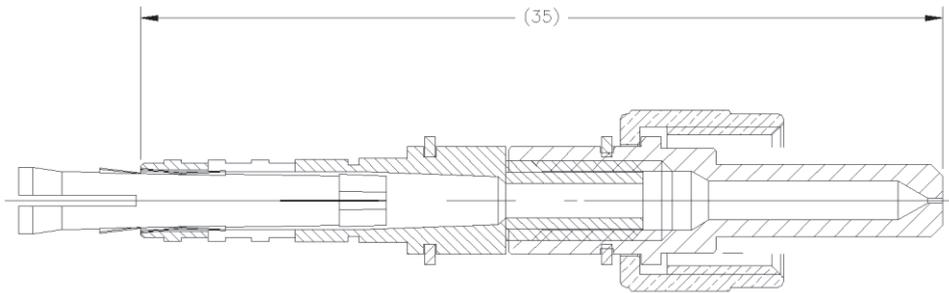
- Tolerance for Beryllium Copper Ferrule Holes: 125um to 149um: +5/-0um
- Tolerance for Beryllium Copper Ferrule Holes: 150um to 249um: +10/-0um
- Tolerance for Beryllium Copper Ferrule Holes: 250um to 1499um: +15/-0um
- Tolerance for Beryllium Copper Ferrule Holes: 1500um to 2300um: +25/-0um
- Retention value is dependent upon the specific size and type of the optical fiber
- Retention can reach values of 20 lb. and higher - Amphenol will determine retention values

## Applications

- Medical Specialty
- Data Communications
- Industrial
- Military

## Industry Compliance

- RoHS compliant



## Ordering Information

Part Number	Description
905-40230-0270L	CONN, SMA, 230/270µm, FG, BERY COPPER, KNURL
905-40640-1040L	CONN, SMA, 640/1040µm, FG, BERY COPPER, KNURL
905-41050-1400L	CONN, SMA, 1050/1400µm, FG, BERY COPPER, KNURL

\*Please call customer service for additional configurations

# Custom Damage Resistant Assemblies

Amphenol's 907 Custom Damage Resistant Cable assemblies are designed for high power applications and utilize air gap ferrule technology. The air gap ferrule technology eliminates energy absorbing materials near the fiber end face such as epoxies, connector materials and coatings. The connector ferrules can be made of stainless steel, beryllium copper, or other customer specified material. The ferrule is used as a heat sink, pulling the heat quickly away from the fiber. Damage threshold on these types of connectors will vary based on launch conditions and operational wavelength.



## Features and Benefits

Custom designed SMA connector available on request

Amphenol is capable of designing and producing an entire "end-to-end" assembly solution, from connector to connector

Amphenol's accelerated design and development cycle, allows for quick response to the customer needs, when time is limited

Rapid ramp-up production method, allows Amphenol to swiftly support production when demand is greater than customer's current production capabilities

Can withstand Autoclave and ETO Sterilization process

## Specifications

Multimode IL:  
 $\leq 0.35\text{dB}$  Typical;  
 $< 0.75\text{dB}$  Max.

Singlemode IL:  
 $\leq 0.35\text{dB}$  Typical  
 $< 0.75\text{dB}$  Max.

Return Loss:  
 $\leq -45\text{dB}$

Operating Temperature:  
 $-40^\circ$  to  $85^\circ\text{C}$

Durability:  
 $> 50$  mating cycles

## Applications

- Medical Specialty
- Data Communications
- Industrial
- Military

## Industry Compliance

RoHS compliant

## Ordering Information

\*Please call customer service for additional configurations

Part Number	Description
907-99999-00303	SMA PIGTAIL, DR, BERY COPPER 200/240/260/400 $\mu\text{m}$ , 1.2M
907-99999-00310	SMA JUMPER, DAM RES, 550/600 $\mu\text{m}$ , W/SS TUBING, 2M

# Amphenol

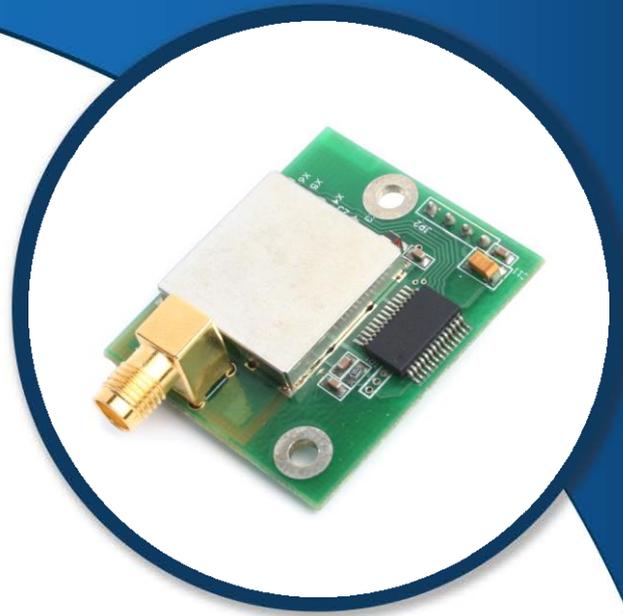
**FIBER OPTIC PRODUCTS**



# Amphenol Secure Reader (ASR)

Amphenol Fiber Optic Products has combined the state-of-the-art technology of Radio Frequency Identification (RFID) with industry leading connectors to develop the Amphenol Secure Connector (ASC) product line. This combination provides our customers with the ability to control and direct the use of their laser delivery systems and assemblies in a safe manner.

The ASC product line allows OEMs to protect their product and market share by securely programming individual serialization and critical data into the read/write memory of the RFID Tag. Each ASC system is designed to meet the client's specific application.



## Features and Benefits

**Brand Protection:** Ensures that only OEM qualified products are used and not competitors'

**Licensing:** Allows the ability to actively control and monitor companies that are licensing product

**Validation:** ASC system determines that the assemblies and systems are valid and used correctly for application

**Security:** Encryption is available to secure customer sensitive information from reaching the public

**Customizable:** Entire systems are designed to meet the client's individual specifications

## Specifications

Radio Frequency Transmitted: 13.56 ± .007 MHz or 125 ± 6.25KHz

Radio Frequency Wave Power: 100mW Maximum

RFID Antenna Read Range: Approximately 1 inch

RFID Transceiver Communication Interface: USB, RS-232, RS-485 and TTL Compatible

Operating Voltage:  
5V to 25V Standard

Operating Temperature:  
0° to +65°C

Current Consumption:  
150mA Maximum

## Applications

Medical Specialty

Data Communications

Industrial

## Industry Compliance

RoHS compliant

## Ordering Information

\*Please call customer service for additional configurations

Part Number	Description
927-2167	RFID SECURE READER PCB ASSEMBLY WITH COAX SMC
927-2265	RFID SECURE READER PCB ASSEMBLY WITH COAX SMC

# Secure Connectors

Amphenol Fiber Optic Products has combined the state-of-the-art technology of Radio Frequency Identification (RFID) with industry leading connectors to develop the Amphenol Secure Connector (ASC) product line.

This combination provides our customers with the ability to control and direct the use of their laser delivery systems and assemblies that are in the market in a safe manner.

The ASC product line allows OEMs to protect their product and market share by securely programming individual serialization and critical data into the read/write memory of the RFID Tag.



## Features and Benefits

**Brand Protection:** Ensures that only OEM qualified products are used and not competitors'

**Licensing:** Allows the ability to actively control and monitor companies that are licensing product

**Validation:** ASC system determines that the assemblies and systems are valid and used correctly for application

**Security:** Encryption is available to secure customer sensitive information from reaching the public

**Customizable:** Entire systems are designed to meet the client's individual specifications

## Specifications

**RFID Transponder Tag:** Operating Frequency: 125KHz to 13.56 MHz

**RFID Programmable Memory:** Up to 256 Bytes

**RFID Antenna Read Range:** Approximately 1 inch

**RFID Transceiver Communication Interface:** USB, RS-232, RS-485 and TTL Compatible

**Operating Voltage:**  
8 - 25V Standard

**Operating Temperature:**  
0° to +85°C

**Power Consumption:**  
100mW Maximum

## Applications

Medical Specialty

Data Communications

Industrial

## Industry Compliance

RoHS compliant

## Ordering Information

\*Please call customer service for additional configurations

Part Number	Description
905-700-5000	RFID SECURE CONN, WITH BLACK CAP & SIDES AND BOOT
905-700-5331	RFID SECURE CONN, WITH BLUE CAP & SIDES AND WHITE BOOT

# SMA Adapters

Amphenol Fiber Optic Products was a pioneer in developing the first industry standard fiber optic interconnect system by introducing the SMA Connector as well as our 905 Series SMA Adapters.

Together they were the first fiber optic interconnect system to gain industry wide acceptance. Today Amphenol Fiber Optic Products continues to support these markets with a wide variety of SMA accessories.

The SMA adapters are made of Nickel Plated Brass and Stainless Steels options. Amphenol Adapters come in the following options: (1) standard Bulkhead D-Hole Feed through adapter, (2) In-line Adapter with chain.

Amphenol's long standing history and development of the SMA product ensures exceptional quality and long term reliability. We continue to support further development and improvement with our standard and custom product offerings.



## Features and Benefits

Reliable, robust and time tested as one of the first industry standard fiber optic interface.

Threaded metal coupling nut for maximum retention

Available with knurl or hexagonal coupling nut upon request

Optional precision machined stainless steel

## Specifications

Nickel Plated Brass

Bulkhead feed through

Jack to Jack; in-line with nuts & washers

Optional environmentally sealed

Dust cap: vinyl

## Applications

Medical Specialty

Data Communicatio

## Industry Compliance

RoHS compliant

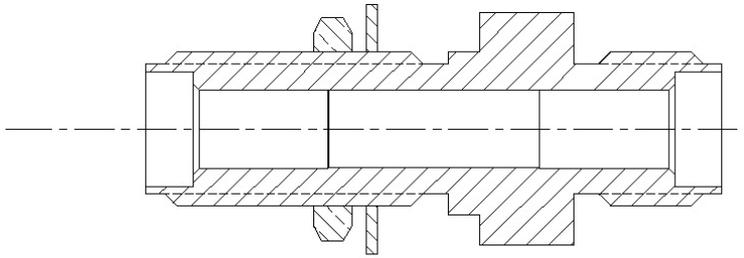
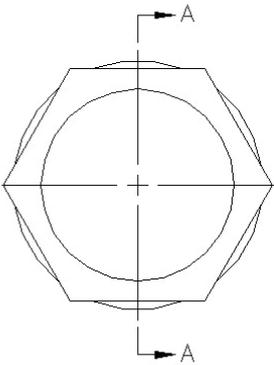
Meets IEC 61754-22 standard



### Ordering Information

Part Number	Description
905-120-5000	SMA ADAPTER, STANDARD
905-120-5008	SMA ADAPTER, SEALED
905-120-5004	SMA ADAPTER, HALF LENGTH

\*Please call customer service for additional configurations



# SMA Coupling Nut (Quad Thread)

Amphenol Fiber Optic Products was a pioneer in developing the first industry standard fiber optic interconnect system by introducing the SMA Connector. The 905 series was the first fiber optic interconnect system to gain industry wide acceptance for Medical, Military, Industrial and Data Communications.

Today Amphenol Fiber Optic Products continues to support these markets with a wide variety of standard and custom SMA connectors and accessories.

The SMA connector family utilizes a threaded coupling nut system for mating and de-mating. The SMA Quad Thread coupling nut is an excellent choice for mating and locking SMA connectors to laser equipment.

Amphenol's long standing history and development of the SMA product ensures exceptional quality and long term reliability. We continue to support further development and improvement with our standard and custom product offerings.



## Features and Benefits

Precision Machined Stainless Steel Knurl Nut

Threaded metal coupling nut for maximum retention

Can withstand Autoclave and ETO Sterilization process

## Specifications

Raised Diamond Etching

Front OD; 8mm (.314"): Length 7mm (.275"):  
Rear OD; 7.5mm (.295")

## Applications

Medical Specialty

Data Communications

Industrial

Military

## Industry Compliance

RoHS compliant

Conform to TIA/EIA



## Ordering Information

Part Number	Description
905-5385	SMA COUPLING NUT, QUAD THREAD

\*Please call customer service for additional configurations

# SMA Coupling Nuts

The 905 SMA series connectors were the first fiber optic interconnect system to gain industry wide acceptance for Medical, Military, Industrial and Data Communications.

Amphenol Fiber Optic Products continues to support these markets with a wide variety of SMA coupling nut options. Amphenol has developed a complete line of coupling nuts to be used with our SMA connectors.

Amphenol has standardized on two types of coupling nuts, a knurl and hex nut. Coupling nuts are made from nickel plated brass, stainless steel or plastic based on customer preference.

The typical knurl nut has a thread of 1/4 x 36 UNS 2B, which is the basis of all coupling nuts. The knurl nuts can be ordered separately.



## Features and Benefits

Precision Machined Stainless Steel Knurl Nuts for Specialized Applications

Threaded metal coupling nuts for maximum retention

Can withstand Autoclave and ETO Sterilization process

## Specifications

Typical 1/4 x 36 2B threads

Standard Nickel Plated Brass

Typical .312" Hexagonal OD

Typical .312" Knurl OD

Raised Diamond Etching

.35 dB typical, M/M

## Applications

Medical Specialty

Data Communications

## Industry Compliance

RoHS compliant

Meets IEC 61754-22 standard



## Ordering Information

Part Number	Description
905-5080-C-P	SMA COUPLING NUT, HEX, LOGO, BULK PACK
905-5191-P	SMA COUPLING NUT, KNURL, BULK PACK
905-5296-P	SMA COUPLING NUT, KNURL, TIGHT TOLERANCE
905-5377	SMA COUPLING NUT, STRAIGHT KNURL, TIGHT TOLERANCE

\*Please call customer service for additional configurations

# SMA Overnuts

Amphenol's accelerated design and development cycle allows for rapid response to the client's custom requirements.

Amphenol Fiber Optic Products is dedicated to supporting each customer by providing exceptional quality and long-term reliability of the SMA connector features.

Amphenol's long standing history and development of the SMA product ensures exceptional quality and long term reliability.

We continue to support further development and improvement with our standard and custom product offerings in a variety of options.



## Features and Benefits

Customizable Design: Entire system are designed to meet client's individual specifications.

Available in 1piece or 2 piece design

Support a variety of colors

Supplied with or without RFID tags

Can withstand Autoclaving and ETO sterilization

## Specifications

Based on clients individual needs

Typically designed in Crystalline Plastic (Delrin)

## Applications

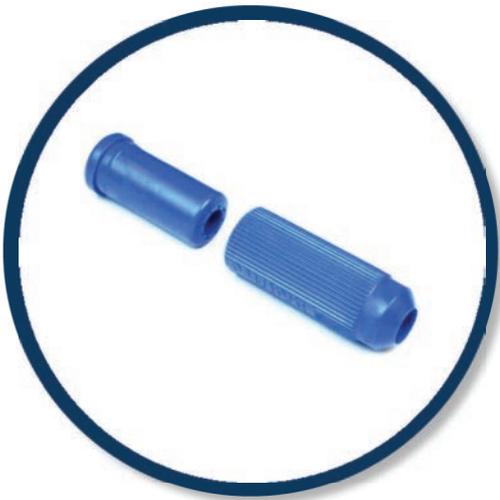
Medical Specialty

Data Communications

## Industry Compliance

RoHS compliant

Meets IEC 61754-22 standard



## Ordering Information

Part Number	Description
905-600-1007	SMA OVERNUT, W/SLEEVE AND BUSHING
905-600-1002	SMA OVERNUT, W/SLEEVE AND BUSHING
905-700-5000	SMA OVERNUT, ASSEMBLY
927-1720-11	SMA OVERNUT, LONG NOSE

\*Please call customer service for additional configurations

# SMA Boots

Amphenol Fiber Optic Products was a pioneer in developing the first industry standard fiber optic inconnect system by introducing the SMA Connector. In addition, to join the SMA Connector we have developed a series of strain relief options for our customers.

Amphenol's long standing history and development of the SMA product ensures exceptional quality and long term reliability.

We continue to support further development and improvement with our standard and custom product offerings.



## Features and Benefits

- Multiple colors
- Passes ETO Sterilization
- Medical Class VI SMA Boots

## Specifications

- Santoprene material
- 3mm Rear Boot ID
- 2mm Rear Boot ID
- 900um Rear Boot ID
- 500um Rear Boot ID

## Applications

- Medical Specialty
- Data Communications

## Industry Compliance

- RoHS compliant

## Ordering Information

\*Please call customer service for additional configurations

Part Number	Description
905-5100-01-P	SMA BOOT, BLACK, NO LOGO, BULK PACK
905-5215-8-MD-P	SMA BOOT, 64 MED CL. VI. FG, NO CRIMP SM END, BULK PACK

# SMA Dust Caps

The 905 SMA series connectors were the first fiber optic interconnect system to gain industry wide acceptance for Medical, Military, Industrial and Data Communications. Amphenol Fiber Optic Products continues to support these markets with a wide variety of SMA dust cap options.

Amphenol's long standing history and development of the SMA product ensures exceptional quality and long term reliability. We continue to support further development and improvement with our standard and custom product offerings.



## Features and Benefits

- Amphenol Logo or without logo
- Multiple colors
- Comes with or without Tether Loop
- Comes with or without Slit
- Passes ETO Sterilization
- Medical Class VI Dust Cap
- Stainless Steel Dust Cap

## Specifications

- Typical 3.25 mm ID
- Typical length 13.5mm
- Tether Loop 105mm
- Santoprene material

## Applications

- Medical Specialty
- Data Communications

## Industry Compliance

- RoHS compliant

## Ordering Information

\*Please call customer service for additional configurations

Part Number	Description
905-5173-01-P	SMA DUST CAP, NO TETHER, SLIT, NO LOGO, BLACK
905-5309-01-07P	SMA DUST CAP, NO TETHER, SLIT, NO LOGO, RED