

# DIAMOND

## Fiber Optic Components

**FSMA Ø 2.5**  
**CONNECTOR**  
**HMS-10.6/AG SM**  
**HFS-10.6/AG MM**

### Specifications:

|                       | Single mode                         |         | Multimode |         | Units | Test conditions                        |
|-----------------------|-------------------------------------|---------|-----------|---------|-------|----------------------------------------|
| Insertion loss (IL)   | typ 0.2                             | max 0.5 | typ 0.15  | max 0.5 | dB    | IEC 1300-3-4; $\lambda = 1300/1550$ nm |
| Return loss (RL)*     | 50                                  |         | 40        |         | dB    | IEC 1300-3-6; $\lambda = 1300/1550$ nm |
| Repeatability         | IL: max $\pm 0.1$                   |         |           |         | dB    |                                        |
| Service life          | min 1000 matings                    |         |           |         |       |                                        |
| Operating temperature | -40                                 | +85     | -40       | +85     | °C    |                                        |
| Storage temperature   | -40                                 | +90     | -40       | +90     | °C    |                                        |
| Strain relief (cable) | 100 N (signal interruption at 10 N) |         |           |         | N     |                                        |

\* Measured with high resolution reflectometer HP 8504A

**APPLICATIONS:** Telecommunications, CATV, LAN, MAN, WAN, Test & Measurement, Industry, Medical, Sensors

**COMPATIBILITY:** With SMA connectors with Ø 2.5 mm ferrules

**DESIGN/MATERIALS:**

Fiber alignment: SM: Active Core Alignment via patented two-step crimping process  
MM: Via patented crimping process

Polish: Convex (PC)

Ferrule: Ø 2.5 mm zirconia ceramic with copper-nickel alloy insert, spring loaded (10 N), anti-rotation keyed

Mating adapter: Tungsten carbide in Inox housing

External parts: Inox, 1/4"-36 UNS SMA threading

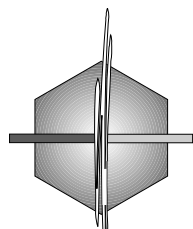
Cable retention: Coupled to ferrule on cable  
ODs ≤ 3.5 mm, signal interruption at 10 N

**AVAILABLE AS:**

- Unterminated connector
- Terminated patch cable, patchcord or pigtail

See ordering information on reverse

**TERMINATION TOOLS AND EQUIPMENT:** See section on Tools and Equipment



**DIAMOND**  
the fiber meeting

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*Specifications subject to change without notice*

002-037-205P003028

CONNECTOR

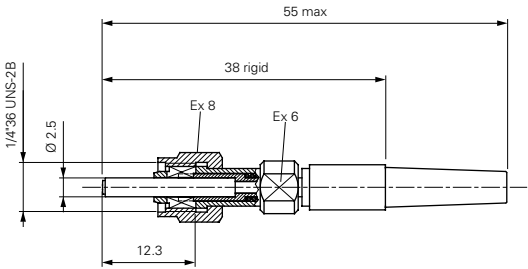
SINGLE MODE

Type designation: HMS-10.6/AG  
Ferrule materials: Zirconia/copper-nickel alloy insert (Pilzferrule)  
External parts: Inox  
Polish geometry: Convex (PC)

| Dimensions<br>Fiber/Cable | Order Number                  |                               |  |  |
|---------------------------|-------------------------------|-------------------------------|--|--|
|                           | Unterminated connector        | Terminated assembly           |  |  |
| 9/125/900                 | 2 4 3 - 0 0 0 - 0 0 1 L 0 0 0 | 2 4 3 - x x x - 0 0 1 L x x x |  |  |
| 9/125/900/2100            | 2 4 3 - 0 0 0 - 0 0 2 L 0 0 0 | 2 4 3 - x x x - 0 0 2 L x x x |  |  |
| 9/125/900/2500            | 2 4 3 - 0 0 0 - 0 0 3 L 0 0 0 | 2 4 3 - x x x - 0 0 3 L x x x |  |  |
| 9/125/900/3000            | 2 4 3 - 0 0 0 - 0 0 4 L 0 0 0 | 2 4 3 - x x x - 0 0 4 L x x x |  |  |
| 9/125/900/3500            | 2 4 3 - 0 0 0 - 0 0 5 L 0 0 0 | 2 4 3 - x x x - 0 0 5 L x x x |  |  |

Connectors for other fiber and cable dimensions available upon request

FSMA

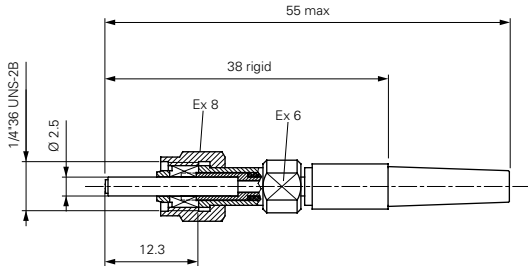


MULTIMODE

Type designation: HFS-10.6/AG  
Ferrule materials: Zirconia/copper-nickel alloy insert (Pilzferrule)  
External parts: Inox  
Polish geometry: Convex (PC)

| Dimensions<br>Fiber/Cable | Order Number                  |                               |  |  |
|---------------------------|-------------------------------|-------------------------------|--|--|
|                           | Unterminated connector        | Terminated assembly           |  |  |
| 50/125/900                | 2 4 4 - 0 0 0 - 0 0 1 L 0 0 0 | 2 4 4 - x x x - 0 0 1 L x x x |  |  |
| 50/125/900/2100           | 2 4 4 - 0 0 0 - 0 0 2 L 0 0 0 | 2 4 4 - x x x - 0 0 2 L x x x |  |  |
| 50/125/900/2500           | 2 4 4 - 0 0 0 - 0 0 3 L 0 0 0 | 2 4 4 - x x x - 0 0 3 L x x x |  |  |
| 50/125/900/3000           | 2 4 4 - 0 0 0 - 0 0 4 L 0 0 0 | 2 4 4 - x x x - 0 0 4 L x x x |  |  |
| 50/125/900/3500           | 2 4 4 - 0 0 0 - 0 0 5 L 0 0 0 | 2 4 4 - x x x - 0 0 5 L x x x |  |  |

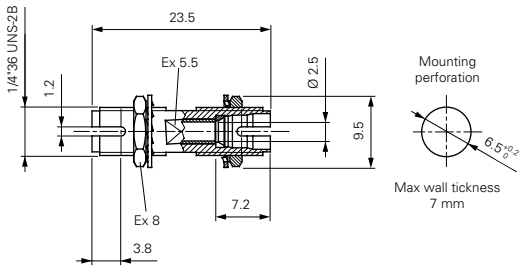
Connectors for other fiber and cable dimensions available upon request



MATING ADAPTER

Type designation: MMT-10/A

| Material         |                | Order Number                  |
|------------------|----------------|-------------------------------|
| Mating sleeve    | External parts |                               |
| Tungsten carbide | Inox           | 1 4 7 - 3 0 4 - 9 0 2 V 0 0 1 |



Order Number Codes

- <sup>1</sup> Connector code
  - <sup>2</sup> Connector code for termination on other end of assembly
    - For pigtails: insert 000
    - For patch assemblies: insert connector code for other connector
  - <sup>3</sup> Code for fiber or cable
  - <sup>4</sup> Length in meters
- See ordering information for additional details