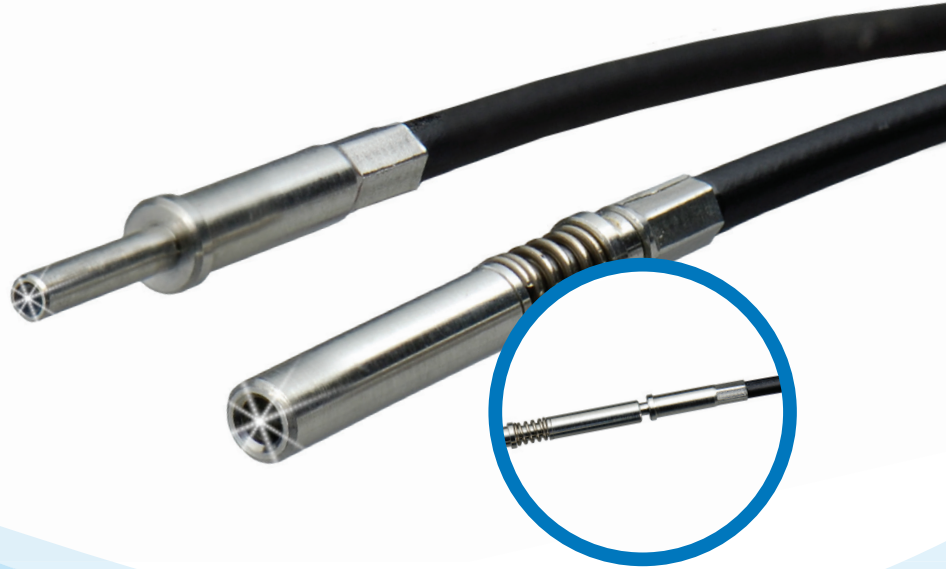


PLASTIC OPTICAL FIBER TERMINI/CABLE ASSEMBLIES

Fiber Optical Contacts for #16 MIL-DTL-38999 Connectors



- ▶ **EMI security**
- ▶ **No crosstalk**
- ▶ **Low weight**
- ▶ **Robust pin and socket design**

Smiths Connectors offers Polymer Optic Fiber (POF) size 16 contacts for MIL-DTL-38999 connector shells. POF contacts, where both the fiber core and the cladding are made of polymer, have been on the market for many years. Key advantages of polymer optical fibers are high flexibility and more economical connecting and transmission technology than in the case of glass. This type of fiber has all the major benefits of a glass fiber optic cable connection but at a reduced cost.

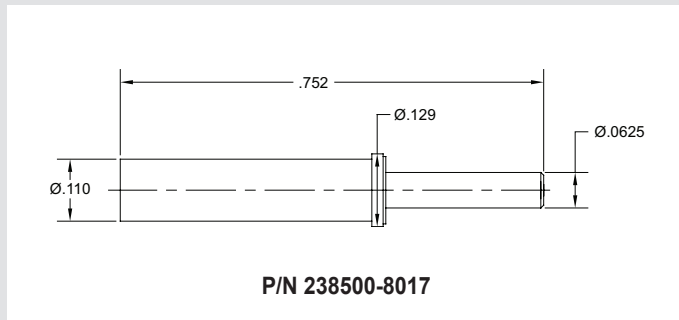
POF assemblies possess special characteristics that make this product an ideal solution for applications which traditional glass fiber products are not well suited. For applications requiring a very tight bend radius, POF products can generally bend to 25mm with no excessive attenuation.

Current Termini Configuration:

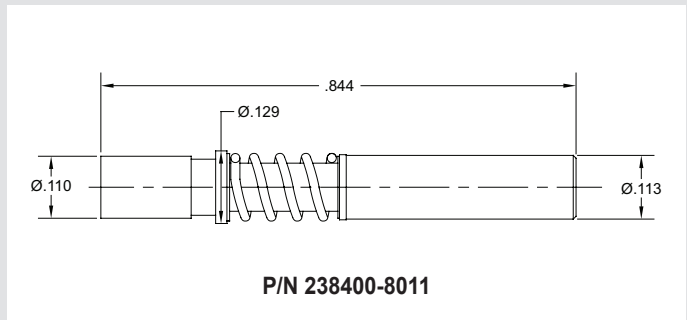
- ▶ Optical termini for use with 1 mm Plastic Optical Fiber (POF) in circular shells according to MIL-DTL-38999.
- ▶ Rear-release type, intermateable with contacts according to MIL-T- 29504/4 and 5.
- ▶ Contact assembly is achieved by crimping and cleaving or polishing.

TECHNICAL DRAWINGS

PLASTIC OPTICAL FIBER PIN CONTACTS



PLASTIC OPTICAL FIBER SOCKET CONTACT



PLASTIC OPTICAL FIBER TERMINI/CABLE ASSEMBLIES

TECHNICAL CHARACTERISTICS

FEATURES

- ▶ Easy termination process – field replaceable
- ▶ Fewer Parts than standard, glass fiber termini
- ▶ Typical dB loss per mated pair: 1 dB
- ▶ Lower cost than typical glass fiber assemblies

PROPERTIES

Optical termini for use with 1 mm POF circular shells according to MIL-DTL-38999. Rear-release type, intermateable with MIL-T-29504/5 and 5 contacts. Contact assembly by crimping and cleaving or polishing.

MATERIALS:

- ▶ **Ferrules:** Ø1.59mm, metal
- ▶ **Alignment Sleeve:** Metal
- ▶ **Connector body:** ARCAP
- ▶ **Mating Cycles:** 500
- ▶ **Fiber Guiding Bore:** Ø1060 µm
- ▶ **Operating Temperatures:** -65° + 150C°, depending on cable material
- ▶ **Insertion Loss:** 1.0 dB
- ▶ **Cable Diameter:** Ø2.2 mm

smiths connectors