2017 – Curso de Certificacion

Aspectos Técnicos de Sistemas de Infraestructura Física de Comunicaciones

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infrastructure for a connected world
Connect. Manage. Automate.

Agenda

- Estándares de ANSI/TIA.
- ANSI/TIA 568.D
- ANSI/TIA 569.D
- ANSI/TIA 607.C
- ANSI/TIA 606.B

Agenda

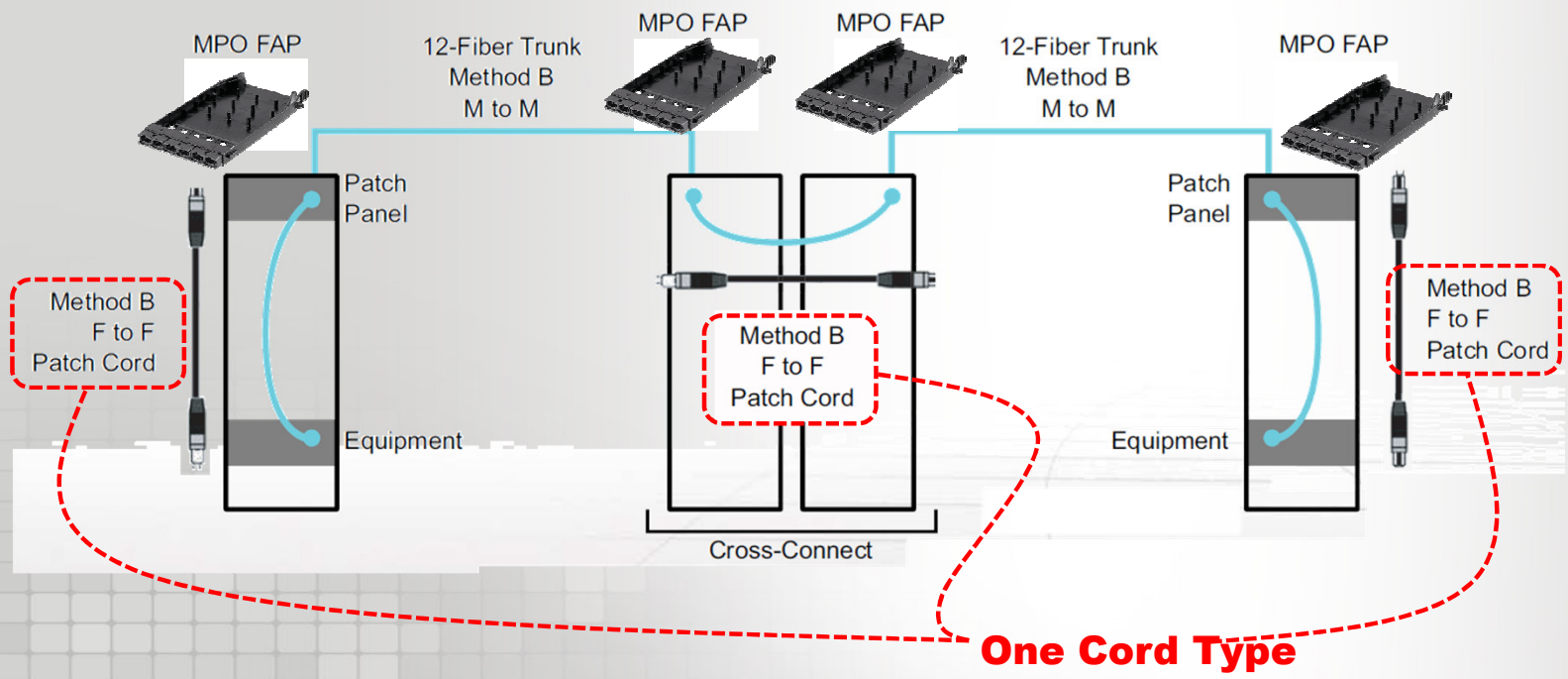
- Estándares de ANSI/TIA.
- ANSI/TIA 568.D
- ANSI/TIA 569.D
- ANSI/TIA 607.C
- ANSI/TIA 606.B

Estándares ANSI/TIA

- ANSI/TIA 568.D
  - Cableado de Cobre
  - Cableado de Fibra Optica
- ANSI/TIA 569.D
  - Rutas
  - Espacios (Gabinetes)
- ANSI/TIA 607.C – Sistemas de Tierras
- ANSI/TIA 606.B – Identificación

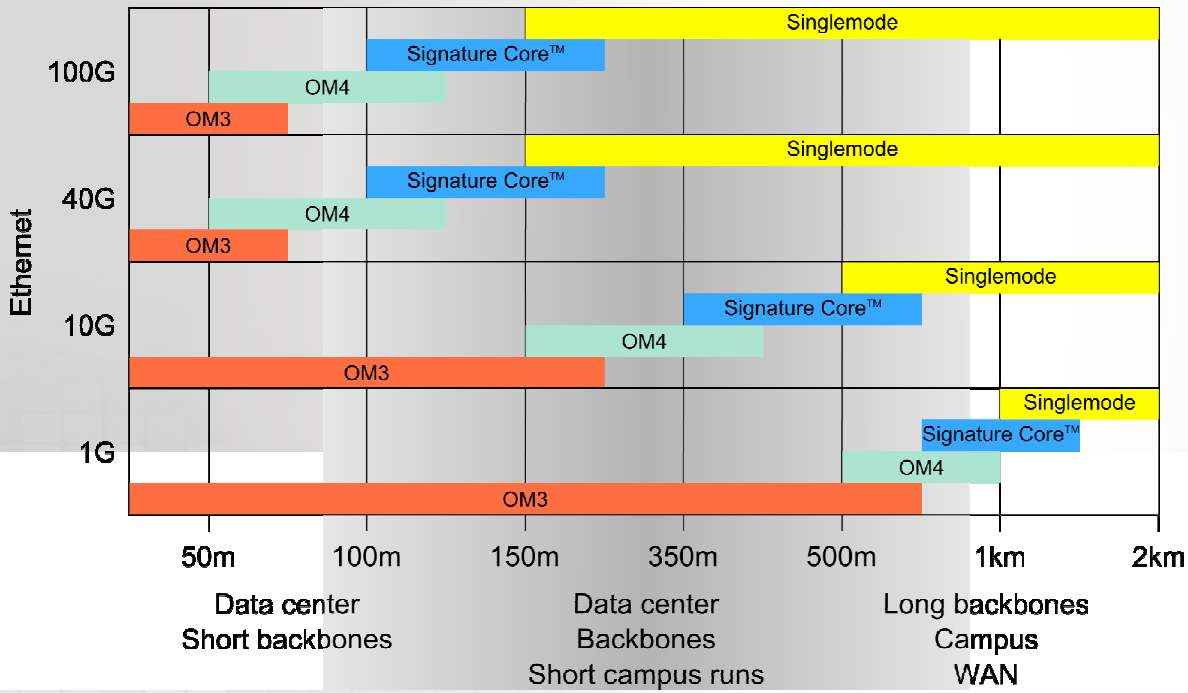
ANSI/TIA 568.D

- Cableado de Fibra Óptica



ANSI/TIA 568.D

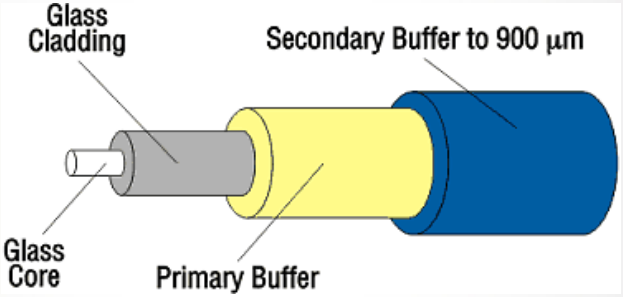
- Cableado de Fibra Óptica



Cableado de Fibra Óptica

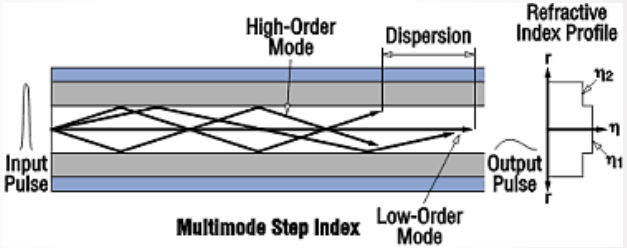
Las partes de un cable de fibra son:

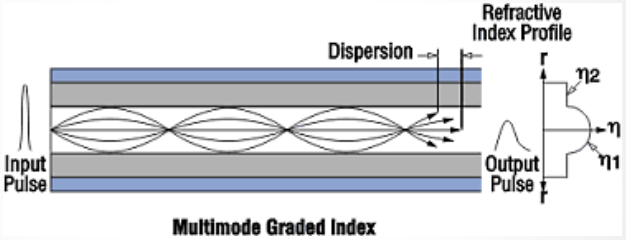
- Nucleo (core)
- Clad
- Cubierta (Primary Buffer)



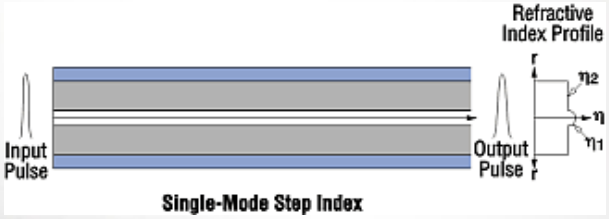
Cableado de Fibra Óptica

- Fibras Multimodo





- Fibras Monomodo



Cableado de Fibra Óptica

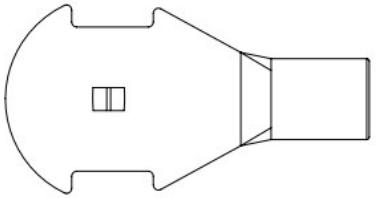
- Los cables de Fibra según la chaqueta

Cableado de Fibra Óptica

KIT PART NUMBER	CLAMP PART NUMBER
ACGK	#10
ACGKX	#16

NOTES:

1. KIT INCLUDES ARMORED CABLE GROUNDING TERMINAL AND MECHANICAL CLAMP
2. FOR USE WITH UNJACKETED ARMOR CABLE. DIAMETER RANGE - .440" - 1.250".



ARMORED CABLE GROUNDING TERMINAL (QTY. 1)

#10 MECHANICAL CLAMP, 9/16" - 1-1/16" DIAMETER RANGE (QTY. 1)

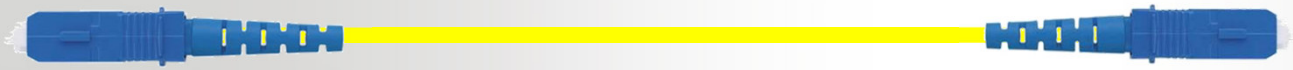
#16 MECHANICAL CLAMP, 15/16" - 1-1/2" DIAMETER RANGE (QTY. 1

ANSI/TIA 568.D

Conectores terminables en campo

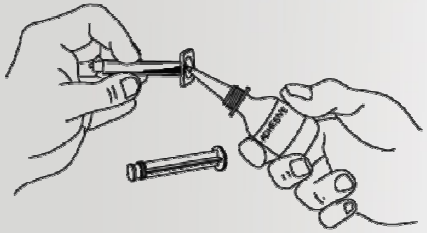
Conector LC

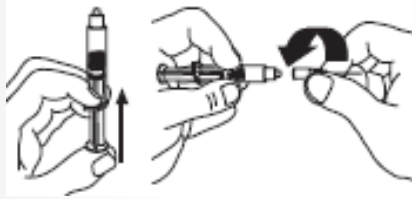
Conector SC



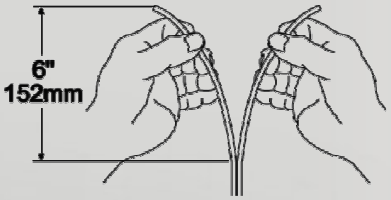
- Pegamento Epóxico
- Fusión
- Opticam - Empalme Mecánico

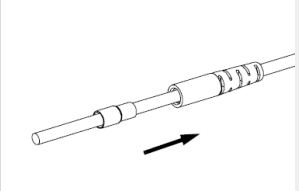
Prepare adhesivo y *primer*

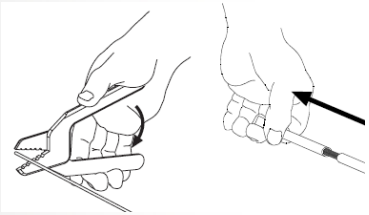


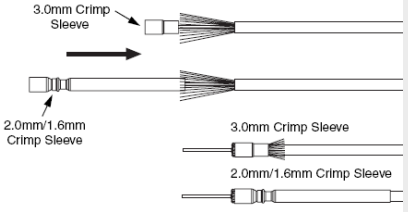


Desforre cable 3.0 mm

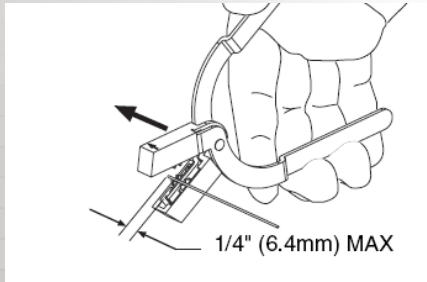




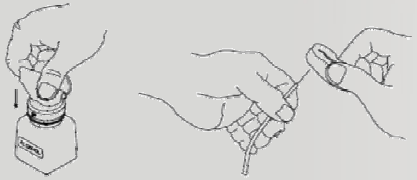


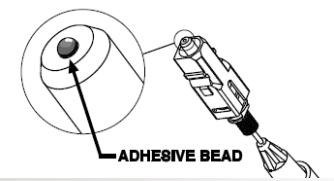


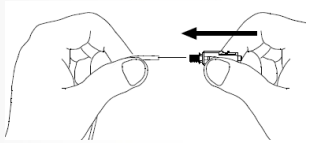
Remueva el búfer

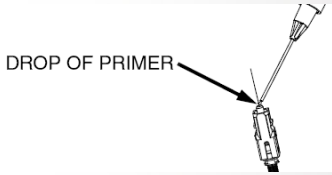


Inserte la fibra en la férula

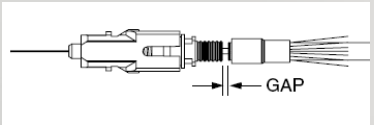


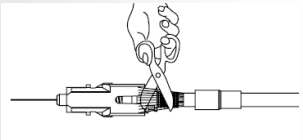


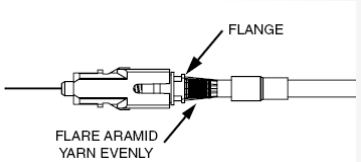


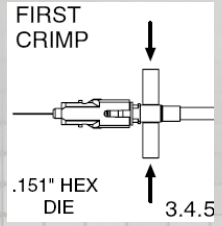


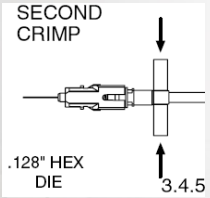
Termine el conector con la herramienta de crimpeo

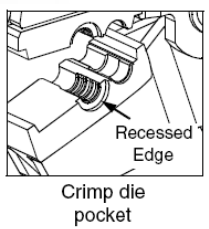


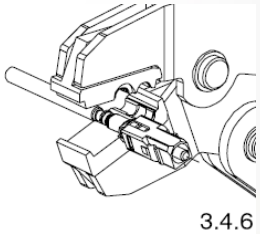




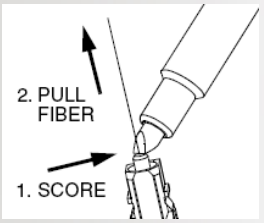


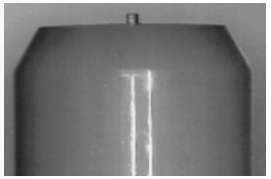




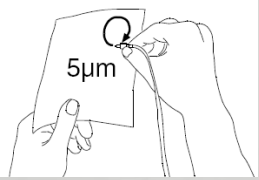


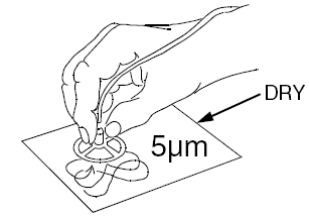
Corte la fibra

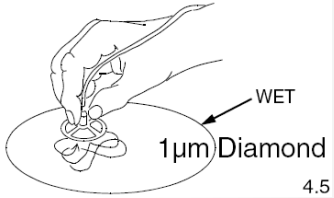


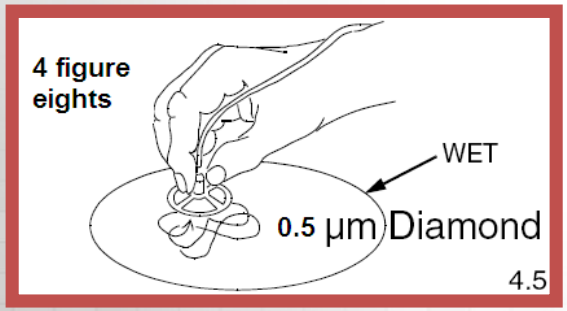


Proceso de pulido

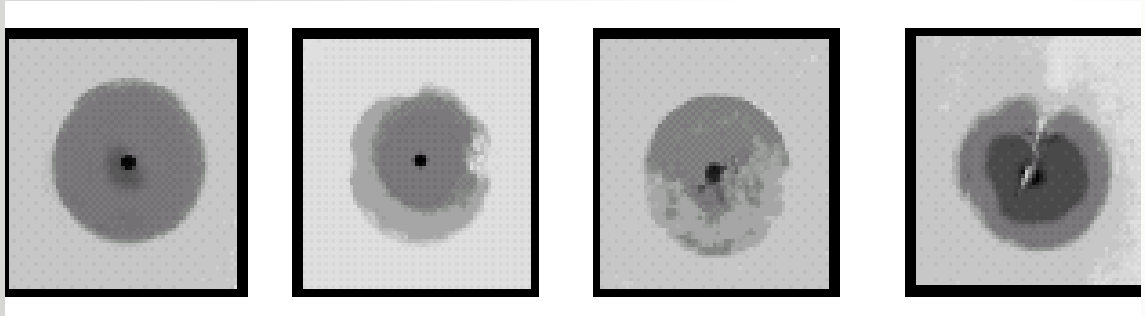




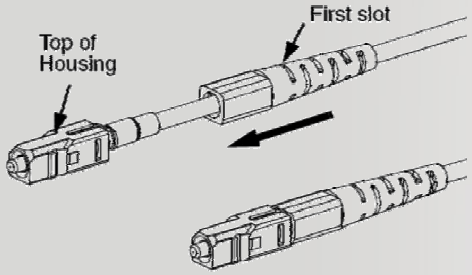


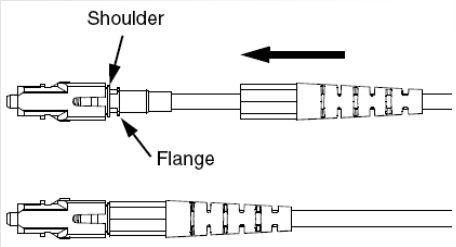


Inspeccione la férula con microscopio



Ensamble final del conector





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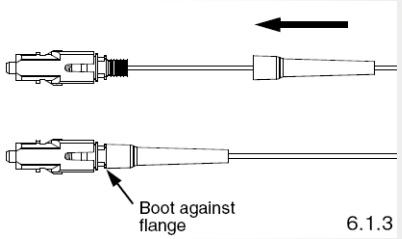
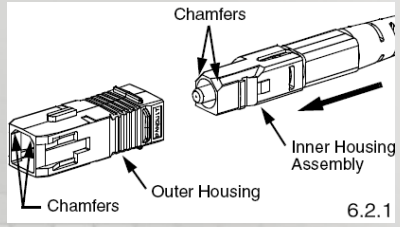
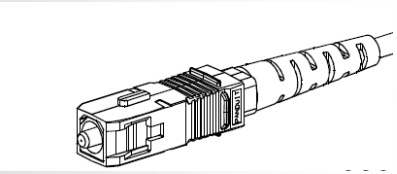
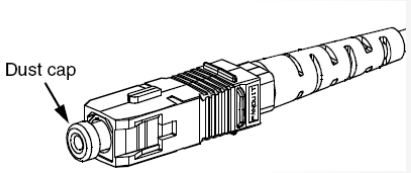




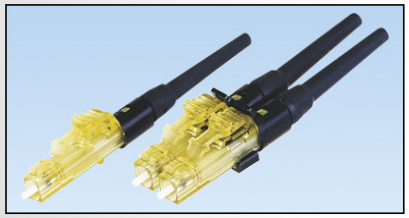




Terminado de conectores prepulidos OPTICAM®

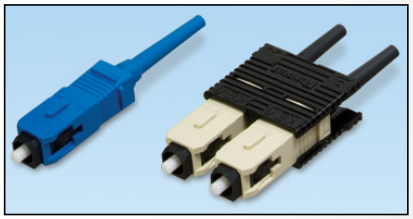
ST OPTICAM®

Simplex connectors



LC OPTICAM®

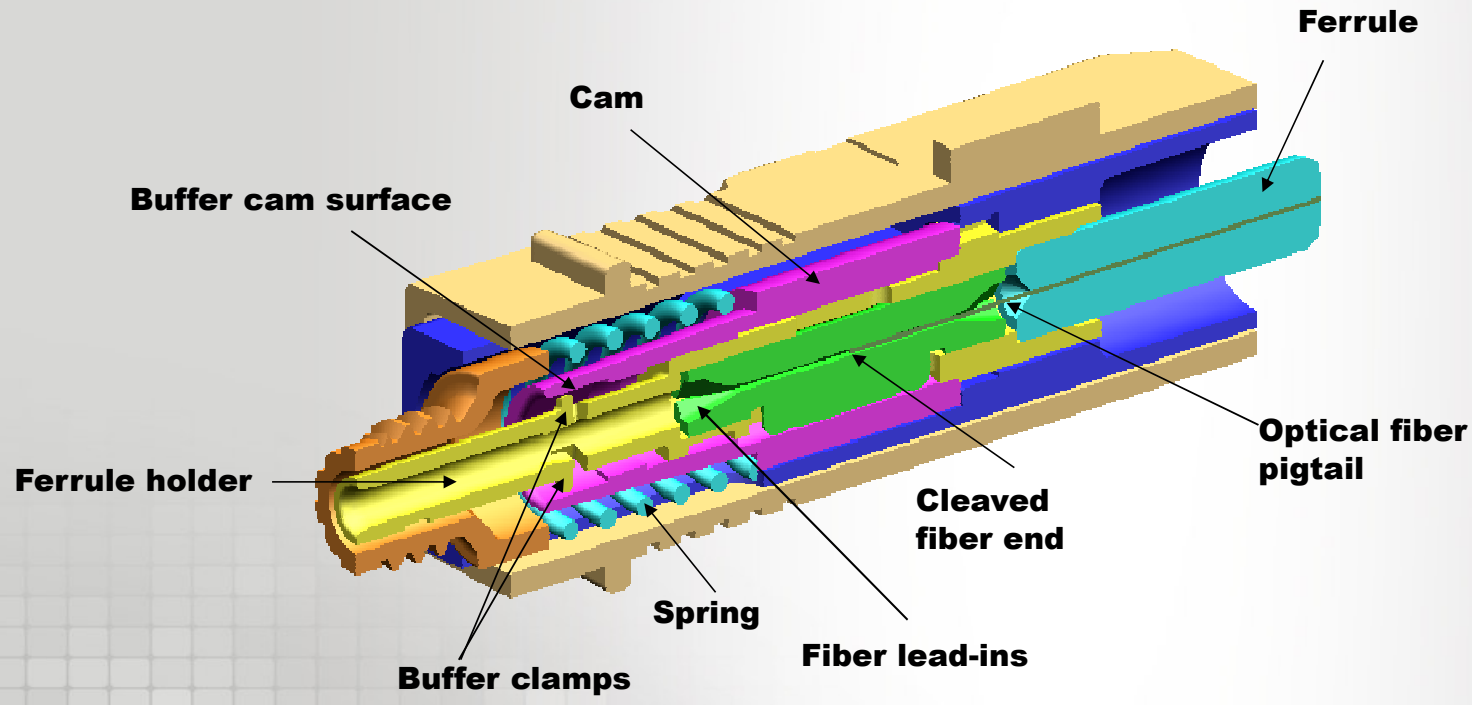
Simplex and duplex connectors



SC OPTICAM®

Simplex and duplex connectors

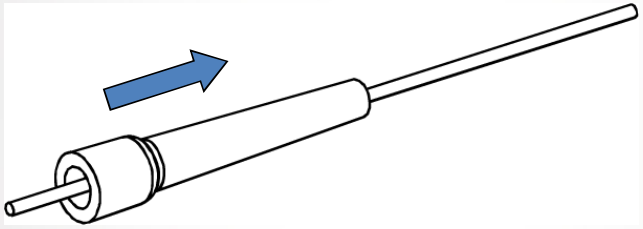
Componentes del conector OPTICAM™



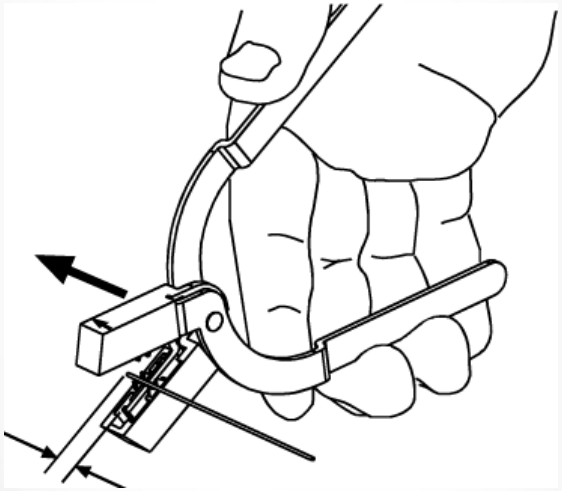
Terminación OPTICAM™

Remueva el búfer

Instale la bota 900 µm como se muestra



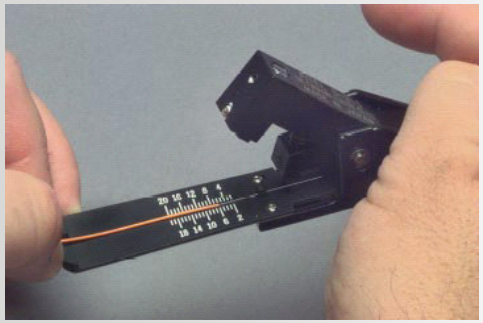
Pele al menos 30 mm (1.18 in) del búfer de la fibra removiendo no más de 0.25 in de búfer a la vez



Terminación OPTICAM™

Ruptura de fibra–usando el *B-Tail Cleaver*

1



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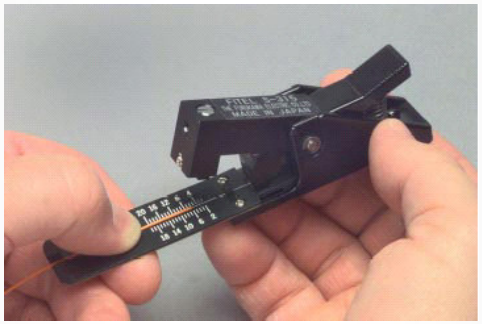

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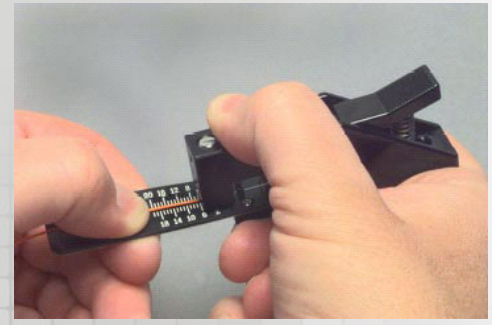

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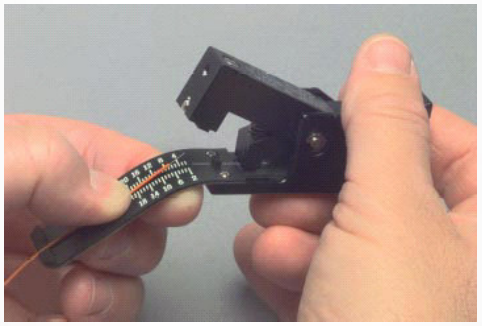


Herramienta de Terminación OCTT

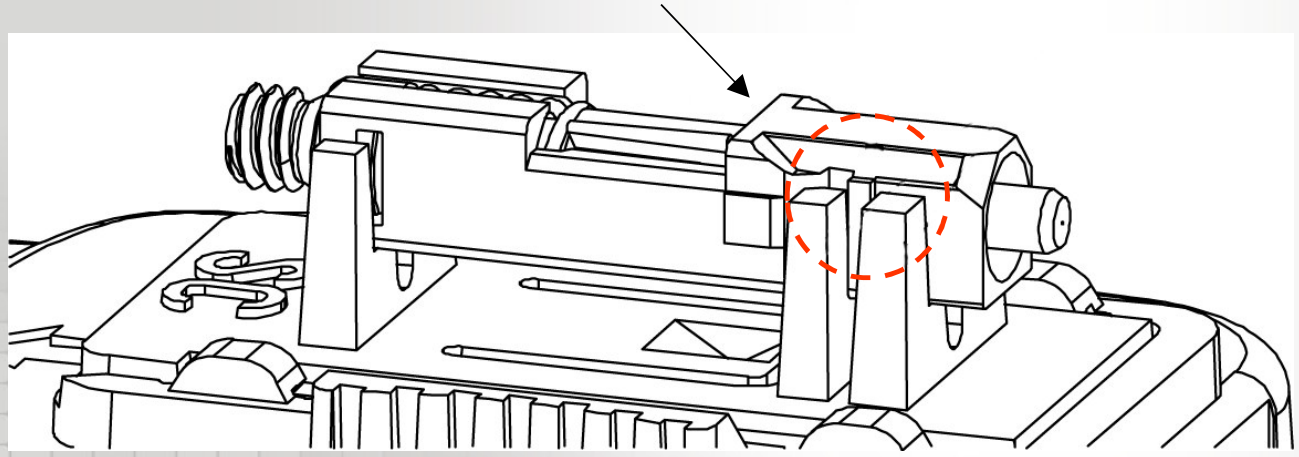
Herramienta universal para terminación
Asegura la fibra y el búfer en una acción para conectores SC, LC y ST OPTICAM™.

Localizador visual de fallas (VFL) integrado
Ofrece verificación visual de la terminación exitosa después de que el paso de cam se ha completado.

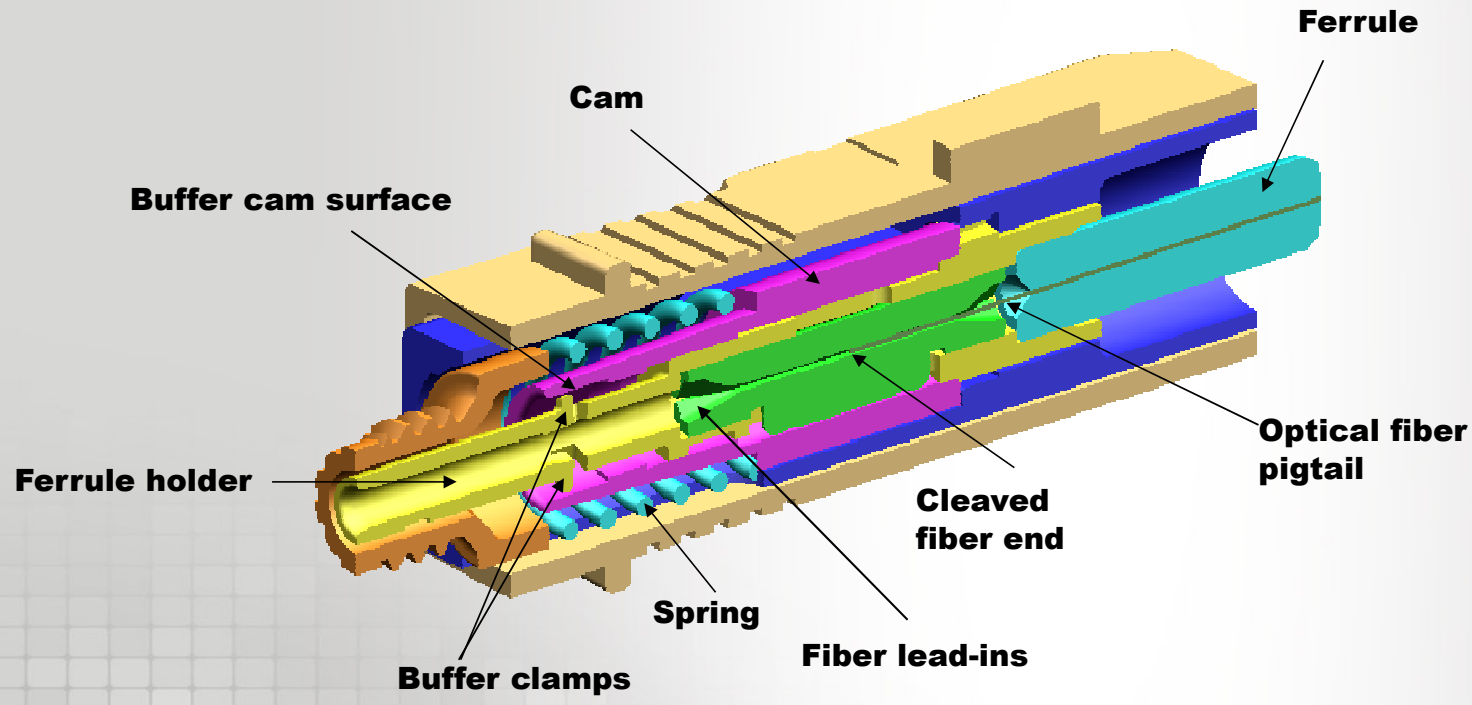
Terminación OPTICAM™

Montaje del conector

Quite las 2 tapas de protección del conector del conjunto de la carcasa interna, a continuación coloque el conjunto de la carcasa interna en el soporte OCTT como se muestra a continuación:
Insertar las pestañas del conector
en las muescas de la base



Componentes del conector OPTICAM™



ANSI/TIA 568.D

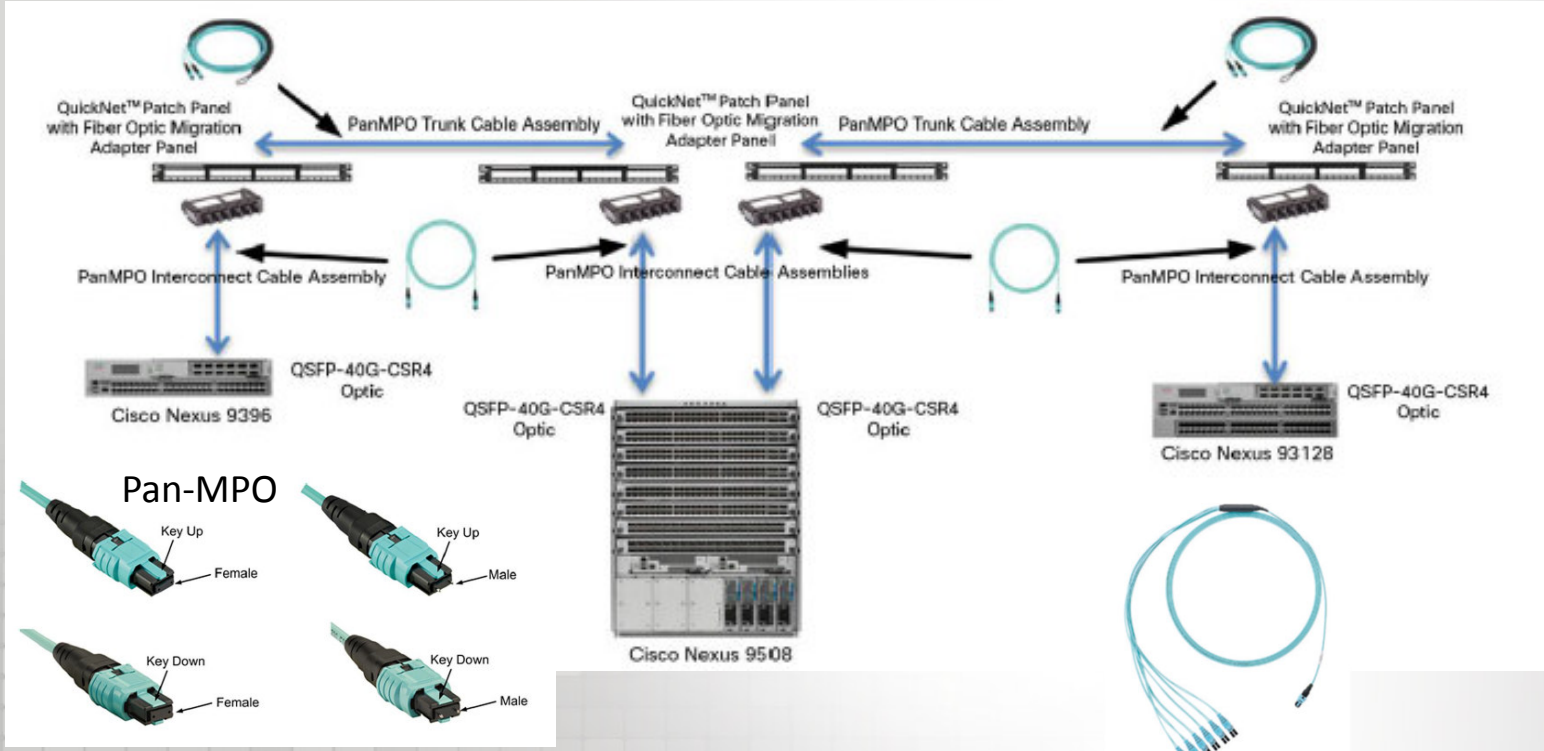
Conectores Pre-terminados de Fábrica

"40G BiDi" optical modules that
are replacements for traditional
40
Bil
Th
Th
typ
tha
ter
Th
us
40
fibers requiring a 12-fiber
MPO connector.

Figure 15: Concept of Existing 40GE Transceivers

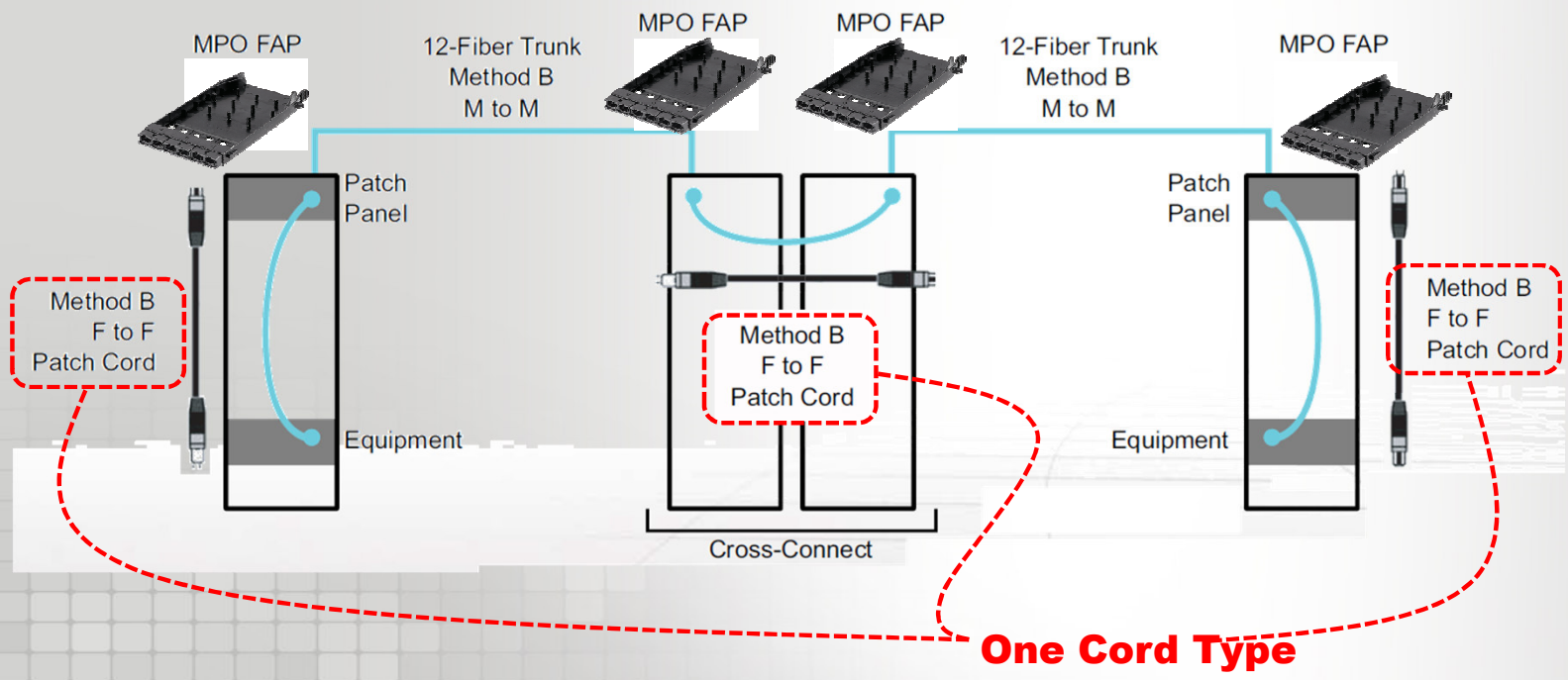
ANSI/TIA 568.D

Conectores Pre-terminados de Fábrica



ANSI/TIA 568.D

Conectores Pre-Terminados de Fabrica

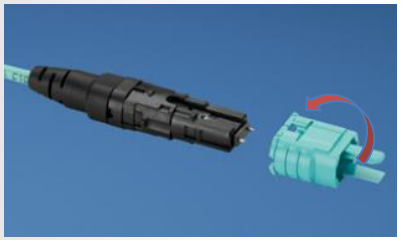


ANSI/TIA 568.D

Conectores Pre-terminados de Fábrica

Change Polarity

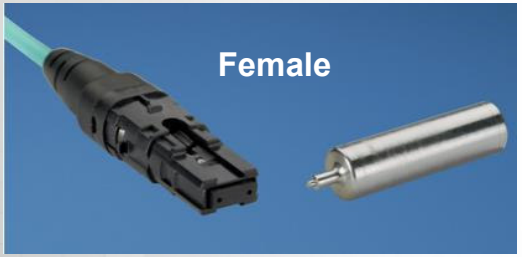
Key - Up



Remove Outer Housing , Flip & Reinstall

Key - Down

Change Gender

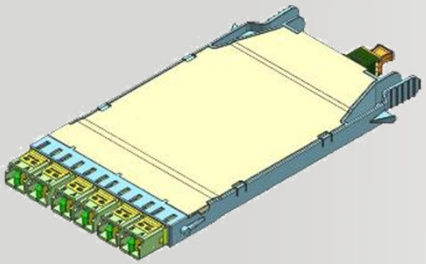


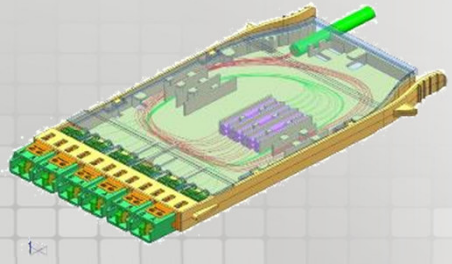
Remove Outer Housing

Using Pin Extend / Retract Tool
Pull Pins Forward & Replace Outer Hsg.

ANSI/TIA 568.D

Conectores Pre-terminados de Fábrica





LC Cassette

- Singlemode & Multimode MPO to 6-port LC breakout
- Facilitates duplex Ethernet, Bi-Di, and FibreChannel deployments

LC Splice Cassette and Adapter Panel

- Splicing capability integral to cassette
- Handles either 12f-ribbon splice or 250um single fiber splices
- Doubles as LC Adapter Panel – max of twelve Ø2.0mm cables inside

ANSI/TIA 568.D

Conectores Pre-terminados de Fábrica

- Offers space-saving density
  - 144 fibers / 1RU (12 and 48 modules)
- Scalable, flexible and accessible
  - LC cassette,
  - LC splice cassette and
  - Adapter panel,
  - MPO to LC breakout cassette
- Improves install-ability - maintainability
  - 3-position slide-out tray for accessibility
  - Cassettes can be inserted from the front or the rear of the enclosure

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