ST Connectors & Adapters

Features & Benefits

- High performance singlemode and multimode pre-polished ferrules
- ST* compatible bayonet coupling
- Field installable
- Standard crimp and crimpless screw type KEVLAR† retention
- Variety of ferrule styles:
  PC, PC+ and stainless steel
- Low insertion loss:
  < .34 dB typical MM
  < .17 dB typical MM enhanced
  < .35 dB typical MM stainless steel
  < .15 dB typical SM
- Variety of connector styles:
  Long boot, short boot, 90° boot & 900µm buffered fiber

Applications

- Telecommunication networks
- Local Area Networks (LAN's)
- Data processing networks
- Premise installations
- Instrumentation

The ST series of lightwave connectors are specially designed for distribution applications and are fully compatible with existing ST type hardware. Five connector styles are available in both the multimode and singlemode versions. The screw-on captivation mechanism, in the long boot style, provides excellent KEVLAR retention without the expense and inconvenience of crimp tools. If the crimping method of KEVLAR retention is preferred, 3 options are available. A long boot style is designed to provide superior strain relief while the short boot style is designed for small bend radius applications where space is limited. For sensitive applications where controlled and managed bends are required, the 90° boot is the answer. A boot for 900µm buffered fiber is also available.

High quality, pre-polished and pre-radiused zirconia ceramic ferrules are combined with the latest engineering polymers and metals to produce the ST connectors. Pre-polished ferrules minimize the polishing times and provide a consistent ferrule end face geometry. When combined with the Molex termination kit and methods, the Molex ST connectors produce superior results both in the factory and in the field.

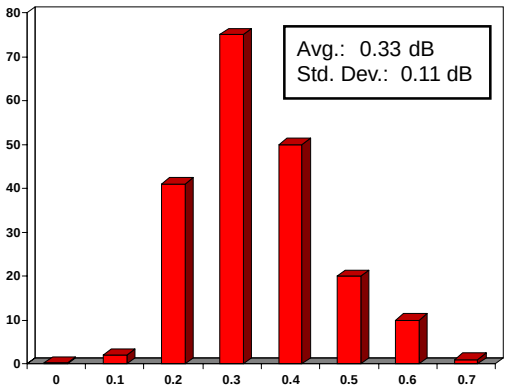
A broad range of ST adapters are available to compliment the connectors. Metal or polymer versions are available with either the extremely precise zirconia ceramic, the rugged phosphor bronze or the cost effective polymer alignment sleeves.

*ST is a trademark of Lucent Technologies

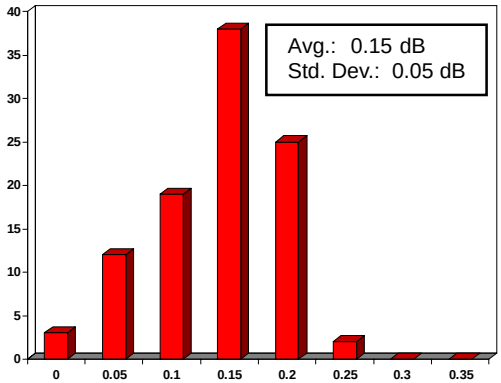
†KEVLAR is a registered trademark of E.I. duPont De Nemours & Co., Inc.

Optical Performance Distribution

Insertion Loss Performance (MM ferrule, 62.5/125µm fiber)



Insertion Loss Performance (SM ferrule, 9/125µm fiber)



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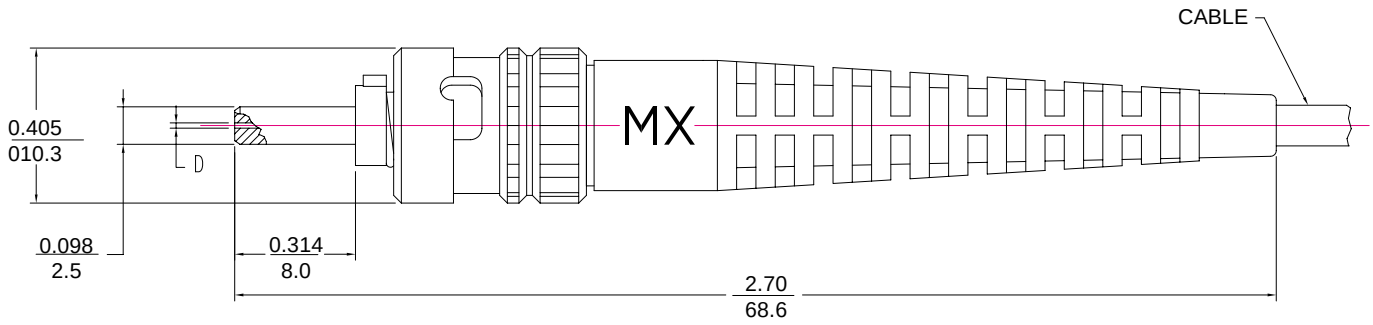
ST Connectors & Adapters

Performance and Specifications

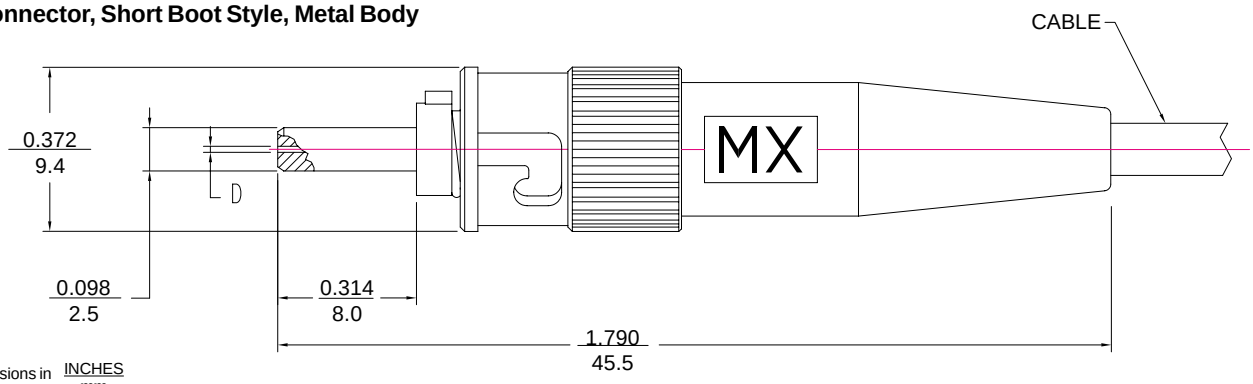
Characteristics	Units	Min.	Typ.	Max.	Comments
Durability	~dB	-	-	0.1	Per FOTP-21A, 1000 cycles cleaning every 100 cycles
Temperature Range:					
Storage	ºC	-40	-	+80	May be further limited by cable specifications
Operating	ºC	-40	-	+80	May be further limited by cable specifications
Thermal Shock	~dB	-	-	0.1	-40ºC to +60ºC, 10 cycles
Temperature Cycling	~dB	-	-	0.1	-40ºC to +80ºC, 40 cycles
Humidity Cycling	~dB	-	-	0.1	Per FOTP-5, +60ºC at 95% RH for 504 hours
Cable Retention	~dB	-	-	0.2	Per FOTP-6, 40 lb. load without adhesive

Mechanical Dimensions

ST Connector, Long Boot Style, Polymer Body



ST Connector, Short Boot Style, Metal Body

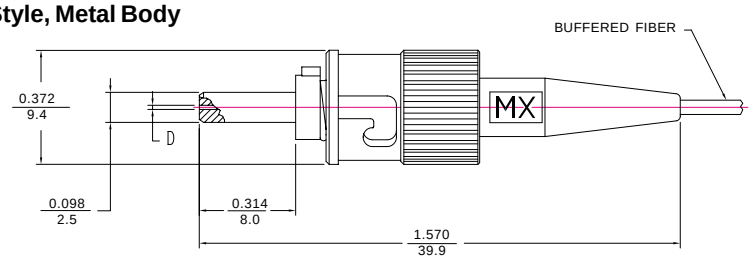


All dimensions in INCHES / mm

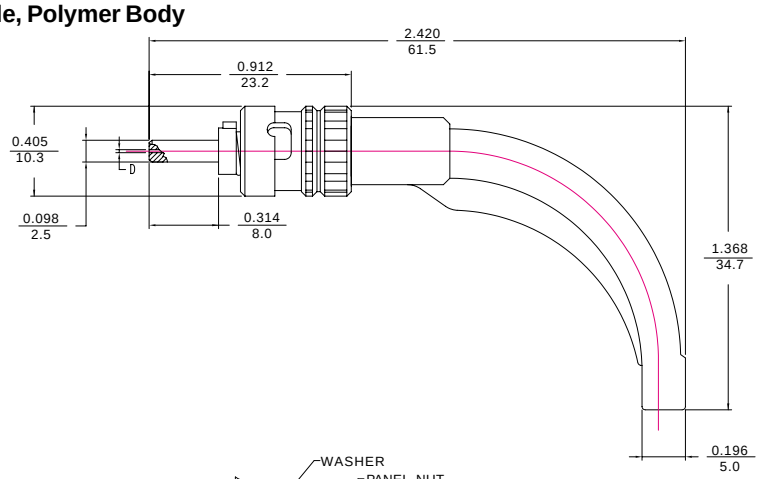
ST Connectors & Adapters

Mechanical Dimensions

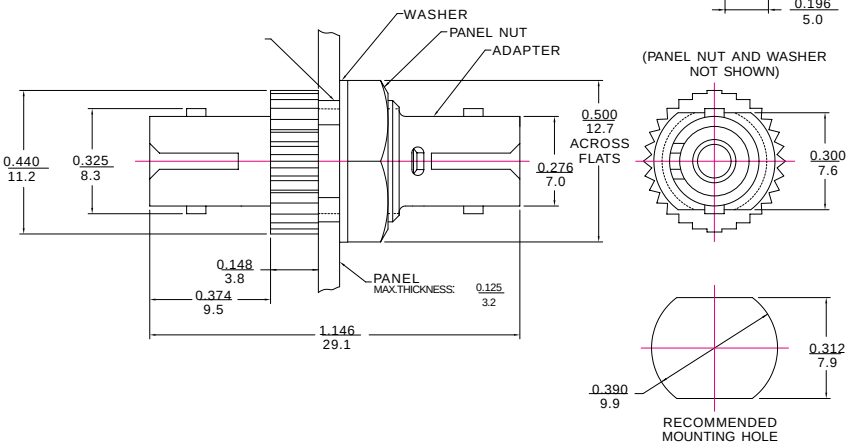
ST Connector, 900µm Boot Style, Metal Body



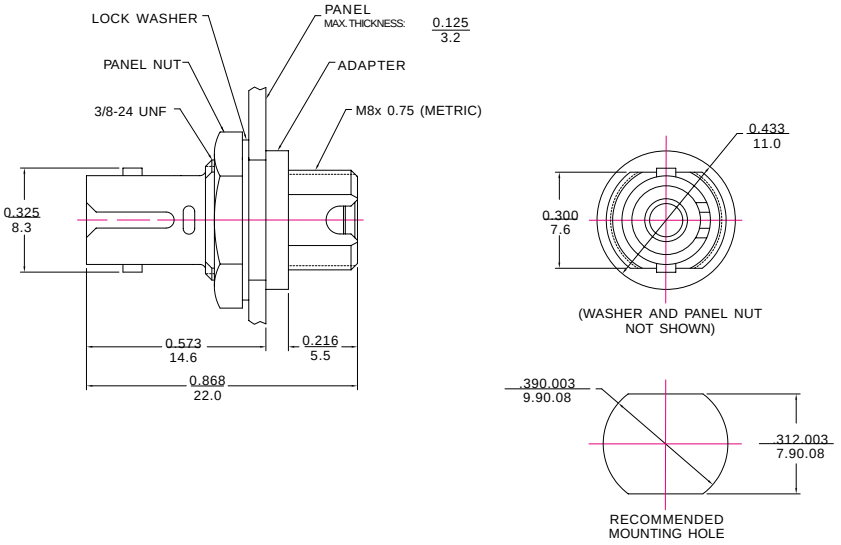
ST Connector, 90° Boot Style, Polymer Body



ST Adapter



ST to FC Adapter



All dimensions in INCHES / mm

ST Connectors & Adapters

Standard Part Numbers

Order Number	Description‡	Hole size "D"	Cable size
86010-0000	ST connector, MM, zirconia PC+ ferrule, polymer coupling nut, long boot	127µm	2.4mm and 3.0mm
86010-0300	ST connector, MM, zirconia PC+ ferrule, polymer coupling nut, long boot crimp	127µm	2.4mm and 3.0mm
86010-0200	ST connector, MM, zirconia PC+ ferrule, polymer coupling nut, short boot crimp	127µm	2.4mm and 3.0mm
86010-0500	ST connector, MM, zirconia PC+ ferrule, polymer coupling nut, buffered fiber	127µm	900µm buffered fiber
86010-0400	ST connector, MM, zirconia PC+ ferrule, polymer coupling nut, 90º boot	127µm	3.0mm
86010-0440	ST connector, MM, zirconia PC+ ferrule, polymer coupling nut, red 90º boot	127µm	3.0mm
86012-0000	ST connector, MM, zirconia PC+ ferrule, metal coupling nut, long boot	127µm	2.4mm and 3.0mm
86012-0300	ST connector, MM, zirconia PC+ ferrule, metal coupling nut, long boot crimp	127µm	2.4mm and 3.0mm
86012-0200	ST connector, MM, zirconia PC+ ferrule, metal coupling nut, short boot crimp	127µm	2.4mm and 3.0mm
86012-0500	ST connector, MM, zirconia PC+ ferrule, metal coupling nut, buffered fiber	127µm	900µm buffered fiber
86012-0400	ST connector, MM, zirconia PC+ ferrule, metal coupling nut, 90º boot	127µm	3.0mm
86012-0440	ST connector, MM, zirconia PC+ ferrule, metal coupling nut, red 90º boot	127µm	3.0mm
86010-3000	ST connector, MM enhanced, zirconia PC ferrule, polymer coupling nut, long boot	128µm	2.4mm and 3.0mm
86010-3300	ST connector, MM enhanced, zirconia PC ferrule, polymer coupling nut, long boot crimp	128µm	2.4mm and 3.0mm
86010-3200	ST connector, MM enhanced, zirconia PC ferrule, polymer coupling nut, short boot crimp	128µm	2.4mm and 3.0mm
86010-3500	ST connector, MM enhanced, zirconia PC ferrule, polymer coupling nut, buffered fiber	128µm	900µm buffered fiber
86010-3400	ST connector, MM enhanced, zirconia PC ferrule, polymer coupling nut, 90º boot	128µm	3.0mm
86010-3440	ST connector, MM enhanced, zirconia PC ferrule, polymer coupling nut, red 90º boot	128µm	3.0mm
86012-3000	ST connector, MM enhanced, zirconia PC ferrule, metal coupling nut, long boot	128µm	2.4mm and 3.0mm
86012-3300	ST connector, MM enhanced, zirconia PC ferrule, metal coupling nut, long boot crimp	128µm	2.4mm and 3.0mm
86012-3200	ST connector, MM enhanced, zirconia PC ferrule, metal coupling nut, short boot crimp	128µm	2.4mm and 3.0mm
86012-3500	ST connector, MM enhanced, zirconia PC ferrule, metal coupling nut, buffered fiber	128µm	900µm buffered fiber
86012-3400	ST connector, MM enhanced, zirconia PC ferrule, metal coupling nut, 90º boot	128µm	3.0mm
86012-3440	ST connector, MM enhanced, zirconia PC ferrule, metal coupling nut, red, 90º boot	128µm	3.0mm
86010-1000	ST connector, MM, zirconia PC ferrule, polymer coupling nut, long boot	144µm	2.4mm and 3.0mm
86010-1300	ST connector, MM, zirconia PC ferrule, polymer coupling nut, long boot crimp	144µm	2.4mm and 3.0mm
86010-1200	ST connector, MM, zirconia PC ferrule, polymer coupling nut, short boot crimp	144µm	2.4mm and 3.0mm
86010-1500	ST connector, MM, zirconia PC ferrule, polymer coupling nut, buffered fiber	144µm	900µm buffered fiber
86010-1400	ST connector, MM, zirconia PC ferrule, polymer coupling nut, 90º boot	144µm	3.0mm
86010-1440	ST connector, MM, zirconia PC ferrule, polymer coupling nut, red 90º boot	144µm	3.0mm
86012-1000	ST connector, MM, zirconia PC ferrule, metal coupling nut, long boot	144µm	2.4mm and 3.0mm
86012-1300	ST connector, MM, zirconia PC ferrule, metal coupling nut, long boot crimp	144µm	2.4mm and 3.0mm
86012-1200	ST connector, MM, zirconia PC ferrule, metal coupling nut, short boot crimp	144µm	2.4mm and 3.0mm
86012-1500	ST connector, MM, zirconia PC ferrule, metal coupling nut, buffered fiber	144µm	900µm buffered fiber
86012-1400	ST connector, MM, zirconia PC ferrule, metal coupling nut, 90º boot	144µm	3.0mm
86012-1440	ST connector, MM, zirconia PC ferrule, metal coupling nut, red 90º boot	144µm	3.0mm
86010-8000	ST connector, MM, stainless steel flat ferrule, polymer coupling nut, long boot	127µm	2.4mm and 3.0mm
86010-8300	ST connector, MM, stainless steel flat ferrule, polymer coupling nut, long boot crimp	127µm	2.4mm and 3.0mm
86010-8200	ST connector, MM, stainless steel flat ferrule, polymer coupling nut, short boot crimp	127µm	2.4mm and 3.0mm
86010-8500	ST connector, MM, stainless steel flat ferrule, polymer coupling nut, buffered fiber	127µm	900µm buffered fiber
86010-8400	ST connector, MM, stainless steel flat ferrule, polymer coupling nut, 90º boot	127µm	3.0mm
86010-8440	ST connector, MM, stainless steel flat ferrule, polymer coupling nut, red 90º boot	127µm	3.0mm
86012-8000	ST connector, MM, stainless steel flat ferrule, metal coupling nut, long boot	127µm	2.4mm and 3.0mm
86012-8300	ST connector, MM, stainless steel flat ferrule, metal coupling nut, long boot crimp	127µm	2.4mm and 3.0mm
86012-8200	ST connector, MM, stainless steel flat ferrule, metal coupling nut, short boot crimp	127µm	2.4mm and 3.0mm
86012-8500	ST connector, MM, stainless steel flat ferrule, metal coupling nut, buffered fiber	127µm	900µm buffered fiber
86012-8400	ST connector, MM, stainless steel flat ferrule, metal coupling nut, 90º boot	127µm	3.0mm
86012-8440	ST connector, MM, stainless steel flat ferrule, metal coupling nut, red 90º boot	127µm	3.0mm

‡Standard boot color is black

ST Connectors & Adapters

Standard Part Numbers

Order Number	Description	Hole size "D"	Cable size
86010-5000	ST connector, SM zirconia PC ferrule, polymer coupling nut, long boot	126µm	2.4mm and 3.0mm
86010-5300	ST connector, SM zirconia PC ferrule, polymer coupling nut, long boot crimp	126µm	2.4mm and 3.0mm
86010-5200	ST connector, SM zirconia PC ferrule, polymer coupling nut, short boot crimp	126µm	2.4mm and 3.0 mm
86010-5500	ST connector, SM zirconia PC ferrule, polymer coupling nut, buffered fiber	126µm	900µm buffered fiber
86010-5400	ST connector, SM zirconia PC ferrule, polymer coupling nut, 90º boot	126µm	3.0mm
86010-5440	ST connector, SM zirconia PC ferrule, polymer coupling nut, red 90º boot	126µm	3.0mm
86012-5000	ST connector, SM zirconia PC ferrule, metal coupling nut, long boot	126µm	2.4mm and 3.0mm
86012-5300	ST connector, SM zirconia PC ferrule, metal coupling nut, long boot crimp	126µm	2.4mm and 3.0mm
86012-5200	ST connector, SM zirconia PC ferrule, metal coupling nut, short boot crimp	126µm	2.4mm and 3.0mm
86012-5500	ST connector, SM zirconia PC ferrule, metal coupling nut, buffered fiber	126µm	900µm buffered fiber
86012-5400	ST connector, SM zirconia PC ferrule, metal coupling nut, 90º boot	126µm	3.0mm
86012-5440	ST connector, SM zirconia PC ferrule, metal coupling nut, red 90º boot	126µm	3.0mm
86010-7000	ST connector, SM zirconia PC ferrule, polymer coupling nut, long boot	127µm	2.4mm and 3.0mm
86010-7300	ST connector, SM zirconia PC ferrule, polymer coupling nut, long boot crimp	127µm	2.4mm and 3.0mm
86010-7200	ST connector, SM zirconia PC ferrule, polymer coupling nut, short boot crimp	127µm	2.4mm and 3.0mm
86010-7500	ST connector, SM zirconia PC ferrule, polymer coupling nut, buffered fiber	127µm	900µm buffered fiber
86010-7400	ST connector, SM zirconia PC ferrule, polymer coupling nut, 90º boot	127µm	3.0mm
86010-7440	ST connector, SM zirconia PC ferrule, polymer coupling nut, red 90º boot	127µm	3.0mm
86012-7000	ST connector, SM zirconia PC ferrule, metal coupling nut, long boot	127µm	2.4mm and 3.0mm
86012-7300	ST connector, SM zirconia PC ferrule, metal coupling nut, long boot crimp	127µm	2.4mm and 3.0mm
86012-7200	ST connector, SM zirconia PC ferrule, metal coupling nut, short boot crimp	127µm	2.4mm and 3.0mm
86012-7500	ST connector, SM zirconia PC ferrule, metal coupling nut, buffered fiber	127µm	900µm buffered fiber
86012-7400	ST connector, SM zirconia PC ferrule, metal coupling nut, 90º boot	127µm	3.0mm
86012-7440	ST connector, SM zirconia PC ferrule, metal coupling nut, red 90º boot	127µm	3.0mm
86110-0000	ST adapter, zirconia alignment sleeve, black polymer housing		
86112-0000	ST adapter, phosphor bronze alignment sleeve, black polymer housing		
86113-0000	ST adapter, polymer alignment sleeve, black polymer housing		
86110-1000	ST adapter, zirconia alignment sleeve, metal housing		
86112-1000	ST adapter, phosphor bronze alignment sleeve, metal housing		
86113-1000	ST adapter, polymer alignment sleeve, metal housing		
86172-0000	ST to FC adapter, zirconia alignment sleeve, metal housing		

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