

DESCRIPTION/APPLICATION

The Thomas & Betts fiber optics ST series connector system features a keyed, bayonet-latching coupling mechanism to guarantee precise, consistent alignment with every connection. These STs are available in either single mode or multimode types and are fully intermateable with other ST-style fiber optic connectors.

The multimode ST connector body is made of nickel-plated zinc and is available with either a ceramic or metal ferrule. Through proprietary machining, the metal ferrules offer both exceptionally tight tolerances and extreme durability. Standard connector sizes accommodate fibers with 125 or 140 micron cladding diameters, and in-house precision drilling capabilities enable customized drilling up to 700 microns.

The single mode ST connector body is made of nickel-plated zinc, blackened for easy differentiation from the multimode type. The ferrule is made of a high quality zirconia ceramic material with a precise radiused endface. This enables the installer to achieve superior return loss and insertion loss, and ensures excellent repeatability.

Connectors may be ordered pre-terminated on cable assemblies or may be terminated in the field. A complete, easy-to-use field termination kit is available for economical field termination of both the single mode and multimode connectors. Also available are bulk head adapters in both single mode and multimode types.

ST[®] SINGLE MODE AND MULTIMODE CONNECTOR SYSTEM



***Low loss, highly repeatable interconnections
for all your ST applications.***

DESIGN ADVANTAGES

- intermateable with ST-type connectors
- keyed for maximum repeatability
- low insertion loss
- low back reflection
- field installable
- durable
- quick installation

ST IS A REGISTERED TRADEMARK OF
AT&T TECHNOLOGIES

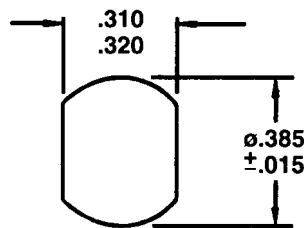
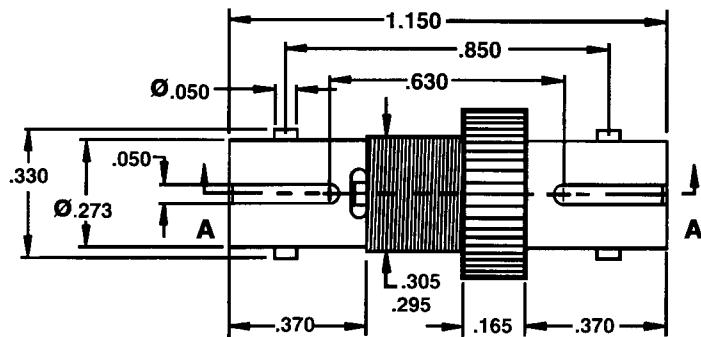
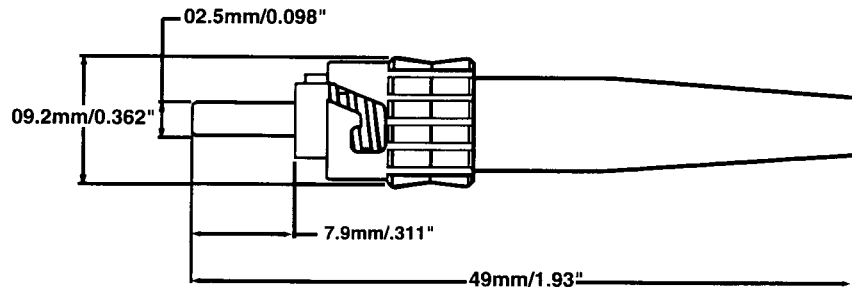
ST CONNECTOR SYSTEM

PHYSICAL PROPERTIES

FERRULE: Zirconia
 HOUSING: PBT
 SPRING: Stainless steel
 BOOT: US rated polyester
DURABILITY (200 CYCLES):
 Insertion Loss (dB) (change): 0.1 (0.2 for single mode APC)
 Return Loss (dB) (change): 1.5 (N/A multimode)
INSERTION LOSS (TYPICAL) (dB): 0.25 (Single mode PC), 0.15 (multimode)
RETURN LOSS (TYPICAL) (dB): -50* (Single mode PC — *ultra PC polish), N/A (multimode)
FIBER O.D. (NOMINAL) (MICRON): 125, 140
CABLE O.D. (NOMINAL) (MM): 3, ϕ .9

ENVIRONMENTAL PROPERTIES

TEMPERATURE STABILITY: -40°C To 75°C
 Insertion Loss (dB) (change): 0.1 (0.2 for single mode APC)
 Return Loss (dB) (change): 2.5 (N/A multimode)



Tools and Accessories

PART NUMBER	DESCRIPTION
68000-010-01	SMA/ST Termination Tool Kit Thomas & Betts Data Sheet #410308. Termination Procedure Sheet #490196.
50000-010-01	Refill Pack for Termination Kit 68000-010-01
698-TMS-1G-XXS-XX	Buffer Stripper Tool (For example: 698-TMS-1G-06S-10 Buffer Stripper Tool for 125 micron cable.)
70000-004	ST Anaerobic Terminal Kit Termination Procedure Sheet #490207.
AR71001	Refill Pack for Terminal Kit 70000-004
68100-008-01	ST Polish Tool
37600-009-01	Crimp Tool Dual Hex (.178/.128/.065)
37600-013-01	ST Heat Sink Adapter
54000-011-04	Curing Oven/110V
54000-011-34	Curing Oven/220V
45101-001-01	Epoxy (EPO-TEK 353 ND), 4 gm pack

(Other size strippers are available. See Data Sheet #410307.)

(For additional accessories, see Thomas & Betts Data Sheet #410306.)

Ordering Information — Connectors

PART NUMBER	BOOT	FERRULE	FIBER DIA
Single Mode			
FC1D1C5XA*#	3mm	ceramic	125µm
FC1D1C5XB*#	0.9mm	ceramic	125µm
Multimode			
FC2D1C5XA*#	3mm	ceramic	125µm
FC2D1C5XB*#	0.9mm	ceramic	125µm
FC2D2C5XA*#	3mm	ARCAP	125µm
FC2D2C5XB*#	0.9mm	ARCAP	125µm
FC2D2C4XA*#	3mm	ARCAP	140µm
FC2D2C4XB*#	0.9mm	ARCAP	140µm

NOTE:

- should be "1" for individual pack and "2" for a bulk pack of 50 and "3" for bulkhead pack of 500

* - Should be "A" for white boot, "B" for blue, "D" for yellow, "E" for black and "F" for red

Ordering Information — Adaptors

PART NUMBER	MOUNTING TYPE	SLEEVE
FBA1DCXB#	"DD" Hole	SM, ceramic
FBA3DBXB#	"DD" Hole	Universal, phosphor bronze
FBA2DAXB#	"DD" Hole	MM, plastic

NOTE: # - should be "1" for individual pack and "2" for a bulk pack of 50 and "3" for bulkhead pack of 500