

**DESCRIPTION/APPLICATION**

The FC/PC I connectors are available in either single mode or multimode and are fully intermateable with other FC/PC style fiber optic connectors.

The Thomas & Betts FC/PC I one-piece design connectors are manufactured of precision screw machined stainless steel for consistent performance.

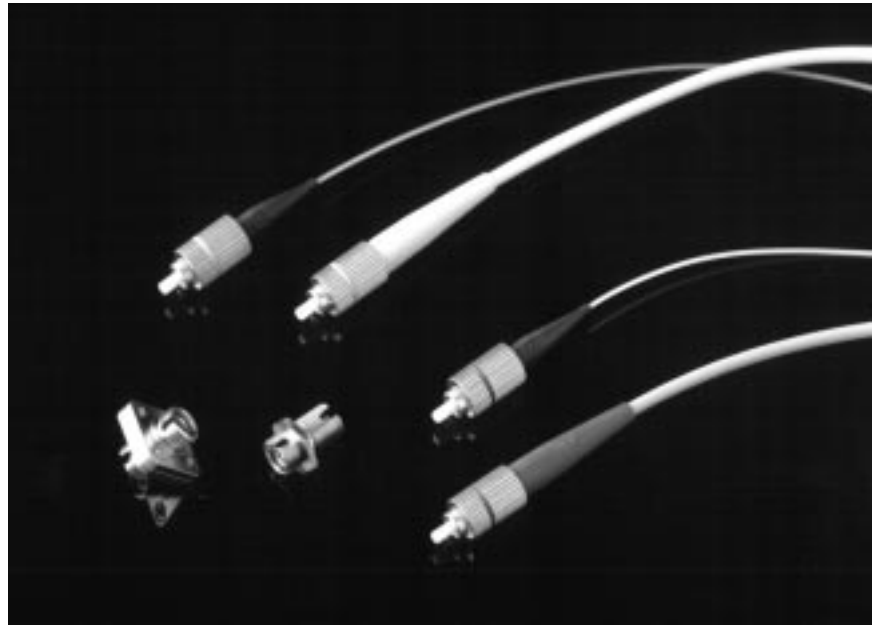
Both the single mode and the multimode connectors use a zirconia ceramic ferrule with a 20 millimeter pre-radius to facilitate optimum PC polish capability and superior performance. This enables the installer to achieve low insertion loss and high return loss while insuring maximum repeatability. The one-piece design of the FC/PC I provides for quick field termination with high yields.

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 FC panel mount adapters.

**DESIGN ADVANTAGES**

- Intermateable with all FC/PC-type connectors
- Keyed for maximum repeatability
- Low insertion loss
- High return loss
- Field installable
- Complies with JIS mating specifications
- One-piece design

## FC/PC 1 SINGLE MODE AND MULTIMODE CONNECTOR SYSTEM



***The Thomas & Betts FC/PC I connector system features a keyed, threaded coupling mechanism to guarantee precise, consistent alignment with every connection.***

### FC/PC 1 CONNECTOR SYSTEM

#### PHYSICAL PROPERTIES

FERRULE: Zirconia

NUT AND BODY: Stainless alloy

SPRING: Stainless steel

BOOT: Synthetic rubber

INSERTION LOSS (TYPICAL) (dB): 0.25 (Single mode PC), .33 (Single mode APC), 0.15 (multimode)

RETURN LOSS (TYPICAL) (dB): -48 (Single mode PC), -65 (Single mode APC), N/A (multimode)

FIBER O.D. (NOMINAL) (MICRON): 125 (125 or 140 Multimode)

CABLE O.D. (NOMINAL) (MM): 3

DURABILITY (200 CYCLES):

Insertion Loss (dB) (change): 0.1 (0.2 for single mode APC)

Return Loss (dB) (change): 1.5 (N/A multimode)

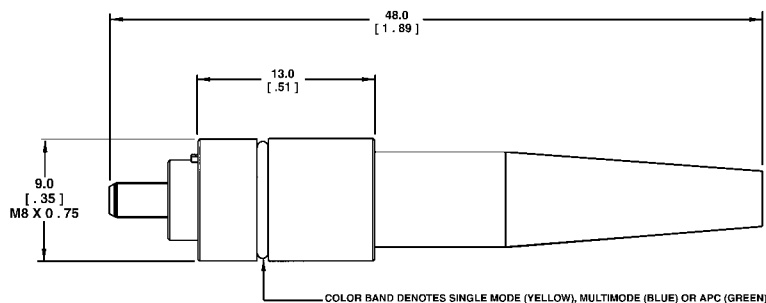
#### ENVIRONMENTAL PROPERTIES

TEMPERATURE STABILITY: -40°C To 85°C

Insertion Loss (dB) (change): .2 typical

Return Loss (dB) (change): 2 typ. (single mode, PC); 2.5 typ. (single mode, APC)

N/A (multimode)

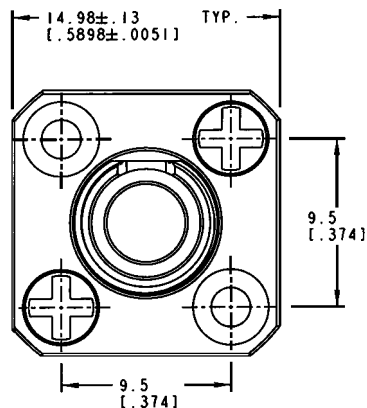


#### Ordering Information — FC1 Connectors

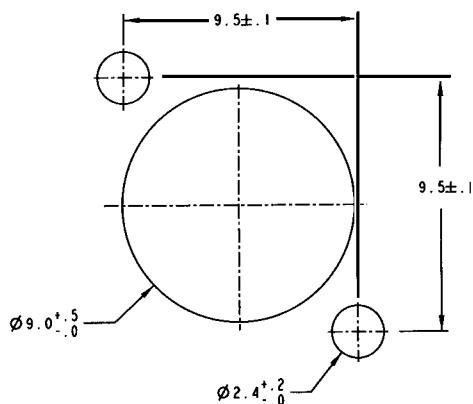
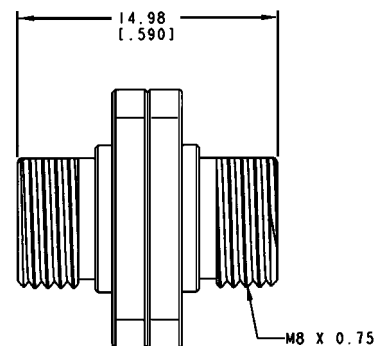
PART NUMBER*	MINIMUM FERRULE DESCRIPTION	HOLE I.D.	COLOR DESIGNATION
68301-101	Single Mode (Ceramic)	126 micron	Yellow band
68301-201	Multimode (Ceramic)	127 micron	Blue band
68301-202	Multimode (Ceramic)	144 micron	Light blue band
68301-211	Multimode (Ceramic)	127 micron	Black band
68307-101	Single Mode (Ceramic) (APC)	126 micron	Green band

\* Add prefix B1 for bulk 50 pack; Add prefix B2 for bulk 500 pack. Prefixes are for connectors and adapters

Flanged Adapter — Front View



Flanged Adapter — Side View



Flanged Adapter Panel Cutout

#### Flanged Adapter

PART NUMBER	DESCRIPTION
68350-101	Ceramic alignment sleeve with all stainless alloy body (flange design)
68350-301	Phosphor bronze alignment sleeve (flange design)