# FC/APC Connectors & Adapters



## Features & Benefits

- NTT-FC* connector design
- One-piece body design for quick & easy assembly
- Precision APC ferrule
  - Superior performance
- Low insertion loss:
  < .25 dB TYP SM
- Low return loss:
  < 60 dB
- Compatible with all APC hardware
  - Standard NTT-FC key
  - Tight fit key (compatible with other manufacturers)

## Applications

- Telecommunication networks
- CATV networks

The Molex FC Angled Physical Contact (APC) connector series combines a NTT-FC connector design with a uniquely precise, pre-angled, pre-radiused and pre-polished ferrule to deliver superior APC performance. This connector is available with either the NTT-FC standard or non-standard, tight fit key configuration.

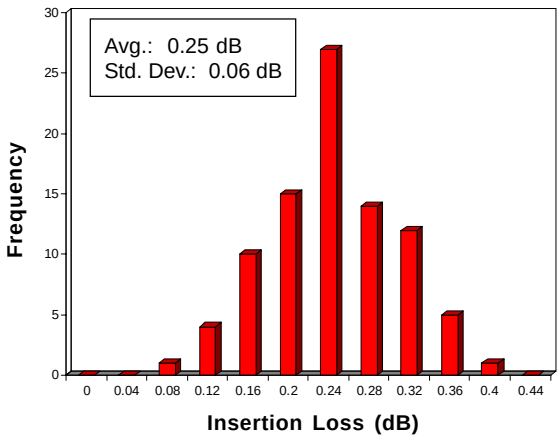
In angled fiber optic connectors, the ferrule endface geometry is especially critical. This is the reason Molex has developed a unique polishing process which not only polishes an 8 degree angle on the ferrule endface, but also a 10mm radius. With this endface geometry, physical contact of the fibers is maintained ensuring a minimum insertion loss and a maximum return loss. Combining the pre-polished ferrule with the preassembled 1-piece body design produces a superior performance APC connector that is easy to terminate in either the factory or in the field.

Flange mount or “D” hole adapters, in both standard or tight fit key configurations, provide connector-to-connector mating.

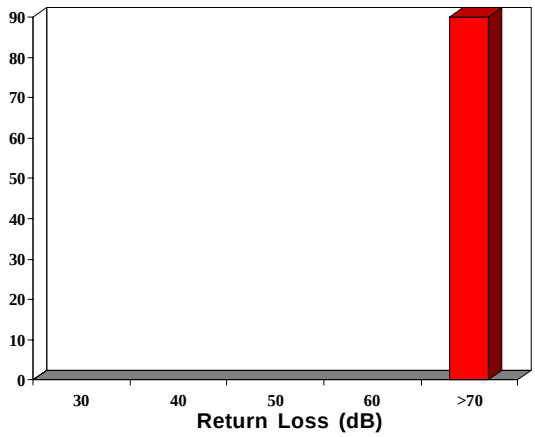
*NTT-FC is a trademark of NTT Advanced Technology Corporation

## Optical Performance Distribution

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




**Return Loss Performance**
**(9/125µm fiber, measured at 1550nm)**

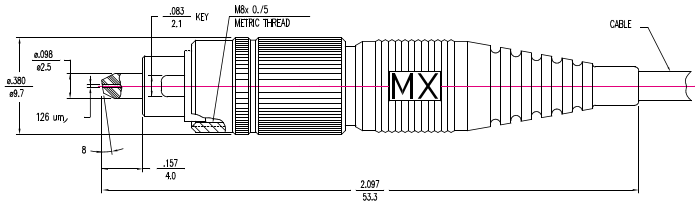



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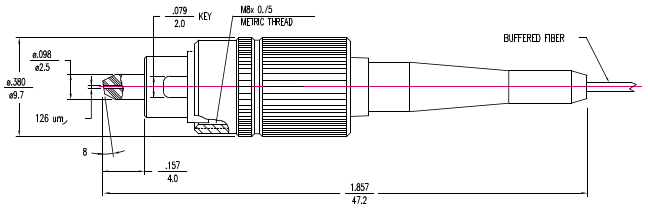
# FC/APC Connectors & Adapters

## Mechanical Dimensions

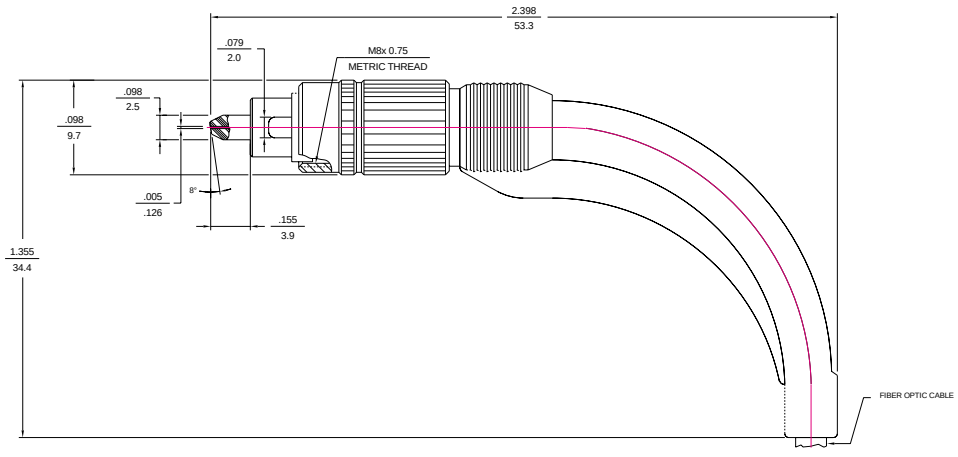
### FC/APC Connector, Standard Key, 3mm Boot Style



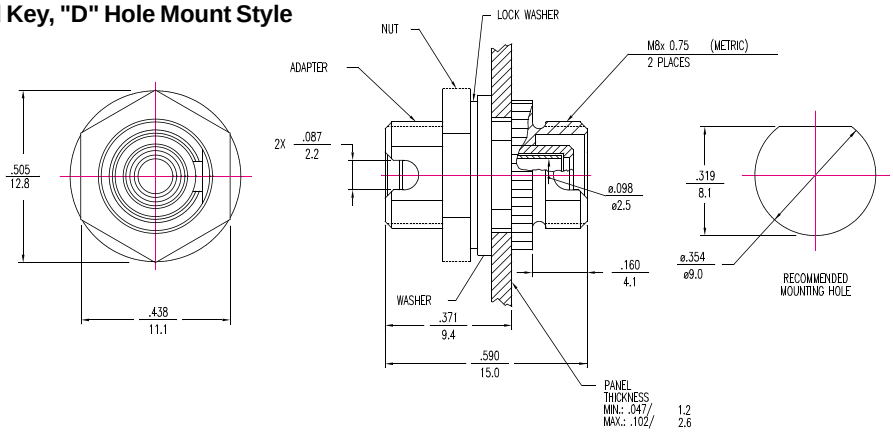

### FC/APC Connector, Tight Fit Key, 900µm Boot Style




### FC/APC Connector, Tight Fit Key, 90° Boot Style



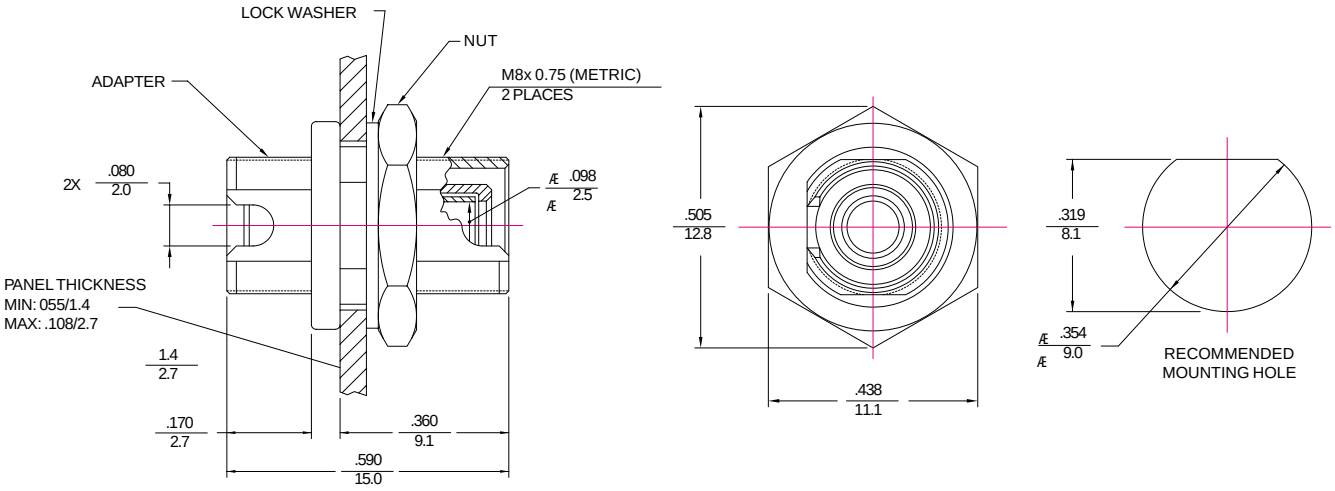

### FC Adapter, Standard Key, "D" Hole Mount Style



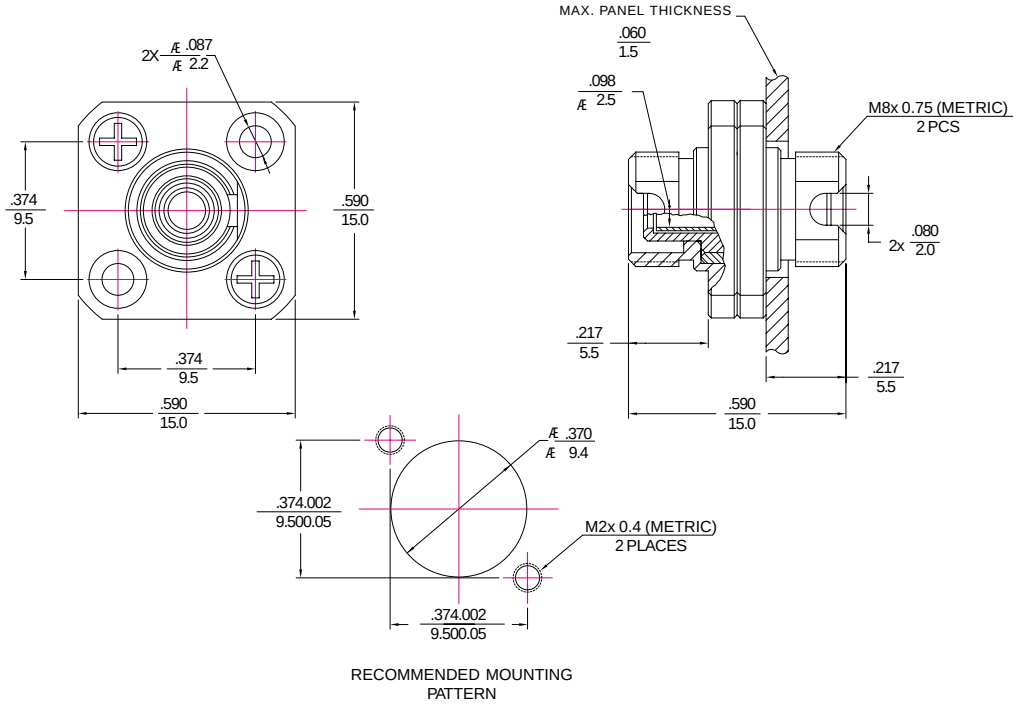

All dimensions in INCHES / **mm**

## Mechanical Dimensions

### FC/APC Adapter, Tight Fit Key, "D" Hole Mounting Style




### FC/APC Adapter, Tight Fit Key, Square Flange Mounting Style




All dimensions in INCHES / **mm**

# FC/APC Connectors & Adapters

## Standard Part Numbers

| Order Number | Description | Hole size | Cable size |
|---|---|---|---|
| 86056-5000 | FC/APC connector, zirconia ferrule, green boot, standard key* | 126µm | 3.0mm |
| 86056-5300 | FC/APC connector, zirconia ferrule, green boot, standard key | 126µm | 2.4mm |
| 86056-5500 | FC/APC connector, zirconia ferrule, green boot, standard key, buffered fiber | 126µm | 900µm buffered fiber |
| 86056-5400 | FC/APC connector, zirconia ferrule, 90º green boot, standard key | 126µm | 3.0mm |
| 86056-5600 | FC/APC connector, zirconia ferrule, 90º green boot, standard key | 126µm | 2.4mm |
| | | | |
| 86055-5000 | FC/APC connector, zirconia ferrule, green boot, tight fit key† | 126µm | 3.0mm |
| 86055-5300 | FC/APC connector, zirconia ferrule, green boot, tight fit key | 126µm | 2.4mm |
| 86055-5500 | FC/APC connector, zirconia ferrule, green boot, tight fit key, buffered fiber | 126µm | 900µm buffered fiber |
| 86055-5400 | FC/APC connector, zirconia ferrule, 90º green boot, tight fit key | 126µm | 3.0mm |
| 86055-5600 | FC/APC connector, zirconia ferrule, 90º green boot, tight fit key | 126µm | 2.4mm |
| | | | |
| 86152-0100 | FC adapter, zirconia alignment sleeve, square mounting flange style, standard key | | |
| 86152-0200 | FC adapter, zirconia alignment sleeve, square mounting flange style, low cost | | |
| 86156-0100 | FC adapter, phosphor bronze alignment sleeve, square mounting flange style, standard key | | |
| 86152-1000 | FC adapter, zirconia alignment sleeve, "D" hole mount stlye, standard key | | |
| 86156-1000 | FC adapter, phosphor bronze alignment sleeve, "D" hole mount style, standard key | | |
| | | | |
| 86152-2000 | FC/APC adapter, zirconia alignment sleeve, square mounting flange style, tight fit key | | |
| 86152-3000 | FC/APC adapter, zirconia alignment sleeve, "D" hole mount style, tight fit key | | |
| 86156-3000 | FC/APC adapter, phosphor bronze alignment sleeve, "D" hole mount style, tight fit key | | |

* Standard fit key is compatible with JIS C 5970 standard
† Tight fit key is compatible with AFL and JDS Fitel hardware


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