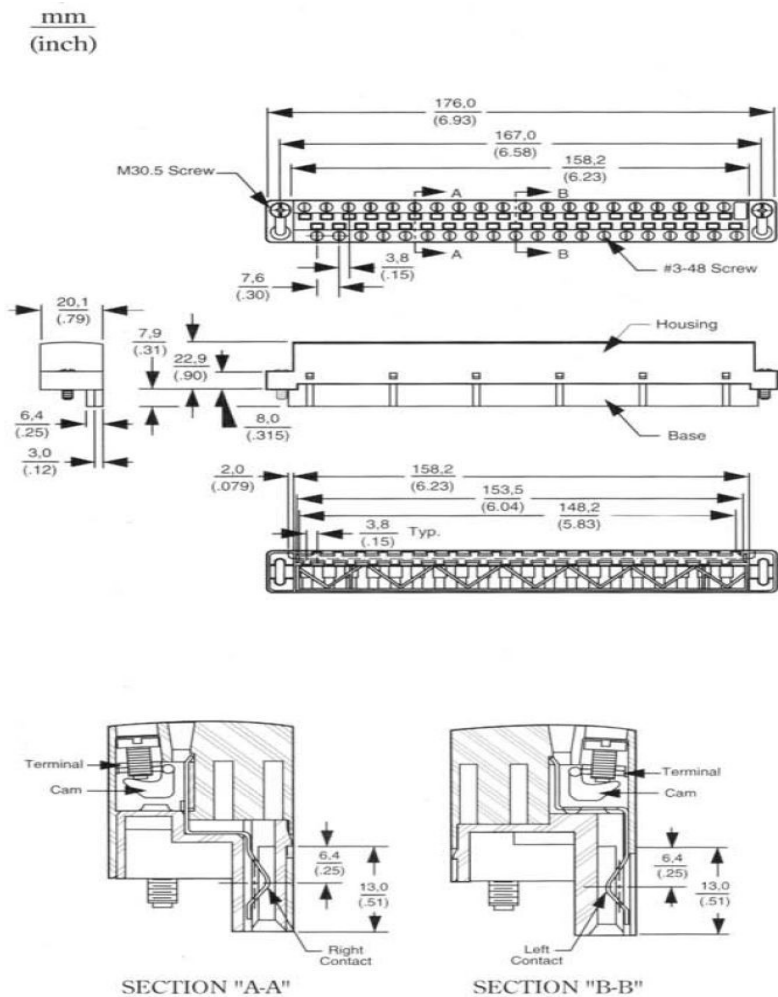
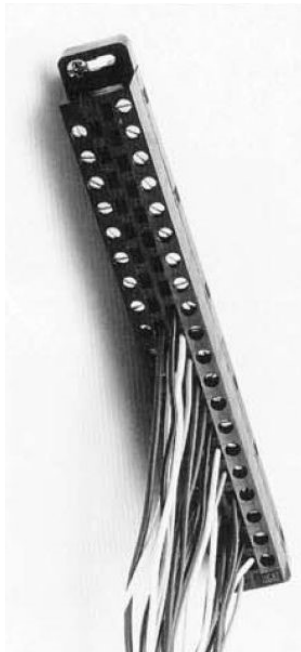


# 2500-40F / 2559-FPC I/O Connectors



## Description

Most 2500-Series I/O modules employ a specially-designed 40-position screw-terminal connector for terminating the field I/O wiring. This connector allows termination of multiple wires with access to both the wire and the screw clamp from the front of the module.

## Features

- 2500-40F Replaces Siemens® 2587705-8011
- Front access to screws and wires
- 14-22 AWG
- 15A, 300V rating
- Special 2559-FPC 40-position connector includes cold junction compensation for 2559-TC Thermocouple input module

**Important Note:** Do not tighten screws beyond 5 in-lb(0.6 Nm) torque rating, as damage can occur.

## Specifications

- Housing: Glass filled polyester UL recognized flammability classification 94V-0, black, 130°C max operating temperature
- Contacts: Copper alloy, selective gold over nickel
- Screws: #3-48 steel, zinc plating with clear chromate coating
- Wire cage: Steel, zinc plating with clear chromate coating
- Cam: Steel alloy, zinc plating with clear chromate coating
- Ratings: 15A, 300V, (limited space ratings)
- Wire range: 14-22 AWG (solid or stranded)
- Tightening torque: 5 in-lb (0.6 Nm)
- UL File #XCFR2.E183240



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# 2500-40F / 2559-FPC I/O Connectors

## IO Selection Guide

These modules require the 2500-40F. The 2500-40F is ordered separately for each module.

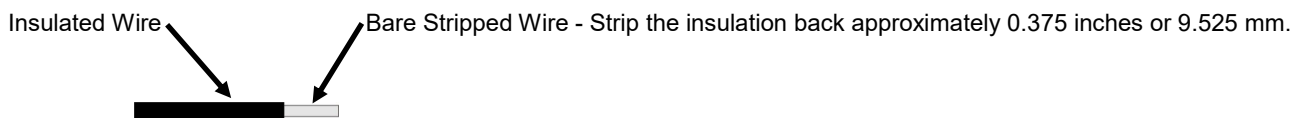
Module Model Number	Module Model Number	Module Model Number
<ul style="list-style-type: none"><li>• 2501</li><li>• 2502</li><li>• 2530</li><li>• 2531</li><li>• 2532</li><li>• 2534</li><li>• 2541</li><li>• 2550-A</li><li>• 2554-A</li><li>• 2555-A</li></ul>	<ul style="list-style-type: none"><li>• 2558</li><li>• 2559-RTD</li><li>• 2560-A</li><li>• 2562</li><li>• 2580</li><li>• 2581</li><li>• 2582</li><li>• 2588-8</li><li>• 2589-A</li><li>• 2589-B</li></ul>	<ul style="list-style-type: none"><li>• 2590-A</li><li>• 2590-EF</li><li>• 2591-A</li><li>• 2591-EF</li><li>• 2596</li><li>• 2596-8</li><li>• 2597</li><li>• 2598</li><li>• 2598-8</li><li>• 2599</li></ul>

These modules require the 2559-FPC. The 2559-FPC is ordered separately for each module.

Module Model Number 2559-TC.

## Wire Stripping Dimensions

The stripping dimensions are the same for all wire gauges.



- Once the wire is stripped it is ready to insert into the front of the connector. With the wire inserted tighten the front connector screw down using a torquing screw driver. Tighten the screw to 5 in-lb or 0.6 Nm. Do not over tighten.

# 2500-40F / 2559-FPC I/O Connectors

## Inserting a 2500-40F or a 2559-FPC on a 2500 Module

New connectors can sometimes be difficult to install the first few times they are plugged onto a module. If you encounter this difficulty, you can use the “rolling” technique shown in the pictures below to attach the connector gradually from top to bottom.

Step 1: Starting at the top insert the connector part of the way and start rolling the connector keeping the top inserted.



Step 2: Once the connector is inserted at the top roll the connector down while pushing the connector in to completely insert it on the board.



Step 3: Once you have rolled the connector all the way down and fully inserted onto the PCB you can finish the installation by screwing the Thumb Screws down. Do not over-tighten.

