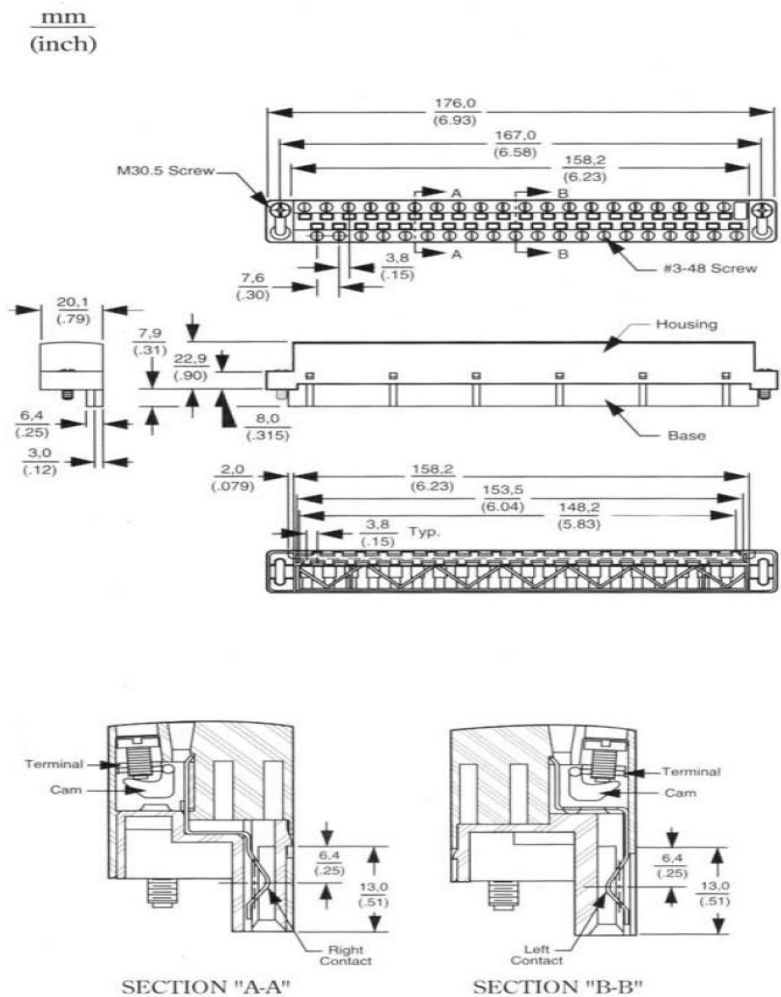
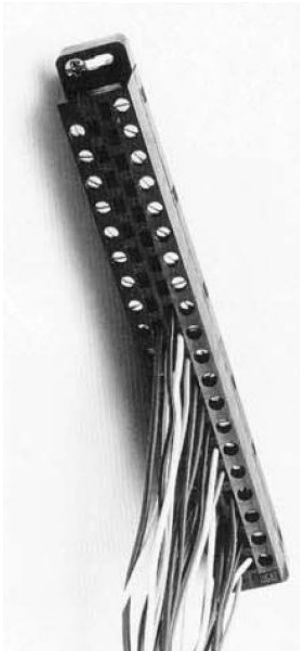


2500-40F / 2559-FPC I/O Connectors



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 the 2556-A and the 2559-TC Thermocouple input module

Important Note: Do not tighten screws beyond 4.55 in-lb (0.508 N-m) 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 (0.32 - 2 mm²) (solid or stranded)
- Tightening torque: 3.5 to 4.5 in-lb (0.395 N-m to 0.508 N-m)



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
• 2501	• 2558	• 2590-A
• 2502	• 2559-RTD	• 2590-EF
• 2530	• 2560-A	• 2591-A
• 2531	• 2562	• 2591-EF
• 2532	• 2580	• 2596
• 2534	• 2581	• 2596-8
• 2541	• 2582	• 2597
• 2550-A	• 2588-8	• 2598
• 2554-A	• 2589-A	• 2598-8
• 2555-A	• 2589-B	• 2599

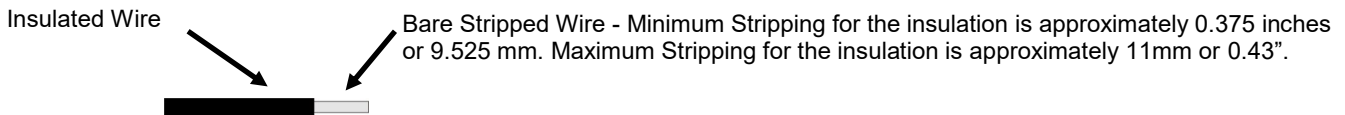
These modules require the 2559-FPC which provides CJC connections for Thermocouple modules. The 2559-FPC is ordered separately for each module.

Module Model Number 2556-A.
Module Model Number 2559-TC

Refer to the Installation and Operation Guide for each module's wiring connections and label.

Wire Stripping Dimensions

The stripping dimensions are the same for all wire gauges.

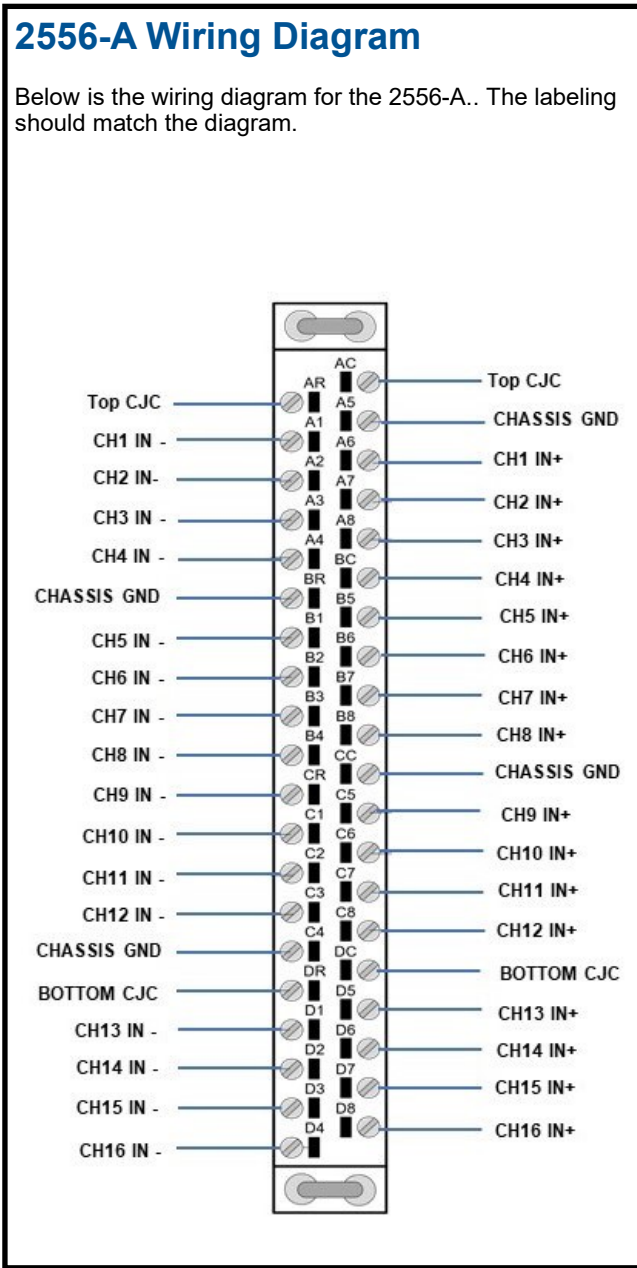
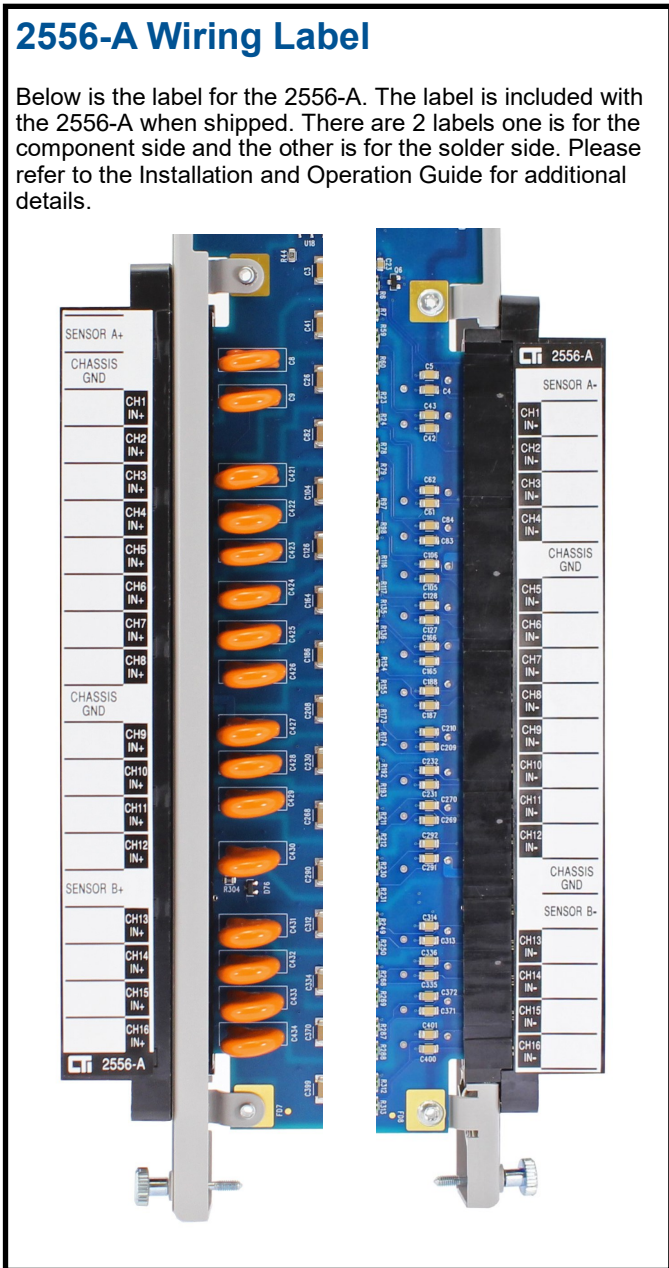


- Once the wire is stripped it is ready to insert into the front of the connector. With the wire inserted tighten the front connector screw down using a torquing screw driver. Tighten the screw to 4.5 in-lb or 0.508 N-m. Do not over tighten.

2559-FPC I/O Connectors for the 2556-A

The correct label for using a 2559-FPC with a 2556-A

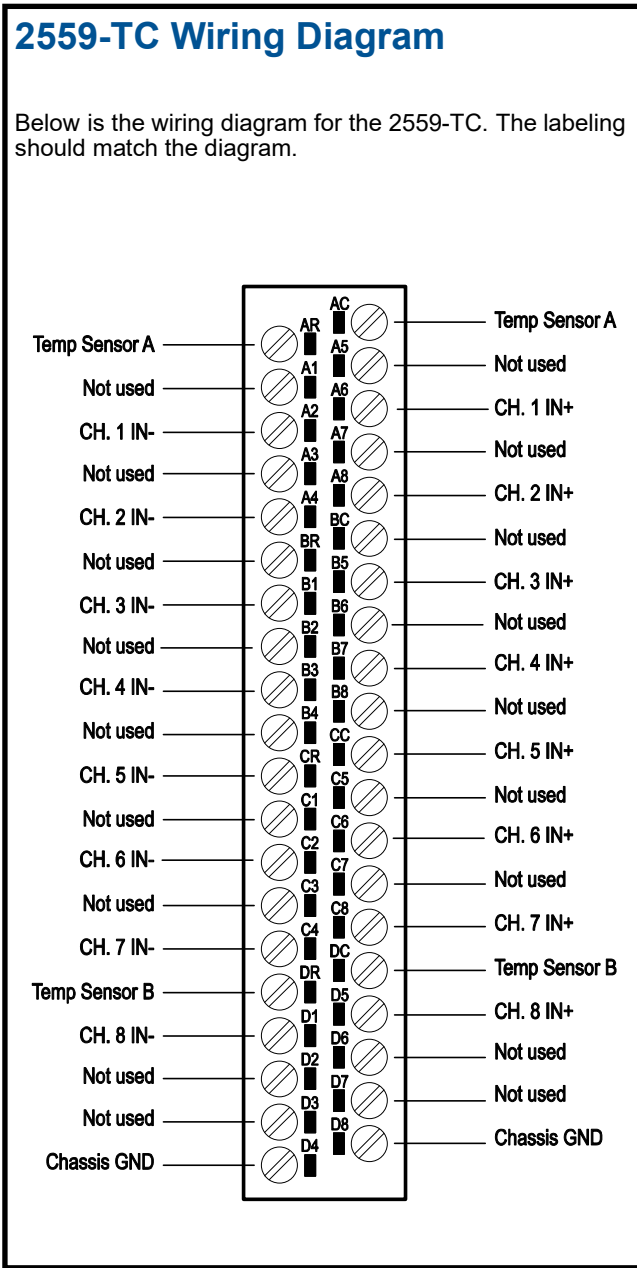
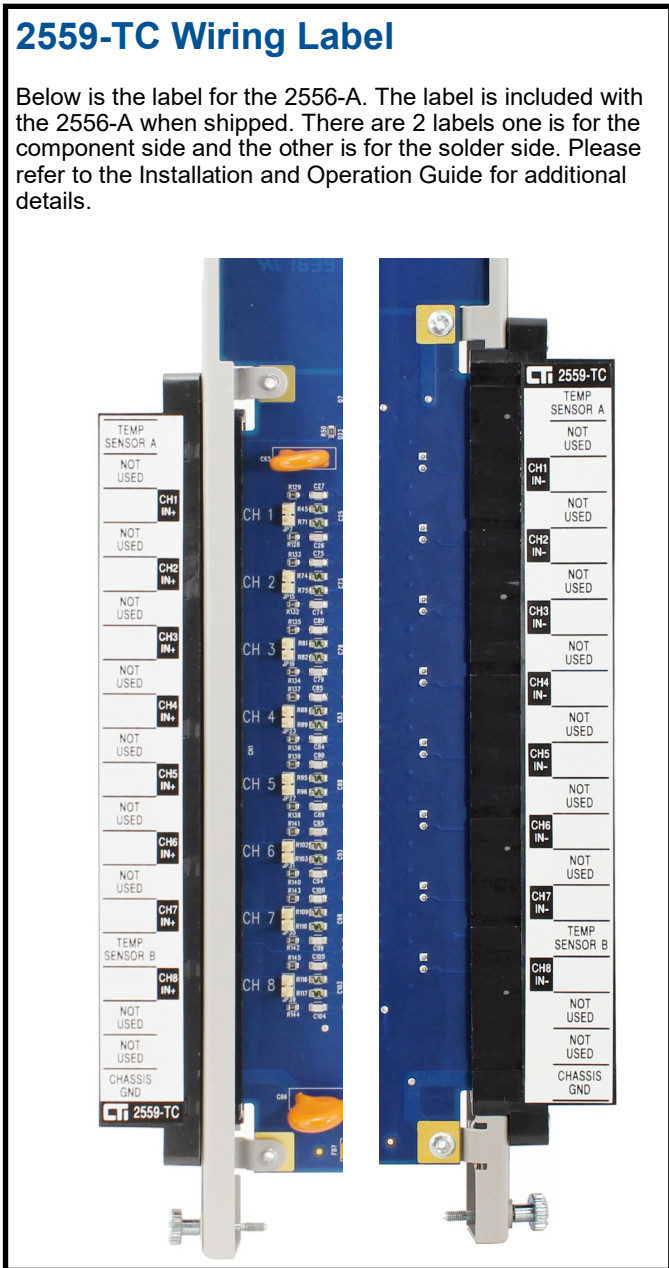
There are different wiring labels for the 2556-A and the 2559-TC. The appropriate label must be applied to the 2559-FPC depending on which module the connector is being installed with. Labels are included with the module packaging. Below is the correct label for the 2556-A



2559-FPC I/O Connectors for the 2559-TC

The correct label for using a 2559-FPC with 2559-TC

There are different wiring labels for the 2556-A and the 2559-TC. The appropriate label must be applied to the 2559-FPC depending on which module the connector is being installed with. Labels are included with the module packaging. Below is the correct label for the 2559-TC



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.

