



# Captis Termination Guide

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## 1 Scope

The purpose of this document is to detail the termination guidelines of the Captis Pulse Lite 1.0, Captis Pulse 1.2, Captis Multi 1.2 and Captis Recharge 1.2.

## 2 Before You Begin

Before you begin, please ensure you have the required tools and have reviewed this document.

Failure to comply with the termination guidelines detailed within this document may result in damage to the Captis device and may **void** the device warranty.

### 2.1 What do you need?

The following table details the required tools and components to successfully terminate a cable to a Captis device.

TOOLS	DEFINITION	COMMENT
	Amphenol Pin Crimping Tool	This tool is required to securely crimp the cable conductor to the amphenol pins.  (Not included)
	Cable Stripping Tool	The tool allows for efficient removal of conductor insulation prior to termination.  (Not included)
	Amphenol Connector Components	Included with the Captis product. 4 terminal connectors provided with the Pulse 1.2 and Pulse Lite or 18 terminal connectors provided for Multi 1.2 and Recharge.  The amphenol pins <sup>1</sup> are suitable for 20-22AWG cable conductors

Table 1

<sup>1</sup> The same Amphenol pins are provided with each Captis model.



## 2.2 Compatibility

It is important to ensure that the sensor being terminated is compatible with the selected Captis device. Please find compatibility details below noting that all approved sensors<sup>2</sup> may be connected and logged at once. However, any more than 2 x digital inputs may adversely affect battery longevity.

DEVICE	SENSOR INPUTS
Pulse 1.2 and Pulse Lite 1.0	<ul style="list-style-type: none"><li>• 2 x Digital Inputs</li></ul>
Multi 1.2 and Recharge 1.2	<ul style="list-style-type: none"><li>• 2 x Digital Inputs</li><li>• 1 x 4-20mA Analogue Input</li><li>• 1 x 0-10VDC Analogue Input</li><li>• 1 x Serial Input (Modbus RS232/RS485)</li><li>• 1 x 1-Wire Input</li></ul>

Table 2

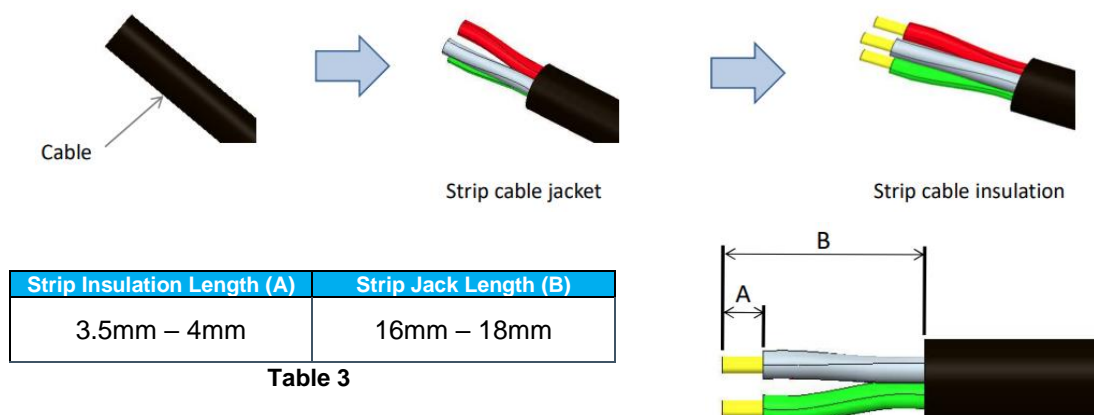
## 3 Terminating

When terminating cable into the Captis' Amphenol connector please follow these steps:

1. Prepare the cable
2. Crimp the pins
3. Secure the pins
4. Fasten the connector

### 3.1 Prepare the Cable

The following diagrams outline how to prepare the sensor cable for termination. These guidelines support the manufacturers specification.



<sup>2</sup> Please contact [support@kallipr.com](mailto:support@kallipr.com) to ensure the selected sensor is compatible with the selected Captis device.



## 3.2 Crimp the pins

The following steps outline how to securely crimp the amphenol pin to the cable conductor. Please note, **only** the crimping tool listed below is recommended for crimping these pins. Failure to use the recommended tool may result in non-compliant installations.

TOOL	MANUFACTURER PART NUMBER
Amphenol Crimping tool 5A 20-22AWG	ASST-C-05-W-A

Table 4

### 3.2.1 Step 1

Insert the crimp contact into the opening of the crimp tool, with the crimp opening facing the top of the tool.

### 3.2.2 Step 2

Insert the stripped cable into the crimp barrel.

Ensure that the cable conductor is in contact with the crimp tabs associated with dimension B, and the cable insulation is in contact with crimp tabs associated with dimension D, as seen in Figure 1 below:

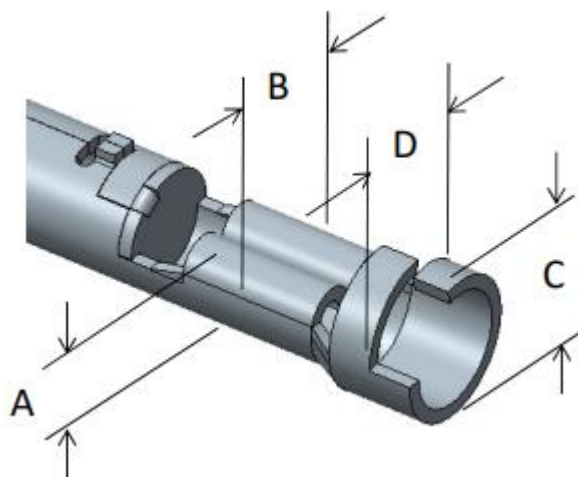


Figure 1

### 3.2.3 Step 3

Squeeze the handle of the crimping tool together firmly until the tool releases.

### 3.2.4 Step 4

Visually inspect the crimp for proper termination. A light tug on each termination will ensure the crimp is mechanically adequate.



### 3.3 Secure the pins

Please ensure that care is taken to select the correct terminal for each pin as the connector is not suitable for pin removal. As such, there is no recommended practice for pin removal.

After all of the cable conductors have been successfully fastened to the crimps, the amphenol pins may be inserted into the pin receptacles.

Insert each pin into each receptacle until you hear a small click.

Attempt to remove each pin with light force after this click to confirm they are securely fastened.

If you do make an error, please call your distributor and request a replacement connector kit and replace the connector assembly. It is recommended that spare connector kits are carried by Captis installers to prevent multiple site visits in the event of a mistake.

### 3.4 Fasten the Connector

Install the Clamp Ring to the housing-with-contacts by screwing. Make sure to apply the correct torsional force.

*Clamping ring torque: 6 ~ 8kgf.cm(0.58 ~ 0.78 Nm)*



Figure 2

Ensure that the clamp seal aligns with the clamp ring surface, as seen below:



Figure 3



Finally, install the sealing nut to the clamp ring by screwing. Make sure to apply the correct torsional force.

*Clamping ring torque: 6 ~ 8kgf.cm(0.58 ~ 0.78 Nm)*

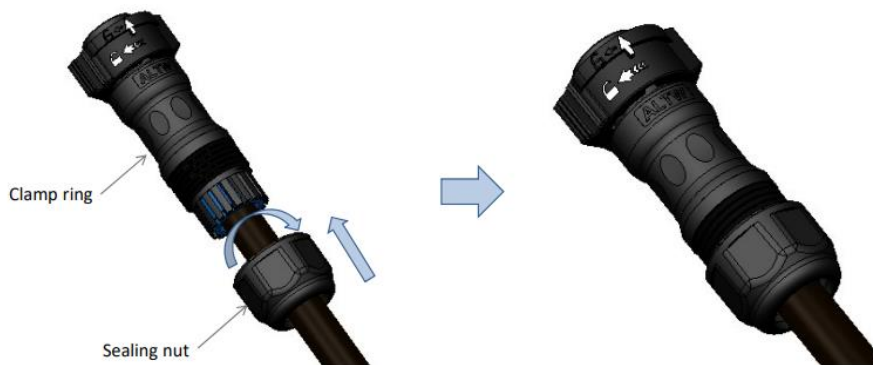


Figure 4

## 4 Testing

Upon completion of the sensor termination, the connector may be secured to the Captis receptacle.

Ensure that the Captis is correctly configured to receive the data from the connected sensor.

If there is no data being transmitted by the sensor to the Captis device, please review the terminations and sensor output.

If the issue persists, please contact [support@Kallipr.com](mailto:support@Kallipr.com)