# RMC200 S8 Cable

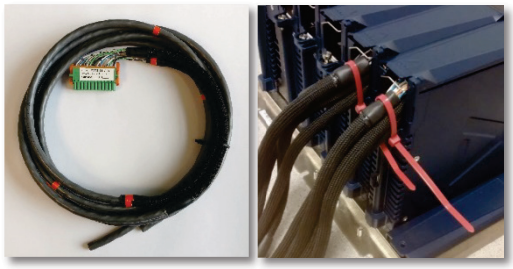
## R2-CB-S8-nnA
## Installation and Wiring

Pigtail cables provide a compact, convenient option for RMC200 modules. These cables are for short distances between the RMC200 and terminal blocks within the same cabinet. For long cable runs, Delta recommends using cables with lower resistance and better shielding.

## Supplied Components

The **R2-CB-S8-nnA** part number denotes a single cable assembly. The S8 module requires two R2-CB-S8-nnA cable assemblies – one per terminal block. Each cable assembly consists of:

- Terminal block connector
- Two cables, both wired to the single terminal block connector
- Flexible cable leader for easy bending out of module
- Pigtail ends



**Cable specifications:**

- Length: nn = 06: 6 ft (1.83 m); nn = 12: 12 ft (3.66 m) (other lengths available)
- Belden 1422A or equivalent
- OD: 0.294 in; min. bend radius: 3.0 in.
- 5 twisted pairs, overall foil shield, 24 AWG stranded
- Impedance: 100 Ohms; Capacitance 13 pf/ft; Resistance: 24 Ohms/1000 ft
- PVC jacket, -20 to 80 °C

## S8 Cable Wiring Notes

- All inputs share the same common potential and all sensor commons must be tied together at some point in the system (typically, they will share a power supply, which would take care of this requirement).
- Shields from each individual sensor cable should be terminated at the separate terminal blocks with a low impedance connection to ground.
- Delta recommends the use of ferrules with these cables.

## S8 Cable Pin-out

**TB1 Cable A: Inputs 0-1**

| Color Pairs | | Pin |
|---|---|---|
| | Wht w/ Blue | Int/Clk0+ |
| | Blue w/ Wht | Int/Clk0- |
| | Wht w/ Org | Ret/Dat0+ |
| | Org w/ Wht | Ret/Dat0- |
| | Wht w/ Grn | Int/Clk1+ |
| | Grn w/ Wht | Int/Clk1- |
| | Wht w/ Brn | Ret/Dat1+ |
| | Brn w/ Wht | Ret/Dat1- |
| | Wht w/ Gry | Cmn0 |
| | Gry w/ Wht | Cmn1 |

No band

**TB1 Cable B: Inputs 2-3**

| Color Pairs | | Pin |
|---|---|---|
| | Wht w/ Blu | Int/Clk2+ |
| | Blu w/ Wht | Int/Clk2- |
| | Wht w/ Org | Ret/Dat2+ |
| | Org w/ Wht | Ret/Dat2- |
| | Wht w/ Grn | Int/Clk3+ |
| | Grn w/ Wht | Int/Clk3- |
| | Wht w/ Brn | Ret/Dat3+ |
| | Brn w/ Wht | Ret/Dat3- |
| | Wht w/ Gry | Cmn2 |
| | Gry w/ Wht | Cmn3 |

Marked with orange band

**TB2 Cable A: Inputs 4-5**

| Color Pairs | | Pin |
|---|---|---|
| | Wht w/ Blu | Int/Clk4+ |
| | Blu w/ Wht | Int/Clk4- |
| | Wht w/ Org | Ret/Dat4+ |
| | Org w/ Wht | Ret/Dat4- |
| | Wht w/ Grn | Int/Clk5+ |
| | Grn w/ Wht | Int/Clk5- |
| | Wht w/ Brn | Ret/Dat5+ |
| | Brn w/ Wht | Ret/Dat5- |
| | Wht w/ Gry | Cmn4 |
| | Gry w/ Wht | Cmn5 |

No band

**TB2 Cable B: Inputs 6-7**

| Color Pairs | | Pin |
|---|---|---|
| | Wht w/ Blu | Int/Clk6+ |
| | Blu w/ Wht | Int/Clk6- |
| | Wht w/ Org | Ret/Dat6+ |
| | Org w/ Wht | Ret/Dat6- |
| | Wht w/ Grn | Int/Clk7+ |
| | Grn w/ Wht | Int/Clk7- |
| | Wht w/ Brn | Ret/Dat7+ |
| | Brn w/ Wht | Ret/Dat7- |
| | Wht w/ Gry | Cmn6 |
| | Gry w/ Wht | Cmn7 |

Marked with orange band

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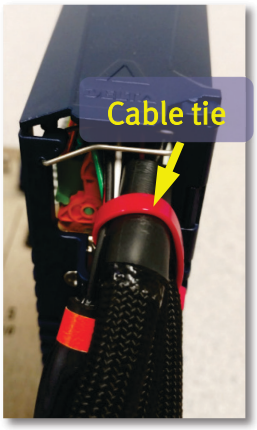
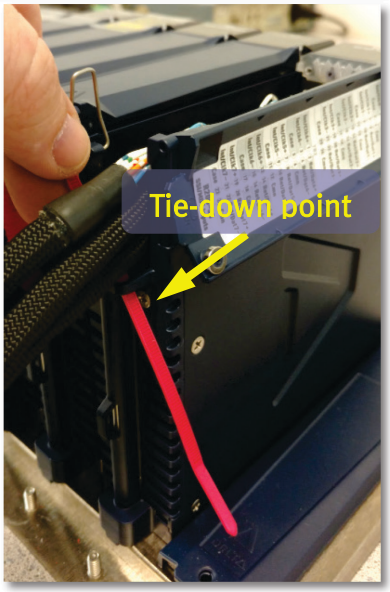
# Installation Procedure

1. Insert the terminal block connectors for each cable assembly into the S8 module, tucking the upper cable into the groove:

2. Use a cable tie to attach all cables exiting module to the tie down location shown. This ensures that module door will close properly. The cable tie should clamp onto the heat shrink tubing. Do not overtighten.




3. Connect the pigtail ends to terminal blocks as required by the application. Delta recommends the use of ferrules.

## RS-422 Wiring

Each S8 transducer input consists of an RS-422 input/output pair. It is important to make sure the Cmn pin on the S8 is connected to the sensor common. Although the S8 may properly receive sensor signals without the common, the risk for intermittent errors or complete errors later is very high if the common is not connected properly.