## CTL-(x) Specification Sheet

## DESCRIPTION

The CTL-(x) cable is for use with all single resolver transducers that are compatible with AMCI controllers. This includes transducers from the HT, H25, and R11 product lines. This cable is also to be used with the HTT-400-1 redundant resolver transducer.

The ( x ) in the part number denotes the cable length in feet. \{A CTL-25 is 25 feet ( 7.6 meters) long.\}
The CTL- $(\mathrm{x})$ cable replaces all CT-( x ), C1T-( x ), C1TG-( x ), C1TP-( x ), C2T-( x ), C3T-( x ) and C4T-( x ) cables in all documentation. Multiple CTL cables can be purchased and wired together to replace the C2T, C3T, and C4T cables.
Note that the CTL-(X) transducer cable does not include a mating connector for the controller. These connectors are supplied with the PLC plug-in module or controller. For correct connections, please see the cable wiring diagram in the installation section of the controller's manual.

## PIN OUT DRAWING



Not Included with CTL Cable.
Connector is included with controller or can be ordered separately from AMCI.

BELDEN 9873 Cable or exact equ.
For cable lengths greater than
100' (30 meters) use BELDEN 9730

Connector
AMCI Part \#: MS-16 Bendix \#:

MS3106A16S-1S

## TECHNICAL DATA

One of two cable types is used for the CTL cable. For cable length under 100 feet, Belden 9873 or exact equivalent is used. For cable lengths over 100 feet, Belden 9730 or exact equivalent is used. The reason for the change is because of cable capacitance which causes a phase shift in the resolver signals. The 9730 has a much lower cable capacitance because of its smaller conductors, (24AWG instead of the 9873's 20AWG), but these smaller conductors can also make it harder to install.
If you are making your own cable, Belden 9730 can be used for any length.
If you need a high temperature cable, AMCI suggests using Belden 89730 cable with foamed Teflon insulation. AMCl's FAQ "What Transducer Cable Can I Use In High Temp or High Flex Applications?" gives installation guidelines on the 89730 cable. This document can be found in the FAQ section of our website, www.amci.com.

|  | Belden Cable Number |  |
| ---: | :---: | :---: |
|  | 9873 | 9730 |
| Max. Cable Length | 100 ft. | 1000 ft. |
| Wire Gauge | 20 AWG <br> $(7 \mathrm{X} 28 \mathrm{Stranded})$ | 24 AWG <br> $(7 \mathrm{X} 32 \mathrm{Stranded})$ |
| Jacket Insulation Material | PVC | PVC |
| Wire Insulation Material | Polyethylene | Polyethylene |
| Temp. Rating | $-20^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$ |
| Capacitance | $30.0 \mathrm{pF} / \mathrm{ft}$. | $12.5 \mathrm{pF} / \mathrm{ft}$. |

