

Belden Infinity® Flexible Automation Cable

Overview and Application Guide

Belden Infinity is a complete line of control, data, video, and power cables specifically designed to handle the rigorous speeds and near-constant motion encountered in automated equipment such as robots, pick and place machines, automatic handling systems, multi-axis machine tools, and conveyor systems.

When the application demands highly flexible cables offering exceptional cable life and performance, specify Belden Infinity.

Belden Infinity Means More Performance And Longer Life

Reduced Cable Memory — Belden Infinity's unique design and neutralized cabling, results in cables that are relaxed, with almost no memory.

Greater Flex Life — Belden Infinity cables offer superior flexibility and are able to handle the vigorous motions and high speeds encountered in automated equipment.

Greater System Uptime — Belden Infinity cables combine specialized manufacturing techniques with precision copper stranding and rugged insulation and jacketing compounds to maximize flex life and reliability.

No Talc Problems — Unlike the potentially harmful talc used in other cables, Belden's non-toxic, non-irritating slipper compound facilitates flexing and also complies with OSHA regulations. It's safer for employees and operators and is less likely to contaminate solder joints or mechanical compounds.

CE Conformity — All Belden Infinity cables are CE marked per the Conformité Européenne low voltage directive, allowing trade of product in Europe.

Custom Designs — Other designs available upon request.

Product Series Descriptions

- **C-TC+** — The C-TC+ series is designed for C-track and extreme flex applications up to 9 million flex cycles*. This series utilizes super fine stranding and some of the tightest lay lengths allowed by UL, providing outstanding flex life.
- **FCC** — The FCC series is a cost effective alternative for C-track and moderate flexing applications rated up to 1 million flex cycles*.
- **Flex Data Cables** — Belden Infinity Flex Data cables are designed for industrial applications where precise data transmission is combined with high-flexing. These cables are ideal for effective operation of computer controlled equipment or other automated production processes, even in harsh environments.
- **Flex Vision** — Belden Infinity Vision cables are continuous flex video cables designed for machine vision applications. They are ideal for motion-controlled video and with inspection and measurement equipment.

Application Guide

Belden Infinity Series	C-Track Systems	Multi-Axis Machining	Robotics	Automated Assembly Systems	Material Handling Systems	Pick & Place Systems	Automated Storage Retrieval	Gantry Systems	Machine Vision	Motion-Controlled Video	Inspection & Measure Equip.	Festooning	Servo	Power
FCC Oil & abrasion resistant 600V UL & CSA rated Life Expectancy: Over 1 million flex cycles*	●	●	●	●	●	●	●	●	●	●	●	●	●	●
C-TC+ Oil & abrasion resistant 600V UL & CSA rated Life Expectancy: Over 9 million flex cycles*	★	★	●	★	★	★	★	★	★	★	★	★	★	★
DATA Oil & abrasion resistant 300V UL & CSA rated Life Expectancy: Over 1 million flex cycles*	●	●	●	●	●	●	●	●	●	●	●	●	●	●
VISION 30V UL & CSA rated Life Expectancy: Over 1 million flex cycles*	●	●	●	●	●	●	●	●	★	+	+	●	●	●

● Good + Better ★ Best

*Based on proper installation techniques in a C-track cable guide.