BELDEN
SENDING ALL THE RIGHT SIGNALS

Be Certain with Belden

Effective Solutions for Machine Building

BELDEN
SENDING ALL THE RIGHT SIGNALS

A **MICE Family**

- Modular switch family
- Extensive range of hot-swappable media modules
- Supports a comprehensive selection of connectors
- MICE PoE media modules available
- Maximum flexibility by comprehensive selection of media types

Welding Spark Proof Actuator/Sensor Connectors

- Fully recyclable
- Drag chain suitability
- IP67 protection class

Actuator/Sensor Distribution Box

- 4, 6, 8, 10 and 10 port distribution box
- Space saving design
- Shock and vibration proof
- IP67 protection class

A **OCTOPUS Family**

B

- Ruggedized switch family for extreme conditions
- Open system with standardized M12 technology
- IP67 protection class and EN 50155 approvals
- Extended management by SNMP
- Redundancy via HIPER-Ring/MRP and Rapid Spanning Tree
- Available with PoE

B **Connectivity Solutions**

- AS-Interface flat, round cable modules
- Actuator/sensor connecting and interconnecting cables
- Valve connectors
- IP67 protection class

C **OpenRail Family**

- Redundant power supply
- Available in customized versions
- Available with conformal coating
- Available with PoE

BAT Family

- Wireless access points and clients
- Bridge functionality
- Redundant WLAN links for reliable data transfer
- IP67 protection class

Fieldbus Systems and Distributors

- Fieldbus modules for AS-Interface, DeviceNet, CANopen® and Profibus
- Actuator/sensor distribution box
- IP67/IP69K protection class, vibration and shock resistant

Connectivity Solutions – Actuator/Sensor Cordsets (M8/M12), Valve and Field Attachable Connectors, Industrial Ethernet Connectivity

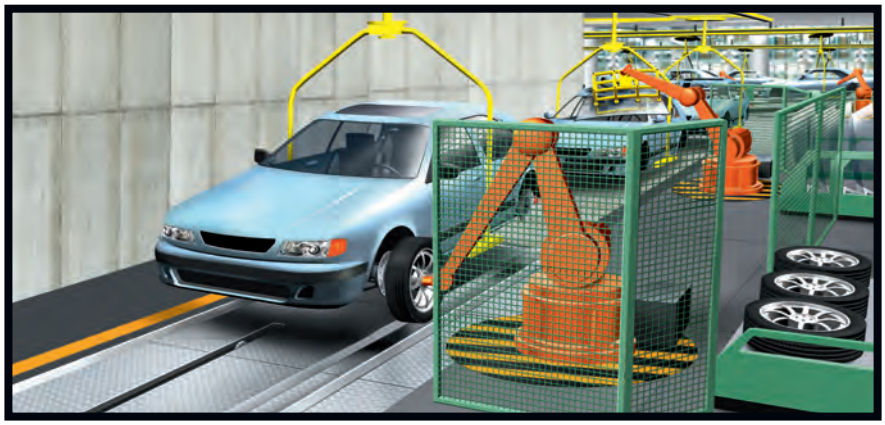
- Reduced installation time
- Easy to maintain
- IP67 protection class
- Good chemical and oil resistance

Automotive

A Body Shop

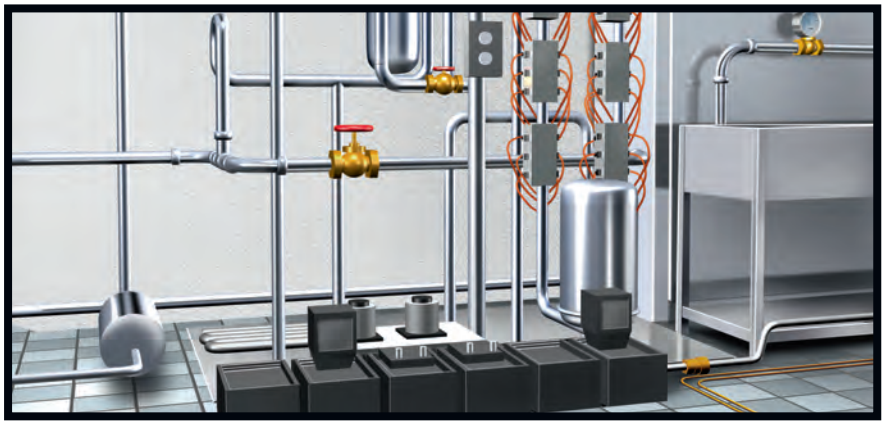
B Power Train

C Assembly Shop

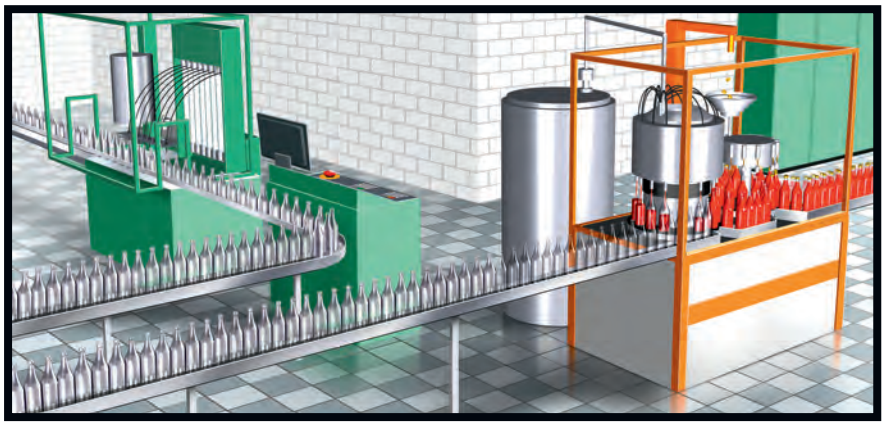


Food and Beverage

D Valve Terminal



E Bottle Cleaning and Filling



F Packaging and Palletizing

D Fieldbus Repeaters

- For the most common Fieldbus protocols
- Predictive maintenance
- Protocol specific Fieldbus repeaters available

Actuator/Sensor Distribution Boxes

- Easy cleaning
- Long-term stability
- Stainless steel V4A
- High resistance, IP69K protection class

Flow Rate and Filling Level Meter: Actuator/Sensor Connectors

- M12-male and female connectors with stainless steel hexagon threaded joint
- High resistance, IP69K protection class

Valve Connectors

- Reduced height resulting in lower space requirements
- Standard version with molded, captive seal
- Up to +80°C and IP65/IP67 protection class

E SPIDER Family

- Unmanaged entry-level switches in many varieties
- Fast Ethernet or full gigabit
- Fiber to copper conversion
- 2 to 8 (+2) ports plus optional optical fiber ports

AS-Interface Fieldbus Modules

- AS-Interface cable connector used as tap distributor of connections or as connector
- 4 digital inputs and outputs
- M12 bus connection
- Stainless steel V4A
- IP69K protection class

Attachable Connectors

- M12 male and female connectors with stainless steel hexagon threaded joint
- 4-, 5- and 8-poles, IP67 protection class

Receptacle Connectors for Food Processing Equipment

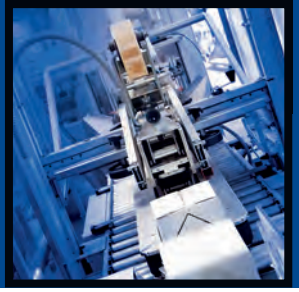
- Male connector for sensors
- Housing of stainless steel
- M12 male and female connectors for front mounting
- 4-, 5- and 8-poles, IP69K protection class

F MICE Family

- Modular switch family
- Extensive range of hot-swappable media modules
- Supports a comprehensive selection of connectors
- MICE PoE media modules available
- Maximum flexibility by comprehensive selection of media types

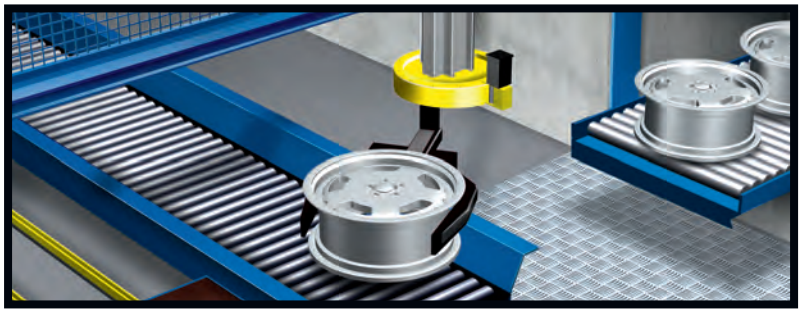
LioN-Link

- Two line per bus head (for Profinet, Profibus, DeviceNet, CANopen®)
- Fieldbus independent I/O Modules
  – up to 100 m extension per line
  – up to 15 devices per line



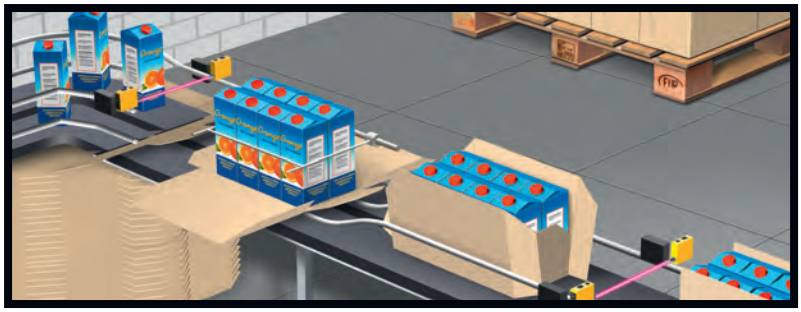
Other Machine Building Applications

G Machine Tools



H Material Handling

I Packaging



J Control Room

G OpenRail Family

- Redundant power supply
- Available in customized versions
- Available with conformal coating
- Available with PoE

LioN-Link Motion

- Control of 24 V brushless drive technology
- Reduced amount of cabling
- Reduced installation time
- High level diagnostics
- Parameter setup

Connectivity Solutions – Actuator/Sensor Cordsets (M8/M12), Valve and Field Attachable Connectors, Industrial Ethernet Connectivity

- Reduced installation time
- Easy to maintain
- IP67 protection class
- Good chemical and oil resistance

H BAT Family

- Wireless access points and clients
- Bridge functionality
- Redundant WLAN links for reliable data transfer
- IP67 protection class

Actuator/Sensor Distribution Box

- Space saving design
- Cost saving wiring
- Easy to maintain
- Shock and vibration proof
- IP67 protection class

Field Attachable Connectors – M8, M12, M23, 7/8"

- Straight and angled versions, 4, 5, 8, 12, 19-poles
- IP65/67

I Fieldbus Systems – LioN-M/LioN-S, LioN-Link, LioN-Link Motion

- Universal I/O functionality
- Exact diagnostic
- IP67 protection class

Connectivity Solutions – M8, M12, M23, 7/8"

- Actuator/sensor connecting and interconnecting cables
- Field attachable connectors
- Valve connectors A, B and C design
- IP65 – IP69K protection class

J MACH4000

- Gigabit backbone routing switches
- Up to 48 Gigabit Ethernet ports and three 10 Gigabit Ethernet ports, highly redundant

Industrial Ethernet Cables

- Black UV resistant cable jacket
- PVC/FRNC or PUR cable jacket available
- IP67, CAT5e

Seamless Solutions for Machine Building

Designed to be Reliable, using Leading Edge Technologies

Belden offers a range of solutions for increased productivity in manufacturing environments. With world-class products from the Belden®, Hirschmann™ and Lumberg Automation™ brands, we are able to deliver complete solutions to many applications, be it in an Automotive, Food and Beverage, Material Handling or Packaging environment.

Our highly cost-effective, integrated solutions offer a large degree of flexibility. Individually, our products provide reliability and availability, working together they create a finely tuned signal transmission infrastructure.

Be Certain with Belden

Increasing productivity has become a key priority in any manufacturing application. Our technologies and network communication solutions ensure maximum availability for these highly automated environments. From individual machines to production lines, from wireless workstation connectivity to control room applications, our products are designed to meet the standards and requirements in any environment, including resistance to water and oil, torsion, vibration and shock.

Easy to install and configure, Belden's solutions can be customised to address specific demands, benefiting from year's of expertise and experience. Ensuring that however challenging or advanced the application, the Belden solution meets and exceeds the expectations.

If you are looking for a broad, high quality product portfolio from one hand supported by extensive solutions expertise, talk to Belden to be certain you have the most effective solution, both now and in the future.

BELDEN
SENDING ALL THE RIGHT SIGNALS

www.beldensolutions.com

GLOBAL LOCATIONS

To learn more about Belden visit us at
www.beldensolutions.com

CONTACT FOR BELDEN® BRAND

Edisonstraat 9
5928 PG Venlo
The Netherlands
Phone: +31-77-3878-555
Fax: +31-77-3878-488
www.beldensolutions.com
venlo.salesinfo@belden.com

CONTACT FOR HIRSCHMANN™ BRAND

Stuttgarter Straße 45-51
72654 Neckartenzlingen
Germany
Phone: +49-7127-14-0
Fax: +49-7127-14-1970
www.beldensolutions.com
inet-sales@belden.com

CONTACT FOR LUMBERG AUTOMATION™ BRAND

Im Gewerbepark 2
58579 Schalksmühle
Germany
Phone: +49-2355-5044-000
Fax: +49-2355-5044-333
www.beldensolutions.com
lac-info@belden.com

©Copyright 2010, Belden Inc.
Printed in Germany
DS 280 720-403 11.2010