

# Line Card - Food and Beverage, Consumer Packaging






Featured Brands











**Innovative technologies for  
hygienic zones, splash zones,  
and product-free zones**

## Industrial Connectivity

### Splash Zone / Washdown Zone

Type	Cable material	Conductor size of cable	Screw/Housing	Nominal current	Rated Voltage	LED
 Washdown series Cordset	PP	0.25 mm <sup>2</sup>	Hexagonal, stainless steel (V4A)	3A	60V (3 poles) 30V (4 poles)	Available
	PP	0.25 mm <sup>2</sup>	Hexagonal, stainless steel (V4A)	4A (3 to 5 poles) 2A (8 poles)	250 V (3 to 4 poles) 60V (5 poles) 30 V (8 poles)	Available
 Distribution box	PVC	0.5 mm <sup>2</sup> - 1 mm <sup>2</sup>	Stainless steel (V4A)	4 A / max. 12 A	10-30 V DC	Available
 Active I/O Module	PVC	0.5 mm <sup>2</sup> - 1 mm <sup>2</sup>	Stainless steel (V4A)	2 A / max. 4 A	29,5-31,6 V DC 10-30 V DC	Available

### No Contact Zone / Product Free Zone





 PVC Classic series Cordset	PVC	0.25 mm <sup>2</sup> -0.34 mm <sup>2</sup>	Hexagonal, stainless steel (V4A)	3A	60V (3 poles) 30V (4 poles)	N/A
	PVC	0.25 mm <sup>2</sup> -0.34 mm <sup>2</sup>	Hexagonal, stainless steel (V4A)	4A	250 V	Available
 Receptacle series	N/A	0.22 mm <sup>2</sup> -0.5 mm <sup>2</sup>	Stainless steel (V4A)	4A (4 to 5 poles) 2A (8 poles)	250 V (4 poles) 60V (5 poles) 30 V (8 poles)	N/A
 360 degree shielded series Cordset	PUR/PVC	0.25 mm <sup>2</sup> -0.34 mm <sup>2</sup>	Knurled (CuZn)	2A-4A	240 V (4 poles) 60V (5 poles) 30 V (8 poles)	N/A
 Sensor/Actor series Cordset/Attachable	PVC/PUR	0.08 - 0.34 mm <sup>2</sup>	Knurled	N/A	63 V (3 poles) 36 V (4 poles)	yes
	PVC/PUR	0.14 - 0.5 mm <sup>2</sup>	Knurled	4 A (3,4,5 poles) 6 A (8, 12 poles)	250 V (3, 4 poles) 63 V (5 poles) 32 V (8, 12 poles)	yes
 Receptacle series	N/A	0.22 mm <sup>2</sup> -0.5 mm <sup>2</sup>	Stainless steel (V4A)	4A (4 to 5 poles) 2A (8 poles)	250 V (4 poles) 60V (5 poles) 30 V (8 poles)	N/A
 Valve connector Cordset	PUR/PVC	0.5 mm <sup>2</sup> -0.75 mm <sup>2</sup>	M3 x 28	up to 10A	up to 250V	Available
 Active I/O Module	PVC	0.5 mm <sup>2</sup> - 1 mm <sup>2</sup>	Knurled	1,6 A / max. 9 A	19-30 V DC	yes
	PVC	0.5 mm <sup>2</sup> - 1 mm <sup>3</sup>	Knurled	1,6 A / max. 9 A	19-30 V DC	yes
	PVC	0.5 mm <sup>2</sup> - 1 mm <sup>4</sup>	Knurled	1,6 A / max. 9 A	18-30 V DC	yes
 Distribution box	PVC	0.5 mm <sup>2</sup> - 1 mm <sup>5</sup>	Knurled	4 A / max. 12 A	11-30 V DC	yes / no
	PVC	0.5 mm <sup>2</sup> - 1 mm <sup>6</sup>	Knurled	4 A / max. 12 A	11-30 V DC	yes / no

Operating Temperature range	Protection degree	Shielding	Applications / Markets	Characteristics
-40 °C to +105 °C	IP67, IP68, IP69K	N/A	Machine Building, Sensor Automation, Automotive, Robotics, Material Handling, Actuator Automation	
-40 °C to +105 °C	IP67, IP68, IP69K	N/A	Machine Building, Sensor Automation, Automotive, Robotics, Material Handling, Actuator Automation	
-25 °C to +70 °C shortly: +80 °C	IP67 / IP69K		Food processing & packaging, Material handling	
-25°C to +80°C	IP67 / IP69K		Food processing & packaging, Material handling	
-25 °C to +70 °C	IP67, IP69K	N/A	Machine Building, Sensor Automation, Automotive, Robotics, Material Handling, Actuator Automation	
-25 °C to +70 °C	IP67, IP69K	N/A	Machine Building, Sensor Automation, Automotive, Robotics, Material Handling, Actuator Automation	
-25 °C to +70 °C	IP67, IP69K	N/A	Machine Building, Sensor Automation, Automotive, Robotics, Material Handling, Actuator Automation	
-25 °C to +85 °C	IP67, IP68, IP69K	Available	Machine Building, Sensor Automation, Automotive, Robotics, Material Handling, Actuator Automation	
-40 °C to +90 °C	IP67, IP68, IP69K	Available	Machine Building, Sensor Automation, Automotive, Robotics, Material Handling, Actuator Automation	
-40 °C to +85 °C	IP67, IP68, IP69K	Available	Machine Building, Sensor Automation, Automotive, Robotics, Material Handling, Actuator Automation	
-25 °C to +70 °C	IP67, IP69K	N/A	Machine Building, Sensor Automation, Automotive, Robotics, Material Handling, Actuator Automation	
-40 °C to +105 °C	IP 65, IP 67, IP68, IP69K	N/A	Machine Building, Automotive, Manufacturing, Robotics, Material Handling, Actuator/ Sensor Automation	
-10°C bis +60°C	IP67	-	Discrete Manufacturing, Automotive Manufacturing, Robotics, Tooling Machines, Material Handling, Food & Beverage Processing	
-10°C bis +60°C	IP67	-	Discrete Manufacturing Automotive Manufacturing, Material Handling	
-10°C bis +60°C	IP67	-	Discrete Manufacturing, Automotive Manufacturing, Robotics, Material Handling	
-40°C to +80 °C drag chain: -25 °C to +60 °C UL: up to +60 °C	IP67	-	Machine Building, Automotive Manufacturing, Robotics	
-40°C to +80 °C drag chain: -25 °C to +60 °C UL: up to +60 °C	IP67	-	Machine Building, Automotive Manufacturing, Robotics	

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## Industrial IT

	Category	Power Range	Standards & Approvals	Management	Technology	Protocols	Application
	Unmanaged Industrial Switches	9,6 bis 32 V DC 18 bis 32 V DC	cUL 508, cUL 60950-1 E1 ISA 12.12.01 Class 1 Div 2 ATEX Zone 2	unmanaged	Industrial Ethernet Switch	Industrial Ethernet	Machine vision, Field level communication, Automation level on the machine
	Unmanaged Industrial Switches waterproof IP67	9,6 bis 32 V DC 24 bis 48 V DC	cUL 60950-1 Germanischer Lloyd E1 EN 50155, EN 50121-4 DIN 5510-2, NF F 16-101, NF F 16-102 EN 45545	unmanaged	Industrial Ethernet Switch	Industrial Ethernet	Field level communication, Automation level on the machine
	Compact & Modular Managed Industrial Switches	9,6 bis 32 V DC	cUL 61010-1	managed Layer 2	Industrial Ethernet Switch	Industrial Ethernet	Diagnostics, Field level communication, Automation level on the machine
	Compact & Modular Managed Industrial Switches	18 bis 32 V DC	cUL508 ISA 12.12.01 Class 1 Div 2	managed Layer 2	Industrial Ethernet Switch	Industrial Ethernet	Diagnostics, Field level communication, Automation level on the machine
	Compact & Modular Managed Industrial Switches	12/36/48 V DC (9,6 bis 60 V DC) 24 V AC (18 bis 30 V AC) 47-52 V DC (PoE)	cUL508 cUL1604 Class 1 Div 2 Germanischer Lloyd IEC 61850-3 IEEE 1613 EN 50121-4 ATEX Zone 2	managed Layer 2	Industrial Ethernet Switch	Industrial Ethernet PROFINET I/O EtherNet/IP	Machine vision, Diagnostics, Field level communication, Automation level on the machine
	Compact & Modular Managed Industrial Switches	18 bis 32 V DC 18 bis 60 V DC	cUL508 ISA 12.12.01 Class 1 Div 2 Germanischer Lloyd IEC 61850-3 IEEE 1613 EN 50121-4 ATEX Zone 2	managed Layer 2	Industrial Ethernet Switch	Industrial Ethernet PROFINET I/O EtherNet/IP	Machine vision, Diagnostics, operation & control, communication cabinets
	Modular Managed Backbone Switches	110 bis 240 V AC 24 V DC 48 V DC	cUL 508 Germanischer Lloyd	managed Layer 2/3	Industrial Ethernet Switch	Industrial Ethernet PROFINET I/O EtherNet/IP	Control level of the machines, operation & control, communication cabinets
	Managed Industrial Switches waterproof IP54/67	24/36/48 V DC (9,6 bis 60 V DC) 72 bis 110 V DC 48 - 57 V DC (PoE)	cUL 60950-1 Germanischer Lloyd E1 EN 50155, EN 50121-4 DIN 5510-2, NF F 16-101, NF F 16-102 EN 45545	managed Layer 2/3	Industrial Ethernet Switch	Industrial Ethernet PROFINET I/O EtherNet/IP	Field level communication, Automation level on the machine, machine vision
	Industrial Security & Firewall	12/24/48 V DC 24 V AC	cUL508 Germanischer Lloyd IEC 61850-3 IEEE 1613 EN 50121-4	managed	Firewall	Industrial Ethernet	Cyber Security, Secure remote access, secure access
	Industrial Wireless LAN	90 bis 265 V AC 48 bis 320 V DC 24/36/48 V DC (18 bis 60 V DC)	EN 60950-1 UL 60950-1 EN 300 328 EN 50155 EN 61850 E1 ANSI/ISA 61010-1+Class 1 div2 ATEX Zone 2 Australien China Europa (CE) Indien Japan Singapur USA/Kanada (FCC/IC)	managed AP/AC	WLAN 802.11a/h/b/g/n	Industrial Ethernet PROFINET I/O EtherNet/IP	Remote access, Wireless Maintenance, Repair and Operation, AGV systems, Material supply systems, Material handling


**Keep your system up and running with integrated, seamless solutions from Belden**


Government regulations, market globalization and consumer preferences are driving changes across the entire food and beverage industry. You need greater flexibility, cost-effective automation, and increased quality control. Belden offers future-proof products and services specifically designed for food and beverage and consumer packaging environments, including:

- Connectivity, cabling, cable management, and I/O modules
- Industrial Ethernet switches, firewalls, and Wireless LANs (WLANs)
- Expert Network Management design and consultation

These solutions will strengthen your network communication – even in environments with extreme mechanical stress and wide temperature ranges – to help you avoid downtime and improve profitability.

Plus, Belden offers international product availability, onsite or online training and expert technical support wherever you are.

Industrial Cable FIBER								
	Product Family	Type	Fiber Type	Wave-length (nm)	Jacket Material	Temperature Range (F1)	Application	Characteristics
	Central Loose Tube Cables	Rodent Protection Cables Corrugated Steel Tape Cables Steel Wire Braid Cables Steel Wire Armored Cables Fiber Reinforced Plastic Armored Cables	9/125 G.652 D OS2 9/125 G.655 C & D 62.5/125 OM1	1310, 1550 1550 850, 1300	PE, PUR, FRNC/LSNH	Transport/storage: -30 °C to +70 °C Installation: -5 °C to +50 °C Operation: -30 °C to +70 °C	Data communication	Halogen-free Flame retardant Non corrosive Low smoke density Watertight Direct burial Outdoor
	Multi Loose Tube Cables	Rodent Protected Cables Corrugated Steel Tape Cables Steel Wire Armored Cables All Dielectric Self Supporting Cable	50/125 OM2 50/125 OM3 50/125 OM4	850, 1300 850, 1300 850, 1300				

Industrial Cable MIPP										
	Product Family	Range	Adapter/Keystone	Fiber Type/Copper Category	IP Rating	Housing	Operating Temperature Range	Body Type	Application	Characteristics
	MIPP Patching and Termination Solution	MIPP Fiber Splice Box	LC, SC, ST, ST metal and E-2000™ fiber duplex adapters	Multimode: OM1, OM2, OM3 and OM4 Singlemode: OS2, and APC	IP30	Robust aluminium housing	-20°C to +70°C	DIN Rail Wall Mount	Structured cabling, Material handling, food processing	Robust housing IP30
		MIPP Copper Panel	RJ45 copper keystone jacks (Shielded and Unshielded, Cat 5e, Cat 6, Cat 6A) RJ45 copper coupler (Shielded and Unshielded, Cat 6A)	Shielded and Unshielded: Cat 5e, Cat 6 and Cat 6A						
		MIPP Mix	Mix	Mix						

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## Industrial Cable

	Product Family	Protocol	Operating Temperature Range	Approvals	Connector & IP Rating	Body Type	Application	Characteristics
	Cables	Industrial Ethernet	-40°C up to +80°C Plenum: -70°C up to +150°C	DataTuff: UL/AWM IEC RailTuff: EN 50155:2007, Class TX (-40 °C to +85 °C) EN/TS 45545-2:2009 DIN 5510-2 ISO/IEC 11801 2nd edition IEC 61156-6	N/A	N/A	Data communication, Control cabinets, Machine vision, Factory Automation,	Torsion resistant Abrasion resistant LSNH Plenum/High Temp 
		PROFINET	-40°C up to +80°C	DataTuff: IEC RailTuff: EN 50155:2007, Class TX (-40 °C to +85 °C) EN/TS 45545-2:2009 DIN 5510-2 ISO/IEC 11801 2nd edition IEC 61156-6	N/A	N/A		Torsion resistant Abrasion resistant LSNH Fast-Connect 
	Patch cords	Industrial Ethernet	-10°C up to +60°C -40°C up to +75°C	UL/AWM	RJ45 with IP20 and IP68	Over Mold Sliding Booth		Torsion Abrasion resistant LSNH 
		PROFINET	-10°C up to +60°C	N/A	RJ45 with IP20	Over Mold		Abrasion resistant LSNH 
	Serial Fieldbus		-40 °C up to +150 °C High temperature and plenum: -70 °C up to +200 °C	UL IEC NFPA	N/A	N/A	Control communication, Field level communication and wiring, Factory Automation, Discrete manufacturing, Process industry	High temp/Plenum LSNH Outdoor Torsion resistant Rodent protection Termite protection Fast Connect 
	Sensor/Actuator		High temp. up to +80 °C PUR /+105 °C PVC	UL/AWM	N/A	N/A	Sensors / Actuators/ Valve connection Field level communication Factory Automation	Torsion resistant Free of halogen LABS free Phosphorus free 
	Control Cables		-40 °C to high temp. up to +80 °C PUR PVC: +105 °C	CSA Standard UL FT4 OEM design per request	N/A	N/A	Motors and Drives, Control system, lighting, cooling equipment, appliances	Abrasion resistant Torsion resistant Halogen free Heat, Cold resistant Corrosion resistant Rodent protection Termite protection Direct burial 