



Factory Automation

Reliable Transmission of Signal &
Data in Industrial Environments

LOROM Factory Automation Cables

Designed for Any Harsh Industrial Environment

Your challenge, our solution:

Lorom and our specialized industrial business unit has in the past 15 years been a leading supplier to the world leading fortune 500 companies in industrial applications for both bulk cable and state of the art customized and standardized cable assemblies.

Our specialized integral knowledge supported senior engineering staff assists our partners and customers in the entire value chain.

Problem definition, feasibility, tooling, prototype and test, creating customized cables, cable assembly and integrated system solutions through to logistics concepts, engaged in the entire lifecycle of your products.

Our advanced high performance products comprises solution for applications in almost any circumstance and environment.



- Cold Bend
- Water Immersion
- UV Exposure
- Crushing
- Oil & Chemical Resistance
- Direct Burial
- Abrasion
- Cut Through
- Cold Impact
- High Temperature
- Weld Splatter Proof
- Rodent Protected

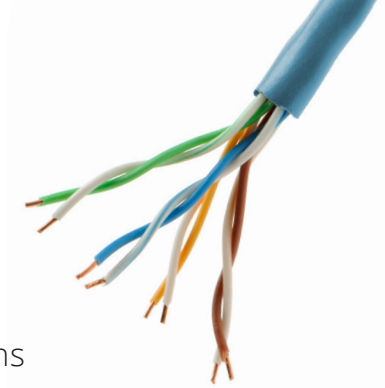
Industrial Ethernet

Category 5e, Category 6 and Enhanced Category 7 cables:

- Unshielded or shielded cables
- Solid or stranded conductors
- Plenum or non-plenum
- Polyolefin or FEP insulation
- PVC, Polyethylene, FEP, and TPE jackets
- Halogen-free and Low Smoke Zero Halogen constructions
- Direct burial or outdoor use, gasoline resistance, high and low temperatures

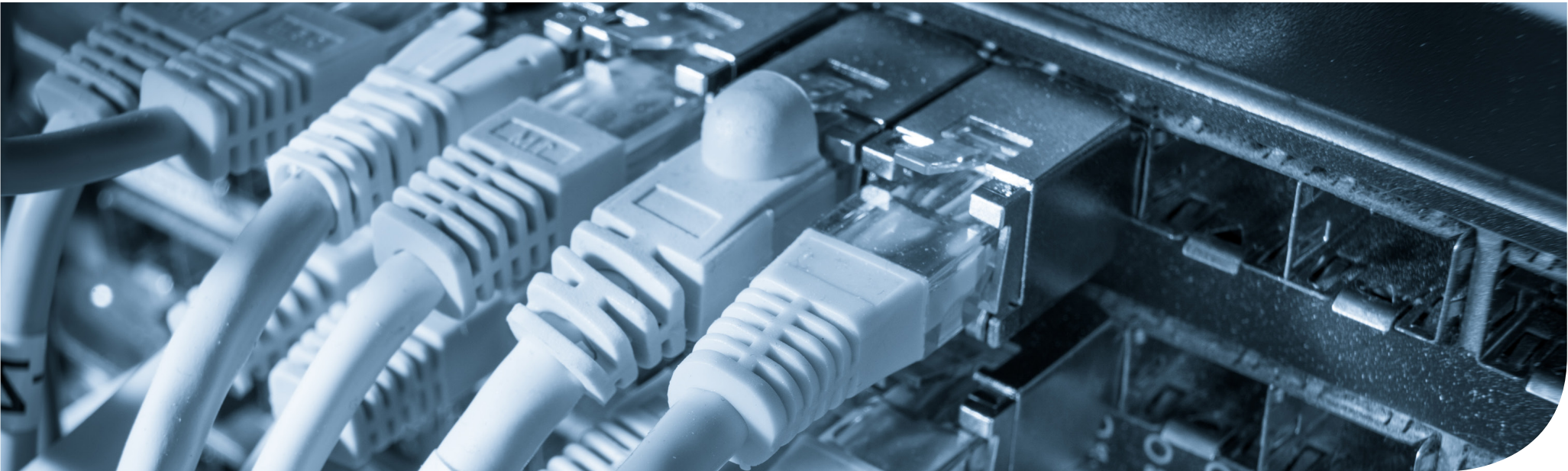
Any harsh environment:

- Oil, sunlight and gasoline
- Temperature variations
- Abrasion and crushing
- Flexing, Cable chain, Torsional conditions
- Presence of EMI/RFI
(electromagnetic interference or radio frequency interference)
- Welds splatter resistance



Application	Performance	AWG	Stranding	Conductor Plating	OD Primary mm	# Cond.	# Pairs	Pair Shield	Shield #1	Shield #2	Jacket	OD mm
Industrial Ethernet	Cat5e	22	Solid	BC	1.5	NA	2	-	AL	TC Braid	PVC	6.5
Industrial Ethernet	Cat5e	22	Solid	BC	1.5	NA	2	-	AL	TC Braid	LSOH	6.5
Industrial Ethernet	Cat5e	22	Solid	BC	1.5	NA	2	-	AL	TC Braid	PE	6.5
Industrial Ethernet	Cat5e	22	7	BC	1.5	NA	2	-	AL	TC Braid	LSOH	6.5
Industrial Ethernet	Cat5e	22	7	BC	1.5	NA	2	-	AL	TC Braid	LSOH	6.5
Industrial Ethernet	Cat5e	22	7	BC	1.5	NA	2	-	AL	TC Braid	LSOH	6.5
Industrial Ethernet	Cat5e	22	7	BC	1.5	NA	2	-	AL	TC Braid	PUR	6.5
Industrial Ethernet	Cat6	14	Solid	BC	1	NA	4	-	AL	TC Braid	PVC	8
Industrial Ethernet	Cat6	24	7	BC	1.1	NA	4	-	AL	TC Braid	PVC	8
Industrial Ethernet	Cat6	24	7	BC	1.1	NA	4	-	AL	TC Braid	PUR	8
Industrial Ethernet	Cat7	23	Solid	BC	1.4	NA	4	AL	AL	TC Braid	PUR	8.2
Industrial Ethernet	Cat5	26	19	BC	1	NA	4	-	AL	TC Braid	PUR	6

FieldBus



Compliant with Fieldbus Spec IEC 61158-2(ISA/SP-50)

- Excellent electrical characteristics
 - Low capacitance (for long runs)
 - Also available Versions in 22, 18, 16 and 14 AWG stranded tinned copper conductors
 - Standard multi-pair cables available in 2 to 24 pairs and up to 50 pairs depending on construction
- PLTC/ITC-ER, PLTC, and TC-ER versions as well as C(UL) CIC Type TC are available
 - Easily identifiable Orange jacket
 - Blue jacket available for Intrinsically Safe applications
 - RoHS compliant and CE approved
 - CMX-Outdoor

Application	Performance	AWG	Stranding	Conductor Plating	OD Primary mm	# Cond.	# Pairs	Pair Shield	Shield #1	Shield #2	Jacket	OD mm
FieldBus	-	19+22	41+37	BC	2.0+2.85	1	1	-	AL	TC Braid	PVC	7.9
FieldBus	-	19	37	BC	2.85	NA	1	-	AL	TC Braid	PVC	7.9

ProfiBus

Application specific custom cable designs are available upon request with solution-oriented features such as:

- Armoured versions also available
- Jackets: PVC, CPE, LDPE, TPE, HDPE, Fluor copolymer, Oil Res II, Low Smoke Zero Halogen (LSOH), and Polyurethane
- Complies with Profibus specification EN50170-2-2:1996
- Shielding: Overall Aluminum Mylar foil, bonded foil, TC Braid, TC Double Braid
- Insulations: Skin Foam Skin, PE, XLPE, FEP, Polypropylene, Foam FEP, HDPE, PVC, TPE, and PVC-Nylon
- Standard version UL listed PLTC CSA CMX-Outdoor-CMG and FT4

Application	Performance	AWG	Stranding	Conductor Plating	OD Primary mm	# Cond.	# Pairs	Pair Shield	Shield #1	Shield #2	Jacket	OD mm
Profibus	-	22	Solid	BC	2.55	NA	1	-	AL	TC Braid	PVC	8
Profibus	-	22	Solid	BC	2.55	NA	1	-	AL	TC Braid	LSOH	8
Profibus	-	22	Solid	BC	2.55	NA	1	-	AL	TC Braid	PUR	8
Profibus	Food industry	22	Solid	BC	2.55	NA	1	-	AL	TC Braid	PE	8
Profibus	-	22	Solid	BC	2.55	NA	1	-	AL	TC Braid	PE	10.8
Profibus	Food industry	23	19	BC	2.55	NA	1	-	AL	TC Braid	PUR	8
Profibus	Food industry	23	19	BC	2.55	NA	1	-	AL	TC Braid	PUR	8
Profibus	-	22	Solid	BC	2.55	NA	1	-	AL	TC Braid	FEP	8
Industrial Ethernet	Cat6	24	7	BC	1.1	NA	4	-	AL	TC Braid	PVC	8
Industrial Ethernet	Cat6	24	7	BC	1.1	NA	4	-	AL	TC Braid	PUR	8
Industrial Ethernet	Cat7	23	Solid	BC	1.4	NA	4	AL	AL	TC Braid	PUR	8.2
Industrial Ethernet	Cat5	26	19	BC	1	NA	4	-	AL	TC Braid	PUR	6

DeviceNet

LOROM excellence in high flexes cables and rugged DeviceNet cable specifically designed for the tough plant environments utilizing networked discrete automation and control.

Through continued product innovation and engagement with the top leading equipment and component manufacturers we remains the leading manufacturer of cables for industrial networking.

LOROM DeviceNet Cables include offerings:

- 10 million flex cycle ODVA Mid about flex testing
- Thick and Special PLTC Thin PLTC (power limited tray cable) rated –CL2 and CL3 per NEC 725.61
- Special PLTC Thin design with 22AWG data pair, PLTC rated
- Thick cable 600V rated, Thin cable 300V rated
- Oil, sunlight, weather resistant gray PVC, LSOH and PUR jackets
- Direct burial, outdoor use

Application	Performance	AWG	Stranding	Conductor Plating	OD Primary mm	# Cond.	# Pairs	Pair Shield	Shield #1	Shield #2	Jacket	OD mm
DeviceNet	Thick Cable	18+15	19+19	BC	3.8+1.7	NA	2	AL	-	TC Braid	PVC	11
DeviceNet	Thin Cable	24+22	19+19	BC	1.9+1.4	NA	2	AL	-	TC Braid	PVC	6.4
DeviceNet	Thick Cable	18+15	19+19	BC	3.8+1.7	NA	2	AL	-	TC Braid	LSOH	12
DeviceNet	Thin Cable	24+22	19+19	BC	1.9+1.4	NA	2	AL	-	TC Braid	LSOH	6.9
DeviceNet	Thick Cable	18+15	40 + 84	BC	3.8+1.7	NA	2	AL	-	TC Braid	PVC	11
DeviceNet	Thin Cable	24+22	19+19	BC	1.9+1.4	NA	2	AL	-	TC Braid	PVC	6.4
DeviceNet	Thick Cable	18+15	19+19	BC	3.8+1.7	NA	2	AL	-	TC Braid	LSOH	12
DeviceNet	Thin Cable	24+22	19+19	BC	1.9+1.4	NA	2	AL	-	TC Braid	LSOH	6.9
Industrial Ethernet	Cat6	24	7	BC	1.1	NA	4	-	AL	TC Braid	PVC	8
Industrial Ethernet	Cat6	24	7	BC	1.1	NA	4	-	AL	TC Braid	PUR	8
Industrial Ethernet	Cat7	23	Solid	BC	1.4	NA	4	AL	AL	TC Braid	PUR	8.2
Industrial Ethernet	Cat5	26	19	BC	1	NA	4	-	AL	TC Braid	PUR	6

CCLink

Lorom CC-Link cables are engineered specifically to meet and exceed the CC-Link performance testing requirements.

300V interconnect; 110-ohm cables are available for this purpose: Our cables are equivalent to Mitsubishi Part No. BA1SJ61-S) for Data transmission, and to Mitsubishi Part No. BA1SJ61-P) for Data transmission and power in the same cable.

Custom cables are available upon request:

- Armoured versions also available
- Jackets: PVC, CPE, LDPE, TPE, HDPE, Fluorocopolymer, Oil Res Low Smoke Zero Halogen (LSZH), Haloarrest, and Polyurethane
- Shielding: Overall Al/Mylar, TC Braid, TC Double Braid, Tape Shields
- Insulations: Skin – Foam - Skin, PE, XLPE, FEP, Polypropylene, Foam FEP, HDPE, PVC, TPE, and PVC-Nylon

Application	Performance	AWG	Stranding	Conductor Plating	OD Primary mm	# Cond.	# Pairs	Pair Shield	Shield #1	Shield #2	Jacket	OD mm
CCLink	-	20	7	BC	2.2	3	-	-	AL	TC Braid	PVC	7.7
CCLink	Easy Strip	20	7	BC	2.2	3	-	-	AL	TC Braid	PUR	8.5
CCLink	-	20+18	7	BC	2.3+2.2	3	-	-	AL	TC Braid	PVC	12.6

EIB

Application	Performance	AWG	Stranding	Conductor Plating	OD Primary mm	# Cond.	# Pairs	Pair Shield	Shield #1	Shield #2	Jacket	OD mm
EIB	-	20	solid	BC	1.6	4	-	-	AL	-	PVC	6.1
EIB	-	20	solid	BC	1.4	-	2	-	AL	-	LSOH	6.3

Interbus

Application	Performance	AWG	Stranding	Conductor Plating	OD Primary mm	# Cond.	# Pairs	Pair Shield	Shield #1	Shield #2	Jacket	OD mm
Interbus	-	24	7	BC	1.1	NA	3	-	-	TC Braid	PVC	6.7
Interbus	-	24	32	BC	1.1	NA	3	-	-	TC Braid	PUR	7
Interbus	-	24+17	19+7	BC	1.7+1.04	3	3	-	-	TC Braid	PVC	9.4

CANBus EIA-485

Application	Performance	AWG	Stranding	Conductor Plating	OD Primary mm	# Cond.	# Pairs	Pair Shield	Shield #1	Shield #2	Jacket	OD mm
CANBus	-	24	7	BC	1.55	NA	1	-	-	TC Braid	PVC	5.8
CANBus	-	22	7	BC	2	NA	1	-	-	TC Braid	PVC	6.8
CANBus	-	20	7	BC	2.4	NA	1	-	-	TC Braid	PVC	7.5
CANBus	-	24	7	BC	1.3	NA	2	-	-	TC Braid	PVC	7.5
CANBus	-	22	7	BC	1.7	NA	2	-	-	TC Braid	PVC	8.5
CANBus	-	20	7	BC	2	NA	2	-	-	TC Braid	PVC	9.6
CANBus	-	24	7	BC	1.55	NA	1	-	-	TC Braid	PUR	6.5
CANBus	-	22	7	BC	2	NA	1	-	-	TC Braid	PUR	6.9
CANBus	-	20	7	BC	2.4	NA	1	-	-	TC Braid	PUR	7.7
CANBus	Trailing	24	19	BC	1.4	4	-	-	-	TC Braid	PUR	6.4
CANBus	Trailing	22	19	BC	1.8	4	-	-	-	TC Braid	PUR	7.4
CANBus	Trailing	21	61	BC	2.3	4	-	-	-	TC Braid	PUR	8.8
CANBus	Trailing	19	37	BC	2.6	4	-	-	-	TC Braid	PUR	9.5

SafetyBus

Application	Performance	AWG	Stranding	Conductor Plating	OD Primary mm	# Cond.	# Pairs	Pair Shield	Shield #1	Shield #2	Jacket	OD mm
SafetyBus	Easy Strip	19	19	BC	2.6	3	-	-	-	TC Braid	PVC	8
SafetyBus	Easy Strip	19	19	BC	2.6	3	-	-	-	TC Braid	LSOH	8.2
SafetyBus	Easy Strip	19	19	BC	2.6	3	-	-	-	TC Braid	PUR	8.2

AS Interface

Application	Performance	AWG	Stranding	Conductor Plating	OD Primary mm	# Cond.	# Pairs	Pair Shield	Shield #1	Shield #2	Jacket	OD mm
AS interface	Flat Cable	17	84	BC	2.5	2					TPE	
AS interface	Flat Cable	17	84	BC	2.5	2					PUR	
AS interface	Flat Cable	17	84	BC	2.5	2					PVC	
AS interface	Flat Cable	14	84	BC	2.5	2					PUR	
AS interface	Co Extruded Black Stripe	12	77	BC	4.8	4					LSOH	15.1

HMI & Standard Bus Cables

Application	Performance	AWG	Stranding	Conductor Plating	OD Primary mm	# Cond.	# Pairs	Pair Shield	Shield #1	Shield #2	Jacket	OD mm
Industrial USB 2.0		28	7	TC	0.85	2	1	AL	AL	TC Braid	PUR	4.2
Industrial USB 3.0		28	7	TC		2	2	AL	AL	TC Braid	PUR	5.7
Industrial Firewire 1394		30+26	7	TC	0.3+0.75	2	2	AL	AL	TC Braid	PUR	5.2
AS interface	Co Extruded Black Stripe	12	77	BC	4.8	4					LSOH	15.1



LOROM Extensive Material Science Capability

Our state of the art compound facility in Hangzhou China supported by chemical engineering staff and associated labs provides enables unprecedented innovation in design cables and cable systems to match any application environment.

Our insulation system capabilities:

- Ram extruded PTFE
- Melt extruded fluorocarbon materials
- Thermoset Crosslinking, eBeam Crosslinking
- Low temperature melt extruded materials, PE, PVC, Nylon
- Polyolefin, and foam polyolefin
- Gas injected Fluorocarbon, and polyolefin dielectrics
- LSOH and Thermoplastic polymers, TPE
- Polyurethane
- Polyamide Fuse-able tapes, and PTFE and ePTFE tapes
- Silicone insulation systems



Lab & Testing Facilities

In our extensive R&D state of the art lab's we can test any condition that your cables and cable systems with be subject to, from environmental conditions such as heat, cold bend, UV exposure, bio burden, humidity, dust, vibration.

As well as mechanical stress such as rolling flex, tic-toc flex, impact and crush resistance and torsion.

During the design cycle, we assimilate the application environment by building test fixture and jigs in house to match that of the real life situation.

Our ultimate objective is 0 defects in the field in harsh industrial environment.



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