

# lynx<sup>x</sup>eo

Wired to electrify industry

**MOTIONLINE<sup>®</sup>**  
high performance cables  
to power your equipment

MOTIONLINE<sup>®</sup> PREMIUM



# About Lynxéo

## A global leader in industrial automation cables

Lynxéo is the new identity of Nexans' Industry Solutions & Projects (ISP) activity. This new identity allows Lynxéo to operate with greater agility, focusing on industrial markets and especially automation, as well as other specialized verticals, and delivering cable solutions that meet the evolving demands of machine builders, robotics manufacturers, and automation engineers.

With a rapidly growing global presence, Lynxéo serves more than 30 countries and employs more than 2,000 industry experts dedicated to advancing industrial technologies. Generating nearly \$1 billion in revenue, Lynxéo continues to expand its manufacturing, R&D, and customer support capabilities to serve an increasingly complex and dynamic market.



## A customer-centric approach

Lynxéo is built to provide fast response times, localized production, and deep technical expertise in motion cables for automation. Our specialized team works closely with customers

to develop innovative, high-performance solutions that enhance machine reliability, efficiency, and longevity.

## Industry-leading innovation and reliability

As a specialist in dynamic cable solutions, Lynxéo continuously invests in engineering, testing, and materials development to ensure our products meet the highest standards of durability and flexibility. Whether for high-

speed robotic applications, drag chain systems, or harsh industrial environments, our cables are designed to withstand the most demanding conditions.

## Built for today and ready for tomorrow

Lynxéo is growing fast, expanding its global reach and manufacturing capabilities to better support the automation industry. With a strong commitment to innovation, sustainability, and performance, we are powering the next

generation of industrial automation—delivering cutting-edge cable solutions that keep businesses moving forward.



# Challenges to automation in North America

## Several factors are driving this expansion:

- **Rising Labor Costs & Workforce Shortages**  
With increasing labor costs and a shrinking pool of skilled workers, companies across North America are investing in automation to sustain production efficiency and fill critical labor gaps.
- **Reshoring & Supply Chain Resilience**  
Many manufacturers are reshoring operations to the U.S. while Canada and Mexico play key roles in nearshoring strategies, helping to balance cost efficiency with supply chain reliability.
- **Advancements in Smart Manufacturing**  
The adoption of Industry 4.0 and Industrial Internet of Things (IIoT) technologies has led to greater use of robotics, real-time data analysis, and AI-driven automation across the region.
- **Customization & Flexible Production**  
The demand for more customized products is pushing manufacturers to adopt flexible automation systems that can quickly adapt to varying production needs in the U.S., Canada, and Mexico.
- **Energy Efficiency & Sustainability**  
Manufacturers across North America are seeking solutions to reduce energy consumption and carbon footprints, with automation playing a critical role in achieving sustainability goals.

Industrial automation in North America continues to grow at a rapid pace, with the United States leading the way as the second-largest market for industrial robots. Nearly 40,000 new robots are installed annually in the U.S., representing the vast majority of installations in the region. Canada and Mexico are also seeing increased adoption, particularly in automotive, electronics, and manufacturing hubs that support regional and global supply chains.

## WHAT NORTH AMERICAN MACHINE TOOL AND ROBOT MANUFACTURERS EXPECT FROM A CABLE SUPPLIER

To meet the demands of high-performance automation systems, manufacturers require cable solutions that offer:

- **Proven Performance & Reliability**  
Robust, high-flex cables that withstand harsh industrial environments and minimize machine downtime.
- **Fast & Reliable Availability**  
Local inventory and quick delivery across North America to support just-in-time manufacturing needs.
- **Compliance with North American & International Standards** – Cables designed to meet UL (U.S.), CSA (Canada), and NEC requirements for safe and reliable operation.
- **Technical Expertise & Support**  
Responsive engineering support for U.S., Canadian, and Mexican manufacturers to assist with product selection, installation, and troubleshooting.
- **Continuous Innovation**  
Advanced cable solutions that keep pace with the latest trends in robotics, motion control, and industrial automation.

## MEETING THE CHALLENGE WITH THE RIGHT CABLING SOLUTIONS

Overcoming these automation challenges requires high-performance cables designed for durability, flexibility, and compliance with North American industry standards. This is where Lynxco's MOTIONLINE® cable solutions provide a competitive advantage.



# The preferred cable partner North America automation



As an innovative partner for leading automation, machine tool, and robot manufacturers, Lynxco continuously enhances its MOTIONLINE® cables to deliver unmatched performance, reliability, and efficiency. Whether for high-speed robotic arms in the U.S., automated manufacturing in Canada, or flexible production in Mexico, Lynxco provides the right cabling solutions to keep North American manufacturing moving forward.

# MOTIONLINE® high performance reliable and flexible MOTIONLINE® cables for North America

Lynxco's MOTIONLINE® brand offers a comprehensive range of dynamic cables designed to ensure seamless interconnection, control, and process efficiency in robotics, machine tools, and automated production lines across North America.

MOTIONLINE® cables are engineered for high-flex, high-performance applications and are manufactured to meet the most stringent safety and quality standards, including:

- UL (United States)
- CSA (Canada)
- VDE (Germany)
- CCC (China)
- ANSI (International Standards)

## DESIGNED FOR HIGH/SUPERIOR PERFORMANCE

- **Full Range of Cables for Automation**  
Covering power, Control, Servo & VFD, Sensor, Hybrid, and Fieldbus including Industrial Ethernet (CAT6+) applications.
- **Proven Reliability & Longevity**  
Developed with innovative materials and optimized designs to maintain electrical performance and withstand extreme motion stress.
- **Quick Availability & Short Lead Times**  
Standard cables stocked locally in North America to support fast delivery and production flexibility.
- **Simplified Installation & Connectivity**  
Engineered for easy strippability/strip ability and seamless integration into automation systems.
- **Customized Solutions**  
Tailored designs, modular connectivity, and application-specific configurations to meet unique customer needs.

# Custom solutions design for demanding application

Lynxeo understands that OEMs and automation engineers require cable solutions that meet specific performance, durability, and environmental demands. Whether an application calls for a fully customer-designed cable or a co-engineered solution leveraging Lynxeo's expertise, we provide tailored products that optimize reliability, longevity, and efficiency.

Our extensive engineering and testing capabilities ensure that every cable we develop meets the rigorous demands of industrial automation, robotics, machine tools, and dynamic motion applications.

### TWO PATHS TO CUSTOMIZED CABLE SOLUTIONS

- Customer-Specified Cables - Lynxeo manufactures cables that are fully designed and specified by the customer, ensuring seamless integration into proprietary systems while meeting application requirements.
- Co-Developed Solutions - Lynxeo partners with OEMs to design, test, and refine cable solutions, applying our material science, electrical performance expertise, and mechanical engineering knowledge to deliver an optimized final product.



# From raw materials to cables



# DESINA standardization in industrial automation



**DESINA**, short for **D**istribut**E**d and **S**tandardised **I**nst**A**llation technology, is a specification designed to standardize electrical, hydraulic, and pneumatic components within CNC-controlled machine tools and manufacturing systems. By establishing a unified platform,

DESINA simplifies installation, maintenance, and system compatibility across industrial automation environments.

While DESINA covers various aspects of system integration, it is particularly well known in the cable industry for its color-coded classification system, which provides clear identification of cable types and applications.

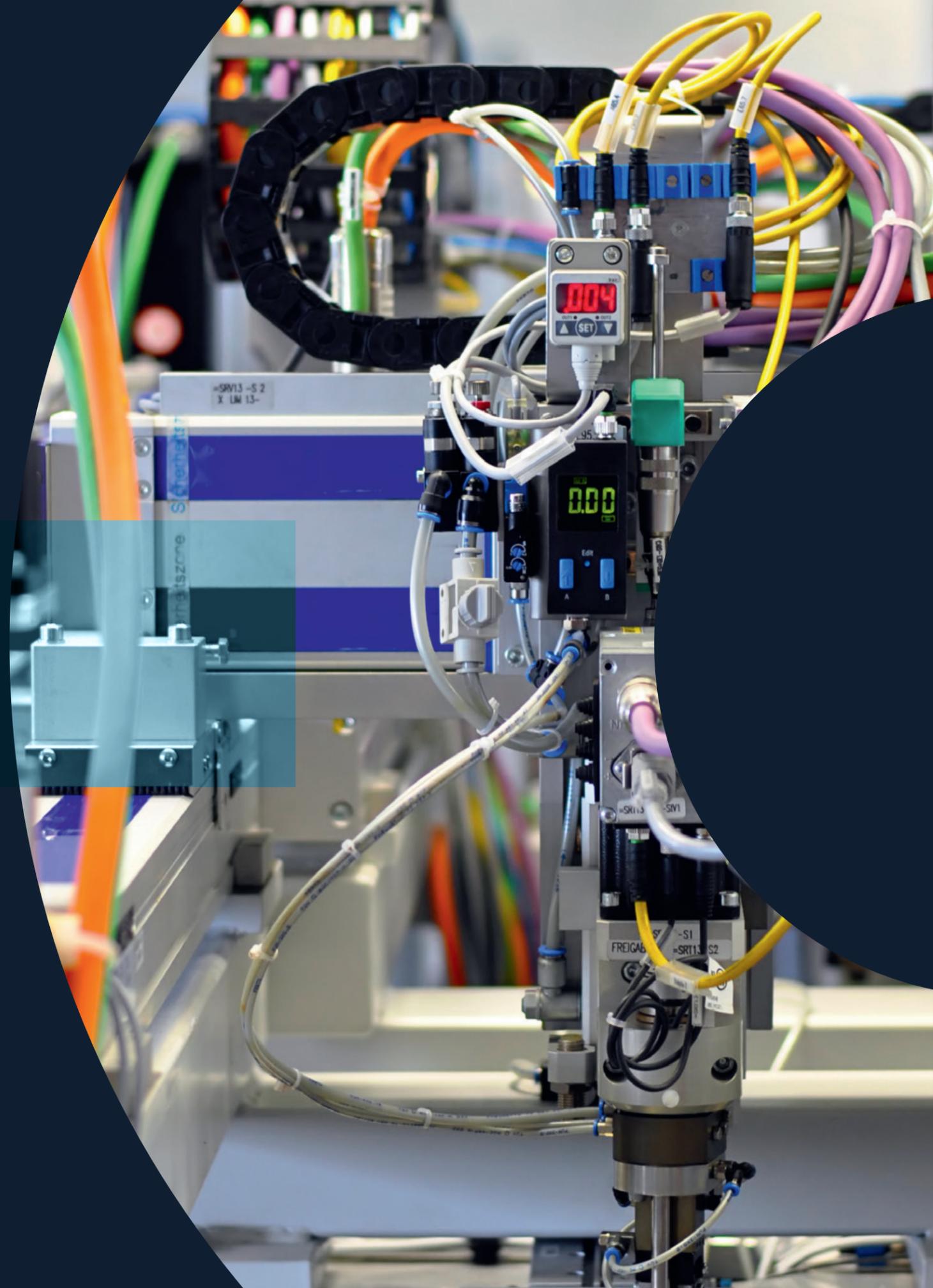


Lynxco offers a full range of cables that adhere to DESINA color coding, ensuring easy selection and compatibility within standardized machine architectures. Additionally, the structure of this catalog follows the DESINA color-coding system, making it easier for customers to identify the right cables for their specific applications.

COLOR CODE	APPLICATION
Orange (RAL 2003)	Servo Cable
Green (RAL 6018)	Measuring Systems
Violet (RAL 4001)	Fieldbus
Yellow (RAL 1021)	Sensor/Actuator
Black (RAL 9005)	Power Cable
Gray (RAL 7040)	Control Cable



By aligning with DESINA standards, Lynxco ensures that its cables meet industry-wide expectations for performance, organization, and seamless integration into automated manufacturing systems.





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# SENSOR TPU-Sensor Cable

## MOTIONLINE® PREMIUM

Extreme Flex Sensor Cables for Drag Chain and C-Track Applications Halogen free

Designed for high-performance in demanding industrial environments, these sensor cables are ideal for continuous flexing and drag chain use. Engineered with a durable TPU/PUR jacket, they offer exceptional resistance to oils, abrasion, and chemicals while being flame retardant and halogen-free for enhanced safety.



Halogen Free

Silicone Free

Oil resistant  
See Properties

Flame retardant  
See Properties

### FLEXING INFORMATION

Bending radius	≥ 7.5 x Ø
Drag chain cycles	5 Million
Speed	≤ 16.4 ft/sec (300 m/min)
Acceleration	≤ 164 ft/sec <sup>2</sup> (50 m/s <sup>2</sup> )
Maximum Chain length	≤ 164 ft (50 m)
Temperature	Flexing: -22° to 176° F (-30° to 80° C) Fixed: -40° to 176° F (-40° to 80° C)

### CABLE DESIGN

Conductor	Bare copper
Core insulation	Polyolefin (PP)
Core identification	3-Core: Brown/Black/Blue 4-Core: Brown/Black/Blue/White 5-Core: Brown/Black/Blue/White/Gray
Core stranding	Cores stranded with fillers
Jacket	TPU/PUR Oil Resistant
Color	Black (similar RAL 9005) Yellow (similar RAL 1021)

### ELECTRICAL PROPERTIES

Rated Voltage	300 V
Test Voltage	2000 V

### PROPERTIES

Oil resistance	IEC 60811-404
Flame retardant	CSA FT1; UL1581 FT2
Halogen Free	Yes
UL/CSA	AWM style 20549
CE	UL Recognized / CSA Approval
DESINA	Yes
Silicon free	Yes
Reach	Yes
RoHS-II conform	Yes

Cable Design	Description	Part Number	Nominal Diameter [mm]	Maximum Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
3x24 AWG / 3x0.25mm <sup>2</sup>	3x24 AWG Conductors, Bn/Bk/Bu - Black TPU Jacket	10573182	4.1	0.161	0.0155	0.0230	23
4x24 AWG / 4x0.25mm <sup>2</sup>	4x24 AWG Conductors, Bn/Bk/Bu/Wh - Black TPU Jacket	10573181	4.5	0.177	0.0181	0.0270	27
3x22 AWG / 3x0.34mm <sup>2</sup>	3x22 AWG Conductors, Bn/Bk/Bu - Black TPU Jacket	10573180	4.1	0.161	0.0181	0.0270	27
4x22 AWG / 4x0.34mm <sup>2</sup>	4x22 AWG Conductors, Bn/Bk/Bu/Wh - Black TPU Jacket	10573109	4.5	0.177	0.0222	0.0330	33
5x22 AWG / 5x0.34mm <sup>2</sup>	5x22 AWG Conductors, Bn/Bk/Bu/Wh/Gy - Black TPU Jacket	10573131	4.8	0.189	0.0255	0.0380	38
3x24 AWG / 3x0.25mm <sup>2</sup>	3x24 AWG Conductors, Bn/Bk/Bu - Yellow TPU Jacket	10573184	4.1	0.161	0.0155	0.0230	23
4x24 AWG / 4x0.25mm <sup>2</sup>	4x24 AWG Conductors, Bn/Bk/Bu/Wh - Yellow TPU Jacket	10573186	4.5	0.177	0.0181	0.0270	27
3x22 AWG / 3x0.34mm <sup>2</sup>	3x22 AWG Conductors, Bn/Bk/Bu - Yellow TPU Jacket	10573187	4.1	0.161	0.0181	0.0270	27
4x22 AWG / 4x0.34mm <sup>2</sup>	4x22 AWG Conductors, Bn/Bk/Bu/Wh - Yellow TPU Jacket	10573188	4.5	0.177	0.0222	0.0330	33
5x22 AWG / 5x0.34mm <sup>2</sup>	5x22 AWG Conductors, Bn/Bk/Bu/Wh/Gy - Yellow TPU Jacket	10573189	4.8	0.189	0.0255	0.0380	38



# SENSOR PVC-Sensor Cable MOTIONLINE®

## Flexible Sensor Cables with PVC Jacket for Industrial Applications

These sensor cables are designed for flexible applications in industrial automation and machinery. Featuring a durable PVC jacket, they provide reliable resistance to oils, flame retardancy, and flexibility, making them ideal for many applications.



Silicone Free

Oil resistant  
See Properties

Flame retardant  
See Properties

### FLEXING INFORMATION

Bending radius	≥ 10 x Ø
Temperature	Flexing: 23° to 176° F (-5°C to 80° C) Fixed: -4° to 221° F (-20°C to +105°C)

### CABLE DESIGN

Conductor	Bare copper
Core insulation	PVC
Core identification	3-Core: Brown/Black/Blue 4-Core: Brown/Black/Blue/White 5-Core: Brown/Black/Blue/White/Gray
Core stranding	Cores stranded with fillers
Jacket	PVC Oil Resistant
Color	Black (similar RAL 9005) Yellow (similar RAL 1021) Gray (similar RAL 7001)

### ELECTRICAL PROPERTIES

Rated Voltage	300 V
Test Voltage	2000 V

### PROPERTIES

Oil resistance	IEC 60811-404
Flame retardant	CSA FT1; UL1581 FT2; VW-1; IEC 60332-1
UL/CSA	AWM style 2517
CE	yes
DE	Yes
Silicon free	Yes
Reach	Yes
RoHS-II conform	Yes

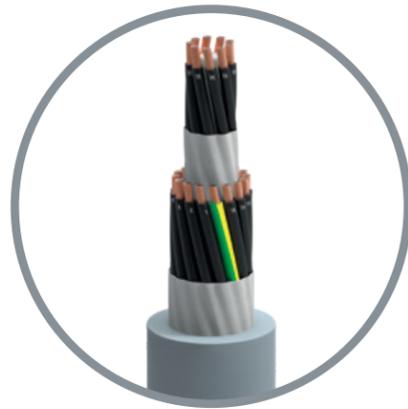
Cable Design	Description	Part Number	Nominal Diameter [mm]	Maximum Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
3x22 AWG / 3x0.34mm <sup>2</sup>	3x22 AWG Conductors, Bn/Bk/Bu - Black PVC Jacket	10580217	4.3	0.169	0.0181	0.0270	27
4x22 AWG / 4x0.34mm <sup>2</sup>	4x22 AWG Conductors, Bn/Bk/Bu/Wh - Black PVC Jacket	10580219	4.6	0.181	0.0222	0.0330	33
5x22 AWG / 5x0.34mm <sup>2</sup>	5x22 AWG Conductors, Bn/Bk/Bu/Wh/Gy - Black PVC Jacket	10580221	5.0	0.197	0.0255	0.0380	38
3x22 AWG / 3x0.34mm <sup>2</sup>	3x22 AWG Conductors, Bn/Bk/Bu - Yellow PVC Jacket	10580222	4.3	0.169	0.0181	0.0270	27
4x22 AWG / 4x0.34mm <sup>2</sup>	4x22 AWG Conductors, Bn/Bk/Bu/Wh - Yellow PVC Jacket	10580223	4.6	0.181	0.0222	0.0330	33
5x22 AWG / 5x0.34mm <sup>2</sup>	5x22 AWG Conductors, Bn/Bk/Bu/Wh/Gy - Yellow PVC Jacket	10580224	5.0	0.197	0.0255	0.0380	38



# CONTROL TPU-Control Cable MOTIONLINE® PREMIUM

TPU-Control cables for extremely flexing and C-track applications, TPU/PUR jacket, oil resistant, halogen free, UL and CSA approved

Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.





UK  
CA



UL



SP



Hal  
Halogen Free



Si  
Silicone Free



REACH  
ROHS



CE



Oil resistant  
See Properties



Flame retardant  
See Properties

### FLEXING INFORMATION

Bending radius	≥ 6.5 x Ø
Drag chain cycles	10 Million
Speed	≤ 32.8 ft/s (600 m/min)
Acceleration	≤ 196.9 ft/s <sup>2</sup> (60 m/s <sup>2</sup> )
Temperature	Flexing: -22° to 176° F (-30° to 80° C) Fixed: -40° to 176° F (-40° to 80° C)

### CABLE DESIGN

Conductor	Bare Copper
Core insulation	Polyolefin (PP)
Core identification	Black with white numbers with one green/yellow trace.
Core assembly	Cores stranded under a nonwoven tape.
Jacket	TPU/PUR
Color	Gray (similar RAL 7001)

### ELECTRICAL PROPERTIES

Rated Voltage	1000 V
Test Voltage	3000 V

### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 cable flame; VW-1; IEC 60332-1
Halogen free	Yes
UL/CSA	AWM style 20940
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

AWG	Number of Conductors	Cable Design	Description	Part Number	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
22	3	3C-22 AWG / 3G-0.5mm <sup>2</sup>	3x22 AWG - 2 Bk Numbered + 1 Gn/Ye - Gray TPU-Jacket	10577024	5.3	0.209	0.0215	0.0320	32.0
	4	4C-22 AWG / 4G-0.5mm <sup>2</sup>	4x22 AWG - 3 Bk Numbered + 1 Gn/Ye - Gray TPU-Jacket	10553970	5.7	0.224	0.0269	0.0400	40.0
	5	5C-22 AWG / 5G-0.5mm <sup>2</sup>	5x22 AWG - 4 Bk Numbered + 1 Gn/Ye - Gray TPU-Jacket	10573533	6.1	0.240	0.0316	0.0470	47.0
	7	7C-22 AWG / 7G-0.5mm <sup>2</sup>	7x22 AWG - 6 Bk Numbered + 1 Gn/Ye - Gray TPU-Jacket	10553986	7	0.276	0.0443	0.0660	66.0
	12	12C-22 AWG / 12G-0.5mm <sup>2</sup>	12x22 AWG - 11 Bk Numbered + 1 Gn/Ye - Gray TPU-Jacket	10563023	8.9	0.350	0.0672	0.1000	100.0
	18	18C-22 AWG / 18G-0.5mm <sup>2</sup>	18x22 AWG - 17 Bk Numbered + 1 Gn/Ye - Gray TPU-Jacket	10555824	10.2	0.402	0.0968	0.1440	144.0
	25	25C-22 AWG / 25G-0.5mm <sup>2</sup>	25x22 AWG - 24 Bk Numbered + 1 Gn/Ye - Gray TPU-Jacket	10555322	12.6	0.496	0.1465	0.2180	218.0
20	3	3C-20 AWG / 3G-0.75mm <sup>2</sup>	3x20 AWG - 2 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10577147	5.7	0.224	0.0276	0.0410	41.0
	4	4C-20 AWG / 4G-0.75mm <sup>2</sup>	4x20 AWG - 3 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555287	6.1	0.240	0.0343	0.0510	51.0
	5	5C-20 AWG / 5G-0.75mm <sup>2</sup>	5x20 AWG - 4 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10575227	6.8	0.268	0.0410	0.0610	61.0
	7	7C-20 AWG / 7G-0.75mm <sup>2</sup>	7x20 AWG - 6 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555298	7.9	0.311	0.0605	0.0900	90.0
	12	12C-20 AWG / 12G-0.75mm <sup>2</sup>	12x20 AWG - 11 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555371	10.3	0.406	0.0894	0.1330	133.0
	18	18C-20 AWG / 18G-0.75mm <sup>2</sup>	18x20 AWG - 17 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10556319	11.8	0.465	0.1391	0.2070	207.0
18	3	3C-18 AWG / 3G-1mm <sup>2</sup>	3x18 AWG - 2 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555693	6.1	0.240	0.0336	0.0500	50.0
	4	4C-18 AWG / 4G-1mm <sup>2</sup>	4x18 AWG - 3 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10563052	6.6	0.260	0.0423	0.0630	63.0
	5	5C-18 AWG / 5G-1mm <sup>2</sup>	5x18 AWG - 4 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555272	7.2	0.283	0.0504	0.0750	75.0
	7	7C-18 AWG / 7G-1mm <sup>2</sup>	7x18 AWG - 6 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555185	8.5	0.335	0.0753	0.1120	112.0
	12	12C-18 AWG / 12G-1mm <sup>2</sup>	12x18 AWG - 11 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555197	11.1	0.437	0.1203	0.1790	179.0
	18	18C-18 AWG / 18G-1mm <sup>2</sup>	18x18 AWG - 17 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555209	12.8	0.504	0.1734	0.2580	258.0
	25	25C-18 AWG / 25G-1mm <sup>2</sup>	25x18 AWG - 24 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555149	15.3	0.602	0.2426	0.3610	361.0
16	3	3C-16 AWG / 3G-1.5mm <sup>2</sup>	3x16 AWG - 2 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555241	6.8	0.268	0.0450	0.0670	67.0
	4	4C-16 AWG / 4G-1.5mm <sup>2</sup>	4x16 AWG - 3 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555262	7.3	0.287	0.0564	0.0840	84.0
	5	5C-16 AWG / 5G-1.5mm <sup>2</sup>	5x16 AWG - 4 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555215	8	0.315	0.0712	0.1060	106.0
	7	7C-16 AWG / 7G-1.5mm <sup>2</sup>	7x16 AWG - 6 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555230	9.6	0.378	0.1040	0.1550	155.0
	12	12C-16 AWG / 12G-1.5mm <sup>2</sup>	12x16 AWG - 11 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555397	12.4	0.378	0.1640	0.2440	244.0
	18	18C-16 AWG / 18G-1.5mm <sup>2</sup>	18x16 AWG - 17 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555682	14.2	0.559	0.2486	0.3700	370.0
14	3	3C-14 AWG / 3G-2.5mm <sup>2</sup>	3x14 AWG - 2 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555680	8	0.315	0.0672	0.1000	100.0
	4	4C-14 AWG / 4G-2.5mm <sup>2</sup>	4x14 AWG - 3 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10577149	8.7	0.343	0.0853	0.1270	127.0
	5	5C-14 AWG / 5G-2.5mm <sup>2</sup>	5x14 AWG - 4 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555675	9.6	0.378	0.1035	0.1540	154.0
	7	7C-14 AWG / 7G-2.5mm <sup>2</sup>	7x14 AWG - 6 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10573534	11.7	0.461	0.1593	0.2370	237.0
	12	12C-14 AWG / 12G-2.5mm <sup>2</sup>	12x14 AWG - 11 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10573535	14.4	0.567	0.2406	0.3580	358.0
12	4	4C-12 AWG / 4G-4mm <sup>2</sup>	4x12 AWG - 3 Bk Numbered + 1 Gn/Ye - Gray TPU Jacket	10555585	11.4	0.449	0.1438	0.2140	214.0

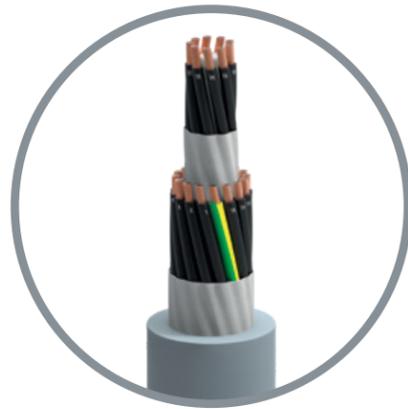
# CONTROL

## TPU-Control Cable Shielded

### MOTIONLINE® PREMIUM

Control cables for extremely flexing and C-track applications, TPU/PUR jacket, shielded, oil resistant, halogen free, UL and CSA approved

Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.



Halogen Free

Silicone Free

Oil resistant  
See Properties

Flame retardant  
See Properties

FLEXING INFORMATION	
Bending radius	≥ 6.5 x Ø
Drag chain cycles	10 Million
Speed	≤ 32.8 ft/s (600 m/min)
Acceleration	≤ 196.9 ft/s <sup>2</sup> (60 m/s <sup>2</sup> )
Temperature	Flexing: -22° to 176° F (-30° to 80° C) Fixed: -40° to 176° F (-40° to 80° C)

CABLE DESIGN	
Conductor	Bare Copper
Core insulation	Polyolefin (PP)
Core identification	Black with white numbers with one green/yellow trace.
Core assembly	Cores stranded under a nonwoven tape.
Shield	Tinned copper braid, Coverage 85 ± 5%
Jacket	TPU/PUR
Color	Gray (similar RAL 7001)

ELECTRICAL PROPERTIES	
Rated Voltage	1000 V
Test Voltage	3000 V

PROPERTIES	
Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 cable flame; VW-1; IEC 60332-1
Halogen free	Yes
UL/CSA	AWM style 20940
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

AWG	Number of Conductors	Cable Design	Description	Part Number	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
22	5	(5C-22 AWG) S / (5G-0.5mm <sup>2</sup> ) C	(5x22 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10554674	6.7	0.264	0.0410	0.0610	61.0
	12	(12C-22 AWG) S / (12G-0.5mm <sup>2</sup> ) C	(12x22 AWG) Shield - 11 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10554747	9.6	0.378	0.0853	0.1270	127.0
	18	(18C-22 AWG) S / (18G-0.5mm <sup>2</sup> ) C	(18x22 AWG) Shield - 17 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10555832	11.4	0.449	0.1176	0.1750	175.0
20	3	(3C-20 AWG) S / (3G-0.75mm <sup>2</sup> ) C	(3x20 AWG) Shield - 2 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10573669	6.3	0.248	0.0363	0.0540	54.0
	4	(4C-20 AWG) S / (4G-0.75mm <sup>2</sup> ) C	(4x20 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10573536	6.7	0.264	0.0437	0.0650	65.0
	5	(5C-20 AWG) S / (5G-0.75mm <sup>2</sup> ) C	(5x20 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10577025	7.3	0.287	0.0517	0.0770	77.0
	7	(7C-20 AWG) S / (7G-0.75mm <sup>2</sup> ) C	(7x20 AWG) Shield - 6 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10554715	8.6	0.339	0.0759	0.1130	113.0
18	12	(12C-20 AWG) S / (12G-0.75mm <sup>2</sup> ) C	(12x20 AWG) Shield - 11 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10573537	10.4	0.409	0.1089	0.1620	162.0
	3	(3C-18 AWG) S / (3G-1mm <sup>2</sup> ) C	(3x18 AWG) Shield - 2 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10555880	6.7	0.264	0.0430	0.0640	64.0
	4	(4C-18 AWG) S / (4G-1mm <sup>2</sup> ) C	(4x18 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10573690	7.3	0.287	0.0524	0.0780	78.0
	5	(5C-18 AWG) S / (5G-1mm <sup>2</sup> ) C	(5x18 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10573538	7.8	0.307	0.0625	0.0930	93.0
	7	(7C-18 AWG) S / (7G-1mm <sup>2</sup> ) C	(7x18 AWG) Shield - 6 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10573539	9.2	0.362	0.0921	0.1370	137.0
16	12	(12C-18 AWG) S / (12G-1mm <sup>2</sup> ) C	(12x18 AWG) Shield - 11 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10555068	11.8	0.465	0.1431	0.2130	213.0
	25	(25C-18 AWG) S / (25G-1mm <sup>2</sup> ) C	(25x18 AWG) Shield - 24 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10555076	15.5	0.610	0.2789	0.4150	415.0
	3	(3C-16 AWG) S / (3G-1.5mm <sup>2</sup> ) C	(3x16 AWG) Shield - 2 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10573540	7.4	0.291	0.0558	0.0830	83.0
	4	(4C-16 AWG) S / (4G-1.5mm <sup>2</sup> ) C	(4x16 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10555875	7.9	0.311	0.0685	0.1020	102.0
	5	(5C-16 AWG) S / (5G-1.5mm <sup>2</sup> ) C	(5x16 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10573541	8.9	0.350	0.0874	0.1300	130.0
	7	(7C-16 AWG) S / (7G-1.5mm <sup>2</sup> ) C	(7x16 AWG) Shield - 6 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10577154	10.4	0.409	0.1210	0.1800	180.0
14	12	(12C-16 AWG) S / (12G-1.5mm <sup>2</sup> ) C	(12x16 AWG) Shield - 11 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10555123	13.2	0.520	0.1929	0.2870	287.0
	3	(3C-14 AWG) S / (3G-2.5mm <sup>2</sup> ) C	(3x14 AWG) Shield - 2 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10573446	8.8	0.346	0.0833	0.1240	124.0
	4	(4C-14 AWG) S / (4G-2.5mm <sup>2</sup> ) C	(4x14 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10555093	9.5	0.374	0.1028	0.1530	153.0
	5	(5C-14 AWG) S / (5G-2.5mm <sup>2</sup> ) C	(5x14 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10573447	10.3	0.406	0.1230	0.1830	183.0
	7	(7C-14 AWG) S / (7G-2.5mm <sup>2</sup> ) C	(7x14 AWG) Shield - 6 Bk Numbered +1 Gn/Ye - Gray TPU Jacket	10573448	12.4	0.488	0.1828	0.2720	272.0



# CONTROL PVC-Control Cable MOTIONLINE® ADVANCED



Silicone Free

Oil resistant  
See Properties

Flame retardant  
See Properties

Control cables for high flexing and C-track applications, PVC jacket, oil resistant, UL and CSA approved



Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.

## FLEXING INFORMATION

Bending radius	≥ 6.5 x Ø
Drag chain cycles	5 Million
Speed	≤ 16.4 ft/s (300 m/min)
Acceleration	≤ 66 ft/s <sup>2</sup> (20 m/s <sup>2</sup> )
Temperature	Flexing: 23° to 176° F (-5°C to 80° C) Fixed: -4° to 176° F (-20°C to +80°C)

## CABLE DESIGN

Conductor	Bare Copper
Core insulation	Polyolefin (PP)
Core identification	Black with white numbers with one green/yellow trace.
Core assembly	Cores stranded under a nonwoven tape.
Jacket	PVC oil resistant
Color	Gray (similar RAL 7001)

## ELECTRICAL PROPERTIES

Rated Voltage	1000 V
Test Voltage	3000 V

## PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 cable flame; VW-1; IEC 60332-1
UL/CSA	AWM style 2570
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

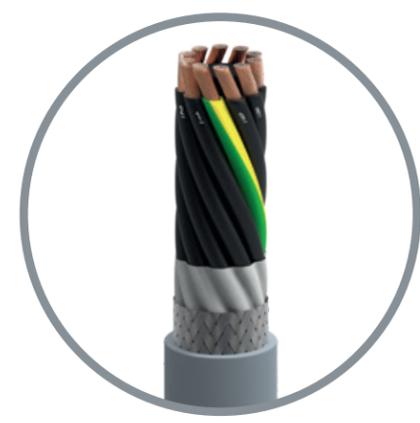
AWG	Number of Conductors	Cable Design	Description	Part Number	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
22	3	3C-22 AWG / 3G-0.5mm <sup>2</sup>	3x22 AWG - 2 Bk Numbered +1 Gn/Ye - Gray PVC-Jacket	10554022	5.3	0.209	0.0228	0.0340	34.0
	4	4C-22 AWG / 4G-0.5mm <sup>2</sup>	4x22 AWG - 3 Bk Numbered +1 Gn/Ye - Gray PVC-Jacket	10553968	5.7	0.224	0.0276	0.0410	41.0
	5	5C-22 AWG / 5G-0.5mm <sup>2</sup>	5x22 AWG - 4 Bk Numbered +1 Gn/Ye - Gray PVC-Jacket	10553977	6.1	0.240	0.0329	0.0490	49.0
	7	7C-22 AWG / 7G-0.5mm <sup>2</sup>	7x22 AWG - 6 Bk Numbered +1 Gn/Ye - Gray PVC-Jacket	10553985	7.2	0.283	0.0464	0.0690	69.0
	12	12C-22 AWG / 12G-0.5mm <sup>2</sup>	12x22 AWG - 11 Bk Numbered +1 Gn/Ye - Gray PVC-Jacket	10555309	8.9	0.350	0.0699	0.1040	104.0
	18	18C-22 AWG / 18G-0.5mm <sup>2</sup>	18x22 AWG - 17 Bk Numbered +1 Gn/Ye - Gray PVC-Jacket	10555316	10.2	0.402	0.0995	0.1480	148.0
20	25	25C-22 AWG / 25G-0.5mm <sup>2</sup>	25x22 AWG - 24 Bk Numbered +1 Gn/Ye - Gray PVC-Jacket	10555321	12.5	0.492	0.1431	0.2130	213.0
	3	3C-20 AWG / 3G-0.75mm <sup>2</sup>	3x20 AWG - 2 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555282	5.7	0.224	0.0289	0.0430	43.0
	5	5C-20 AWG / 5G-0.75mm <sup>2</sup>	5x20 AWG - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555291	6.7	0.264	0.0423	0.0630	63.0
	7	7C-20 AWG / 7G-0.75mm <sup>2</sup>	7x20 AWG - 6 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555297	7.9	0.311	0.0679	0.1010	101.0
	12	12C-20 AWG / 12G-0.75mm <sup>2</sup>	12x20 AWG - 11 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555370	9.7	0.382	0.0921	0.1370	137.0
	18	18C-20 AWG / 18G-0.75mm <sup>2</sup>	18x20 AWG - 17 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10561912	11.3	0.445	0.1357	0.2020	202.0
18	25	25C-20 AWG / 25G-0.75mm <sup>2</sup>	25x20 AWG - 24 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10561901	13.9	0.547	0.1942	0.2890	289.0
	3	3C-18 AWG / 3G-1mm <sup>2</sup>	3x18 AWG - 2 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555346	6.1	0.240	0.0349	0.0520	52.0
	4	4C-18 AWG / 4G-1mm <sup>2</sup>	4x18 AWG - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555355	6.6	0.260	0.0437	0.0650	65.0
	5	5C-18 AWG / 5G-1mm <sup>2</sup>	5x18 AWG - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555364	7.2	0.283	0.0524	0.0780	78.0
	7	7C-18 AWG / 7G-1mm <sup>2</sup>	7x18 AWG - 6 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555184	8.5	0.335	0.0773	0.1150	115.0
	12	12C-18 AWG / 12G-1mm <sup>2</sup>	12x18 AWG - 11 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555196	10.5	0.413	0.1176	0.1750	175.0
16	18	18C-18 AWG / 18G-1mm <sup>2</sup>	18x18 AWG - 17 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555208	12.4	0.488	0.1700	0.2530	253.0
	25	25C-18 AWG / 25G-1mm <sup>2</sup>	25x18 AWG - 24 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555150	15.1	0.594	0.2480	0.3690	369.0
	3	3C-16 AWG / 3G-1.5mm <sup>2</sup>	3x16 AWG - 2 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555177	6.8	0.268	0.0464	0.0690	69.0
	4	4C-16 AWG / 4G-1.5mm <sup>2</sup>	4x16 AWG - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555259	7.4	0.291	0.0585	0.0870	87.0
	5	5C-16 AWG / 5G-1.5mm <sup>2</sup>	5x16 AWG - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555213	8.2	0.323	0.0732	0.1090	109.0
	7	7C-16 AWG / 7G-1.5mm <sup>2</sup>	7x16 AWG - 6 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555228	9.5	0.374	0.1042	0.1550	155.0
14	12	12C-16 AWG / 12G-1.5mm <sup>2</sup>	12x16 AWG - 11 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555239	12	0.472	0.1606	0.2390	239.0
	18	18C-16 AWG / 18G-1.5mm <sup>2</sup>	18x16 AWG - 17 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555564	14.4	0.567	0.2634	0.3920	392.0
	3	3C-14 AWG / 3G-2.5mm <sup>2</sup>	3x14 AWG - 2 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555529	8	0.315	0.0692	0.1030	103.0
	4	4C-14 AWG / 4G-2.5mm <sup>2</sup>	4x14 AWG - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555545	8.7	0.343	0.0874	0.1300	130.0
	5	5C-14 AWG / 5G-2.5mm <sup>2</sup>	5x14 AWG - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555552	9.6	0.378	0.1062	0.1580	158.0
	7	7C-14 AWG / 7G-2.5mm <sup>2</sup>	7x14 AWG - 6 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555623	11.6	0.457	0.1566	0.2330	233.0
12	12	12C-14 AWG / 12G-2.5mm <sup>2</sup>	12x14 AWG - 11 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555630	14.2	0.559	0.2419	0.3600	360.0
	4	4C-12 AWG / 4G-4mm <sup>2</sup>	4x12 AWG - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555646	11.3	0.445	0.1478	0.2200	220.0
	5	5C-12 AWG / 5G-4mm <sup>2</sup>	5x12 AWG - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555589	12.4	0.488	0.1794	0.2670	267.0
	4	4C-10 AWG / 4G-6mm <sup>2</sup>	4x10 AWG - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555596	13	0.512	0.2056	0.3060	306.0
	5	5C-10 AWG / 5G-6mm <sup>2</sup>	5x10 AWG - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555601	14.5	0.571	0.2553	0.3800	380.0
	7	7C-10 AWG / 7G-6mm <sup>2</sup>	7x10 AWG - 6 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10557215	17.1	0.673	0.3763	0.5600	560.0
8	4	4C-8 AWG / 4G-10mm <sup>2</sup>	4x8 AWG - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555522	17.3	0.681	0.3387	0.5040	504.0
	5	5C-8 AWG / 5G-10mm <sup>2</sup>	5x8 AWG - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555429	18.1	0.713	0.4207	0.6260	626.0
	7	7C-8 AWG / 7G-10mm <sup>2</sup>	7x8 AWG - 6 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555430	21.8	0.858	0.6317	0.9400	940.0
6	4	4C-6 AWG / 4G-16mm <sup>2</sup>	4x6 AWG - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555431	19.1	0.752	0.6155	0.9160	916.0

# CONTROL PVC-Control Cable Shielded MOTIONLINE® ADVANCED



Control cables for high flexing and C-track applications, PVC jacket, shielded, oil resistant, UL and CSA approved

Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.



### FLEXING INFORMATION

Bending radius	≥ 6.5 x Ø
Drag chain cycles	5 Million
Speed	≤ 16.4 ft/s (300 m/min)
Acceleration	≤ 66 ft/s <sup>2</sup> (20 m/s <sup>2</sup> )
Temperature	Flexing: 23° to 176° F (-5°C to 80° C) Fixed: -4° to 176° F (-20°C to +80°C)

### CABLE DESIGN

Conductor	Bare Copper
Core insulation	Polyolefin (PP)
Core identification	Black with white numbers with one green/yellow trace.
Core assembly	Cores stranded under a nonwoven tape.
Shield	Tinned copper braid, Coverage 85 ± 5%
Jacket	PVC oil resistant
Color	Gray (similar RAL 7001)

### ELECTRICAL PROPERTIES

Rated Voltage	1000 V
Test Voltage	3000 V

### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 cable flame; VW-1; IEC 60332-1
UL/CSA	AWM style 2570
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

AWG	Number of Conductors	Cable Design	Description	Part Number	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
22	3	(3C-22 AWG) S / (3-0.5mm <sup>2</sup> ) C	(3x22 AWG) Shield - 2 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554665	5.9	0.232	0.0309	0.0460	46.0
	4	(4C-22 AWG) S / (4-0.5mm <sup>2</sup> ) C	(4x22 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554669	6.3	0.248	0.0370	0.0550	55.0
	5	(5C-22 AWG) S / (5G-0.5mm <sup>2</sup> ) C	(5x22 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554673	6.7	0.264	0.0430	0.0640	64.0
	7	(7C-22 AWG) S / (7-0.5mm <sup>2</sup> ) C	(7x22 AWG) Shield - 6 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554741	7.7	0.303	0.0578	0.0860	86.0
	12	(12C-22 AWG) S / (12-0.5mm <sup>2</sup> ) C	(12x22 AWG) Shield - 12 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554746	9.6	0.378	0.0880	0.1310	131.0
	18	(18C-22 AWG) S / (18-0.5mm <sup>2</sup> ) C	(18x22 AWG) Shield - 11 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554751	10.9	0.429	0.1210	0.1800	180.0
20	25	(25C-22 AWG) S / (25-0.5mm <sup>2</sup> ) C	(25x22 AWG) Shield - 17 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554753	13.3	0.524	0.1727	0.2570	257.0
	4	(4C-20 AWG) S / (4G-0.75mm <sup>2</sup> ) C	(4x20 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554766	6.8	0.268	0.0457	0.0680	68.0
	5	(5C-20 AWG) S / (5G-0.75mm <sup>2</sup> ) C	(5x20 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554710	7.3	0.287	0.0531	0.0790	79.0
18	7	(7C-20 AWG) S / (7G-0.75mm <sup>2</sup> ) C	(7x20 AWG) Shield - 6 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554714	8.6	0.339	0.0786	0.1170	117.0
	3	(3C-18 AWG) S / (3G-1mm <sup>2</sup> ) C	(3x18 AWG) Shield - 2 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554734	6.7	0.264	0.0450	0.0670	67.0
	4	(4C-18 AWG) S / (4G-1mm <sup>2</sup> ) C	(4x18 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555054	7.3	0.287	0.0544	0.0810	81.0
	5	(5C-18 AWG) S / (5G-1mm <sup>2</sup> ) C	(5x18 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555058	7.9	0.311	0.0638	0.0950	95.0
	7	(7C-18 AWG) S / (7G-1mm <sup>2</sup> ) C	(7x18 AWG) Shield - 6 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555062	9.2	0.362	0.0947	0.1410	141.0
	12	(12C-18 AWG) S / (12G-1mm <sup>2</sup> ) C	(12x18 AWG) Shield - 11 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555067	11.5	0.453	0.1398	0.2080	208.0
	18	(18C-18 AWG) S / (18G-1mm <sup>2</sup> ) C	(18x18 AWG) Shield - 17 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555071	13.2	0.520	0.1996	0.2970	297.0
16	25	(25C-18 AWG) S / (25G-1mm <sup>2</sup> ) C	(25x18 AWG) Shield - 24 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555075	16.1	0.634	0.2849	0.4240	424.0
	3	(3C-16 AWG) S / (3G-1.5mm <sup>2</sup> ) C	(3x16 AWG) Shield - 2 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555024	7.4	0.291	0.0571	0.0850	85.0
	4	(4C-16 AWG) S / (4G-1.5mm <sup>2</sup> ) C	(4x16 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555038	8	0.315	0.0706	0.1050	105.0
	5	(5C-16 AWG) S / (5G-1.5mm <sup>2</sup> ) C	(5x16 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555044	8.9	0.350	0.0894	0.1330	133.0
	7	(7C-16 AWG) S / (7G-1.5mm <sup>2</sup> ) C	(7x16 AWG) Shield - 6 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555052	10.3	0.406	0.1236	0.1840	184.0
14	12	(12C-16 AWG) S / (12G-1.5mm <sup>2</sup> ) C	(12x16 AWG) Shield - 11 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555121	12.9	0.508	0.1888	0.2810	281.0
	3	(3C-14 AWG) S / (3G-2.5mm <sup>2</sup> ) C	(3x14 AWG) Shield - 2 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555139	8.8	0.346	0.0853	0.1270	127.0
	4	(4C-14 AWG) S / (4G-2.5mm <sup>2</sup> ) C	(4x14 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555089	9.5	0.374	0.1055	0.1570	157.0
12	5	(5C-14 AWG) S / (5G-2.5mm <sup>2</sup> ) C	(5x14 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555095	10.3	0.406	0.1257	0.1870	187.0
	4	(4C-12 AWG) S / (4G-4mm <sup>2</sup> ) C	(4x12 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555108	11.8	0.465	0.1673	0.2490	249.0
10	4	(4C-10 AWG) S / (4G-6mm <sup>2</sup> ) C	(4x10 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10555112	14	0.551	0.2365	0.3520	352.0
8	4	(4C-8 AWG) S / (4G-10mm <sup>2</sup> ) C	(4x8 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554934	17.5	0.689	0.3830	0.5700	570.0
6	4	(4C-6 AWG) S / (4G-16mm <sup>2</sup> ) C	(4x6 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Gray PVC Jacket	10554939	20.3	0.799	0.5933	0.8830	883.0



# TRAY CABLE

## Unshielded Tray Cable

### MOTIONLINE®

TRAY CABLES for low flex applications, PVC/Nylon jacket, oil resistant, UL 1277-2277

Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.



#### FLEXING INFORMATION

Bending radius	Low Flexing : $\geq 15 \times \varnothing$ Static: $\geq 5 \times \varnothing$
Temperature	Low Flexing: 23° to 194° F (-5° to 90° C) Fixed: -40° to 194° F (-40° to 90° C)

#### CABLE DESIGN

Conductor	Bare Copper
Core insulation	PVC/Nylon (UL 62 & 83)
Core identification	(Standard) Black with white numbers with one green/yellow trace. (Optional) Colored Insulators to meet several NEC and CEC power circuit wiring color codes.
Core assembly	Cores stranded in layers.
Jacket	Special-grade PVC, Oil Resistant
Color	Black (similar RAL 9005)

#### ELECTRICAL PROPERTIES

Rated Voltage	UL AWM 600V UL TC-ER / MTW 600V UL WTTC 1000V
Test Voltage	2000 V

#### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	Flame retardant to: UL 1581 section 1160 and CSA FT4
UL/CSA	UL MTW UL TC-ER 90°C 600V UL WTTC 90°C 1000V UL DP-1 UL AWM 90°C 600V I/II A/B C(UL) CIC/TC-ER 600V
CE	Yes
Reach	Yes
RoHS-II conform	Yes

AWG	Number of Conductors	Cable Design	Description	Part Number	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
18	2	2C-18 AWG / 2G-1mm <sup>2</sup>	2x18 AWG - Bu, Bn - Black PVC Jacket	10580229	6.9	0.272	0.0511	0.0760	76.0
	2	2C-18 AWG / 2G-1mm <sup>2</sup>	2x18 AWG - 2 Bk Numbered - Black PVC Jacket	10554630	6.9	0.272	0.0511	0.0760	76.0
	3	3C-18 AWG / 3G-1mm <sup>2</sup>	3x18 AWG - Bk, Wh, Gn/Ye - Black PVC Jacket	10580230	7.3	0.287	0.0598	0.0890	89.0
	3	3C-18 AWG / 3G-1mm <sup>2</sup>	3x18 AWG - Bu, Bn, Bk - Black PVC Jacket	10580231	7.3	0.287	0.0598	0.0890	89.0
	3	3C-18 AWG / 3G-1mm <sup>2</sup>	3x18 AWG - 2 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554633	7.3	0.287	0.0598	0.0890	89.0
	4	4C-18 AWG / 4G-1mm <sup>2</sup>	4x18 AWG - Bu, Bn, Bk, Wh - Black PVC Jacket	10580232	7.9	0.311	0.0719	0.1070	107.0
	4	4C-18 AWG / 4G-1mm <sup>2</sup>	4x18 AWG - Bk, Rd, Wh, Gn/Ye - Black PVC Jacket	10580234	7.9	0.311	0.0719	0.1070	107.0
	4	4C-18 AWG / 4G-1mm <sup>2</sup>	4x18 AWG - Bk, Rd, Bu, Gn/Ye - Black PVC Jacket	10580235	7.9	0.311	0.0719	0.1070	107.0
	4	4C-18 AWG / 4G-1mm <sup>2</sup>	4x18 AWG - Bn, Og, Ye, Gn/Ye, - Black PVC Jacket	10580236	7.9	0.311	0.0719	0.1070	107.0
	4	4C-18 AWG / 4G-1mm <sup>2</sup>	4x18 AWG - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554638	7.9	0.311	0.0719	0.1070	107.0
	5	5C-18 AWG / 5G-1mm <sup>2</sup>	5x18 AWG - 4 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554640	8.5	0.335	0.0847	0.1260	126.0
	7	7C-18 AWG / 7G-1mm <sup>2</sup>	7x18 AWG - 6 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554642	9.2	0.362	0.1042	0.1550	155.0
	12	12C-18 AWG / 12G-1mm <sup>2</sup>	12x18 AWG - 11 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554646	12	0.472	0.1640	0.2440	244.0
	18	18C-18 AWG / 18G-1mm <sup>2</sup>	18x18 AWG - 17 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554587	14.6	0.575	0.2500	0.3720	372.0
	25	25C-18 AWG / 25G-1mm <sup>2</sup>	25x18 AWG - 24 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554590	17.4	0.685	0.3333	0.4960	496.0
16	2	2C-16 AWG / 2G-1.5mm <sup>2</sup>	2x16 AWG - Bu, Bn - Black PVC Jacket	10580237	7.5	0.295	0.0632	0.0940	94.0
	2	2C-16 AWG / 2G-1.5mm <sup>2</sup>	2x16 AWG - 2 Bk Numbered - Black PVC Jacket	10554593	7.5	0.295	0.0632	0.0940	94.0
	3	3C-16 AWG / 3G-1.5mm <sup>2</sup>	3x16 AWG - Bk, Wh, Gn/Ye - Black PVC Jacket	10580238	7.9	0.311	0.0739	0.1100	110.0
	3	3C-16 AWG / 3G-1.5mm <sup>2</sup>	3x16 AWG - Bu, Bn, Bk - Black PVC Jacket	10580239	7.9	0.311	0.0739	0.1100	110.0
	3	3C-16 AWG / 3G-1.5mm <sup>2</sup>	3x16 AWG - 2 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554598	7.9	0.311	0.0739	0.1100	110.0
	4	4C-16 AWG / 4G-1.5mm <sup>2</sup>	4x16 AWG - Bu, Bn, Bk, Wh - Black PVC Jacket	10580240	8.6	0.339	0.0894	0.1330	133.0
	4	4C-16 AWG / 4G-1.5mm <sup>2</sup>	4x16 AWG - Bk, Rd, Wh, Gn/Ye - Black PVC Jacket	10580241	8.6	0.339	0.0894	0.1330	133.0
	4	4C-16 AWG / 4G-1.5mm <sup>2</sup>	4x16 AWG - Bk, Rd, Bu, Gn/Ye - Black PVC Jacket	10580242	8.6	0.339	0.0894	0.1330	133.0
	4	4C-16 AWG / 4G-1.5mm <sup>2</sup>	4x16 AWG - Bn, Og, Ye, Gn/Ye - Black PVC Jacket	10580243	8.6	0.339	0.0894	0.1330	133.0
	4	4C-16 AWG / 4G-1.5mm <sup>2</sup>	4x16 AWG - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554603	8.6	0.339	0.0894	0.1330	133.0
	5	5C-16 AWG / 5G-1.5mm <sup>2</sup>	5x16 AWG - 4 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554606	9.4	0.370	0.1075	0.1600	160.0
	7	7C-16 AWG / 7G-1.5mm <sup>2</sup>	7x16 AWG - 6 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554609	10.2	0.402	0.1337	0.1990	199.0
	12	12C-16 AWG / 12G-1.5mm <sup>2</sup>	12x16 AWG - 11 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554612	14	0.551	0.2291	0.3410	341.0
	18	18C-16 AWG / 18G-1.5mm <sup>2</sup>	18x16 AWG - 17 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554615	16.2	0.638	0.3266	0.4860	486.0



# TRAY CABLE

## Unshielded Tray Cable

### MOTIONLINE®



AWG	Number of Conductors	Cable Design	Description	Part Number	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]	
14	2	2C-14 AWG / 2G-2.5mm <sup>2</sup>	2x14 AWG - Bu, Bn - Black PVC Jacket	10580263	8.3	0.327	0.0753	0.1120	112.0	
	2	2C-14 AWG / 2G-x2.5mm <sup>2</sup>	2x14 AWG - 2 Bk Numbered - Black PVC Jacket	10580269	8.3	0.327	0.0753	0.1120	112.0	
	3	3C-14 AWG / 3G-2.5mm <sup>2</sup>	3x14 AWG - Bk, Wh, Gn/Ye - Black PVC Jacket	10580244	8.8	0.346	0.0995	0.1480	148.0	
	3	3C-14 AWG / 3G-2.5mm <sup>2</sup>	3x14 AWG - Bu, Bn, Bk - Black PVC Jacket	10580245	8.8	0.346	0.0995	0.1480	148.0	
	3	3C-14 AWG / 3G-2.5mm <sup>2</sup>	3x14 AWG - 2 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554433	8.8	0.346	0.0995	0.1480	148.0	
	4	4C-14 AWG / 4G-2.5mm <sup>2</sup>	4x14 AWG - Bu, Bn, Bk, Wh - Black PVC Jacket	10580246	9.5	0.374	0.1156	0.1720	172.0	
	4	4C-14 AWG / 4G-2.5mm <sup>2</sup>	4x14 AWG - Bk, Rd, Wh, Gn/Ye - Black PVC Jacket	10580247	9.5	0.374	0.1156	0.1720	172.0	
	4	4C-14 AWG / 4G-2.5mm <sup>2</sup>	4x14 AWG - Bk, Rd, Bu, Gn/Ye - Black PVC Jacket	10580248	9.5	0.374	0.1156	0.1720	172.0	
	4	4C-14 AWG / 4G-2.5mm <sup>2</sup>	4x14 AWG - Bn, Og, Ye, Gn/Ye - Black PVC Jacket	10580249	9.5	0.374	0.1156	0.1720	172.0	
	4	4C-14 AWG / 4G-2.5mm <sup>2</sup>	4x14 AWG - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554436	9.5	0.374	0.1156	0.1720	172.0	
	5	5C-14 AWG / 5G-2.5mm <sup>2</sup>	5x14 AWG - 4 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554440	10.5	0.413	0.1472	0.2190	219.0	
	7	7C-14 AWG / 7G-2.5mm <sup>2</sup>	7x14 AWG - 6 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554444	11.4	0.449	0.1882	0.2800	280.0	
	12	12C-14 AWG / 12G-2.5mm <sup>2</sup>	12x14 AWG - 11 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554447	15.6	0.614	0.3158	0.4700	470.0	
	18	18C-14 AWG / 18G-2.5mm <sup>2</sup>	18x14 AWG - 17 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554449	18.3	0.720	0.4583	0.6820	682.0	
12	2	2C-12 AWG / 2G-4mm <sup>2</sup>	2x12 AWG - Bu, Bn - Black PVC Jacket	10580264	9.6	0.378	0.1122	0.1670	167.0	
	2	2C-12 AWG / 2Gx4mm <sup>2</sup>	2x12 AWG - 2 Bk Numbered - Black PVC Jacket	10580270	9.6	0.378	0.1122	0.1670	167.0	
	3	3C-12 AWG / 3G-4mm <sup>2</sup>	3x12 AWG - Bk, Wh, Gn/Ye - Black PVC Jacket	10580250	10.1	0.398	0.1451	0.2160	216.0	
	3	3C-12 AWG / 3G-4mm <sup>2</sup>	3x12 AWG - Bu, Bn, Bk - Black PVC Jacket	10580251	10.1	0.398	0.1451	0.2160	216.0	
	3	3C-12 AWG / 3G-4mm <sup>2</sup>	3x12 AWG - 2 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554453	10.1	0.398	0.1451	0.2160	216.0	
	4	4C-12 AWG / 4G-4mm <sup>2</sup>	4x12 AWG - Bu, Bn, Bk, Wh - Black PVC Jacket	10580252	11	0.433	0.1787	0.2660	266.0	
	4	4C-12 AWG / 4G-4mm <sup>2</sup>	4x12 AWG - Bk, Rd, Wh, Gn/Ye - Black PVC Jacket	10580253	11	0.433	0.1787	0.2660	266.0	
	4	4C-12 AWG / 4G-4mm <sup>2</sup>	4x12 AWG - Bk, Rd, Bu, Gn/Ye - Black PVC Jacket	10580254	11	0.433	0.1787	0.2660	266.0	
	4	4C-12 AWG / 4G-4mm <sup>2</sup>	4x12 AWG - Bn, Og, Ye, Gn/Ye - Black PVC Jacket	10580256	11	0.433	0.1787	0.2660	266.0	
	4	4C-12 AWG / 4G-4mm <sup>2</sup>	4x12 AWG - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554456	11	0.433	0.1787	0.2660	266.0	
	5	5C-12 AWG / 5G-4mm <sup>2</sup>	5x12 AWG - 4 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554459	12.2	0.480	0.2191	0.3260	326.0	
	7	7C-12 AWG / 7G-4mm <sup>2</sup>	7x12 AWG - 6 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554399	13.2	0.520	0.2789	0.4150	415.0	
	10	3	3C-10 AWG / 3G-6mm <sup>2</sup>	3x10 AWG - 2 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554403	12.2	0.480	0.2211	0.3290	329.0
		4	4C-10 AWG / 4G-6mm <sup>2</sup>	4x10 AWG - Bk, Rd, Wh, Gn/Ye - Black PVC Jacket	10580257	14	0.551	0.2742	0.4080	408.0
4		4C-10 AWG / 4G-6mm <sup>2</sup>	4x10 AWG - Bk, Rd, Bu, Gn/Ye - Black PVC Jacket	10580258	14	0.551	0.2742	0.4080	408.0	
4		4C-10 AWG / 4G-6mm <sup>2</sup>	4x10 AWG - Bn, Og, Ye, Gn/Ye - Black PVC Jacket	10580259	14	0.551	0.2742	0.4080	408.0	
4		4C-10 AWG / 4G-6mm <sup>2</sup>	4x10 AWG - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554405	14	0.551	0.2742	0.4080	408.0	
5		5C-10 AWG / 5G-6mm <sup>2</sup>	5x10 AWG - 4 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554407	15.4	0.606	0.3340	0.4970	497.0	
7		7C-10 AWG / 7G-6mm <sup>2</sup>	7x10 AWG - 6 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554409	16.9	0.665	0.4200	0.6250	625.0	
8	3	3C-8 AWG / 3G-10mm <sup>2</sup>	3x8 AWG - 2 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10580265	17	0.669	0.3817	0.5680	568.0	
	4	4C-8 AWG / 4G-10mm <sup>2</sup>	4x8 AWG - Bk, Rd, Wh, Gn/Ye - Black PVC Jacket	10580260	18.8	0.740	0.4737	0.7050	705.0	
	4	4C-8 AWG / 4G-10mm <sup>2</sup>	4x8 AWG - Bk, Rd, Bu, Gn/Ye - Black PVC Jacket	10580261	18.8	0.740	0.4737	0.7050	705.0	
	4	4C-8 AWG / 4G-10mm <sup>2</sup>	4x8AWG - Bn, Og, Ye, Gn/Ye - Black PVC Jacket	10580262	18.8	0.740	0.4737	0.7050	705.0	
	4	4C-8 AWG / 4G-10mm <sup>2</sup>	4x8 AWG - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554520	18.8	0.740	0.4737	0.7050	705.0	
6	3	3C-6 AWG / 3G-16mm <sup>2</sup>	3x6 AWG - 2 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554462	19.4	0.764	0.5349	0.7960	796.0	
	4	4C-6 AWG / 4G-16mm <sup>2</sup>	4x6 AWG - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554464	22.4	0.882	0.7096	1.0560	1 056.0	
4	4	4C-4 AWG / 4G-25mm <sup>2</sup>	4x4 AWG - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554468	27.2	1.071	1.1074	1.6480	1 648.0	
2	4	4C-2 AWG / 4G-35mm <sup>2</sup>	4x2 AWG - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554470	31.3	1.232	1.5186	2.2600	2 260.0	
1	4	4C-1 AWG / 4G-50mm <sup>2</sup>	4x1 AWG - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554471	35.6	1.402	2.7685	4.1200	4 120.0	



# TRAY CABLE

## Shielded Tray Cable

### MOTIONLINE®

TRAY CABLES for low flex applications, PVC jacket, oil resistant, UL 1277-2277

Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.



#### FLEXING INFORMATION

Bending radius	Low Flexing : $\geq 15 \times \varnothing$ Static: $\geq 5 \times \varnothing$
Temperature	Low Flexing: 23° to 194° F (-5° to 90° C) Fixed: -40° to 194° F (-40° to 90° C)

#### CABLE DESIGN

Conductor	Bare Copper
Core insulation	PVC/Nylon (UL 62 & 83)
Core identification	(Standard) Black with white numbers with one green/yellow trace. (Optional) Colored Insulators to meet several NEC and CEC power circuit wiring color codes.
Core assembly	Cores stranded in layers.
Shield	Tinned copper braid, Coverage 85 ± 5%
Jacket	Special-grade PVC, Oil Resistant
Color	Black (similar RAL 9005)

#### ELECTRICAL PROPERTIES

Rated Voltage	UL AWM 600V UL TC-ER / MTW 600V UL WTTC 1000V
Test Voltage	2000 V

#### PROPERTIES

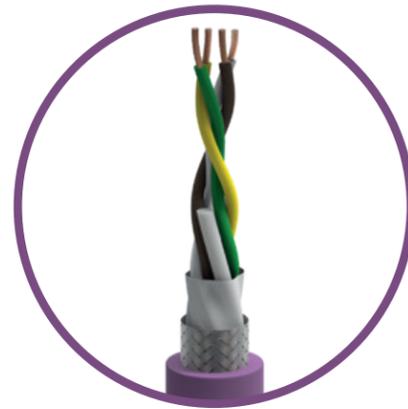
Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	Flame retardant to: UL 1581 section 1160 and CSA FT4
UL/CSA	UL MTW UL TC-ER 90°C 600V UL WTTC 90°C 1000V UL DP-1 UL AWM 90°C 600V I/II A/B C(UL) CIC/TC-ER 600V
CE	Yes
Reach	Yes
RoHS-II conform	Yes

AWG	Number of Conductors	Cable Design	Description	Part Number	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
18	3	(3C-18 AWG) S / (3G-1mm <sup>2</sup> ) C	(3x18 AWG) Shield - 2 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553859	8.1	0.319	0.0739	0.1100	110.0
	4	(4C-18 AWG) S / (4G-1mm <sup>2</sup> ) C	(4x18 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553862	8.5	0.335	0.0800	0.1190	119.0
	5	(5C-18 AWG) S / (5G-1mm <sup>2</sup> ) C	(5x18 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553865	9.3	0.366	0.1021	0.1520	152.0
	7	(7C-18 AWG) S / (7G-1mm <sup>2</sup> ) C	(7x18 AWG) Shield - 6 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553680	10.1	0.398	0.1250	0.1860	186.0
	12	(12C-18 AWG) S / (12G-1mm <sup>2</sup> ) C	(12x18 AWG) Shield - 11 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553683	12.9	0.508	0.1962	0.2920	292.0
16	18	(18C-18 AWG) S / (18G-1mm <sup>2</sup> ) C	(18x18 AWG) Shield - 17 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10580272	14.6	0.575	0.2459	0.3660	366.0
	25	(25C-18 AWG) S / (25G-1mm <sup>2</sup> ) C	(25x18 AWG) Shield - 24 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10580273	17.4	0.685	0.3353	0.4990	499.0
	3	(3C-16 AWG) S / (3G-1.5mm <sup>2</sup> ) C	(3x16 AWG) Shield - 2 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553698	8.6	0.339	0.0793	0.1180	118.0
	4	(4C-16 AWG) S / (4G-1.5mm <sup>2</sup> ) C	(4x16 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553702	9.2	0.362	0.1042	0.1550	155.0
	5	(5C-16 AWG) S / (5G-1.5mm <sup>2</sup> ) C	(5x16 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553707	10.1	0.398	0.1230	0.1830	183.0
14	7	(7C-16 AWG) S / (7G-1.5mm <sup>2</sup> ) C	(7x16 AWG) Shield - 6 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553663	11	0.433	0.1519	0.2260	226.0
	12	(12C-16 AWG) S / (12G-1.5mm <sup>2</sup> ) C	(12x16 AWG) Shield - 11 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553659	14.8	0.583	0.2580	0.3840	384.0
	18	(18C-16 AWG) S / (18G-1.5mm <sup>2</sup> ) C	(18x16 AWG) Shield - 17 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553657	17.2	0.677	0.3743	0.5570	557.0
	25	(25C-16 AWG) S / (25G-1.5mm <sup>2</sup> ) C	(25x16 AWG) Shield - 24 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553650	20.2	0.795	0.4885	0.7270	727.0
	3	(3C-14 AWG) S / (3G-2.5mm <sup>2</sup> ) C	(3x14 AWG) Shield - 2 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553664	9.6	0.378	0.1136	0.1690	169.0
12	4	(4C-14 AWG) S / (4G-2.5mm <sup>2</sup> ) C	(4x14 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553668	10.5	0.413	0.1438	0.2140	214.0
	5	(5C-14 AWG) S / (5G-2.5mm <sup>2</sup> ) C	(5x14 AWG) Shield - 4 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553674	11.2	0.441	0.1653	0.2460	246.0
	7	(7C-14 AWG) S / (7G-2.5mm <sup>2</sup> ) C	(7x14 AWG) Shield - 6 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553678	12.4	0.488	0.2103	0.3130	313.0
10	(12C-14 AWG) S / (12G-2.5mm <sup>2</sup> ) C	(12x14 AWG) Shield - 11 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10556366	16.6	0.654	0.3568	0.5310	531.0	
10	4	(4C-12 AWG) S / (4G-4mm <sup>2</sup> ) C	(4x12 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553752	11.6	0.457	0.1875	0.2790	279.0
10	4	(4C-10 AWG) S / (4G-6mm <sup>2</sup> ) C	(4x10 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553760	14.9	0.587	0.2977	0.4430	443.0
8	4	(4C-8 AWG) S / (4G-10mm <sup>2</sup> ) C	(4x8 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10553739	21.2	0.835	0.5483	0.8160	816.0
6	4	(4C-6 AWG) S / (4G-16mm <sup>2</sup> ) C	(4x6 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554056	23.5	0.925	0.7439	1.1070	1 107.0
4	4	(4C-4 AWG) S / (4G-25mm <sup>2</sup> ) C	(4x4 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554061	28.3	1.114	1.0993	1.6360	1 636.0
2	4	(4C-2 AWG) S / (4G-35mm <sup>2</sup> ) C	(4x2 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554062	32.6	1.283	1.4898	2.2170	2 217.0
1	4	(4C-1 AWG) S / (4G-50mm <sup>2</sup> ) C	(4x1 AWG) Shield - 3 Bk Numbered +1 Gn/Ye - Black PVC Jacket	10554063	37.4	1.472	1.9534	2.9070	2 907.0



# FIELD BUS CAN BUS MOTIONLINE®

CAN BUS cable with PUR/TPU and PVC jacket types. PUR/TPU for high flex drag chain applications and PVC for less dynamic needs. All are shielded, oil resistant, and flame retardant



Silicone Free

See Properties

Oil resistant  
See Properties

Flame retardant  
See Properties

Description	CAN BUS PUR Shielded 2x2-22 AWG	CAN BUS PVC Shielded 2x22 AWG	CAN BUS PVC Shielded 2x2-22 AWG
Part Number	10553023	10553022	10553025
<b>FAMILY</b>	<b>MOTIONLINER® Premium</b>	<b>MOTIONLINE®</b>	<b>MOTIONLINE®</b>
Diameter [mm]	7.8	6.5	7.6
Diameter [in]	0.307	0.256	0.299
Weight [lb/ft]	0.0457	0.0356	0.0551
Weight [kg/m]	0.068	0.053	0.082
Weight [kg/km]	68.0	53.0	82.0
<b>FLEXING INFORMATION</b>			
Bending radius	≥ 10 x Ø	≥ 10 x Ø	≥ 10 x Ø
Drag chain cycles	5 Million	Not Suggested	Not Suggested
Speed	≤ 13.2 ft/sec (240 m/M)		
Acceleration	≤ 66 ft/sec <sup>2</sup> (20 m/s <sup>2</sup> )		
Temperature	Flexing: -4° to 176° F (-20° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)	Flexing: 23° to 176° F (-5° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)	Flexing: 23° to 176° F (-5° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)
<b>CABLE DESIGN</b>			
Conductor	Flexible bare copper	Flexible bare copper	Flexible bare copper
Core insulation	Polyolefin foam skin	Polyolefin foam skin	Polyolefin foam skin
Core stranding	Two pairs stranded with fillers	two cores starnded with fillers	Two pairs stranded with fillers
Core identification	Colored: (Brown/White)-(Yellow/Green)	Colored: (Brown/White)	Colored: (Brown/White)-(Yellow/Green)
Shield	Tinned copper braid, coverage ≥85%	Tinned copper braid, coverage ≥85%	Tinned copper braid, coverage ≥85%
Jacket	PUR/TPU	PVC	PVC
Color	Violet RAL 4001	Violet RAL 4001	Violet RAL 4001
<b>ELECTRICAL PROPERTIES</b>			
Rated Voltage	30V	300V	300V
Test Voltage	1500V	1500V	1500V
Characteristic Impedance	120 Ω	120 Ω	120 Ω
<b>PROPERTIES</b>			
Oil resistance	IEC 60811-404; EN 50363-10-2	IEC 60811-404; EN 50363-10-2	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 FT2; IEC 60332-1	CSA FT1; UL1581 VW-1; IEC 60332-1	CSA FT1; UL1581 VW-1; IEC 60332-1
Halogen free	Yes	No	No
UL/CSA	UL-style 20554	UL-style 2095	UL-style 2502
CE	Yes	Yes	Yes
Silicon Free	Yes	Yes	Yes
Reach	Yes	Yes	Yes
RoHS-II conform	Yes	Yes	Yes



# FIELD BUS

## DeviceNet

### MOTIONLINE®

DeviceNet cable with PUR/TPU and PVC jacket types. PUR/TPU for high flex drag chain applications and PVC for less dynamic needs. All are shielded, oil resistant, and flame retardant.



Silicone Free

Oil resistant  
See Properties

Flame retardant  
See Properties

Description	DeviceNet TPU Shielded 2x22 AWG + 2x24 AWG - Drop Cable	DeviceNet TPU Shielded 2x15 AWG + 2x18 AWG - Trunk Cable	DeviceNet PVC Shielded 2x22 AWG + 2x24 AWG - Drop Cable
Part Number	10553015	10553014	10553018
<b>FAMILY</b>	<b>MOTIONLINE® Premium</b>	<b>MOTIONLINE® Premium</b>	<b>MOTIONLINE®</b>
Diameter [mm]	7	12	7
Diameter [in]	0.276	0.472	0.276
Weight [lb/ft]	0.0403	0.1210	0.0417
Weight [kg/m]	0.06	0.18	0.062
Weight [kg/km]	60.0	180.0	62.0
<b>FLEXING INFORMATION</b>			
Bending radius	≥ 10 x Ø	≥ 10 x Ø	≥ 10 x Ø
Drag chain cycles	5 Million	5 Million	Not Suggested
Speed	≤ 9.8 ft/sec (180 m/M)	≤ 9.8 ft/sec (180 m/M)	
Acceleration	≤ 22 ft/sec <sup>2</sup> (7 m/s <sup>2</sup> )	≤ 22 ft/sec <sup>2</sup> (7 m/s <sup>2</sup> )	
Temperature	Flexing: -4° to 176° F (-20° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)	Flexing: -4° to 176° F (-20° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)	Flexing: 23° to 176° F (-5° to 80° C) Fixed: -4° to 176° F (-20° to 80° C)
<b>CABLE DESIGN</b>			
Conductor	Flexible tinned copper	Flexible tinned copper	Flexible tinned copper
Core insulation	Polyolefin foam skin (data) Polyolefine (power)	Polyolefin foam skin (data) Polyolefine (power)	Polyolefin foam skin (data) Polyolefine (power)
Core stranding	Two pairs stranded with drain wire and fillers	Two pairs stranded with drain wire and fillers	Two pairs stranded with drain wire and fillers
Core identification	Pair 1: White, Blue Pair 2: Red, Black	Pair 1: White, Blue Pair 2: Red, Black	Pair 1: White, Blue Pair 2: Red, Black
Shield on each pair	Aluminum/Polyester Tape	Aluminum/Polyester Tape	Aluminum/Polyester Tape
Shield	Tinned copper braid, coverage ≥70%	Tinned copper braid, coverage ≥70%	Tinned copper braid, coverage ≥70%
Jacket	PUR/TPU	PUR/TPU	PVC
Color	Violet RAL 4001	Violet RAL 4001	Violet RAL 4001
<b>ELECTRICAL PROPERTIES</b>			
Rated Voltage	300V	300V	300V
Test Voltage	1500V	1500V	1500V
Characteristic Impedance	120 Ω	120 Ω	120 Ω
<b>PROPERTIES</b>			
Oil resistance	IEC 60811-404; EN 50363-10-2	IEC 60811-404; EN 50363-10-2	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1	CSA FT1; UL1581 VW-1; IEC 60332-1	CSA FT1; UL1581 VW-1; IEC 60332-1
Halogen free	No	No	No
UL/CSA	UL-AWM	UL-AWM	UL
CE	Yes	Yes	Yes
Silicon Free	Yes	Yes	Yes
Reach	Yes	Yes	Yes
RoHS-II conform	Yes	Yes	Yes



# FIELD BUS

## Profinet

### MOTIONLINE®

Profinet Type C cable with PUR/TPU jacket for high flex drag chain applications and PVC Type B for less dynamic needs. Both are shielded, oil resistant, and flame retardant.



Silicone Free



Oil resistant  
See Properties



Flame retardant  
See Properties

Description	Profinet Type C TPU - Shielded 4x22 AWG	Profinet Type B PVC - Shielded 4x22 AWG
Part Number	10564256	10560842
<b>FAMILY</b>	<b>MOTIONLINE® Premium</b>	<b>MOTIONLINE®</b>
Diameter [mm]	6.7	6.8
Diameter [in]	0.264	0.268
Weight [lb/ft]	0.0417	0.0437
Weight [kg/m]	0.062	0.065
Weight [kg/km]	62.0	65.0
<b>FLEXING INFORMATION</b>		
Bending radius	≥ 10 x Ø	≥ 15 x Ø
Drag chain cycles	5 Million	Not Suggested
Speed	≤ 9.8 ft/sec (180 m/M)	
Acceleration	≤ 32 ft/sec <sup>2</sup> (10 m/s <sup>2</sup> )	
Temperature	Flexing: -4° to 176° F (-20° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)	Flexing: 23° to 176° F (-5° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)
<b>CABLE DESIGN</b>		
Conductor	Flexible bare copper	Flexible tinned copper
Core insulation	Polyolefin	Polyolefin
Core stranding	Four cores stranded	Four cores stranded
Core identification	Colored: Wh, Og, Bu, Ye	Colored: Wh, Og, Bu, Ye
Inner sheath	Thermoplastic polymer	Thermoplastic polymer
Shield	Tinned copper braid, coverage ≥85%	Tinned copper braid, coverage ≥85%
Jacket	PUR/TPU	PVC
Color	Green RAL 6018	Green RAL 6018
<b>ELECTRICAL PROPERTIES</b>		
Rated Voltage	300V	300V
Test Voltage	1500V	1500V
Characteristic Impedance	100 Ω	100 Ω
<b>PROPERTIES</b>		
Oil resistance	IEC 60811-404; EN 50363-10-2	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1	CSA FT1; UL1581 VW-1; IEC 60332-1
Halogen free	Yes	No
UL/CSA	UL-Style 20549	UL-Style 2571
CE	Yes	Yes
Silicon Free	Yes	Yes
Reach	Yes	Yes
RoHS-II conform	Yes	Yes



# FIELD BUS

## Industrial Ethernet Cable

### TPU / PUR

## MOTIONLINE®

Industrial Ethernet cables shielded with TPU jacket for high flex or C-Track application, oil resistant, flame retardant



Halogen Free



Silicone Free



Oil resistant  
See Properties



Flame retardant  
See Properties

Description	Ethernet CAT5e TPU - Shielded - Green 4x2xAWG26	Ethernet CAT5e TPU - Shielded - Teal 4x2xAWG26
Part Number	10553013	10580271
<b>FAMILY</b>	<b>MOTIONLINE® Premium</b>	<b>MOTIONLINE® Premium</b>
Diameter [mm]	6.8	6.8
Diameter [in]	0.268	0.268
Weight [lb/ft]	0.0390	0.0390
Weight [kg/m]	0.058	0.058
Weight [kg/km]	58.0	58.0
<b>FLEXING INFORMATION</b>		
Bending radius	Fixed: $\geq 7.5 \times \emptyset$ Flexing: $\geq 14 \times \emptyset$	Fixed: $\geq 7.5 \times \emptyset$ Flexing: $\geq 14 \times \emptyset$
Drag chain cycles	2 Million	2 Million
Speed	$\leq 3.3$ ft/sec (60 m/min)	$\leq 3.3$ ft/sec (60 m/min)
Acceleration	$\leq 66$ ft/sec <sup>2</sup> (20 m/s <sup>2</sup> )	$\leq 66$ ft/sec <sup>2</sup> (20 m/s <sup>2</sup> )
Temperature	Flexing: -4° to 176° F (-20° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)	Flexing: -4° to 176° F (-20° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)
<b>CABLE DESIGN</b>		
Conductor	Stranded bare copper	Stranded bare copper
Core insulation	Polyethylene	Polyethylene
Core stranding	Two cores twisted to a pair	Two cores twisted to a pair
Assembly	4 pairs twisted	4 pairs twisted
Core identification	Colored: (Wh/Bu-Bu)(Wh/Og-Og)(Wh/Gn-Gn)(Wh/Bn-Bn)	Colored: (Wh/Bu-Bu)(Wh/Og-Og)(Wh/Gn-Gn)(Wh/Bn-Bn)
Inner sheath	Aluminum/Polyester Tape	Aluminum/Polyester Tape
Shield	Tinned copper braid, coverage $\geq 85\%$	Tinned copper braid, coverage $\geq 85\%$
Jacket	PUR/TPU	PUR/TPU
Color	Green RAL 6018	Teal RAL 5018
<b>ELECTRICAL PROPERTIES</b>		
Rated Voltage	30V	30V
Test Voltage	1000V	1000V
Characteristic Impedance	100 $\pm$ 15 $\Omega$	100 $\pm$ 15 $\Omega$
Transmission Characteristics	CAT5e according to IEC 61156-6	CAT5e according to IEC 61156-6
<b>PROPERTIES</b>		
Oil resistance	IEC 60811-404; EN 50363-10-2	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1	CSA FT1; UL1581 VW-1; IEC 60332-1
Halogen free	Yes	Yes
UL/CSA	UL-Style 20236	UL-Style 20236
CE	Yes	Yes
Silicon Free	Yes	Yes
Reach	Yes	Yes
RoHS-II conform	Yes	Yes



# FIELD BUS

## Profibus

### MOTIONLINE®

Profibus Type C cable with TPU/PUR Jacket for high flex drag chain applications and Type B cable with PVC for less dynamic needs. Both are shielded, oil resistant, and flame retardant.



Silicone Free



Oil resistant  
See Properties



Flame retardant  
See Properties

Description	Profibus TPU - Shielded 1x2x24 AWG	Profibus PVC - Shielded 1x2x24 AWG
Part Number	10572412	10552899
<b>FAMILY</b>	<b>MOTIONLINE® Premium</b>	<b>MOTIONLINE®</b>
Diameter [mm]	7.8	7.8
Diameter [in]	0.307	0.307
Weight [lb/ft]	0.0470	0.0470
Weight [kg/m]	0.07	0.07
Weight [kg/km]	70.0	70.0
<b>FLEXING INFORMATION</b>		
Bending radius	≥ 10 x Ø	≥ 10 x Ø
Drag chain cycles	5 Million	Not Suggested
Speed	≤ 13.2 ft/sec (240 m/M)	
Acceleration	≤ 66 ft/sec <sup>2</sup> (20 m/s <sup>2</sup> )	
Temperature	Flexing: -4° to 176° F (-20° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)	Flexing: -4° to 176° F (-20° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)
<b>CABLE DESIGN</b>		
Conductor	Flexible bare copper	Flexible bare copper
Core insulation	Polyolefin foam skin	Polyolefin foam skin
Core stranding	Two cores stranded	Two cores stranded
Core identification	Colored: Gn, Rd	Colored: Gn, Rd
Inner sheath	Thermoplastic polymer	Thermoplastic polymer
Shield	Tinned copper braid, coverage ≥85%	Tinned copper braid, coverage ≥85%
Jacket	PUR/TPU	PVC
Color	Violet RAL 4001	Violet RAL 4001
<b>ELECTRICAL PROPERTIES</b>		
Rated Voltage	30V	30V
Test Voltage	1500V	1500V
Characteristic Impedance	150 Ω	150 Ω
<b>PROPERTIES</b>		
Oil resistance	IEC 60811-404; EN 50363-10-2	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1	CSA FT1; UL1581 VW-1; IEC 60332-1
Halogen free	Yes	
UL/CSA	AWM 758	UL-Style 20121
CE	Yes	Yes
Silicon Free	Yes	Yes
Reach	Yes	Yes
RoHS-II conform	Yes	Yes



# FIELD BUS

## AS-Interface

### MOTIONLINE®

#### AS-I flat cables for use in AS-I fieldbus systems

AS-I flat cables for use in AS-I fieldbus systems.



Description	ASI Rubber 2x16 AWG / 2x1.5	ASI Rubber 2x14 AWG / 2x1.5	ASI TPU/PUR 2x16 AWG / 2x1.5	ASI TPU/PUR 2x16 AWG / 2x14
Part Number	48210165 - Yellow Jacket 48210116 - Black Jacket	48213165 - Yellow Jacket 48213115 - Black Jacket	48216165 - Yellow Jacket 48216115 - Black Jacket	48216565 - Yellow Jacket 48216515 - Black Jacket
FAMILY	MOTIONLINE®	MOTIONLINE®	MOTIONLINE® Premium	MOTIONLINE® Premium
Dimension width x length [in]	0.157x0.394	0.157x0.394	0.157x0.394	0.157x0.394
Dimension width x length [mm]	4x10	4x10	4x10	4x10
Weight [lb/ft]	0.0437	0.0437	0.0437	0.0511
Weight [kg/m]	0.070	0.084	0.061	0.076
Weight [kg/km]	70.0	84.0	61.0	76.0
FLEXING INFORMATION				
Bending radius	≥ 9 x Ø	≥ 9 x Ø	≥ 6 x Ø	≥ 6 x Ø
Drag chain cycles	Not Suggested	Not Suggested	5 Million	5 Million
Speed			≤ 9.8 ft/sec (180 m/min)	≤ 9.8 ft/sec (180 m/min)
Acceleration			≤ 64 ft/sec <sup>2</sup> (20 m/s <sup>2</sup> )	≤ 64 ft/sec <sup>2</sup> (20 m/s <sup>2</sup> )
Temperature	-4° to 188° F (-20° to 85° C)	-4° to 188° F (-20° to 85° C)	Flexing: -4° to 176° F (-20° to 80° C) Fixed: -40° to 176° F (-40° to 80° C)	Flexing: -4° to 176° F (-20° to 80° C) Fixed: -40° to 176° F (-40° to 80° C)
CABLE DESIGN				
Conductor	Flexible tinned copper	Flexible tinned copper	Flexible tinned copper	Flexible tinned copper
Core insulation	Thermoset polymer	Thermoset polymer	Thermoset polymer	Thermoset polymer
Core stranding	Two cores parallel	Two cores parallel	Two cores parallel	Two cores parallel
Core identification	Colored: Bu, Bn	Colored: Bu, Bn	Colored: Bu, Bn	Colored, Bu, Bn
Jacket Material	Rubber	Rubber	TPU / PUR	TPU / PUR
ELECTRICAL PROPERTIES				
Rated Voltage	32V Yellow jacket 48V Black jacket	32V Yellow jacket 48V Black jacket	300V	90V
Test Voltage	300V	300V	1500V	500V
PROPERTIES				
Oil resistance	EN 50363-4.1	EN 50363-4.1	IEC 60811-404; EN 50363-10-2	IEC 60811-404; EN 50363-10-2
Flame retardant	No	No	Flame retardant acc to EN 60332-2; FT2	Flame retardant acc to EN 60332-2; FT2
Halogen free	Yes	Yes	Yes	Yes
UL/CSA	No	No	UL style 20549	UL-style 21866
CE	Yes	Yes	Yes	Yes
Silicon Free	Yes	Yes	Yes	Yes
Reach	Yes	Yes	Yes	Yes
RoHS-II conform	Yes	Yes	Yes	Yes



# MEASURING SYSTEMS

## Feedback/Encoder Cables

### for SIEMENS Standard

### 6FX8008-PLUS

## MOTIONLINE® PREMIUM

Feedback cables according to SIEMENS standard 6FX8008-PLUS for high flex and C-Track applications, PUR jacket, shielded, oils resistant, flame retardant, halogen-free

Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.



Silicone Free

Halogen Free

Oil resistant  
See Properties

Flame retardant  
See Properties

#### FLEXING INFORMATION

Bending radius	≥ 7.5 x Ø
Drag chain cycles	5 million
Speed	≤ 16 ft/sec (300 m/min)
Acceleration	≤ 160 ft/sec <sup>2</sup> (50 m/s <sup>2</sup> )
Temperature	Flexing: -22° to 176° F (-30° to 80° C) Fixed: -40° to 176° F (-40° to 80° C)

#### CABLE DESIGN

Conductor	Tinned copper
Core insulation	Polyolefin (PP)
Core stranding	According to measuring systems specification
Core identification	Colored: See table
Shield	Tinned copper braid, coverage ≥85%
Jacket	PUR/TPU
Color	Green RAL 6018

#### ELECTRICAL PROPERTIES

Rated Voltage	30 V
Test Voltage	500 V

#### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1
Halogen free	Yes
UL/CSA	UL AWM UL 758
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

Number of Conductors	Part number	Core Identification	Cable Design	OEM Reference	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
16	10553616	26 AWG/8Pr: Wh/Ye-Wh/Gn, Wh/Rd-Wh/Og, Wh/Bk-Wh/Bn, Gy-Wh, Bu-Vt, Ye-Gn, Rd-Og, Bk-Bn	(8Pr-26AWG) S	6FX8008-1BD11	7.8	0.307	0.0551	0.0820	82.0
12	10553606	22 AWG/4Pr, 20 AWG/4C: Bu-Vt, Rd-Og, Bn-Bk, Ye,Gn, Wh/Bu, Wh/Bk, Wh/Rd, Wh/Ye	((4Pr-22 AWG) S + 4C-20 AWG) S	6FX8008-1BD21	8.9	0.350	0.0779	0.1160	116.0
8	10554349	26 AWG/3Pr, 20 AWG/4C: Ye-Gn, Bk-Bn, Rd-Og, Bk, Rd	(3x(1Pr-26 AWG) S + (2C-20 AWG) S) S	6FX8008-1BD31	9.0	0.354	0.0719	0.1070	107.0
12	10554353	26 AWG/3Pr, 26 AWG/4C, 20 AWG/1Pr: Ye-Gn, Bk-Bn, Rd-Og, Gy, Bu, Wh/Ye, Wh/Bk, Bn/Rd-Bn/Bu	((3x1Pr-26 AWG) S + 4C-20 AWG + 1Pr-20 AWG) S	6FX8008-1BD41	8.9	0.350	0.0672	0.1000	100.0
16	10554360	26 AWG/3Pr, 20 AWG/2C, 26 AWG/4C, 24 AWG/4C: Ye-Gn, Bk-Bn, Rd-Og, Bn/Rd, Bn/Bu, Gy, Bu, Wh/Ye, Wh/Bk, Bn/Ye, Bn/Gy, Gn/Bk, Gn/Rd	((3x1Pr-26 SWG) S + 2C-20 AWG + 4C-26AWG + 4C-24 AWG) S	6FX8008-1BD51	9.5	0.374	0.0793	0.1180	118.0
8	10553613	26 AWG/4pr: Bk-Bn, Rd-Og, Ye-Gn, Bp-Vt	(4Pr-26 AWG) S	6FX8008-1BD61	6.4	0.252	0.0356	0.0530	53.0
4	10558927	26 AWG/2pr: Rd-Og, Bk-Bn	(2Pr-26 AWG) S	6FX8008-1BD71	5.0	0.197	0.0222	0.0330	33.0
12	10554182	24 AWG/12C: Bk, Bn, Rd, Og, Ye, Gn, Bu, Vt, Gy, Wh, Wh/Bk, Wh/Bn	(12C-24 AWG) S	6FX8008-1BD81	6.9	0.272	0.0464	0.0690	69.0



# MEASURING SYSTEMS

## Feedback/Encoder Cables

### for SIEMENS Standard

## 6FX5008-Standard

# MOTIONLINE® Advanced

Feedback cables according to Siemens 6FX5008-Standard for Low flex applications. PVC Jacket, shielded, oil resistant, flame retardant.

Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.



Silicone Free



Oil resistant  
See Properties



Flame retardant  
See Properties

#### FLEXING INFORMATION

Bending radius	≥ 10 x Ø
Drag chain cycles	1 million
Speed	≤ 10 ft/sec (180 m/min)
Acceleration	≤ 16 ft/sec <sup>2</sup> (5 m/s <sup>2</sup> )
Temperature	Flexing: 23° to 176° F (-5° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)

#### CABLE DESIGN

Conductor	Tinned copper
Core insulation	Polyolefin (PP)
Core stranding	According to measuring systems specification
Core identification	Colored: See table
Shield	Tinned copper braid, coverage >=85%
Jacket	PVC
Color	Green RAL 6018

#### ELECTRICAL PROPERTIES

Rated Voltage	30 V
Test Voltage	500 V

#### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1
Halogen free	No
UL/CSA	UL AWM UL 758
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

Number of Conductors	Part number	Core Identification	Cable Design	OEM Reference	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
12	10553609	2 AWG/4Pr, 20 AWG/4C: Bu-Vt, Rd-Og, Bn-Bk, Ye,Gn, Wh/Bu, Wh/Bk, Wh/Rd, Wh/Ye	((4Pr-22 AWG) S + 4C-20 AWG) S	6FX5008-1BD21	8.9	0.350	0.0739	0.1100	110.0
8	10554351	26 AWG/3Pr, 20 AWG/2C: Ye-Bk, Gn-Bk, Rd-Bk, Wh, Bk	(3x(1Pr-26 AWG) S + (2C-20 AWG) S) S	6FX5008-1BD31	9.0	0.354	0.0779	0.1160	116.0
12	10554357	26 AWG/3Pr, 26 AWG/4C, 20 AWG/1Pr: Ye-Gn, Bk-Bn, Rd-Og, Gy, Bu, Wh/Ye, Wh/Bk, Bn/Rd-Bn/Bu	((3x1Pr-26 AWG) S + 4C-26 AWG + 1Pr-20 AWG) S	6FX5008-1BD41	8.2	0.323	0.0759	0.1130	113.0
16	10554363	26 AWG/3Pr, 20 AWG/2C, 26 AWG/4C, 24 AWG/4C: Ye-Gn, Bk-Bn, Rd-Og, Bn/Rd, Bn/Bu, Gy, Bu, Wh/Ye, Wh/Bk, Bn/Ye, Bn/Gy, Gn/Bk, Gn/Rd	((3x1Pr-26 SWG) S + 2C-20 AWG + 4C-26AWG + 4C-24 AWG) S	6FX5008-1BD51	9.5	0.374	0.0820	0.1220	122.0

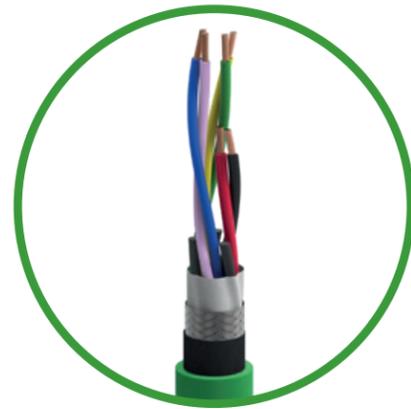


# MEASURING SYSTEMS

## Siemens DRIVE CliQ

### MOTIONLINE®

Feedback cables according to SIEMENS standard Drive CliQ, shielded, oils resistant, flame retardant, halogen-free



Silicone Free See Properties

Oil resistant See Properties

Flame retardant See Properties

Description	DRIVE CliQ 6FX8008-2DC00 (2x(2x24AWG)+1x2x22AWG)	DRIVE CliQ 6FX5008-2DC00 (2x2-24 AWG + 1x2-22 AWG)	DRIVE CliQ 6FX2008-1DC00 (2x(2x24) AWG)
Part Number	10563699	10554179	10554181
<b>FAMILY</b>	<b>MOTIONLINE® Premium</b>	<b>MOTIONLINE®</b>	<b>MOTIONLINE®</b>
Diameter [mm]	7	7.2	6.8
Diameter [in]	0.276	0.283	0.268
Weight [lb/ft]	0.0450	0.0443	0.0383
Weight [kg/m]	0.067	0.066	0.057
Weight [kg/km]	67.0	66.0	57.0
<b>FLEXING INFORMATION</b>			
Bending radius	≥ 10 x Ø	≥ 15 x Ø	≥ 7.5 x Ø
Drag chain cycles	5 Million	100 Thousand	Not Suggested
Speed	≤ 9.8 ft/sec (180 m/M)	≤ 1.65 ft/sec (30 m/M)	
Acceleration	≤ 16 ft/sec <sup>2</sup> (5 m/s <sup>2</sup> )	≤ 6.6 ft/sec <sup>2</sup> (2 m/s <sup>2</sup> )	
Temperature	Flexing: -22° to 176° F (-30° to 80° C) Fixed: -40° to 176° F (-40° to 80° C)	Flexing: -23° to 176° F (-5° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)	23° to 176° F (-5° to 80° C)
<b>CABLE DESIGN</b>			
Conductor	Bare Copper	Bare Copper	Bare Copper
Core insulation	Polyolefin	Polyolefin	Polyolefin foam skin
Core stranding	According to DREVE_CLIQ specification	According to DREVE_CLIQ specification	According to DREVE_CLIQ specification
Core identification	Pair 1: Green, Yellow Pair 2: Blue, Pink Pair 3 (Power): Red, Black	Pair 1: Green, Yellow Pair 2: Blue, Pink Pair 3 (Power): Red, Black	Pair 1: Green, Yellow Pair 2: Blue, Pink
Shield on each pair	Metal Tape	Metal Tape	Metal Tape
Shield	Tinned copper braid, coverage ≥85%	Tinned copper braid, coverage ≥85%	Tinned copper braid, coverage ≥85%
Jacket	PUR/TPU	PVC	PVC
Color	Green RAL 6018	Green RAL 6018	Green Ral 6018
<b>ELECTRICAL PROPERTIES</b>			
Rated Voltage	30V	30V	30V
Test Voltage	500V	500V	500V
Characteristic Impedance	100 Ω	100 Ω	100 Ω
<b>PROPERTIES</b>			
Oil resistance	IEC 60811-404; EN 50363-10-2	IEC 60811-404; EN 50363-10-2	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1	CSA FT1; UL1581 VW-1; IEC 60332-1	CSA FT1; UL1581 VW-1; IEC 60332-1
Halogen free	Yes	No	No
UL/CSA	UL AWM UL 758	UL AWM UL 758	UL AWM UL 758
CE	Yes	Yes	Yes
Silicon Free	Yes	Yes	Yes
Reach	Yes	Yes	Yes
RoHS-II conform	Yes	Yes	Yes



# MEASURING SYSTEMS

## Feedback/Encoder Cables

### for Bosch-Rexroth High Flex

# MOTIONLINE® Premium

Feedback cables according to Bosch-Rexroth standard for high flex and C-Track applications, PUR jacket, shielded, oils resistant, flame retardant, halogen-free

Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.



Silicone Free

Halogen Free

Oil resistant  
See Properties

Flame retardant  
See Properties

#### FLEXING INFORMATION

Bending radius	≥ 7.5 x Ø
Drag chain cycles	5 million
Speed	≤ 16 ft/sec (300 m/min)
Acceleration	≤ 160 ft/sec <sup>2</sup> (50 m/s <sup>2</sup> )
Temperature	Flexing: -22° to 176° F (-30° to 80° C) Fixed: -40° to 176° F (-40° to 80° C)

#### CABLE DESIGN

Conductor	Tinned copper
Core insulation	Polyolefin
Core stranding	According to measuring systems specification
Core identification	Colored: See table
Shield	Tinned copper braid, coverage ≥85%
Jacket	PUR/TPU
Color	Orange RAL 2003

#### ELECTRICAL PROPERTIES

Rated Voltage	300 V
Test Voltage	1500 V

#### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1
Halogen free	Yes
UL/CSA	UL AWM UL 758; UL Recognized
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

Number of Conductors	Part number	Core Identification	Cable Design	OEM Reference	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
10	10554394	24 AWG/4Pr, 20 AWG/2C: BN-Gn, Gy-Pk, Bu-Vt, Rd-Bk, Wh, Bn	(4pr-24AWG + 2C-20 AWG) S	INK-0448	8.5	0.335	0.0672	0.1000	100.0
8	10554384	24 AWG/4Pr, 18 AWG/2C: BN-Gn, Gy-Pk, Bu-Vt, Rd-Bk, Wh, Bn	(4pr-24AWG + 2C-18 AWG) S	INK-0209	8.8	0.346	0.0806	0.1200	120.0
16	10555735	26 AWG/4C, 26 AWG/4Pr, 18 AWG/4C: Ye/Bk, Bu/Bk, Gn/Bk, Rd/Bk, Rd-Bk, Bn-Gn, Ye-Vt, Gy-Pk, Wh, Bn/Gn, Wh/Gn, Bu	(4x(1pr-26 AWG) S + 4C-26 AWG + 4C-18 AWG) S	INK-0532	9.7	0.382	0.0947	0.1410	141.0
9	10554389	20 AWG/9C: Gn, Bn, Gy, Ye, Bk, Bu, Rd, Wh, Pk, (DIN47100)	(9C-20 AWG) S	INK-0208	8.8	0.374	0.0773	0.1150	115.0



# MEASURING SYSTEMS

## Feedback/Encoder Cables

### for Heidenhain Standards

# MOTIONLINE® Premium



Silicone Free

Halogen Free  
See table

Oil resistant  
See Properties

Flame retardant  
See Properties

Measuring systems cables according to Heidenhain standard for dynamic applications, PUR jacket, shielded, resistant to oils, flame retardant, halogen-free.



Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.

#### FLEXING INFORMATION

Bending radius	≥ 10 x Ø
Drag chain cycles	5 million
Speed	≤ 13.2 ft/sec (240m/min)
Acceleration	≤ 66 ft/sec <sup>2</sup> (20 m/s <sup>2</sup> )
Temperature	Flexing: -22° to 176° F (-30° to 80° C) Fixed: -40° to 176° F (-40° to 80° C)

#### CABLE DESIGN

Conductor	Tinned copper
Core insulation	See table below
Core stranding	According to measuring systems specification
Core identification	Colored: See table
Shield	Tinned copper braid, coverage >=85%
Jacket	PUR/TPU
Color	See Table

#### ELECTRICAL PROPERTIES

Rated Voltage	30 V
Test Voltage	1500 V

#### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1
Halogen free	See table
UL/CSA	UL AWM UL 758
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

Number of Conductors	Part number	Core Identification	Ins 26	Ins 22/18	Sheath on pairs	Cable Design	OEM Reference	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]	Halogen Free
8	10554333	26 AWG/3Pr, 22 AWG/2C : Ye-Gn, Pk-Gy, Bu-Rd, Wh, Bn	TPE-E	PVC	PVC	(3Pr-26 AWG) S + 2C(22 AWG) S) S	Green RAL 6018	8.3	0.327	0.0867	0.1290	129.0	No
12	10554274	22 AWG/4C, 26 AWG/4Pr: Wh, Bu, Wh/Gn, Bn/Gn, Gn-Bn, Ye-Vt, Pk-Gy, Rd-Bk	TPE-E	PP	-	(4Pr-26 AWG + 4C-22 AWG) S	Black RAL 9005	8.5	0.335	0.0558	0.0830	83.0	Yes
12	10554277	22 AWG/4C, 26 AWG/4Pr: Wh, Bu, Wh/Gn, Bn/Gn, Gn-Bn, Ye-Vt, Pk-Gy, Rd-Bk	TPE-E	PP	-	(4Pr-26 AWG + 4C-22 AWG) S	Green RAL 6128	8.5	0.335	0.0558	0.0830	83.0	Yes
16	10554279	26 AWG/4C, 22 AWG/4C, 26 AWG/4Pr: Bu/Bk, Ye/Bk, Rd/Bk, Gn/Bk, Wh, Bu, Wh/Gn, Bn/Gn, Gy-Pk, Ye-Vt, Gn-Bn, Rd-Bk	TPE-E	TPE-E	-	(4Pr-26 AWG +4C-22 AWG + (4C-26 AWG) S) S	Black RAL 9005	8.3	0.327	0.0672	0.1000	100.0	No
8	10554327	26 AWG/3Pr, 18 AWG/2C: Ye-Gn, Pk-Gy, Bu-Rd, Wh, Bn		PVC	PVC	((3Pr-26 AWG) S + 2C(18 AWG) S) S	Black RAL 9005	9.1	0.358	0.0571	0.0850	85.0	No



# SERVO

## VFD Servo/Power Cables

### for SIEMENS

## Standard 6FX8008-PLUS

# MOTIONLINE® Premium



Servo cables with control pair according to SIEMENS 6FX8008-Plus for high-flex and C-track applications, PUR jacket, shielded, resistant to oils, flame retardant, halogen-free. Suitable for VFD applications.



Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.

#### FLEXING INFORMATION

Bending radius	≥ 7.5 x Ø, (≥ 10 x Ø on 4 AWG and Larger)
Drag chain cycles	10 million
Speed	≤ 16 ft/sec (300 m/min)
Acceleration	≤ 160 ft/sec <sup>2</sup> (50 m/s <sup>2</sup> )
Temperature	Flexing: -22° to 194° F (-30° to 90° C) Fixed: -58° to 194° F (-50° to 90° C)

#### CABLE DESIGN

Conductor	Stranded Bare Copper
Core insulation	Polyolefin (XLPE)
Core stranding	Power cores stranded with fillers
Core identification	Power: Bk-Marked U/L1/C/L+, Bk-Marked V/L2, Bk-Marked W/L3/D/L-, Ye/Gn Signal: Bk, Wh
Shield	Tinned copper braid, coverage >=80%
Jacket	PUR/TPU
Color	Orange RAL 2003

#### ELECTRICAL PROPERTIES

Rated Voltage	1000 V (UL)
Test Voltage	4000 V

#### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1; EN 50265-2-1
Halogen free	Yes
UL/CSA	UL-style 21209
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

Number of Conductors	Cable Design	Description	Part number	OEM Reference	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
4+1Pr	(4C-16 AWG + (1Pr-16 AWG) S) S	Siemens 6FX8008 - 16 AWG/4C + 16 AWG/1Pr	10561457	6FX8008-1BA11	11.6	0.457	0.1546	0.2300	230.0
4+1Pr	(4C-14 AWG + (1Pr-16 AWG) S) S	Siemens 6FX8008 - 14 AWG/4C + 16 AWG/1Pr	10565713	6FX8008-1BA21	13.4	0.528	0.2016	0.3000	300.0
4+1Pr	(4C-12 AWG + (1Pr-16 AWG) S) S	Siemens 6FX8008 - 12 AWG/4C + 16 AWG/1Pr	10565714	6FX8008-1BA31	14.8	0.583	0.2553	0.3800	380.0
4+1Pr	(4C-10 AWG + (1Pr-16 AWG) S) S	Siemens 6FX8008 - 10 AWG/4C + 16 AWG/1Pr	10551458	6FX8008-1BA41	16.8	0.661	0.3561	0.5300	530.0
4+1Pr	(4C-8 AWG + (1Pr-16 AWG) S) S	Siemens 6FX8008 - 8 AWG/4C + 16 AWG/1Pr	10565715	6FX8008-1BA51	19.4	0.764	0.5141	0.7650	765.0
4+1Pr	(4C-6 AWG + (1Pr-16 AWG) S) S	Siemens 6FX8008 - 6 AWG/4C + 16 AWG/1Pr	10565716	6FX8008-1BA61	23.1	0.909	0.7324	1.0900	1 090.0
4+1Pr	(4C-4 AWG + (1Pr-16 AWG) S) S	Siemens 6FX8008 - 4 AWG/4C + 16 AWG/1Pr	10561459	6FX8008-1BA25	27.1	1.047	1.0281	1.5300	1 530.0
4+1Pr	(4C-2 AWG + (1Pr-16 AWG) S) S	Siemens 6FX8008 - 2 AWG/4C + 16 AWG/1Pr	10565717	6FX8008-1BA35	30.9	1.217	1.3708	2.0400	2 040.0
4+1Pr	(4C-1 AWG + (1Pr-16 AWG) S) S	Siemens 6FX8008 - 1 AWG/4C + 16 AWG/1Pr	10565718	6FX8008-1BA50	34.0	1.339	1.8546	2.7600	2 760.0
4	(4C-16 AWG) S	Siemens 6FX8008 - 16 AWG/4C	10565730	6FX8008-1BB11	9.1	0.358	0.1008	0.1500	150.0
4	(4C-14 AWG) S	Siemens 6FX8008 - 14 AWG/4C	10565731	6FX8008-1BB21	10.6	0.417	0.1478	0.2200	220.0
4	(4C-12 AWG) S	Siemens 6FX8008 - 12 AWG/4C	10565732	6FX8008-1BB31	11.7	0.461	0.2016	0.3000	300.0
4	(4C-10 AWG) S	Siemens 6FX8008 - 10 AWG/4C	10565733	6FX8008-1BB41	14.4	0.567	0.3024	0.4500	450.0
4	(4C-8 AWG) S	Siemens 6FX8008 - 8 AWG/4C	10565734	6FX8008-1BB51	17.5	0.689	0.4435	0.6600	660.0
4	(4C-6 AWG) S	Siemens 6FX8008 - 6 AWG/4C	10565735	6FX8008-1BB61	21.6	0.850	0.6787	1.0100	1 010.0
4	(4C-4 AWG) S	Siemens 6FX8008 - 4 AWG/4C	10565736	6FX8008-1BB25	25.2	0.992	0.9542	1.4200	1 420.0
4	(4C-2 AWG) S	Siemens 6FX8008 - 2 AWG/4C	10565737	6FX8008-1BB35	28.6	1.126	1.3171	1.9600	1 960.0
4	(4C-1 AWG) S	Siemens 6FX8008 - 1 AWG/4C	10565738	6FX8008-1BB50	33.4	1.315	1.8143	2.7000	2 700.0



# SERVO

## VFD Servo/Power Cables for Bosch-Rexroth Standard MOTIONLINE® Premium

Servo cables with control pair according to BOSCH REXROTH standard for extremely dynamic applications, PUR jacket, shielded, resistant to oils, flame retardant, halogen-free. Suitable for VFD applications.

Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.



Halogen Free

Oil resistant  
See Properties

Flame retardant  
See Properties

Silicone Free

FLEXING INFORMATION	
Bending radius	≥ 7.5 x Ø
Drag chain cycles	10 million
Speed	≤ 16 ft/sec (300 m/min)
Acceleration	≤ 160 ft/sec <sup>2</sup> (50 m/s <sup>2</sup> )
Temperature	Flexing: -22° to 194° F (-30° to 90° C) Fixed: -58° to 194° F (-50° to 90° C)

CABLE DESIGN	
Conductor	Stranded Bare Copper
Core insulation	Polyolefin (XLPE)
Core stranding	Power cores stranded with fillers
Core identification	Power: Bk-Marked U/L1/C/L+, Bk-Marked V/L2, Bk-Marked W/L3/D/L-, Ye/Gn; Signal: Bk-Marked 5-6, 7-8
Shield	Tinned copper braid, coverage >=80%
Jacket	PUR/TPU
Color	Orange RAL 2003

ELECTRICAL PROPERTIES	
Rated Voltage	1000 V (UL)
Test Voltage	4000 V

PROPERTIES	
Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1; EN 50265-2-1
Halogen free	Yes
UL/CSA	UL-style 20234
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

Number of Conductors	Cable Design	Description	Part number	OEM Reference	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
4+2Pr	(4C-18 AWG + (1Pr-19 AWG) S + (1Pr-19 AWG) S) S	Bosch-Rexroth, 18 AWG/4C + 19 AWG/2Pr	10580421	INK-0653	11.6	0.457	0.1411	0.2100	210.0
4+2Pr	(4C-16 AWG + (1Pr-19 AWG) S + (1Pr-19 AWG) S) S	Bosch-Rexroth, 16 AWG/4C + 19 AWG/2Pr	10580422	INK-0650	12.2	0.480	0.1613	0.2400	240.0
4+2Pr	(4C-14 AWG + (1Pr-18 AWG) S + (1Pr-18 AWG) S) S	Bosch-Rexroth, 14 AWG/4C + 18 AWG/2Pr	10580423	INK-0602	14.6	0.575	0.1882	0.2800	280.0
4+2Pr	(4C-12 AWG + (1Pr-16 AWG) S + (1Pr-18 AWG) S) S	Bosch-Rexroth, 12 AWG/4C + 16 AWG/1Pr + 18 AWG/1Pr	10580424	INK-0603	16.3	0.642	0.3024	0.4500	450.0



# SERVO

## VFD Servo/Power Cables for SIEMENS Standard 6FX5008-Standard MOTIONLINE®

Servo cables according to SIEMENS standard 6FX5008 for fixed installation or low flex applications, PVC jacket, shielded, resistant to oils, flame retardant. Suitable for VFD applications.



Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.



Silicone Free



Oil resistant  
See Properties



Flame retardant  
See Properties

### FLEXING INFORMATION

Bending radius	≥ 15 x Ø
Drag chain cycles	100 Thousand
Speed	≤ 1.65 ft/sec (30 m/M)
Acceleration	≤ 6.6 ft/sec <sup>2</sup> (2 m/s <sup>2</sup> )
Temperature	Flexing: -23° to 194° F (-5° to 90° C) Fixed: -22° to 194° F (-30° to 90° C)

### CABLE DESIGN

Conductor	Stranded Bare Copper
Core insulation	Polyolefin (XLPE)
Core stranding	Power cores stranded with fillers
Core identification	Power: Bk-Marked U/L1/C/L+, Bk-Marked V/L2, Bk-Marked W/L3/D/L-, Ye/Gn Signal: Bk, Wh
Shield	Tinned copper braid, coverage >=85%
Jacket	PVC
Color	Orange RAL 2003

### ELECTRICAL PROPERTIES

Rated Voltage	600 V / 1000 V
Test Voltage	4000 V

### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1; EN 50265-2-1
Halogen free	No
UL/CSA	Approved
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

Number of Conductors	Cable Design	Description	Part number	OEM Reference	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
4+1Pr	(4C-16 AWG + (1Pr-16 AWG) S) S	Siemens 6FX5008 - 16 AWG/4C + 16 AWG/1Pr	10580425	6FX5008-1BA11	10.4	0.409	0.1310	0.1950	195.0
4+1Pr	(4C-14 AWG + (1Pr-16 AWG) S) S	Siemens 6FX5008 - 14 AWG/4C + 16 AWG/1Pr	10580426	6FX5008-1BA21	12.1	0.476	0.1646	0.2450	245.0
4+1Pr	(4C-12 AWG + (1Pr-16 AWG) S) S	Siemens 6FX5008 - 12 AWG/4C + 16 AWG/1Pr	10580427	6FX5008-1BA31	13.6	0.535	0.2170	0.3230	323.0
4+1Pr	(4C-10 AWG + (1Pr-16 AWG) S) S	Siemens 6FX5008 - 10 AWG/4C + 16 AWG/1Pr	10580428	6FX5008-1BA41	15.8	0.622	0.3125	0.4650	465.0
4	(4C-16 AWG) S	Siemens 6FX5008 - 16 AWG/4C	10580429	6FX5008-1BB11	8.0	0.315	0.0813	0.1210	121.0
4	(4C-14 AWG) S	Siemens 6FX5008 - 14 AWG/4C	10580430	6FX5008-1BB21	9.6	0.378	0.1169	0.1740	174.0
4	(4C-12 AWG) S	Siemens 6FX5008 - 12 AWG/4C	10580431	6FX5008-1BB31	11.0	0.433	0.1646	0.2450	245.0
4	(4C-10 AWG) S	Siemens 6FX5008 - 10 AWG/4C	10580432	6FX5008-1BB41	13.5	0.531	0.2466	0.3670	367.0



# SERVO

## VFD Servo/Power Cables

### MOTIONLINE® Advanced

Servo cables for fixed or moderate flex applications, PVC jacket, shielded, resistant to oils, flame retardant. Suitable for VFD applications.

Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.



Silicone Free



Oil resistant  
See Properties



Flame retardant  
See Properties

#### FLEXING INFORMATION

Bending radius	≥ 10 x Ø
Drag chain cycles	5 Million
Speed	≤ 9.8 ft/sec (180 m/M)
Acceleration	≤ 50 ft/sec <sup>2</sup> (15 m/s <sup>2</sup> )
Temperature	Flexing: -15° to 194° F (-15° to 90° C) Fixed: -4° to 194° F (-20° to 90° C)

#### CABLE DESIGN

Conductor	Stranded Bare Copper
Core insulation	Polyolefin (XLPE)
Core stranding	Power cores stranded with fillers
Core identification	Power: Bk-Numbered Signal: Bk, Wh
Shield	Tinned copper braid, coverage >=85%
Jacket	PVC
Color	Orange RAL 2003

#### ELECTRICAL PROPERTIES

Rated Voltage	600 V / 1000 V
Test Voltage	Power: 4000 V Signal: 2000 V

#### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 VW-1; IEC 60332-1; EN 50265-2-1
Halogen free	No
UL/CSA	Approved
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

Number of Conductors	Cable Design	Description	Part number	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	[kg/m]	Weight [kg/km]
4	(4C-16 AWG) S	MOTIONLINE 800RATIO SERVO - 16 AWG/4C	10580433	9.1	0.358	0.0874	0.1300	130.0
4	(4C-14 AWG) S	MOTIONLINE 800RATIO SERVO - 14 AWG/4C	10580434	10.6	0.417	0.1263	0.1880	188.0
4	(4C-12 AWG) S	MOTIONLINE 800RATIO SERVO - 12 AWG/4C	10580435	11.9	0.469	0.1814	0.2700	270.0
4	(4C-10 AWG) S	MOTIONLINE 800RATIO SERVO - 10 AWG/4C	10580436	14.5	0.571	0.2775	0.4130	413.0
4	(4C-8 AWG) S	MOTIONLINE 800RATIO SERVO - 8 AWG/4C	10580437	17.5	0.689	0.4099	0.6100	610.0
4	(4C-6 AWG) S	MOTIONLINE 800RATIO SERVO - 6 AWG/4C	10580438	21.6	0.850	0.6384	0.9500	950.0
4+1Pr	(4C-16 AWG + (1Pr-16 AWG) S) S	MOTIONLINE 800RATIO SERVO/VFD - 16 AWG/4C + 16 AWG/1Pr	10580439	11.6	0.457	0.1498	0.2230	223.0
4+1Pr	(4C-14 AWG + (1Pr-16 AWG) S) S	MOTIONLINE 800RATIO SERVO/VFD - 14 AWG/4C + 16 AWG/1Pr	10580440	13.4	0.528	0.1902	0.2830	283.0
4+1Pr	(4C-12 AWG + (1Pr-16 AWG) S) S	MOTIONLINE 800RATIO SERVO/VFD - 12 AWG/4C + 16 AWG/1Pr	10580441	14.8	0.583	0.2433	0.3620	362.0
4+1Pr	(4C-10 AWG + (1Pr-16 AWG) S) S	MOTIONLINE 800RATIO SERVO/VFD - 10 AWG/4C + 16 AWG/1Pr	10580442	16.8	0.661	0.3279	0.4880	488.0
4+1Pr	(4C-8 AWG + (1Pr-16 AWG) S) S	MOTIONLINE 800RATIO SERVO/VFD - 8 AWG/4C + 16 AWG/1Pr	10580443	19.4	0.764	0.4650	0.6920	692.0

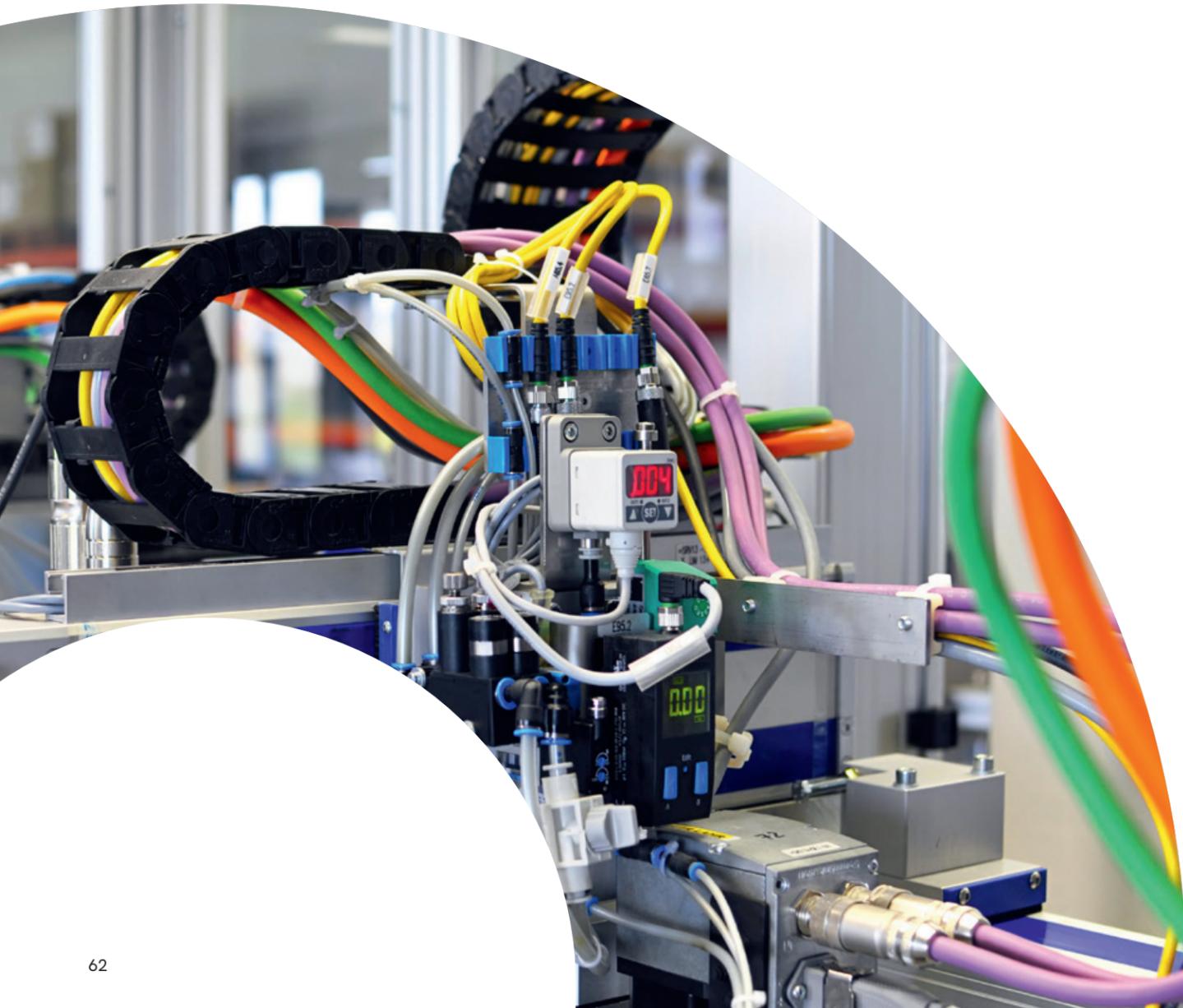


# HYBRID CABLES

## Solutions for customized automation applications

Lynxco's Hybrid Cables are designed to streamline complex wiring requirements by integrating multiple functionalities into a single, high-performance cable solution. Whether combining power, data, and sensor

lines or creating a tailored configuration for specialized automation systems, Lynxco's Hybrid Cables provide unmatched flexibility and design versatility.



### CUSTOMIZED CABLES ACCORDING TO YOUR NEEDS

Hybrid Cables are engineered to simplify installation, reduce weight, and enhance system reliability by minimizing the number of separate cables required. Each cable is designed to meet specific application requirements, including:

- Power and Data Integration – Efficiently transmit power and high-speed data within a unified cable construction.
- Sensor, Signal, and Control Combinations – Enable precise communication and control in industrial automation systems.
- Dynamic Motion Compatibility – Optimized for high-flex applications, ensuring long-term durability in continuous motion environments.

### ENGINEERED TO YOUR SPECIFICATIONS

Lynxco offers two paths to customized solutions:

- Customer-Specified Design – Manufacture to exact specifications provided by the customer, ensuring seamless integration and performance within proprietary systems.
- Co-Developed Solutions – Partner with Lynxco's engineering experts to co-design and refine a solution that optimizes performance, reliability, and cost efficiency.

### VERSATILE APPLICATIONS AND PERFORMANCE BENEFITS

With nearly limitless configuration options, Hybrid Cables are ideal for use in:

- Industrial Automation – Consolidate multiple connections into one robust, dynamic cable.
- Robotics and Motion Control – Maintain flexibility and reliability in demanding, continuous-motion environments.
- Machine Tools and Manufacturing Systems – Reduce installation time and complexity with custom hybrid designs.

### UNMATCHED FLEXIBILITY AND RELIABILITY

Lynxco's Hybrid Cables are designed to withstand harsh industrial environments while maintaining signal integrity and electrical performance. With options for high-flex, torsion-resistant, and abrasion-resistant constructions, these cables provide long-term durability and reduced maintenance costs.

### TAILORED TO YOUR NEEDS

Whether you need a fully customer-specified design or a co-developed solution leveraging Lynxco's engineering expertise, our Hybrid Cables can be customized to your specific application requirements.

### READY TO DISCUSS YOUR APPLICATION?

Lynxco's technical team is ready to collaborate on custom Hybrid Cable solutions that meet your exact specifications. Contact us to explore how our Hybrid Cables can enhance performance, reliability, and efficiency in your automation systems.



# ROBOT CABLES

## Solutions for extreme dynamic motion

Lynxéo's Robot Cables are specifically engineered for the most demanding robotic applications, where constant movement, tight bending radii, and extreme torsion forces are the norm. These cables are designed to deliver

exceptional flexibility, durability, and signal integrity, ensuring reliable performance in robotic arms, motion-controlled machinery, and automation systems.

### BUILT FOR HIGH-DYNAMIC APPLICATIONS

Unlike standard hybrid cables, Robot Cables are optimized for extreme motion, including:

- Multi-Axis Torsion Resistance - Engineered to withstand continuous twisting up to  $\pm 720^\circ/\text{m}$ , ensuring reliability in robotic joints and rotating components.
- High-Flex Life - Designed for millions of flex cycles, providing long-term durability in robotic arms and automation cells.
- Abrasion and Chemical Resistance - Manufactured with robust outer jackets to endure harsh industrial environments, oil exposure, and mechanical stress.

### CUSTOMIZED TO YOUR ROBOTIC SYSTEM

Lynxéo's Robot Cables are available in fully customer-specified designs or as co-engineered solutions, allowing for complete customization based on the robotic system, operating conditions, and motion profile.

- Customer-Specified Cables - Built to exact requirements, ensuring seamless integration into robotic arms, tool changers, and automation systems.
- Co-Developed Solutions - Partner with Lynxéo's engineering team to refine materials, shielding, and mechanical properties for optimal flexibility, signal transmission, and longevity.

### APPLICATIONS & PERFORMANCE BENEFITS

Designed for dynamic, high-performance environments, Lynxéo's Robot Cables excel in:

- Articulated Robotic Arms - Continuous motion, high-speed operation, and extreme bending requirements.
- Industrial Automation & Motion Control - Precise power, data, and sensor transmission in robotic applications.
- Cobots & Smart Manufacturing - Flexible, lightweight solutions for collaborative robotics and adaptive automation.

### SUPERIOR RELIABILITY & LONGEVITY

Robotic applications place intense mechanical stress on cables. Lynxéo's Robot Cables are designed to:

- Reduce Downtime - Engineered for exceptional flex life, minimizing failures and replacements.
- Enhance Safety & Performance - Superior electromagnetic shielding and mechanical protection ensure uninterrupted data transmission.
- Adapt to Challenging Environments - High-resistance materials protect against oil, chemicals, and abrasion, extending cable life.

### READY TO OPTIMIZE YOUR ROBOTIC SYSTEM?

Lynxéo specializes in custom robotic cable solutions that keep automation systems running at peak performance. Contact us to explore how a customized Robot Cable can enhance flexibility, durability, and efficiency in your robotic application.



# SINGLE CONDUCTOR PUR/TPU Cables MOTIONLINE® Premium



Silicone Free



Halogen Free



Oil resistant  
See Properties



Flame retardant  
See Properties

Single conductor power cable for high-flex and C-track applications, PUR/TPU jacket, resistant to oils, flame retardant, halogen-free



Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.

### FLEXING INFORMATION

Bending radius	≥ 7.5 x Ø
Drag chain cycles	5 Million
Speed	≤ 16 ft/sec (300 m/min)
Acceleration	≤ 80 ft/sec <sup>2</sup> (25 m/s <sup>2</sup> )
Temperature	Flexing: -22° to 176° F (-30° to 80° C) Fixed: -40° to 176° F (-40° to 80° C)

### CABLE DESIGN

Conductor	Stranded Bare Copper
Core insulation	Polyolefin (PP)
Core stranding	One Conductor
Core identification	See table
Shield	Tinned copper braid, coverage >=85% when shielded
Jacket	PUR/TPU
Color	See table

### ELECTRICAL PROPERTIES

Rated Voltage	1000 V
Test Voltage	4000 V

### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 cable flame; IEC 60332-1
Halogen free	Yes
UL/CSA	See table
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

Number of Conductors	Cable Design	Description	Insul.	Part number	Jacket	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]	Style
No	1C-12 AWG	12 AWG Black TPU Jacket	Gn/Ye	10555014	Bk	6.1	0.295	0.0618	0.0920	92.0	10835
No	1C-10 AWG	10 AWG Black TPU Jacket	Gn/Ye	10553016	Bk	6.8	0.319	0.0773	0.1150	115.0	10835
No	1C-8 AWG	8 AWG Black TPU Jacket	Gn/Ye	10556002	Bk	8.2	0.362	0.1095	0.1630	163.0	10835
No	1C-6 AWG	6 AWG Black TPU Jacket	Gn/Ye	10555990	Bk	9.6	0.402	0.1559	0.2320	232.0	10835
No	1C-4 AWG	4 AWG Black TPU Jacket	Gn/Ye	10555984	Bk	11.4	0.469	0.2204	0.3280	328.0	10835
No	1C-1 AWG	1 AWG Black TPU Jacket	Bk	10555911	Bk	15.0	0.591	0.4422	0.6580	658.0	10835
No	1C-2/0 MCM	2/0 MCM Black TPU Jacket	Bk	10555906	Bk	16.8	0.661	0.5779	0.8600	860.0	10835
No	1C-3/0 MCM	3/0 MCM Black TPU Jacket	Bk	10555902	Bk	18.2	0.717	0.7392	1.1000	1 100.0	10835
Yes	(1C-12 AWG) S	12 AWG Black TPU Jacket - Shielded	Nat	10573960	Orange	6.5	0.295	0.0618	0.0920	92.0	10553
Yes	(1C-10 AWG) S	10 AWG Black TPU Jacket - Shielded	Nat	10572141	Orange	7.7	0.319	0.0773	0.1150	115.0	10553
Yes	(1C-8 AWG) S	8 AWG Black TPU Jacket - Shielded	Nat	10571679	Orange	8.9	0.362	0.1095	0.1630	163.0	10553
Yes	(1C-6 AWG) S	6 AWG Black TPU Jacket - Shielded	Nat	10571520	Orange	10.2	0.402	0.1559	0.2320	232.0	10553
Yes	(1C-4 AWG) S	4 AWG Black TPU Jacket - Shielded	Nat	10572147	Orange	11.6	0.469	0.2204	0.3280	328.0	10553
Yes	(1C-2 AWG) S	2 AWG Black TPU Jacket - Shielded	Nat	10571704	Orange	13.0	0.524	0.2930	0.4360	436.0	10553



# SINGLE CONDUCTOR PVC Cables

## MOTIONLINE® Advanced



Single conductor power cable for high-flex and C-track applications, PVC jacket, resistant to oils, flame retardant.



Don't see what you're looking for? We can manufacture custom solutions with a variety of options, including alternate conductor colors, conductor counts, jacket colors, and more. Contact us to discuss your specific needs.

### FLEXING INFORMATION

Bending radius	≥ 10 x Ø
Drag chain cycles	5 Million
Speed	≤ 9.8 ft/sec (180 m/min)
Acceleration	≤ 33 ft/sec <sup>2</sup> (10 m/s <sup>2</sup> )
Temperature	Flexing: 23° to 176° F (-5° to 80° C) Fixed: -22° to 176° F (-30° to 80° C)

### CABLE DESIGN

Conductor	Stranded Bare Copper
Core insulation	PVC
Core stranding	One Conductor
Core identification	See table
Shield	Tinned copper braid, coverage >=85% when shielded
Jacket	PVC
Color	See Description

### ELECTRICAL PROPERTIES

Rated Voltage	1000 V
Test Voltage	4000 V

### PROPERTIES

Oil resistance	IEC 60811-404; EN 50363-10-2
Flame retardant	CSA FT1; UL1581 cable flame; IEC 60332-3-24
Halogen free	No
UL/CSA	UL-style 10754
CE	Yes
Silicon Free	Yes
Reach	Yes
RoHS-II conform	Yes

Number of Conductors	Cable Design	Description	Insul.	Part number	Nominal Diameter [mm]	Nominal Diameter [in]	Weight [lb/ft]	Weight [kg/m]	Weight [kg/km]
No	1C-10 AWG	10 AWG Black PVC Jacket	Bk	10553184	7.5	0.295	0.0739	0.1100	110.0
No	1C-8 AWG	8 AWG Black PVC Jacket	Bk	10553179	9.0	0.354	0.1115	0.1660	166.0
No	1C-6 AWG	6 AWG Black PVC Jacket	Bk	10553175	11.5	0.453	0.1720	0.2560	256.0
No	1C-4 AWG	4 AWG Black PVC Jacket	Bk	10553173	12.6	0.496	0.2433	0.3620	362.0
No	1C-2 AWG	2 AWG Black PVC Jacket	Bk	10553171	14.1	0.555	0.3131	0.4660	466.0
No	1C-1 AWG	1 AWG Black PVC Jacket	Bk	10553189	17.0	0.669	0.4610	0.6860	686.0
No	1C-2/0 MCM	2/0 MCM Black PVC Jacket	Bk	10553191	20.4	0.803	0.6384	0.9500	950.0
No	1C-3/0 MCM	3/0 MCM Black PVC Jacket	Bk	10556462	22.4	0.882	0.8574	1.2760	1 276.0
No	1C-4/0 MCM	4/0 MCM Black PVC Jacket	Bk	10555741	21.7	0.969	1.0436	1.5530	1 553.0
No	1C-250 MCM	250 MCM Black PVC Jacket	Bk	10556300	25.4	1.079	1.1222	1.6700	1 670.0
No	1C-10 AWG	10 AWG Green/Yellow PVC Jacket	Gn/Ye	10553181	7.5	0.295	0.0739	0.1100	110.0
No	1C-8 AWG	8 AWG Green/Yellow PVC Jacket	Gn/Ye	10553178	9.0	0.354	0.1115	0.1660	166.0
No	1C-6 AWG	6 AWG Green/Yellow PVC Jacket	Gn/Ye	10553174	11.5	0.453	0.1720	0.2560	256.0
No	1C-4 AWG	4 AWG Green/Yellow PVC Jacket	Gn/Ye	10553172	12.6	0.496	0.2433	0.3620	362.0
No	1C-2 AWG	2 AWG Green/Yellow PVC Jacket	Gn/Ye	10553170	14.1	0.555	0.3131	0.4660	466.0
No	1C-1 AWG	1 AWG Green/Yellow PVC Jacket	Gn/Ye	10553188	17.0	0.669	0.4610	0.6860	686.0
Yes	(1C-10 AWG) S	10 AWG Black PVC Jacket - Shielded	Bk	10553123	8.1	0.319	0.0880	0.1310	131.0
Yes	(1C-8 AWG) S	8 AWG Black PVC Jacket - Shielded	Bk	10553121	9.6	0.378	0.1283	0.1910	191.0
Yes	(1C-6 AWG) S	6 AWG Black PVC Jacket - Shielded	Bk	10553119	12.1	0.476	0.2029	0.3020	302.0
Yes	(1C-4 AWG) S	4 AWG Black PVC Jacket - Shielded	Bk	10553117	13.4	0.528	0.2735	0.4070	407.0
Yes	(1C-2 AWG) S	2 AWG Black PVC Jacket - Shielded	Bk	10555746	13.1	0.579	0.3440	0.5120	512.0
Yes	(1C-1 AWG) S	1 AWG Black PVC Jacket - Shielded	Bk	10553128	17.6	0.693	0.5006	0.7450	745.0
Yes	(1C-2/0 MCM) S	2/0 MCM Black PVC Jacket - Shielded	Bk	10553129	21.0	0.827	0.7378	1.0980	1 098.0
Yes	(1C-3/0 MCM) S	3/0 MCM Black PVC Jacket - Shielded	Bk	10553130	19.9	0.906	0.8803	1.3100	1 310.0
Yes	(1C-4/0 MCM) S	4/0 MCM Black PVC Jacket - Shielded	Bk	10553131	22.6	1.000	1.1229	1.6710	1 671.0
Yes	(1C-250 MCM) S	250 MCM Black PVC Jacket - Shielded	Bk	10553132	26.5	1.110	1.2902	1.9200	1 920.0

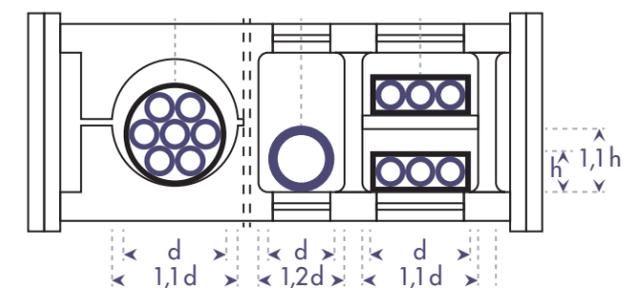
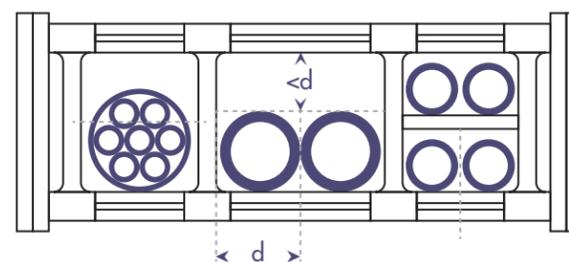
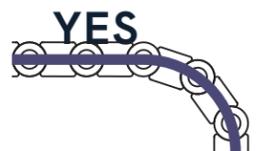
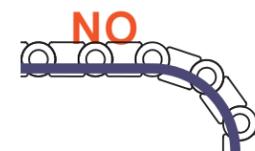
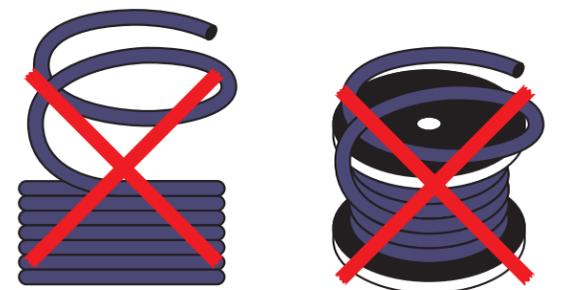
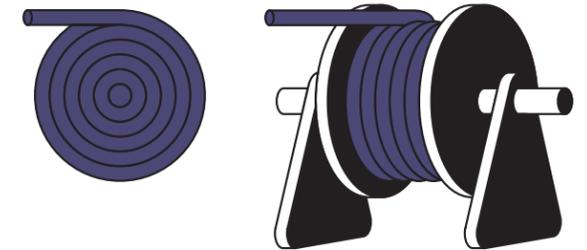


# Suggested installation guidelines for optimal performance

## Cable installation in a drag chain

To ensure optimal performance and longevity, cables should be installed carefully in drag chains following these best practices.

- Cables should be laid straight to prevent unnecessary stress or internal twisting. When unwinding cables from a spool, avoid pulling them over the flange in loops.
- The maximum cable diameter should correspond to the inner height of the chain, allowing for clearance: at least 10% for cables and 20% for hoses.
- Separators should be used to maintain cable position and prevent movement during operation.
- Cables with significantly different diameters should be installed separately to prevent tangling.
- Different sheath materials may stick to one another over time, so it is recommended to use separators when installing cables with different outer jackets.



# Suggested installation guidelines for optimal performance

## Securing cables in their drag chain

To prevent excess strain on cables during motion, follow these recommended securing methods.

- Cables should be secured with strain relief at both ends.
- At the moving end of the drag chain, allow for a sufficient distance between the last bending segment and the fixed point. A recommended distance is approximately 20 to 30 times the cable diameter.
- For balanced load distribution, cables should be arranged as symmetrically as possible in the chain.
- Cables should not be tightly fixed inside the chain, particularly in bending zones. Allowing them to move freely will reduce mechanical stress and extend service life.

## Tensile load recommendations

To protect cable integrity and ensure reliable performance in motion applications, tensile loads should be managed carefully.

- Dynamic applications: Maximum 7.3 lb/in<sup>2</sup> (50 N/mm<sup>2</sup>) of conductor cross-section.
- Static applications: Maximum 2.9 lb/in<sup>2</sup> (20 N/mm<sup>2</sup>) of conductor cross-section.

## Installation near motors

- Cables should be routed so they do not come into direct contact with the surface of a motor or generator to avoid excessive heat exposure and mechanical wear.

## Operating parameters

- Bending radius, speed, acceleration, and travel distance recommendations vary by cable type. Refer to the individual cable data sheets for exact specifications to ensure optimal performance in dynamic applications.

## Special requirements

For applications requiring specifications beyond standard ratings, such as:

- Torsional movement (up to  $\pm 30^\circ$  per 3.3 ft (1 m), for shielded cables)
  - Reduced bending radii
  - Extended travel distances
  - Higher operating speeds and acceleration
  - Increased tensile strength
- Lynxco offers specialized cable designs upon request. Contact us to discuss custom solutions tailored to your specific application needs.



# Notes



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# Notes



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## Wired to electrify industry

**Industry is everywhere.** Making our daily lives easier. Fostering progress. Moving the world. Industry plays a key role in shaping a better future.

**We have been serving industry for generations.** Today, we are committed to making it more efficient, more reliable and more sustainable.

**Our cables are essential to the machines developed by global industry champions.** They serve as the spinal cord of mission-critical infrastructures, assets and applications. Our clients rely on our advanced technologies and our industrial excellence to bring their machines to life.

**In the century since we were founded,** we have risen to a leading position in our markets.

**Now, as a standalone company,** we embark on a new journey with even greater agility, more focus and stronger customer intimacy.

**For industry leaders,** we are ever-evolving partners in an ever-changing world.

**Together,** we build connections beyond cables.

**From energy transition to mobility and automation,** our teams are tackling the greatest challenges of our times.

**Our name is Lynxéo.** We have local roots and global reach.

**Connected to our customers,** committed to excellence and progress, we are wired.

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**Wired to electrify the industries that move the world.**

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