

## Cable Brochure

[www.barankablo.com.tr](http://www.barankablo.com.tr)

### Nature And People

Production which respects to environment and human life in compliance with ISO 14001:2015 Environmental Management and ISO 45001:2018 Occupational Health and Safety

### Quality

Reliable and qualified production in compliance with ISO9001:2015 Quality Management Systems, CPR and UKCA norms

### Logistic

Reliable and on time deliveries to 42 countries

### R&D

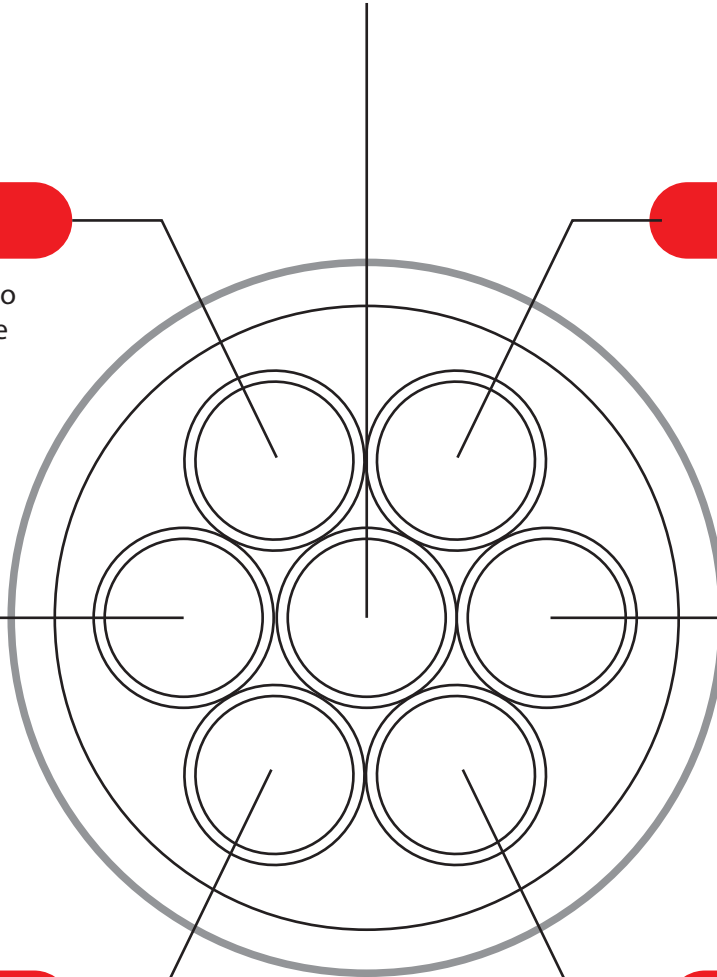
Innovative and effective solutions with our continuous R&D activities

### Production

State of art technology in manufacturing with the most reliable and hi-tech equipments

### Product

Wide range of low voltage cable solutions which are required by industry





Baran Kablo, Special Cable Manufacturer of Europe,

Providing services since 2004 with production facilities established in Turkey, Baran Kablo is one of the dynamic and finest low voltage cable, plug, socket and plastic component manufacturers in Europe.

Our low voltage cable range includes below types,

- Signal/Control Cables (PVC, PUR, HFFR etc.)
- Robotic and Drag chain Cables
- Fire Alarm/Sensor Cables
- Instrumentation Cables
- Defence Standard Cables
- Shipboard Cables
- Speaker and Microphone Cables
- Spiral Cables
- Custom Design Cables
- Special PUR Cables
- Fabric Cables

The production is performed at fully integrated plant with the total floor space of 6,000 m<sup>2</sup> with the latest technologies and using the most updated machinery and methods under the supervision of skilled and experienced staff assuring the most updated & quality products.

Our main customers are the cable distributors, robotic industry, white/brown goods manufacturers, automation and lighting industry. Our company holds the ISO 9001:2015, ISO 1401:2015, ISO 45001:2018 approvals and we have CPR and UKCA approved cables. All our products are REACH, RoHS compliant.

Baran Kablo achieves the high quality standards and reliable delivery schedules by means of its well-trained and experienced specialist staff in all departments.

Our main operating principles are;

- Creativity and Leadership in Technology,
- Continuous Improvement,
- Public Responsibility,
- Total Customer Satisfaction,
- Growth and Profitability,
- Cost Improvement

Those principles provide guidance for Baran Cable and define our products/services. Guaranteeing success in the market, is made possible through our customers, suppliers, employees and building effective relations with the public.

We know that our leadership position in the electro-mechanical industry, shall be ensured by the continuous development of creative products and services. Therefore, we perpetuate the customer satisfaction and loyalty through our devotion to excellence in all our products.

We support the development of our employees through creating a trusting and respectful environment based on rewarding the success and sharing the responsibilities.

We believe in establishing long-term, fair, ethical and integral relations with our customers, suppliers and employees based on mutual benefit.

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\*The images used in the brochure are for only indicative purpose and not actual cable pictures.



## YY-YSLY

### Application Area

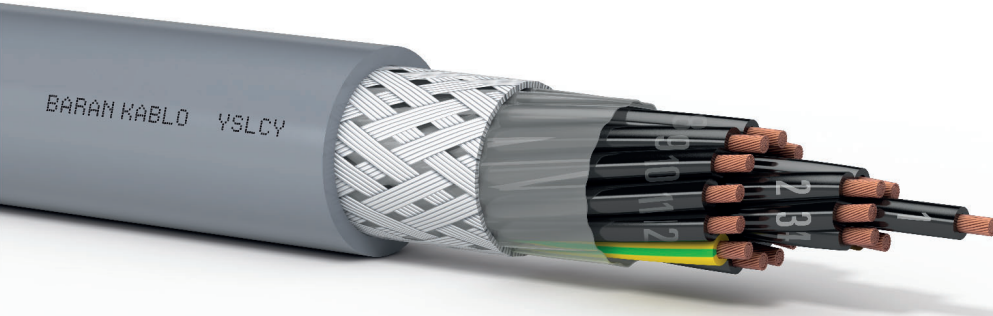
These flexible cables are used in all electrical equipments, electronic control systems, automation technologies, plant manufacturing, power station and others. Mainly for installation in dry, moist/wet rooms, especially in industrial environments, for average mechanical loads.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Fine Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	In layers
<b>Outer Sheath</b>	PVC (EN 50363-4-1, VDE 0207-363-4-1)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request
<b>Core Colours:</b>	<ul style="list-style-type: none"> <li>- JZ type; White numbered black cores with yellow-green earth conductor.</li> <li>- OZ type; White numbered black cores without yellow-green earth conductor.</li> <li>- JB type; Colored cores according to VDE 0293 with yellow-green earth conductor</li> <li>- OB type; Colored cores according to VDE 0293 without yellow-green earth conductor</li> </ul>

### Technical Characteristics

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	3000 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC/EN 60332-1-2
<b>Min. Bending Radius</b>	Fixed: 4 x Cable Diameter, Flexible: 7,5 x Cable Diameter



## CY-YSLCY

### Application Area

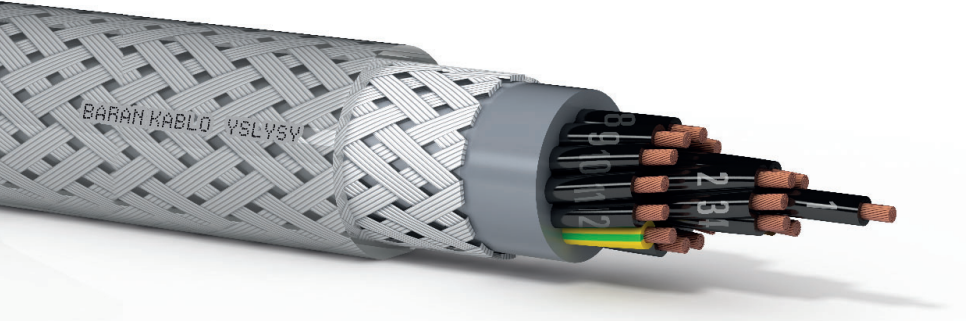
YSLCY cable is an overall screened flexible cable and this control cable is used in similar areas as YSLY cable. It has also tinned copper wire screening for the areas where there is a requirement to avoid electro magnetic interference.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Fine Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	In layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Tinned Copper Wire Braid
<b>Outer Sheath</b>	PVC (EN 50363-4-1, VDE 0207-363-4-1)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request
<b>Core Colours:</b>	-JZ type; White numbered black cores with yellow-green earth conductor. -OZ type; White numbered black cores without yellow-green earth conductor. -JB type; Colored cores according to VDE 0293 with yellow-green earthconductor -OB type; Colored cores according to VDE 0293 without yellow-green earth conductor

### Technical Characteristics

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	3000 V
<b>Temperature Range Fixed:</b>	-30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC/EN 60332-1-2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter



## SY-YSLYSY-YSLYAY-YSLYQY

### Application Area

This flexible cable is used in similar areas as YSLY cable but galvanised steel wire braiding that protects the cable against mechanical loads and damages as an armour in addition to its magnetic screening.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	In layers
<b>Inner Sheath</b>	PVC
<b>Armouring</b>	Galvanised Steel Wire Braid
<b>Outer Sheath</b>	PVC (EN 50363-4-1, VDE 0207-363-4-1)
<b>Colours</b>	Outer Sheath: Transparent and other colours on request
<b>Core Colours</b>	-JZ type ; White numbered black cores with yellow-green earth conductor. -OZ type ; White numbered black cores without yellow-green earth conductor. -JB type ; Colored cores according to VDE 0293 with yellow-green earth conductor -OB type ; Colored cores according to VDE 0293 without yellow-green earth conductor

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V
<b>Test Voltage</b>	3000 V
<b>Temperature Range Fixed:</b>	-30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC/EN 60332-1-2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter





## NYSLY

### Application Area

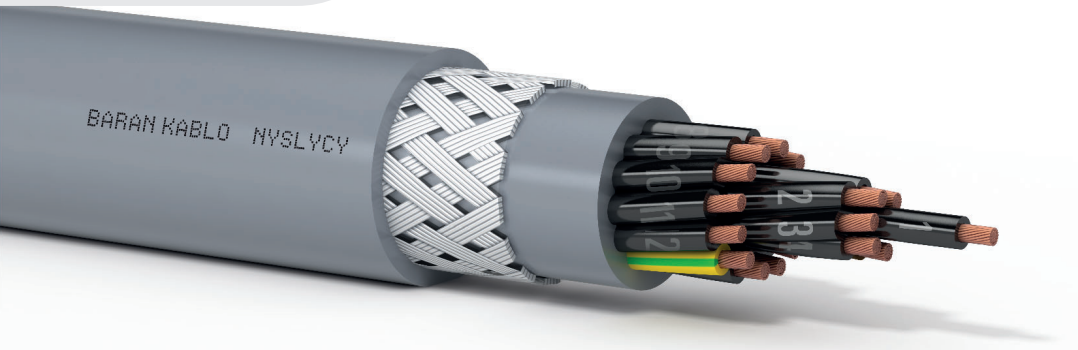
These oil resistant flexible cables are used in all electrical equipments, electronic control systems, automation technologies, plant manufacturing, power station and others. Mainly for installation in dry, moist/wet rooms, especially in industrial environments, for average mechanical loads.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	In layers
<b>Outer Sheath</b>	Special PVC (EN 50363-4-1, VDE 0207-363-4-1)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request
<b>Core Colours:</b>	-JZ type; White numbered black cores with yellow-green earth conductor. -OZ type; White numbered black cores without yellow-green earth conductor. -JB type; Colored cores according to VDE 0293 with yellow-green earth conductor -OB type; Colored cores according to VDE 0293 without yellow-green earth conductor

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..2.50 mm <sup>2</sup> 300 V / 500 V
<b>Test Voltage</b>	3000 V
<b>Temperature Range</b>	Fixed -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC/EN 60332-1
<b>Oil Resistance</b>	IRM 902(4h,70°C)
<b>Min. Bending Radius</b>	Fixed: 4 x Cable Diameter, Flexible: 7,5 x Cable Diameter



## NYSLYCY / YSLYCY

### Application Area

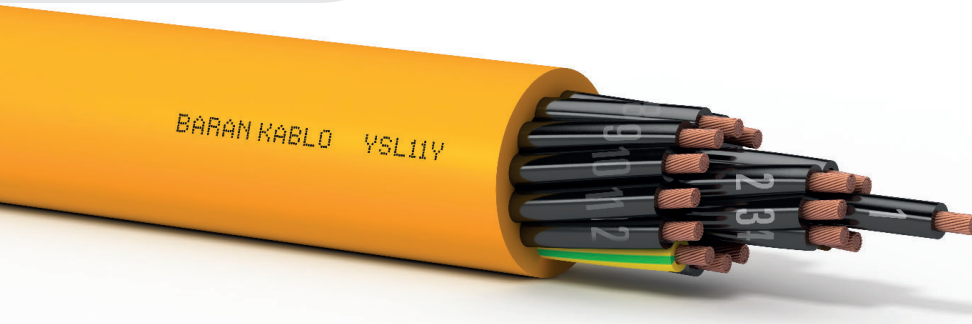
These oil resistant flexible cables are used in all electrical equipments, electronic control systems, automation technologies, plant manufacturing, power station and others. Mainly for installation in dry, moist/wet rooms, especially in industrial environments, for average mechanical loads. It incorporates the inner sheath to maintain the cable in circular formation and minimize the space between cores. It's tinned copper wire braiding provides shielding in places where electro magnetic interference and influence exist.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	In layers
<b>Inner Sheath</b>	PVC
<b>Screen</b>	Tinned Copper Wire Braid
<b>Outer Sheath</b>	Special PVC (EN 50363-4-1, VDE 0207-363-4-1)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request
<b>Core Colours:</b>	-JZ type; White numbered black cores with yellow-green earth conductor. -OZ type; White numbered black cores without yellow-green earth conductor. -JB type; Colored cores according to VDE 0293 with yellow-green earth conductor -OB type; Colored cores according to VDE 0293 without yellow-green earth conductor

### Technical Characteristics

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	3000 V
<b>Temperature Range</b>	Fixed -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC/EN 60332-1
<b>Oil Resistance</b>	IRM 902(4h,70°C)
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter



## YSL11Y

### Application Area

These flexible cables are used in all electrical equipments, oil and coal industry, automation technologies, heavy machinery and chemical industry. Suitable for in wet, dry, damp indoor and outdoor applications in rough environments. Cable is Oil, Ozone and UV resistant.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	In layers
<b>Outer Sheath</b>	PUR (EN 50363-10-2)
<b>Colours</b>	Outer Sheath: Orange RAL2003 and other colours on request
<b>Core Colours:</b>	-JZ type ; White numbered black cores with yellow-green earth conductor. -OZ type ; White numbered black cores without yellow-green earth conductor. -JB type ; Colored cores according to VDE 0293 with yellow-green earth conductor -OB type ; Colored cores according to VDE 0293 without yellow-green earth conductor

### Technical Characteristics

<b>Operating Voltage</b>	300/500V
<b>Test Voltage</b>	3000V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5°C .....+70 °C
<b>Flame Retardancy</b>	IEC/EN 60332-1-2
<b>Oil Resistance</b>	EN 50363-10-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## LI11Y11Y

### Application Area

These flexible cables are used in all electrical equipments, mobile applications, oil and coal industry, automation technologies, heavy machinery and chemical industry. Suitable for in wet, dry, damp indoor and outdoor applications in rough environments. Cable is Oil, Ozone and UV resistant.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	Special PUR Compound
<b>Core Stranding</b>	In layers
<b>Outer Sheath</b>	PUR (TMPU EN 50363-10-2)
<b>Colours</b>	Outer Sheath: Orange RAL 2003 and other colours on request Core Colours: Colored cores according to VDE 0293

### Technical Characteristics

<b>Operating Voltage</b>	0,14-0,34 mm <sup>2</sup> 250V; ≥0.50mm <sup>2</sup> 300 V / 500 V
<b>Test Voltage</b>	0,14-1,00 mm <sup>2</sup> 1200 V; 1.5-2.5 mm <sup>2</sup> 2500 V
<b>Temperature Range</b>	Fixed: -50 °C .....+90 °C, Flexible: -40 °C .....+80 °C
<b>Flame Retardancy</b>	IEC/EN 60332-1
<b>Oil Resistance</b>	EN 50363-10-2
<b>Min. Bending Radius</b>	Fixed: 7,5 x Cable Diameter, Flexible: 12 x Cable Diameter



## LI9Y11Y

### Application Area

These highly flexible drag chain cables are used in all electrical equipments and connector systems for sensors and actuators, automation technologies. Suitable for in wet, dry, damp indoor and outdoor applications in rough environments. Cable is Oil, Ozone and UV resistant.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 6)
<b>Insulation</b>	PP Compound
<b>Core Stranding</b>	In layers
<b>Outer Sheath</b>	PUR (EN 50363-10-2)
<b>Colours</b>	Outer Sheath: Orange RAL 2003 and other colours on request Core Colours: Colored cores according to VDE 0293

### Technical Characteristics

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	0,14-0,22 mm <sup>2</sup> 800 V; 0,22-1,00 mm <sup>2</sup> 1200 V; 1.5-2.5 mm <sup>2</sup> 2500 V
<b>Temperature Range</b>	Fixed: -50 °C .....+90 °C, Flexible: -40 °C .....+80 °C
<b>Flame Retardancy</b>	IEC/EN 60332-1
<b>Oil Resistance</b>	EN 50363-10-2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter



## LIYC11Y

### Application Area

These flexible cables are used in all electrical equipments, electronic control systems, automation technologies, heavy machinery and chemical industry. Cable has tinned copper wire screening for the areas where there is a requirement to avoid high frequency interference. Suitable for in wet, dry, damp indoor and outdoor applications in rough environments. Cable is Oil, Ozone and UV resistant.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	In layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Tinned Copper Wire Braid
<b>Outer Sheath</b>	PUR (EN 50363-10-2)
<b>Colours</b>	Outer Sheath: Orange RAL 2003 and other colours on request Core Colours: Colored cores according to VDE 0293

### Technical Characteristics

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	0,14-0,22 mm <sup>2</sup> 800 V; 0,22-1,00 mm <sup>2</sup> 1200 V; 1.5-2.5 mm <sup>2</sup> 2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC/EN 60332-1
<b>Oil Resistance</b>	EN 50363-10-2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter



## HSLH - HMM

### Application Area

These halogen free flexible cables are used in all electrical equipments, electronic control systems, automation technologies, machinery and chemical industry, in wet, dry, damp indoor applications. HFFR compound has flame retardant and self extinguishing speciliaties and it is suitable for the areas where the safety requirements for cables are very high. As long as UV protected compound is used, these cables also can be used in outdoor applications where the cable is exposed to direct sunlight.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	HFFR compound (EN 50363-7, VDE 0207-363-7)
<b>Core Stranding</b>	In layers
<b>Outer Sheath</b>	HFFR compound (EN 50363-8, VDE 0207-363-8)

#### Colours

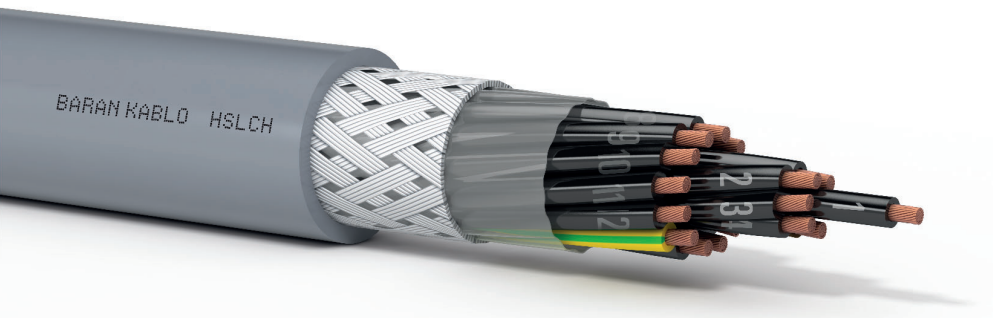
Outer Sheath: Grey RAL7001 and other colours on request

Core Colours: HSLH-JZ type; White numbered black cores with yellow-green earth conductor.

HSLH-OZ type; White numbered black cores without yellow-green earth conductor.

### Technical Characteristics

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	3000 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1&2 / DIN EN 60754-1&2 / IEC 60754-1&2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter



# HSLCH - HMH-C

## Application Area

These halogen free flexible cables are used in all electrical equipments, electronic control systems, automation technologies, machinery and chemical industry, in wet, dry, damp indoor applications. HFFR compound has flame retardant and self extinguishing specialities and it is suitable for the areas where the safety requirements for cables are very high. Cable has tinned copper wire screening for the areas where there is a requirement to avoid high frequency interference. As long as UV protected compound is used, these cables also can be used in outdoor applications where the cable is exposed to direct sunlight.

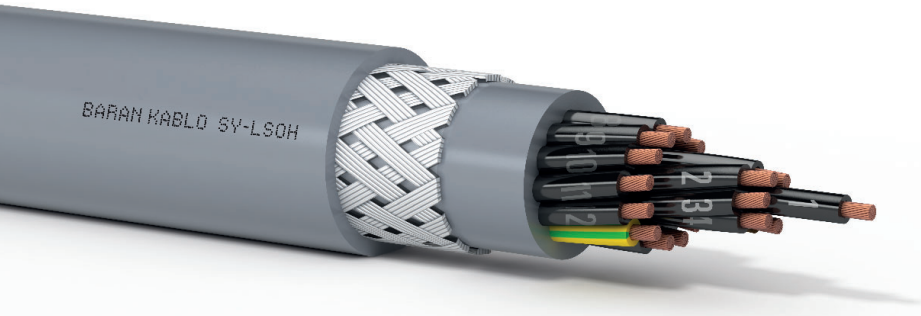
## Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	HFFR compound (EN 50290-2-26, VDE 0207-363-7)
<b>Core Stranding</b>	In layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Tinned Copper Wire Braid
<b>Outer Sheath</b>	HFFR compound (DIN EN 50363-8, VDE 0207-363-8)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request
<b>Core Colours:</b>	HSLCH-JZ type; White numbered black cores with yellow-green earth conductor. HSLCH-OZ type; White numbered black cores without yellow-green earth conductor.

## Technical Characteristics

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1&2 / DIN EN 60754-1&2 / IEC 60754-1&2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter





## SY-LSOH - HSLHSH - HSLHQH

### Application Area

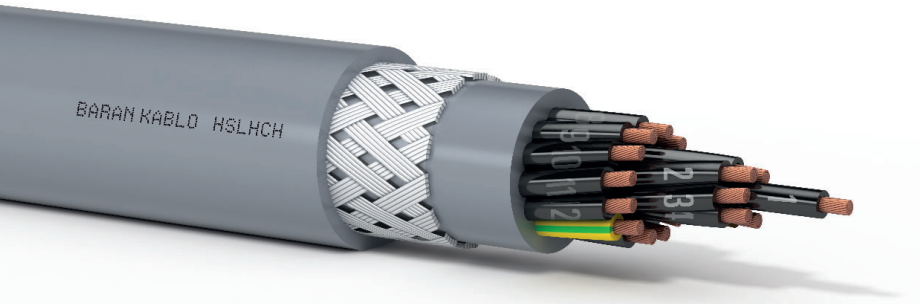
These halogen free flexible cables are used in all electrical equipments, electronic control systems, automation technologies, machinery and chemical industry, in wet, dry, damp indoor applications. HFFR compound has flame retardant and self extinguishing speciliaties and it is suitable for the areas where the safety requirements for cables are very high. Cable has galvanised steel wire screening which protects the cable against mechanical loads and damages. Braiding also provides magnetic screening. As long as UV protected compound is used, these cables also can be used in outdoor applications where the cable is exposed to direct sunlight.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	halogen-free polymer compound (EN 50290-2-26, VDE 0207-363-7)
<b>Core Stranding</b>	In layers
<b>Inner Sheat</b>	HFFR compound
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Galvanised Steel Wire Braid
<b>Outer Sheath</b>	halogen-free polymer compound (DIN EN 50363-8, VDE 0207-363-8)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request Core Colours: HSLHSH-JZ type; White numbered black cores with yellow-green earth conductor. HSLHSH-OZ type; White numbered black cores without yellow-green earth conductor.

### Technical Characteristics

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter



# HSLHCH

## Application Area

These halogen free flexible cables are used in all electrical equipments, electronic control systems, automation technologies, machinery and chemical industry, in wet, dry, damp indoor applications. HFFR compound has flame retardant and self extinguishing specialties and it is suitable for the areas where the safety requirements for cables are very high. Cable has tinned copper wire screening for the areas where there is a requirement to avoid high frequency interference and inner sheath provides additional mechanical protection. As long as UV protected compound is used, these cables also can be used in outdoor applications where the cable is exposed to direct sunlight.

## Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	halogen-free polymer compound (EN 50290-2-26, VDE 0207-363-7)
<b>Core Stranding</b>	In layers
<b>Inner Sheath</b>	halogen-free polymer compound (DIN EN 50363-8, VDE 0207-363-8)
<b>Screen</b>	Tinned Copper Wire Braid
<b>Outer Sheath</b>	halogen-free polymer compound (DIN EN 50363-8, VDE 0207-363-8)

### Colours

Outer Sheath: Grey RAL7001 and other colours on request

Core Colours: HSLHCH-JZ type; White numbered black cores with yellow-green earth conductor.

HSLHCH-OZ type; White numbered black cores without yellow-green earth conductor.

## Technical Characteristics

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter



## 2YSLCY-J / 2YSLCYK-J

### Application Area

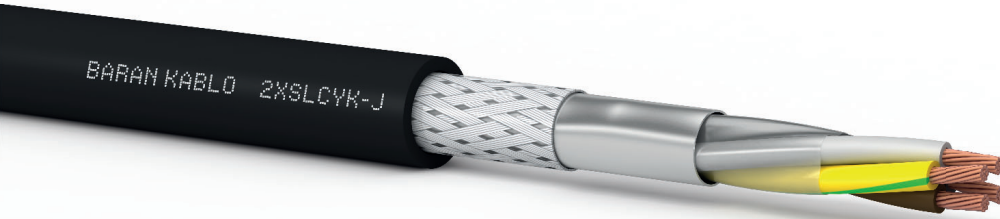
Double-Screened motor power supply cable for frequency converters is used in industrial installations, machine tools, automation technologies, production plants and other equipment operating in wet, dry, damp conditions. 2YSLCY-J is suitable for indoor and 2YSLCYK-J is for outdoor applications. Foil and Copper braid screens provide excellent interference-free data and signal transmission in measuring and control technology.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PE Compound
<b>Core Stranding</b>	In layers
<b>Double-Screen</b>	1st Al/PET foil 2nd tinned copper braid
<b>Outer Sheath</b>	Special PVC Compound
<b>Colours</b>	Outer Sheath: Transparent for 2YSLCY-J and Black for 2YSLCYK-J. Other colours on request Core Colours: Colored cores according to VDE 0293

### Technical Characteristics

<b>Operating Voltage</b>	600/1000 V
<b>Test Voltage</b>	4000 V
<b>Temperature Range</b>	Fixed: -40 °C .....+80 °C, Flexible: -5°C .....+70 °C
<b>Flame Retardancy</b>	DIN VDE 0482 part 265-2-1 / EN 50265-2-1 / IEC 60332-1-2
<b>Min. Bending Radius</b>	Fixed: up to 12 mm : 5x and up to 20 mm : 7,5x Cable Diameter Flexible: up to 12mm Ø: 10x and up to 20mm Ø: 15x Cable Diameter



## 2XSLCY-J / 2XSLCYK-J

### Application Area

Double-Screened motor power supply cable for frequency converters is used in industrial installations, machine tools, automation technologies, production plants and other equipment operating in wet, dry, damp conditions. 2XSLCY-J is suitable for indoor and 2XSLCYK-J is for outdoor applications. Foil and Copper braid screens provide excellent interference-free data and signal transmission in measuring and control technology.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	XLPE Compound
<b>Core Stranding</b>	In layers
<b>Double-Screen</b>	1st Al/PET foil 2nd tinned copper braid
<b>Outer Sheath</b>	Special PVC Compound
<b>Colours</b>	Outer Sheath: Grey or Black. Other colours on request. Core Colours: Colored cores according to VDE 0293

### Technical Characteristics

<b>Operating Voltage</b>	600/1000 V
<b>Test Voltage</b>	4000 V
<b>Temperature Range</b>	Fixed: -40 °C .....+80 °C, Flexible: -5°C .....+70 °C
<b>Flame Retardancy</b>	DIN VDE 0482 part 265-2-1 / EN 50265-2-1 / IEC 60332-1-2
<b>Min. Bending Radius</b>	Fixed: up to 12 mm: 5x and up to 20 mm : 7,5x Cable Diameter Flexible: up to 12mm Ø: 10x and up to 20mm Ø: 15x Cable Diameter



## 2XSLCH-J / 2XSLCHK-J

### Application Area

Double-Screened motor power supply cable for frequency converters is used in industrial installations, machine tools, automation technologies, production plants and other equipment operating in wet, dry, damp conditions. 2XSLCH-J is suitable for indoor and 2XSLCHK-J is for outdoor applications. Foil and Copper wire braid screens provide excellent interference-free data and signal transmission in measuring and control technology. HFFR compound has flame retardant and self extinguishing specifications and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	XLPE Compound
<b>Core Stranding</b>	In layers
<b>Double-Screen</b>	1st Al/PET foil 2nd tinned copper braid
<b>Outer Sheath</b>	Halogen Free Compound (EN 50363-8 / IEC 60754-1)
<b>Colours</b>	Outer Sheath: Grey or Black. Other colours on request Core Colours: Colored cores according to VDE 0293

### Technical Characteristics

<b>Operating Voltage</b>	600/1000 V
<b>Test Voltage</b>	4000 V
<b>Temperature Range</b>	Fixed: -40 °C .....+80 °C, Flexible: -5°C .....+70 °C
<b>Flame Retardancy</b>	DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
<b>Halogen Free</b>	VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
<b>Min. Bending Radius</b>	Fixed: up to 12 mm: 5x and up to 20 mm : 7,5x Cable Diameter Flexible: up to 12mm Ø: 10x and up to 20mm Ø: 15x Cable Diameter



## LIYY

### Application Area

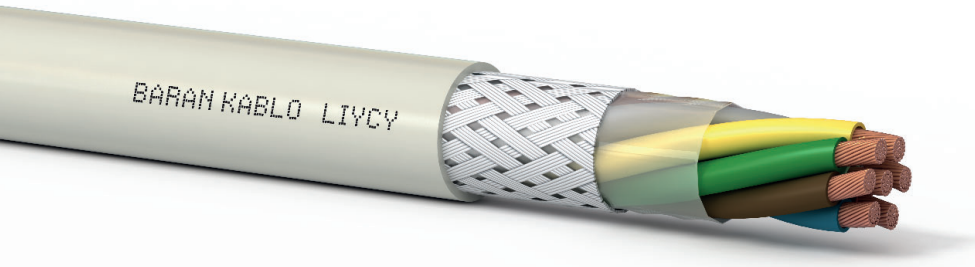
These flexible data cables are used in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	In layers
<b>Outer Sheath</b>	PVC (EN 50290-2-22, EN 50363-4-1, VDE 0207-363-4-1)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request
<b>Core Colours:</b>	Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 4 x Cable Diameter, Flexible: 7,5 x Cable Diameter



## LIYCY

### Application Area

This screened data cable has good EMC characteristics and it is used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	In layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Tinned Copper Wire Braid
<b>Outer Sheath</b>	PVC (EN 50290-2-22, EN 50363-4-1, VDE 0207-363-4-1)

#### Colours

Outer Sheath: Grey RAL7001 and other colours on request  
Core Colours: Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V; 2.50 mm <sup>2</sup> ..... 450 V / 750 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## LIY(st)Y

### Application Area

This screened data cable has good EMC characteristics and it is used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications.

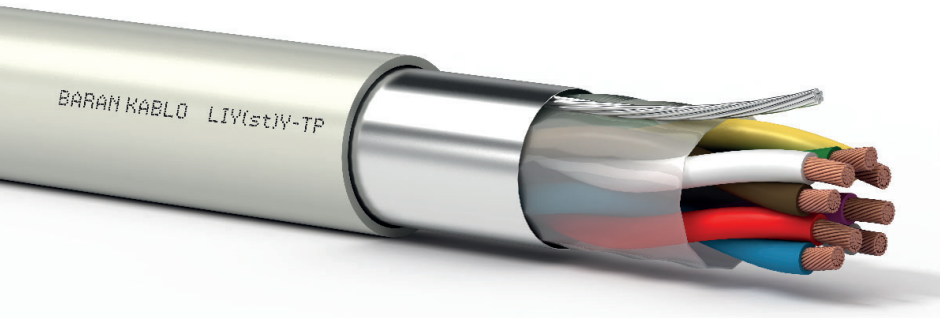
### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	In layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Al-PET Foil with Tinned Copper Drain Wire
<b>Outer Sheath</b>	PVC (EN 50290-2-22, EN 50363-4-1, VDE 0207-363-4-1)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request Core Colours: Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter





## LIY(st)Y-TP

### Application Area

This paired and screened data cable has good EMC characteristics. It is used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	Cores twisted to pairs, pairs is stranded in layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Al-PET Foil with Tinned Copper Drain Wire
<b>Outer Sheath</b>	PVC (EN 50290-2-22, EN 50363-4-1, VDE 0207-363-4-1)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request
<b>Core Colours:</b>	Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## LIY(st)CY

### Application Area

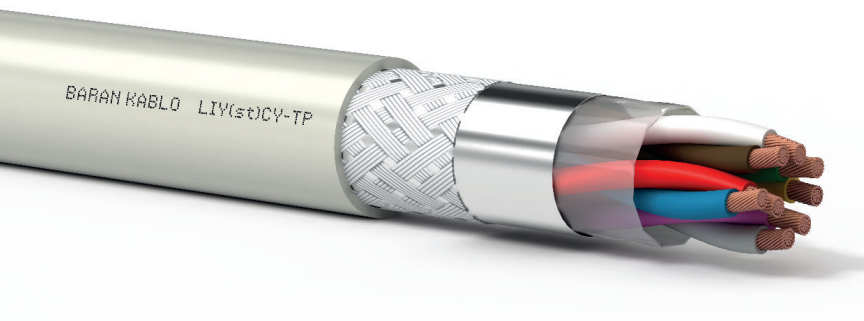
This double screened data cable has good EMC characteristics and it is used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	In layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	1st Al-PET Foil 2nd Tinned Copper Wire Braid
<b>Outer Sheath</b>	PVC (EN 50290-2-22, EN 50363-4-1, VDE 0207-363-4-1)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request Core Colours: Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## LIY(st)CY-TP

### Application Area

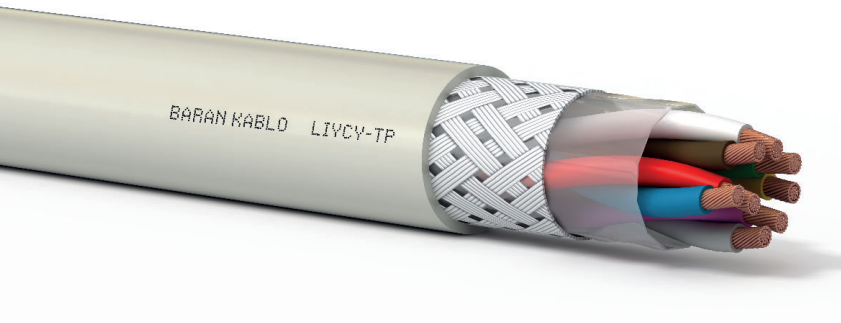
This paired and double screened data cable has good EMC characteristics. It is used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	Cores twisted to pairs, pairs is stranded in layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	1st Al-PET Foil 2nd Tinned Copper Wire Braid
<b>Outer Sheath</b>	PVC (EN 50290-2-22, EN 50363-4-1, VDE 0207-363-4-1)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request
<b>Core Colours:</b>	Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## LIYCY-TP

### Application Area

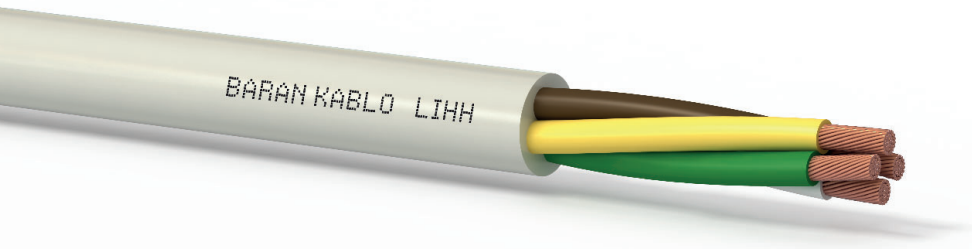
This paired and screened data cable has good EMC characteristics. It is used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	PVC (EN 50363-3, VDE 0207-363-3)
<b>Core Stranding</b>	Cores twisted to pairs, pairs is stranded in layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Tinned Copper Wire Braid
<b>Outer Sheath</b>	PVC (EN 50290-2-22, EN 50363-4-1, VDE 0207-363-4-1)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request Core Colours: Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V; 2.50 mm <sup>2</sup> ..... 450 V / 750 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## LIHH

### Application Area

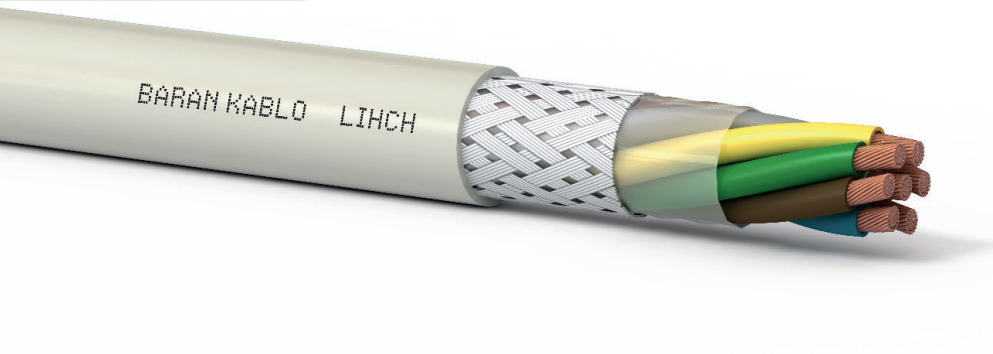
These flexible data cables are used in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications. HFFR compound is halogen free, low smoke and flame retardant with low-toxicity self-extinguishing properties and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	HFFR compound (EN 50290-2-26, VDE 0207-363-7)
<b>Core Stranding</b>	In layers
<b>Outer Sheath</b>	HFFR compound (EN 50290-2-27, VDE 0207-363-7)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request Core Colours: Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## LIHCH

### Application Area

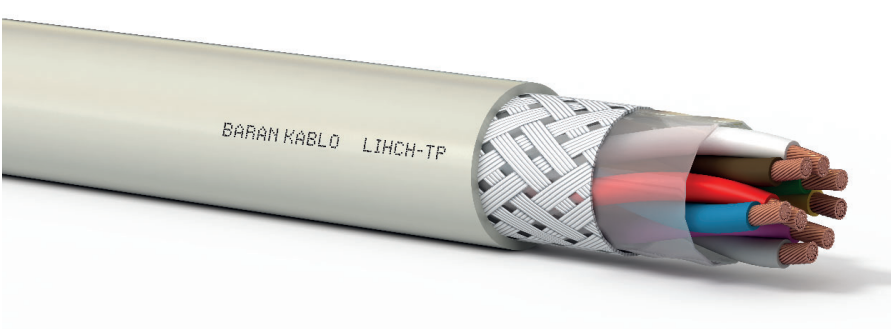
These halogen free and screened data cables have good EMC characteristics. LIHCH cables are used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications. HFFR compound has flame retardant and self extinguishing specialties and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	HFFR compound (EN 50290-2-26, VDE 0207-363-7)
<b>Core Stranding</b>	In layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Tinned Copper Wire Braid
<b>Outer Sheath</b>	HFFR compound (EN 50290-2-27, VDE 0207-363-7)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request Core Colours: Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V; 2.50 mm <sup>2</sup> ..... 450 V / 750 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## LIHCH-TP

### Application Area

These halogen free and screened data cables have good EMC characteristics. These are paired cables and used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications. HFFR compound has flame retardant and self extinguishing specialties and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	HFFR compound (EN 50290-2-26, VDE 0207-363-7)
<b>Core Stranding</b>	Cores twisted to pairs, pairs is stranded in layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Tinned Copper Wire Braid
<b>Outer Sheath</b>	HFFR compound (EN 50290-2-27, VDE 0207-363-7)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request Core Colours: Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## LIH(st)H

### Application Area

These halogen free and screened data cables have good EMC characteristics. These cables are used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications. HFFR compound has flame retardant and self extinguishing specialties and it is suitable for the areas where the safety requirements for cables are very high.

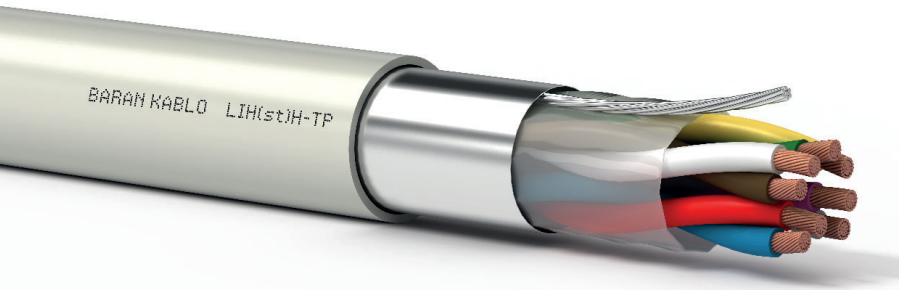
### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	halogen-free polymer compound (EN 50290-2-26, VDE 0207-363-7)
<b>Core Stranding</b>	In layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Al-PET Foil with Tinned Copper Drain Wire
<b>Outer Sheath</b>	halogen-free polymer compound (EN 50290-2-27, VDE 0207-363-7)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request Core Colours: Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V; 2.50 mm <sup>2</sup> ..... 450 V / 750 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter





## LIH(st)H-TP

### Application Area

These halogen free and screened data cables have good EMC characteristics. These are paired cables and used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications. HFFR compound has flame retardant and self extinguishing specialties and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	halogen-free polymer compound (EN 50290-2-26, VDE 0207-363-7)
<b>Core Stranding</b>	Cores twisted to pairs, pairs is stranded in layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Al-PET Foil with Tinned Copper Drain Wire
<b>Outer Sheath</b>	halogen-free polymer compound (EN 50290-2-27, VDE 0207-363-7)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request Core Colours: Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V; 2.50 mm <sup>2</sup> ..... 450 V / 750 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## LIH(st)CH

### Application Area

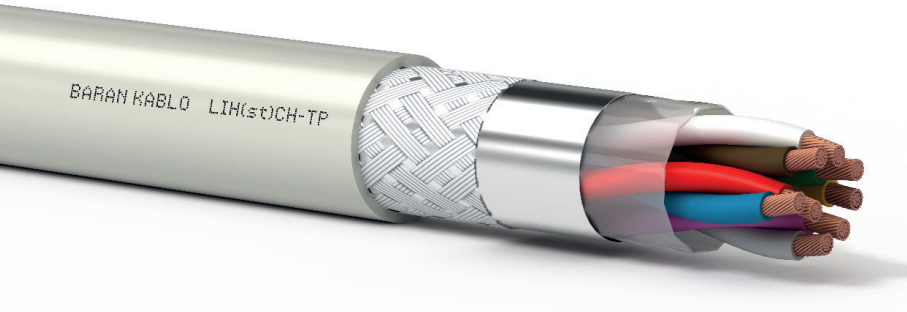
These halogen free and double screened data cables have good EMC characteristics. These cables are used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications. HFFR compound has flame retardant and self extinguishing specialties and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	halogen-free polymer compound (EN 50290-2-26, VDE 0207-363-7)
<b>Core Stranding</b>	In layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	1st Al-PET Foil 2nd Tinned Copper Wire Braid
<b>Outer Sheath</b>	halogen-free polymer compound (EN 50290-2-27, VDE 0207-363-7)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request
<b>Core Colours:</b>	Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V; 2.50 mm <sup>2</sup> ..... 450 V / 750 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## LIH(st)CH-TP

### Application Area

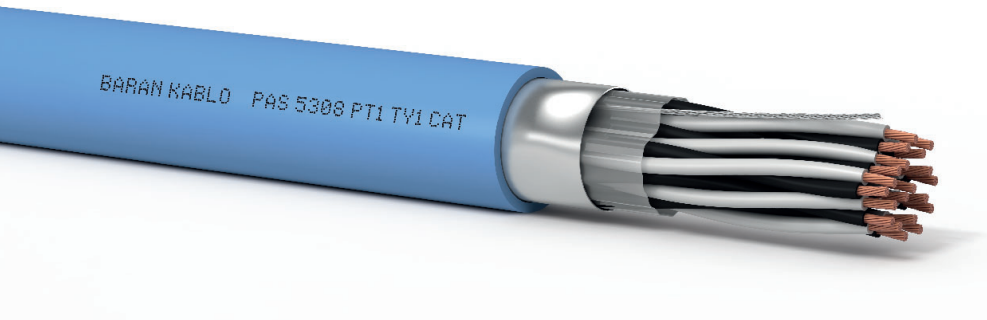
These halogen free and double screened data cables have good EMC characteristics. These are paired cables and used for signal transmission in electronic control systems and panels, communication technologies, switchboards in machinery industry for indoor applications. HFFR compound has flame retardant and self extinguishing specialties and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	halogen-free polymer compound (EN 50290-2-26, VDE 0207-363-7)
<b>Core Stranding</b>	Cores twisted to pairs, pairs is stranded in layers
<b>Wrapping</b>	PETP foil
<b>Screen</b>	1st Al-PET Foil 2nd Tinned Copper Wire Braid
<b>Outer Sheath</b>	halogen-free polymer compound (EN 50290-2-27, VDE 0207-363-7)
<b>Colours</b>	Outer Sheath: Grey RAL7001 and other colours on request Core Colours: Coloured acc. to DIN 47100

### Technical Characteristics

<b>Operating Voltage</b>	0.50 mm <sup>2</sup> ..1.50 mm <sup>2</sup> 300 V / 500 V; 2.50 mm <sup>2</sup> ..... 450 V / 750 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
<b>Flame Retardancy</b>	IEC 60332-1-2, VDE 0482-332-1-2
<b>Min. Bending Radius</b>	Fixed: 5 x Cable Diameter, Flexible: 10 x Cable Diameter



## **XLPE / CAT / PVC P1TY1**

### **Application Area**

This individual and overall screened instrumentation cable is used for signal transmission in electronic control systems and panels, communication and telecom technologies, petrochemical and other commercial and industrial applications.

### **Cable Construction**

<b>Conductor</b>	Solid (class 1), stranded (class 2) or flexible (class 5) copper conductor to BS EN 60228
<b>Insulation</b>	PE to BS EN 50290-2-23 or XLPE to BS EN 50290-2-29
<b>Core Stranding</b>	Cores twisted to pairs, triples or quads in layers
<b>Screen</b>	Collective Al-PET foil Screen with Tinned Copper Drain Wire
<b>Outer Sheath</b>	PVC (EN 50290-2-22)
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Colour coded in accordance to PAS 5308-1

### **Technical Characteristics**

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Operating -15°C to +65°C, Installation 0°C to +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter



## **XLPE / ICAT / PVC PT1TY1**

### **Application Area**

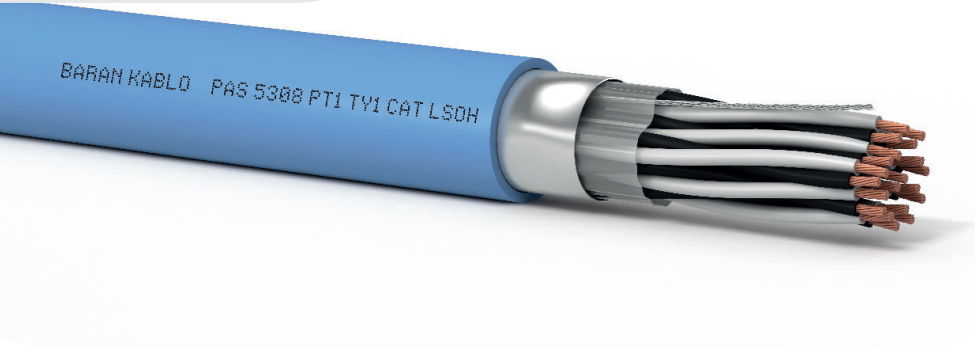
This individual and overall screened instrumentation cable is used for signal transmission in electronic control systems and panels, communication and telecom technologies, petrochemical and other commercial and industrial applications.

### **Cable Construction**

<b>Conductor</b>	Solid (class 1), stranded (class 2) or flexible (class 5) copper conductor to BS EN 60228
<b>Insulation</b>	PE to BS EN 50290-2-23 or XLPE to BS EN 50290-2-29
<b>Core Stranding</b>	Screened pairs, triple strand in layer.
<b>Binder Tape</b>	PETP foil
<b>Screen</b>	Individual & Collective Al-PET foil Screens with Tinned Copper Drain Wire
<b>Outer Sheath</b>	PVC (EN 50290-2-22)
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Colour coded in accordance to PAS 5308-1

### **Technical Characteristics**

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Operating -15°C to +65°C, Installation 0°C to +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter



## **XLPE / CAT / LSOH PITY1**

### **Application Area**

This overall screened instrumentation cable is used for signal transmission in electronic control systems and panels, communication and telecom technologies, petrochemical and other commercial and industrial applications. HFFR compound is halogen free, low smoke and flame retardant with low-toxicity and self-extinguishing properties and it is suitable for the areas where the safety requirements for cables are very high.

### **Cable Construction**

<b>Conductor</b> BS EN 60228	Solid (class 1), stranded (class 2) or flexible (class 5) copper conductor to
<b>Insulation</b>	PE to BS EN 50290-2-23 or XLPE to BS EN 50290-2-29
<b>Core Stranding</b>	Cores twisted to pairs, triples or quads in layers.
<b>Screen</b>	Collective Al-PET foil Screen with Tinned Copper Drain Wire
<b>Outer Sheath</b>	LSZH (EN 50290-2-27)
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Colour coded in accordance to PAS 5308-1

### **Technical Characteristics**

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Operating -15°C to +90°C, Installation 0°C to +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2
<b>Smoke Density</b>	IEC/EN 61034-1
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter



## **XLPE / ICAT / LSOH PT1TY1**

### **Application Area**

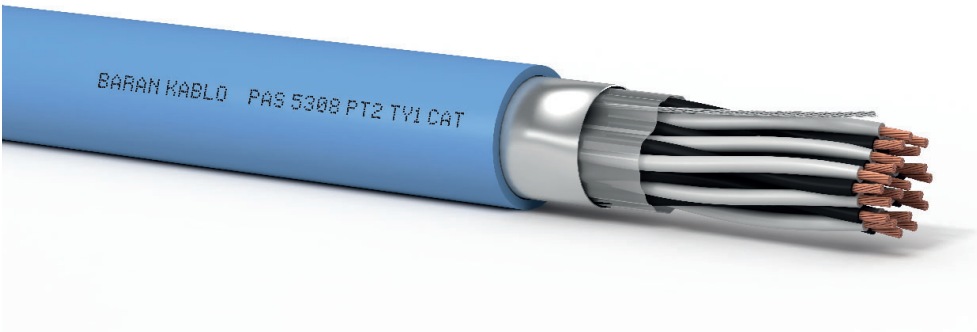
This individual and overall screened instrumentation cable is used for signal transmission in electronic control systems and panels, communication and telecom technologies, petrochemical and other commercial and industrial applications. HFFR compound is halogen free, low smoke and flame retardant with low-toxic acid self-extinguishing properties and it is suitable for the areas where the safety requirements for cables are very high."

### **Cable Construction**

<b>Conductor</b> BS EN 60228	Solid (class 1), stranded (class 2) or flexible (class 5) copper conductor to
<b>Insulation</b>	PE to BS EN 50290-2-23 or XLPE to BS EN 50290-2-29
<b>Core Stranding</b>	Cores twisted to pairs, triples or quads in layers
<b>Screen</b>	Individual & Collective Al-PET foil Screens with Tinned Copper Drain Wire"
<b>Outer Sheath</b>	LSZH (EN 50290-2-27)
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Colour coded in accordance to PAS 5308-1"

### **Technical Characteristics**

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Operating -15°C to +90°C, Installation 0°C to +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2
<b>Smoke Density</b>	IEC/EN 61034-1&2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter



## **PVC / CAT /PVC P2TY1**

### **Application Area**

This overall screened instrumentation cable is used for signal transmission in electronic control systems and panels, communication and telecom technologies, petrochemical and other commercial and industrial applications.

### **Cable Construction**

<b>Conductor</b> BS EN 60228	Solid (class 1), stranded (class 2) or flexible (class 5) copper conductor to
<b>Insulation</b>	PVC (EN 50290-2-21)
<b>Core Stranding</b>	Cores twisted to pairs , triples or quads in layers.
<b>Screen</b>	Collective Al-PET foil Screens with Tinned Copper Drain Wire
<b>Outer Sheath</b>	PVC (EN 50290-2-22)
<b>Insulation</b>	PVC (EN 50290-2-21)
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Colour coded in accordance to PAS 5308-1

### **Technical Characteristics**

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Operating -15°C to +65°C, Installation 0°C to +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter





## PVC / ICAT /PVC P2TY1

### Application Area

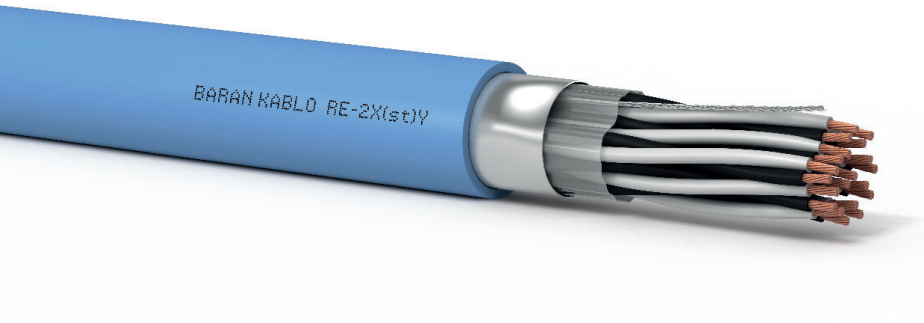
This overall screened instrumentation cable is used for signal transmission in electronic control systems and panels, communication and telecom technologies, petrochemical and other commercial and industrial applications.

### Cable Construction

<b>Conductor</b> BS EN 60228	Solid (class 1), stranded (class 2) or flexible (class 5) copper conductor to
<b>Insulation</b>	PVC (EN 50290-2-21)
<b>Core Stranding</b>	Cores twisted to pairs , triples or quads in layers.
<b>Binder Tape</b>	PETP foil
<b>Screen</b>	Individual & Overall Al-PET foil Screens with Tinned Copper Drain Wire
<b>Outer Sheath</b>	PVC (EN 50290-2-22)
<b>Insulation</b>	PVC (EN 50290-2-21)
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Colour coded in accordance to PAS 5308-1

### Technical Characteristics

<b>Operating Voltage</b>	300 V / 500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Operating -15°C to +65°C, Installation 0°C to +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter



## RE-2X(st)Y-fl

### Application Area

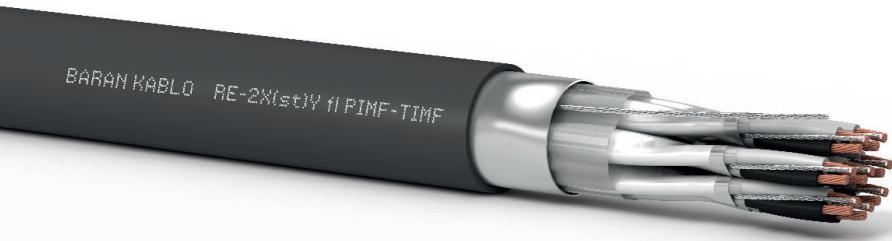
This instrumentation cable is used for analogous and digital signal transmission in electronic control systems and panels, communication technologies, petrochemical industry in indoor and outdoor applications.

### Cable Construction

<b>Conductor</b>	Stranded Annealed Copper to IEC/EN 60228, Class 2 (Class 1 or Class 5 and / or tinned on request)
<b>Insulation</b>	XLPE to BS EN 50290-2-29
<b>Core Stranding</b>	Cores twisted to pairs, triples or quads in layers
<b>Screen</b>	Collective Al-PET foil Screen with Tinned Copper Drain Wire
<b>Outer Sheath</b>	UV Resistant, Flame Retardant PVC (EN 50290-2-22 )
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Numbered Pair: Black / White, Numbered Triples: Black / White / Red and Numbered Quad: Black / White / Red / Blue

### Technical Characteristics

<b>Operating Voltage</b>	500 V
<b>Test Voltage</b>	2000 V
<b>Operating Temperature</b>	-30°C / +70°C, Installation -5°C to +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2 / IEC 60332-3-24 Cat. C
<b>Min. Bending Radius</b>	Fixed: 7,5 x Cable Diameter



## RE-2X(st)Y-fl PIMF - TIMF

### Application Area

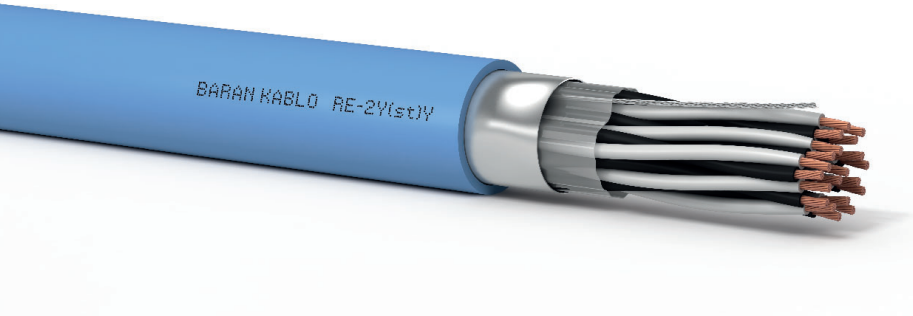
This instrumentation cable is used for analogous and digital signal transmission in electronic control systems and panels, communication technologies, petrochemical industry in indoor and outdoor applications.

### Cable Construction

<b>Conductor</b>	Stranded Annealed Copper to IEC/EN 60228, Class 2 (Class 1 or Class 5 and / or tinned on request)
<b>Insulation</b>	XLPE to BS EN 50290-2-29
<b>Core Stranding</b>	Screened pairs,triples are stranded in layers
<b>Screen</b>	Individual & Overall Al-PET foil Screens with Tinned Copper Drain Wire
<b>Outer Sheath</b>	UV Resistant, Flame Retardant PVC (EN 50290-2-22 )"
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Numbered Pair: Black / White, Numbered Triples: Black / White / Red and Numbered Quad: Black / White / Red / Blue"

### Technical Characteristics

<b>Operating Voltage</b>	500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Fixed -40°C / +70°C, Flexible - 5°C / +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2 / IEC 60332-3-24 Cat. C
<b>Min. Bending Radius</b>	Fixed: 7,5 x Cable Diameter



## RE-2Y(st)Y-fl

### Application Area

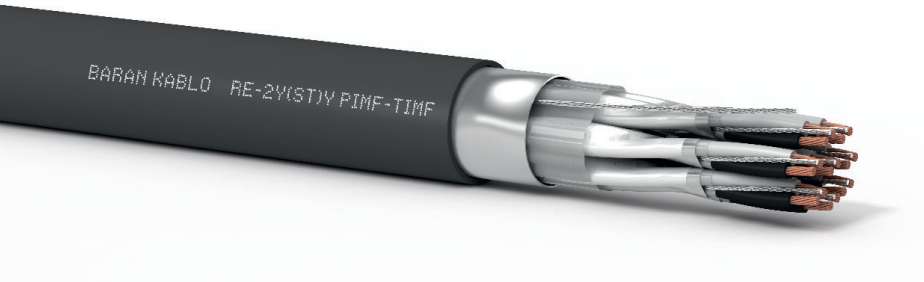
This instrumentation cable is used for analogous and digital signal transmission in electronic control systems and panels, communication technologies, petrochemical industry in indoor and outdoor applications.

### Cable Construction

<b>Conductor</b>	Stranded Annealed Copper to IEC/EN 60228, Class 2 (Class 1 or Class 5 and / or tinned on request)
<b>Insulation</b>	PE compound to EN50290-2-23
<b>Core Stranding</b>	Cores twisted to pairs, pairs is stranded in layers
<b>Screen</b>	Overall Al-PET Foil Screen with Tinned Copper Drain Wire
<b>Outer Sheath</b>	UV Resistant, Flame Retardant PVC (EN 50290-2-22 )
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Numbered Pair: Black / White, Numbered Triples: Black / White / Red and Numbered Quad: Black / White / Red / Blue

### Technical Characteristics

<b>Operating Voltage</b>	500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Fixed -40°C / +70°C, Flexible - 5°C / +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2 / IEC 60332-3-24 Cat. C
<b>Min. Bending Radius</b>	Fixed: 7,5 x Cable Diameter



## RE-2Y(st)Y-fl PIMF - TIMF

### Application Area

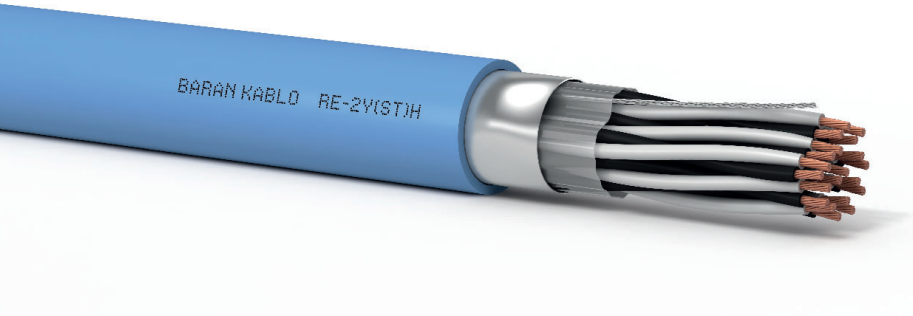
This instrumentation cable is used for analogous and digital signal transmission in electronic control systems and panels, communication technologies, petrochemical industry in indoor and outdoor applications.

### Cable Construction

<b>Conductor</b>	Stranded Annealed Copper to IEC/EN 60228, Class 2 (Class 1 or Class 5 and / or tinned on request)
<b>Insulation</b>	PE compound to EN50290-2-23
<b>Core Stranding</b>	Screened pairs, triples are stranded in layers
<b>Screen</b>	Individual & Overall Al-PET Foil Screens with Tinned Copper Drain Wire
<b>Outer Sheath</b>	UV Resistant, Flame Retardant PVC (EN 50290-2-22)
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Numbered Pair: Black / White, Numbered Triples: Black / White / Red and Numbered Quad: Black / White / Red / Blue

### Technical Characteristics

<b>Operating Voltage</b>	500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Fixed -40°C / +70°C, Flexible - 5°C / +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2 / IEC 60332-3-24 Cat. C
<b>Min. Bending Radius</b>	Fixed: 7,5 x Cable Diameter



## RE-2Y(st)H-fl

### Application Area

This instrumentation cable is used for analogous and digital signal transmission in electronic control systems and panels, communication technologies, petrochemical industry in indoor and outdoor applications. HFFR compound has flame retardant and self extinguishing specialities and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Stranded Annealed Copper to IEC/EN 60228, Class 2 (Class 1 or Class 5 and / or tinned on request)
<b>Insulation</b>	PE compound to EN50290-2-23
<b>Core Stranding</b>	Cores twisted to pairs, pairs is stranded in layers
<b>Screen</b>	Overall Al-PET Foil Screen with Tinned Copper Drain Wire
<b>Outer Sheath</b>	HFFR EN50290-2-27
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Numbered Pair: Black / White, Numbered Triples: Black / White / Red and Numbered Quad: Black / White / Red / Blue

### Technical Characteristics

<b>Operating Voltage</b>	500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Fixed -40°C / +70°C, Flexible - 5°C / +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2 / IEC 60332-3-24 Cat. C
<b>Min. Bending Radius</b>	Fixed: 7,5 x Cable Diameter



## RE-2Y(st)H-fl PIMF - TIMF

### Application Area

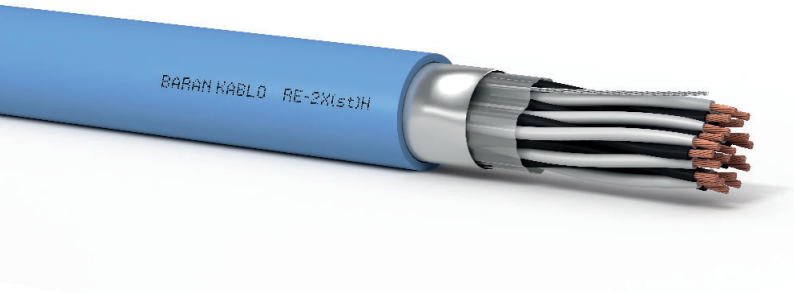
This instrumentation cable is used for analogous and digital signal transmission in electronic control systems and panels, communication technologies, petrochemical industry in indoor and outdoor applications. HFFR compound has flame retardant and self extinguishing specialties and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Stranded Annealed Copper to IEC/EN 60228, Class 2 (Class 1 or Class 5 and / or tinned on request)
<b>Insulation</b>	PE compound to EN50290-2-23
<b>Core Stranding</b>	Screened pairs, triples are stranded in layers
<b>Screen</b>	Individual & Overall Al-PET Foil Screens with Tinned Copper Drain Wire
<b>Outer Sheath</b>	HFFR Compound EN50290-2-27
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Numbered Pair: Black / White, Numbered Triples: Black / White / Red and Numbered Quad: Black / White / Red / Blue

### Technical Characteristics

<b>Operating Voltage</b>	500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Fixed -40°C / +70°C, Flexible - 5°C / +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2 / IEC 60332-3-24 Cat. C
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
<b>Min. Bending Radius</b>	Fixed: 7,5 x Cable Diameter



## RE-2X(st)H-fl

### Application Area

This instrumentation cable is used for analogous and digital signal transmission in electronic control systems and panels, communication technologies, petrochemical industry in indoor and outdoor applications. HFFR compound has flame retardant and self extinguishing specialities and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Stranded Annealed Copper to IEC/EN 60228, Class 2 (Class 1 or Class 5 and / or tinned on request)
<b>Insulation</b>	XLPE to BS EN 50290-2-29
<b>Core Stranding</b>	Cores twisted to pairs, pairs is stranded in layers
<b>Binder Tape</b>	PETP foil
<b>Screen</b>	Overall Al-PET Foil Screen with Tinned Copper Drain Wire
<b>Outer Sheath</b>	HFFR Compound EN50290-2-27
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Numbered Pair: Black / White, Numbered Triples: Black / White / Red and Numbered Quad: Black / White / Red / Blue

### Technical Characteristics

<b>Operating Voltage</b>	500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Fixed -40°C / +70°C, Flexible - 5°C / +50°C
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
<b>Flame Retardancy</b>	IEC 60332-1-2 / IEC 60332-3-24 Cat. C
<b>Min. Bending Radius</b>	Fixed: 7,5 x Cable Diameter





## RE-2X(st)H-fl PIMF -TIMF

### Application Area

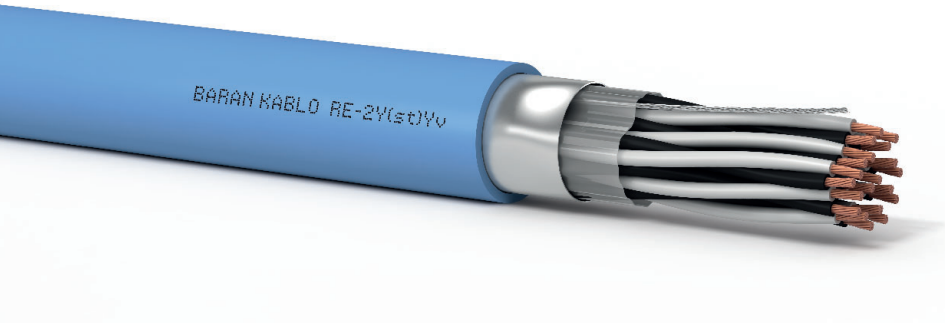
This instrumentation cable is used for analogous and digital signal transmission in electronic control systems and panels, communication technologies, petrochemical industry in indoor and outdoor applications. HFFR compound has flame retardant and self extinguishing specialties and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Stranded Annealed Copper to IEC/EN 60228, Class 2 (Class 1 or Class 5 and / or tinned on request)
<b>Insulation</b>	XLPE to BS EN 50290-2-29
<b>Core Stranding</b>	Cores twisted to pairs , triples or quad in layers
<b>Screen</b>	Individual & Collective Al-PET foil Screens with Tinned Copper Drain Wire
<b>Outer Sheath</b>	HFFR Compound EN50290-2-27
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Numbered Pair: Black / White, Numbered Triples: Black / White / Red and Numbered Quad: Black / White / Red / Blue

### Technical Characteristics

<b>Operating Voltage</b>	500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Fixed -40°C / +70°C, Flexible - 5°C / +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2 / IEC 60332-3-24 Cat. C
<b>Min. Bending Radius</b>	Fixed: 7,5 x Cable Diameter



## RE-2Y(st)Yv-fl

### Application Area

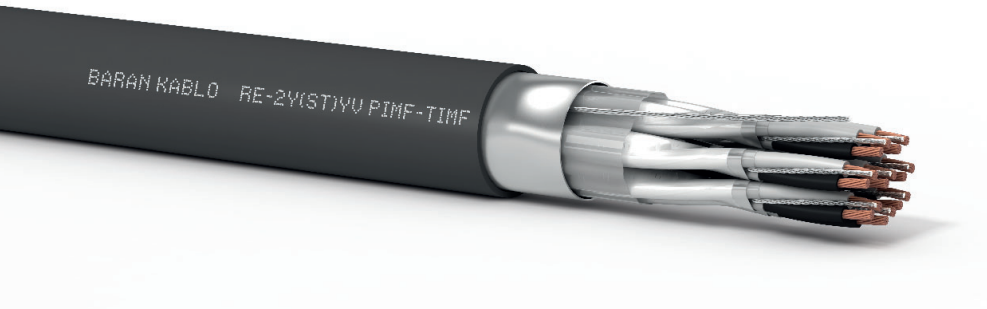
This instrumentation cable is used for analogous and digital signal transmission in electronic control systems and panels, communication technologies, petrochemical industry in indoor and outdoor applications.

### Cable Construction

<b>Conductor</b>	Stranded Annealed Copper to IEC/EN 60228, Class 2 (Class 1 or Class 5 and / or tinned on request)
<b>Insulation</b>	PE compound to EN50290-2-23
<b>Core Stranding</b>	Cores twisted to pairs, pairs is stranded in layers
<b>Screen</b>	Collective Al-PET foil Screen with Tinned Copper Drain Wire
<b>Outer Sheath</b>	Special PVC compound (Reinforced)
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Numbered Pair: Black / White, Numbered Triples: Black / White / Red and Numbered Quad: Black / White / Red / Blue

### Technical Characteristics

<b>Operating Voltage</b>	500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Fixed -40°C / +70°C, Flexible - 5°C / +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2 / IEC 60332-3-24 Cat. C
<b>Min. Bending Radius</b>	Fixed: 7,5 x Cable Diameter



## RE-2Y(st)Yv-fl PIMF - TIMF

### Application Area

This instrumentation cable is used for analogous and digital signal transmission in electronic control systems and panels, communication technologies, petrochemical industry in indoor and outdoor applications.

### Cable Construction

<b>Conductor</b>	Stranded Annealed Copper to IEC/EN 60228, Class 2 (Class 1 or Class 5 and / or tinned on request)
<b>Insulation</b>	PE compound to EN50290-2-23
<b>Core Stranding</b>	Screened pairs, triples,quads are stranded in layers
<b>Screen</b>	Individual & Overall Al-PET foil Screens with Tinned Copper Drain Wire
<b>Outer Sheath</b>	Special reinforced PVC compound
<b>Colours</b>	Outer Sheath: Blue or Black and other colours on request Core Colours: Numbered Pair: Black / White, Numbered Triples: Black / White / Red and Numbered Quad: Black / White / Red / Blue

### Technical Characteristics

<b>Operating Voltage</b>	500 V
<b>Test Voltage</b>	2000 V
<b>Temperature Range</b>	Fixed -40°C / +70°C, Flexible - 5°C / +50°C
<b>Flame Retardancy</b>	IEC 60332-1-2 / IEC 60332-3-24 Cat. C
<b>Min. Bending Radius</b>	Fixed: 7,5 x Cable Diameter



## J-Y(st)Y...Lg

### Application Area

Fire alarm and telecommunication installation cable. It is used for analogue and digital signal transmission for control and fire alarm installations, security systems inside buildings in dry and humid rooms.

### Cable Construction

<b>Conductor</b>	Solid Annealed Copper (IEC/EN 60228, VDE 0295, Class 1)
<b>Insulation</b>	PVC (EN 50290-2-21 TI1)
<b>Core Stranding</b>	2 cores twisted to pairs and 4 pairs twisted to a unit
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Al-PET Foil with Solid Tinned Copper Drain Wire
<b>Outer Sheath</b>	PVC (EN 50290-2-22)
<b>Colours</b>	Outer Sheath: Red and other colours on request Core Colours: Coloured acc. to VDE 0815

### Technical Characteristics

<b>Operating Voltage</b>	300 V
<b>Test Voltage</b>	800 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C
<b>Flame Retardancy</b>	IEC 60332-1-2
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter



## J-H(st)H...Lg

### Application Area

Fire alarm and telecommunication installation cable. It is used for analogue and digital signal transmission for control and fire alarm installations, security systems inside buildings in dry and humid rooms. Cable has halogen free and flame retardant compound and it is suitable for the areas where the safety requirements for cables are very high.

### Cable Construction

<b>Conductor</b>	Solid Annealed Copper (IEC/EN 60228, VDE 0295, Class 1)
<b>Insulation</b>	HFFR (EN 50290-2-26)
<b>Core Stranding</b>	2 cores twisted to pairs and 4 pairs twisted to a unit
<b>Wrapping</b>	PETP foil
<b>Screen</b>	Al-PET Foil with Solid Tinned Copper Drain Wire
<b>Outer Sheath</b>	HFFR (EN 50290-2-27)
<b>Colours</b>	Outer Sheath: Red and other colours on request Core Colours: Coloured acc. to VDE 0815

### Technical Characteristics

<b>Operating Voltage</b>	300 V
<b>Test Voltage</b>	800 V
<b>Temperature Range</b>	Fixed: -30 °C .....+70 °C
<b>Flame Retardancy</b>	IEC/EN 60332-1
<b>Smoke Density</b>	IEC 61034-1&2
<b>Halogen Free</b>	DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1"
<b>Min. Bending Radius</b>	Fixed: 8 x Cable Diameter



## Festoon PUR-HF

### Application Area

These flexible cables are used in mobile applications, conveyor and trolley systems, drag chain applications etc.. Suitable for wet, dry, damp outdoor applications and high mechanical requirements. Cable is halogen free, Oil, Ozone and UV resistant.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	Special Halogen free compound
<b>Core Stranding</b>	In layers
<b>Supporting Element</b>	Textile based central strength member
<b>Outer Sheath</b>	HF-PUR
<b>Colours</b>	Outer Sheath: Black and other colours on request Core Colours: Colored cores according to VDE 0293

### Technical Characteristics

<b>Operating Voltage</b>	600 V / 1000 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -50 °C .....+90 °C, Flexible: -40 °C .....+80 °C
<b>Flame Retardancy</b>	IEC/EN 60332-2-1
<b>Oil Resistance</b>	EN/IEC 60811-2-1, DIN VDE 0473-811-2-1
<b>Festoon Travel Speed</b>	200 m/min.
<b>Drag Chain Travel Speed</b>	200 m/min.
<b>Min. Bending Radius</b>	Fixed: 6 x Cable Diameter, Flexible: 8 x Cable Diameter



## Festoon C-PUR-HF

### Application Area

These flexible cables are used in mobile applications, conveyor and trolley systems, drag chain applications etc.. Suitable for wet, dry, damp outdoor applications and high mechanical requirements. Cable is halogen free, Oil, Ozone and UV resistant.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	Special Halogen free compound
<b>Core Stranding</b>	In layers
<b>Supporting Element</b>	Textile based central strength member
<b>Inner Sheath</b>	HF-PUR
<b>Separator</b>	PETP foil
<b>Screen</b>	Tinned Copper Wire Braiding
<b>Outer Sheath</b>	HF-PUR
<b>Colours</b>	Outer Sheath: Black and other colours on request Core Colours: Colored cores according to VDE 0293

### Technical Characteristics

<b>Operating Voltage</b>	600 V / 1000 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -50 °C .....+90 °C, Flexible: -40 °C .....+80 °C
<b>Flame Retardancy</b>	IEC/EN 60332-2-1
<b>Oil Resistance</b>	EN/IEC 60811-2-1, DIN VDE 0473-811-2-1
<b>Festoon Travel Speed</b>	200 m/min.
<b>Drag Chain Travel Speed</b>	200 m/min.
<b>Min. Bending Radius</b>	Fixed: 6 x Cable Diameter, Flexible: 8 x Cable Diameter



## Trommel PUR-HF LV Reeling Cable

### Application Area

This drum reeling cable is used in mobile applications under mechanical stress.. Suitable for wet, dry, damp outdoor applications and high mechanical requirements. Cable has a special halogen free PUR sheath which provides strong protection against oil, ozone, alkalines and UV.

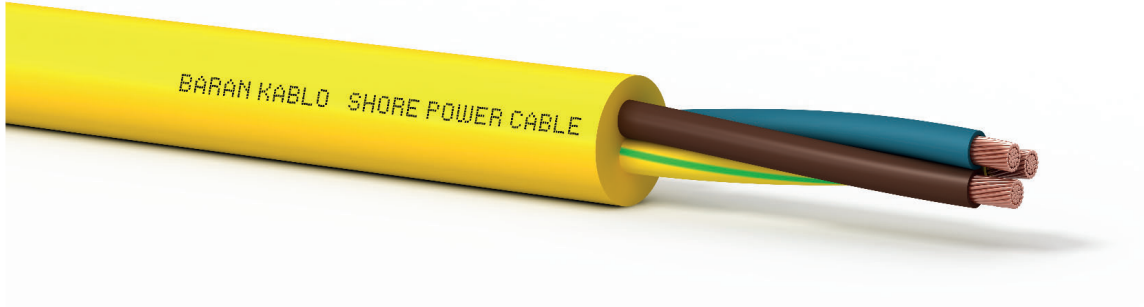
### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper (IEC/EN 60228, VDE 0295, Class 5)
<b>Insulation</b>	Special compound based on Polyester
<b>Core Stranding</b>	In layers
<b>Supporting Element</b>	Textile based central strength member
<b>Inner Sheath</b>	HF-PUR
<b>Supporting Element</b>	Anti-twisting Textile braid
<b>Outer Sheath</b>	HF-PUR
<b>Colours</b>	Outer Sheath: Black and other colours on request Core Colours: Colored cores according to VDE 0293

### Technical Characteristics

<b>Operating Voltage</b>	600 V / 1000 V
<b>Test Voltage</b>	2500 V
<b>Temperature Range</b>	Fixed: -50 °C .....+90 °C, Flexible: -40 °C .....+80 °C
<b>Flame Retardancy</b>	IEC/EN 60332-2-1
<b>Oil Resistance</b>	EN/IEC 60811-2-1, DIN VDE 0473-811-2-1
<b>Max. Torsion</b>	±25°/m
<b>Festoon Travel Speed</b>	200 m/min.
<b>Drag Chain Travel Speed</b>	200 m/min.
<b>Min. Bending Radius</b>	Fixed: 6 x Cable Diameter, Flexible: 8 x Cable Diameter





## Oil/Ozone/UV Resistant 0,6/1kV Shore to Ship

### Application Area

Shore to ship power supply connection cable is used from shore to ship applications. This cable provides protection against oil, sea-water, and UV.

### Cable Construction

<b>Conductor</b>	Flexible Stranded Annealed Copper to IEC/EN 60228, Class 5 (Tinned on request)
<b>Insulation</b>	PVC or PUR compound
<b>Core Stranding</b>	In layers
<b>Inner Sheath</b>	PVC or PUR
<b>Outer Sheath</b>	PUR
<b>Colours</b>	Outer Sheath: Yellow or Black and other colours on request Core Colours: Colored cores according to HD 308 S2

### Technical Characteristics

<b>Operating Voltage</b>	600 V / 1000 V
<b>Test Voltage</b>	3500 V
<b>Temperature Range</b>	Fixed: -40°C / + 90°C
<b>Flame Retardancy</b>	IEC/EN 60332-1-2
<b>Halogen Free</b>	IEC/ EN 60754-2
<b>Oil Resistance</b>	EN/IEC 60811-2-1, DIN VDE 0473-811-2-1
<b>Ozone Resistance</b>	EN 50363-2-1
<b>UV Resistance</b>	EN 50289-4-17
<b>Min. Bending Radius</b>	8 x Cable Diameter

## Technical Information

### Designation

#### Copper Types

CLASS 1 : Solid Wire

CLASS 2 : Stranded Multi Wire

CLASS 5 : Stranded Flexible Multi Wire

CLASS 6 : Stranded Extra Flexible Multi Wire

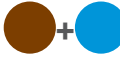






CODE	MEANING
Y	PVC
2Y	PE
9Y	PP
11Y	TPU
12Y	TPE
H	HFFR
2X	XLPE

Screen Material	
CODE	MEANING
C	Copper Wire Braid
S/Q/A	Galvanized Steel Wire Braid
(st)	Static Screen

CODE	MEANING
J-	Wiring Cable
Lg	Stranded in layers
Bd	Bunched
LI	Stranded or twisted conductor
SL	Stranded or twisted conductor
Yv	Reinforced Sheath
ICAT	Individual & Collective Screen
CAT	Collective Screen
TP	Twisted Pair

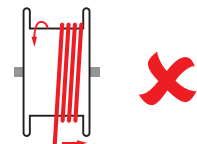
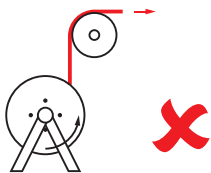
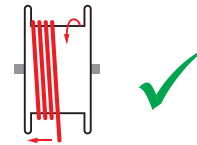
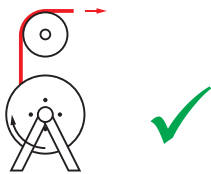
COLOURS CODE			
DIN 47100			
1	White	31	Green-Blue
2	Brown	32	Yellow-Blue
3	Green	33	Green-Red
4	Yellow	34	Yellow-Red
5	Grey	35	Green-Black
6	Pink	36	Yellow-Black
7	Blue	37	Grey-Blue
8	Red	38	Pink-Blue
9	Black	39	Grey-Red
10	Violet	40	Pink-Red
11	Grey-Pink	41	Grey-Black
12	Red-Blue	42	Pink-Black
13	White-Green	43	Blue-Black
14	Brown-Green	44	Red-Black
15	White-Yellow	45	White-Brown-Black
16	Yellow-Brown	46	Yellow-Green-Black
17	White-Grey	47	Green-Pink-Black
18	Grey-Brown	48	Red-Blue-Black
19	White-Pink	49	White-Green-Black
20	Pink-Brown	50	Brown-Green-Black
21	White-Blue	51	White-Yellow-Black
22	Brown-Blue	52	Yellow-Brown-Black
23	White-Red	53	White-Grey-Black
24	Brown-Red	54	Grey-Brown-Black
25	White-Black	55	White-Pink-Black
26	Brown-Black	56	Pink-Brown-Black
27	Grey-Green	57	White-Blue-Black
28	Yellow-Grey	58	Brown-Blue-Black
29	Pink-Green	59	White-Red-Black
30	Yellow-Pink	60	Brown-Red-Black

## Technical Information

	With Ground Wire	Without Ground Wire
2 Cores	-	
3 Cores		
4 Cores		
5 Cores		
≥ 6 Cores	Black numbered	Black numbered

<b>-JZ</b>	: White numbered black cores with yellow-green earth conductor
<b>-OZ</b>	: White numbered black cores without yellow-green earth conductor
<b>-JB</b>	: Coloured cores acc. to VDE 0293 with yellow-green earth conductor
<b>-OB</b>	: Coloured cores acc. to VDE 0293 without yellow-green earth conductor

### CABLE HANDLING INSTRUCTION



The cable should be without torsion and be careful during unwinding over edges or pulling.

The cables should be unwound tangential

The cables should be rolled onto the operating drums so that the cable moves to the left when started







## Notes

A series of horizontal dotted lines for writing notes.



**Baran Kablo A.Ş.**

Address: Cerkesli OSB Mah.  
İmes 9.Cd. No:30 41455 Dilovası  
Kocaeli / TÜRKİYE

+ 90 262 655 02 76  
sales@barankablo.com.tr

www.**barankablo**.com.tr