POWERFLEX RV-K

Industrial flexible cable for power transmission.

IEC 60502-1 - UNE 21123-2

DESIGN

1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228 and IEC 60228.

2. Insulation

Cross-linked polyethylene (XLPE)

The standard identification of insulated conductors is the following:

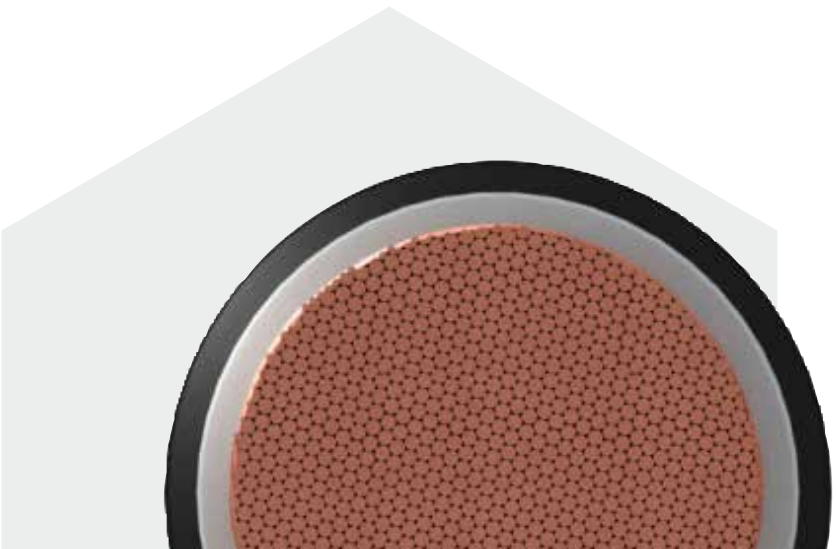
1 x	Natural
2 x	Blue + Brown
3 G	Blue + Brown + Green/yellow
3 x	Brown + Black + Grey
3 x + 1 x	Brown + Black + Grey + Blue (reduced cross-section)
4 G	Brown + Black + Grey + Green/yellow
4 x	Brown + Black + Grey + Blue
5 G	Brown + Black + Grey + Blue + Green/yellow

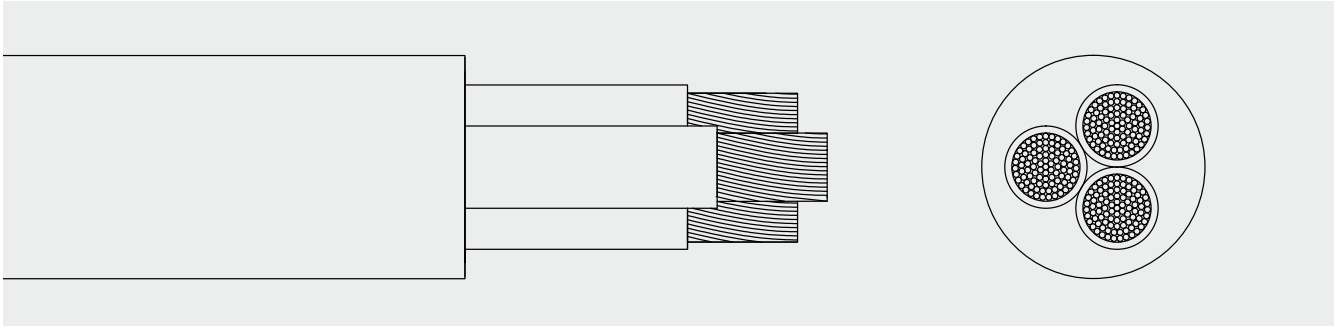
3. Outer sheath

Flexible PVC, black colour.

APPLICATIONS

Powerflex RV-K cable is suitable for all types of low voltage industrial-type connections, in urban grids, building installations, etc. Its high flexibility makes the installation process substantially easier and, as a result, is particularly suitable for use in difficult layouts. It can be buried or installed in a tube as well as outdoors without requiring additional protection. This cable can withstand damp conditions including total immersion in water (AD7).





CHARACTERISTICS

Electrical performance
LOW VOLTAGE 0,6/1kV

Standard
IEC 60502-1 - UNE 21123-2

Approvals
CE
SEC
BUREAU VERITAS
AENOR
SASO
RoHS
KEMA KEUR

Thermal performance
Maximum service temperature: 90°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations).

Fire performance
Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.
Reduced emission of halogens. Chlorine <15%.

Mechanical performance
Minimum bending radius: x5 cable diameter.
Impact resistance: AG2 Medium severity.

Chemical performance
Chemical & Oil resistance: Good.
UV Resistant: UNE 211605.

Water performance
Water resistance: AD7 Immersion

Other
Meter by meter marking.

Installation conditions
Open Air.
Buried.
In conduit.

Applications
Industrial use.
Urban grids.

Packaging
Available in rolls (lengths of 100 m) and drums.

Top Cable

TOPFLAT H05VVH6-F & H07VVH6-F

Flat cables for lifts, cranes, hoists and conveyor systems.

HD 359 – EN 50214

This cable render is an example from this product range and does not neccesarily match the selected core size or number of cores.

DESIGN

1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228 and IEC 60228.

2. Insulation

Flexible PVC.

The standard identification of insulated conductors is the following:

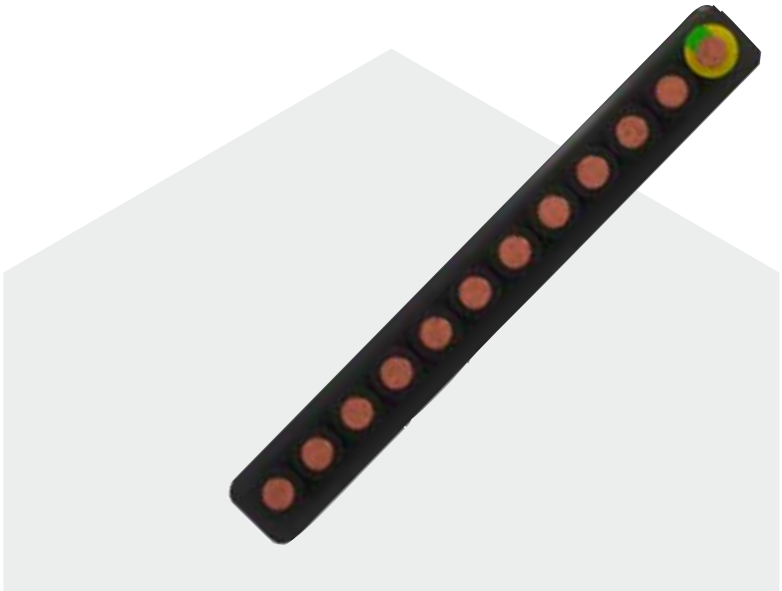
4 G	Brown + Black + Grey + Green/yellow
6 or more conductors	Black numbered+ Green/yellow

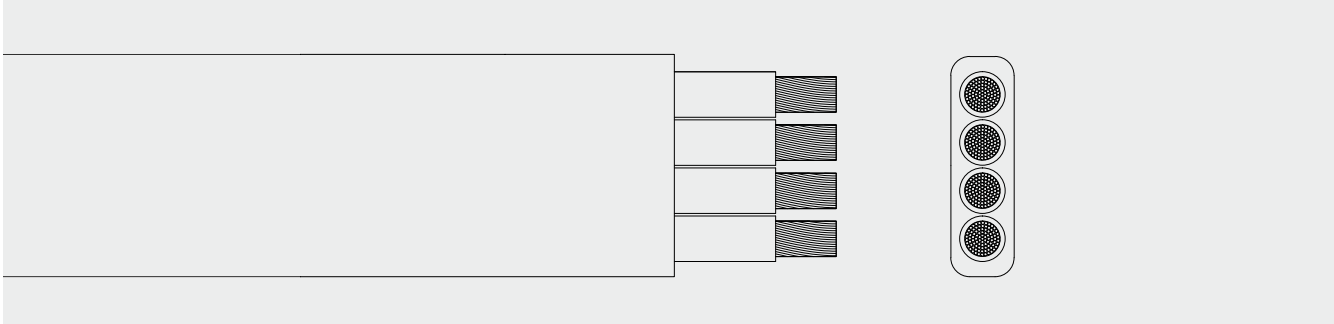
3. Outer sheath

Flexible PVC outer sheath, black colour. The ripcord allows you to gently tear the outer-sheath allowing you to gently peel it away without damaging the screen.

APPLICATIONS

The Topflat H05VVH6-F & H07VVH6-F is a flat cable specially designed for cranes, lifts, hoists, drum reeling and conveyor systems. The hanging length of the cable can reach up to 35m and its pull out speed can reach up to 1.6 m/s (overlaying cables is not recommended when installing).





CHARACTERISTICS

Electrical performance
LOW VOLTAGE 300/500 V 450/750 V

Standard
HD 359 – EN 50214

Approvals
CE
HAR
AENOR
SASO
RoHS

Thermal performance
Maximum service temperature: 70°C.
Maximum short-circuit temperature: 160°C (max. 5 s).
Minimum service temperature: 0°C.

Fire performance
Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.
Reduced emission of halogens. Chlorine <15%.

Mechanical performance
Minimum bending radius: x25 cable diameter.
Impact resistance: AG2 Medium severity.

Chemical performance
Chemical & Oil resistance: Acceptable.

Water performance
Water resistance: AD5 Jets.

Other
Meter by meter marking.

Installation conditions
Open Air.

Applications
Industrial use.
Mobile use.
Hoists.
Cranes.
Elevators, lifts.
Conveyors.

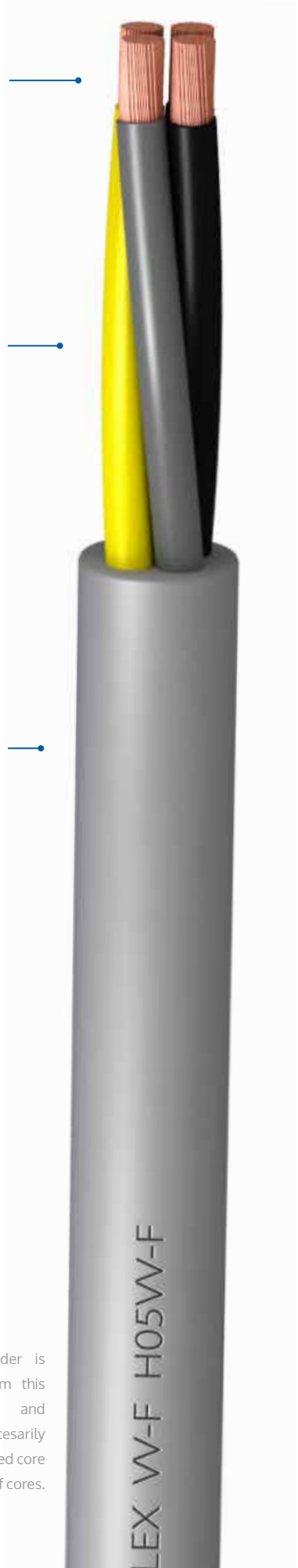
Top Cable

Top Cable

TOPFLEX VV-F H05VV-F

Flexible cable for connecting small electrical appliances.

EN 50525-2-11 / IEC 60227-5



This cable render is an example from this product range and does not neccesarily match the selected core size or number of cores.

DESIGN

1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228 and IEC 60228.

2. Insulation

Flexible PVC.

The standard identification of insulated conductors is the following:

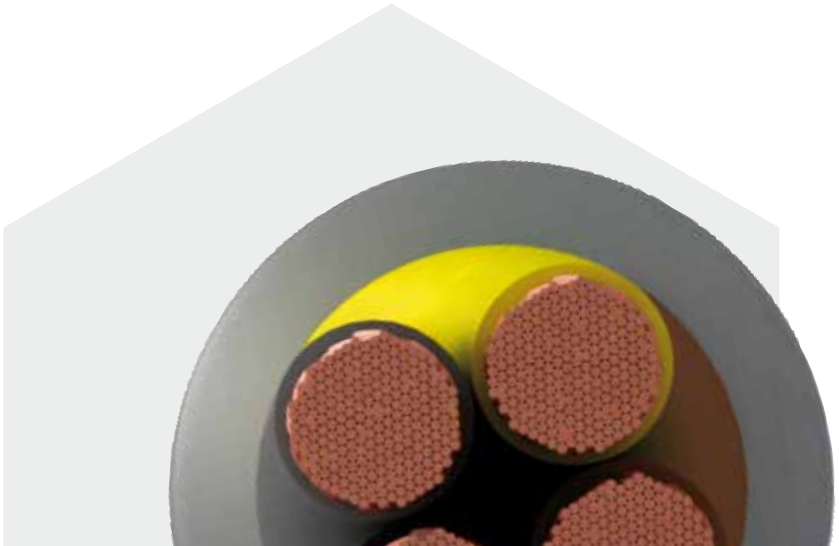
2x	Brown + Blue
3G	Brown + Blue + Green/yellow
4G	Brown + Black + Grey + Green/yellow
5G	Brown + Black + Grey + Blue + Green/yellow

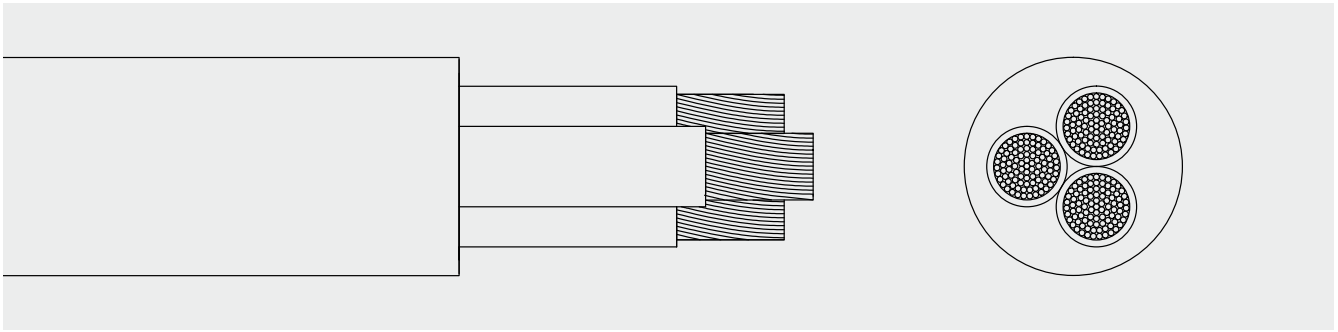
3. Outer sheath

Flexible PVC. Standard colours are grey, white and black. Other colours available on request.

APPLICATIONS

Topflex VV-F H05VV-F cable has been specially designed for connecting small home appliances such as vacuum cleaners, washing machines, refrigerators, etc. It is recommended for household installations and can also be used for light mobile services. These cables are also suitable for fixed applications in furniture, wall partitions, and in hollow spaces of prefabricated building parts.





CHARACTERISTICS

Electrical performance
LOW VOLTAGE 300/500 V

Standard
EN 50525-2-11 / IEC 60227-5

Approvals
CE
SEC
HAR
AENOR
SASO
RoHS

Thermal performance
Maximum service temperature: 60°C.
Maximum short-circuit temperature: 150°C (max. 5 s).
Minimum service temperature: 5°C.

Fire performance
Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.
Reduced emission of halogens. Chlorine <15%.

Mechanical performance
Minimum bending radius: 3 x cable Ø (Ø cable <12 mm2). 4 x cable Ø (Ø cable >12 mm2).
Impact resistance: AG2 Medium severity.

Chemical performance
Chemical & Oil resistance: Good.

Water performance
Water resistance: AD5 Jets.

Other
Meter by meter marking.

Installation conditions
Open Air.
In conduit.

Applications
Mobile use.
Domestic use.
Domestic appliances.
Temporary site installations.

Packaging
Available in rolls (lengths of 50 and 100 m) and drums.

Top Cable

Top Cable

TOPWELD H01N2-D

The special cable for welding.

UNE-EN 50525-2-81 / IEC 60245

This cable render is an example from this product range and does not neccesarily match the selected core size or number of cores.

DESIGN

1. Conductor

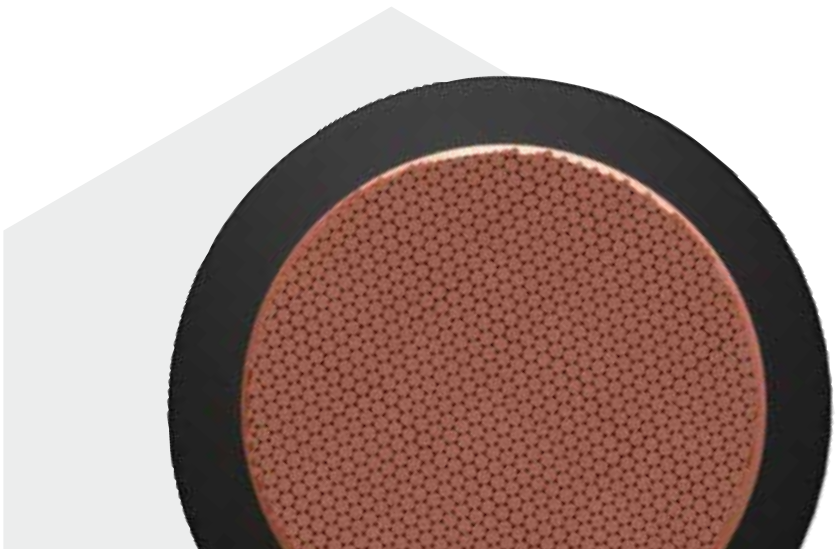
Electrolytic copper, class D (extra-flexible), based on UNE-EN 50525-2-81.

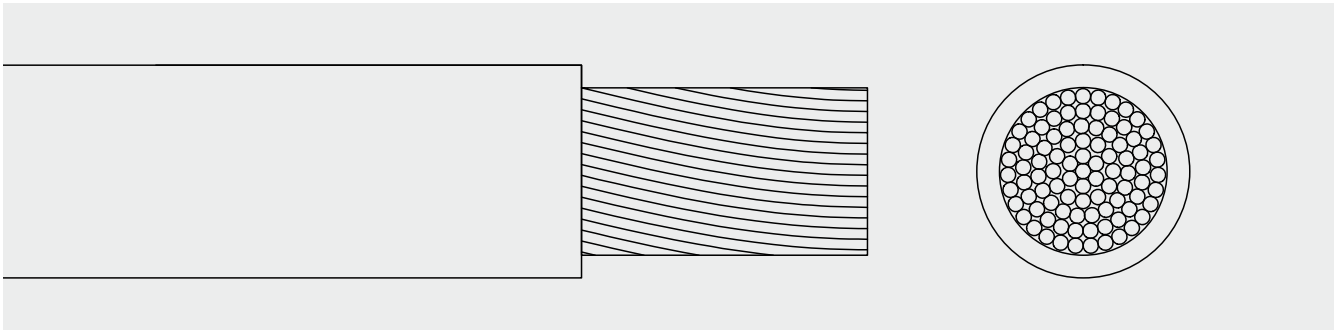
2. Outer sheath

Flexible rubber. Black colour.

APPLICATIONS

Topweld H01N2-D is a harmonized, flexible, rubber welding cable specially designed for transmitting high currents between the welding generator and the electrode. Its flexibility makes using the welding tool easier and also prevents knots from forming in the cable that could cause the internal conductor to break. It can also be used in automatic welding and machine tools, conveyor systems and production or assembly lines, for example in automobile assembly lines.





CHARACTERISTICS

Electrical performance
LOW VOLTAGE 100/100V

Standard
EN 50525-2-81 / IEC 60245

Approvals
CE
HAR
AENOR
SASO
RoHS

Thermal performance
Maximum service temperature: 85°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -20°C.

Fire performance
Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.

Mechanical performance
Minimum bending radius: x5 cable diameter.
Impact resistance: AG2 Medium severity.

Chemical performance
Chemical & Oil resistance: Excellent.
Grease & mineral oils resistance: Excellent

Water performance
Water resistance: AD3 Sprays

Other
Meter by meter marking.

Installation conditions
Open Air.

Applications
Welding.
Industrial use.
Mobile use.
Robotics.
Conveyors.

Top Cable

TOXFREE ZH ES05Z1-K & H07Z1-K (AS)

Flexible and halogen free power cable for electrical panel wiring.

UNE-EN 50525-3-31 / UNE 211002 / UL 1581

This cable render is an example from this product range and does not neccesarily match the selected core size or number of cores.

DESIGN

1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228 and IEC 60228.

2. Insulation

Extra sliding low smoke zero halogen (LSZH) polyolefin insulation.

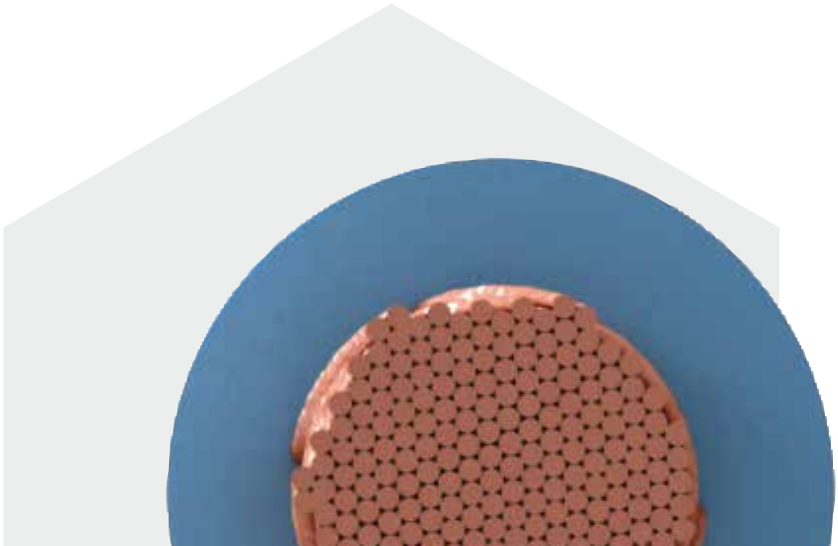
The standard identification of insulated conductors is the following:

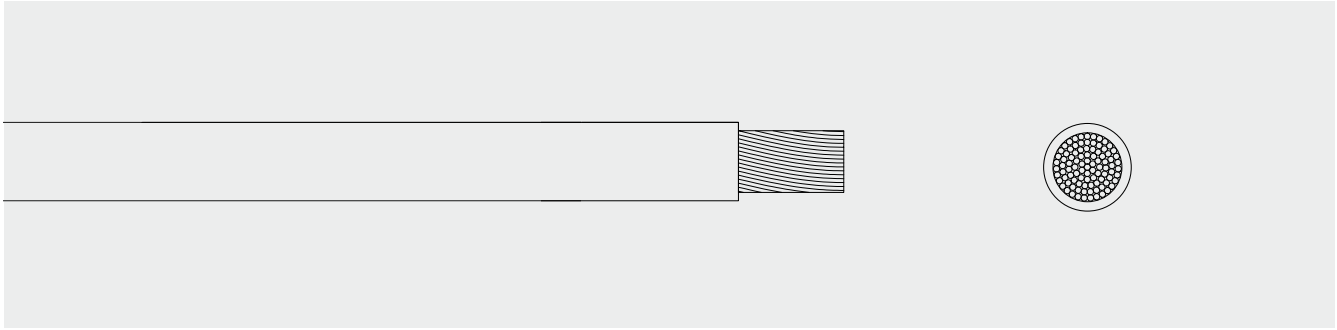
Blue	RAL 5015
Brown	RAL 8003
Black	RAL 9005
Red	RAL 3000
Green/yellow	RAL 1021 / RAL 6018
Grey	RAL 7000
Dark Blue	RAL 5003
White	RAL 9010
Orange	RAL 2003
Violet	RAL 4005

Other colours available on request

APPLICATIONS

Toxfree ES05Z1-K & H07Z1-K is a LSZH safety cable. In the event of fire, it does not emit toxic gases, nor does it give off corrosive gases, avoiding any possible damage to people or electronic equipment. For these reasons it is highly recommended for use in public places such as: hospitals, schools, museums, airports, bus terminals, shopping malls, offices, laboratories, etc.





CHARACTERISTICS

Electrical performance

LOW VOLTAGE 300/500 V · 450/750 V · UL 600 V

Standard

UNE-EN 50525-3-31 / UNE 211002 / UL 1581

Approvals

CE
SEC
HAR
BUREAU VERITAS
AENOR
SASO
RoHS

Thermal performance

Maximum service temperature: 90°C (UL 1581) / 70°C (EN 50525-3-31).
Maximum short-circuit temperature: 160°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations).

Fire performance

Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.
Fire non-propagation based on UNE-EN 60332-3 and IEC 60332-3.
LSZH (Low Smoke Zero Halogen) based on UNE-EN 60754-1 and IEC 60754-1.
Low smoke emission based on UNE-EN 61034 and IEC 61034: Light transmittance > 60%
Low corrosive gases emission based on UNE-EN 60754-2 and IEC 60754-2.

Mechanical performance

Minimum bending radius: x5 cable diameter.

Chemical performance

Chemical & Oil resistance: Acceptable.

Water performance

Water resistance: AD3 Sprays.

Other

Meter by meter marking. (from 10mm2 onwards)

Installation conditions

In conduit.

Applications

Domestic use.
Electrical panel wiring.
Public places.

Packaging

Small cross sections (from 0,75 mm2 to 6 mm2) are supplied in high-resistant boxes. Medium cross sections (from 10 mm2 to 35 mm2) are supplied in 100 m sealed coils. Greater cross sections (>35 mm2) are supplied in drums.

Top Cable

Top Cable

TOXFREE PLUS 331 ZH RZ1-K (AS+)

LSZH and fire resistant power cable, for emergency circuits.

IEC 60502-1 / UNE 211025

This cable render is an example from this product range and does not neccesarily match the selected core size or number of cores.

DESIGN

1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228 and IEC 60228.

2/3. Insulation

(2) Mica tape + (3) XLPE

The standard identification of insulated conductors is the following:

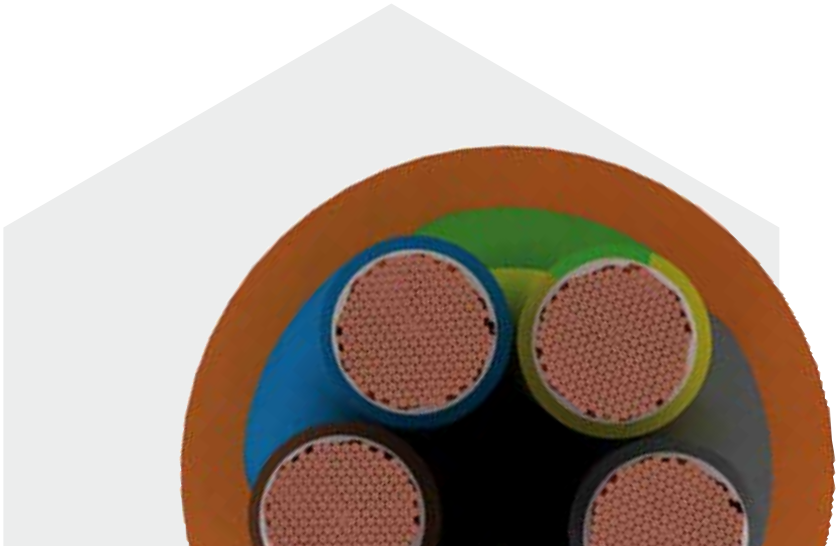
1 x	Natural
2x	Blue + Brown
3 G	Blue + Brown + Green/yellow
4 G	Brown + Black + Grey + Green/yellow
5 G	Brown + Black + Grey + Green/yellow + Blue

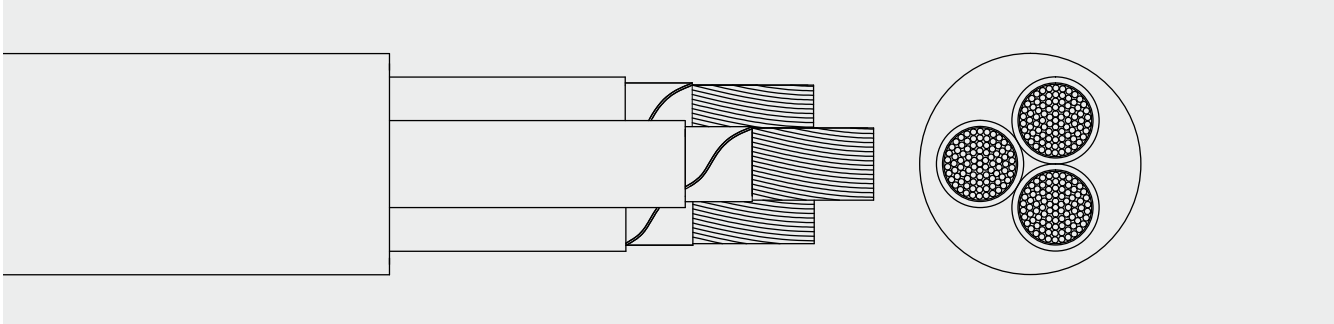
4. Outer sheath

Low Smoke Zero Halogen (LSZH) polyolefin. Orange colour, non-toxic, fire retardant and fire resistant.

APPLICATIONS

Toxfree Plus RZ1-K (AS+) is a fire resistant cable, specially designed to ensure the power supply to emergency circuits in the event of fire. During a fire you need critical circuits to work for life safety (signaling lights, fume extractors, acustic alarms, water pumps, etc) and a secure plant shutdown. For this reason, its use is highly recommended in public places such as: hospitals, tunnels, offices, production plants, laboratories, hotels, etc.





CHARACTERISTICS

Electrical performance

LOW VOLTAGE 0,6/1kV

Standard

IEC 60502-1 / UNE 211025

Approvals

CE
RoHS

Thermal performance

Maximum service temperature: 90°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations).

Mechanical performance

Minimum bending radius: x5 cable diameter.
Impact resistance: AG2 Medium severity.

Chemical performance

Chemical & Oil resistance: Acceptable.

Water performance

Water resistance: AD5 Jets.

Fire performance

Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.
Fire non-propagation based on UNE-EN 60332-3 and IEC 60332-3.
Fire resistant: (PH120) mínimum 120 minutes at 840 °C: Based on EN 50200 and IEC 60331-2 for Ø cable < 20 mm.
Based on EN 50362 and IEC 60331-1 for Ø cable > 20 mm. 180' at 950°C (cat C) category C,W & Z based on BS6387.
Fire resistant 180' at 950°C (cat C) category C,W & Z based on BS6387 (300/500V).
LSZH (Low Smoke Zero Halogen) based on UNE-EN 60754-1 and IEC 60754-1.
Low smoke emission based on UNE-EN 61034 and IEC 61034: Light transmittance > 60%
Low corrosive gases emission based on UNE-EN 60754-2 and IEC 60754-2.

Other

Meter by meter marking.

Installation conditions

Open Air.
Buried.
In conduit.

Applications

Industrial use.
Emergency circuits
Public places.

Top Cable

TOXFREE ZH XTREM H07ZZ-F (AS)

The extra-flexible LSZH rubber cable for mobile service.

UNE-EN 50525-3-21

This cable render is an example from this product range and does not neccesarily match the selected core size or number of cores.

DESIGN

1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228 and IEC 60228.

2. Insulation

LSZH Rubber.

The standard identification of insulated conductors is the following:

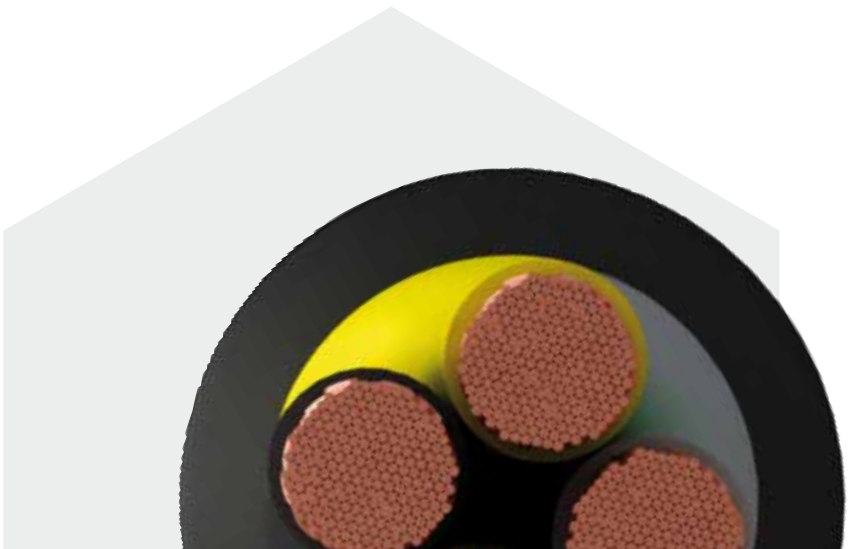
1 x	Natural
2 x	Brown + Blue
3 G	Brown + Blue + Green/yellow
4 G	Brown + Black + Grey + Green/yellow
5 G	Brown + Black + Grey + Blue + Green/yellow

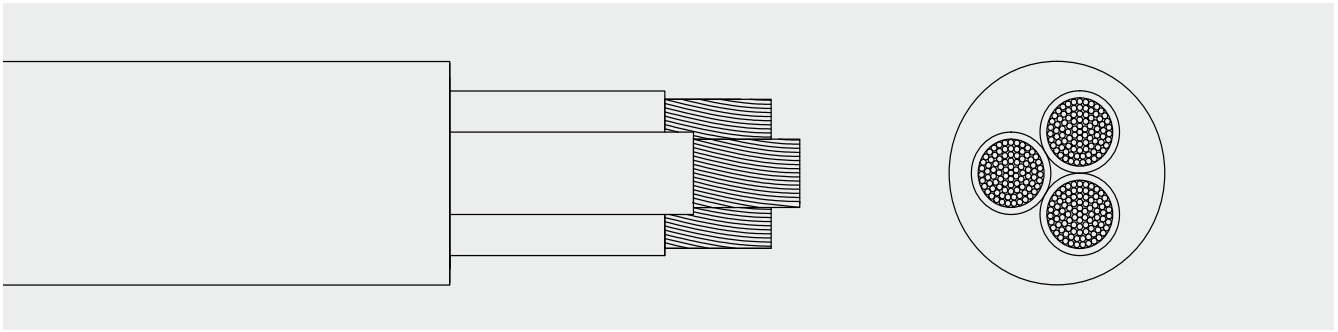
3. Outer sheath

Low Smoke Zero Halogen (LSZH) rubber. Black colour. Fire retardant cable.

APPLICATIONS

Toxfree Xtrem H07ZZ-F is a flexible cable for mobile service, suitable for instalations where low smoke and halogen free fumes under fire conditions are required. Suitable for installations where the cable must withstand medium mechanical stress, for machines in industrial and agricultural workshops, for motors and transportable machines on construction sites, for windmills and for agricultural applications.





CHARACTERISTICS

Electrical performance
LOW VOLTAGE 450/750 V

Standard
UNE-EN 50525-3-21

Approvals
CE
RoHS

Thermal performance
Maximum service temperature: 90°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations).

Fire performance
Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.
Fire non-propagation based on UNE-EN 60332-3 and IEC 60332-3.
Low smoke emission based on UNE-EN 61034 and IEC 61034: Light transmittance > 60%
Low corrosive gases emission based on UNE-EN 60754-2 and IEC 60754-2.
Low corrosive gases emission based on UNE-EN 60754-2 and IEC 60754-2.

Mechanical performance
Minimum bending radius: x3 cable diameter.
Impact resistance: AG2 Medium severity.

Chemical performance
Chemical & Oil resistance: Excellent.
Grease & mineral oils resistance: Excellent.

Water performance
Water resistance: AD7 Immersion.

Other
Meter by meter marking.

Installation conditions
Open Air.
In conduit.

Applications
Industrial use.
Mobile use.
Windmills.

Top Cable

Top Cable

TOXFREE ZH RZ1-K (AS)

Flexible and halogen free (LSZH) power cable for public places.

IEC 60502-1 / UNE 21123-4

DESIGN

1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228 and IEC 60228.

2. Insulation

Cross-linked polyethylene (XLPE)

The standard identification of insulated conductors is the following:

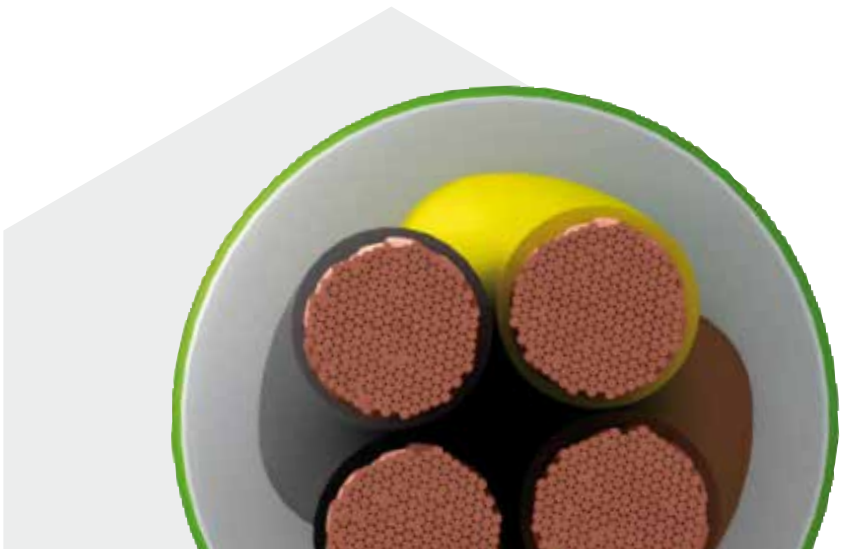
1 x	Natural
2 x	Blue + Brown
3 G	Blue + Brown + Yellow/green
3 x	Brown + Black + Grey
3 x + 1 x	Brown + Black + Grey + Blue (reduced cross section)
4 G	Brown + Black + Grey + Green/yellow
4 x	Brown + Black + Grey + Blue
5 G	Brown + Black + Grey + Blue + Green/yellow
6 G or more conductors:	Black numbered + Green/yellow

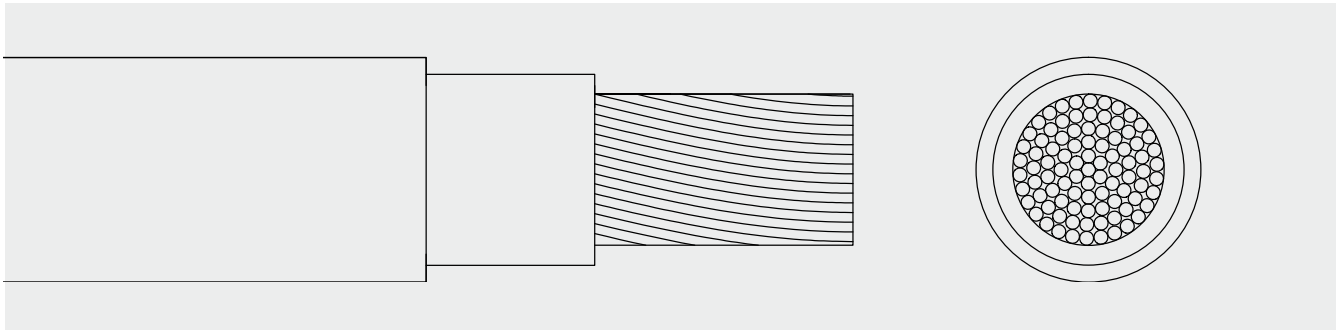
3. Outer sheath

Low Smoke Zero Halogen (LSZH) polyolefin. Green colour, non-toxic and fire retardant.

APPLICATIONS

Toxfree RZ1-K is a LSZH safety cable. In the event of fire, it does not emit toxic gases, nor does it give off corrosive gases, avoiding any possible damage to people or electronic equipment. For these reasons it is highly recommended for use in public places such as: hospitals, schools, museums, airports, bus terminals, shopping malls, offices, laboratories, etc.





CHARACTERISTICS

Electrical performance

LOW VOLTAGE 0,6/1kV

Standard

IEC 60502-1 / UNE 21123-4

Approvals

CE
SEC
AENOR
SASO
RoHS
KEMA KEUR

Thermal performance

Maximum service temperature: 90°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations).

Fire performance

Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.
Fire non-propagation based on UNE-EN 60332-3 and IEC 60332-3.
LSZH (Low Smoke Zero Halogen) based on UNE-EN 60754-1 and IEC 60754-1.
Low smoke emission based on UNE-EN 61034 and IEC 61034: Light transmittance > 60%
Low corrosive gases emission based on UNE-EN 60754-2 and IEC 60754-2.

Mechanical performance

Minimum bending radius: x5 cable diameter.
Impact resistance: AG2 Medium severity.

Chemical performance

Chemical & Oil resistance: Acceptable.
UV Resistant: UNE 211605.

Water performance

Water resistance: AD5 Jets.

Other

Meter by meter marking.

Installation conditions

Open Air.
Buried.
In conduit.

Applications

Industrial use.
Public places.

Packaging

Available in rolls (lengths of 100 m) and drums.

Top Cable

XTREM DN-F

Flexible 1.000 V rubber cable for industrial use.

UNE 21150

This cable render is an example from this product range and does not neccesarily match the selected core size or number of cores.

DESIGN

1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228 and IEC 60228.

2. Insulation

Rubber (type EPR).

The standard identification of insulated conductors is the following:

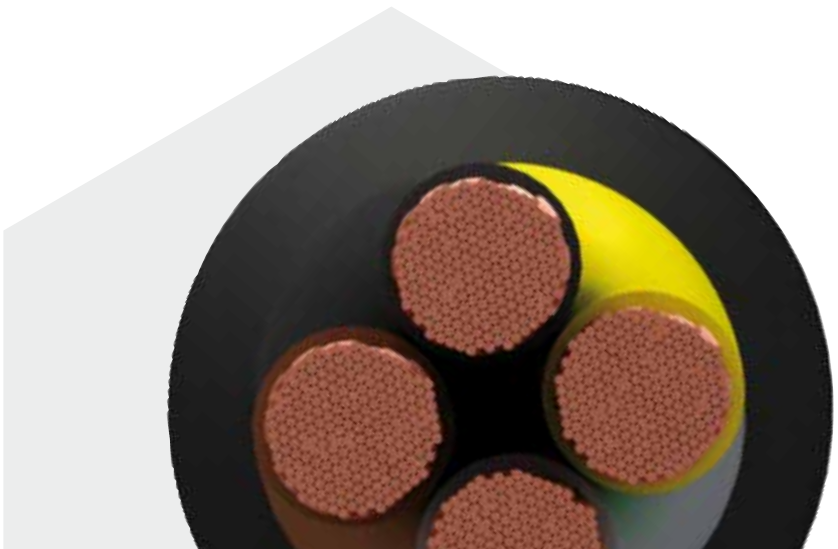
1 x	natural
2 x	Brown + Blue
3 G	Brown + Blue + Green/yellow
4 G	Brown + Black + Grey + Green/yellow
5 G	Brown + Black + Grey + Blue + Green/yellow

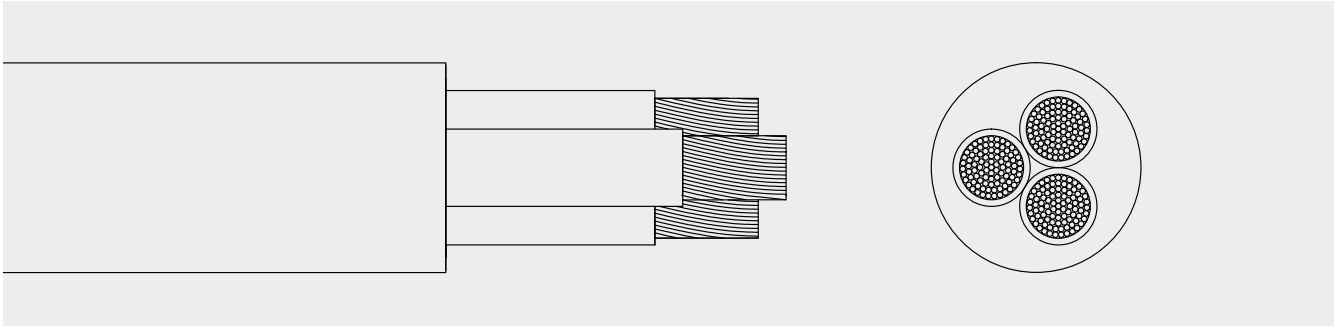
3. Outer sheath

Flexible rubber. Black colour.

APPLICATIONS

Xtrem DN-F is a flexible rubber cable for mobile heavy duty. Suitable for installations in dry, damp or wet locations, outdoors, machines in industrial workshops, motors and transportable machines; on construction sites and for agricultural exploitations. Suitable for submerged installations (AD8) and for supplying power to low voltage appliances including electric motors and submersible pumps in deep water installations as well many other types of electrical equipment.





CHARACTERISTICS

Electrical performance
LOW VOLTAGE 0,6/1kV

Standard
UNE 21150

Approvals
CE
RoHS

Thermal performance
Maximum service temperature: 90°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations)

Fire performance
Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.

Mechanical performance
Minimum bending radius: 3 x cable Ø (up to 12 mm2).
4 x cable Ø (from 12 mm2 onwards).
Impact resistance: AG2 Medium severity.

Chemical performance
Chemical & Oil resistance: Excellent.
Grease & mineral oils resistance: Excellent.

Water performance
Water resistance: AD8 Submersion.
Submersible pumps
Deep wells
Drinkable water

Other
Meter by meter marking.

Installation conditions
Open Air.

Applications
Industrial use.
Mobile use.
Windmills

Top Cable

XTREM H07RN-F

Flexible rubber cable, for industrial use.

EN 50525-2-21 / IEC 60245-4

This cable render is an example from this product range and does not neccesarily match the selected core size or number of cores.

DESIGN

1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228 and IEC 60228.

2. Insulation

Rubber (type EPR).

The standard identification of insulated conductors is the following:

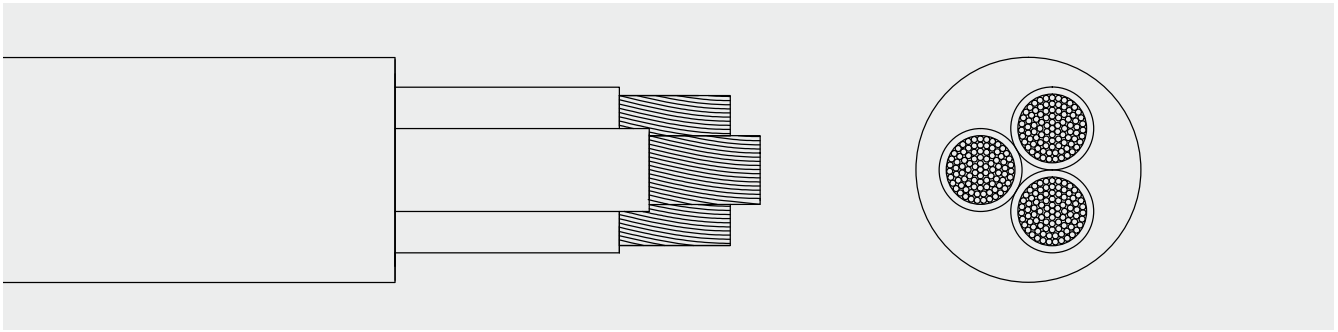
1 x	natural
2 x	Brown + Blue
3 G	Brown + Blue + Green/Yellow
4 G	Brown + Black + Grey + Green/Yellow
5 G	Brown + Black + Grey + Blue + Green/Yellow
6 G or more	Black numbered + Green/Yellow

3. Outer sheath

Flexible rubber. Black colour.

APPLICATIONS

Xtrem H07RN-F rubber cables are designed to supply power to low voltage appliances including electric motors and submersible pumps in deep water installations as well as many other types of electrical equipment. Thanks to its extraordinary flexibility and mechanical strength, the Xtrem H07RN-F cable is ideal for power transmission in both fixed instalation or mobile service. The nominal voltage up to 1000 V thanks to the high dielectric properties of the insulation material (according to HD 516).



CHARACTERISTICS

Electrical performance

LOW VOLTAGE 450/750 V

Standard

EN 50525-2-21 / IEC 60245-4

Approvals

CE
SEC
HAR
AENOR
DNV
SASO
RoHS
Safe drinking water certificate

Thermal performance

Maximum service temperature: 90°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations) and -25°C (mobile use)

Fire performance

Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.

Mechanical performance

Minimum bending radius: 3 x cable Ø (up to 12 mm2).
4 x cable Ø (from 12 mm2 onwards).
Impact resistance: AG2 Medium severity.

Chemical performance

Chemical & Oil resistance: Excellent.
Grease & mineral oils resistance: Excellent.

Water performance

Water resistance: AD8 Submersion.
Submersible pumps
Deep wells
Drinkable water

Other

Meter by meter marking.

Installation conditions

Open Air.

Applications

Industrial use.
Mobile use.
Robotics.
Windmills
Temporary site installations.

Packaging

Available in rolls of 100 m. and drums.

Top Cable