

1 Application

For used in power transmission and distribution system. suitable for outdoor use at temperature range from -52°C to +80°C. For VSD system application.

2 Standard & specification

Cable design comply with IEC 60502-1, IEC 60228, GOST 31996-2012, GOST 22483-2012, IEC 60332-3-22, IEC 61034, IEC 60754-2

3 Design

3.1 Conductor

Up to 25mm²: Plain annealed stranded circular non-compacted copper conductor in accordance with IEC 60228 Class 2

Above 25mm²: Plain annealed stranded circular compacted copper conductor in accordance with IEC 60228 Class 2

3.2 Insulation

Extruded XLPE compound comply with IEC 60502-1

Color:

3C: Black, Brown, Grey

3.3 Earth conductor

Three earth insulation conductors (color: Yellow/Green) arranged in 360°symmetrical configuration

3.4 Assembly and filler(optional)

The interstices between cores filled with non-hygroscopic polypropylene rope to form substantially circular shape with a suitable binder tape

3.5 Metallic Screen

A layer of copper tape helically overlap applied on the assembly core

3.6 Separation sheath

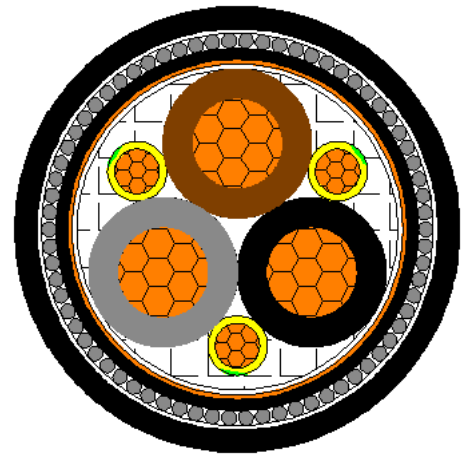
Extruded LSZH ST8 compound comply with IEC 60502-1

Color: Black

3.7 Metal armour

A layer of galvanize steel wires with suitable binder tape helically applied on the separation sheath

3.8 Outer sheath



Cable Drawing for Reference



Conductor flexibility
 Class 2



Lead free



Rated Voltage
 U₀/U (Um)
 0.6/1 (1.2)



Max. conductor temp.in service
 90°C



Flame retardant
 IEC 60332-3-22



Smoke density
 IEC 61034



Halogen free
 IEC 60754-2

Extruded LSZH ST8 compound comply with IEC 60502-1
 Color: Black

4 Cable marking-Inkjet

For example:

EAC YANGER® IEC 60332-3-22 CU/XLPE/OA.SCR/LSZH/SWA/LSZH 3C×SIZE+3E×SIZE SQMM 0.6/1kV НГ (A) – HF
 -52°C~+40°C 2020 ****M

Note: “****M” meter marking by inkjet with increased sequence with numbering
 “ Н Г (A) – HF” at least every 1 metre appear on the cable

5 Operation condition

| | |
|---|---|
| Rated voltage, U ₀ /U(U _m), kV | 0.6/1(1.2) |
| Rated, operating temperature range, °C | -52~+80 |
| Min. installation temperature without preheating, °C | -20 |
| Max. conductor temperature in service, °C | 90 |
| Max. permissible short-circuit temperature,5 sec, °C | 250 |
| Min. bending radius, D overall diameter of cable | 15D |
| Flame retardant | IEC 60332-3-22 |
| Halogen Gas Emission | IEC 60754-1, < 0.5% |
| Low Smoke Emission | IEC 61034-1/2 |
| UV resistant | UL 1581 |
| Oil resistant | IEC60811(IRM 902 - 4h at 70°C, variation ±40%) |
| Oxygen Index (Sheath) | ASTM D 2863 |
| Cold bend | IEC 60811-1-4, -35°C |
| Cold impact | IEC 60811-1-4 & CSA C22.2 No.38- 10, -35°C |
| Chemical resistance | Accidental |



Conductor flexibility
 Class 2



Lead free



Rated Voltage
 U₀/U (U_m)
 0.6/1 (1.2)



Max. conductor temp.in service
 90°C



Flame retardant
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Smoke density
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YANGER®

0.6/1kV
 CU/XLPE/
 OA.SCR/LSZH/SWA/LSZH
 Power Cable

Page 3 of 3

CABLE TYPE:0.6/1kV CU/XLPE/OA.SCR/LSZH/SWA/LSZH

| No. | Cable Size | Nom. cross section (Phase) | Insulation | | Nom. Cross-section (Earth) | Insulation | | Separation Sheath | Under armour Dia. (+/- 10%) | Steel wire | | Outer Sheath | Overall Dia(+/- 10%) | Approx. Weight | DC Resistance at 20°C | | Reactance | Capacitance | Short-circuit withstand capacity(1s) | Voltage drop | Test Voltage | | Max. allowable Pulling tension | Current Rating | | Insulation Core Color | Outer Sheath Color | | | | |
|-----|------------|----------------------------|-------------|-------------|----------------------------|-------------|-------------|-------------------|-----------------------------|------------|-------------|--------------|----------------------|----------------|-----------------------|--------|-----------|-------------|--------------------------------------|--------------|--------------|-------|----------------------------------|----------------|-----|-----------------------|--------------------|---|----|---|---|
| | | | Nom. Thick. | Min. Thick. | | Nom. Thick. | Min. Thick. | | | Nom. Dia. | Nom. Thick. | | | | Phase / Earth | Ω/km | | | | | Ω/km | μF/km | | kA | V/m | | | V | KN | A | A |
| | | | mm | mm | | mm | mm | | | mm | mm | | | | mm | kg/km | | | | | Ω/km | μF/km | | kA | V/m | | | V | KN | A | A |
| 1 | 3C10+3E | 10 | 0.7 | 0.53 | 1.5 | 0.7 | 0.53 | 1.2 | 15.0 | 1.25 | 1.8 | 21.7 | 1061 | 1.83/12.1 | 0.2704 | 0.4628 | 1.53 | 0.176 | 3500 | 2.1 | 75 | 65 | Black, Brown, Grey, Green/Yellow | Black | | | | | | | |