

1 Application

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

2 Standard & specification

Cable design comply with IEC 60502-1, IEC 60228, GOST 31996-2012, GOST 22483-2012, IEC 60332-3-22, IEC 60331, IEC 61034, IEC 60754-2, GOST 31565-2012

3 Design

3.1 Conductor

Plain annealed stranded circular copper conductor in accordance with IEC 60228 Class 2

3.2 Fire proof layer

Mica Glass tape overlapped around the conductor

3.3 Insulation

Extruded XLPE compound comply with IEC 60502-1

Color:

Pair: Brown, Grey

3G: Brown, Light Blue, Green/Yellow (Earth)

5G and above: Black core printed white numbers and Green/Yellow (Earth)

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 Inner sheath

Extruded LSZH ST8 compound comply with IEC 60502-1

Color: Black

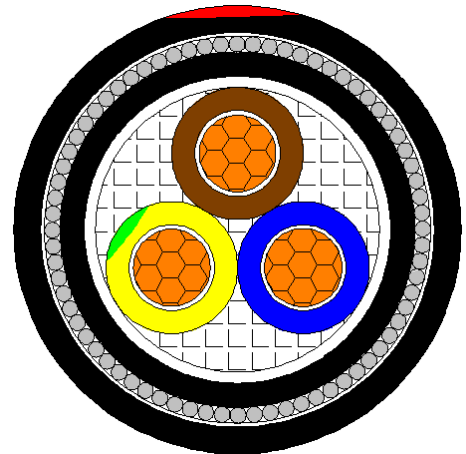
3.6 Metal armour

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

3.7 Outer sheath

Extruded LSZH ST8 compound comply with IEC 60502-1

Color: Black with a red strip



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

4 Cable marking-Inkjet

For example:

EAC YANGER® IEC 60331 CU/MGT/XLPE/LSZH/SWA/LSZH 3G×2.5 SQMM 0.6/1kV H Γ (A) - FRHF Project Cable
 Code -52° C~+40° C YEAR ****M

Note: “****M” meter marking by inkjet with increased sequence with numbering
 “H Γ (A) - FRHF” 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	-30
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
Fire resistant	IEC60331(2 h)
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 @ 70°C, variation ±40%)
Oxygen Index (Sheath)	ASTM D 2863
Cold bend	IEC 60811-1-4, -52°C
Cold impact	IEC 60811-1-4 & CSA C22.2 No.38- 10, -52°C
Chemical resistance	Accidental



Conductor flexibility
Class 2



Lead free



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U₀/U (U_m)
0.6/1 (1.2)



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Flame retardant
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Smoke density
IEC 61034



Halogen free
IEC 60754-2

CABLE TYPE: 0.6/1kV CU/MGT/XLPE/LSZH/SWA/LSZH

No.	Project Cable Code	Cable Size	Nom. cross section (Phase)	Insulation		Nom. Cross-section (Earth)	Insulation		Inner Sheath	Under armour Dia. (+/-10%)	Steel wire	Outer Sheath	Overall Dia(+/-10%)	Approx. Weight	DC Resistance at 20°C	AC Resistance at 90°C (50Hz)	Test Voltage	Current Rating	Insulation Core Color	Outer Sheath Color
				Nom. Thick.	Min. Thick.		Nom. Thick.	Min. Thick.			Nom. Dia.	Nom. Thick.			Phase / Earth		5 mins	in air at 30°C		
				mm ²	mm		mm	mm ²			mm	mm			mm		mm	kg/km		
1	01PP-S25-NSHNW	1x2x2.5	2.5	0.7	0.53	/	/	/	1.0	10.8	0.8	1.8	16.6	450	7.41	9.48	3500	36	Brown, Grey	Black with a red strip
2	01PP-S40-NSHNW	1x2x4	4	0.7	0.53	/	/	/	1.0	11.8	0.8	1.8	17.6	514	4.61	5.9	3500	49	Brown, Grey	Black with a red strip
3	02PG-S25-NSHNW	2C2.5+E	2.5	0.7	0.53	2.5	0.7	0.53	1.0	11.5	0.8	1.8	16.9	499	7.41	9.48	3500	36	Brown, Light Blue, Yellow/Green	Black with a red strip
4	04PG-S25-NSHNW	4C2.5+E	2.5	0.7	0.53	2.5	0.7	0.53	1.0	13.7	0.8	1.8	19.5	637	7.41	9.48	3500	36	Black core printed white numbers and Green/Yellow	Black with a red strip
5	02PG-S40-NSHNW	2C4+E	4	0.7	0.53	4	0.7	0.53	1.0	12.5	0.8	1.8	18.3	580	4.61	5.9	3500	49	Brown, Light Blue, Yellow/Green	Black with a red strip