

**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**

**Up to 2.5mm<sup>2</sup>:** Tinned annealed stranded circular non-compacted copper conductor in accordance with IEC 60228 Class 2

**4 to 25mm<sup>2</sup>:** Plain annealed stranded circular non-compacted copper conductor in accordance with IEC 60228 Class 2

**Above 25mm<sup>2</sup>:** Plain annealed stranded circular compacted 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:

2C: Brown, Blue

3C: Black, Brown, Grey

4C: Black, Brown, Grey, Blue

2C+E: Brown, Blue, Green/Yellow (Earth)

3C+E: Black, Brown, Grey, Green/Yellow (Earth)

4C+E: Black, Brown, Grey, Blue, Green/Yellow (Earth)

5 core and above: black core printed white numbers

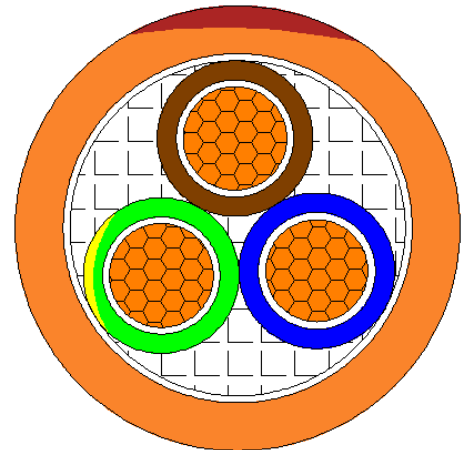
**3.4 Assembly and filler(optional)**

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

**3.5 Outer sheath**

Extruded LSZH ST8 compound comply with IEC 60502-1

Color: Orange with a red strip



Cable Drawing for Reference



Conductor flexibility  
Class 2



Lead free



Rated Voltage  
U<sub>0</sub>/U (U<sub>m</sub>)  
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 2C×2.5+E 2.5 SQMM 0.6/1kV H Γ (A) - FRHF -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 <sub>0</sub> /U(U <sub>m</sub> ), 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
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, -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  
U<sub>0</sub>/U (U<sub>m</sub>)  
0.6/1 (1.2)



Max. conductor temp.in service  
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Flame retardant  
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Smoke density  
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No.	Cable Size	Nom. cross section (Phase) mm <sup>2</sup>	Insulation		Nom. Cross-section (Earth) mm <sup>2</sup>	Insulation		Outer Sheath Nom. Thick. mm	Overall Dia(+/-10%) mm	Approx. Weight kg/km	DC Resistance at 20°C	Reactance Ω/km	Capacitance μF/km	Short-circuit withstand capacity(1s) kA	Voltage drop V/m	Test Voltage	Max. allowable Pulling tension KN	Current Rating		
			Nom. Thick. mm	Min. Thick. mm		Phase / Earth	5 mins V				in air at 30°C A					Underground (buries)20°C A				
1	2C2.5+E	2.5	0.7	0.53	2.5	0.7	0.53	1.8	13.7	224	7.56	0.3062	0.1935	0.41	0.347	3500	0.5	36	30	
2	2C4+E	4	0.7	0.53	4	0.7	0.53	1.8	14.7	283	4.61	0.2969	0.2278	0.64	0.288	3500	0.8	49	39	
3	2C6+E	6	0.7	0.53	6	0.7	0.53	1.8	15.8	354	3.08	0.2901	0.2617	0.94	0.248	3500	1.2	63	49	
4	2C10+E	10	0.7	0.53	10	0.7	0.53	1.8	17.3	488	1.83	0.2822	0.3169	1.53	0.202	3500	2	86	65	
5	2C16+E	16	0.7	0.53	16	0.7	0.53	1.8	19.7	692	1.15	0.2754	0.3873	2.29	0.172	3500	3.3	115	84	
6	3C2.5+E	2.5	0.7	0.53	2.5	0.7	0.53	1.8	14.7	267	7.56	0.3062	0.1935	0.41	0.309	3500	0.7	32	30	
7	3C4+E	4	0.7	0.53	4	0.7	0.53	1.8	15.9	345	4.61	0.2969	0.2278	0.64	0.247	3500	1.1	42	39	
8	3C6+E	6	0.7	0.53	6	0.7	0.53	1.8	17.1	436	3.08	0.2901	0.2617	0.94	0.213	3500	1.6	54	49	
9	3C10	10	0.7	0.53	10	0.7	0.53	1.8	18.3	552	1.83	0.2822	0.3169	1.53	0.176	3500	2.7	75	65	
10	3C10+E	10	0.7	0.53	10	0.7	0.53	1.8	18.8	609	1.83	0.2822	0.3169	1.53	0.176	3500	2.7	75	65	
11	3C16+E	16	0.7	0.53	16	0.7	0.53	1.8	21.5	875	1.15	0.2754	0.3873	2.29	0.149	3500	4.4	100	84	
12	3C35+E	35	0.9	0.71	25	0.7	0.53	1.8	26.4	1505	0.524	0.084	0.44	5.01	1.167	3500	8.2	158	129	
13	4C2.5+E	2.5	0.7	0.53	2.5	0.7	0.53	1.8	15.9	316	7.56	0.3062	0.1935	0.41	0.309	3500	0.9	32	30	
14	4C4+E	4	0.7	0.53	4	0.7	0.53	1.8	17.2	411	4.61	0.2969	0.2278	0.64	0.247	3500	1.4	42	39	
15	4C6+E	6	0.7	0.53	6	0.7	0.53	1.8	18.6	525	3.08	0.2901	0.2617	0.94	0.213	3500	2	54	49	
16	4C10+E	10	0.7	0.53	10	0.7	0.53	1.8	20.5	739	1.83	0.2822	0.3169	1.53	0.176	3500	3.4	75	65	
17	6C2.5+E	2.5	0.7	0.53	2.5	0.7	0.53	1.8	17.1	390	7.56	0.3062	0.1935	0.41	0.309	3500	1.2	32	30	