

1 Application

For used in control systems for analogue or digital signal transmission, suitable for outdoor use at temperature range from -52°C to +80°C.

2 Standard & specification

Cable design comply with EN 50288-7, IEC 60228, GOST 22483-2012, IEC 60332-3-22, IEC 61034, IEC 60754-2

3 Design

3.1 Conductor

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

3.2 Insulation

Extruded XLPE compound comply with EN 50288-7

Core identification*(Multi-):

Pair: White, Black

Triple: White, Black, Red

*each pair/triple is printed with number

Lay length for pair / triple:

≤70mm for 1mm²; ≤100mm for 1.5mm²; ≤150mm for 2.5mm²;

3.3 Individual screen

Aluminum-polyester tape shield with a binder tape applied on Each pair/triple, the metallic side down in electrical contact with a drain wire (0.5mm²)

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 Collective screen

Aluminum-polyester tape shield applied on assembly core, the metallic side down in electrical contact with a drain wire (0.5mm²)

3.6 Binder Tape

Non-hygroscopic tape wrapped around the collective screen

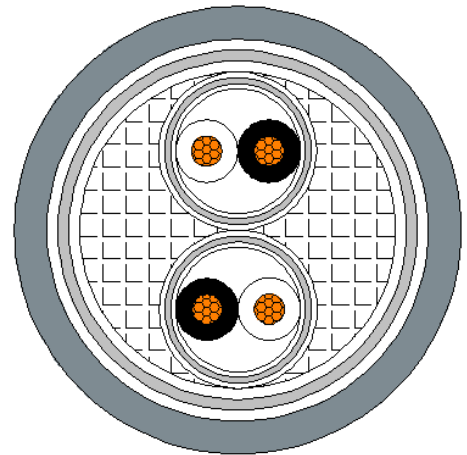
3.7 Outer sheath

Extruded LSZH compound comply with EN 50288-7

Color: Grey (Non-intrinsically safe)

Light Blue (Intrinsically safe)

Orange (Telecom)



Cable Drawing for Reference



Conductor flexibility
Class 2



Lead free



Rated Voltage
U_o/U
300/500V



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 60332-3-22 CU/XLPE/IS/OS/LSZH 2Pair×1 SQMM 300/500V -52° C~+40° C YEAR ****M

Note: “****M” meter marking by inkjet with increased sequence with numbering

5 Operation condition

Rated voltage, U ₀ /U, V	300/500
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
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, -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



Rated Voltage
U₀/U
300/500V



Max. conductor temp.in service
90°C



Flame retardant
IEC 60332-3-22



Smoke density
IEC 61034



Halogen free
IEC 60754-2

CABLE TYPE: 300/500V CU/XLPE/IS/OS/LSZH

No.	Project Cable Code	no. of pairs or triples x cross section	Insulation		Outer Sheath	Overall Dia. (+/-10%)	Approx. Weight	DC Resistance at 20°C	AC Resistance at 90°C (50Hz)	Test Voltage		Screen isolation Voltage	Insulation resistance	Max. mutual capacitance	Max. Capacitance between conductor and shield	Max. L/R ratio	Current Rating		Max. allowable Pulling tension	Insulation Core Color	Outer Sheath Color
			Nom. Thick.	Min. Thick.						Nom. Thick.	1 min						1 min	in air at 30°C			
			mm	mm	mm					mm	mm						kg/km	Ω/km			
1		2x2x1	0.6	0.44	1.0	12.7	169	18.1	23.2	2000	500	10000	150	300	25	14	12	0.3	White, Black	Grey	
2		2x2x1.5	0.6	0.44	1.1	13.8	205	12.1	15.5	2000	500	10000	150	300	40	21	18	0.4	White, Black	Grey	
3		2x2x2.5	0.7	0.53	1.2	16.3	282	7.41	9.48	2000	500	10000	150	300	60	34	29	0.7	White, Black	Grey	
4		2x3x1	0.6	0.44	1.1	14.1	218	18.1	23.2	2000	500	10000	150	300	25	14	12	0.4	White, Black, Red	Grey	
5		2x3x1.5	0.6	0.44	1.1	15.2	262	12.1	15.5	2000	500	10000	150	300	40	21	18	0.6	White, Black, Red	Grey	
6		2x3x2.5	0.7	0.53	1.2	18.0	369	7.41	9.48	2000	500	10000	150	300	60	34	29	1.0	White, Black, Red	Grey	
7		3x2x1	0.6	0.44	1.1	13.6	205	18.1	23.2	2000	500	10000	150	300	25	14	12	0.4	White, Black	Grey	
8		3x2x1.5	0.6	0.44	1.1	14.6	246	12.1	15.5	2000	500	10000	150	300	40	21	18	0.6	White, Black	Grey	
9		3x2x2.5	0.7	0.53	1.2	17.3	343	7.41	9.48	2000	500	10000	150	300	60	34	29	1.0	White, Black	Grey	
10		3x3x1	0.6	0.44	1.1	15.0	265	18.1	23.2	2000	500	10000	150	300	25	14	12	0.6	White, Black, Red	Grey	
11		3x3x1.5	0.6	0.44	1.2	16.3	329	12.1	15.5	2000	500	10000	150	300	40	21	18	0.9	White, Black, Red	Grey	
12		3x3x2.5	0.7	0.53	1.3	19.4	468	7.41	9.48	2000	500	10000	150	300	60	34	29	1.5	White, Black, Red	Grey	
13		6x2x1	0.6	0.44	1.3	19.5	448	18.1	23.2	2000	500	10000	150	300	25	14	12	1.1	White, Black	Grey	
14		6x2x1.5	0.6	0.44	1.3	21.0	547	12.1	15.5	2000	500	10000	150	300	40	21	18	1.6	White, Black	Grey	
15		6x2x2.5	0.7	0.53	1.5	25.0	786	7.41	9.48	2000	500	10000	150	300	60	34	29	2.7	White, Black	Grey	