

**0.6/1kV, MULTI-CORES, COPPER CONDUCTOR, XLPE INSULATED, ALUMINUM LAMINATED WITH TINNED  
COPPER DRAIN WIRE OVERALL SHIELD, GALVANIZED STEEL WIRE ARMoured,  
Fr-PVC SHEATHED, FLAME RETARDANT CONTROL CABLES**  
Cu/XLPE/PVC/SWA/Fr-PVC-AMS nCx..sqmm - 0.6/1kV



- APPLIED STANDARD: IEC 60502-1
  - Flame retardant standard: IEC 60332-1-2

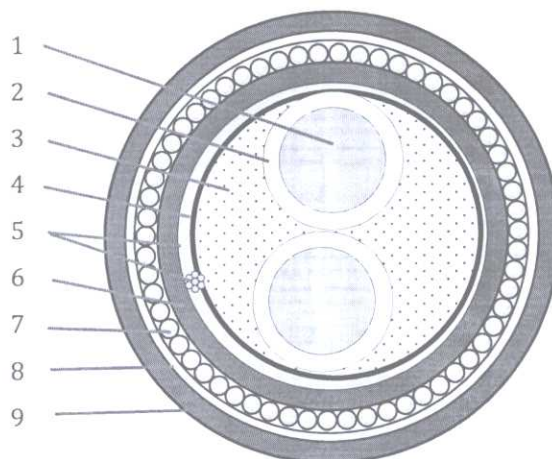
- Maximum conductor temperature:
    - + Normal operation: 90°C
    - + Short-circuit (5s maximum duration): 250°C
  - 50 Hz testing voltage: 3.5kV/5min
- \* Control cables shall have Overall shield consist of overlapped aluminum/polyester laminated tape screen (Thickness ~0.05mm) with 7/0.3mm (0.5sqmm) tinned copper drain wire**

No. of core x Nominal cross section area	Approx. Conductor Diameter	Maximum DC resistance of conductor at 20°C	Nominal Insulation Thickness	Nominal/Min. Thickness Separation sheath	Galvanized steel wire armour diameter	Nominal/Min. Thickness Over sheath Thickness	Approx. overall diameter of cable	Approx. overall weight of cable
No. x mm <sup>2</sup>	mm	Ω/km	mm	mm	mm	mm	mm	kg/km
2x6	3.12	3.08	0.7	1.2/0.76	≥1.25-5%	1.8/1.24	19	710

- Other parameters is complied with applied standards
- \* Interpretation of the symbol:
  - AMS: Overall screen (OS) aluminum/polyester laminated tape

## CROSS SECTION DRAWING

Cu/XLPE/PVC/SWA/Fr-PVC-AMS nCx..sqmm - 0.6/1kV



The drawing is for illustration of product structure, not used to calculate the scale

1. **CONDUCTOR:** Annealed copper wires, Circular stranded non compacted to Class 2 - IEC 60228
2. **INSULATION:** XLPE compound; Color: **Natural**  
The average thickness not less than the nominal value  
The minimum thickness at any point shall not fall below 90% of the nominal value by more than 0.1mm
3. **FILLER:** PP Yarn ( If necessary)
4. **BEDDING TAPE:** Polyester tape
5. **SHIELD:** Aluminum/polyester laminated tape shield with tinned copper drain wire
6. **SEPARATION SHEATH:** PVC compound; Color: Black  
The minimum thickness at any point shall not fall below 80% of the nominal value by more than 0.2mm
7. **ARMOUR:** Galvanized steel wires
8. **BINDER TAPE:** PP foam tape
9. **OVER SHEATH:** Flame retardant Fr-PVC compound; Color: **Black**  
The minimum thickness at any point shall not fall below 80% of the nominal value by more than 0.2mm

### CORE IDENTIFICATION:

Cores shall be identified by ink numbering and lettering on insulation surface of each core. Color of numbers & letters shall be Black. Distance between groups shall be not more than 100 mm. Identifying methods shall be ink jet printing.

Example:

For first core:	"1-ONE	1-ONE	1-ONE...."
For second core:	"2-TWO	2-TWO	2-TWO...."

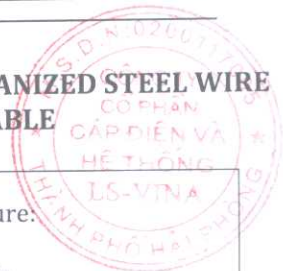
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### CABLE MARKING:

Printing on the Over sheath surface with Max. 1m interval, example:

0001m LS-VINA Cable & System \* Cu/XLPE/PVC/SWA/Fr-PVC-AMS 2x6sqmm - 0.6/1kV \* IEC 60502-1; IEC 60332-1-2 \*  
(Year)

**500V, SINGLE-PAIR, COPPER CONDUCTOR, PE INSULATED,  
ALUMINUM LAMINATED WITH TINNED COPPER DRAIN WIRE OVERALL SHIELD, GALVANIZED STEEL WIRE  
ARMOURED, Fr-PVC SHEATHED, FLAME RETARDANT INSTRUMENT CABLE**  
Cu/PE/PVC/SWA/Fr-PVC-AMS 1Px...sqmm – 500V



– REFERENCE STANDARD: BS EN 50288-7  
– Flame retardant standard: IEC 60332-1-2

– Maximum conductor temperature:  
+ Normal operation: 70°C  
– 50 Hz testing voltage: 2kV/1min

**\* The cables shall have Overall shield consist of overlapped aluminum/polyester laminated tape (Thickness ~ 0.05mm) shield with 7/0.3mm (0.5sqmm) tinned copper drain wire**

No. of pair x Nominal cross section area	Approx. Conductor Diameter	Maximum DC resistance of conductor at 20°C	Min. Thickness of Insulation	Nominal/Min. Thickness Separation sheath	Galvanized steel wire armour diameter	Nominal/Min. Thickness Over sheath	Approx. overall diamet er of cable	Approx. overall weight of cable
No. x mm <sup>2</sup>	mm	Ω/km	mm	mm	mm	mm	mm	kg/km
1Px2.5	2.01	7.41	0.53	1.0/0.75	0.9±5%	1.4/0.92	14.5	380

- Other parameters is complied with applied standards

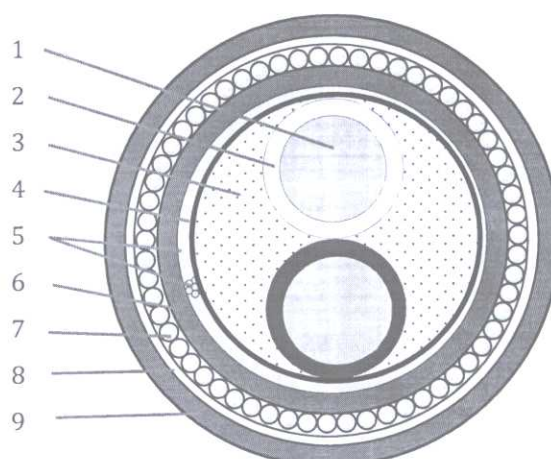
\* Interpretation of the symbol:

- **AMS**: Overall screen (OS) aluminum/polyester laminated tape shield with tinned copper drain wire



## CROSS SECTION DRAWING

Cu/PE/PVC/SWA/Fr-PVC-AMS 1Px...sqmm - 500V



*The drawing is for illustration of product structure, not used to calculate the scale*

1. **CONDUCTOR:** Annealed copper wires, Circular stranded non compacted to IEC 60228 Class 2
2. **INSULATION:** PE compound; Color: White, Black
3. **FILLER:** PP Yarn
4. **BEDDING TAPE:** Polyester tape
5. **OVERALL SHIELD:** Aluminum/polyester laminated tape shield with tinned copper drain wire
6. **SEPARATION SHEATH:** PVC compound; Color: Black  
*The average thickness not less than the nominal value*  
*The minimum thickness at any point shall not fall below 85% of the nominal value by more than 0.1mm*
7. **ARMOUR:** Galvanized steel wires
8. **BINDER TAPE:** PP foam tape
9. **OVER SHEATH:** Flame retardant Fr-PVC compound; Color: **Black**  
*The minimum thickness at any point shall not fall below 80% of the nominal value by more than 0.2mm*

**CABLE MARKING:** Printing on the over sheath surface with Max. 1m interval, example:  
0001m LS-VINA Cable & System \* Cu/PE/PVC/SWA/Fr-PVC-AMS 1Px2.5sqmm - 500V \* BS EN 50288-7; IEC 60332-1-2 \*  
(Year)

**300V, SINGLE-PAIR, COPPER CONDUCTOR, PE INSULATED,  
ALUMINUM LAMINATED WITH TINNED COPPER DRAIN WIRE OVERALL SHIELD, GALVANIZED STEEL WIRE  
ARMoured, Fr-PVC SHEATHED, FLAME RETARDANT INSTRUMENT CABLE**  
Cu/PE/PVC/SWA/Fr-PVC-AMS 1Px...sqmm – 300V



- REFERENCE STANDARD: BS EN 50288-7
- Flame retardant standard: IEC 60332-1-2
- Maximum conductor temperature:  
+ Normal operation: 70°C
- 50 Hz testing voltage: 1kV/1min

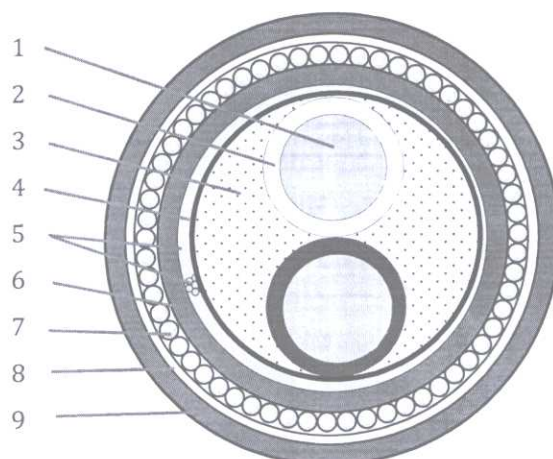
**\* The cables shall have Overall shield consist of overlapped aluminum/polyester laminated tape (Thickness ~ 0.05mm) shield with 7/0.3mm (0.5sqmm) tinned copper drain wire**

No. of pair x Nominal cross section area	Approx. Conductor Diameter	Maximum DC resistance of conductor at 20°C	Min. Thickness of Insulation	Nominal/Min. Thickness Separation sheath	Galvanized steel wire armour diameter	Nominal/Min. Thickness Over sheath	Approx. overall diamet er of cable	Approx. overall weight of cable
No. x mm <sup>2</sup>	mm	Ω/km	mm	mm	mm	mm	mm	kg/km
1Px1	1.29	18.1	0.26	0.8/0.58	0.9±5%	1.3/0.84	12	280

- Other parameters is complied with applied standards
- \* Interpretation of the symbol:
- **AMS**: Overall screen (OS) aluminum/polyester laminated tape shield with tinned copper drain wire

## CROSS SECTION DRAWING

Cu/PE/PVC/SWA/Fr-PVC-AMS 1Px...sqmm - 300V



*The drawing is for illustration of product structure, not used to calculate the scale*

1. **CONDUCTOR:** Annealed copper wires, Circular stranded non compacted to IEC 60228 Class 2
2. **INSULATION:** PE compound; Color: White, Black
3. **FILLER:** PP Yarn
4. **BEDDING TAPE:** Polyester tape
5. **OVERALL SHIELD:** Aluminum/polyester laminated tape shield with tinned copper drain wire
6. **SEPARATION SHEATH:** PVC compound; Color: Black  
*The average thickness not less than the nominal value*  
*The minimum thickness at any point shall not fall below 85% of the nominal value by more than 0.1mm*
7. **ARMOUR:** Galvanized steel wires
8. **BINDER TAPE:** PP foam tape
9. **OVER SHEATH:** Flame retardant Fr-PVC compound; Color: **Black**  
*The minimum thickness at any point shall not fall below 80% of the nominal value by more than 0.2mm*

**CABLE MARKING:** Printing on the over sheath surface with Max. 1m interval, example:  
0001m LS-VINA Cable & System \* Cu/PE/PVC/SWA/Fr-PVC-AMS 1Px1sqmm - 300V \* BS EN 50288-7; IEC 60332-1-2 \*  
(Year)



**300V, MULTI-PAIR, COPPER CONDUCTOR, PE INSULATED,  
ALUMINUM LAMINATED WITH TINNED COPPER DRAIN WIRE OVERALL SHIELD, GALVANIZED STEEL WIRE  
ARMOURED, Fr-PVC SHEATHED, FLAME RETARDANT INSTRUMENT CABLES**  
Cu/PE/PVC/SWA/Fr-PVC-AMS nPx...sqmm – 300V



– REFERENCE STANDARD: BS EN 50288-7  
– Flame retardant standard: IEC 60332-1-2

– Maximum conductor temperature:  
+ Normal operation: 70°C  
– 50 Hz testing voltage: 1kV/1min

**\* The cables shall have Overall shield consist of overlapped aluminum/polyester laminated tape (Thickness ~0.05mm) shield with 7/0.3mm (0.5sqmm) tinned copper drain wire**

No. of pair x Nominal cross section area	Approx. Conductor Diameter	Maximum DC resistance of conductor at 20°C	Min. Thickness of Insulation	Nominal/Min. Thickness Separation sheath	Nominal Galvanized steel wire armour diameter	Nominal/Min. Thickness Over sheath	Approx. overall diameter of cable	Approx. overall weight of cable
No. x mm <sup>2</sup>	mm	Ω/km	mm	mm	mm	mm	mm	kg/km
2Px0.75	1.11	24.99	0.26	0.9/0.67	0.9±5%	1.4/0.92	16	440
4Px0.75	1.11	24.99	0.26	1.0/0.75	0.9±5%	1.4/0.92	17	490
8Px0.75	1.11	24.99	0.26	1.1/0.84	0.9±5%	1.5/1.0	21	700
16Px0.75	1.11	24.99	0.26	1.2/0.92	0.9±5%	1.6/1.08	26	1030
24Px0.75	1.11	24.99	0.26	1.3/1.01	1.25±5%	1.7/1.16	33	1580
2Px1	1.29	18.462	0.26	0.9/0.67	0.9±5%	1.4/0.92	17	480

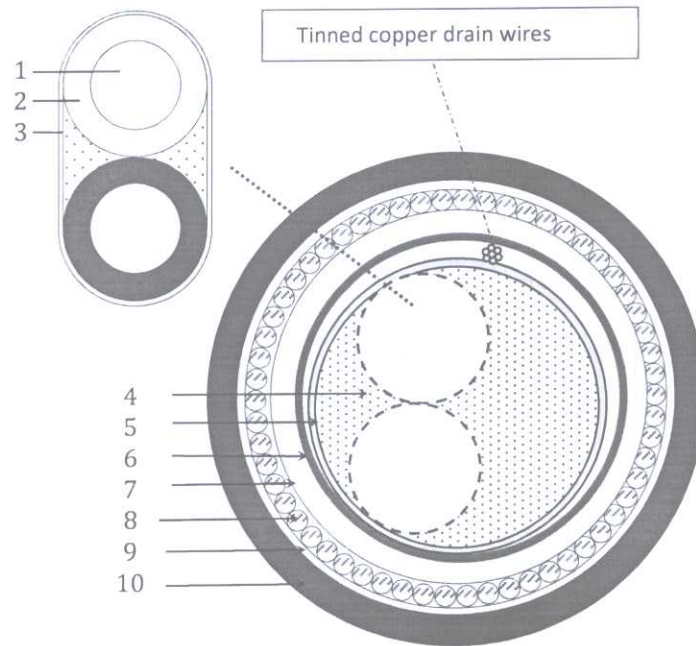
- Other parameters is complied with applied standards

\* Interpretation of the symbol:

- **AMS**: Overall screen (OS) aluminum/polyester laminated tape shield with tinned copper drain wire

## CROSS SECTION DRAWING

Cu/PE/PVC/SWA/FR-PVC-AMS nPx...sqmm – 300V



*The drawing is for illustration of product structure, not used to calculate the scale*

1. **CONDUCTOR:** Annealed copper wires, Circular stranded non compacted to Class 2 - IEC 60228
2. **INSULATION:** PE compound; Color: White, Black
3. **PAIR SEPARATE:** Polyester tape
4. **FILLER:** PP Yarn (If necessary)
5. **BEDDING TAPE:** Polyester tape
6. **OVERALL SHIELD:** Aluminum/polyester laminated tape shield with tinned copper drain wire
7. **SEPARATION SHEATH:** PVC compound; Color: Black

*The average thickness not less than the nominal value*

*The minimum thickness at any point shall not fall below 85% of the nominal value by more than 0.1mm*

8. **ARMOUR:** Galvanized steel wires
9. **BINDER TAPE:** PP foam tape
10. **OVER SHEATH:** Flame retardant and Low smoke Fr-PVC compound; Color: **Black**

*The minimum thickness at any point shall not fall below 80% of the nominal value by more than 0.2mm*

**PAIR TWISTED:** 1 black core and 1 white core shall be twisted pair

**PAIR IDENTIFICATION:** All cores shall be ink-jet on insulation surface of each core with following content, Example:

	Black core	White core
For first pair:	" 1-ONE	" 1-ONE ...
For second pair:	" 2-TWO	" 2-TWO ...

.....

**CABLE MARKING:** Printing on the over sheath surface with Max. 1m interval, example for:

0001m LS-VINA Cable & System \* Cu/PE/PVC/SWA/Fr-PVC-AMS 8Px0.75sqmm – 300V \* BE EN 50288-7;  
IEC 60332-1-2 \* (Year)



**300V, MULTI-TRIAD, COPPER CONDUCTOR, PE INSULATED,  
ALUMINUM LAMINATED WITH TINNED COPPER DRAIN WIRE INDIVIDUAL & OVERALL SHIELD, GALVANIZED  
STEEL WIRE ARMoured, Fr-PVC SHEATHED, FLAME RETARDANT INSTRUMENT CABLES**  
Cu/PE/PVC/SWA/Fr-PVC-I/CAMS nTx...sqmm – 300V



– REFERENCE STANDARD: BS EN 50288-7  
– Flame retardant standard: IEC 60332-1-2

– Maximum conductor temperature:  
+ Normal operation: 70°C  
– 50 Hz testing voltage: 1kV/1min

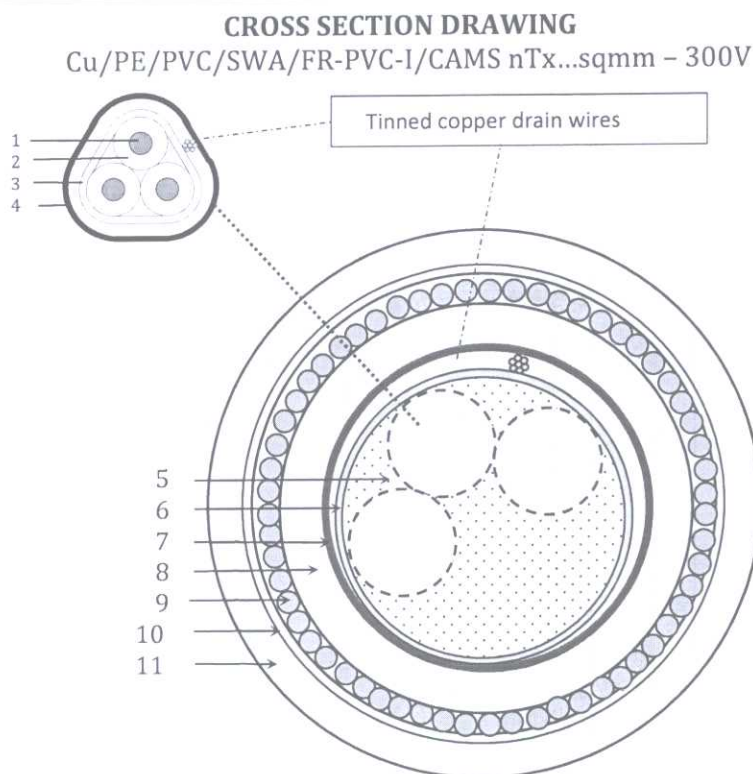
**\* The cables shall have Individual & Overall shield consist of overlapped aluminum/polyester laminated tape (Thickness ~0.05mm) shield with 7/0.3mm (0.5sqmm) tinned copper drain wire**

No. of pair x Nominal cross section area	Approx. Conductor Diameter	Maximum DC resistance of conductor at 20°C	Min. Thickness of Insulation	Nominal/Min. Thickness Separation sheath	Nominal Galvanized steel wire armour diameter	Nominal/Min. Thickness Over sheath	Approx. overall diameter of cable	Approx. overall weight of cable
No. x mm <sup>2</sup>	mm	Ω/km	mm	mm	mm	mm	mm	kg/km
8Tx0.75	1.11	24.99	0.26	1.2/0.92	1.25±5%	1.6/1.08	25	1080

- Other parameters is complied with applied standards

\* Interpretation of the symbol:

- **I/CAMS**: Individual & Overall screen (IS/OS) aluminum/polyester laminated tape shield with tinned copper drain wire



*The drawing is for illustration of product structure, not used to calculate the scale*

1. **CONDUCTOR:** Annealed copper wires, Circular stranded non compacted to Class 2 - IEC 60228
2. **INSULATION:** PE compound; Color: White, Black, Red
3. **TRIAD SEPARATE:** Polyester tape
4. **INDIVIDUAL SHIELD:** Aluminum/polyester laminated tape shield with tinned copper drain wire
5. **FILLER:** PP Yarn ( if necessary)
6. **BEDDING TAPE:** Polyester tape
7. **OVERALL SHIELD:** Aluminum/polyester laminated tape shield with tinned copper drain wire
8. **SEPARATION SHEATH:** PVC compound; Color: Black

*The average thickness not less than the nominal value*

*The minimum thickness at any point shall not fall below 85% of the nominal value by more than 0.1mm*

9. **ARMOUR:** Galvanized steel wires
10. **BINDER TAPE:** PP foam tape
11. **OVER SHEATH:** Flame retardant Fr-PVC compound; Color: **Black**

*The minimum thickness at any point shall not fall below 80% of the nominal value by more than 0.2mm*

**TRIAD TWISTED:** 1 white core, 1 black core and 1 red core shall be twisted triad

**TRIAD IDENTIFICATION:** All cores shall be ink-jet on insulation surface of each core with following content, Example:

	White core	Black core	Red core
For first triad:	" 1-ONE	" 1-ONE ...	
For second triad:	" 2-TWO	" 2-TWO ...	

.....

**CABLE MARKING:** Printing on the over sheath surface with Max. 1m interval, example for:

0001m LS-VINA Cable & System \* Cu/PE/PVC/SWA/Fr-PVC-I/CAMS 8Tx0.75sqmm – 300V \* BS EN 50288-7;  
IEC 60332-1-2 \* (Year)

**500V, SINGLE-PAIR, COPPER CONDUCTOR, XLPE INSULATED, ALUMINUM LAMINATED WITH TINNED COPPER DRAIN WIRE OVERALL SHIELD, GALVANIZED STEEL WIRE ARMoured, LSZH SHEATHED, FIRE RESISTANT INSTRUMENT CABLE**  
Cu/Mica/XLPE/LSZH/SWA/LSZH-AMS 1Px...sqmm – 500V



– REFERENCE STANDARD: BS EN 50288-7  
– Flame retardant standard: IEC 60331-21

– Maximum conductor temperature:  
+ Normal operation: 90°C  
– 50 Hz testing voltage: 2kV/1min  
– Fire resisting test: 750°C/90 min.

**\* The cables shall have Overall shield consist of overlapped aluminum/polyester laminated tape (Thickness ~ 0.05mm) shield with 7/0.3mm (0.5sqmm) tinned copper drain wire**

No. of pair x Nominal cross section area	Approx. Conductor Diameter	Maximum DC resistance of conductor at 20°C	Min. Thickness of Insulation	Nominal/Min. Thickness Separation sheath	Nominal Galvanized steel wire armour diameter	Nominal/Min. Thickness Over sheath	Approx. overall diamet er of cable	Approx. overall weight of cable
No. x mm <sup>2</sup>	mm	Ω/km	mm	mm	mm	mm	mm	kg/km
1Px1	1.29	18.1	0.44	0.9/0.67	0.9±5%	1.3/0.84	13	340

- Other parameters is complied with applied standards

\* Interpretation of the symbol:

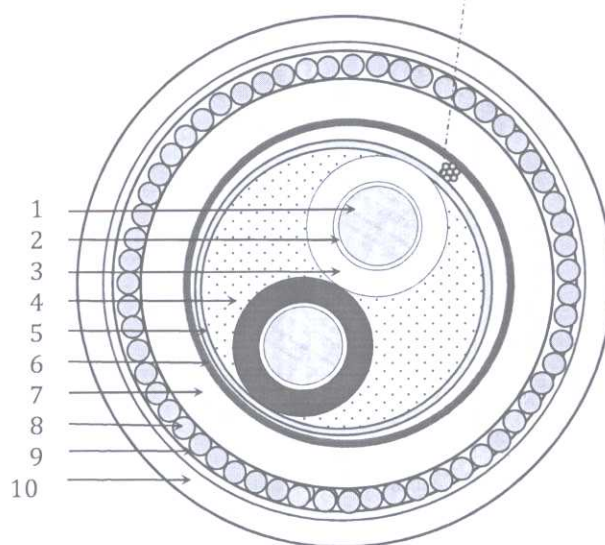
- **AMS**: Overall screen (OS) aluminum/polyester laminated tape shield with tinned copper drain wire



## CROSS SECTION DRAWING

Cu/Mica/XLPE/LSZH/SWA/LSZH-AMS 1Px...sqmm - 500V

Tinned copper drain wires



*The drawing is for illustration of product structure, not used to calculate the scale*

1. **CONDUCTOR:** Annealed copper wires, Circular stranded non compacted to IEC 60228 Class 2
2. **FIRE BARRIER:** Mica tape (S)
3. **INSULATION:** XLPE compound; Color: White, Black
4. **FILLER:** PP Yarn
5. **BEDDING TAPE:** Polyester tape
6. **OVERALL SHIELD:** Aluminum/polyester laminated tape shield with tinned copper drain wire  
*The average thickness not less than the nominal value*  
*The minimum thickness at any point shall not fall below 85% of the nominal value by more than 0.1mm*
7. **SEPARATION SHEATH:** LSZH compound; Color: Black  
*The average thickness not less than the nominal value*  
*The minimum thickness at any point shall not fall below 85% of the nominal value by more than 0.1mm*
8. **ARMOUR:** Galvanized steel wires
9. **BINDER TAPE:** PP foam tape
10. **OVER SHEATH:** LSZH compound; Color: **Black**  
*The minimum thickness at any point shall not fall below 80% of the nominal value by more than 0.2mm*

**CABLE MARKING:** Printing on the over sheath surface with Max. 1m interval, example:

0001m LS-VINA Cable & System \* Fire resistant cable Cu/Mica/XLPE/LSZH/SWA/LSZH-AMS 1Px1sqmm - 500V \* BS EN 50288-7; IEC 60331-21 \* (Year)



**500V, MULTI-PAIR, COPPER CONDUCTOR, XLPE INSULATED,  
ALUMINUM LAMINATED WITH TINNED COPPER DRAIN WIRE OVERALL SHIELD, GALVANIZED STEEL WIRE  
ARMOURED, LSZH SHEATHED, FIRE RESISTANT INSTRUMENT CABLES**  
Cu/Mica/XLPE/LSZH/SWA/LSZH-AMS nPx...sqmm – 500V



– REFERENCE STANDARD: BS EN 50288-7  
– Flame retardant standard: IEC 60331-21

– Maximum conductor temperature:  
+ Normal operation: 90°C  
– 50 Hz testing voltage: 2kV/1min  
– Fire resisting test: 750°C/90 min

**\* The cables shall have Overall shield consist of overlapped aluminum/polyester laminated tape (Thickness ~0.05mm) shield with 7/0.3mm (0.5sqmm) tinned copper drain wire**

No. of pair x Nominal cross section area	Approx. Conductor Diameter	Maximum DC resistance of conductor at 20°C	Min. Thickness of Insulation	Nominal/Min. Thickness Separation sheath	Galvanized steel wire armour diameter	Nominal/Min. Thickness Over sheath	Approx. overall diameter of cable	Approx. overall weight of cable
No. x mm <sup>2</sup>	mm	Ω/km	mm	mm	mm	mm	mm	kg/km
4Px0.75	1.11	24.99	0.44	1.0/0.75	0.9±5%	1.4/0.92	18	570
8Px2.5	2.01	7.56	0.53	1.4/1.09	1.25±5%	1.7/1.16	32	1640

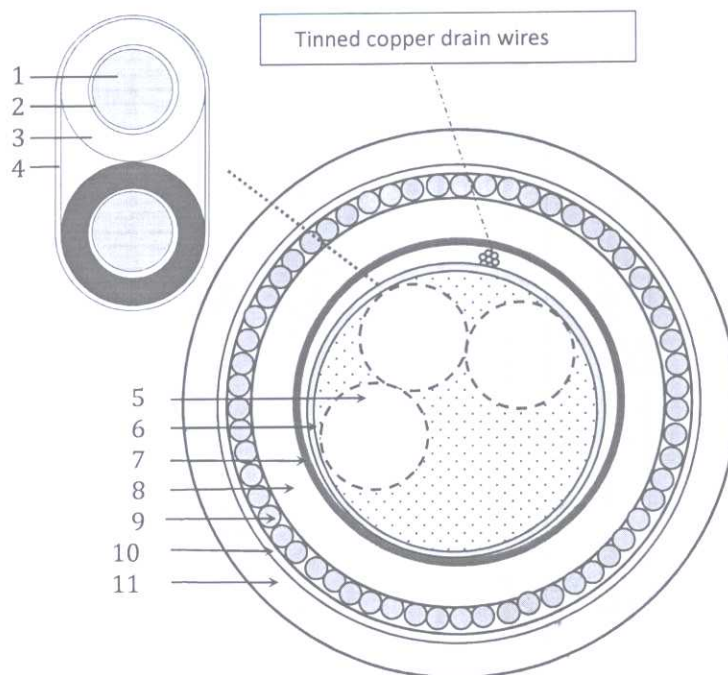
– Other parameters is complied with applied standards

\* Interpretation of the symbol:

– **AMS**: Overall screen (OS) aluminum/polyester laminated tape shield with tinned copper drain wire

## CROSS SECTION DRAWING

Cu/Mica/XLPE/LSZH/SWA/LSZH-AMS nPx...sqmm – 500V



*The drawing is for illustration of product structure, not used to calculate the scale*

1. **CONDUCTOR:** Annealed copper wires, Circular stranded non compacted to Class 2 - IEC 60228
2. **FIRE BARRIER:** Mica tape (S)
3. **INSULATION:** XLPE compound; Color: White, Black
4. **PAIR SEPARATE:** Polyester tape
5. **FILLER:** PP Yarn (If necessary)
6. **BEDDING TAPE:** Polyester tape
7. **OVERALL SHIELD:** Aluminum/polyester laminated tape shield with tinned copper drain wire
8. **SEPARATION SHEATH:** LSZH compound; Color: Black

*The average thickness not less than the nominal value*

*The minimum thickness at any point shall not fall below 85% of the nominal value by more than 0.1mm*

9. **ARMOUR:** Galvanized steel wires
10. **BINDER TAPE:** PP foam tape
11. **OVER SHEATH:** LSZH compound; Color: **Black**

*The minimum thickness at any point shall not fall below 80% of the nominal value by more than 0.2mm*

**PAIR TWISTED:** 1 black core and 1 white core shall be twisted pair

**PAIR IDENTIFICATION:** All cores shall be ink-jet on insulation surface of each core with following content, Example:

	Black core	White core
For first pair:	" 1-ONE	" 1-ONE ...
For second pair:	" 2-TWO	" 2-TWO ...

.....

**CABLE MARKING:** Printing on the over sheath surface with Max. 1m interval, example:

0001m LS-VINA Cable & System \* Fire resistant cable Cu/Mica/XLPE/LSZH/SWA/LSZH-AMS 8Px2.5sqmm - 500V \* BS EN 50288-7; IEC 60331-21 \* (Year)



**500V, MULTI-TRIAD, COPPER CONDUCTOR, XLPE INSULATED,  
ALUMINUM LAMINATED WITH TINNED COPPER DRAIN WIRE INDIVIDUAL & OVERALL SHIELD, GALVANIZED  
STEEL WIRE ARMoured, LSZH SHEATHED, FIRE RESISTANT INSTRUMENT CABLES**  
Cu/Mica/XLPE/LSZH/SWA/LSZH-I/CAMS nTx...sqmm – 500V



– REFERENCE STANDARD: BS EN 50288-7  
– Flame retardant standard: IEC 60331-21

– Maximum conductor temperature:  
+ Normal operation: 90°C  
– 50 Hz testing voltage: 2kV/1min  
– Fire resisting test: 750°C/90 min

**\* The cables shall have Individual & Overall shield consist of overlapped aluminum/polyester laminated tape (Thickness ~0.05mm) shield with 7/0.3mm (0.5sqmm) tinned copper drain wire**

No. of pair x Nominal cross section area	Approx. Conductor Diameter	Maximum DC resistance of conductor at 20°C	Min. Thickness of Insulation	Nominal/Min. Thickness Separation sheath	Galvanized steel wire armour diameter	Nominal/Min. Thickness Over sheath	Approx. overall diameter of cable	Approx. overall weight of cable
No. x mm <sup>2</sup>	mm	Ω/km	mm	mm	mm	mm	mm	kg/km
4Tx0.75	1.11	24.99	0.44	1.1/0.84	0.9±5%	1.5/1.0	25	920
8Tx0.75	1.11	24.99	0.44	1.3/1.01	1.25±5%	1.6/1.08	34	1650
12Tx0.75	1.11	24.99	0.44	1.4/1.09	1.25±5%	1.7/1.16	39	2080

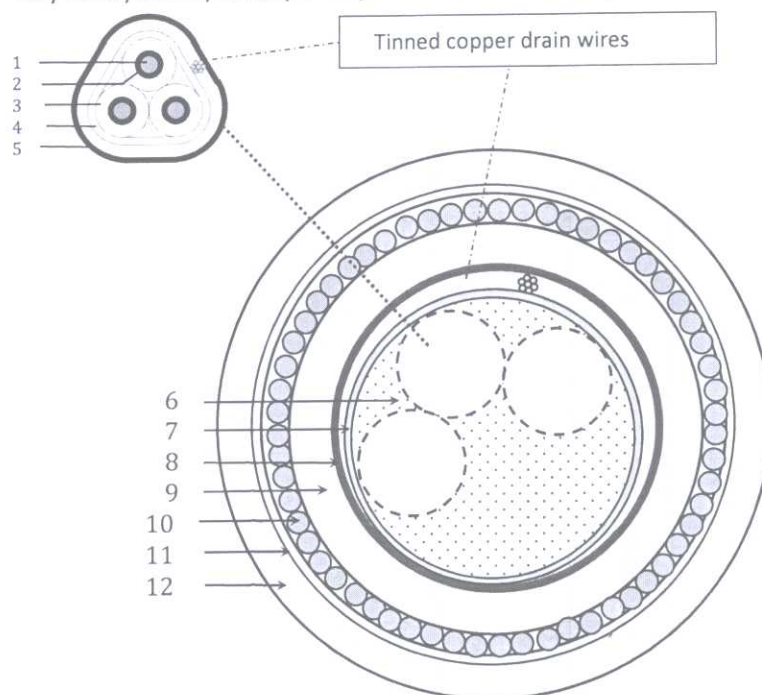
- Other parameters is complied with applied standards

\* Interpretation of the symbol:

- **I/CAMS**: Individual & Overall screen (IS/OS) aluminum/polyester laminated tape shield with tinned copper drain wire

## CROSS SECTION DRAWING

Cu/Mica/XLPE/LSZH/SWA/LSZH-AMS nTx...sqmm – 500V



*The drawing is for illustration of product structure, not used to calculate the scale*

1. **CONDUCTOR:** Annealed copper wires, Circular stranded non compacted to Class 2 - IEC 60228
2. **FIRE BARRIER:** Mica tape (S)
3. **INSULATION:** XLPE compound; Color: White, Black, Red
4. **TRIAD SEPARATE:** Polyester tape
5. **INDIVIDUAL SHIELD:** Aluminum/polyester laminated tape shield with tinned copper drain wire
6. **FILLER:** PP Yarn ( if necessary)
7. **BEDDING TAPE:** Polyester tape
8. **OVERALL SHIELD:** Aluminum/polyester laminated tape shield with tinned copper drain wire
9. **SEPARATION SHEATH:** LSZH compound; Color: Black

*The average thickness not less than the nominal value*

*The minimum thickness at any point shall not fall below 85% of the nominal value by more than 0.1mm*

10. **ARMOUR:** Galvanized steel wires
11. **BINDER TAPE:** PP foam tape
12. **OVER SHEATH:** LSZH compound; Color: **Blue or Black**

*The minimum thickness at any point shall not fall below 80% of the nominal value by more than 0.2mm*

**TRIAD TWISTED:** 1 white core, 1 black core and 1 red core shall be twisted triad

**TRIAD IDENTIFICATION:** All cores shall be ink-jet on insulation surface of each core with following content, Example:

	White core	Black core	Red core
For first triad:	" 1-ONE	" 1-ONE	...
For second triad:	" 2-TWO	" 2-TWO	...

**CABLE MARKING:** Printing on the over sheath surface with Max. 1m interval, example:

**0001m LS-VINA Cable & System \* Fire resistant cable Cu/Mica/XLPE/LSZH/SWA/LSZH-I/CAMS 8Tx0.75sqmm - 500V \* BS EN 50288-7; IEC 60331-21 \* (Year)**

Type : KX/PE/OSCR/PVC/SWA/PVC-FR  
Specification Reference : BS EN 50288-7, IEC 60332-3-24, IEC 60584-3

300/500V

Thermocouple Cable	Specification
CABLE CONSTRUCTION	1PR x 1.3MMSQ
1. Conductor : Material	Solid Strand K Type Thermocouple Conductor
: Construction	IEC 60584 Class 1
: Diameter/dimension	1.29MM
2. Insulation : Material	Polyethylene (PE)
: Average thickness (mm)	0.60
: Minimum thickness (mm)	0.44
: Nominal diameter/dimension (mm)	2.50
: Core Color	Green (+ve) & White (-ve) core with numbering
3. Assembly O.D. (mm)	5
4. Overall Screen	
4.1 Mylar tape : Thickness	0.025MM
4.2 Drain wire : Material & Construction	Tinned Annealed Copper (0.50mm <sup>2</sup> )
4.3 Alum/mylar : Thickness	0.025MM
4.4 Mylar tape : Thickness	0.025MM
4.5 Overlapping % : Minimum	>= 25%
5. Bedding : Material	Polyvinyl Chloride (PVC)
: Average thickness (mm)	0.9
6. Armouring : Material	Galvanized Steel Wire
: Nominal wire diameter (mm)	0.9
7. Sheathing : Material	Flame Retardant Polyvinyl Chloride (PVC-FR)
: Nominal thickness (mm)	1.30
: Minimum thickness (mm)	0.84
: Colour	Green
8. Completed cable : Approx. Overall Diameter (mm)	11.80
: Approx. Cable Weight (kg/km)	265
: Printing Legend	=LENGTH= HELUKABEL KX/PE/OSCR/PVC/SWA/PVC-FR 1PR x 1.3MMSQ 300/500V 2599PO-Details Month/Year
9. Packing : Maximum Packing Length (m/drum)	2000
: Drum Height & Width (mm)	900 x 780
: Approx. Total Weight (kg)	605
10. Testing	
10.1 Loop Conductor DC Resistance at 20°C	785 Ω/KM
10.2 Insulation Resistance MΩ.km at 20°C	> 1000
10.3 HV Dielectric test	2 kV/1min
10.4 Mutual Capacitance (Max @ 1kHz)	150 nF/km
10.5 Inductance	3 mH/km

\* Tolerance of assembly &amp; final O.D. up to 20mm: ±1mm; above 20mm: ±5%