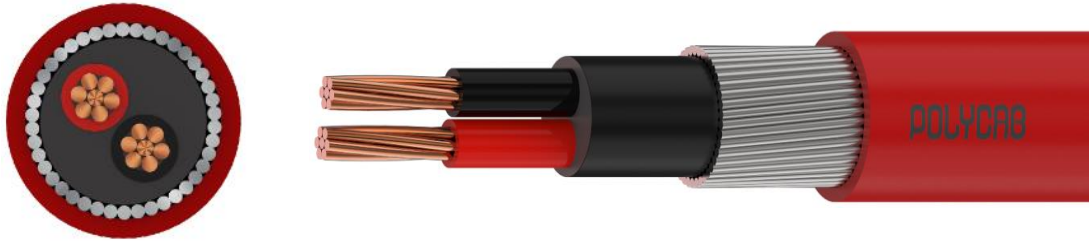


POLYCAB FIRE ALARM CABLE



Today, in continuous growing world it is very important to adopt safety systems in High rise buildings, Industries, Schools, Hospitals & Complexes etc. Fire security system is the most commonly used safety system in commercial area, where it is connected with fire alarm cable for powering.

Fire security system requires high quality cables to provide power. POLYCAB provides high quality fire resistant outer jacket fire alarm cables & powering the fire fighting equipments. POLYCAB is having high standard manufacturing facility for producing high quality fire alarm cable.

The shielded and screened type of fire alarm signal cables also designed and manufactured by POLYCAB to connect fire and smoke sensitive equipment with the fire security system, which reduces the external noise pick up in the circuit, thereby reduces the interference. These cables are also offered with GI armour wire for protected application.

POLYCAB Fire alarm shielded cable confirming to **BS EN 50288** and without shielding cable confirming to BS 5467.

Conductor: High conductivity annealed plain stranded copper conductor produced in-house from state-of-the-art machine.

Insulation: In-house developed XLPE insulation compound having high insulation properties.

Screen: Shielding type for twisted pair, Aluminium-Mylar tape with tinned copper drain wire. Drain wire will have continuous contact with aluminum side of the tape.

Inner Sheath: In-house developed thermoplastic compound having low emission of smoke and corrosive gases when exposed to fire and also ensures circular shape of cable.

Armour: Galvanised Steel Round/stripe wire Armoured to give mechanical protection.

Outer Sheath: In-house developed thermoplastic compound having low emission of smoke and corrosive gases when exposed to fire.

POLYCAB FIRE ALARM CABLE ARM



POLYCAB FIRE ALARM CABLE UN ARM

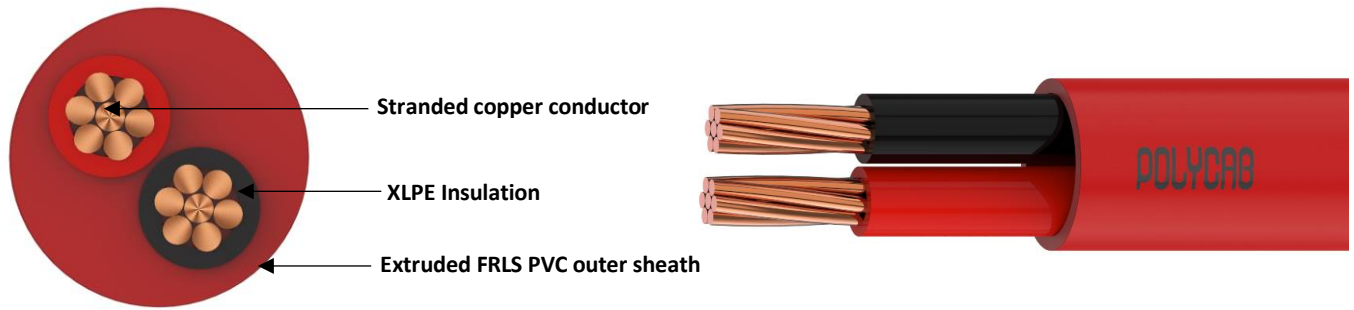


POLYCAB FIRE ALARM CABLE SHIELDED ARM



POLYCAB FIRE ALARM CABLE SHIELDED UN ARM





Application

POLYCAB Fire alarm cable stranded copper conductor, XLPE insulated, cores laid up & FRLS PVC outer sheath twin cable is used for powering firefighting equipment's in hospital, schools, commercial complex & industries in fire security systems.

Voltage Rating

600/1000 V

Operation Temperature

Max.: 90°C

Conductor temperature at short circuit

Max.: 250°C

Construction

- Stranded Class 2 Copper conductor as per EN 60228
- Insulated with XLPE type GP8 as per BS 7655-1.3
- Sheathed with Extruded FRLS PVC

Core Identification

Red & Black
Blue, Brown, Black & Red

Outer sheath colour: Red

Note: Black with red strip colour also available on request.

Bending Radius

12 x Overall diameter

Standard and References

EN 60228
BS 7655-1.3
IEC 60332-1-2

Compliance

Conductor resistance - EN 60228
Insulation resistance constant – BS 7655-1.3



OUR ACCREDITATION



Weight, Dimension & Electrical Data

No.of core	Conductor cross sectional area (sqmm)	Outer diameter(mm)	Weight (Approx.) Kg/km
2	1.5	7.53	76
2	2.5	8.76	104
4	1.5	8.54	116
4	2.5	10.02	166

The above data is approximate & subject to manufacturing tolerance.

Electrical parameter

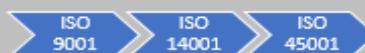
Area of Conductor	Max. DC resistance of conductor at 20°C Plain wires	Insulation resistance constant (XLPE)	Dielectric strength for 1 minute (H.V Test)	Short Circuit rating of conductor for the duration of 1 sec
Sqmm	Ohm/km	MΩ.Km	kV	kA
1.5	12.1	3.67	2	0.21
2.5	7.41	3.67	2	0.36

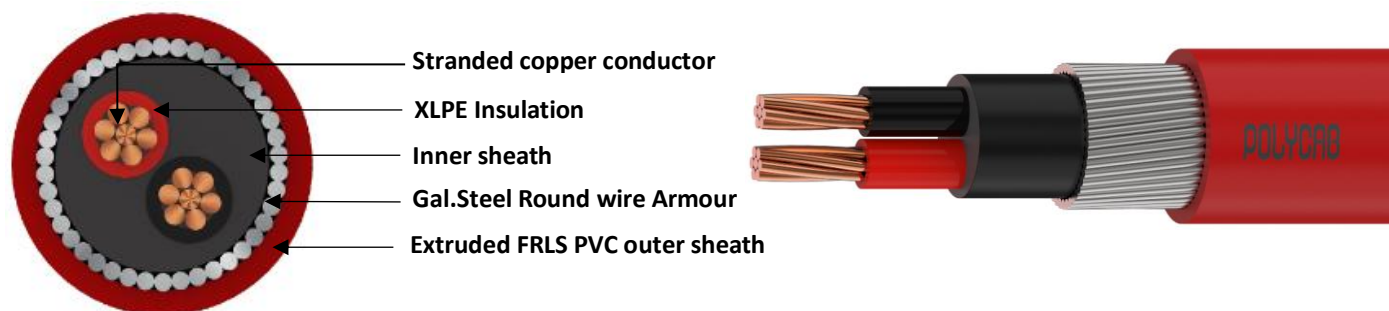
Current Carrying capacities

Ambient temperature: 30°C				
Ground Ambient temperature: 20°C				
Conductor operating temperature:90°C				
Conductor cross sectional area	Reference method C (clipped direct)		Reference method E (in free air or on a perforated cable tray etc, horizontal or vertical etc)	
	1 two core cable single phase ac or dc	1 three or 1 four core cable three phase ac	1 two core cable single phase ac or dc	1 three or four core cable three phase ac
Sqmm	A	A	A	A
1.5	24	22	26	23
2.5	33	30	36	32

Current rating refers to table 4E2A of BS 7671

OUR ACCREDITATION





Application

POLYCAB Fire alarm cable stranded copper conductor, XLPE insulated, cores laid up, PVC Inner sheathed, GI wire armoured & FRLS PVC outer sheath twin cable is used for powering firefighting equipment's in hospital, schools, commercial complex & industries in fire security systems.

Voltage Rating

600/1000 V

Operation Temperature

Max.: 90°C

Conductor temperature at short circuit

Max.: 250°C

Construction

- Stranded Class 2 Copper conductor as per EN 60228
- Insulated with XLPE type GP8 as per BS 7655-1.3
- Extruded inner sheath with PVC as per BS 5467
- Armoured with Galvanised Steel Round wire as per BS 5467
- Sheathed with Extruded FRLS PVC as per BS 5467

Core Identification

Red & Black

Blue, Brown, Black & Red

Outer sheath colour: Red

Note: Black with red strip colour also available on request.

Bending Radius

12 x Overall diameter

Standard and References

BS 5467

EN 60228

BS 7655-1.3

IEC 60332-1-2

Compliance

Conductor resistance - EN 60228

Insulation resistance constant - BS 7655-1.3



OUR ACCREDITATION



Weight & Dimension data

No. of core	Conductor cross sectional area (sqmm)	Dia over armour (mm)	Outer diameter (mm)	Weight (Approx.) Kg/KM
2	1.5	7.33	9.81	188
2	2.5	8.56	11.20	241
4	1.5	8.34	10.82	243
4	2.5	9.82	12.46	327

The above data is approximate & subject to manufacturing tolerance.

Electrical parameter

Area of Conductor	Max. DC resistance of conductor at 20°C Plain wires	Insulation resistance constant (XLPE)	Dielectric strength for 1 minute (H.V Test)	Short Circuit rating of conductor for the duration of 1 sec
Sqmm	Ohm/km	MΩ.Km	kV	kA
1.5	12.1	3.67	2	0.21
2.5	7.41	3.67	2	0.36

Current Carrying capacities

Ambient temperature: 30°C				
Ground Ambient temperature: 20°C				
Conductor operating temperature:90°C				
Conductor cross sectional area	Reference method C (clipped direct)		Reference method E (in free air or on a perforated cable tray etc, horizontal or vertical etc)	
	1 two core cable single phase ac or dc	1 three or 1 four core cable three phase ac	1 two core cable single phase ac or dc	1 three or four core cable three phase ac
Sqmm	A	A	A	A
1.5	27	23	29	25
2.5	36	31	39	33

Current rating refers to table 4E4A of BS 7671

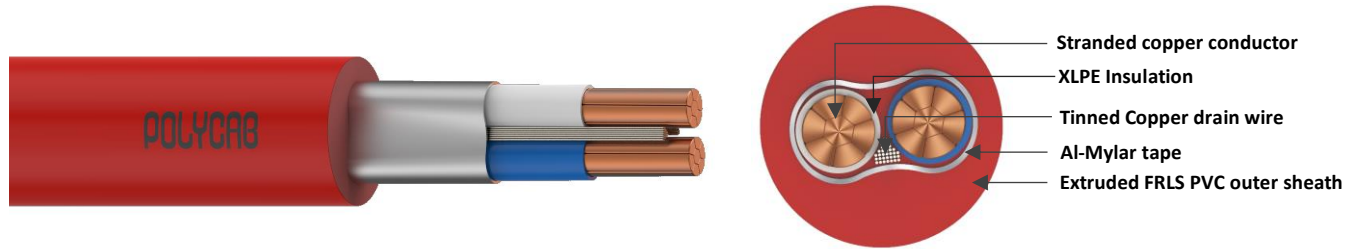
OUR ACCREDITATION







500V FIRE PROTECTION FIRE ALARM SHIELDED UNARMoured CABLE



Application

POLYCAB Fire alarm signal cable stranded copper conductor, XLPE insulated, cores twisted, shielded & FRLS PVC sheathed cable is designed to use for conveying signal from fire/smoke sensor to the firefighting equipment panels in hospital, schools commercial complex & industries for security systems.

Voltage Rating

500 V

Operation Temperature

Max.: XLPE 90°C

Construction

- Stranded Class 2 Copper conductor as per EN 60228
- Insulated with XLPE as per EN 50288-7
- Collective screen Al/PET (Aluminium /Polyester tape) with drain wire of tinned Cu
- Sheathed with Extruded FRLS PVC

Core Identification

White & Blue

Outer sheath colour: Red

Note: Black with red strip colour also available on request.

Bending Radius

12 x Overall diameter

Standard and References

EN 50288-7
EN 50288-1
EN 60228
EN 60332-1-2

Compliance

Conductor resistance - EN 60228
Insulation resistance - EN 50288-7
L/R Ratio - EN 50288-7
Mutual capacitance - EN 50288-7



OUR ACCREDITATION



Weight, Dimension & Electrical Data

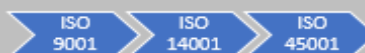
No.of core	Conductor cross sectional area (sqmm)	Outer diameter(mm)	Weight (Approx.) Kg/km
2	1.5	7.01	70
2	2.5	8.35	99

The above data is approximate & subject to manufacturing tolerance.

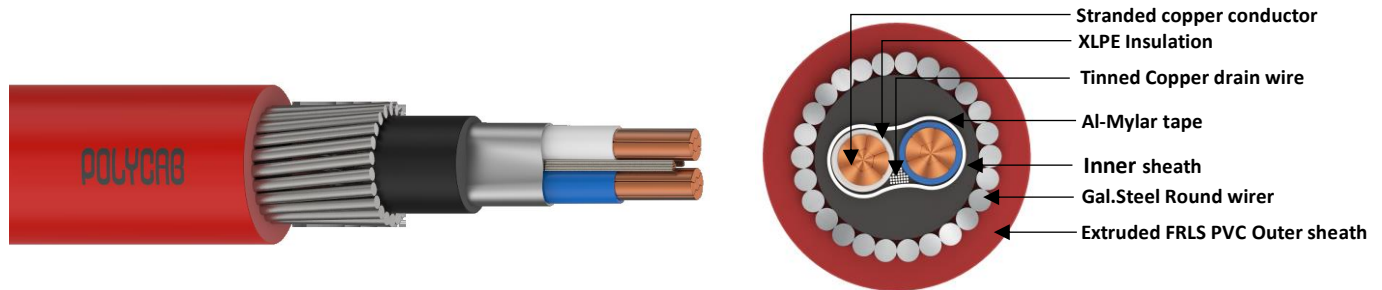
Electrical parameter

Area of Conductor	Max. DC resistance of conductor at 20°C Plain wires	Insulation resistance (XLPE)	Mutual capacitance (XLPE)	Inductance to resistance ratio(L/R)
Sqmm	Ohm/km	MΩ/Km	nf/Km	μH/Ω
1.5	12.1	1000	< 250	< 40
2.5	7.41	1000	< 250	< 60

OUR ACCREDITATION



500V FIRE PROTECTION FIRE ALARM SHIELDED ARMoured CABLE



Application

POLYCAB Fire alarm signal cable stranded copper conductor, XLPE insulated, cores twisted, shielded & armoured cable is designed to use for conveying signal from fire/smoke sensor to the firefighting equipment panels in hospital, schools commercial complex & industries for security systems.

Voltage Rating

500 V

Operation Temperature

Max.:90°C

Construction

- Stranded Class 2 Copper conductor as per EN 60228
- Insulated with XLPE as per EN 50288-7
- Collective screen Al/PET (Aluminium /Polyester tape) with drain wire of tinned Cu
- Extruded inner sheath with PVC as per EN 50290-2-22
- Armoured with Galvanised Steel Round wire as per EN 50288-7
- Sheathed with Extruded FRLS PVC

Bending Radius

12 x Overall diameter

Standard and References

EN 50288-7
EN 50288-1
EN 50290-2-22
EN 60228
EN 60332-1-2

Compliance

Conductor resistance - EN 60228
Insulation resistance - EN 50288-7
L/R Ratio - EN 50288-7
Mutual capacitance - EN 50288-7

Core Identification

White & Blue



Outer sheath colour: Red

Note: Black with red strip colour also available on request.

OUR ACCREDITATION



500V FIRE PROTECTION FIRE ALARM SHIELDED ARMoured CABLE

Weight, Dimension & Electrical Data

No.of core	Conductor cross sectional area (sqmm)	Dia over armour(mm)	Outer diameter(mm)	Weight (Approx.) Kg/km
2	1.5	8.81	11.51	254
2	2.5	10.15	12.92	318

The above data is approximate & subject to manufacturing tolerance.

Electrical parameter

Area of Conductor	Max. DC resistance of conductor at 20°C Plain wires	Insulation resistance (XLPE)	Mutual capacitance (XLPE)	Inductance to resistance ratio(L/R)
Sqmm	Ohm/km	MΩ/Km	nf/Km	μH/Ω
1.5	12.1	1000	< 250	< 40
2.5	7.41	1000	< 250	< 60

OUR ACCREDITATION

