

FOR ACTIVATING FIRE SECURITY SYSTEM AND HIGH-SPEED SIGNAL TRANSMISSION



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POLYCAB WIRES & CABLES

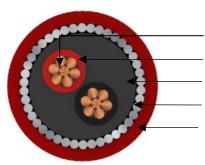
Reliable and safe supply of electricity is crucial to lead our life and the growth of any business, community, or country. This supply of electricity can only be managed through high quality, durable, reliable and efficient wires & cables.

Polycab India Ltd, a Super brand manufacturer of wire & cables having wide range of product practically in every application and voltage grade from 0.6 KV to 220 KV, serving to the world continuously since last 50 years with it's most economic, reliable and efficient product for safe transmission of electricity without much hazards and earned the trust of millions of customers over last 5 decades. It caters to a range of industries viz; Utilities, Power generation, transmission & distribution, oil refineries, OEMS, EPC Contractors, Nuclear power generation and many more with the supply of variety of power, control, instrumentation, communication, and Fire Alarm Cable.

Polycab, the largest manufacturer of wires & cables, having multilocation activity with high degree of backward integration, a comprehensive product portfolio, strong brand position and robust distribution network riding on key differentiators like product innovation, superior quality and easy availability.



POLYCAB FIRE ALARM ARMOURED CABLE 600/1000V FIRE PROTECTION FIRE ALARM ARMOURED CABLE



Stranded copper conductor **XLPE** Insulation Inner sheath Gal.Steel Round wire Armour



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

Two core - Red & Black Four core - Blue, Brown, Black & Red

Outer sheath colour: Red

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

Bending Radii

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

















POLYCAB FIRE ALARM ARMOURED CABLE 600/1000V FIRE PROTECTION FIRE ALARM ARMOURED CABLE



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

iouriour parameter						
Area of Conductor	20°C Plain wires		Dielectric strength for 1 minute Outer diameter (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	Reference method C (clipped direct)		Reference method E (in free air or on a perforated cable tray etc, horizontal or vertical etc)					
sectional area	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	Α	A	Α				
1.5	27	23	29	25				
2.5	36	31	39	33				

Current rating refers to table 4E4A of BS 7671







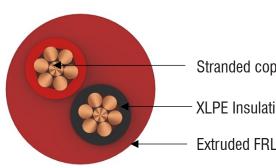








POLYCAB FIRE ALARM UNARMOURED CABLE 600/1000V FIRE PROTECTION FIRE ALARM UNARMOURED CABLE



Stranded copper conductor

XLPE Insulation

Extruded FRLS PVC outer sheath



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

Two core - Red & Black

Four core - Blue, Brown, Black & Red

Outer sheath colour: Red

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

Bending Radii

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



















POLYCAB FIRE ALARM UNARMOURED CABLE 600/1000V FIRE PROTECTION FIRE ALARM UNARMOURED CABLE



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 Outer diameter (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	0	0.36

Current Carrying capacities

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

Current rating refers to table 4E2A of BS 7671











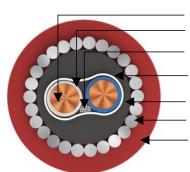






POLYCAB FIRE ALARM ARMOURED SIGNAL CABLE 500V FIRE PROTECTION FIRE ALARM SHIELDED ARMOURED CABLE





Stranded copper conductor XLPE Insulation Tinned Copper drain wire Al-Mylar tape Inner sheath Gal.Steel Round wirer Extruded FRLS PVC Outer sheath

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

Conductor temperature at short circuit

Max.: 250°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

Core Identification

White & Blue

Outer sheath colour: Red

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

Bending Radii

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





















POLYCAB FIRE ALARM ARMOURED SIGNAL CABLE 500V FIRE PROTECTION FIRE ALARM SHIELDED ARMOURED CABLE



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	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		Mutual capacitance (XLPE)	Inductance to resistance ratio(L/R)
Sqmm	Ohm/km	MΩ.Km	nf/Km	μ H/ Ω
1.5	12.1	1000	< 250	< 40
2.5	7.41	1000	< 250	< 60









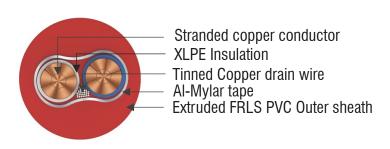






POLYCAB FIRE ALARM UNARMOURED SIGNAL CABLE 500V FIRE PROTECTION FIRE ALARM SHIELDED UNARMOURED CABLE





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.: 90°C

Conductor temperature at short circuit

Max.: 250°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 Radii

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





















POLYCAB FIRE ALARM UNARMOURED SIGNAL CABLE 500V FIRE PROTECTION FIRE ALARM SHIELDED UNARMOURED CABLE



Weight, Dimension Data

	No. of core	Conductor cross sectional area (sqmm)	Outer diameter (mm)	Weight (Approx.) Kg/KM
	2	1.5	7.01	70
Ì	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 constant (XLPE)	Mutual capacitance (XLPE)	Inductance to resistance ratio(L/R)
Sqmm	Ohm/km	MΩ.Km	nf/Km	μ H/ Ω
1.5	12.1	1000	< 250	< 40
2.5	7 41	1000	< 250	< 60

















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