Polycab XLPE insulated round wire armored Power cable conforming to BS 5467 standard.



These includes 600/1000 V and 1900/3300 V low voltage and medium voltage armoured cable confirming to the construction and performance as per BS 5467. These cables are suitable to use in fixed installations in industrial area, building or similar application.

These cables are available in single and multicore with maximum operating conductor temperature of 90°C and maximum short circuit conductor temperature 250°C.

**Conductor:** High conductivity annealed plain stranded copper conductor produced from state-of-the art Contirod line.

**Insulation**: In-house developed high insulation resistance cross-linked polyethylene thermoset insulation or ethylene propylene rubber.

**Bedding:** A protective barrier created between insulation and armour by extruded layer of polymeric material.

**Armour:** A steel wire or aluminium wire is provided to allow the cable to withstand mechanical stresses to which it is exposed.

Sheath: In-house developed PVC compound to withstand mechanical abrasion while in use.

The construction based on the application and requirement of the user against BS 5467.





CONDUCTOR) - Power Cable, 1.9/3.3 KV AC



# POLYCAB BS 5467 MC Power Cable, 1.9/3.3 KV AC



## **Application**

POLYCAB BS 5467 MC stranded copper conductor with thermosetting insulation Multi core armoured cable fulfils the requirement as per BS EN 5467. These cables are suitable for fixed installation in industrial area, buildings, Power network in underground, outdoor, indoor and similar application where mechanical protection is required.

#### **Voltage Rating**

1900/3300 V

## **Operation Temperature**

Fixed: -15°C to +90° C Short circuit temperature 250°C

#### Construction

- Annealed stranded copper conductor as per IEC 60228, class 2
- Insulated with cross linked type GP8 to BS 7655-1.3 or type GP 6 to BS 7655-1.2
- Bedding shall be extruded layer of polymeric material
- Armoured with Galvanised steel wire
- Sheathed with PVC confirming to Type 9 of BS 7655-4.2

#### **Core Identification**

Three Core – Brown, Black & Grey

#### **Bending Radius**

Fixed installation- 12 x Overall diameter

#### **Standard and References**

IEC 60228 BS 7655-1.3/1.2 BS 7655-4.2 BS 5467 EN 50265

#### **Test Voltage**

11250V AC at (20±5) °C

#### Compliance

Conductor Resistance test	
Insulation Resistance test	
Spark test	
Smoke emission test	
Flame propagation test	

- IEC 60228 - BS 5467 - BS EN 5099 - BS EN 61034
- BS EN 50265-2-1

#### Approval

The Cable approved for BASEC, A British approval service for cables.

The cable compliant with European Regulation EN 50575, the construction Products Regulation(CPR).











## POLYCAB BS 5467 MC

## Power Cable, 1.9/3.3 KV AC

Product Code	Size of Conductor mm <sup>2</sup>	Number of Core	Nominal insulation Thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km	POLYCAB/DOWEL Gland Size
MVBS10CXSWY2003C010S	10	3	2	26.9	1461	DBW-05A/DBF-05A
MVBS10CXSWY2003C016S	16	3	2	29.3	1774	DBW-05A/DBF-05A
MVBS10CXSWY2003C025S	25	3	2	32.2	2241	DBW-06A/DBF-06A
MVBS10CXSWY2003C035S	35	3	2	34.8	2695	DBW-07/DBF-07

• DBW – Weather proof series

• DBF – Flame proof series

## **Electrical characteristics**

Current carrying capacity and Maximum Dc conductor resistance.

Nominal cross	Clipped direct	In free air on a perforated cable tray etc, horizontal or vertical at 30°C	Direct in ground or in ducting in ground, in or around buildings at 20°C	Max. resistance of conductor at	
sectional area	1 three-or 1 four-core cable, three-phase a.c.	1 three-or 1 four-core cable, three-phase a.c.	1 three-or 1 four-core cable, three-phase a.c.	20°C	
mm²	Amp.	Amp.	Amp.	Ω/km	
10	73	78	58	1.83	
16	94	99	75	1.15	
25	124	131	96	0.727	
35	154	162	115	0.524	

Ambient temperature: 30°C

Ground ambient temperature: 20°C

Conductor operating temperature: 90°C

Note<sup>\*</sup> Where cables in this table are connected to equipment or accessories designed to operate at a temperature not exceeding  $70^{\circ}$ C thermoplastic insulated cable (table 4D4A) must be used.

The above table is in accordance with Table 4E4A of 17<sup>th</sup> edition of IEE wiring regulations.

## **De-Rating Factor**

De-rating factor for 90°C thermosetting insulated cable

Ambient temperature	35°C to 50°C	55°C	60°C	65°C	70°C
De-Rating factor	1	0.96	0.83	0.67	0.47

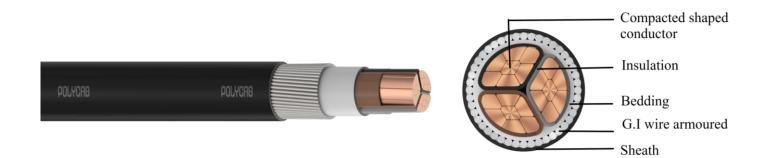








# POLYCAB BS 5467 MC (SHAPED CONDUCTOR) Power Cable, 1.9/3.3 KV AC



## Application

POLYCAB BS 5467 MC Stranded sector shaped copper conductor thermosetting material insulated Multi core armoured cable fulfils the requirement as per BS EN 5467. These cables are suitable for fixed installation in industrial area, buildings, Power network in underground, outdoor, indoor and similar application where mechanical protection is required.

## **Voltage Rating**

1900/3300 V

## **Operation Temperature**

Fixed: -15°C to +90° C Short circuit temperature 250°C

#### Construction

- Annealed compacted stranded copper conductor as per IEC 60228, class 2
- Insulated with cross linked type GP8 to BS 7655-1.3 or type GP 6 to BS 7655-1.2
- Bedding shall be extruded layer of polymeric material
- Armoured with Galvanised steel wire
- Sheathed with PVC confirming to Type 9 of BS 7655-4.2

## **Core Identification**

Three Core – Brown, Black & Grey

### **Bending Radius**

Fixed installation- 12 x Overall diameter

## **Standard and References**

IEC 60228 BS 7655-1.3/1.2 BS 7655-4.2 BS 5467 EN 50265

#### **Test Voltage**

11250V AC at (20±5) °C

#### Compliance

- Conductor Resistance test Insulation Resistance test Spark test Smoke emission test Flame propagation test
- IEC 60228
- BS 5467
- BS EN 5099
- BS EN 61034
- BS EN 50265-2-1

#### Approval

The Cable is approved for BASEC, A British approval service for cables.

The cable is compliant with European Regulation EN 50575, the construction Products Regulation(CPR).











## POLYCAB BS 5467 MC (SHAPED CONDUCTOR)

## Power Cable, 1.9/3.3 KV AC

Product Code	Size of Conductor mm <sup>2</sup>	Nominal insulation Thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km	POLYCAB/DOWEL Gland Size
MVBS10CXSWY2003C035S	35	2	31.1	2251	DBW - 06A/DBF - 06A
MVBS10CXSWY2003C050S	50	2	34.7	3063	DBW - 07/DBF - 07
MVBS10CXSWY2003C070S	70	2	38	3799	DBW - 08/DBF - 08
MVBS10CXSWY2003C095S	95	2	41.4	4715	DBW - 09/DBF - 09
MVBS10CXSWY2003C120S	120	2	45.7	5973	DBW - 09/DBF - 09
MVBS10CXSWY2003C150S	150	2	48.5	7088	DBW - 010A/DBF - 010A
MVBS10CXSWY2003C185S	185	2	51.9	8286	DBW - 010A/DBF - 010A
MVBS10CXSWY2003C240S	240	2	56.9	10248	DBW - 011/DBF - 011
MVBS10CXSWY2003C300S	300	2	61.2	12258	DBW - 012/DBF - 012
MVBS10CXSWY2003C400S	400	2	66.6	14718	DBW - 013A/DBF - 013A

• DBW – Weather proof series

• DBF – Flame proof series

## **Electrical characteristics**

Current carrying capacity

Nominal cross sectional area	Clipped direct 1 three-or 1 four- core cable, three- phase a.c.	In free air on a perforated cable tray etc, horizontal or vertical at 30°C 1 three-or 1 four-core cable, three-phase a.c.	Direct in ground or in ducting in ground, in or around buildings at 20°C 1 three-or 1 four-core cable, three-phase a.c.	Max. resistance of conductor at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
35	154	162	115	0.524
50	187	197	135	0.387
70	238	251	167	0.268
95	289	304	197	0.193
120	335	353	223	0.153
150	386	406	251	0.124
185	441	463	281	0.0991
240	520	546	324	0.0754
300	599	628	365	0.0601
400	-	-	-	0.047

Ambient temperature: 30°C

Ground ambient temperature: 20°C

Conductor operating temperature: 90°C

Note\* Where cables in this table are connected to equipment or accessories designed to operate at a temperature not exceeding 70°C thermoplastic insulated cable (table 4D4A) must be used.

The above table is in accordance with Table 4E4A of BS 7671:2018

## **De-Rating Factor**

De-rating factor for 90°C thermosetting insulated cable

Ambient temperature	35°C to 50°C	55°C	60°C	65°C	70°C
De-Rating factor	1	0.96	0.83	0.67	0.47









# POLYCAB BS 5467 SC Power Cable, 1.9/3.3 KV AC



## **Application**

POLYCAB BS 5467 SC stranded copper conductor thermosetting material insulated single core armoured cable fulfils the requirement as per BS EN 5467. These cables suitable for power network, underground in free-draining soil, outdoor and indoor applications, and cable ducting.

#### **Voltage Rating**

1900/3300 V

#### **Operation Temperature**

Maximum operating: +90° C Short circuit temperature 250°C

#### Construction

- Annealed stranded copper conductor as per IEC 60228, class 2
- Insulated with cross linked type GP8 to BS 7655-1.3 or type GP 6 to BS 7655-1.2
- Bedding shall be extruded layer of polymeric material.
- Armoured with Aluminium round wire armoured.
- Sheathed with PVC confirming to requirements for Type 9 to BS 7655-4.2

#### **Core Identification**

Brown or Blue

#### **Bending Radius**

Fixed installation – 6 x Overall Diameter

## **Standard and References**

IEC 60228 BS 7655-1.3/1.2 BS 7655-4.2 BS 5467 EN 50265

#### **Test Voltage**

11250V AC at (20±5) °C

#### Compliance

Conductor Resistance test	- 1E
Insulation Resistance test	- B
Spark test	- B
Smoke emission test	- B
Flame propagation test	- B

- IEC 60228
- BS 5467
- BS EN 5099
- BS EN 61034
- BS EN 50265-2-1

#### Approval

The Cable approved for BASEC, A British approval service for cables.

The cable compliant with European Regulation EN 50575, the construction Products Regulation.











# POLYCAB BS 5467 SC

## Power Cable, 1.9/3.3 KV AC

Product Code	Size of Conductor mm <sup>2</sup>	Nominal insulation Thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km	POLYCAB/DOWEL Gland Size
MVBS10CXAWY2001C050S	50	2	20.6	896	DBW - 03/DBF - 03
MVBS10CXAWY2001C070S	70	2	22.4	1122	DBW - 03/DBF - 03
MVBS10CXAWY2001C095S	95	2	24.3	1405	DBW - 04A/DBF - 04A
MVBS10CXAWY2001C120S	120	2	27.2	1775	DBW - 05A/DBF - 05A
MVBS10CXAWY2001C150S	150	2	28.8	2102	DBW - 05A/DBF - 05A
MVBS10CXAWY2001C185S	185	2	30.8	2489	DBW - 06A/DBF - 06A
MVBS10CXAWY2001C240S	240	2	33.5	3104	DBW - 07/DBF - 07
MVBS10CXAWY2001C300S	300	2	36.1	3752	DBW - 07/DBF - 07
MVBS10CXAWY2001C400S	400	2	40.5	4895	DBW - 08/DBF - 08
MVBS10CXAWY2001C500S	500	2.2	44.2	5990	DBW - 09/DBF - 09
MVBS10CXAWY2001C630S	630	2.4	48.8	7432	DBW - 010A/DBF - 010A

• DBW – Weatherproof series

• DBF – Flame proof series

## **Electrical characteristics**

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area	Reference Method C (clipped direct) 1 three-or 1 four- core cable, three- phase a.c.	Reference Method E (in free air or on a perforated cable tray etc, horizontal or vertical) 1 three-or 1 four-core cable, three-phase a.c.	Reference Method D (direct in ground or in ducting in ground, in or around buildings) 1 three-or 1 four-core cable, three-phase a.c.	Maximum DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
50	187	197	135	0.387
70	238	251	167	0.268
95	289	304	197	0.193
120	335	353	223	0.153
150	386	406	251	0.124
185	441	463	281	0.0991
240	520	546	324	0.0754
300	599	628	365	0.0601
400	-	-	-	0.047
500	-	-	-	0.0366
630	-	-	-	0.0283

Ambient temperature: 30°C, Ambient ground temperature: 20°C, Conductor operating temperature: 90°C

Note \* Where cables in this table are connected to equipment or accessories designed to operate at a temperature not exceeding 70°C, the current ratings given in the equivalent table for 70°C thermoplastic insulated cables (Table 4D4A) must be used.

The above table is in accordance with Table 4E4A of BS 7671:2018

#### **De-Rating Factor**

De-rating factor for 90°C thermosetting insulated cable

Ambient temperature	35°C to 50°C	55°C	60°C	65°C	70°C
De-Rating factor	1	0.96	0.83	0.67	0.47





