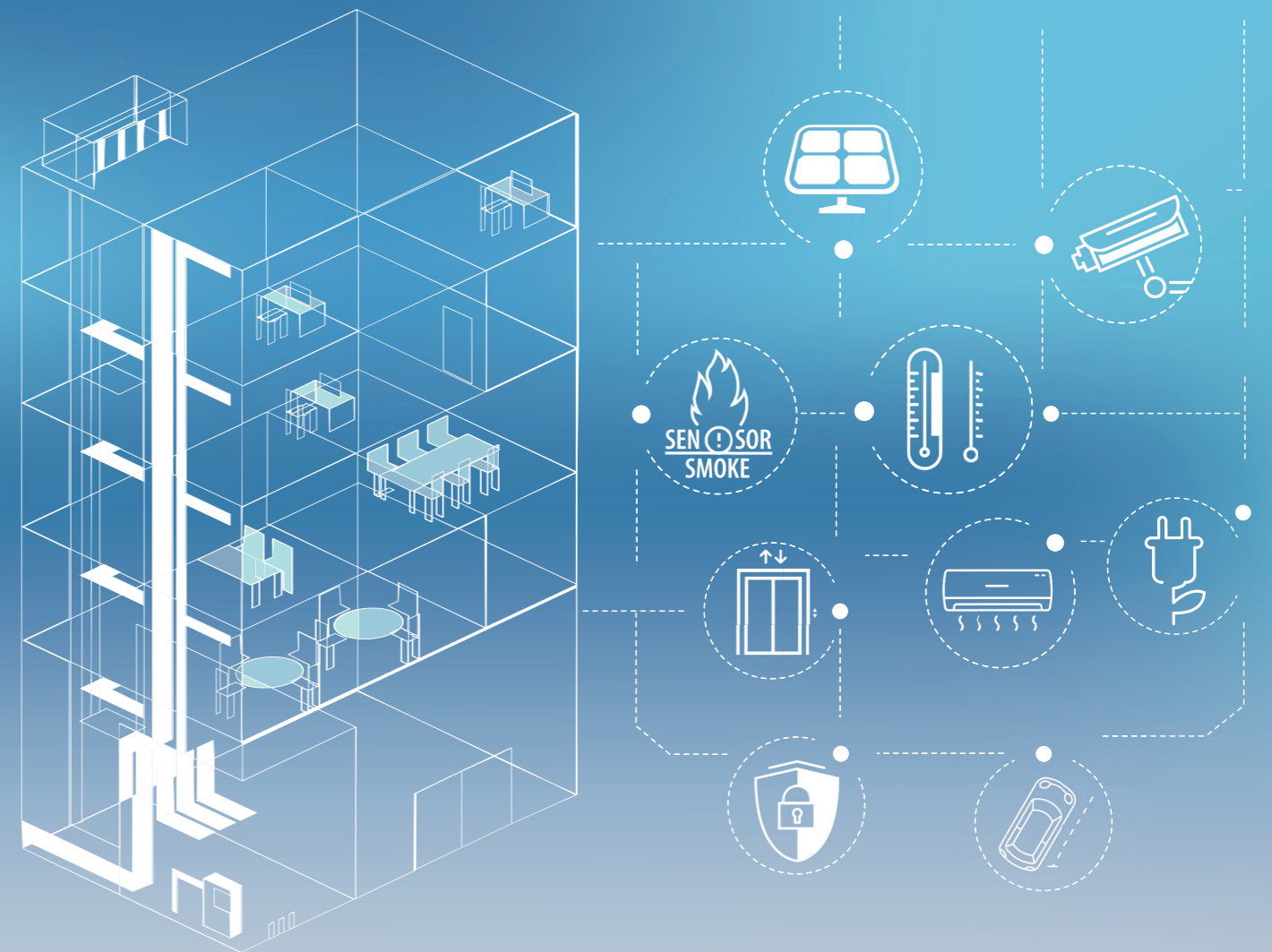


# Polycab BMS Cable

## The new power partner to your smart infrastructure!



Corporate Office:  
**POLY CAB INDIA LIMITED** (formerly known as 'Polycab Wires Limited')  
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POLY CAB



# WIDE RANGE OF CABLES AND WIRES



## Introduction

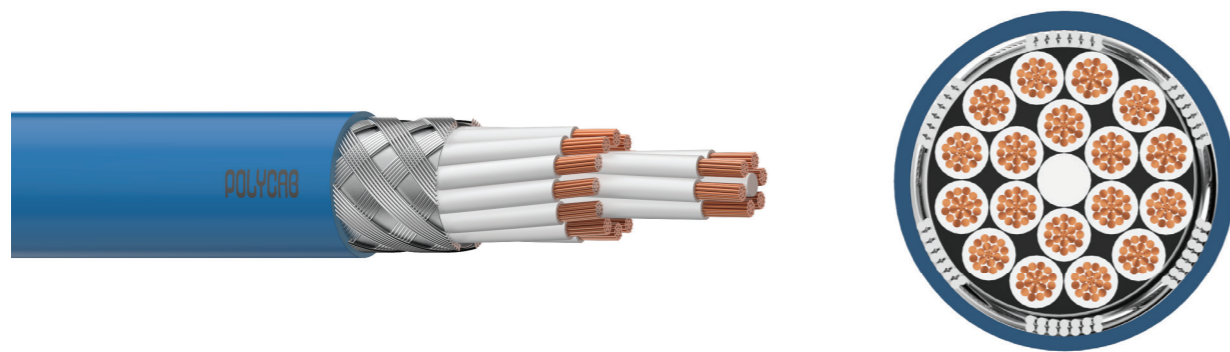
Reliable and safe supply of electricity is crucial to lead our life and the growth of any business, community, or country. This supply of electricity can only be managed through high quality, durable, reliable, and efficient wires & cables.

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, Metal clad and BMS Cables.

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.



## POLYCARB BUILDING MANAGEMENT SYSTEM (BMS) CABLE



Building management system cables also known as BMS cables, or intelligent building cables, are used to automate building utility systems like air conditioning, ventilation, lighting, hydraulics, etc. These cables power individual equipments as well as the interconnection between various equipments; thus creating an integrated system. EMI suppression filters are attached to the cables to provide noise-free signal in BMS systems.

Polycab BMS cables are the industry's preferred choice for building management systems. Developed as per international standards and manufactured for a wide range of applications, Polycab BMS cables easily meet the industry's demanding requirements

### What makes Polycab BMS cables the ultimate choice?

**Conductor:** Annealed plain flexible copper conductor, manufactured in-house using state-of-the-art machines, ensure high conductivity.

**Insulation:** PVC insulation compound, developed in-house, has high insulation properties.

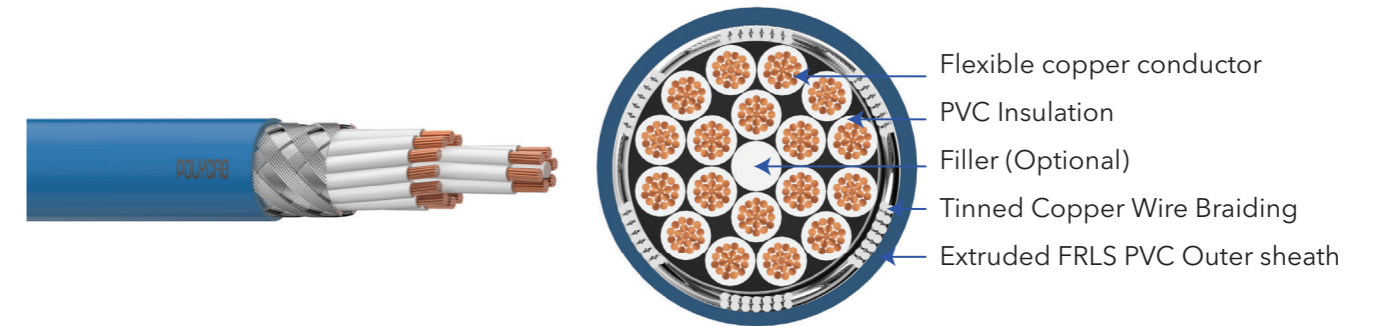
**Collective screen:** The cables are shielded with Aluminium Mylar tape & Drain wire. The Drain wire stays in continuous contact with aluminium side of the tape. Shielding with ATC braiding can also be provided to meet specific requirements.

**Outer Sheath:** Made from a thermoplastic compound, developed in-house, the sheath emits low smoke and corrosive gases when exposed to fire.

**Caution:** BMS cables are not designed for use with power supplies and should not be connected to the main power.



## POLYCARB BMS 300 MC-C4 BMS Cable PVC Insulated Overall Braided 300V



### Application

Polycab BMS 300 MC-C4 cables are designed for transmission of analogue and digital signals in building management system. The cables generally conform to BS EN 50288-7 and are useful for controlling & monitoring of diverse applications inside the building.

### Voltage Rating

300 V

### Operation Temperature

Max.: PVC 70°C

### Construction

- Flexible (Class 5) Copper conductor as per EN 60228
- Insulated with PVC Type A
- Tinned copper wire braided
- Sheathed with Extruded PVC FRLS

### Core Identification

- 2 Core-Red & Black
- 3 Core-Red, Black & Yellow-green
- 4 Core-Red, Yellow, Blue & Yellow-green
- 5 Core & above -White/Grey core with number printing

### Outer sheath colour:

Blue

Note: As per the application/identification requirement, other colours are also available upon 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



**POLYCAB BMS 300 MC-C4**  
**BMS Cable PVC Insulated Overall Braided 300V**

**Weight & Dimension Data**

300 VOLTS, MULTI CORE, FLEX. COPPER, PVC TYPE-A INSULATED, OVERALL TINNED COPPER WIRE BRAIDED  
 BMS CABLES AS PER EN 50288-7

Area of conductor	No.of core	Min. thickness of insulation	Nominal thickness of outer sheath	Nominal overall Diameter	Approx. weight
sqmm		mm	mm	mm	kg/km
0.5	2	0.26	0.83	4.84	37
0.5	3	0.26	0.84	5.09	45
0.5	4	0.26	0.86	5.49	53
0.5	5	0.26	0.87	5.93	63
0.5	6	0.26	0.89	6.39	72
0.5	7	0.26	0.89	6.39	78
0.5	8	0.26	0.92	7.09	90
0.5	10	0.26	0.95	7.94	108
0.5	12	0.26	0.96	8.18	122
0.5	16	0.26	0.99	9.02	153
0.5	18	0.26	1.01	9.48	169
0.5	19	0.26	1.01	9.48	175
0.5	20	0.26	1.03	9.99	186
0.5	24	0.26	1.06	11.03	219
0.75	2	0.26	0.85	5.29	45
0.75	3	0.26	0.86	5.57	56
0.75	4	0.26	0.88	6.03	68
0.75	5	0.26	0.90	6.52	80
0.75	6	0.26	0.92	7.05	93
0.75	7	0.26	0.92	7.05	101
0.75	8	0.26	0.95	7.85	116
0.75	10	0.26	0.98	8.82	141
0.75	12	0.26	0.99	9.11	161
0.75	16	0.26	1.03	10.06	203
0.75	18	0.26	1.05	10.59	225
0.75	19	0.26	1.05	10.59	233
0.75	20	0.26	1.07	11.17	247
0.75	24	0.26	1.11	12.36	293
1	2	0.26	0.86	5.66	53
1	3	0.26	0.88	5.97	66
1	4	0.26	0.90	6.48	81
1	5	0.26	0.92	7.03	96
1	6	0.26	0.94	7.61	112
1	7	0.26	0.94	7.61	123
1	8	0.26	0.97	8.49	141
1	10	0.26	1.01	9.57	173
1	12	0.26	1.02	9.88	197



**POLYCAB BMS 300 MC-C4**  
**BMS Cable PVC Insulated Overall Braided 300V**

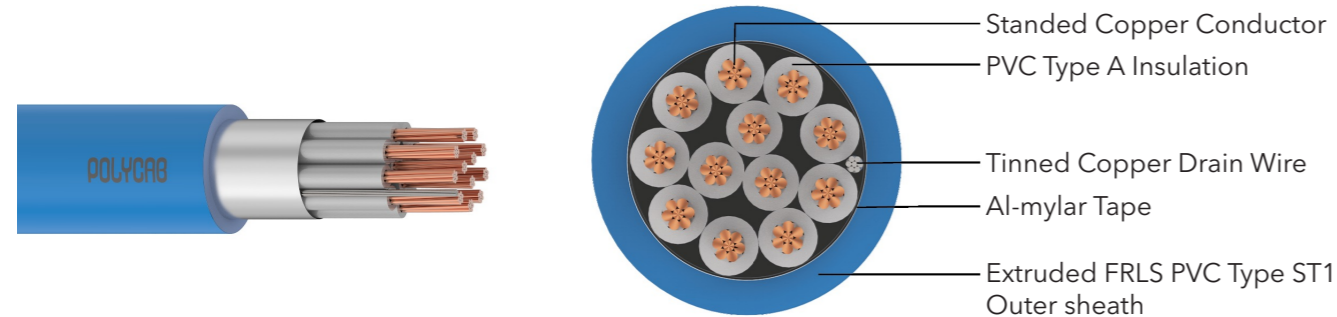
Area of conductor	No.of core	Min. thickness of insulation	Nominal thickness of outer sheath	Nominal overall Diameter	Approx. weight
sqmm		mm	mm	mm	kg/km
1	16	0.26	1.06	10.94	251
1	18	0.26	1.08	11.52	278
1	19	0.26	1.08	11.52	289
1	20	0.26	1.11	12.17	307
1	24	0.26	1.15	13.48	364
1.5	2	0.35	0.90	6.63	71
1.5	3	0.35	0.92	7.03	91
1.5	4	0.35	0.94	7.66	112
1.5	5	0.35	0.96	8.34	134
1.5	6	0.35	0.99	9.08	157
1.5	7	0.35	0.99	9.08	173
1.5	8	0.35	1.03	10.18	200
1.5	10	0.35	1.08	11.52	245
1.5	12	0.35	1.10	11.91	282
1.5	16	0.35	1.15	13.23	360
1.5	18	0.35	1.17	13.96	401
1.5	19	0.35	1.17	13.96	417
1.5	20	0.35	1.20	14.77	442
1.5	24	0.35	1.26	16.40	526

For Cables of sizes or cores not listed above the product data is available on request  
 Dimensions & Weights are representative figures and may vary

**Electrical Parameter**

Area of Conductor	Max. DC resistance of conductor at 20°C Plain wires	Insulation resistance (PVC)	Mutual capacitance (PVC)	Inductance to resistance ratio(L/R)
Sqmm	Ohm/km	MΩ/Km	nf/Km	μH/Ω
0.5	39	10	250	< 25
0.75	26	10	250	< 25
1	19.5	10	250	< 25
1.5	13.3	10	250	< 40

## POLYCAB BMS 300 MC-A7 BMS Cable shielded 300V



### Application

Polycab BMS 300 MC-A7 cables generally conforming to EN 50288-7, are designed for transmission of analogue and digital signals in the building management system. The cables are useful for controlling & monitoring of diverse applications inside the building.

### Voltage Rating

300 V

### Operation Temperature

Max.: PVC 70°C

### Construction

- Flexible (Class 5) Copper conductor as per EN 60228
- Insulated with PVC Type A
- Collective screen Al/PET (Aluminium Polyester tape) with drain wire of tinned Cu
- Sheathed with Extruded PVC FRLS

### Core Identification

- 2 Core-Red & Black
- 3 Core-Red, Black & Yellow-green
- 4 Core-Red, Yellow, Blue & Yellow-green
- 5 Core & above -White/Grey core with number printing

### Outer sheath colour:

Blue

Note: As per the application/identification requirement, other colours are also available upon 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



## POLYCAB BMS 300 MC-A7 BMS Cable shielded 300V

### Weight & Dimension Data

300 VOLTS, MULTI CORE, FLEX. COPPER, PVC TYPE-A INSULATED, ALUMINIUM MYLAR TAPED OVERALL SHIELDED, UNARMoured BMS CABLES AS PER EN 50288-7

Area of conductor	No. of core	Min. thickness of insulation	Nominal thickness of outer sheath	Nominal overall Diameter	Approx. weight
sqmm		mm	mm	mm	kg/km
0.5	2	0.26	0.83	4.79	35
0.5	3	0.26	0.83	5.03	43
0.5	4	0.26	0.85	5.44	51
0.5	5	0.26	0.87	5.87	59
0.5	6	0.26	0.88	6.33	68
0.5	7	0.26	0.88	6.33	74
0.5	8	0.26	0.91	7.03	84
0.5	10	0.26	0.94	7.88	101
0.5	12	0.26	0.95	8.13	115
0.5	16	0.26	0.98	8.96	144
0.5	18	0.26	1.00	9.43	159
0.5	19	0.26	1.00	9.43	165
0.5	20	0.26	1.02	9.94	175
0.5	24	0.26	1.05	10.97	207
0.75	2	0.26	0.84	5.23	43
0.75	3	0.26	0.85	5.51	53
0.75	4	0.26	0.87	5.97	64
0.75	5	0.26	0.89	6.47	75
0.75	6	0.26	0.91	7.00	87
0.75	7	0.26	0.91	7.00	95
0.75	8	0.26	0.94	7.79	109
0.75	10	0.26	0.97	8.77	133
0.75	12	0.26	0.98	9.05	151
0.75	16	0.26	1.02	10.00	192
0.75	18	0.26	1.04	10.53	213
0.75	19	0.26	1.04	10.53	221
0.75	20	0.26	1.06	11.12	234
0.75	24	0.26	1.10	12.30	278
1	2	0.26	0.86	5.60	50
1	3	0.26	0.87	5.92	63
1	4	0.26	0.89	6.42	77
1	5	0.26	0.91	6.97	91
1	6	0.26	0.93	7.56	106
1	7	0.26	0.93	7.56	116
1	8	0.26	0.96	8.44	133
1	10	0.26	1.00	9.51	163
1	12	0.26	1.01	9.82	187
1	16	0.26	1.05	10.88	238
1	18	0.26	1.07	11.47	265

### Our Accreditation





## POLYCAB BMS 500 MC-A7 BMS Cable shielded 500V

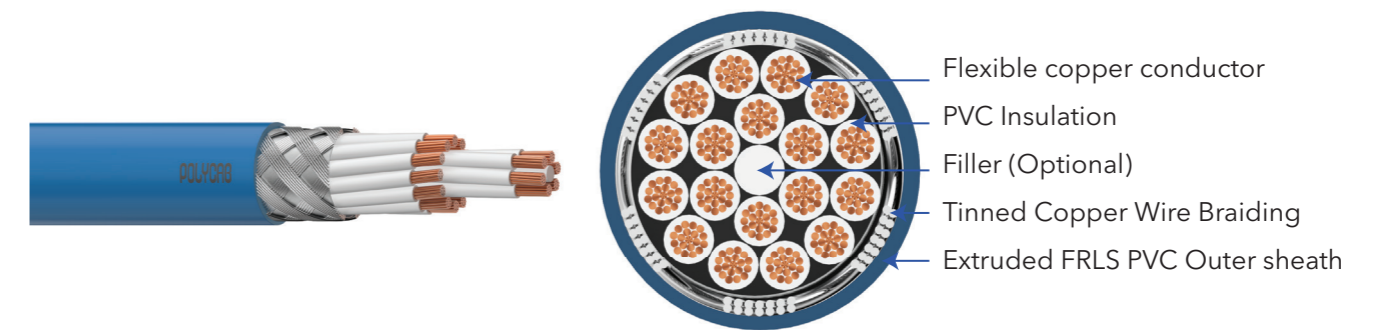
Area of conductor	No. of core	Min. thickness of insulation	Nominal thickness of outer sheath	Nominal overall Diameter	Approx. weight
sqmm		mm	mm	mm	kg/km
1	19	0.26	1.07	11.47	276
1	20	0.26	1.10	12.11	292
1	24	0.26	1.15	13.42	347
1.5	2	0.35	0.89	6.58	66
1.5	3	0.35	0.91	6.97	85
1.5	4	0.35	0.93	7.60	106
1.5	5	0.35	0.96	8.29	127
1.5	6	0.35	0.98	9.02	148
1.5	7	0.35	0.98	9.02	164
1.5	8	0.35	1.02	10.12	189
1.5	10	0.35	1.07	11.46	232
1.5	12	0.35	1.09	11.85	268
1.5	16	0.35	1.14	13.17	344
1.5	18	0.35	1.16	13.90	383
1.5	19	0.35	1.16	13.90	399
1.5	20	0.35	1.19	14.71	423
1.5	24	0.35	1.25	16.35	504

For Cables of sizes or cores not listed above the product data is available on request  
Dimensions & Weights are representative figures and may vary

### Electrical Parameter

Area of Conductor	Max. DC resistance of conductor at 20°C Plain wires	Insulation resistance (PVC)	Mutual capacitance (PVC)	Inductance to resistance ratio(L/R)
Sqmm	Ohm/km	MΩ/Km	nf/Km	μH/Ω
0.5	39	10	250	< 25
0.75	26	10	250	< 25
1	19.5	10	250	< 25
1.5	13.3	10	250	< 40

## POLYCAB BMS 500 MC-C4 BMS Cable PVC Insulated Overall Braided 500V



### Application

Polycab BMS 500 MC-C4 cables generally are designed for transmission of analogue and digital signals in building management system. The cables conform to BS EN 50288-7 and are useful for controlling & monitoring of diverse applications inside the building.

### Voltage Rating

500 V

### Operation Temperature

Max.: PVC 70°C

### Construction

- Flexible (Class 5) Copper conductor as per EN 60228
- Insulated with PVC Type A
- Tinned copper wire braided
- Sheathed with Extruded PVC FRLS

### Core Identification

- 2 Core-Red & Black
- 3 Core-Red, Black & Yellow-green
- 4 Core-Red, Yellow, Blue & Yellow-green
- 5 Core & above -White/Grey core with number printing

### 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



### Outer sheath colour:

Blue

Note: As per the application/identification requirement, other colours are also available upon request.



State of the art Braiding facility

Our Accreditation



**POLYCAB BMS 500 MC-C4**  
**BMS Cable PVC Insulated Overall Braided 500V**

**Weight & Dimension Data**

500 VOLTS, MULTI CORE, FLEX. COPPER, PVC TYPE-A INSULATED, OVERALL TINNED COPPER WIRE BRAIDED  
 BMS CABLES AS PER EN 50288-7

Area of conductor	No.of core	Min. thickness of insulation	Nominal thickness of outer sheath	Nominal overall Diameter	Approx. weight
sqmm		mm	mm	mm	kg/km
0.5	2	0.44	0.86	5.6	45
0.5	3	0.44	0.87	5.9	55
0.5	4	0.44	0.89	6.4	66
0.5	5	0.44	0.91	7.0	77
0.5	6	0.44	0.94	7.6	89
0.5	7	0.44	0.94	7.6	97
0.5	8	0.44	0.97	8.4	111
0.5	10	0.44	1.01	9.5	135
0.5	12	0.44	1.02	9.8	152
0.5	16	0.44	1.06	10.8	191
0.5	18	0.44	1.08	11.4	211
0.5	19	0.44	1.08	11.4	218
0.5	20	0.44	1.10	12.1	231
0.5	24	0.44	1.15	13.4	274
0.75	2	0.44	0.88	6.1	54
0.75	3	0.44	0.89	6.4	66
0.75	4	0.44	0.91	7.0	81
0.75	5	0.44	0.94	7.6	96
0.75	6	0.44	0.96	8.2	111
0.75	7	0.44	0.96	8.2	121
0.75	8	0.44	1.00	9.2	139
0.75	10	0.44	1.04	10.4	170
0.75	12	0.44	1.05	10.7	193
0.75	16	0.44	1.10	11.9	244
0.75	18	0.44	1.12	12.5	270
0.75	19	0.44	1.12	12.5	280
0.75	20	0.44	1.15	13.2	297
0.75	24	0.44	1.20	14.7	352
1	2	0.44	0.89	6.4	62
1	3	0.44	0.91	6.8	78
1	4	0.44	0.93	7.4	95
1	5	0.44	0.95	8.1	113
1	6	0.44	0.98	8.8	132
1	7	0.44	0.98	8.8	144
1	8	0.44	1.02	9.8	166
1	10	0.44	1.07	11.1	203
1	12	0.44	1.08	11.5	232
1	16	0.44	1.13	12.8	294
1	18	0.44	1.15	13.5	327
1	19	0.44	1.15	13.5	339



**POLYCAB BMS 500 MC-C4**  
**BMS Cable PVC Insulated Overall Braided 500V**

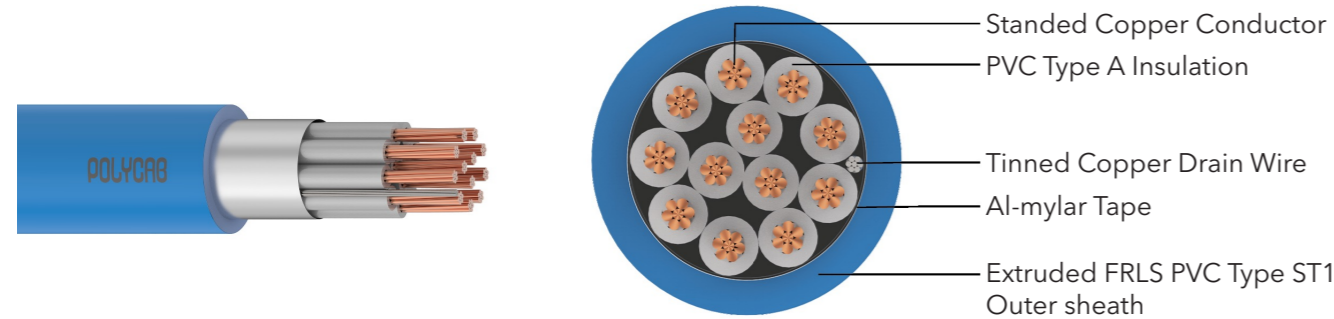
Area of conductor	No.of core	Min. thickness of insulation	Nominal thickness of outer sheath	Nominal overall Diameter	Approx. weight
sqmm		mm	mm	mm	kg/km
1	20	0.44	1.18	14.2	360
1	24	0.44	1.24	15.8	428
1.5	2	0.44	0.92	7.0	76
1.5	3	0.44	0.93	7.4	97
1.5	4	0.44	0.96	8.1	120
1.5	5	0.44	0.98	8.9	144
1.5	6	0.44	1.01	9.7	168
1.5	7	0.44	1.01	9.7	185
1.5	8	0.44	1.06	10.8	214
1.5	10	0.44	1.11	12.3	262
1.5	12	0.44	1.13	12.7	301
1.5	16	0.44	1.18	14.1	385
1.5	18	0.44	1.21	14.9	428
1.5	19	0.44	1.21	14.9	446
1.5	20	0.44	1.24	15.8	473
1.5	24	0.44	1.31	17.6	563
2.5	2	0.53	0.97	8.4	110
2.5	3	0.53	0.99	8.9	143
2.5	4	0.53	1.02	9.8	179
2.5	5	0.53	1.05	10.7	215
2.5	6	0.53	1.09	11.7	253
2.5	7	0.53	1.09	11.7	282
2.5	8	0.53	1.14	13.2	325
2.5	10	0.53	1.21	15.0	401
2.5	12	0.53	1.23	15.6	464
2.5	16	0.53	1.30	17.4	598
2.5	18	0.53	1.34	18.4	667
2.5	19	0.53	1.34	18.4	695
2.5	20	0.53	1.38	19.5	737
2.5	24	0.53	1.46	21.7	879

For Cables of sizes or cores not listed above the product data is available on request  
 Dimensions & Weights are representative figures and may vary

**Electrical Parameter**

Area of Conductor	Max. DC resistance of conductor at 20°C Plain wires	Insulation resistance (PVC)	Mutual capacitance (PVC)	Inductance to resistance ratio(L/R)
Sqmm	Ohm/km	MΩ/Km	nf/Km	μH/Ω
0.5	39	10	250	< 25
0.75	26	10	250	< 25
1	19.5	10	250	< 25
1.5	13.3	10	250	< 40
2.5	7.98	10	250	< 60

**POLYCAB BMS 500 MC-A7**  
BMS Cable shielded 500V



**Application**

Polycab BMS 500 MC-A7 cables generally are designed for transmission of analogue and digital signals in building management system. The cables conform to BS EN 50288-7 and are useful for controlling & monitoring of diverse applications inside the building.

**Voltage Rating**

500 V

**Operation Temperature**

Max.: PVC 70°C

**Construction**

- Flexible (Class 5) Copper conductor as per EN 60228
- Insulated with PVC Type A
- Collective screen Al/PET (Aluminium Polyester tape) with drain wire of tinned Cu
- Sheathed with Extruded PVC FRLS

**Core Identification**

- 2 Core-Red & Black
- 3 Core-Red, Black & Yellow-green
- 4 Core-Red, Yellow, Blue & Yellow-green
- 5 Core & above -White/Grey core with number printing

**Outer sheath colour:**

Blue

Note: As per the application/identification requirement, other colours are also available upon 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



**POLYCAB BMS 500 MC-A7**  
BMS Cable shielded 500V

**Weight & Dimension Data**

500 VOLTS, MULTI CORE, FLEX. COPPER, PVC TYPE-A INSULATED, ALUMINIUM MYLAR TAPED OVERALL SHIELDED, UNARMoured BMS CABLES AS PER EN 50288-7

Area of conductor	No.of core	Min. thickness of insulation	Nominal thickness of outer sheath	Nominal overall Diameter	Approx. weight
sqmm		mm	mm	mm	kg/km
0.5	2	0.44	0.85	5.56	42
0.5	3	0.44	0.87	5.87	51
0.5	4	0.44	0.88	6.38	61
0.5	5	0.44	0.90	6.92	72
0.5	6	0.44	0.93	7.50	83
0.5	7	0.44	0.93	7.50	90
0.5	8	0.44	0.96	8.37	103
0.5	10	0.44	1.00	9.44	125
0.5	12	0.44	1.01	9.74	142
0.5	16	0.44	1.05	10.79	178
0.5	18	0.44	1.07	11.37	197
0.5	19	0.44	1.07	11.37	205
0.5	20	0.44	1.09	12.01	217
0.5	24	0.44	1.14	13.31	257
0.75	2	0.44	0.87	6.01	50
0.75	3	0.44	0.88	6.35	62
0.75	4	0.44	0.90	6.91	75
0.75	5	0.44	0.93	7.52	89
0.75	6	0.44	0.95	8.16	103
0.75	7	0.44	0.95	8.16	113
0.75	8	0.44	0.99	9.13	130
0.75	10	0.44	1.03	10.32	158
0.75	12	0.44	1.04	10.67	181
0.75	16	0.44	1.09	11.83	230
0.75	18	0.44	1.11	12.48	255
0.75	19	0.44	1.11	12.48	265
0.75	20	0.44	1.14	13.19	281
0.75	24	0.44	1.19	14.63	333
1	2	0.44	0.88	6.38	58
1	3	0.44	0.90	6.76	72
1	4	0.44	0.92	7.36	89
1	5	0.44	0.95	8.02	106
1	6	0.44	0.97	8.72	123
1	7	0.44	0.97	8.72	135
1	8	0.44	1.01	9.78	156
1	10	0.44	1.06	11.07	190
1	12	0.44	1.07	11.44	218
1	16	0.44	1.12	12.71	279
1	18	0.44	1.14	13.41	310
1	19	0.44	1.14	13.41	322





