

POLYCAB BMS CABLE



BMS cable also known as Building management system cable, is used in Intelligent controller for monitoring and control of building utility system such as air conditioning, ventilation, lighting, hydraulics, etc. Functionally it links with individual unit of building equipment so that operation can be done in one complete integrated system. Such integrated systems require BMS cable to interconnect. The cables are supplied with EMI suppression facility with the help of metallic screen to provide noise free signal in BMS systems.

Polycab's BMS cables are preferred choice for Building management system applications.

The design of BMS cable is based on national & international standards as available to meet the service requirement.

The screening type of BMS cables designed and manufactured by POLYCAB, reduces the external noise pick up in the circuit, thereby reduces the interference.

POLYCAB is a leading manufacturer of a comprehensive range of BMS cables and we can offer the right product for right application.

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

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

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

Collective screen: Shielding type Aluminium-Mylar tape with tinned copper drain wire. Drain wire will have continuous contact with aluminum side of the tape. Shielding with ATC braiding can also be provided to meet the specific requirements.

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

POLYCAB BMS 300 MC-C4



POLYCAB BMS 500 MC-C4



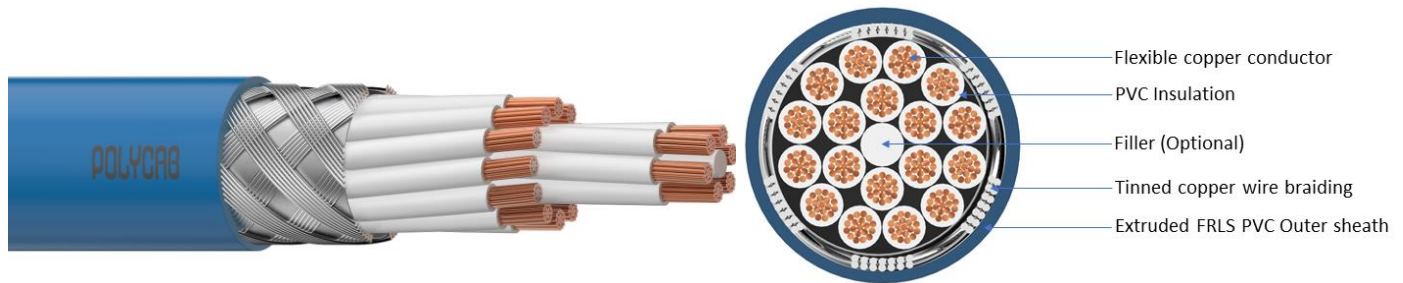
POLYCAB BMS 300 MC-A7



POLYCAB BMS 500 MC-A7



BMS Cable PVC Insulated Overall Braided 300V.



Application

POLYCAB BMS 300 MC-C4, Flexible copper conductor, PVC insulated, laid up with tinned copper braided and FRLS sheathed cable conforming to BS EN 50288-7 are designed for transmission of analogue and digital signals in Building management system. POLYCAB BMS 300 MC-C4 cables are used for diverse applications for control & monitoring of service provided within the building.

Voltage Rating

300 V

Bending Radius

12 x Overall diameter

Operation Temperature

Max.: PVC 70°C

Standard and References

EN 50288-7

EN 50288-1

EN 60228

EN 50290-2-22

EN 60332-1-2

Construction

- Flexible (Class 5) Copper conductor as per EN 60228
- Insulated with PVC Type A as per EN 50288-7
- Tinned copper wire braided.
- Sheathed with Extruded PVC FRLS as per EN 50290-2-22

Compliance

Conductor resistance - EN 60228

Insulation resistance - EN 50288-7

L/R Ratio - EN 50288-7

Mutual capacitance - EN 50288-7

Core Identification

White/Grey core with number printing.

Outer sheath colour: Blue

Note: As per the application/identification requirement, other colour also available on request.



OUR ACCREDITATION



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

OUR ACCREDITATION



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

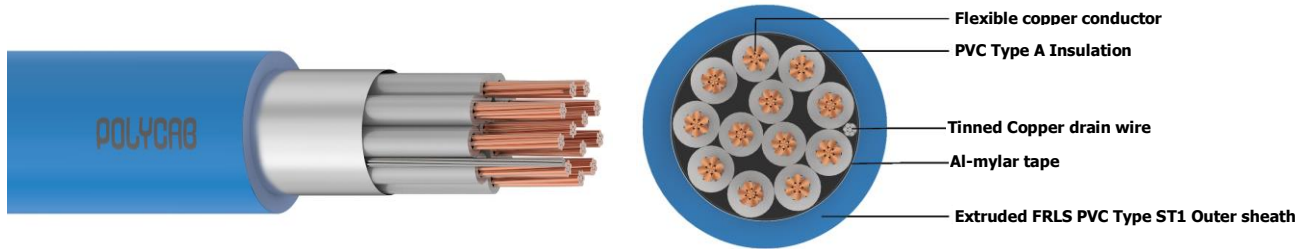
Electrical Parameter

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

OUR ACCREDITATION



BMS Cable shielded 300V



Application

POLYCAB BMS 300 MC-A7, Flexible copper conductor, PVC insulated, Al-mylar shielded unarmoured and FRLS sheathed cable conforming to EN 50288-7 are designed for transmission of analogue and digital signals in Building management system. POLYCAB BMS 300 MC-A7 cables are used for diverse applications for control & monitoring of service provided within the building.

Voltage Rating

300 V

Bending Radius

12 x Overall diameter

Operation Temperature

Max.: PVC 70°C

Standard and References

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

Construction

- Flexible (Class 5) Copper conductor as per EN 60228
- Insulated with PVC Type A as per EN 50288-7
- Collective screen Al/PET (Aluminium /Polyester tape) with drain wire of tinned Cu
- Sheathed with Extruded PVC FRLS

Compliance

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

Core Identification

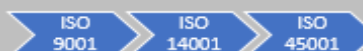
White/Grey core with number printing.



Outer sheath colour: Blue

Note: As per the application/identification requirement, other colour also available on request.

OUR ACCREDITATION



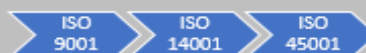
BMS Cable shielded 300V

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



BMS Cable shielded 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	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

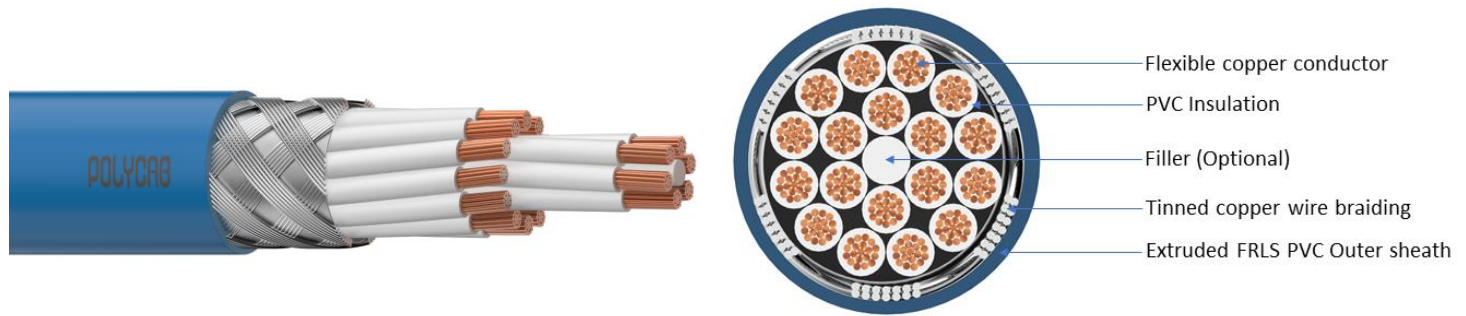
Electrical Parameter

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

OUR ACCREDITATION



BMS Cable PVC Insulated Overall Braided 500V.



Application

POLYCAB BMS 500 MC-C4, Flexible copper conductor, PVC insulated, laid up with tinned copper braided and FRLS sheathed cable conforming to BS EN 50288-7 are designed for transmission of analogue and digital signals in Building management system. POLYCAB BMS 500 MC-C4 cables are used for diverse applications for control & monitoring of service provided within the building.

Voltage Rating

500 V

Bending Radius

12 x Overall diameter

Operation Temperature

Max.: PVC 70°C

Standard and References

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

Construction

- Flexible (Class 5) Copper conductor as per EN 60228
- Insulated with PVC Type A as per EN 50288-7
- Tinned copper wire braided.
- Sheathed with Extruded PVC FRLS as per EN 50290-2-22

Compliance

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

Core Identification

White/Grey core with number printing.

Outer sheath colour: Blue

Note: As per the application/identification requirement, other colour also available on request.



OUR ACCREDITATION



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

OUR ACCREDITATION



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	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
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

OUR ACCREDITATION

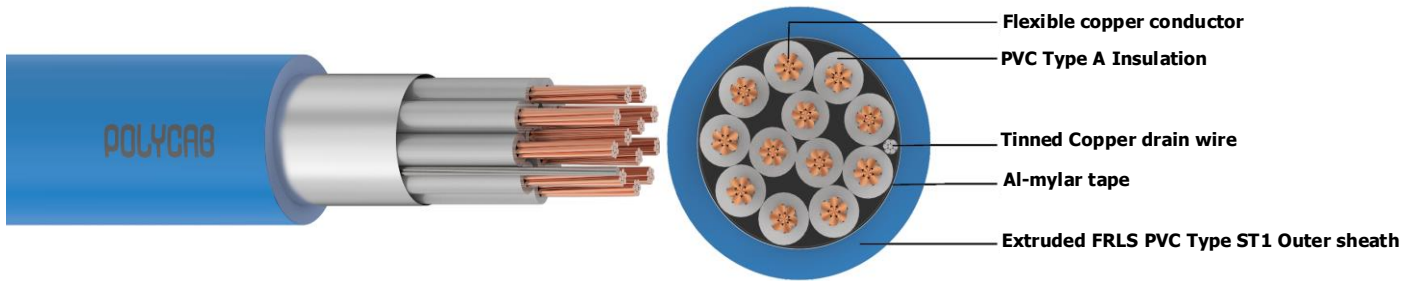
Electrical Parameter

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

OUR ACCREDITATION



BMS Cable shielded 500V



Application

POLYCAB BMS 500 MC-A7, Flexible copper conductor, PVC insulated, Al-mylar shielded unarmoured and FRLS sheathed cable conforming to EN 50288-7 are designed for transmission of analogue and digital signals in Building management system. POLYCAB BMS 500 MC-A7 cables are used for diverse applications for control & monitoring of service provided within the building.

Voltage Rating
500 V

Bending Radius
12 x Overall diameter

Operation Temperature
Max.: PVC 70°C

Standard and References
EN 50288-7
EN 50288-1
EN 60228
EN 60332-1-2

- Construction**
- Flexible (Class 5) Copper conductor as per EN 60228
 - Insulated with PVC Type A as per EN 50288-7
 - Collective screen Al/PET (Aluminium /Polyester tape) with drain wire of tinned Cu
 - Sheathed with Extruded PVC FRLS

Compliance

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

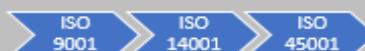
Core Identification
White/Grey core with number printing.

Outer sheath colour: Blue

Note: As per the application/identification requirement, other colour also available on request.



OUR ACCREDITATION



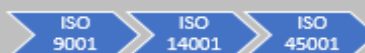
BMS Cable shielded 500V

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

OUR ACCREDITATION



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	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
1	20	0.44	1.17	14.18	342
1	24	0.44	1.23	15.75	406
1.5	2	0.44	0.91	6.97	71
1.5	3	0.44	0.92	7.39	91
1.5	4	0.44	0.95	8.07	113
1.5	5	0.44	0.97	8.81	135
1.5	6	0.44	1.00	9.60	158
1.5	7	0.44	1.00	9.60	175
1.5	8	0.44	1.05	10.79	201
1.5	10	0.44	1.10	12.24	248
1.5	12	0.44	1.12	12.66	286
1.5	16	0.44	1.17	14.08	367
1.5	18	0.44	1.20	14.88	409
1.5	19	0.44	1.20	14.88	426
1.5	20	0.44	1.23	15.75	452
1.5	24	0.44	1.30	17.51	539
2.5	2	0.53	0.96	8.34	102
2.5	3	0.53	0.98	8.87	134
2.5	4	0.53	1.01	9.73	168
2.5	5	0.53	1.04	10.66	203
2.5	6	0.53	1.08	11.66	240
2.5	7	0.53	1.08	11.66	268
2.5	8	0.53	1.14	13.15	309
2.5	10	0.53	1.20	14.98	382
2.5	12	0.53	1.22	15.51	443
2.5	16	0.53	1.29	17.30	574
2.5	18	0.53	1.33	18.30	641
2.5	19	0.53	1.33	18.30	669
2.5	20	0.53	1.37	19.40	709
2.5	24	0.53	1.45	21.62	848

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

OUR ACCREDITATION

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

OUR ACCREDITATION

