Control Cable

CU/PVC/CB/PET/PVC 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Control cables, also called control cables, are used for a wide range of automated applications in industrial processes including transmission, measurement, adjustment and control. These cables are generally flexible and suitable for mechanical stresses. These cables are produced in both shielded and non-shielded forms. Shielded cables are used in the presence of noise and other electrical or mechanical .disturbances

CONSTRUCTION

Conductor

Class 5 stranded copper conductors

Insulation

PVC (Polyvinyl Chloride)

CB

Copper Braid

Pet

Polyester tape

Sheath

PVC (Polyvinyl Chloride)

CHARACTERISTICS

Voltage Rating (U_0.U)

500 V

Dielectric strength

For 500 V rating ≥ 2.0KV_{ac} Or ≥ 3.0 KV_{dc}

Temperature Rating

Fixed: -20°C to +70°C

Flexed: -5°C to +70°C

Short Circuit Temperature

+160°C

Minimum Bending Radius

12 x Overall Diameter **for Multi Core**

15 x Overall Diameter **for Single Core**

Sheath Color

Black

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Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
2	0.5	RM	36.0	0.071	< 150	> 10	< 25	6.7	63
2	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.3	74
2	1	RM	18.1	0.133	< 150	> 10	< 25	7.5	81
2	1.5	RM	12.1	0.194	< 150	> 10	< 40	8.0	94
2	2.5	RM	7.41	0.315	< 150	> 10	< 60	9.7	143
3	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.1	75
3	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.7	90
3	1	RM	18.1	0.133	< 150	> 10	< 25	7.9	99
3	1.5	RM	12.1	0.194	< 150	> 10	< 40	8.7	123
3	2.5	RM	7.41	0.315	< 150	> 10	< 60	10.3	180
4	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.6	90
4	0.75	RM	24.5	0.102	< 150	> 10	< 25	8.5	113
4	1	RM	18.1	0.133	< 150	> 10	< 25	9.0	135
4	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.6	161
4	2.5	RM	7.41	0.315	< 150	> 10	< 60	11.3	229
5	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.4	113
5	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.4	148
5	1	RM	18.1	0.133	< 150	> 10	< 25	9.7	164
5	1.5	RM	12.1	0.194	< 150	> 10	< 40	10.3	197
5	2.5	RM	7.41	0.315	< 150	> 10	< 60	12.3	283
6	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.2	133
6	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.1	162
6	1	RM	18.1	0.133	< 150	> 10	< 25	10.4	179
6	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.3	221
6	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.3	312
7	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.2	142
7	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.1	172
7	1	RM	18.1	0.133	< 150	> 10	< 25	10.4	192
7	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.3	239
7	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.3	341

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NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
8	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.1	167
8	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.3	211
8	1	RM	18.1	0.133	< 150	> 10	< 25	11.7	232
8	1.5	RM	12.1	0.194	< 150	> 10	< 40	12.6	283
8	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.0	413
9	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.7	181
9	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.0	227
9	1	RM	18.1	0.133	< 150	> 10	< 25	12.4	254
9	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.3	313
9	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.9	453
10	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.4	199
10	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.6	241
10	1	RM	18.1	0.133	< 150	> 10	< 25	13.0	270
10	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.2	336
10	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.0	489
12	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.7	219
12	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.0	269
12	1	RM	18.1	0.133	< 150	> 10	< 25	13.4	299
12	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.6	378
12	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.5	557
14	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.3	244
14	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.8	305
14	1	RM	18.1	0.133	< 150	> 10	< 25	14.2	342
14	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.3	423
14	2.5	RM	7.41	0.315	< 150	> 10	< 60	18.4	625
16	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.9	273
16	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.5	346
16	1	RM	18.1	0.133	< 150	> 10	< 25	15.0	392
16	1.5	RM	12.1	0.194	< 150	> 10	< 40	16.1	479
16	2.5	RM	7.41	0.315	< 150	> 10	< 60	20.0	775

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NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
19	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.7	276
19	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.2	344
19	1	RM	18.1	0.133	< 150	> 10	< 25	15.7	390
19	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.1	498
19	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.0	797
20	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.3	332
20	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.9	411
20	1	RM	18.1	0.133	< 150	> 10	< 25	16.6	473
20	1.5	RM	12.1	0.194	< 150	> 10	< 40	18.0	588
20	2.5	RM	7.41	0.315	< 150	> 10	< 60	22.2	939
22	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.0	355
22	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.8	450
22	1	RM	18.1	0.133	< 150	> 10	< 25	17.4	515
22	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.4	691
22	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.3	1012
24	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.7	380
24	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.7	480
24	1	RM	18.1	0.133	< 150	> 10	< 25	18.3	539
24	1.5	RM	12.1	0.194	< 150	> 10	< 40	20.4	740
24	2.5	RM	7.41	0.315	< 150	> 10	< 60	24.7	1104
27	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.0	408
27	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.1	518
27	1	RM	18.1	0.133	< 150	> 10	< 25	19.3	650
27	1.5	RM	12.1	0.194	< 150	> 10	< 40	20.8	793
27	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.2	1191
30	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.8	448
30	0.75	RM	24.5	0.102	< 150	> 10	< 25	19.3	616
30	1	RM	18.1	0.133	< 150	> 10	< 25	19.9	698
30	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.5	871
30	2.5	RM	7.41	0.315	< 150	> 10	< 60	26.1	1301

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NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
37	0.5	RM	36.0	0.071	< 150	> 10	< 25	18.0	523
37	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.7	728
37	1	RM	18.1	0.133	< 150	> 10	< 25	21.4	826
37	1.5	RM	12.1	0.194	< 150	> 10	< 40	23.3	1033
37	2.5	RM	7.41	0.315	< 150	> 10	< 60	28.3	1552
42	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.9	655
42	0.75	RM	24.5	0.102	< 150	> 10	< 25	22.3	829
42	1	RM	18.1	0.133	< 150	> 10	< 25	23.1	945
42	1.5	RM	12.1	0.194	< 150	> 10	< 40	25.2	1183
42	2.5	RM	7.41	0.315	< 150	> 10	< 60	31.0	1859
47	0.5	RM	36.0	0.071	< 150	> 10	< 25	20.6	702
47	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.2	886
47	1	RM	18.1	0.133	< 150	> 10	< 25	24.0	1008
47	1.5	RM	12.1	0.194	< 150	> 10	< 40	26.2	1283
47	2.5	RM	7.41	0.315	< 150	> 10	< 60	31.8	1938
54	0.5	RM	36.0	0.071	< 150	> 10	< 25	22.3	817
54	0.75	RM	24.5	0.102	< 150	> 10	< 25	25.1	1029
54	1	RM	18.1	0.133	< 150	> 10	< 25	26.0	1177
54	1.5	RM	12.1	0.194	< 150	> 10	< 40	28.3	1490
54	2.5	RM	7.41	0.315	< 150	> 10	< 60	34.8	2342
60	0.5	RM	36.0	0.071	< 150	> 10	< 25	22.9	875
60	0.75	RM	24.5	0.102	< 150	> 10	< 25	25.8	1105
60	1	RM	18.1	0.133	< 150	> 10	< 25	26.7	1257
60	1.5	RM	12.1	0.194	< 150	> 10	< 40	29.1	1592
60	2.5	RM	7.41	0.315	< 150	> 10	< 60	36.0	2527

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CABLE STANDARDS

BS EN 50288-7

APPLICATION

Control cables, also called control cables, are used for a wide range of automated applications in industrial processes including transmission, measurement, adjustment and control. These cables are generally flexible and suitable for mechanical stresses. These cables are produced in both shielded and non-shielded forms. Shielded cables are used in the presence of noise and other electrical or mechanical .disturbances

CONSTRUCTION

Conductor

Class 2 stranded copper conductors

Insulation

PVC (Polyvinyl Chloride)

CB

Copper Braid

Pet

Polyester tape

Sheath

PVC (Polyvinyl Chloride)

CHARACTERISTICS

Voltage Rating ($U_0.U$)

500 V

Dielectric strength

For 500 V rating ≥ 2.0KV_{ac} Or ≥ 3.0 KV_{dc}

Temperature Rating

Fixed: -20°C to +70°C

Flexed: -5°C to +70°C

Short Circuit Temperature

+160°C

Minimum Bending Radius

12 x Overall Diameter **for Multi Core**

15 x Overall Diameter **for Single Core**

Sheath Color

Black

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2	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.1	70
2	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.4	79
2	1	RM	18.1	0.133	< 150	> 10	< 25	7.8	88
2	1.5	RM	12.1	0.194	< 150	> 10	< 40	8.5	110
2	2.5	RM	7.41	0.315	< 150	> 10	< 60	10.0	154
3	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.4	83
3	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.8	94
3	1	RM	18.1	0.133	< 150	> 10	< 25	8.4	111
3	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.2	143
3	2.5	RM	7.41	0.315	< 150	> 10	< 60	10.5	194
4	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.0	90
4	0.75	RM	24.5	0.102	< 150	> 10	< 25	8.6	111
4	1	RM	18.1	0.133	< 150	> 10	< 25	9.2	137
4	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.9	169
4	2.5	RM	7.41	0.315	< 150	> 10	< 60	11.6	239
5	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.0	134
5	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.4	152
5	1	RM	18.1	0.133	< 150	> 10	< 25	9.9	173
5	1.5	RM	12.1	0.194	< 150	> 10	< 40	10.7	212
5	2.5	RM	7.41	0.315	< 150	> 10	< 60	12.6	300
6	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.7	146
6	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.1	166
6	1	RM	18.1	0.133	< 150	> 10	< 25	10.7	190
6	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.7	240
6	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.8	339
7	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.7	156
7	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.1	178
7	1	RM	18.1	0.133	< 150	> 10	< 25	10.7	205
7	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.7	261
7	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.8	371

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8	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.7	182
8	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.4	219
8	1	RM	18.1	0.133	< 150	> 10	< 25	12.1	247
8	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.0	307
8	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.4	440
9	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.4	206
9	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.1	236
9	1	RM	18.1	0.133	< 150	> 10	< 25	12.8	273
9	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.0	347
9	2.5	RM	7.41	0.315	< 150	> 10	< 60	16.5	492
10	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.1	215
10	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.7	251
10	1	RM	18.1	0.133	< 150	> 10	< 25	13.7	296
10	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.8	365
10	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.5	527
12	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.5	242
12	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.1	282
12	1	RM	18.1	0.133	< 150	> 10	< 25	14.1	334
12	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.3	419
12	2.5	RM	7.41	0.315	< 150	> 10	< 60	18.1	599
14	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.0	268
14	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.9	321
14	1	RM	18.1	0.133	< 150	> 10	< 25	14.8	370
14	1.5	RM	12.1	0.194	< 150	> 10	< 40	16.0	466
14	2.5	RM	7.41	0.315	< 150	> 10	< 60	19.5	730
16	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.8	307
16	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.6	358
16	1	RM	18.1	0.133	< 150	> 10	< 25	15.5	420
16	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.0	536
16	2.5	RM	7.41	0.315	< 150	> 10	< 60	20.5	829

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19	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.5	340
19	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.3	398
19	1	RM	18.1	0.133	< 150	> 10	< 25	16.4	473
19	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.8	604
19	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.8	937
20	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.2	361
20	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.0	430
20	1	RM	18.1	0.133	< 150	> 10	< 25	17.2	507
20	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.3	701
20	2.5	RM	7.41	0.315	< 150	> 10	< 60	22.8	1012
22	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.8	403
22	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.0	485
22	1	RM	18.1	0.133	< 150	> 10	< 25	18.0	571
22	1.5	RM	12.1	0.194	< 150	> 10	< 40	20.2	791
22	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.9	1136
24	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.9	426
24	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.9	501
24	1	RM	18.1	0.133	< 150	> 10	< 25	19.6	645
24	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.2	815
24	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.4	1174
27	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.2	459
27	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.2	541
27	1	RM	18.1	0.133	< 150	> 10	< 25	20.0	693
27	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.9	895
27	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.9	1287
30	0.5	RM	36.0	0.071	< 150	> 10	< 25	18.2	538
30	0.75	RM	24.5	0.102	< 150	> 10	< 25	19.4	647
30	1	RM	18.1	0.133	< 150	> 10	< 25	20.6	756
30	1.5	RM	12.1	0.194	< 150	> 10	< 40	22.6	968
30	2.5	RM	7.41	0.315	< 150	> 10	< 60	26.8	1398

OFOGH ALBORZ INDUSTRIAL GROUP

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Control Cable

CU/PVC/CB/PET/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
37	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.7	644
37	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.8	758
37	1	RM	18.1	0.133	< 150	> 10	< 25	22.4	901
37	1.5	RM	12.1	0.194	< 150	> 10	< 40	24.5	1159
37	2.5	RM	7.41	0.315	< 150	> 10	< 60	29.1	1671
42	0.5	RM	36.0	0.071	< 150	> 10	< 25	21.1	716
42	0.75	RM	24.5	0.102	< 150	> 10	< 25	22.5	868
42	1	RM	18.1	0.133	< 150	> 10	< 25	23.9	1014
42	1.5	RM	12.1	0.194	< 150	> 10	< 40	26.2	1299
42	2.5	RM	7.41	0.315	< 150	> 10	< 60	31.8	2006
47	0.5	RM	36.0	0.071	< 150	> 10	< 25	22.1	792
47	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.4	936
47	1	RM	18.1	0.133	< 150	> 10	< 25	25.1	1118
47	1.5	RM	12.1	0.194	< 150	> 10	< 40	27.5	1434
47	2.5	RM	7.41	0.315	< 150	> 10	< 60	33.4	2197
54	0.5	RM	36.0	0.071	< 150	> 10	< 25	23.6	894
54	0.75	RM	24.5	0.102	< 150	> 10	< 25	25.3	1073
54	1	RM	18.1	0.133	< 150	> 10	< 25	26.9	1260
54	1.5	RM	12.1	0.194	< 150	> 10	< 40	29.5	1621
54	2.5	RM	7.41	0.315	< 150	> 10	< 60	36.0	2505
60	0.5	RM	36.0	0.071	< 150	> 10	< 25	24.5	811
60	0.75	RM	24.5	0.102	< 150	> 10	< 25	26.0	1014
60	1	RM	18.1	0.133	< 150	> 10	< 25	27.9	1259
60	1.5	RM	12.1	0.194	< 150	> 10	< 40	30.9	1804
60	2.5	RM	7.41	0.315	< 150	> 10	< 60	37.0	2678

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OFOGH ALBORZ INDUSTRIAL GROUP

Control Cable

CU/PVC/PET/PVC 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Control cables, also called control cables, are used for a wide range of automated applications in industrial processes including transmission, measurement, adjustment and control. These cables are generally flexible and suitable for mechanical stresses. These cables are produced in both shielded and non-shielded forms. Shielded cables are used in the presence of noise and other electrical or mechanical .disturbances

CONSTRUCTION

Conductor

Class 5 stranded copper conductors

Insulation

PVC (Polyvinyl Chloride)

Pet

Polyester tape

Sheath

PVC (Polyvinyl Chloride)

CHARACTERISTICS

Voltage Rating ($U_0.U$)

500 V

Dielectric strength

For 500 V rating ≥ 2.0KV_{ac} Or ≥ 3.0 KV_{dc}

Temperature Rating

Fixed: -20°C to +70°C

Flexed: -5°C to +70°C

Short Circuit Temperature

+160°C

Minimum Bending Radius

12 x Overall Diameter **for Multi Core**

15 x Overall Diameter **for Single Core**

Sheath Color

Black

OFOGH ALBORZ INDUSTRIAL GROUP

OFOGH ALBORZ INDUSTRIAL GROUP

Control Cable

CU/PVC/PET/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
2	0.5	RM	36.0	0.071	< 150	> 10	< 25	6.0	43
2	0.75	RM	24.5	0.102	< 150	> 10	< 25	6.6	52
2	1	RM	18.1	0.133	< 150	> 10	< 25	6.8	58
2	1.5	RM	12.1	0.194	< 150	> 10	< 40	7.3	70
2	2.5	RM	7.41	0.315	< 150	> 10	< 60	8.8	103
3	0.5	RM	36.0	0.071	< 150	> 10	< 25	6.3	53
3	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.0	65
3	1	RM	18.1	0.133	< 150	> 10	< 25	7.2	74
3	1.5	RM	12.1	0.194	< 150	> 10	< 40	7.8	90
3	2.5	RM	7.41	0.315	< 150	> 10	< 60	9.4	135
4	0.5	RM	36.0	0.071	< 150	> 10	< 25	6.9	65
4	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.6	80
4	1	RM	18.1	0.133	< 150	> 10	< 25	7.8	91
4	1.5	RM	12.1	0.194	< 150	> 10	< 40	8.7	117
4	2.5	RM	7.41	0.315	< 150	> 10	< 60	10.2	170
5	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.5	79
5	0.75	RM	24.5	0.102	< 150	> 10	< 25	8.5	103
5	1	RM	18.1	0.133	< 150	> 10	< 25	8.7	117
5	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.4	145
5	2.5	RM	7.41	0.315	< 150	> 10	< 60	11.4	219
6	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.3	92
6	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.2	115
6	1	RM	18.1	0.133	< 150	> 10	< 25	9.5	131
6	1.5	RM	12.1	0.194	< 150	> 10	< 40	10.2	163
6	2.5	RM	7.41	0.315	< 150	> 10	< 60	12.4	246
7	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.3	101
7	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.2	126
7	1	RM	18.1	0.133	< 150	> 10	< 25	9.5	145
7	1.5	RM	12.1	0.194	< 150	> 10	< 40	10.2	182
7	2.5	RM	7.41	0.315	< 150	> 10	< 60	12.4	277

OFOGH ALBORZ INDUSTRIAL GROUP

OFOGH ALBORZ INDUSTRIAL GROUP

Control Cable

CU/PVC/PET/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
8	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.9	104
8	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.9	146
8	1	RM	18.1	0.133	< 150	> 10	< 25	10.2	167
8	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.3	216
8	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.4	320
9	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.5	125
9	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.6	158
9	1	RM	18.1	0.133	< 150	> 10	< 25	11.2	187
9	1.5	RM	12.1	0.194	< 150	> 10	< 40	12.1	236
9	2.5	RM	7.41	0.315	< 150	> 10	< 60	14.6	359
10	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.3	139
10	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.7	180
10	1	RM	18.1	0.133	< 150	> 10	< 25	12.1	207
10	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.1	260
10	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.9	395
12	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.6	158
12	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.1	206
12	1	RM	18.1	0.133	< 150	> 10	< 25	12.5	238
12	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.7	307
12	2.5	RM	7.41	0.315	< 150	> 10	< 60	16.6	466
14	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.4	184
14	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.7	233
14	1	RM	18.1	0.133	< 150	> 10	< 25	13.2	270
14	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.4	349
14	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.5	532
16	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.0	210
16	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.4	266
16	1	RM	18.1	0.133	< 150	> 10	< 25	14.0	316
16	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.2	400
16	2.5	RM	7.41	0.315	< 150	> 10	< 60	18.5	611

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OFOGH ALBORZ INDUSTRIAL GROUP

Control Cable

CU/PVC/PET/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
19	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.6	235
19	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.3	306
19	1	RM	18.1	0.133	< 150	> 10	< 25	14.8	355
19	1.5	RM	12.1	0.194	< 150	> 10	< 40	16.0	452
19	2.5	RM	7.41	0.315	< 150	> 10	< 60	19.7	705
20	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.2	252
20	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.0	329
20	1	RM	18.1	0.133	< 150	> 10	< 25	15.5	381
20	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.1	494
20	2.5	RM	7.41	0.315	< 150	> 10	< 60	20.7	756
22	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.0	281
22	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.7	357
22	1	RM	18.1	0.133	< 150	> 10	< 25	16.5	423
22	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.9	538
22	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.9	835
24	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.8	298
24	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.8	388
24	1	RM	18.1	0.133	< 150	> 10	< 25	17.4	451
24	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.1	584
24	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.2	891
27	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.1	326
27	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.2	425
27	1	RM	18.1	0.133	< 150	> 10	< 25	17.8	495
27	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.5	643
27	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.7	984
30	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.7	356
30	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.8	464
30	1	RM	18.1	0.133	< 150	> 10	< 25	18.4	541
30	1.5	RM	12.1	0.194	< 150	> 10	< 40	20.2	704
30	2.5	RM	7.41	0.315	< 150	> 10	< 60	24.8	1094

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Control Cable

CU/PVC/PET/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20°C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
37	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.1	434
37	0.75	RM	24.5	0.102	< 150	> 10	< 25	19.4	565
37	1	RM	18.1	0.133	< 150	> 10	< 25	20.1	660
37	1.5	RM	12.1	0.194	< 150	> 10	< 40	22.0	858
37	2.5	RM	7.41	0.315	< 150	> 10	< 60	26.8	1319
42	0.5	RM	36.0	0.071	< 150	> 10	< 25	18.3	475
42	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.8	621
42	1	RM	18.1	0.133	< 150	> 10	< 25	21.8	738
42	1.5	RM	12.1	0.194	< 150	> 10	< 40	23.7	950
42	2.5	RM	7.41	0.315	< 150	> 10	< 60	29.0	1481
47	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.3	545
47	0.75	RM	24.5	0.102	< 150	> 10	< 25	21.9	710
47	1	RM	18.1	0.133	< 150	> 10	< 25	22.7	830
47	1.5	RM	12.1	0.194	< 150	> 10	< 40	24.9	1080
47	2.5	RM	7.41	0.315	< 150	> 10	< 60	30.5	1677
54	0.5	RM	36.0	0.071	< 150	> 10	< 25	20.8	612
54	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.6	801
54	1	RM	18.1	0.133	< 150	> 10	< 25	24.6	950
54	1.5	RM	12.1	0.194	< 150	> 10	< 40	26.8	1224
54	2.5	RM	7.41	0.315	< 150	> 10	< 60	33.1	1923
60	0.5	RM	36.0	0.071	< 150	> 10	< 25	21.4	659
60	0.75	RM	24.5	0.102	< 150	> 10	< 25	24.5	873
60	1	RM	18.1	0.133	< 150	> 10	< 25	25.4	1025
60	1.5	RM	12.1	0.194	< 150	> 10	< 40	27.8	1338
60	2.5	RM	7.41	0.315	< 150	> 10	< 60	34.1	2084

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Control Cable

CU/PVC/PET/PVC 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Control cables, also called control cables, are used for a wide range of automated applications in industrial processes including transmission, measurement, adjustment and control. These cables are generally flexible and suitable for mechanical stresses. These cables are produced in both shielded and non-shielded forms. Shielded cables are used in the presence of noise and other electrical or mechanical .disturbances

CONSTRUCTION

Conductor

Class 2 stranded copper conductors

Insulation

PVC (Polyvinyl Chloride)

Pet

Polyester tape

Sheath

PVC (Polyvinyl Chloride)

CHARACTERISTICS

Voltage Rating ($U_0.U$)

500 V

Dielectric strength

For 500 V rating ≥ 2.0KV_{ac} Or ≥ 3.0 KV_{dc}

Temperature Rating

Fixed: -20°C to +70°C

Flexed: -5°C to +70°C

Short Circuit Temperature

+160°C

Minimum Bending Radius

12 x Overall Diameter **for Multi Core**

15 x Overall Diameter **for Single Core**

Sheath Color

Black

OFOGH ALBORZ INDUSTRIAL GROUP

Control Cable

CU/PVC/PET/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
2	0.5	RM	36.0	0.071	< 150	> 10	< 25	6.3	48
2	0.75	RM	24.5	0.102	< 150	> 10	< 25	6.6	54
2	1	RM	18.1	0.133	< 150	> 10	< 25	7.0	63
2	1.5	RM	12.1	0.194	< 150	> 10	< 40	7.6	77
2	2.5	RM	7.41	0.315	< 150	> 10	< 60	9.0	112
3	0.5	RM	36.0	0.071	< 150	> 10	< 25	6.7	60
3	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.0	69
3	1	RM	18.1	0.133	< 150	> 10	< 25	7.4	80
3	1.5	RM	12.1	0.194	< 150	> 10	< 40	8.0	101
3	2.5	RM	7.41	0.315	< 150	> 10	< 60	9.6	147
4	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.3	72
4	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.6	84
4	1	RM	18.1	0.133	< 150	> 10	< 25	8.3	104
4	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.0	130
4	2.5	RM	7.41	0.315	< 150	> 10	< 60	10.5	185
5	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.9	89
5	0.75	RM	24.5	0.102	< 150	> 10	< 25	8.4	108
5	1	RM	18.1	0.133	< 150	> 10	< 25	9.0	128
5	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.8	162
5	2.5	RM	7.41	0.315	< 150	> 10	< 60	11.7	239
6	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.7	103
6	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.1	121
6	1	RM	18.1	0.133	< 150	> 10	< 25	9.8	143
6	1.5	RM	12.1	0.194	< 150	> 10	< 40	10.6	182
6	2.5	RM	7.41	0.315	< 150	> 10	< 60	12.7	269
7	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.7	113
7	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.1	133
7	1	RM	18.1	0.133	< 150	> 10	< 25	9.8	158
7	1.5	RM	12.1	0.194	< 150	> 10	< 40	10.6	203
7	2.5	RM	7.41	0.315	< 150	> 10	< 60	12.7	301

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Control Cable

CU/PVC/PET/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
8	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.4	130
8	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.9	153
8	1	RM	18.1	0.133	< 150	> 10	< 25	10.6	183
8	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.7	242
8	2.5	RM	7.41	0.315	< 150	> 10	< 60	14.0	357
9	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.1	144
9	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.6	170
9	1	RM	18.1	0.133	< 150	> 10	< 25	11.6	210
9	1.5	RM	12.1	0.194	< 150	> 10	< 40	12.6	268
9	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.1	397
10	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.1	161
10	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.7	190
10	1	RM	18.1	0.133	< 150	> 10	< 25	12.6	226
10	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.9	298
10	2.5	RM	7.41	0.315	< 150	> 10	< 60	16.6	439
12	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.5	172
12	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.0	205
12	1	RM	18.1	0.133	< 150	> 10	< 25	12.9	247
12	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.3	328
12	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.1	488
14	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.1	195
14	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.6	232
14	1	RM	18.1	0.133	< 150	> 10	< 25	13.8	287
14	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.0	374
14	2.5	RM	7.41	0.315	< 150	> 10	< 60	18.0	558
16	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.7	229
16	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.3	273
16	1	RM	18.1	0.133	< 150	> 10	< 25	14.6	337
16	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.8	438
16	2.5	RM	7.41	0.315	< 150	> 10	< 60	19.2	664

OFOGH ALBORZ INDUSTRIAL GROUP

OFOGH ALBORZ INDUSTRIAL GROUP

Control Cable

CU/PVC/PET/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
19	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.1	243
19	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.6	293
19	1	RM	18.1	0.133	< 150	> 10	< 25	13.8	363
19	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.0	479
19	2.5	RM	7.41	0.315	< 150	> 10	< 60	18.0	720
20	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.2	283
20	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.9	338
20	1	RM	18.1	0.133	< 150	> 10	< 25	16.1	408
20	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.8	542
20	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.3	809
22	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.9	307
22	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.7	367
22	1	RM	18.1	0.133	< 150	> 10	< 25	17.1	453
22	1.5	RM	12.1	0.194	< 150	> 10	< 40	18.6	590
22	2.5	RM	7.41	0.315	< 150	> 10	< 60	22.6	893
24	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.8	318
24	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.7	390
24	1	RM	18.1	0.133	< 150	> 10	< 25	18.1	472
24	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.9	628
24	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.9	939
27	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.1	349
27	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.1	428
27	1	RM	18.1	0.133	< 150	> 10	< 25	18.5	520
27	1.5	RM	12.1	0.194	< 150	> 10	< 40	20.3	694
27	2.5	RM	7.41	0.315	< 150	> 10	< 60	24.6	1051
30	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.9	389
30	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.7	469
30	1	RM	18.1	0.133	< 150	> 10	< 25	19.3	579
30	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.1	762
30	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.5	1155

OFOGH ALBORZ INDUSTRIAL GROUP

OFOGH ALBORZ INDUSTRIAL GROUP

Control Cable

CU/PVC/PET/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
37	0.5	RM	36.0	0.071	< 150	> 10	< 25	18.2	430
37	0.75	RM	24.5	0.102	< 150	> 10	< 25	19.3	534
37	1	RM	18.1	0.133	< 150	> 10	< 25	20.8	653
37	1.5	RM	12.1	0.194	< 150	> 10	< 40	23.0	881
37	2.5	RM	7.41	0.315	< 150	> 10	< 60	27.8	1338
42	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.7	549
42	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.7	662
42	1	RM	18.1	0.133	< 150	> 10	< 25	22.6	816
42	1.5	RM	12.1	0.194	< 150	> 10	< 40	24.9	1086
42	2.5	RM	7.41	0.315	< 150	> 10	< 60	30.1	1641
47	0.5	RM	36.0	0.071	< 150	> 10	< 25	20.6	586
47	0.75	RM	24.5	0.102	< 150	> 10	< 25	21.8	719
47	1	RM	18.1	0.133	< 150	> 10	< 25	23.6	877
47	1.5	RM	12.1	0.194	< 150	> 10	< 40	26.0	1172
47	2.5	RM	7.41	0.315	< 150	> 10	< 60	31.4	1776
54	0.5	RM	36.0	0.071	< 150	> 10	< 25	22.3	706
54	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.4	851
54	1	RM	18.1	0.133	< 150	> 10	< 25	25.6	1050
54	1.5	RM	12.1	0.194	< 150	> 10	< 40	28.2	1397
54	2.5	RM	7.41	0.315	< 150	> 10	< 60	34.1	2111
60	0.5	RM	36.0	0.071	< 150	> 10	< 25	23.0	758
60	0.75	RM	24.5	0.102	< 150	> 10	< 25	24.1	917
60	1	RM	18.1	0.133	< 150	> 10	< 25	26.4	1132
60	1.5	RM	12.1	0.194	< 150	> 10	< 40	29.0	1511
60	2.5	RM	7.41	0.315	< 150	> 10	< 60	35.3	2305

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OFOGH ALBORZ INDUSTRIAL GROUP

Control Cable

CU/PVC/PET/TCB/FOIL/PVC 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Control cables, also called control cables, are used for a wide range of automated applications in industrial processes including transmission, measurement, adjustment and control. These cables are generally flexible and suitable for mechanical stresses. These cables are produced in both shielded and non-shielded forms. Shielded cables are used in the presence of noise and other electrical or mechanical .disturbances

CONSTRUCTION

Conductor

Class 5 stranded copper conductors

Insulation

PVC (Polyvinyl Chloride)

Pet

Polyester tape

TCB

Tinned Copper Braid

FOIL

FOIL (Aluminum Backed polyester)

Sheath

PVC (Polyvinyl Chloride)

CHARACTERISTICS

Voltage Rating ($U_0.U$)

500 V

Dielectric strength

For 500 V rating ≥ 2.0KV_{ac} Or ≥ 3.0 KV_{dc}

Temperature Rating

Fixed: -20°C to +70°C

Flexed: -5°C to +70°C

Short Circuit Temperature

+160°C

Minimum Bending Radius

12 x Overall Diameter **for Multi Core**

15 x Overall Diameter **for Single Core**

Sheath Color

Black

OFOGH ALBORZ INDUSTRIAL GROUP

Control Cable

CU/PVC/PET/TCB/FOIL/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
2	0.5	RM	36.0	0.071	< 150	> 10	< 25	6.9	58
2	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.5	68
2	1	RM	18.1	0.133	< 150	> 10	< 25	7.7	74
2	1.5	RM	12.1	0.194	< 150	> 10	< 40	8.4	91
2	2.5	RM	7.41	0.315	< 150	> 10	< 60	9.9	129
3	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.2	68
3	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.8	82
3	1	RM	18.1	0.133	< 150	> 10	< 25	8.0	91
3	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.0	118
3	2.5	RM	7.41	0.315	< 150	> 10	< 60	10.4	162
4	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.7	82
4	0.75	RM	24.5	0.102	< 150	> 10	< 25	8.6	104
4	1	RM	18.1	0.133	< 150	> 10	< 25	9.1	119
4	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.7	143
4	2.5	RM	7.41	0.315	< 150	> 10	< 60	11.5	208
5	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.5	103
5	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.5	130
5	1	RM	18.1	0.133	< 150	> 10	< 25	9.8	148
5	1.5	RM	12.1	0.194	< 150	> 10	< 40	10.4	177
5	2.5	RM	7.41	0.315	< 150	> 10	< 60	12.4	257
6	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.3	117
6	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.2	143
6	1	RM	18.1	0.133	< 150	> 10	< 25	10.5	159
6	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.5	202
6	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.4	285
7	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.3	126
7	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.2	154
7	1	RM	18.1	0.133	< 150	> 10	< 25	10.5	173
7	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.5	221
7	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.4	315

OFOGH ALBORZ INDUSTRIAL GROUP

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Control Cable

CU/PVC/PET/TCB/FOIL/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
8	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.2	149
8	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.5	189
8	1	RM	18.1	0.133	< 150	> 10	< 25	11.8	211
8	1.5	RM	12.1	0.194	< 150	> 10	< 40	12.7	257
8	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.1	377
9	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.0	167
9	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.1	205
9	1	RM	18.1	0.133	< 150	> 10	< 25	12.5	230
9	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.4	285
9	2.5	RM	7.41	0.315	< 150	> 10	< 60	16.0	416
10	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.6	175
10	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.8	215
10	1	RM	18.1	0.133	< 150	> 10	< 25	13.2	245
10	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.4	308
10	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.2	452
12	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.9	198
12	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.1	241
12	1	RM	18.1	0.133	< 150	> 10	< 25	13.7	282
12	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.8	348
12	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.7	515
14	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.4	219
14	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.9	280
14	1	RM	18.1	0.133	< 150	> 10	< 25	14.4	315
14	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.5	391
14	2.5	RM	7.41	0.315	< 150	> 10	< 60	18.5	587
16	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.0	246
16	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.6	314
16	1	RM	18.1	0.133	< 150	> 10	< 25	15.1	357
16	1.5	RM	12.1	0.194	< 150	> 10	< 40	16.4	457
16	2.5	RM	7.41	0.315	< 150	> 10	< 60	20.1	701

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OFOGH ALBORZ INDUSTRIAL GROUP

Control Cable

CU/PVC/PET/TCB/FOIL/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
19	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.8	280
19	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.3	348
19	1	RM	18.1	0.133	< 150	> 10	< 25	15.8	402
19	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.3	510
19	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.1	787
20	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.4	303
20	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.0	376
20	1	RM	18.1	0.133	< 150	> 10	< 25	16.8	438
20	1.5	RM	12.1	0.194	< 150	> 10	< 40	18.1	545
20	2.5	RM	7.41	0.315	< 150	> 10	< 60	22.3	863
22	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.1	326
22	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.0	415
22	1	RM	18.1	0.133	< 150	> 10	< 25	17.5	473
22	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.5	630
22	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.4	934
24	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.9	345
24	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.9	439
24	1	RM	18.1	0.133	< 150	> 10	< 25	18.5	502
24	1.5	RM	12.1	0.194	< 150	> 10	< 40	20.6	669
24	2.5	RM	7.41	0.315	< 150	> 10	< 60	24.9	1007
27	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.4	382
27	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.2	476
27	1	RM	18.1	0.133	< 150	> 10	< 25	19.4	587
27	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.0	728
27	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.4	1101
30	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.9	412
30	0.75	RM	24.5	0.102	< 150	> 10	< 25	19.4	556
30	1	RM	18.1	0.133	< 150	> 10	< 25	20.1	635
30	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.9	803
30	2.5	RM	7.41	0.315	< 150	> 10	< 60	26.2	1200

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Control Cable

CU/PVC/PET/TCB/FOIL/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
37	0.5	RM	36.0	0.071	< 150	> 10	< 25	18.1	489
37	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.8	651
37	1	RM	18.1	0.133	< 150	> 10	< 25	21.5	747
37	1.5	RM	12.1	0.194	< 150	> 10	< 40	23.5	958
37	2.5	RM	7.41	0.315	< 150	> 10	< 60	28.4	1457
42	0.5	RM	36.0	0.071	< 150	> 10	< 25	20.0	594
42	0.75	RM	24.5	0.102	< 150	> 10	< 25	22.5	742
42	1	RM	18.1	0.133	< 150	> 10	< 25	23.2	859
42	1.5	RM	12.1	0.194	< 150	> 10	< 40	25.3	1092
42	2.5	RM	7.41	0.315	< 150	> 10	< 60	31.1	1699
47	0.5	RM	36.0	0.071	< 150	> 10	< 25	20.8	638
47	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.4	810
47	1	RM	18.1	0.133	< 150	> 10	< 25	24.2	932
47	1.5	RM	12.1	0.194	< 150	> 10	< 40	26.4	1188
47	2.5	RM	7.41	0.315	< 150	> 10	< 60	32.6	1873
54	0.5	RM	36.0	0.071	< 150	> 10	< 25	22.4	741
54	0.75	RM	24.5	0.102	< 150	> 10	< 25	25.2	942
54	1	RM	18.1	0.133	< 150	> 10	< 25	26.1	1084
54	1.5	RM	12.1	0.194	< 150	> 10	< 40	28.4	1386
54	2.5	RM	7.41	0.315	< 150	> 10	< 60	34.9	2150
60	0.5	RM	36.0	0.071	< 150	> 10	< 25	23.0	790
60	0.75	RM	24.5	0.102	< 150	> 10	< 25	25.9	1006
60	1	RM	18.1	0.133	< 150	> 10	< 25	26.8	1161
60	1.5	RM	12.1	0.194	< 150	> 10	< 40	29.3	1490
60	2.5	RM	7.41	0.315	< 150	> 10	< 60	36.1	2339

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Control Cable

CU/PVC/TCB/PET/PVC 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Control cables, also called control cables, are used for a wide range of automated applications in industrial processes including transmission, measurement, adjustment and control. These cables are generally flexible and suitable for mechanical stresses. These cables are produced in both shielded and non-shielded forms. Shielded cables are used in the presence of noise and other electrical or mechanical .disturbances

CONSTRUCTION

Conductor

Class 5 stranded copper conductors

Insulation

PVC (Polyvinyl Chloride)

TCB

Tinned Copper Braid

Pet

Polyester tape

Sheath

PVC (Polyvinyl Chloride)

CHARACTERISTICS

Voltage Rating ($U_0.U$)

500 V

Dielectric strength

For 500 V rating ≥ 2.0KV_{ac} Or ≥ 3.0 KV_{dc}

Temperature Rating

Fixed: -20°C to +70°C

Flexed: -5°C to +70°C

Short Circuit Temperature

+160°C

Minimum Bending Radius

12 x Overall Diameter **for Multi Core**

15 x Overall Diameter **for Single Core**

Sheath Color

Black

OFOGH ALBORZ INDUSTRIAL GROUP

Control Cable

CU/PVC/TCB/PET/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
2	0.5	RM	36.0	0.071	< 150	> 10	< 25	6.7	63
2	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.3	74
2	1	RM	18.1	0.133	< 150	> 10	< 25	7.5	81
2	1.5	RM	12.1	0.194	< 150	> 10	< 40	8.0	94
2	2.5	RM	7.41	0.315	< 150	> 10	< 60	9.7	143
3	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.1	75
3	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.7	90
3	1	RM	18.1	0.133	< 150	> 10	< 25	7.9	99
3	1.5	RM	12.1	0.194	< 150	> 10	< 40	8.7	123
3	2.5	RM	7.41	0.315	< 150	> 10	< 60	10.3	180
4	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.6	90
4	0.75	RM	24.5	0.102	< 150	> 10	< 25	8.5	113
4	1	RM	18.1	0.133	< 150	> 10	< 25	9.0	135
4	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.6	161
4	2.5	RM	7.41	0.315	< 150	> 10	< 60	11.3	229
5	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.4	113
5	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.4	148
5	1	RM	18.1	0.133	< 150	> 10	< 25	9.7	164
5	1.5	RM	12.1	0.194	< 150	> 10	< 40	10.3	197
5	2.5	RM	7.41	0.315	< 150	> 10	< 60	12.3	283
6	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.2	133
6	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.1	162
6	1	RM	18.1	0.133	< 150	> 10	< 25	10.4	179
6	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.3	221
6	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.3	312
7	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.2	142
7	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.1	172
7	1	RM	18.1	0.133	< 150	> 10	< 25	10.4	192
7	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.3	239
7	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.3	341

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Control Cable

CU/PVC/TCB/PET/PVC 500 V Cable

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
8	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.1	167
8	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.3	211
8	1	RM	18.1	0.133	< 150	> 10	< 25	11.7	232
8	1.5	RM	12.1	0.194	< 150	> 10	< 40	12.6	283
8	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.0	413
9	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.7	181
9	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.0	227
9	1	RM	18.1	0.133	< 150	> 10	< 25	12.4	254
9	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.3	313
9	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.9	453
10	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.4	199
10	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.6	241
10	1	RM	18.1	0.133	< 150	> 10	< 25	13.0	270
10	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.2	336
10	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.0	489
12	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.7	219
12	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.0	269
12	1	RM	18.1	0.133	< 150	> 10	< 25	13.4	299
12	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.6	378
12	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.5	557
14	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.3	244
14	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.8	305
14	1	RM	18.1	0.133	< 150	> 10	< 25	14.2	342
14	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.3	423
14	2.5	RM	7.41	0.315	< 150	> 10	< 60	18.4	625
16	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.9	273
16	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.5	346
16	1	RM	18.1	0.133	< 150	> 10	< 25	15.0	392
16	1.5	RM	12.1	0.194	< 150	> 10	< 40	16.1	479
16	2.5	RM	7.41	0.315	< 150	> 10	< 60	20.0	775

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Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
19	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.7	276
19	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.2	344
19	1	RM	18.1	0.133	< 150	> 10	< 25	15.7	390
19	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.1	498
19	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.0	797
20	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.3	332
20	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.9	411
20	1	RM	18.1	0.133	< 150	> 10	< 25	16.6	473
20	1.5	RM	12.1	0.194	< 150	> 10	< 40	18.0	588
20	2.5	RM	7.41	0.315	< 150	> 10	< 60	22.2	939
22	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.0	355
22	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.8	450
22	1	RM	18.1	0.133	< 150	> 10	< 25	17.4	515
22	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.4	691
22	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.3	1012
24	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.7	380
24	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.7	480
24	1	RM	18.1	0.133	< 150	> 10	< 25	18.3	539
24	1.5	RM	12.1	0.194	< 150	> 10	< 40	20.4	740
24	2.5	RM	7.41	0.315	< 150	> 10	< 60	24.7	1104
27	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.0	408
27	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.1	518
27	1	RM	18.1	0.133	< 150	> 10	< 25	19.3	650
27	1.5	RM	12.1	0.194	< 150	> 10	< 40	20.8	793
27	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.2	1191
30	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.8	448
30	0.75	RM	24.5	0.102	< 150	> 10	< 25	19.3	616
30	1	RM	18.1	0.133	< 150	> 10	< 25	19.9	698
30	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.5	871
30	2.5	RM	7.41	0.315	< 150	> 10	< 60	26.1	1301

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Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
37	0.5	RM	36.0	0.071	< 150	> 10	< 25	18.0	523
37	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.7	728
37	1	RM	18.1	0.133	< 150	> 10	< 25	21.4	826
37	1.5	RM	12.1	0.194	< 150	> 10	< 40	23.3	1033
37	2.5	RM	7.41	0.315	< 150	> 10	< 60	28.3	1552
42	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.9	655
42	0.75	RM	24.5	0.102	< 150	> 10	< 25	22.3	829
42	1	RM	18.1	0.133	< 150	> 10	< 25	23.1	945
42	1.5	RM	12.1	0.194	< 150	> 10	< 40	25.2	1183
42	2.5	RM	7.41	0.315	< 150	> 10	< 60	31.0	1859
47	0.5	RM	36.0	0.071	< 150	> 10	< 25	20.6	702
47	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.2	886
47	1	RM	18.1	0.133	< 150	> 10	< 25	24.0	1008
47	1.5	RM	12.1	0.194	< 150	> 10	< 40	26.2	1283
47	2.5	RM	7.41	0.315	< 150	> 10	< 60	31.8	1938
54	0.5	RM	36.0	0.071	< 150	> 10	< 25	22.3	817
54	0.75	RM	24.5	0.102	< 150	> 10	< 25	25.1	1029
54	1	RM	18.1	0.133	< 150	> 10	< 25	26.0	1177
54	1.5	RM	12.1	0.194	< 150	> 10	< 40	28.3	1490
54	2.5	RM	7.41	0.315	< 150	> 10	< 60	34.8	2342
60	0.5	RM	36.0	0.071	< 150	> 10	< 25	22.9	875
60	0.75	RM	24.5	0.102	< 150	> 10	< 25	25.8	1105
60	1	RM	18.1	0.133	< 150	> 10	< 25	26.7	1257
60	1.5	RM	12.1	0.194	< 150	> 10	< 40	29.1	1592
60	2.5	RM	7.41	0.315	< 150	> 10	< 60	36.0	2527

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Control Cable

CU/PVC/TCB/PET/PVC 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Control cables, also called control cables, are used for a wide range of automated applications in industrial processes including transmission, measurement, adjustment and control. These cables are generally flexible and suitable for mechanical stresses. These cables are produced in both shielded and non-shielded forms. Shielded cables are used in the presence of noise and other electrical or mechanical .disturbances

CONSTRUCTION

Conductor

Class 2 stranded copper conductors

Insulation

PVC (Polyvinyl Chloride)

TCB

Tinned Copper Braid

Pet

Polyester tape

Sheath

PVC (Polyvinyl Chloride)

CHARACTERISTICS

Voltage Rating ($U_0.U$)

500 V

Dielectric strength

For 500 V rating ≥ 2.0KV_{ac} Or ≥ 3.0 KV_{dc}

Temperature Rating

Fixed: -20°C to +70°C

Flexed: -5°C to +70°C

Short Circuit Temperature

+160°C

Minimum Bending Radius

12 x Overall Diameter **for Multi Core**

15 x Overall Diameter **for Single Core**

Sheath Color

Black

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Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
2	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.1	70
2	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.4	79
2	1	RM	18.1	0.133	< 150	> 10	< 25	7.8	88
2	1.5	RM	12.1	0.194	< 150	> 10	< 40	8.5	110
2	2.5	RM	7.41	0.315	< 150	> 10	< 60	10.0	154
3	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.4	83
3	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.8	94
3	1	RM	18.1	0.133	< 150	> 10	< 25	8.4	111
3	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.2	143
3	2.5	RM	7.41	0.315	< 150	> 10	< 60	10.5	194
4	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.0	90
4	0.75	RM	24.5	0.102	< 150	> 10	< 25	8.6	111
4	1	RM	18.1	0.133	< 150	> 10	< 25	9.2	137
4	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.9	169
4	2.5	RM	7.41	0.315	< 150	> 10	< 60	11.6	239
5	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.0	134
5	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.4	152
5	1	RM	18.1	0.133	< 150	> 10	< 25	9.9	173
5	1.5	RM	12.1	0.194	< 150	> 10	< 40	10.7	212
5	2.5	RM	7.41	0.315	< 150	> 10	< 60	12.6	300
6	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.7	146
6	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.1	166
6	1	RM	18.1	0.133	< 150	> 10	< 25	10.7	190
6	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.7	240
6	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.8	339
7	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.7	156
7	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.1	178
7	1	RM	18.1	0.133	< 150	> 10	< 25	10.7	205
7	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.7	261
7	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.8	371

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Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
8	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.7	182
8	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.4	219
8	1	RM	18.1	0.133	< 150	> 10	< 25	12.1	247
8	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.0	307
8	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.4	440
9	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.4	206
9	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.1	236
9	1	RM	18.1	0.133	< 150	> 10	< 25	12.8	273
9	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.0	347
9	2.5	RM	7.41	0.315	< 150	> 10	< 60	16.5	492
10	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.1	215
10	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.7	251
10	1	RM	18.1	0.133	< 150	> 10	< 25	13.7	296
10	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.8	365
10	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.5	527
12	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.5	242
12	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.1	282
12	1	RM	18.1	0.133	< 150	> 10	< 25	14.1	334
12	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.3	419
12	2.5	RM	7.41	0.315	< 150	> 10	< 60	18.1	599
14	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.0	268
14	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.9	321
14	1	RM	18.1	0.133	< 150	> 10	< 25	14.8	370
14	1.5	RM	12.1	0.194	< 150	> 10	< 40	16.0	466
14	2.5	RM	7.41	0.315	< 150	> 10	< 60	19.5	730
16	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.8	307
16	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.6	358
16	1	RM	18.1	0.133	< 150	> 10	< 25	15.5	420
16	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.0	536
16	2.5	RM	7.41	0.315	< 150	> 10	< 60	20.5	829

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Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
19	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.5	340
19	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.3	398
19	1	RM	18.1	0.133	< 150	> 10	< 25	16.4	473
19	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.8	604
19	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.8	937
20	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.2	361
20	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.0	430
20	1	RM	18.1	0.133	< 150	> 10	< 25	17.2	507
20	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.3	701
20	2.5	RM	7.41	0.315	< 150	> 10	< 60	22.8	1012
22	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.8	403
22	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.0	485
22	1	RM	18.1	0.133	< 150	> 10	< 25	18.0	571
22	1.5	RM	12.1	0.194	< 150	> 10	< 40	20.2	791
22	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.9	1136
24	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.9	426
24	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.9	501
24	1	RM	18.1	0.133	< 150	> 10	< 25	19.6	645
24	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.2	815
24	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.4	1174
27	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.2	459
27	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.2	541
27	1	RM	18.1	0.133	< 150	> 10	< 25	20.0	693
27	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.9	895
27	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.9	1287
30	0.5	RM	36.0	0.071	< 150	> 10	< 25	18.2	538
30	0.75	RM	24.5	0.102	< 150	> 10	< 25	19.4	647
30	1	RM	18.1	0.133	< 150	> 10	< 25	20.6	756
30	1.5	RM	12.1	0.194	< 150	> 10	< 40	22.6	968
30	2.5	RM	7.41	0.315	< 150	> 10	< 60	26.8	1398

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Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA Conductor mm²		Max DC Conductor Resistance at 20◦C Ω.km	Short-circuit Current KA 1.sec Approx	Electrical Test Mutual Capacitance nf/km	Mechanical Test Conductor Elongation at break %	Inductance to Resistance Ratio (L/R) μ H/Ω	OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
37	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.7	644
37	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.8	758
37	1	RM	18.1	0.133	< 150	> 10	< 25	22.4	901
37	1.5	RM	12.1	0.194	< 150	> 10	< 40	24.5	1159
37	2.5	RM	7.41	0.315	< 150	> 10	< 60	29.1	1671
42	0.5	RM	36.0	0.071	< 150	> 10	< 25	21.1	716
42	0.75	RM	24.5	0.102	< 150	> 10	< 25	22.5	868
42	1	RM	18.1	0.133	< 150	> 10	< 25	23.9	1014
42	1.5	RM	12.1	0.194	< 150	> 10	< 40	26.2	1299
42	2.5	RM	7.41	0.315	< 150	> 10	< 60	31.8	2006
47	0.5	RM	36.0	0.071	< 150	> 10	< 25	23.4	792
47	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.4	936
47	1	RM	18.1	0.133	< 150	> 10	< 25	25.1	1118
47	1.5	RM	12.1	0.194	< 150	> 10	< 40	27.5	1434
47	2.5	RM	7.41	0.315	< 150	> 10	< 60	33.4	2197
54	0.5	RM	36.0	0.071	< 150	> 10	< 25	23.6	894
54	0.75	RM	24.5	0.102	< 150	> 10	< 25	25.3	1073
54	1	RM	18.1	0.133	< 150	> 10	< 25	26.9	1260
54	1.5	RM	12.1	0.194	< 150	> 10	< 40	29.5	1621
54	2.5	RM	7.41	0.315	< 150	> 10	< 60	36.0	2505
60	0.5	RM	36.0	0.071	< 150	> 10	< 25	24.5	811
60	0.75	RM	24.5	0.102	< 150	> 10	< 25	26.0	1014
60	1	RM	18.1	0.133	< 150	> 10	< 25	27.9	1259
60	1.5	RM	12.1	0.194	< 150	> 10	< 40	30.9	1804
60	2.5	RM	7.41	0.315	< 150	> 10	< 60	37.0	2678

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