Instrument Cable

CU/PVC/ISCR/OSCR/PVC 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Instrumentation cables are cables that are responsible . for transmitting signals and data. These cables are designed to be resistant to electromagnetic interference .and noise

CONSTRUCTION

Conductor

Class 2 stranded copper conductors

Insulation

PVC (Polyvinyl Chloride)

ISCR

Individual Screen

PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

OSCR

Overall Screen

PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

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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CU/PVC/ISCR/OSCR/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
1*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	5.9	50
1*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	6.2	56
1*2	1	RM	18.1	0.133	< 150	> 10	< 25	6.6	65
1*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	7.8	83
1*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	8.4	112
2*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.6	114
2*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.3	134
2*2	1	RM	18.1	0.133	< 150	> 10	< 25	12.1	152
2*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.1	183
2*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.5	253
3*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.5	150
3*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	12	170
3*2	1	RM	18.1	0.133	< 150	> 10	< 25	12.9	195
3*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.1	246
3*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	16.7	343
4*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.6	184
4*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.1	210
4*2	1	RM	18.1	0.133	< 150	> 10	< 25	14.3	249
4*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.5	306
4*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	18.4	429
6*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.2	280
6*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.9	321
6*2	1	RM	18.1	0.133	< 150	> 10	< 25	17.3	381
6*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	18.7	471
6*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	22.5	677
8*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.3	355
8*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.0	408
8*2	1	RM	18.1	0.133	< 150	> 10	< 25	19.6	484
8*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.3	601
8*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.6	863

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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
10*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.7	414
10*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.6	478
10*2	1	RM	18.1	0.133	< 150	> 10	< 25	22.4	566
10*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	24.6	718
10*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	29.3	1010
1*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	6.5	61
1*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	6.8	70
1*3	1	RM	18.1	0.133	< 150	> 10	< 25	7.2	82
1*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	7.8	102
1*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	9.3	147
2*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.0	146
2*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.5	167
2*3	1	RM	18.1	0.133	< 150	> 10	< 25	13.4	192
2*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.7	242
2*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.5	340
3*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.7	187
3*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.3	216
3*3	1	RM	18.1	0.133	< 150	> 10	< 25	14.5	259
3*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.6	321
3*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	18.6	455
4*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.1	239
4*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.8	277
4*3	1	RM	18.1	0.133	< 150	> 10	< 25	15.9	323
4*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.4	413
4*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	20.7	588
6*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.1	365
6*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.9	424
6*3	1	RM	18.1	0.133	< 150	> 10	< 25	19.4	507
6*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.1	636
6*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.3	924

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CU/PVC/ISCR/OSCR/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*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.4	463
8*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.3	541
8*3	1	RM	18.1	0.133	< 150	> 10	< 25	22.1	646
8*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	23.9	814
8*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	28.8	1183
10*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	22.2	542
10*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.2	635
10*3	1	RM	18.1	0.133	< 150	> 10	< 25	25.2	759
10*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	27.6	973
10*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	33.2	1408
1*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.4	75
1*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.7	87
1*4	1	RM	18.1	0.133	< 150	> 10	< 25	8.4	106
1*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.1	133
1*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	10.6	187
2*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.9	185
2*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.5	212
2*4	1	RM	18.1	0.133	< 150	> 10	< 25	15.6	245
2*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.1	310
2*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	20.4	437
3*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.8	237
3*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.5	276
3*4	1	RM	18.1	0.133	< 150	> 10	< 25	16.9	330
3*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	18.3	413
3*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	22.0	600
4*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.5	302
4*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.2	352
4*4	1	RM	18.1	0.133	< 150	> 10	< 25	18.5	413
4*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	20.3	531
4*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	24.2	760

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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
6*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.9	465
6*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.8	544
6*4	1	RM	18.1	0.133	< 150	> 10	< 25	22.7	653
6*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	24.8	837
6*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	29.6	1202
8*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	22.6	590
8*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.7	693
8*4	1	RM	18.1	0.133	< 150	> 10	< 25	25.8	831
8*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	28.2	1068
8*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	33.9	1555
10*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	25.9	685
10*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	27.3	822
10*4	1	RM	18.1	0.133	< 150	> 10	< 25	29.5	969
10*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	32.3	1251
10*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	39.1	1840

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CABLE STANDARDS

BS EN 50288-7

APPLICATION

Instrumentation cables are cables that are responsible . for transmitting signals and data. These cables are designed to be resistant to electromagnetic interference .and noise

CONSTRUCTION

Conductor

Class 2 stranded copper conductors

Insulation

PVC (Polyvinyl Chloride)

ISCR
Individual Screen
PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

OSCR
Overall Screen
PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

Bedding

PVC (Polyvinyl Chloride)

Armour

Steel (Galvanized) Wire

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
1*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.5	222
1*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.7	235
1*2	1	RM	18.1	0.133	< 150	> 10	< 25	11.1	251
1*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.8	284
1*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.2	348
2*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.6	412
2*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.3	448
2*2	1	RM	18.1	0.133	< 150	> 10	< 25	17.1	487
2*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	18.0	540
2*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.4	804
3*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.5	471
3*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.0	500
3*2	1	RM	18.1	0.133	< 150	> 10	< 25	17.8	546
3*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.3	636
3*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	22.6	924
4*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.6	522
4*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.1	562
4*2	1	RM	18.1	0.133	< 150	> 10	< 25	19.5	639
4*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.3	839
4*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	24.5	1065
6*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	21.1	811
6*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	21.7	867
6*2	1	RM	18.1	0.133	< 150	> 10	< 25	23.3	987
6*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	24.8	1118
6*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	28.8	1456
8*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	23.3	961
8*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	24.1	1040
8*2	1	RM	18.1	0.133	< 150	> 10	< 25	25.7	1158
8*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	27.5	1340
8*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	32.7	1945

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10*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	25.8	1099
10*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	26.9	1203
10*2	1	RM	18.1	0.133	< 150	> 10	< 25	28.7	1345
10*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	31.0	1579
10*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	36.7	2256
1*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.1	248
1*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.3	264
1*3	1	RM	18.1	0.133	< 150	> 10	< 25	12.0	295
1*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	12.5	324
1*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	14.0	407
2*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.9	476
2*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.5	510
2*3	1	RM	18.1	0.133	< 150	> 10	< 25	18.4	557
2*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.9	648
2*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.5	958
3*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.7	538
3*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.3	576
3*3	1	RM	18.1	0.133	< 150	> 10	< 25	19.6	657
3*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.5	873
3*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	24.7	1113
4*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.3	622
4*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	19.9	675
4*3	1	RM	18.1	0.133	< 150	> 10	< 25	21.7	869
4*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	23.5	1021
4*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	27.0	1313
6*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	23.1	960
6*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.9	1046
6*3	1	RM	18.1	0.133	< 150	> 10	< 25	25.5	1180
6*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	27.3	1374
6*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	32.5	2004

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8*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	25.5	1136
8*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	26.4	1240
8*3	1	RM	18.1	0.133	< 150	> 10	< 25	28.3	1413
8*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	30.2	1636
8*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	36.2	2408
10*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	28.4	1309
10*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	29.5	1441
10*3	1	RM	18.1	0.133	< 150	> 10	< 25	32.4	1822
10*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	35.0	2155
10*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	40.7	2822
1*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.2	289
1*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.5	309
1*4	1	RM	18.1	0.133	< 150	> 10	< 25	13.2	349
1*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.9	391
1*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.6	489
2*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	18.9	565
2*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	19.7	616
2*4	1	RM	18.1	0.133	< 150	> 10	< 25	21.5	797
2*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	23.2	916
2*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	26.5	1150
3*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	20.0	649
3*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	21.4	827
3*4	1	RM	18.1	0.133	< 150	> 10	< 25	22.7	923
3*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	24.3	1058
3*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	28.3	1381
4*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	22.3	872
4*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.3	959
4*4	1	RM	18.1	0.133	< 150	> 10	< 25	24.6	1059
4*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	26.4	1231
4*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	30.7	1608

OFOGH ALBORZ INDUSTRIAL GROUP

OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/PVC/ISCR/OSCR/PVC/SWA/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
6*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	26.0	1152
6*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	27.1	1271
6*4	1	RM	18.1	0.133	< 150	> 10	< 25	28.9	1434
6*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	31.3	1710
6*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	37.0	2467
8*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	28.9	1370
8*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	30.0	1512
8*4	1	RM	18.1	0.133	< 150	> 10	< 25	32.9	1915
8*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	35.6	2272
8*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	41.5	2993
10*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	33.1	1786
10*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	34.7	1985
10*4	1	RM	18.1	0.133	< 150	> 10	< 25	36.9	2217
10*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	39.9	2641
10*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	47.8	3870

OFOGH ALBORZ INDUSTRIAL GROUP

OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/PVC/OSCR/PVC 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Instrumentation cables are cables that are responsible . for transmitting signals and data. These cables are designed to be resistant to electromagnetic interference .and noise

CONSTRUCTION

Conductor

Class 2 stranded copper conductors

Insulation

PVC (Polyvinyl Chloride)

OSCR

Overall Screen

PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

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

Instrument Cable

CU/PVC/OSCR/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	5.9	49
2	0.75	RM	24.5	0.102	< 150	> 10	< 25	6.2	55
2	1	RM	18.1	0.133	< 150	> 10	< 25	6.6	63
2	1.5	RM	12.1	0.194	< 150	> 10	< 40	7.8	81
2	2.5	RM	7.41	0.315	< 150	> 10	< 60	8.4	110
3	0.5	RM	36.0	0.071	< 150	> 10	< 25	6.5	61
3	0.75	RM	24.5	0.102	< 150	> 10	< 25	6.8	70
3	1	RM	18.1	0.133	< 150	> 10	< 25	7.2	82
3	1.5	RM	12.1	0.194	< 150	> 10	< 40	7.8	102
3	2.5	RM	7.41	0.315	< 150	> 10	< 60	9.3	147
4	0.5	RM	36.0	0.071	< 150	> 10	< 25	7.4	75
4	0.75	RM	24.5	0.102	< 150	> 10	< 25	7.7	87
4	1	RM	18.1	0.133	< 150	> 10	< 25	8.4	106
4	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.1	133
4	2.5	RM	7.41	0.315	< 150	> 10	< 60	10.6	187
5	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.0	93
5	0.75	RM	24.5	0.102	< 150	> 10	< 25	8.5	113
5	1	RM	18.1	0.133	< 150	> 10	< 25	9.2	133
5	1.5	RM	12.1	0.194	< 150	> 10	< 40	9.9	168
5	2.5	RM	7.41	0.315	< 150	> 10	< 60	11.8	245
6	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.9	110
6	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.2	129
6	1	RM	18.1	0.133	< 150	> 10	< 25	9.9	153
6	1.5	RM	12.1	0.194	< 150	> 10	< 40	10.7	194
6	2.5	RM	7.41	0.315	< 150	> 10	< 60	12.8	284
7	0.5	RM	36.0	0.071	< 150	> 10	< 25	8.9	114
7	0.75	RM	24.5	0.102	< 150	> 10	< 25	9.2	135
7	1	RM	18.1	0.133	< 150	> 10	< 25	9.9	161
7	1.5	RM	12.1	0.194	< 150	> 10	< 40	10.7	206
7	2.5	RM	7.41	0.315	< 150	> 10	< 60	12.8	302

OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/PVC/OSCR/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	9.9	135
8	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.3	160
8	1	RM	18.1	0.133	< 150	> 10	< 25	11.3	195
8	1.5	RM	12.1	0.194	< 150	> 10	< 40	12.2	250
8	2.5	RM	7.41	0.315	< 150	> 10	< 60	14.6	365
10	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.3	160
10	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.8	191
10	1	RM	18.1	0.133	< 150	> 10	< 25	12.7	227
10	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.0	299
10	2.5	RM	7.41	0.315	< 150	> 10	< 60	16.7	437
12	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.6	181
12	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.1	217
12	1	RM	18.1	0.133	< 150	> 10	< 25	13.1	260
12	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.4	344
12	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.2	506
14	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.2	204
14	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.7	246
14	1	RM	18.1	0.133	< 150	> 10	< 25	13.9	301
14	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.1	391
14	2.5	RM	7.41	0.315	< 150	> 10	< 60	18.1	577
16	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.8	227
16	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.4	275
16	1	RM	18.1	0.133	< 150	> 10	< 25	14.7	337
16	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.9	439
16	2.5	RM	7.41	0.315	< 150	> 10	< 60	19.3	659
20	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.4	286
20	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.0	346
20	1	RM	18.1	0.133	< 150	> 10	< 25	16.4	424
20	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.9	553
20	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.4	819

OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/PVC/OSCR/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
40	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.2	524
40	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.1	642
40	1	RM	18.1	0.133	< 150	> 10	< 25	22.0	788
40	1.5	RM	12.1	0.194	< 150	> 10	< 40	23.9	1040
40	2.5	RM	7.41	0.315	< 150	> 10	< 60	29.0	1564
2*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	9.8	97
2*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.2	111
2*2	1	RM	18.1	0.133	< 150	> 10	< 25	11.2	133
2*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	12.0	163
2*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	14.3	231
3*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	10.4	121
3*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.0	146
3*2	1	RM	18.1	0.133	< 150	> 10	< 25	11.8	170
3*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	12.8	212
3*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.2	305
4*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.6	153
4*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.1	179
4*2	1	RM	18.1	0.133	< 150	> 10	< 25	13.0	209
4*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.2	272
4*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	16.9	392
6*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.9	231
6*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.5	271
6*2	1	RM	18.1	0.133	< 150	> 10	< 25	15.7	320
6*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.2	415
6*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	20.5	602
8*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.6	284
8*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.5	344
8*2	1	RM	18.1	0.133	< 150	> 10	< 25	17.8	407
8*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.5	530
8*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.3	770

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OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/PVC/OSCR/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
10*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.8	332
10*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.7	394
10*2	1	RM	18.1	0.133	< 150	> 10	< 25	20.3	478
10*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	22.3	624
10*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	26.7	907
2*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.0	128
2*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.5	148
2*3	1	RM	18.1	0.133	< 150	> 10	< 25	12.3	172
2*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.3	214
2*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.9	307
3*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.7	163
3*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.2	191
3*3	1	RM	18.1	0.133	< 150	> 10	< 25	13.1	225
3*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.4	293
3*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.2	424
4*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.8	200
4*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.4	237
4*3	1	RM	18.1	0.133	< 150	> 10	< 25	14.6	289
4*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.8	369
4*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	19.1	547
6*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.4	305
6*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.4	371
6*3	1	RM	18.1	0.133	< 150	> 10	< 25	17.6	441
6*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.3	576
6*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.1	841
8*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.5	388
8*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.4	463
8*3	1	RM	18.1	0.133	< 150	> 10	< 25	20.0	564
8*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	22.0	738
8*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	26.3	1081

OFOGH ALBORZ INDUSTRIAL GROUP

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Instrument Cable

CU/PVC/OSCR/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
10*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	20.1	455
10*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	21.0	546
10*3	1	RM	18.1	0.133	< 150	> 10	< 25	22.9	665
10*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	25.1	874
10*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	30.3	1295
2*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.7	171
2*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.3	197
2*4	1	RM	18.1	0.133	< 150	> 10	< 25	15.4	230
2*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	16.9	295
2*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	20.2	421
3*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.6	217
3*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.2	255
3*4	1	RM	18.1	0.133	< 150	> 10	< 25	16.6	309
3*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	18.0	391
3*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.5	566
4*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.0	267
4*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.9	325
4*4	1	RM	18.1	0.133	< 150	> 10	< 25	18.2	385
4*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	20.0	502
4*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.9	729
6*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.5	424
6*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.5	502
6*4	1	RM	18.1	0.133	< 150	> 10	< 25	22.3	609
6*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	24.5	792
6*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	29.3	1154
8*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	22.2	535
8*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	23.3	637
8*4	1	RM	18.1	0.133	< 150	> 10	< 25	25.3	774
8*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	27.8	1009
8*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	33.5	1492

OFOGH ALBORZ INDUSTRIAL GROUP

OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/PVC/OSCR/PVC/SWA/PVC 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Instrumentation cables are cables that are responsible . for transmitting signals and data. These cables are designed to be resistant to electromagnetic interference .and noise

CONSTRUCTION

Conductor

Class 2 stranded copper conductors

Insulation

PVC (Polyvinyl Chloride)

OSCR

Overall Screen

PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

Bedding

PVC (Polyvinyl Chloride)

Armour

Steel (Galvanized) Wire

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

Instrument Cable

CU/PVC/OSCR/PVC/SWA/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	10.5	222
2	0.75	RM	24.5	0.102	< 150	> 10	< 25	10.7	235
2	1	RM	18.1	0.133	< 150	> 10	< 25	11.1	251
2	1.5	RM	12.1	0.194	< 150	> 10	< 40	11.8	284
2	2.5	RM	7.41	0.315	< 150	> 10	< 60	13.2	348
3	0.5	RM	36.0	0.071	< 150	> 10	< 25	11.1	248
3	0.75	RM	24.5	0.102	< 150	> 10	< 25	11.3	264
3	1	RM	18.1	0.133	< 150	> 10	< 25	12.0	295
3	1.5	RM	12.1	0.194	< 150	> 10	< 40	12.5	324
3	2.5	RM	7.41	0.315	< 150	> 10	< 60	14.0	407
4	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.2	289
4	0.75	RM	24.5	0.102	< 150	> 10	< 25	12.5	309
4	1	RM	18.1	0.133	< 150	> 10	< 25	13.2	349
4	1.5	RM	12.1	0.194	< 150	> 10	< 40	13.9	391
4	2.5	RM	7.41	0.315	< 150	> 10	< 60	15.6	489
5	0.5	RM	36.0	0.071	< 150	> 10	< 25	12.8	316
5	0.75	RM	24.5	0.102	< 150	> 10	< 25	13.3	350
5	1	RM	18.1	0.133	< 150	> 10	< 25	13.9	384
5	1.5	RM	12.1	0.194	< 150	> 10	< 40	14.7	433
5	2.5	RM	7.41	0.315	< 150	> 10	< 60	16.8	564
6	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.6	356
6	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.0	382
6	1	RM	18.1	0.133	< 150	> 10	< 25	14.7	420
6	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.7	488
6	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.8	626
7	0.5	RM	36.0	0.071	< 150	> 10	< 25	13.6	365
7	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.0	395
7	1	RM	18.1	0.133	< 150	> 10	< 25	14.7	435
7	1.5	RM	12.1	0.194	< 150	> 10	< 40	15.7	509
7	2.5	RM	7.41	0.315	< 150	> 10	< 60	17.8	659

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Instrument Cable

CU/PVC/OSCR/PVC/SWA/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	14.3	400
8	0.75	RM	24.5	0.102	< 150	> 10	< 25	14.7	438
8	1	RM	18.1	0.133	< 150	> 10	< 25	15.7	491
8	1.5	RM	12.1	0.194	< 150	> 10	< 40	16.8	580
8	2.5	RM	7.41	0.315	< 150	> 10	< 60	19.3	760
10	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.2	479
10	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.8	523
10	1	RM	18.1	0.133	< 150	> 10	< 25	17.7	582
10	1.5	RM	12.1	0.194	< 150	> 10	< 40	18.9	686
10	2.5	RM	7.41	0.315	< 150	> 10	< 60	22.6	1026
12	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.6	508
12	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.1	558
12	1	RM	18.1	0.133	< 150	> 10	< 25	18.0	623
12	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.6	749
12	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.3	1130
14	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.1	545
14	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.7	602
14	1	RM	18.1	0.133	< 150	> 10	< 25	18.9	688
14	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.0	936
14	2.5	RM	7.41	0.315	< 150	> 10	< 60	24.2	1230
16	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.8	589
16	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.4	652
16	1	RM	18.1	0.133	< 150	> 10	< 25	19.8	757
16	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.8	1021
16	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.4	1368
20	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.5	690
20	0.75	RM	24.5	0.102	< 150	> 10	< 25	20.9	881
20	1	RM	18.1	0.133	< 150	> 10	< 25	22.3	1011
20	1.5	RM	12.1	0.194	< 150	> 10	< 40	23.9	1194
20	2.5	RM	7.41	0.315	< 150	> 10	< 60	27.7	1596

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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
40	0.5	RM	36.0	0.071	< 150	> 10	< 25	25.2	1208
40	0.75	RM	24.5	0.102	< 150	> 10	< 25	26.2	1354
40	1	RM	18.1	0.133	< 150	> 10	< 25	28.2	1581
40	1.5	RM	12.1	0.194	< 150	> 10	< 40	30.2	1893
40	2.5	RM	7.41	0.315	< 150	> 10	< 60	36.3	2834
2*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	14.6	367
2*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	15.0	389
2*2	1	RM	18.1	0.133	< 150	> 10	< 25	16.1	446
2*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.0	493
2*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	19.5	628
3*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	15.2	405
3*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.0	453
3*2	1	RM	18.1	0.133	< 150	> 10	< 25	16.8	498
3*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	17.8	563
3*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.1	844
4*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.5	469
4*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.0	508
4*2	1	RM	18.1	0.133	< 150	> 10	< 25	17.9	555
4*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.4	661
4*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	22.8	975
6*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	18.9	604
6*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	19.7	668
6*2	1	RM	18.1	0.133	< 150	> 10	< 25	21.5	864
6*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	23.2	1011
6*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	26.6	1303
8*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	21.5	828
8*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	22.4	914
8*2	1	RM	18.1	0.133	< 150	> 10	< 25	23.9	1027
8*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	25.6	1204
8*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	29.6	1576

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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
10*2	0.5	RM	36.0	0.071	< 150	> 10	< 25	23.9	953
10*2	0.75	RM	24.5	0.102	< 150	> 10	< 25	24.7	1041
10*2	1	RM	18.1	0.133	< 150	> 10	< 25	26.4	1178
10*2	1.5	RM	12.1	0.194	< 150	> 10	< 40	28.6	1403
10*2	2.5	RM	7.41	0.315	< 150	> 10	< 60	33.9	2032
2*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.0	435
2*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	16.5	469
2*3	1	RM	18.1	0.133	< 150	> 10	< 25	17.3	509
2*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	18.3	580
2*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	21.8	872
3*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	16.7	485
3*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	17.2	527
3*3	1	RM	18.1	0.133	< 150	> 10	< 25	18.1	583
3*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	19.6	691
3*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	23.2	1030
4*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	17.8	545
4*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	18.3	596
4*3	1	RM	18.1	0.133	< 150	> 10	< 25	19.8	686
4*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	21.7	914
4*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	25.1	1208
6*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	21.3	838
6*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	22.2	940
6*3	1	RM	18.1	0.133	< 150	> 10	< 25	23.7	1061
6*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	25.4	1248
6*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	29.4	1636
8*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	23.6	997
8*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	24.4	1098
8*3	1	RM	18.1	0.133	< 150	> 10	< 25	26.1	1252
8*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	28.2	1504
8*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	33.4	2186

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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
10*3	0.5	RM	36.0	0.071	< 150	> 10	< 25	26.1	1143
10*3	0.75	RM	24.5	0.102	< 150	> 10	< 25	27.3	1284
10*3	1	RM	18.1	0.133	< 150	> 10	< 25	29.2	1458
10*3	1.5	RM	12.1	0.194	< 150	> 10	< 40	32.3	1937
10*3	2.5	RM	7.41	0.315	< 150	> 10	< 60	37.6	2582
2*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	18.7	544
2*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	19.5	595
2*4	1	RM	18.1	0.133	< 150	> 10	< 25	21.3	770
2*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	22.8	888
2*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	26.2	1132
3*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	19.7	621
3*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	21.1	794
3*4	1	RM	18.1	0.133	< 150	> 10	< 25	22.5	889
3*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	24.1	1024
3*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	27.8	1331
4*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	21.8	823
4*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	22.8	908
4*4	1	RM	18.1	0.133	< 150	> 10	< 25	24.3	1019
4*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	26.1	1190
4*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	30.2	1551
6*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	25.6	1098
6*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	26.6	1203
6*4	1	RM	18.1	0.133	< 150	> 10	< 25	28.6	1388
6*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	30.9	1652
6*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	36.6	2400
8*4	0.5	RM	36.0	0.071	< 150	> 10	< 25	28.5	1302
8*4	0.75	RM	24.5	0.102	< 150	> 10	< 25	29.6	1443
8*4	1	RM	18.1	0.133	< 150	> 10	< 25	32.5	1854
8*4	1.5	RM	12.1	0.194	< 150	> 10	< 40	35.2	2193
8*4	2.5	RM	7.41	0.315	< 150	> 10	< 60	41.1	2926

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Instrument Cable

CU/XLPE/ISCR/OSCR/LSFOH 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Instrumentation cables are cables that are responsible . for transmitting signals and data. These cables are designed to be resistant to electromagnetic interference .and noise

CONSTRUCTION

Conductor

Class 2 stranded copper conductors

Insulation

XLPE (Cross-linked polyethylene)

ISCR

Individual Screen

PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

OSCR

Overall Screen

PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

Sheath

LSFOH (Halogen Free)

CHARACTERISTICS

Voltage Rating ($U_0.U$)

500 V

Dielectric strength

For 500 V rating ≥ 2.0KV$_{ac}$ Or ≥ 3.0 KV$_{dc}$

Temperature Rating

-40°C to +80°C
0°C to +50°C

Short Circuit Temperature

+250°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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Instrument Cable

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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
1*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	5.9	45
1*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	6.2	51
1*2	1	RM	18.1	0.133	< 250	> 10	< 25	6.6	59
1*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	7.8	76
1*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	8.4	103
2*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	10.6	106
2*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	11.3	126
2*2	1	RM	18.1	0.133	< 250	> 10	< 25	12.1	142
2*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	13.1	172
2*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	15.5	237
3*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	11.5	139
3*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	12.0	158
3*2	1	RM	18.1	0.133	< 250	> 10	< 25	12.9	181
3*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	14.1	230
3*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	16.7	319
4*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	12.6	169
4*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	13.1	194
4*2	1	RM	18.1	0.133	< 250	> 10	< 25	14.3	230
4*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	15.5	284
4*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	18.4	398
6*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	15.2	250
6*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	15.9	289
6*2	1	RM	18.1	0.133	< 250	> 10	< 25	17.3	343
6*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	18.7	426
6*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	22.5	612
8*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	17.3	317
8*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	18.0	368
8*2	1	RM	18.1	0.133	< 250	> 10	< 25	19.6	437
8*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	21.3	546
8*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	25.6	783

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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
10*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	19.7	377
10*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	20.6	438
10*2	1	RM	18.1	0.133	< 250	> 10	< 25	22.4	520
10*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	24.6	664
10*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	29.3	933
1*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	6.5	55
1*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	6.8	65
1*3	1	RM	18.1	0.133	< 250	> 10	< 25	7.2	75
1*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	7.8	94
1*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	9.3	136
2*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	12.0	135
2*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	12.5	155
2*3	1	RM	18.1	0.133	< 250	> 10	< 25	13.4	178
2*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	14.7	226
2*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	17.5	317
3*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	12.7	171
3*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	13.3	198
3*3	1	RM	18.1	0.133	< 250	> 10	< 25	14.5	238
3*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	15.6	297
3*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	18.6	421
4*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	14.1	217
4*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	14.8	253
4*3	1	RM	18.1	0.133	< 250	> 10	< 25	15.9	295
4*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	17.4	381
4*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	20.7	542
6*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	17.1	322
6*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	17.9	378
6*3	1	RM	18.1	0.133	< 250	> 10	< 25	19.4	453
6*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	21.1	573
6*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	25.3	833

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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*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	19.4	409
8*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	20.3	483
8*3	1	RM	18.1	0.133	< 250	> 10	< 25	22.1	578
8*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	23.9	735
8*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	28.8	1069
10*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	22.2	486
10*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	23.2	575
10*3	1	RM	18.1	0.133	< 250	> 10	< 25	25.2	689
10*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	27.6	893
10*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	33.2	1294
1*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	7.4	67
1*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	7.7	79
1*4	1	RM	18.1	0.133	< 250	> 10	< 25	8.4	97
1*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	9.1	123
1*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	10.6	172
2*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	13.9	170
2*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	14.5	196
2*4	1	RM	18.1	0.133	< 250	> 10	< 25	15.6	226
2*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	17.1	289
2*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	20.4	407
3*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	14.8	215
3*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	15.5	252
3*4	1	RM	18.1	0.133	< 250	> 10	< 25	16.9	303
3*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	18.3	381
3*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	22.0	555
4*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	16.5	272
4*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	17.2	321
4*4	1	RM	18.1	0.133	< 250	> 10	< 25	18.5	376
4*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	20.3	488
4*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	24.2	699

OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/XLPE/ISCR/OSCR/LSFOH 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
6*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	19.9	408
6*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	20.8	482
6*4	1	RM	18.1	0.133	< 250	> 10	< 25	22.7	580
6*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	24.8	751
6*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	29.6	1079
8*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	22.6	517
8*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	23.7	614
8*4	1	RM	18.1	0.133	< 250	> 10	< 25	25.8	739
8*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	28.2	961
8*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	33.9	1402
10*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	25.9	611
10*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	27.3	743
10*4	1	RM	18.1	0.133	< 250	> 10	< 25	29.5	877
10*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	32.3	1144
10*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	39.1	1688

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Instrument Cable

CU/XLPE/ISCR/OSCR/LSFOH/SWA/LSFOH 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Instrumentation cables are cables that are responsible . for transmitting signals and data. These cables are designed to be resistant to electromagnetic interference .and noise

CONSTRUCTION

Conductor

Class 2 stranded copper conductors

Insulation

XLPE (Cross-linked polyethylene)

ISCR
Individual Screen
PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

OSCR
Overall Screen
PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

Bedding

LSFOH (Halogen Free)

Armour

Steel (Galvanized) Wire

Sheath

LSFOH (Halogen Free)

CHARACTERISTICS

Voltage Rating ($U_0.U$)

500 V

Dielectric strength

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

Temperature Rating

-40°C to +80°C
0°C to +50°C

Short Circuit Temperature

+250°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

Instrument Cable

CU/XLPE/ISCR/OSCR/LSFOH/SWA/LSFOH 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
1*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	10.5	218
1*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	10.7	231
1*2	1	RM	18.1	0.133	< 250	> 10	< 25	11.1	246
1*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	11.8	279
1*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	13.2	340
2*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	15.6	405
2*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	16.3	440
2*2	1	RM	18.1	0.133	< 250	> 10	< 25	17.1	478
2*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	18.0	530
2*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	21.4	788
3*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	16.5	460
3*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	17.0	488
3*2	1	RM	18.1	0.133	< 250	> 10	< 25	17.8	532
3*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	19.3	620
3*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	22.6	901
4*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	17.6	507
4*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	18.1	546
4*2	1	RM	18.1	0.133	< 250	> 10	< 25	19.5	620
4*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	21.3	817
4*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	24.5	1034
6*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	21.1	781
6*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	21.7	835
6*2	1	RM	18.1	0.133	< 250	> 10	< 25	23.3	950
6*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	24.8	1074
6*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	28.8	1392
8*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	23.3	924
8*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	24.1	1000
8*2	1	RM	18.1	0.133	< 250	> 10	< 25	25.7	1111
8*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	27.5	1286
8*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	32.7	1866

OFOGH ALBORZ INDUSTRIAL GROUP

OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/XLPE/ISCR/OSCR/LSFOH/SWA/LSFOH 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
10*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	25.8	1062
10*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	26.9	1163
10*2	1	RM	18.1	0.133	< 250	> 10	< 25	28.7	1299
10*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	31.0	1525
10*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	36.7	2179
1*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	11.1	242
1*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	11.3	258
1*3	1	RM	18.1	0.133	< 250	> 10	< 25	12.0	288
1*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	12.5	316
1*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	14.0	395
2*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	16.9	465
2*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	17.5	498
2*3	1	RM	18.1	0.133	< 250	> 10	< 25	18.4	543
2*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	19.9	632
2*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	23.5	935
3*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	17.7	521
3*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	18.3	558
3*3	1	RM	18.1	0.133	< 250	> 10	< 25	19.6	637
3*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	21.5	849
3*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	24.7	1079
4*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	19.3	600
4*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	19.9	652
4*3	1	RM	18.1	0.133	< 250	> 10	< 25	21.7	841
4*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	23.5	989
4*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	27.0	1267
6*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	23.1	917
6*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	23.9	999
6*3	1	RM	18.1	0.133	< 250	> 10	< 25	25.5	1126
6*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	27.3	1311
6*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	32.5	1913

OFOGH ALBORZ INDUSTRIAL GROUP

OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/XLPE/ISCR/OSCR/LSFOH/SWA/LSFOH 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*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	25.5	1082
8*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	26.4	1182
8*3	1	RM	18.1	0.133	< 250	> 10	< 25	28.3	1345
8*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	30.2	1556
8*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	36.2	2294
10*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	28.4	1254
10*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	29.5	1381
10*3	1	RM	18.1	0.133	< 250	> 10	< 25	32.4	1753
10*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	35.0	2075
10*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	40.7	2708
1*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	12.2	281
1*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	12.5	301
1*4	1	RM	18.1	0.133	< 250	> 10	< 25	13.2	340
1*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	13.9	380
1*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	15.6	474
2*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	18.9	550
2*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	19.7	600
2*4	1	RM	18.1	0.133	< 250	> 10	< 25	21.5	778
2*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	23.2	895
2*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	26.5	1120
3*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	20.0	627
3*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	21.4	803
3*4	1	RM	18.1	0.133	< 250	> 10	< 25	22.7	895
3*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	24.3	1026
3*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	28.3	1335
4*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	22.3	842
4*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	23.3	927
4*4	1	RM	18.1	0.133	< 250	> 10	< 25	24.6	1022
4*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	26.4	1188
4*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	30.7	1548

OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/XLPE/ISCR/OSCR/LSFOH/SWA/LSFOH 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
6*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	26.0	0.32
6*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	27.1	0.32
6*4	1	RM	18.1	0.133	< 250	> 10	< 25	28.9	0.32
6*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	31.3	0.32
6*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	37.0	0.32
8*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	28.9	0.42
8*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	30.0	0.42
8*4	1	RM	18.1	0.133	< 250	> 10	< 25	32.9	0.42
8*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	35.6	0.42
8*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	41.5	0.42
10*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	33.1	0.51
10*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	34.7	0.51
10*4	1	RM	18.1	0.133	< 250	> 10	< 25	36.9	0.51
10*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	39.9	0.51
10*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	47.8	0.51

OFOGH ALBORZ INDUSTRIAL GROUP

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Instrument Cable

CU/XLPE/OSCR/LSFOH 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Instrumentation cables are cables that are responsible . for transmitting signals and data. These cables are designed to be resistant to electromagnetic interference .and noise

CONSTRUCTION

Conductor

Class 2 stranded copper conductors

Insulation

XLPE (Cross-linked polyethylene)

OSCR

Overall Screen

PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

Sheath

LSFOH (Halogen Free)

CHARACTERISTICS

Voltage Rating (U_0.U)

500 V

Dielectric strength

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

Temperature Rating

-40°C to +80°C
0°C to +50°C

Short Circuit Temperature

+250°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

Instrument Cable

CU/XLPE/OSCR/LSFOH 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	< 250	> 10	< 25	5.9	45
2	0.75	RM	24.5	0.102	< 250	> 10	< 25	6.2	51
2	1	RM	18.1	0.133	< 250	> 10	< 25	6.6	59
2	1.5	RM	12.1	0.194	< 250	> 10	< 40	7.8	76
2	2.5	RM	7.41	0.315	< 250	> 10	< 60	8.4	103
3	0.5	RM	36.0	0.071	< 250	> 10	< 25	6.5	55
3	0.75	RM	24.5	0.102	< 250	> 10	< 25	6.8	65
3	1	RM	18.1	0.133	< 250	> 10	< 25	7.2	75
3	1.5	RM	12.1	0.194	< 250	> 10	< 40	7.8	94
3	2.5	RM	7.41	0.315	< 250	> 10	< 60	9.3	136
4	0.5	RM	36.0	0.071	< 250	> 10	< 25	7.4	67
4	0.75	RM	24.5	0.102	< 250	> 10	< 25	7.7	79
4	1	RM	18.1	0.133	< 250	> 10	< 25	8.4	97
4	1.5	RM	12.1	0.194	< 250	> 10	< 40	9.1	123
4	2.5	RM	7.41	0.315	< 250	> 10	< 60	10.6	172
5	0.5	RM	36.0	0.071	< 250	> 10	< 25	8.0	84
5	0.75	RM	24.5	0.102	< 250	> 10	< 25	8.5	103
5	1	RM	18.1	0.133	< 250	> 10	< 25	9.2	122
5	1.5	RM	12.1	0.194	< 250	> 10	< 40	9.9	155
5	2.5	RM	7.41	0.315	< 250	> 10	< 60	11.8	226
6	0.5	RM	36.0	0.071	< 250	> 10	< 25	8.9	99
6	0.75	RM	24.5	0.102	< 250	> 10	< 25	9.2	118
6	1	RM	18.1	0.133	< 250	> 10	< 25	9.9	139
6	1.5	RM	12.1	0.194	< 250	> 10	< 40	10.7	178
6	2.5	RM	7.41	0.315	< 250	> 10	< 60	12.8	261
7	0.5	RM	36.0	0.071	< 250	> 10	< 25	8.9	101
7	0.75	RM	24.5	0.102	< 250	> 10	< 25	9.2	122
7	1	RM	18.1	0.133	< 250	> 10	< 25	9.9	144
7	1.5	RM	12.1	0.194	< 250	> 10	< 40	10.7	188
7	2.5	RM	7.41	0.315	< 250	> 10	< 60	12.8	276

OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/XLPE/OSCR/LSFOH 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	< 250	> 10	< 25	9.9	120
8	0.75	RM	24.5	0.102	< 250	> 10	< 25	10.3	144
8	1	RM	18.1	0.133	< 250	> 10	< 25	11.3	177
8	1.5	RM	12.1	0.194	< 250	> 10	< 40	12.2	228
8	2.5	RM	7.41	0.315	< 250	> 10	< 60	14.6	335
10	0.5	RM	36.0	0.071	< 250	> 10	< 25	11.3	142
10	0.75	RM	24.5	0.102	< 250	> 10	< 25	11.8	171
10	1	RM	18.1	0.133	< 250	> 10	< 25	12.7	204
10	1.5	RM	12.1	0.194	< 250	> 10	< 40	14.0	272
10	2.5	RM	7.41	0.315	< 250	> 10	< 60	16.7	399
12	0.5	RM	36.0	0.071	< 250	> 10	< 25	11.6	159
12	0.75	RM	24.5	0.102	< 250	> 10	< 25	12.1	194
12	1	RM	18.1	0.133	< 250	> 10	< 25	13.1	232
12	1.5	RM	12.1	0.194	< 250	> 10	< 40	14.4	312
12	2.5	RM	7.41	0.315	< 250	> 10	< 60	17.2	460
14	0.5	RM	36.0	0.071	< 250	> 10	< 25	12.2	178
14	0.75	RM	24.5	0.102	< 250	> 10	< 25	12.7	218
14	1	RM	18.1	0.133	< 250	> 10	< 25	13.9	269
14	1.5	RM	12.1	0.194	< 250	> 10	< 40	15.1	354
14	2.5	RM	7.41	0.315	< 250	> 10	< 60	18.1	524
16	0.5	RM	36.0	0.071	< 250	> 10	< 25	12.8	198
16	0.75	RM	24.5	0.102	< 250	> 10	< 25	13.4	243
16	1	RM	18.1	0.133	< 250	> 10	< 25	14.7	300
16	1.5	RM	12.1	0.194	< 250	> 10	< 40	15.9	396
16	2.5	RM	7.41	0.315	< 250	> 10	< 60	19.3	598
20	0.5	RM	36.0	0.071	< 250	> 10	< 25	14.4	249
20	0.75	RM	24.5	0.102	< 250	> 10	< 25	15.0	306
20	1	RM	18.1	0.133	< 250	> 10	< 25	16.4	378
20	1.5	RM	12.1	0.194	< 250	> 10	< 40	17.9	500
20	2.5	RM	7.41	0.315	< 250	> 10	< 60	21.4	743

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Instrument Cable

CU/XLPE/OSCR/LSFOH 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
40	0.5	RM	36.0	0.071	< 250	> 10	< 25	19.2	451
40	0.75	RM	24.5	0.102	< 250	> 10	< 25	20.1	563
40	1	RM	18.1	0.133	< 250	> 10	< 25	22.0	696
40	1.5	RM	12.1	0.194	< 250	> 10	< 40	23.9	934
40	2.5	RM	7.41	0.315	< 250	> 10	< 60	29.0	1413
2*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	9.8	90
2*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	10.2	103
2*2	1	RM	18.1	0.133	< 250	> 10	< 25	11.2	124
2*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	12.0	152
2*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	14.3	215
3*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	10.4	110
3*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	11.0	134
3*2	1	RM	18.1	0.133	< 250	> 10	< 25	11.8	156
3*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	12.8	196
3*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	15.2	281
4*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	11.6	138
4*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	12.1	163
4*2	1	RM	18.1	0.133	< 250	> 10	< 25	13.0	191
4*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	14.2	251
4*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	16.9	361
6*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	13.9	206
6*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	14.5	243
6*2	1	RM	18.1	0.133	< 250	> 10	< 25	15.7	287
6*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	17.2	377
6*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	20.5	546
8*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	15.6	251
8*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	16.5	308
8*2	1	RM	18.1	0.133	< 250	> 10	< 25	17.8	365
8*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	19.5	481
8*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	23.3	699

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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
10*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	17.8	295
10*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	18.7	354
10*2	1	RM	18.1	0.133	< 250	> 10	< 25	20.3	432
10*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	22.3	571
10*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	26.7	829
2*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	11.0	117
2*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	11.5	136
2*3	1	RM	18.1	0.133	< 250	> 10	< 25	12.3	158
2*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	13.3	198
2*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	15.9	285
3*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	11.7	146
3*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	12.2	173
3*3	1	RM	18.1	0.133	< 250	> 10	< 25	13.1	204
3*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	14.4	269
3*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	17.2	390
4*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	12.8	178
4*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	13.4	213
4*3	1	RM	18.1	0.133	< 250	> 10	< 25	14.6	261
4*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	15.8	337
4*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	19.1	502
6*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	15.4	267
6*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	16.4	330
6*3	1	RM	18.1	0.133	< 250	> 10	< 25	17.6	394
6*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	19.3	520
6*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	23.1	761
8*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	17.5	339
8*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	18.4	410
8*3	1	RM	18.1	0.133	< 250	> 10	< 25	20.0	502
8*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	22.0	666
8*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	26.3	978

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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
10*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	20.1	399
10*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	21.0	486
10*3	1	RM	18.1	0.133	< 250	> 10	< 25	22.9	596
10*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	25.1	794
10*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	30.3	1181
2*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	13.7	156
2*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	14.3	182
2*4	1	RM	18.1	0.133	< 250	> 10	< 25	15.4	211
2*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	16.9	274
2*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	20.2	391
3*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	14.6	195
3*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	15.2	231
3*4	1	RM	18.1	0.133	< 250	> 10	< 25	16.6	281
3*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	18.0	359
3*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	21.5	520
4*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	16.0	237
4*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	16.9	293
4*4	1	RM	18.1	0.133	< 250	> 10	< 25	18.2	348
4*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	20.0	460
4*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	23.9	669
6*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	19.5	368
6*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	20.5	441
6*4	1	RM	18.1	0.133	< 250	> 10	< 25	22.3	538
6*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	24.5	708
6*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	29.3	1033
8*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	22.2	464
8*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	23.3	560
8*4	1	RM	18.1	0.133	< 250	> 10	< 25	25.3	684
8*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	27.8	904
8*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	33.5	1341

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Instrument Cable

CU/XLPE/OSCR/LSFOH/SWA/LSFOH 500 V Cable

CABLE STANDARDS

BS EN 50288-7

APPLICATION

Instrumentation cables are cables that are responsible . for transmitting signals and data. These cables are designed to be resistant to electromagnetic interference .and noise

CONSTRUCTION

Conductor

Class 2 stranded copper conductors

Insulation

XLPE (Cross-linked polyethylene)

OSCR

Overall Screen

PET (Polyester Tape)
FOIL (Aluminum Backed polyester)
DRIAN WIRE (Tinned copper)

Bedding

LSFOH (Halogen Free)

Armour

Steel (Galvanized) Wire

Sheath

LSFOH (Halogen Free)

CHARACTERISTICS

Voltage Rating ($U_0.U$)

500 V

Dielectric strength

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

Temperature Rating

-40°C to +80°C
0°C to +50°C

Short Circuit Temperature

+250°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	< 250	> 10	< 25	10.5	218
2	0.75	RM	24.5	0.102	< 250	> 10	< 25	10.7	231
2	1	RM	18.1	0.133	< 250	> 10	< 25	11.1	246
2	1.5	RM	12.1	0.194	< 250	> 10	< 40	11.8	279
2	2.5	RM	7.41	0.315	< 250	> 10	< 60	13.2	340
3	0.5	RM	36.0	0.071	< 250	> 10	< 25	11.1	242
3	0.75	RM	24.5	0.102	< 250	> 10	< 25	11.3	258
3	1	RM	18.1	0.133	< 250	> 10	< 25	12.0	288
3	1.5	RM	12.1	0.194	< 250	> 10	< 40	12.5	316
3	2.5	RM	7.41	0.315	< 250	> 10	< 60	14.0	395
4	0.5	RM	36.0	0.071	< 250	> 10	< 25	12.2	281
4	0.75	RM	24.5	0.102	< 250	> 10	< 25	12.5	301
4	1	RM	18.1	0.133	< 250	> 10	< 25	13.2	340
4	1.5	RM	12.1	0.194	< 250	> 10	< 40	13.9	380
4	2.5	RM	7.41	0.315	< 250	> 10	< 60	15.6	474
5	0.5	RM	36.0	0.071	< 250	> 10	< 25	12.8	307
5	0.75	RM	24.5	0.102	< 250	> 10	< 25	13.3	341
5	1	RM	18.1	0.133	< 250	> 10	< 25	13.9	372
5	1.5	RM	12.1	0.194	< 250	> 10	< 40	14.7	420
5	2.5	RM	7.41	0.315	< 250	> 10	< 60	16.8	545
6	0.5	RM	36.0	0.071	< 250	> 10	< 25	13.6	345
6	0.75	RM	24.5	0.102	< 250	> 10	< 25	14.0	370
6	1	RM	18.1	0.133	< 250	> 10	< 25	14.7	406
6	1.5	RM	12.1	0.194	< 250	> 10	< 40	15.7	472
6	2.5	RM	7.41	0.315	< 250	> 10	< 60	17.8	604
7	0.5	RM	36.0	0.071	< 250	> 10	< 25	13.6	352
7	0.75	RM	24.5	0.102	< 250	> 10	< 25	14.0	381
7	1	RM	18.1	0.133	< 250	> 10	< 25	14.7	419
7	1.5	RM	12.1	0.194	< 250	> 10	< 40	15.7	491
7	2.5	RM	7.41	0.315	< 250	> 10	< 60	17.8	632

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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	< 250	> 10	< 25	14.3	385
8	0.75	RM	24.5	0.102	< 250	> 10	< 25	14.7	422
8	1	RM	18.1	0.133	< 250	> 10	< 25	15.7	473
8	1.5	RM	12.1	0.194	< 250	> 10	< 40	16.8	559
8	2.5	RM	7.41	0.315	< 250	> 10	< 60	19.3	729
10	0.5	RM	36.0	0.071	< 250	> 10	< 25	16.2	460
10	0.75	RM	24.5	0.102	< 250	> 10	< 25	16.8	504
10	1	RM	18.1	0.133	< 250	> 10	< 25	17.7	559
10	1.5	RM	12.1	0.194	< 250	> 10	< 40	18.9	659
10	2.5	RM	7.41	0.315	< 250	> 10	< 60	22.6	989
12	0.5	RM	36.0	0.071	< 250	> 10	< 25	16.6	486
12	0.75	RM	24.5	0.102	< 250	> 10	< 25	17.1	534
12	1	RM	18.1	0.133	< 250	> 10	< 25	18.0	596
12	1.5	RM	12.1	0.194	< 250	> 10	< 40	19.6	717
12	2.5	RM	7.41	0.315	< 250	> 10	< 60	23.3	1085
14	0.5	RM	36.0	0.071	< 250	> 10	< 25	17.1	519
14	0.75	RM	24.5	0.102	< 250	> 10	< 25	17.7	574
14	1	RM	18.1	0.133	< 250	> 10	< 25	18.9	656
14	1.5	RM	12.1	0.194	< 250	> 10	< 40	21.0	899
14	2.5	RM	7.41	0.315	< 250	> 10	< 60	24.2	1177
16	0.5	RM	36.0	0.071	< 250	> 10	< 25	17.8	560
16	0.75	RM	24.5	0.102	< 250	> 10	< 25	18.4	621
16	1	RM	18.1	0.133	< 250	> 10	< 25	19.8	720
16	1.5	RM	12.1	0.194	< 250	> 10	< 40	21.8	978
16	2.5	RM	7.41	0.315	< 250	> 10	< 60	25.4	1307
20	0.5	RM	36.0	0.071	< 250	> 10	< 25	19.5	654
20	0.75	RM	24.5	0.102	< 250	> 10	< 25	20.9	841
20	1	RM	18.1	0.133	< 250	> 10	< 25	22.3	965
20	1.5	RM	12.1	0.194	< 250	> 10	< 40	23.9	1141
20	2.5	RM	7.41	0.315	< 250	> 10	< 60	27.7	1520

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40	0.5	RM	36.0	0.071	< 250	> 10	< 25	25.2	1135
40	0.75	RM	24.5	0.102	< 250	> 10	< 25	26.2	1275
40	1	RM	18.1	0.133	< 250	> 10	< 25	28.2	1490
40	1.5	RM	12.1	0.194	< 250	> 10	< 40	30.2	1786
40	2.5	RM	7.41	0.315	< 250	> 10	< 60	36.3	2683
2*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	14.6	359
2*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	15.0	381
2*2	1	RM	18.1	0.133	< 250	> 10	< 25	16.1	437
2*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	17.0	482
2*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	19.5	613
3*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	15.2	394
3*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	16.0	441
3*2	1	RM	18.1	0.133	< 250	> 10	< 25	16.8	484
3*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	17.8	547
3*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	21.1	821
4*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	16.5	454
4*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	17.0	492
4*2	1	RM	18.1	0.133	< 250	> 10	< 25	17.9	537
4*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	19.4	640
4*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	22.8	944
6*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	18.9	579
6*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	19.7	640
6*2	1	RM	18.1	0.133	< 250	> 10	< 25	21.5	831
6*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	23.2	973
6*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	26.6	1248
8*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	21.5	795
8*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	22.4	879
8*2	1	RM	18.1	0.133	< 250	> 10	< 25	23.9	986
8*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	25.6	1155
8*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	29.6	1505

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10*2	0.5	RM	36.0	0.071	< 250	> 10	< 25	23.9	916
10*2	0.75	RM	24.5	0.102	< 250	> 10	< 25	24.7	1002
10*2	1	RM	18.1	0.133	< 250	> 10	< 25	26.4	1132
10*2	1.5	RM	12.1	0.194	< 250	> 10	< 40	28.6	1349
10*2	2.5	RM	7.41	0.315	< 250	> 10	< 60	33.9	1954
2*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	16.0	424
2*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	16.5	457
2*3	1	RM	18.1	0.133	< 250	> 10	< 25	17.3	495
2*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	18.3	563
2*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	21.8	849
3*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	16.7	468
3*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	17.2	509
3*3	1	RM	18.1	0.133	< 250	> 10	< 25	18.1	563
3*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	19.6	667
3*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	23.2	996
4*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	17.8	522
4*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	18.3	572
4*3	1	RM	18.1	0.133	< 250	> 10	< 25	19.8	658
4*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	21.7	882
4*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	25.1	1162
6*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	21.3	800
6*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	22.2	899
6*3	1	RM	18.1	0.133	< 250	> 10	< 25	23.7	1013
6*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	25.4	1193
6*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	29.4	1556
8*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	23.6	948
8*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	24.4	1046
8*3	1	RM	18.1	0.133	< 250	> 10	< 25	26.1	1190
8*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	28.2	1432
8*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	33.4	2083

OFOGH ALBORZ INDUSTRIAL GROUP

Instrument Cable

CU/XLPE/OSCR/LSFOH/SWA/LSFOH 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
10*3	0.5	RM	36.0	0.071	< 250	> 10	< 25	26.1	1087
10*3	0.75	RM	24.5	0.102	< 250	> 10	< 25	27.3	1224
10*3	1	RM	18.1	0.133	< 250	> 10	< 25	29.2	1389
10*3	1.5	RM	12.1	0.194	< 250	> 10	< 40	32.3	1856
10*3	2.5	RM	7.41	0.315	< 250	> 10	< 60	37.6	2468
2*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	18.7	529
2*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	19.5	579
2*4	1	RM	18.1	0.133	< 250	> 10	< 25	21.3	752
2*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	22.8	867
2*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	26.2	1102
3*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	19.7	599
3*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	21.1	770
3*4	1	RM	18.1	0.133	< 250	> 10	< 25	22.5	862
3*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	24.1	992
3*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	27.8	1285
4*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	21.8	794
4*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	22.8	877
4*4	1	RM	18.1	0.133	< 250	> 10	< 25	24.3	982
4*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	26.1	1147
4*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	30.2	1490
6*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	25.6	1042
6*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	26.6	1142
6*4	1	RM	18.1	0.133	< 250	> 10	< 25	28.6	1316
6*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	30.9	1568
6*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	36.6	2279
8*4	0.5	RM	36.0	0.071	< 250	> 10	< 25	28.5	1232
8*4	0.75	RM	24.5	0.102	< 250	> 10	< 25	29.6	1366
8*4	1	RM	18.1	0.133	< 250	> 10	< 25	32.5	1764
8*4	1.5	RM	12.1	0.194	< 250	> 10	< 40	35.2	2087
8*4	2.5	RM	7.41	0.315	< 250	> 10	< 60	41.1	2774

OFOGH ALBORZ INDUSTRIAL GROUP