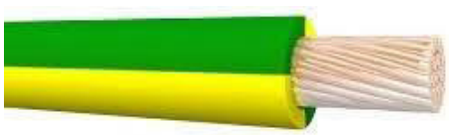
CU/PVC 450/750 V, 600/1000 V
General Lighting and Earthing Cables

GENERAL INFO

Used in covered, dry places, in fixed plants, in distribution panels, on and under plaster as laid in conduit or on insulating support. When cable is used in fixed installations with mechanically protected switchgear and control panels, the rated voltage is 600/1000 V.



CABLE CONSTRUCTION

Conductor material	: Copper
Conductor surface	: Bare
Insulation material	: Polyvinyl Chloride (PVC)

STANDARDS APPLIED

BSEN 50525-2-31, SS 358-3	Construction
IEC 60228 Class 2	Conductors
BSEN 50525-2-31	Insulation
IEC 60332-1	Flame retardant properties

Special feature available on request:

IEC 60332-3-22 (Category A)
IEC 60332-3-24 (Category C)
Anti-termite
Anti-rodent
Oil resistance
UV resistance
Low smoke halogen free

CORE IDENTIFICATION

1-core	Green/Yellow

* Other colours available upon request

APPLICATION PROPERTIES

Nominal voltage U0 [V]	450, 600
Nominal voltage U [V]	750, 1000
Test voltage [kV / min]	2.5 kV for 5mins [for 450/750V], 3.5 kV for 5mins [for 600/1000V]
Flame retardant	In accordance with IEC 60332-1
Halogen free	No
Low smoke	No
Max. conductor operating temperature [°C]	70
Min. ambient temperature, fixed installation [°C]	-25
Max. ambient temperature, fixed installation [°C]	60
Outdoor installation	Yes
Bending radius (during installation)	8 x OD
Bending radius (fixed installed)	6 x OD

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius during Installation (mm)	Standard Packing Length (m)
1 x 1.5	1.5	0.7	2.9	21	17	3000
1 x 2.5	1.9	0.8	3.5	32	21	3000
1 x 4	2.4	0.8	4.0	48	24	3000
1 x 6	3.0	0.8	4.6	68	28	3000
1 x 10	3.9	1.0	5.9	111	35	3000
1 x 16	5.0	1.0	7.0	172	42	3000
1 x 25	6.3	1.2	8.7	271	52	3000
1 x 35	7.3	1.2	9.7	351	58	3000
1 x 50	8.7	1.4	11.5	476	69	3000
1 x 70	10.4	1.4	13.2	664	79	3000
1 x 95	12.3	1.6	15.5	919	93	3000
1 x 120	13.8	1.6	17.0	1142	102	3000
1 x 150	15.5	1.8	19.1	1424	115	3000
1 x 185	17.3	2.0	21.3	1750	128	1900
1 x 240	19.7	2.2	24.1	2318	145	1400
1 x 300	22.4	2.4	27.2	2917	163	1100
1 x 400	25.3	2.6	30.5	3698	183	900
1 x 500	28.6	2.8	34.2	4682	205	700
1 x 630	32.4	2.8	38.0	5882	228	500
1 x 16cc	4.7	1.0	6.8	168	41	3000
1 x 25cc	5.9	1.2	8.3	262	50	3000
1 x 35cc	6.9	1.2	9.3	342	56	2000
1 x 50cc	7.9	1.4	10.7	463	64	2000
1 x 70cc	9.7	1.4	12.5	654	75	2000
1 x 95cc	11.4	1.6	14.6	892	88	2000
1 x 120cc	12.7	1.6	15.9	1125	95	2000
1 x 150cc	14.2	1.8	17.8	1391	107	2000
1 x 185cc	15.9	2.0	19.9	1740	119	2000
1 x 240cc	18.9	2.2	23.3	2253	140	1500
1 x 300cc	20.3	2.4	25.1	2817	151	1200
1 x 400cc	23.0	2.6	28.2	3628	169	900
1 x 500cc	26.0	2.8	31.6	4574	190	700
1 x 630cc	29.8	2.8	35.4	5739	212	500

cc – Circular compacted conductor

Product Electrical Data

Cross Section (mm^2)	Max. Conductor Resistance at 20°C (Ω/km)	Max. Conductor AC Resistance at 70°C (Ω/km)	Min. Insulation Resistance at 70°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
1 x 1.5	12.1	14.484	0.01	11	60
1 x 2.5	7.41	8.87	0.009	18	83
1 x 4	4.61	5.518	0.0077	28	117
1 x 6	3.08	3.687	0.0065	42	152
1 x 10	1.83	2.191	0.0065	70	198
1 x 16	1.15	1.377	0.005	112	267
1 x 25	0.727	0.87	0.005	175	335
1 x 35	0.524	0.627	0.0043	245	421
1 x 50	0.387	0.463	0.0043	350	507
1 x 70	0.268	0.321	0.0035	490	619
1 x 95	0.193	0.231	0.0035	665	715
1 x 120	0.153	0.184	0.0032	840	824
1 x 150	0.124	0.149	0.0032	1050	916
1 x 185	0.0991	0.119	0.0032	1295	1013
1 x 240	0.0754	0.091	0.0032	1680	1162
1 x 300	0.0601	0.073	0.003	2100	1287
1 x 400	0.0470	0.058	0.0028	2800	1530
1 x 500	0.0366	0.046	0.0028	3500	1706
1 x 630	0.0283	0.036	0.0025	4410	1934
1 x 16cc	1.15	1.377	0.005	112	273
1 x 25cc	0.727	0.87	0.005	175	360
1 x 35cc	0.524	0.627	0.0043	245	439
1 x 50cc	0.387	0.463	0.0043	350	545
1 x 70cc	0.268	0.321	0.0035	490	653
1 x 95cc	0.193	0.231	0.0035	665	759
1 x 120cc	0.153	0.184	0.0032	840	881
1 x 150cc	0.124	0.149	0.0032	1050	983
1 x 185cc	0.0991	0.119	0.0032	1295	1085
1 x 240cc	0.0754	0.091	0.0032	1680	1202
1 x 300cc	0.0601	0.073	0.003	2100	1394
1 x 400cc	0.0470	0.058	0.0028	2800	1655
1 x 500cc	0.0366	0.046	0.0028	3500	1846
1 x 630cc	0.0283	0.036	0.0025	4410	2076

cc – Circular compacted conductor

Cable Gland Selection Data

Cross Section (mm^2)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	ICON Ex-Proof Cable Gland Part Number
1 x 1.5	2.9	-	-	-
1 x 2.5	3.5	-	-	-
1 x 4	4.0	M16	KM409-51	KM494-51
1 x 6	4.6	M16	KM409-51	KM494-51
1 x 10	5.9	M16	KM409-51	KM494-51
1 x 16	7.0	M16	KM409-51	KM494-51
1 x 25	8.7	M20S	KM409-52	KM494-52
1 x 35	9.7	M20S	KM409-52	KM494-52
1 x 50	11.5	M20	KM409-53	KM494-53
1 x 70	13.2	M20	KM409-53	KM494-53
1 x 95	15.5	M25	KM409-55	KM494-55
1 x 120	17.0	M25	KM409-55	KM494-55
1 x 150	19.1	M25	KM409-55	KM494-55
1 x 185	21.3	M32	KM409-56	KM494-56
1 x 240	24.1	M32	KM409-56	KM494-56
1 x 300	27.2	M40	KM409-57	KM494-57
1 x 400	30.5	M40	KM409-57	KM494-57
1 x 500	34.2	M50S / M50	KM409-58	KM494-59
1 x 630	38.0	M50	KM409-59	KM494-59
1 x 16cc	6.8	M16	KM409-51	KM494-51
1 x 25cc	8.3	M16	KM409-51	KM494-51
1 x 35cc	9.3	M20S	KM409-52	KM494-52
1 x 50cc	10.7	M20S	KM409-52	KM494-52
1 x 70cc	12.5	M20	KM409-53	KM494-53
1 x 95cc	14.6	M25	KM409-55	KM494-55
1 x 120cc	15.9	M25	KM409-55	KM494-55
1 x 150cc	17.8	M25	KM409-55	KM494-55
1 x 185cc	19.9	M32	KM409-56	KM494-56
1 x 240cc	23.3	M32	KM409-56	KM494-56
1 x 300cc	25.1	M32	KM409-56	KM494-56
1 x 400cc	28.2	M40	KM409-57	KM494-57
1 x 500cc	31.6	M40	KM409-57	KM494-57
1 x 630cc	35.4	M50S / M50	KM409-58	KM494-59

cc – Circular compacted conductor

CU/PVC/PVC 0.6/1 kV
General Power Cables

GENERAL INFO

Used as energy, utility and lighting cables, for outdoor installations, in cable ducts, underground in normal and salty water if specially produced.

CABLE CONSTRUCTION

Conductor material	: Copper
Conductor surface	: Bare
Insulation material	: Polyvinyl Chloride (PVC)
Sheath material	: Polyvinyl Chloride (PVC)

STANDARDS APPLIED

IEC 60502-1	Construction
IEC 60228 Class 2	Conductors
IEC 60502-1	Insulation
IEC 60502-1	Sheath
IEC 60332-1	Flame retardant properties

Special feature available on request:

IEC 60332-3-22 (Category A)
IEC 60332-3-24 (Category C)
Anti-termite
Anti-rodent
Oil resistance
UV resistance
Low smoke halogen free

CORE IDENTIFICATION

1-core	Black

* Other colours available upon request

APPLICATION PROPERTIES

Nominal voltage U0 [V]	600
Nominal voltage U [V]	1000
Test voltage [kV / min]	3.5 kV for 5mins
Flame retardant	In accordance with IEC 60332-1
Halogen free	No
Low smoke	No
Max. conductor operating temperature [°C]	70
Min. ambient temperature, fixed installation [°C]	-25
Max. ambient temperature, fixed installation [°C]	60
Outdoor installation	Yes
Bending radius (during installation)	10 x OD
Bending radius (fixed installed)	8 x OD

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
1 x 1.5	1.6	3.2	6.0	54	48	2000
1 x 2.5	2.0	3.6	6.4	67	51	2000
1 x 4	2.5	4.5	7.3	93	58	2000
1 x 6	3.1	5.1	7.9	118	63	2000
1 x 10	3.9	5.9	8.8	163	70	2000
1 x 16	5.0	7.0	9.8	230	78	2000
1 x 25	6.3	8.7	11.6	342	93	2000
1 x 35	7.4	9.8	12.8	434	102	2000
1 x 50	8.7	11.5	14.5	571	116	2000
1 x 70	10.5	13.3	16.3	773	130	2000
1 x 95	12.4	15.6	18.8	1053	150	2000
1 x 120	13.9	17.1	20.3	1290	162	1000
1 x 150	15.6	19.2	22.6	1599	181	1000
1 x 185	17.4	21.4	25.0	1955	200	1000
1 x 240	19.8	24.2	28.0	2562	224	1000
1 x 300	22.5	27.3	31.3	3204	250	1000
1 x 400	25.4	30.6	34.8	4083	278	1000
1 x 500	28.6	34.2	38.6	5133	308	1000
1 x 630	32.5	38.1	42.7	6421	342	500
1 x 16cc	4.7	6.7	9.5	218	76	2000
1 x 25cc	6.0	8.4	11.2	322	90	2000
1 x 35cc	7.0	9.4	12.4	422	99	2000
1 x 50cc	8.0	10.8	13.8	553	110	2000
1 x 70cc	9.8	12.6	15.6	757	125	2000
1 x 95cc	11.5	14.7	17.9	1019	143	2000
1 x 120cc	12.8	16.0	19.2	1265	154	1000
1 x 150cc	14.3	17.9	21.3	1556	170	1000
1 x 185cc	16.0	20.0	23.6	1933	189	1000
1 x 240cc	19.0	23.4	27.2	2489	218	1000
1 x 300cc	20.4	25.2	29.2	3084	234	1000
1 x 400cc	23.1	28.3	32.5	3883	260	1000
1 x 500cc	26.1	31.7	36.1	4933	289	1000
1 x 630cc	29.9	35.5	40.1	6221	321	500

cc – Circular compacted conductor

Product Technical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 70°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
1 x 1.5	12.1	14.48	10	11	22
1 x 2.5	7.41	8.87	9	18	34
1 x 4	4.61	5.52	8	28	48
1 x 6	3.08	3.69	7	42	66
1 x 10	1.83	2.19	7	70	99
1 x 16	1.15	1.38	6	112	143
1 x 25	0.727	0.870	5	175	189
1 x 35	0.524	0.627	5	245	239
1 x 50	0.387	0.463	5	350	302
1 x 70	0.268	0.321	5	490	376
1 x 95	0.193	0.231	5	665	442
1 x 120	0.153	0.184	5	840	517
1 x 150	0.124	0.149	5	1050	581
1 x 185	0.0991	0.119	5	1295	648
1 x 240	0.0754	0.091	5	1680	750
1 x 300	0.0601	0.073	5	2100	839
1 x 400	0.047	0.058	5	2800	1006
1 x 500	0.0366	0.046	5	3500	1135
1 x 630	0.0283	0.036	5	4410	1290
1 x 16cc	1.15	1.38	5	112	147
1 x 25cc	0.727	0.870	5	175	195
1 x 35cc	0.524	0.627	5	245	247
1 x 50cc	0.387	0.463	5	350	317
1 x 70cc	0.268	0.321	5	490	393
1 x 95cc	0.193	0.231	5	665	464
1 x 120cc	0.153	0.184	5	840	547
1 x 150cc	0.124	0.149	5	1050	616
1 x 185cc	0.0991	0.119	5	1295	686
1 x 240cc	0.0754	0.091	5	1680	772
1 x 300cc	0.0601	0.073	5	2100	899
1 x 400cc	0.047	0.058	5	2800	1077
1 x 500cc	0.0366	0.046	5	3500	1212
1 x 630cc	0.0283	0.036	5	4410	1375

cc – Circular compacted conductor

Cable Gland Selection Data

Cross Section (mm^2)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
1 x 1.5	6.0	M16	KM409-51	KM494-51
1 x 2.5	6.4	M16	KM409-51	KM494-51
1 x 4	7.3	M16	KM409-51	KM494-51
1 x 6	7.9	M16	KM409-51	KM494-51
1 x 10	8.8	M20S	KM409-52	KM494-52
1 x 16	9.8	M20S	KM409-52	KM494-52
1 x 25	11.6	M20	KM409-53	KM494-53
1 x 35	12.8	M20	KM409-53	KM494-53
1 x 50	14.5	M25	KM409-55	KM494-55
1 x 70	16.3	M25	KM409-55	KM494-55
1 x 95	18.8	M25	KM409-55	KM494-55
1 x 120	20.3	M32	KM409-56	KM494-56
1 x 150	22.6	M32	KM409-56	KM494-56
1 x 185	25.0	M32	KM409-56	KM494-56
1 x 240	28.0	M40	KM409-57	KM494-57
1 x 300	31.3	M40	KM409-57	KM494-57
1 x 400	34.8	M50S / M50	KM409-58	KM494-59
1 x 500	38.6	M50	KM409-59	KM494-59
1 x 630	42.7	M63S / M63	KM409-60	KM494-61
1 x 16cc	9.5	M20S	KM409-52	KM494-52
1 x 25cc	11.2	M20S	KM409-52	KM494-52
1 x 35cc	12.4	M20	KM409-53	KM494-53
1 x 50cc	13.8	M25	KM409-55	KM494-55
1 x 70cc	15.6	M25	KM409-55	KM494-55
1 x 95cc	17.9	M25	KM409-55	KM494-55
1 x 120cc	19.2	M32	KM409-56	KM494-56
1 x 150cc	21.3	M32	KM409-56	KM494-56
1 x 185cc	23.6	M32	KM409-56	KM494-56
1 x 240cc	27.2	M40	KM409-57	KM494-57
1 x 300cc	29.2	M40	KM409-57	KM494-57
1 x 400cc	32.5	M50S / M50	KM409-58	KM494-59
1 x 500cc	36.1	M50S / M50	KM409-58	KM494-59
1 x 630cc	40.1	M50	KM409-59	KM494-59

cc – Circular compacted conductor

CU/PVC/PVC 0.6/1 kV
General Power and Control Cables

GENERAL INFO

Used as energy, utility and lighting cables, for outdoor installations, in cable ducts, underground in normal and salty water if specially produced.

CABLE CONSTRUCTION

Conductor material	: Copper
Conductor surface	: Bare
Insulation material	: Polyvinyl Chloride (PVC)
Filler material	: Non-hygroscopic filler
Binder material	: Polyester tape
Sheath material	: Polyvinyl Chloride (PVC)

STANDARDS APPLIED

IEC 60502-1	Construction
IEC 60228 Class 2	Conductors
IEC 60502-1	Insulation
IEC 60502-1	Sheath
IEC 60332-1	Flame retardant properties

Special feature available on request:

IEC 60332-3-22 (Category A)
IEC 60332-3-24 (Category C)
Anti-termite
Anti-rodent
Oil resistance
UV resistance
Low smoke halogen free

CORE IDENTIFICATION

2-cores	Brown, Blue
3-cores	Brown, Black, Blue
4-cores	Brown, Black, Grey, Blue
Multi-cores	Black with core numbering

* Other colours available upon request

APPLICATION PROPERTIES

Nominal voltage U0 [V]	600
Nominal voltage U [V]	1000
Test voltage [kV / min]	3.5 kV for 5mins
Flame retardant	In accordance with IEC 60332-1
Halogen free	No
Low smoke	No
Max. conductor operating temperature [°C]	70
Min. ambient temperature, fixed installation [°C]	-25
Max. ambient temperature, fixed installation [°C]	60
Outdoor installation	Yes
Bending radius (during installation)	10 x OD
Bending radius (fixed installed)	8 x OD

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
2 x 1.5	1.6	3.2	9.3	124	74	2000
2 x 2.5	2.0	3.6	10.1	157	81	2000
2 x 4	2.5	4.5	12.0	227	96	2000
2 x 6	3.1	5.1	13.1	290	105	2000
2 x 10	3.9	5.9	15.0	343	120	1500
2 x 16	5.0	7.0	17.1	485	137	1500
2 x 25	6.3	8.7	20.6	721	165	1500
2 x 35	7.4	9.8	22.8	933	182	2300
2 x 50	8.7	11.5	26.3	1231	210	2300
2 x 70	10.5	13.3	30.0	1695	240	2300
2 x 95	12.4	15.6	35.0	2315	280	1600
2 x 120	13.9	17.1	38.3	2928	306	1400
2 x 150	15.6	19.2	42.7	3556	342	1000
2 x 185	17.4	21.4	47.4	4355	379	800
2 x 240	19.8	24.2	53.5	5725	428	600
2 x 300	22.5	27.3	59.9	7089	479	500
2 x 400	25.4	30.6	67.0	8323	536	300

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
3 x 1.5	1.6	3.2	9.8	147	78	2000
3 x 2.5	2.0	3.6	10.7	188	86	2000
3 x 4	2.5	4.5	12.7	277	102	2000
3 x 6	3.1	5.1	13.9	358	111	2000
3 x 10	3.9	5.9	15.9	458	127	1500
3 x 16	5.0	7.0	18.2	663	146	1500
3 x 25	6.3	8.7	22.0	1000	176	1500
3 x 35sh	15.1	17.5	21.2	1237	170	2300
3 x 50sh	17.9	20.7	24.7	1648	198	2300
3 x 70sh	21.0	23.8	28.0	2295	224	2000
3 x 95sh	24.1	27.3	32.0	3130	256	1800
3 x 120sh	27.2	30.4	35.2	3879	282	1600
3 x 150sh	30.5	34.1	39.1	4773	313	1200
3 x 185sh	33.9	37.9	43.4	5956	347	1000
3 x 240sh	38.3	42.7	48.8	7721	390	800
3 x 300sh	42.7	47.5	54.1	9602	433	600
3 x 400sh	49.1	54.3	61.3	12207	490	400

sh – Shaped conductor

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
4 x 1.5	1.6	3.2	10.6	177	85	2000
4 x 2.5	2.0	3.6	11.6	229	93	2000
4 x 4	2.5	4.5	13.8	339	110	2000
4 x 6	3.1	5.1	15.2	444	122	2000
4 x 10	3.9	5.9	17.5	579	140	1500
4 x 16	5.0	7.0	20.0	858	160	1500
4 x 25	6.3	8.7	24.2	1310	194	1000
4 x 35sh	18.0	20.4	24.4	1642	195	2300
4 x 50sh	21.3	24.1	28.5	2189	228	2300
4 x 70sh	24.9	27.7	32.3	3050	258	2000
4 x 95sh	28.5	31.7	37.2	4169	298	1500
4 x 120sh	32.1	35.3	40.9	5161	327	1200
4 x 150sh	36.0	39.6	45.4	6348	363	1000
4 x 185sh	40.1	44.1	50.3	7896	402	800
4 x 240sh	45.3	49.7	56.5	10253	452	600
4 x 300sh	50.3	55.1	62.6	12769	501	500
4 x 400sh	57.8	63.0	71.1	16244	569	300

sh – Shaped conductor

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
5 x 1.5	1.6	3.2	11.6	188	93	2000
6 x 1.5	1.6	3.2	12.5	220	100	1800
7 x 1.5	1.6	3.2	12.5	237	100	1500
12 x 1.5	1.6	3.2	16.1	379	129	1500
19 x 1.5	1.6	3.2	18.7	550	150	1500
21 x 1.5	1.6	3.2	19.8	604	158	1500
27 x 1.5	1.6	3.2	22.3	759	178	1500
30 x 1.5	1.6	3.2	23.1	829	185	1500
37 x 1.5	1.6	3.2	24.9	998	199	1500
40 x 1.5	1.6	3.2	25.9	1073	207	1500
48 x 1.5	1.6	3.2	28.7	1286	230	1000
5 x 2.5	2.0	3.6	12.7	249	102	2000
6 x 2.5	2.0	3.6	13.8	300	110	1500
7 x 2.5	2.0	3.6	13.8	316	110	1500
12 x 2.5	2.0	3.6	17.9	512	143	1500
19 x 2.5	2.0	3.6	20.8	757	166	1500
21 x 2.5	2.0	3.6	22.0	831	176	1500
27 x 2.5	2.0	3.6	24.9	1049	199	1500
30 x 2.5	2.0	3.6	25.8	1150	206	1500
37 x 2.5	2.0	3.6	28.1	1404	225	1500
40 x 2.5	2.0	3.6	29.2	1511	234	1500
48 x 2.5	2.0	3.6	32.3	1810	258	1000
5 x 4	2.5	4.5	15.2	368	122	2000
6 x 4	2.5	4.5	16.6	450	133	1500
7 x 4	2.5	4.5	16.6	477	133	1500
12 x 4	2.5	4.5	21.7	784	174	1500
19 x 4	2.5	4.5	25.5	1170	204	1500
21 x 4	2.5	4.5	26.9	1287	215	1500
27 x 4	2.5	4.5	31.0	1662	248	1400
30 x 4	2.5	4.5	32.2	1822	258	1300
37 x 4	2.5	4.5	35.0	2225	280	1000
40 x 4	2.5	4.5	36.4	2396	291	1000
48 x 4	2.5	4.5	40.5	2889	324	800

Product Electrical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 90°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
2 x 1.5	12.1	14.48	10	21	28
2 x 2.5	7.41	8.87	9	35	43
2 x 4	4.61	5.52	8	56	58
2 x 6	3.08	3.69	7	84	80
2 x 10	1.83	2.19	7	140	117
2 x 16	1.15	1.38	6	224	164
2 x 25	0.727	0.870	5	350	212
2 x 35	0.524	0.627	5	490	269
2 x 50	0.387	0.463	5	700	333
2 x 70	0.268	0.321	5	980	408
2 x 95	0.193	0.231	5	1330	475
2 x 120	0.153	0.184	5	1680	548
2 x 150	0.124	0.150	5	2100	615
2 x 185	0.0991	0.120	5	2590	683
2 x 240	0.0754	0.092	5	3360	785
2 x 300	0.0601	0.075	5	4200	876
2 x 400	0.047	0.060	5	5600	1045

Product Electrical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 70°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to cable (kgf/m)
3 x 1.5	12.1	14.48	10	31	40
3 x 2.5	7.41	8.87	9	52	61
3 x 4	4.61	5.52	8	84	83
3 x 6	3.08	3.69	7	126	113
3 x 10	1.83	2.19	7	210	165
3 x 16	1.15	1.38	6	336	231
3 x 25	0.727	0.870	5	525	298
3 x 35sh	0.524	0.627	5	735	433
3 x 50sh	0.387	0.463	5	1050	531
3 x 70sh	0.268	0.321	5	1470	656
3 x 95sh	0.193	0.231	5	1995	779
3 x 120sh	0.153	0.184	5	2520	895
3 x 150sh	0.124	0.150	5	3150	1007
3 x 185sh	0.0991	0.120	5	3885	1119
3 x 240sh	0.0754	0.092	5	5040	1291
3 x 300sh	0.0601	0.075	5	6300	1456
3 x 400sh	0.047	0.060	5	8400	1713

sh – Shaped conductor

Product Electrical Data

Cross Section (mm²)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 70°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
4 x 1.5	12.1	14.48	10	42	50
4 x 2.5	7.41	8.87	9	70	75
4 x 4	4.61	5.52	8	112	101
4 x 6	3.08	3.69	7	168	138
4 x 10	1.83	2.19	7	280	200
4 x 16	1.15	1.38	6	448	280
4 x 25	0.727	0.870	5	700	362
4 x 35sh	0.524	0.627	5	980	502
4 x 50sh	0.387	0.463	5	1400	614
4 x 70sh	0.268	0.321	5	1960	759
4 x 95sh	0.193	0.231	5	2660	894
4 x 120sh	0.153	0.184	5	3360	1027
4 x 150sh	0.124	0.150	5	4200	1156
4 x 185sh	0.0991	0.120	5	5180	1287
4 x 240sh	0.0754	0.092	5	6720	1487
4 x 300sh	0.0601	0.075	5	8400	1677
4 x 400sh	0.047	0.060	5	11200	1969

sh – Shaped conductor

Product Technical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 70°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
5 x 1.5	12.1	14.48	10	52	56
6 x 1.5	12.1	14.48	10	63	63
7 x 1.5	12.1	14.48	10	73	73
12 x 1.5	12.1	14.48	10	126	98
19 x 1.5	12.1	14.48	10	199	133
21 x 1.5	12.1	14.48	10	220	139
27 x 1.5	12.1	14.48	10	283	159
30 x 1.5	12.1	14.48	10	315	170
37 x 1.5	12.1	14.48	10	388	195
40 x 1.5	12.1	14.48	10	420	203
48 x 1.5	12.1	14.48	10	504	220
5 x 2.5	7.41	8.87	9	87	86
6 x 2.5	7.41	8.87	9	105	95
7 x 2.5	7.41	8.87	9	122	111
12 x 2.5	7.41	8.87	9	210	147
19 x 2.5	7.41	8.87	9	332	200
21 x 2.5	7.41	8.87	9	367	209
27 x 2.5	7.41	8.87	9	472	237
30 x 2.5	7.41	8.87	9	525	254
37 x 2.5	7.41	8.87	9	647	288
40 x 2.5	7.41	8.87	9	700	300
48 x 2.5	7.41	8.87	9	840	325
5 x 4	4.61	5.52	8	140	115
6 x 4	4.61	5.52	8	168	127
7 x 4	4.61	5.52	8	196	148
12 x 4	4.61	5.52	8	336	194
19 x 4	4.61	5.52	8	532	261
21 x 4	4.61	5.52	8	588	273
27 x 4	4.61	5.52	8	756	305
30 x 4	4.61	5.52	8	840	326
37 x 4	4.61	5.52	8	1036	370
40 x 4	4.61	5.52	8	1120	385
48 x 4	4.61	5.52	8	1344	415

Cable Gland Selection Data

Cross Section (mm^2)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
2 x 1.5	9.3	M20S	KM409-52	KM494-52
2 x 2.5	10.1	M20S	KM409-52	KM494-52
2 x 4	12.0	M20	KM409-53	KM494-53
2 x 6	13.1	M20	KM409-53	KM494-53
2 x 10	15.0	M25	KM409-55	KM494-55
2 x 16	17.1	M25	KM409-55	KM494-55
2 x 25	20.6	M32	KM409-56	KM494-56
2 x 35	22.8	M32	KM409-56	KM494-56
2 x 50	26.3	M40	KM409-57	KM494-57
2 x 70	30.0	M40	KM409-57	KM494-57
2 x 95	35.0	M50S / M50	KM409-58	KM494-59
2 x 120	38.3	M50	KM409-59	KM494-59
2 x 150	42.7	M50	KM409-59	KM494-59
2 x 185	47.4	M63S / M63	KM409-60	KM494-61
2 x 240	53.5	M63	KM409-61	KM494-61
2 x 300	59.9	M75S	KM409-62	KM494-62
2 x 400	67.0	M90	KM409-65	-

Cable Gland Selection Data

Cross Section (mm^2)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
3 x 1.5	9.8	M20S	KM409-52	KM494-52
3 x 2.5	10.7	M20S	KM409-52	KM494-52
3 x 4	12.7	M20	KM409-53	KM494-53
3 x 6	13.9	M25	KM409-55	KM494-55
3 x 10	15.9	M25	KM409-55	KM494-55
3 x 16	18.2	M25	KM409-55	KM494-55
3 x 25	22.0	M32	KM409-56	KM494-56
3 x 35sh	21.2	M32	KM409-56	KM494-56
3 x 50sh	24.7	M32	KM409-56	KM494-56
3 x 70sh	28.0	M40	KM409-57	KM494-57
3 x 95sh	32.0	M50S / M50	KM409-58	KM494-59
3 x 120sh	35.2	M50S / M50	KM409-58	KM494-59
3 x 150sh	39.1	M50	KM409-59	KM494-59
3 x 185sh	43.4	M63S / M63	KM409-60	KM494-61
3 x 240sh	48.8	M63S / M63	KM409-60	KM494-61
3 x 300sh	54.1	M63	KM409-61	KM494-61
3 x 400sh	61.3	M75	KM409-63	KM494-63

sh – Shaped conductor

Cable Gland Selection Data

Cross Section (mm^2)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
4 x 1.5	10.6	M20S	KM409-52	KM494-52
4 x 2.5	11.6	M20	KM409-53	KM494-53
4 x 4	13.8	M25	KM409-55	KM494-55
4 x 6	15.2	M25	KM409-55	KM494-55
4 x 10	17.5	M25	KM409-55	KM494-55
4 x 16	20.0	M32	KM409-56	KM494-56
4 x 25	24.2	M32	KM409-56	KM494-56
4 x 35sh	24.4	M32	KM409-56	KM494-56
4 x 50sh	28.5	M40	KM409-57	KM494-57
4 x 70sh	32.3	M50S / M50	KM409-58	KM494-59
4 x 95sh	37.2	M50	KM409-59	KM494-59
4 x 120sh	40.9	M50	KM409-59	KM494-59
4 x 150sh	45.4	M63S / M63	KM409-60	KM494-61
4 x 185sh	50.3	M63	KM409-61	KM494-61
4 x 240sh	56.5	M75S	KM409-62	KM494-62
4 x 300sh	62.6	M75	KM409-63	KM494-63
4 x 400sh	71.1	M90	KM409-65	-

sh – Shaped conductor

Cable Gland Selection Data

Cross Section (mm^2)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
5 x 1.5	11.6	M20	KM409-53	KM494-53
6 x 1.5	12.5	M20	KM409-53	KM494-53
7 x 1.5	12.5	M20	KM409-53	KM494-53
12 x 1.5	16.1	M25	KM409-55	KM494-55
19 x 1.5	18.7	M25	KM409-55	KM494-55
21 x 1.5	19.8	M32	KM409-56	KM494-56
27 x 1.5	22.3	M32	KM409-56	KM494-56
30 x 1.5	23.1	M32	KM409-56	KM494-56
37 x 1.5	24.9	M32	KM409-56	KM494-56
40 x 1.5	25.9	M40	KM409-57	KM494-57
48 x 1.5	28.7	M40	KM409-57	KM494-57
5 x 2.5	12.7	M20	KM409-53	KM494-53
6 x 2.5	13.8	M25	KM409-55	KM494-55
7 x 2.5	13.8	M25	KM409-55	KM494-55
12 x 2.5	17.9	M25	KM409-55	KM494-55
19 x 2.5	20.8	M32	KM409-56	KM494-56
21 x 2.5	22.0	M32	KM409-56	KM494-56
27 x 2.5	24.9	M32	KM409-56	KM494-56
30 x 2.5	25.8	M40	KM409-57	KM494-57
37 x 2.5	28.1	M40	KM409-57	KM494-57
40 x 2.5	29.2	M40	KM409-57	KM494-57
48 x 2.5	32.3	M50S / M50	KM409-57	KM494-57
5 x 4	15.2	M25	KM409-55	KM494-55
6 x 4	16.6	M25	KM409-55	KM494-55
7 x 4	16.6	M25	KM409-55	KM494-55
12 x 4	21.7	M32	KM409-56	KM494-56
19 x 4	25.5	M40	KM409-57	KM494-57
21 x 4	26.9	M40	KM409-57	KM494-57
27 x 4	31.0	M40	KM409-57	KM494-57
30 x 4	32.2	M50S / M50	KM409-58	KM494-59
37 x 4	35.0	M50S / M50	KM409-58	KM494-59
40 x 4	36.4	M50S / M50	KM409-58	KM494-59
48 x 4	40.5	M50	KM409-59	KM494-59

CU/XLPE/PVC 0.6/1 kV
General Power Cables

GENERAL INFO

Used as energy, utility and lighting cables, for outdoor installations, in cable ducts, underground in normal and salty water if specially produced.

CABLE CONSTRUCTION

Conductor material	: Copper
Conductor surface	: Bare
Insulation material	: Crosslinked Polyethylene (XLPE)
Sheath material	: Polyvinyl Chloride (PVC)

STANDARDS APPLIED

IEC 60502-1	Construction
IEC 60228 Class 2	Conductors
IEC 60502-1	Insulation
IEC 60502-1	Sheath
IEC 60332-1	Flame retardant properties

Special feature available on request:

IEC 60332-3-22 (Category A)
IEC 60332-3-24 (Category C)
Anti-termite
Anti-rodent
Oil resistance
UV resistance
Low smoke halogen free

CORE IDENTIFICATION

1-core	Natural

* Other colours available upon request

APPLICATION PROPERTIES

Nominal voltage U0 [V]	600
Nominal voltage U [V]	1000
Test voltage [kV / min]	3.5 kV for 5mins
Flame retardant	In accordance with IEC 60332-1
Halogen free	No
Low smoke	No
Max. conductor operating temperature [°C]	90
Min. ambient temperature, fixed installation [°C]	-25
Max. ambient temperature, fixed installation [°C]	60
Outdoor installation	Yes
Bending radius (during installation)	10 x OD
Bending radius (fixed installed)	8 x OD

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
1 x 1.5	1.6	3.0	5.8	48	46	3000
1 x 2.5	2.0	3.4	6.2	60	50	2000
1 x 4	2.5	3.9	6.8	79	54	1000
1 x 6	3.1	4.5	7.3	102	58	1000
1 x 10	3.9	5.3	8.2	144	66	3000
1 x 16	5.0	6.4	9.3	208	74	3000
1 x 25	6.3	8.1	11.0	313	88	1000
1 x 35	7.4	9.2	12.2	399	98	1000
1 x 50	8.7	10.7	13.7	525	110	1000
1 x 70	10.5	12.7	15.7	723	126	3000
1 x 95	12.4	14.6	17.8	978	142	2800
1 x 120	13.9	16.3	19.5	1215	156	1000
1 x 150	15.6	18.4	21.9	1509	175	2800
1 x 185	17.4	20.6	24.0	1836	192	2800
1 x 240	19.8	23.2	26.8	2412	214	2500
1 x 300	22.5	26.1	29.9	3017	239	1000
1 x 400	25.4	29.4	33.4	3813	267	1000
1 x 500	28.6	33.0	37.3	4813	298	800
1 x 630	32.5	37.3	41.9	6109	335	550
1 x 16cc	4.7	6.1	8.9	199	71	2000
1 x 25cc	6.0	7.8	10.6	297	85	2000
1 x 35cc	7.0	8.8	11.8	393	94	2000
1 x 50cc	8.0	10.0	13.0	512	104	2000
1 x 70cc	9.8	12.0	15.0	715	120	1000
1 x 95cc	11.5	13.7	16.9	955	135	1000
1 x 120cc	12.8	15.2	18.4	1201	147	1000
1 x 150cc	14.3	17.1	20.5	1479	164	1000
1 x 185cc	16.0	19.2	22.6	1830	181	2000
1 x 240cc	19.0	22.4	26.0	2354	208	800
1 x 300cc	20.4	24.0	27.8	2922	222	1000
1 x 400cc	23.1	27.1	31.1	3694	249	1000
1 x 500cc	26.1	30.5	34.7	4710	278	1000
1 x 630cc	29.9	34.7	39.3	6014	314	550

cc – Circular compacted conductor

Product Technical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 90°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
1 x 1.5	12.1	15.428	2000	11	23
1 x 2.5	7.41	9.448	2000	18	35
1 x 4	4.61	5.878	2000	28	51
1 x 6	3.08	3.927	2000	42	72
1 x 10	1.83	2.333	2000	70	107
1 x 16	1.15	1.466	2000	112	151
1 x 25	0.727	0.927	2000	175	199
1 x 35	0.524	0.668	2000	245	251
1 x 50	0.387	0.493	2000	350	319
1 x 70	0.268	0.342	2000	490	390
1 x 95	0.193	0.246	2000	665	467
1 x 120	0.153	0.195	2000	840	538
1 x 150	0.124	0.159	2000	1050	599
1 x 185	0.0991	0.127	2000	1295	674
1 x 240	0.0754	0.097	2000	1680	784
1 x 300	0.0601	0.078	2000	2100	878
1 x 400	0.047	0.061	2000	2800	1048
1 x 500	0.0366	0.048	2000	3500	1173
1 x 630	0.0283	0.038	2000	4410	1316
1 x 16cc	1.15	1.466	2000	199	279
1 x 25cc	0.727	0.927	2000	175	206
1 x 35cc	0.524	0.668	2000	245	260
1 x 50cc	0.387	0.493	2000	350	337
1 x 70cc	0.268	0.342	2000	490	408
1 x 95cc	0.193	0.246	2000	665	492
1 x 120cc	0.153	0.195	2000	840	571
1 x 150cc	0.124	0.159	2000	1050	640
1 x 185cc	0.0991	0.127	2000	1295	716
1 x 240cc	0.0754	0.097	2000	1680	808
1 x 300cc	0.0601	0.078	2000	2100	944
1 x 400cc	0.047	0.061	2000	2800	1125
1 x 500cc	0.0366	0.048	2000	3500	1261
1 x 630cc	0.0283	0.038	2000	4410	1403

cc – Circular compacted conductor

Cable Gland Selection Data

Cross Section (mm^2)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
1 x 1.5	5.8	M16	KM409-51	KM494-51
1 x 2.5	6.2	M16	KM409-51	KM494-51
1 x 4	6.8	M16	KM409-51	KM494-51
1 x 6	7.3	M16	KM409-51	KM494-51
1 x 10	8.2	M20SS	KM409-71	KM494-71
1 x 16	9.3	M20S	KM409-52	KM494-52
1 x 25	11.0	M20S	KM409-52	KM494-52
1 x 35	12.2	M20	KM409-53	KM494-53
1 x 50	13.7	M25	KM409-55	KM494-55
1 x 70	15.7	M25	KM409-55	KM494-55
1 x 95	17.8	M25	KM409-55	KM494-55
1 x 120	19.5	M32	KM409-56	KM494-56
1 x 150	21.9	M32	KM409-56	KM494-56
1 x 185	24.0	M32	KM409-56	KM494-56
1 x 240	26.8	M40	KM409-57	KM494-57
1 x 300	29.9	M40	KM409-57	KM494-57
1 x 400	33.4	M50S / M50	KM409-58	KM494-59
1 x 500	37.3	M50	KM409-59	KM494-59
1 x 630	41.9	M50 / M63	KM409-59	KM494-61
1 x 16cc	8.9	M20S	KM409-52	KM494-52
1 x 25cc	10.6	M20S	KM409-52	KM494-52
1 x 35cc	11.8	M20	KM409-53	KM494-53
1 x 50cc	13.0	M20	KM409-53	KM494-53
1 x 70cc	15.0	M25	KM409-55	KM494-55
1 x 95cc	16.9	M25	KM409-55	KM494-55
1 x 120cc	18.4	M25	KM409-55	KM494-55
1 x 150cc	20.5	M32	KM409-56	KM494-56
1 x 185cc	22.6	M32	KM409-56	KM494-56
1 x 240cc	26.0	M40	KM409-57	KM494-57
1 x 300cc	27.8	M40	KM409-57	KM494-57
1 x 400cc	31.1	M40	KM409-57	KM494-57
1 x 500cc	34.7	M50S / M50	KM409-58	KM494-59
1 x 630cc	39.3	M50	KM409-59	KM494-59

cc – Circular compacted conductor

CU/XLPE/PVC 0.6/1 kV
General Power and Control Cables

GENERAL INFO

Used as energy, utility and lighting cables, for outdoor installations, in cable ducts, underground in normal and salty water if specially produced.

CABLE CONSTRUCTION

Conductor material	: Copper
Conductor surface	: Bare
Insulation material	: Crosslinked Polyethylene (XLPE)
Filler material	: Non-hygroscopic filler
Binder material	: Polyester tape
Sheath material	: Polyvinyl Chloride (PVC)

STANDARDS APPLIED

IEC 60502-1	Construction
IEC 60228 Class 2	Conductors
IEC 60502-1	Insulation
IEC 60502-1	Sheath
IEC 60332-1	Flame retardant properties

Special feature available on request:

IEC 60332-3-22 (Category A)
IEC 60332-3-24 (Category C)
Anti-termite
Anti-rodent
Oil resistance
UV resistance
Low smoke halogen free

CORE IDENTIFICATION

2-cores	Brown, Blue
3-cores	Brown, Black, Blue
4-cores	Brown, Black, Grey, Blue
Multi-cores	Black with core numbering

* Other colours available upon request

APPLICATION PROPERTIES

Nominal voltage U0 [V]	600
Nominal voltage U [V]	1000
Test voltage [kV / min]	3.5 kV for 5mins
Flame retardant	In accordance with IEC 60332-1
Halogen free	No
Low smoke	No
Max. conductor operating temperature [°C]	90
Min. ambient temperature, fixed installation [°C]	-25
Max. ambient temperature, fixed installation [°C]	60
Outdoor installation	Yes
Bending radius (during installation)	10 x OD
Bending radius (fixed installed)	8 x OD

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
2 x 1.5	1.6	3.0	8.9	110	71	2000
2 x 2.5	2.0	3.4	9.7	141	78	2000
2 x 4	2.5	3.9	10.8	187	86	2000
2 x 6	3.1	4.5	11.9	245	95	2000
2 x 10	3.9	5.3	13.8	301	110	1500
2 x 16	5.0	6.4	15.9	436	127	1500
2 x 25	6.3	8.1	19.4	657	155	1500
2 x 35	7.4	9.2	21.6	851	173	2300
2 x 50	8.7	10.7	24.7	1125	198	2300
2 x 70	10.5	12.7	28.6	1566	229	2300
2 x 95	12.4	14.6	33.0	2151	264	1800
2 x 120	13.9	16.3	36.7	2661	294	1500
2 x 150	15.6	18.4	41.1	3371	329	1200
2 x 185	17.4	20.6	45.6	4059	365	1000
2 x 240	19.8	23.2	51.3	5307	410	800
2 x 300	22.5	26.1	57.5	6677	460	500
2 x 400	25.4	29.4	64.4	7873	515	400
2 x 16cc	4.7	6.1	15.3	420	122	1500
2 x 25cc	5.9	7.7	18.5	628	148	1500
2 x 35cc	6.9	8.7	20.7	833	166	1000
2 x 50cc	8.2	10.2	23.6	1126	189	1000
2 x 70cc	9.7	11.9	27.0	1532	216	1000
2 x 95cc	11.5	13.7	31.0	2076	248	1000
2 x 120cc	12.8	15.2	34.5	2629	276	1000
2 x 150cc	14.3	17.1	38.5	3306	308	1000
2 x 185cc	16.0	19.2	42.9	4042	343	1000
2 x 240cc	19.0	22.4	49.7	5262	398	800
2 x 300cc	20.4	24.0	53.3	6474	426	700
2 x 400cc	23.1	27.1	59.8	8128	478	500

cc – Circular compacted conductor

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
3 x 1.5	1.6	3.0	9.3	129	74	2000
3 x 2.5	2.0	3.4	10.3	168	82	2000
3 x 4	2.5	3.9	11.4	229	91	2000
3 x 6	3.1	4.5	12.6	304	101	2000
3 x 10	3.9	5.3	14.6	406	117	2000
3 x 16	5.0	6.4	16.9	597	135	2000
3 x 25	6.3	8.1	20.7	915	166	2000
3 x 35sh	15.1	16.9	20.0	1133	160	2300
3 x 50sh	17.9	19.9	23.0	1499	184	2300
3 x 70sh	21.0	23.2	26.6	2127	213	2300
3 x 95sh	24.1	26.3	29.9	2879	239	1800
3 x 120sh	27.2	29.6	33.5	3620	268	1600
3 x 150sh	30.5	33.3	37.6	4476	301	1400
3 x 185sh	33.9	37.1	41.6	5580	333	1100
3 x 240sh	38.3	41.7	46.6	7246	373	800
3 x 300sh	42.7	46.3	51.5	9017	412	700
3 x 400sh	49.1	53.1	58.9	11526	471	400
3 x 16cc	4.7	6.1	16.3	571	130	2000
3 x 25cc	6.0	7.8	19.9	869	159	1800
3 x 35cc	6.9	8.7	22.0	1155	176	2300
3 x 50cc	8.2	10.2	25.2	1584	202	2000
3 x 70cc	9.7	11.9	29.1	2177	233	1800
3 x 95cc	11.5	13.7	33.3	2921	266	1600
3 x 120cc	12.8	15.2	36.9	3680	295	1500
3 x 150cc	14.3	17.1	41.4	4583	331	1200
3 x 185cc	16.0	19.2	46.1	5707	369	1000
3 x 240cc	19.0	22.4	53.4	7455	427	600
3 x 300cc	20.4	24.0	57.2	9239	458	500
3 x 400cc	23.1	27.1	64.4	11617	515	400

sh – Shaped conductor

cc – Circular compacted conductor

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
4 x 1.5	1.6	3.0	10.1	155	81	2000
4 x 2.5	2.0	3.4	11.1	204	89	2000
4 x 4	2.5	3.9	12.4	280	99	2000
4 x 6	3.1	4.5	13.8	376	110	2000
4 x 10	3.9	5.3	16.0	512	128	1500
4 x 16	5.0	6.4	18.6	771	149	1500
4 x 25	6.3	8.1	22.8	1180	182	1000
4 x 35sh	18.0	19.8	22.9	1502	183	2300
4 x 50sh	21.3	23.3	26.6	1999	213	2300
4 x 70sh	24.9	27.1	30.7	2831	246	2000
4 x 95sh	28.5	30.7	34.7	3843	278	1600
4 x 120sh	32.1	34.5	38.8	4823	310	1300
4 x 150sh	36.0	38.8	43.3	5937	346	1000
4 x 185sh	40.1	43.3	48.2	7407	386	800
4 x 240sh	45.3	48.7	54.0	9622	432	600
4 x 300sh	50.3	53.9	59.6	11980	477	500
4 x 400sh	57.8	61.8	68.1	15301	545	300
4 x 16cc	4.7	6.1	17.8	736	142	900
4 x 25cc	6.0	7.8	22.0	1120	176	900
4 x 35cc	6.9	8.7	24.4	1512	195	2300
4 x 50cc	8.2	10.2	28.1	2030	225	2000
4 x 70cc	9.7	11.9	32.4	2887	259	1800
4 x 95cc	11.5	13.7	37.1	3822	297	1500
4 x 120cc	12.8	15.2	41.2	4860	330	1200
4 x 150cc	14.3	17.1	46.0	5994	368	1000
4 x 185cc	16.0	19.2	51.5	7545	412	800
4 x 240cc	19.0	22.4	59.6	9870	477	500
4 x 300cc	20.4	24.0	63.8	12077	510	400
4 x 400cc	23.1	27.1	71.8	15218	574	300

sh – Shaped conductor
cc – Circular compacted conductor

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
5 x 1.5	1.6	3.0	11.1	163	89	2000
6 x 1.5	1.6	3.0	11.9	192	95	2000
7 x 1.5	1.6	3.0	11.9	204	95	2000
12 x 1.5	1.6	3.0	15.3	324	122	1800
19 x 1.5	1.6	3.0	17.7	466	142	1600
21 x 1.5	1.6	3.0	18.7	510	150	1500
27 x 1.5	1.6	3.0	21.1	640	169	1500
30 x 1.5	1.6	3.0	21.8	698	174	1500
37 x 1.5	1.6	3.0	23.5	837	188	1500
40 x 1.5	1.6	3.0	24.5	900	196	1500
48 x 1.5	1.6	3.0	26.9	1066	215	1000
5 x 2.5	2.0	3.4	12.2	218	98	2000
6 x 2.5	2.0	3.4	13.2	258	106	1500
7 x 2.5	2.0	3.4	13.2	278	106	1500
12 x 2.5	2.0	3.4	17.0	448	136	1500
19 x 2.5	2.0	3.4	19.8	657	158	1500
21 x 2.5	2.0	3.4	20.9	721	167	1500
27 x 2.5	2.0	3.4	23.6	909	189	1500
30 x 2.5	2.0	3.4	24.5	995	196	1500
37 x 2.5	2.0	3.4	26.5	1201	212	1500
40 x 2.5	2.0	3.4	27.8	1305	222	1500
48 x 2.5	2.0	3.4	30.5	1549	244	1000
5 x 4	2.5	3.9	13.6	306	109	2000
6 x 4	2.5	3.9	14.8	395	118	1500
7 x 4	2.5	3.9	14.8	624	118	1500
12 x 4	2.5	3.9	19.2	644	154	1500
19 x 4	2.5	3.9	22.5	961	180	1500
21 x 4	2.5	3.9	23.7	1057	190	1500
27 x 4	2.5	3.9	26.9	1338	215	1500
30 x 4	2.5	3.9	28.1	1483	225	1500
37 x 4	2.5	3.9	30.4	1797	243	1300
40 x 4	2.5	3.9	31.8	1950	254	1200
48 x 4	2.5	3.9	35.2	2335	282	1000

Product Electrical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 90°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
2 x 1.5	12.1	15.43	2000	21	29
2 x 2.5	7.41	9.45	2000	35	45
2 x 4	4.61	5.88	2000	56	65
2 x 6	3.08	3.93	2000	84	88
2 x 10	1.83	2.33	2000	140	127
2 x 16	1.15	1.47	2000	224	176
2 x 25	0.727	0.927	2000	350	226
2 x 35	0.524	0.668	2000	490	284
2 x 50	0.387	0.493	2000	700	354
2 x 70	0.268	0.342	2000	980	428
2 x 95	0.193	0.246	2000	1330	504
2 x 120	0.153	0.196	2000	1680	572
2 x 150	0.124	0.159	2000	2100	639
2 x 185	0.0991	0.128	2000	2590	710
2 x 240	0.0754	0.098	2000	3360	819
2 x 300	0.0601	0.08	2000	4200	913
2 x 400	0.047	0.064	2000	5600	1087
2 x 16cc	1.15	1.47	2000	224	183
2 x 25cc	0.727	0.927	2000	350	236
2 x 35cc	0.524	0.668	2000	490	296
2 x 50cc	0.387	0.493	2000	700	371
2 x 70cc	0.268	0.342	2000	980	454
2 x 95cc	0.193	0.246	2000	1330	536
2 x 120cc	0.153	0.196	2000	1680	609
2 x 150cc	0.124	0.159	2000	2100	682
2 x 185cc	0.0991	0.128	2000	2590	755
2 x 240cc	0.0754	0.098	2000	3360	845
2 x 300cc	0.0601	0.08	2000	4200	985
2 x 400cc	0.047	0.064	2000	5600	1171

cc – Circular compacted conductor

Product Electrical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 90°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
3 x 1.5	12.1	15.43	2000	31	42
3 x 2.5	7.41	9.45	2000	52	63
3 x 4	4.61	5.88	2000	84	92
3 x 6	3.08	3.93	2000	126	125
3 x 10	1.83	2.33	2000	210	180
3 x 16	1.15	1.47	2000	336	249
3 x 25	0.727	0.927	2000	525	317
3 x 35sh	0.524	0.668	2000	735	459
3 x 50sh	0.387	0.493	2000	1050	571
3 x 70sh	0.268	0.342	2000	1470	691
3 x 95sh	0.193	0.246	2000	1995	834
3 x 120sh	0.153	0.196	2000	2520	940
3 x 150sh	0.124	0.159	2000	3150	1047
3 x 185sh	0.0991	0.128	2000	3885	1167
3 x 240sh	0.0754	0.098	2000	5040	1352
3 x 300sh	0.0601	0.08	2000	6300	1529
3 x 400sh	0.047	0.064	2000	8400	1783
3 x 16cc	1.15	1.47	2000	336	258
3 x 25cc	0.727	0.927	2000	525	330
3 x 35cc	0.524	0.668	2000	735	418
3 x 50cc	0.387	0.493	2000	1050	521
3 x 70cc	0.268	0.342	2000	1470	631
3 x 95cc	0.193	0.246	2000	1995	749
3 x 120cc	0.153	0.196	2000	2520	854
3 x 150cc	0.124	0.159	2000	3150	951
3 x 185cc	0.0991	0.128	2000	3885	1053
3 x 240cc	0.0754	0.098	2000	5040	1180
3 x 300cc	0.0601	0.08	2000	6300	1377
3 x 400cc	0.047	0.064	2000	8400	1630

sh – Shaped conductor

cc – Circular compacted conductor

Product Electrical Data

Cross Section (mm²)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 90°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
4 x 1.5	12.1	15.43	2000	42	52
4 x 2.5	7.41	9.45	2000	70	79
4 x 4	4.61	5.88	2000	112	113
4 x 6	3.08	3.93	2000	168	152
4 x 10	1.83	2.33	2000	280	219
4 x 16	1.15	1.47	2000	448	301
4 x 25	0.727	0.927	2000	700	384
4 x 35sh	0.524	0.668	2000	980	535
4 x 50sh	0.387	0.493	2000	1400	658
4 x 70sh	0.268	0.342	2000	1960	798
4 x 95sh	0.193	0.246	2000	2660	958
4 x 120sh	0.153	0.196	2000	3360	1082
4 x 150sh	0.124	0.159	2000	4200	1212
4 x 185sh	0.0991	0.128	2000	5180	1343
4 x 240sh	0.0754	0.098	2000	6720	1556
4 x 300sh	0.0601	0.08	2000	8400	1762
4 x 400sh	0.047	0.064	2000	11200	2056
4 x 16cc	1.15	1.47	2000	448	315
4 x 25cc	0.727	0.927	2000	700	398
4 x 35cc	0.524	0.668	2000	980	502
4 x 50cc	0.387	0.493	2000	1400	623
4 x 70cc	0.268	0.342	2000	1960	756
4 x 95cc	0.193	0.246	2000	2660	896
4 x 120cc	0.153	0.196	2000	3360	1019
4 x 150cc	0.124	0.159	2000	4200	1141
4 x 185cc	0.0991	0.128	2000	5180	1257
4 x 240cc	0.0754	0.098	2000	6720	1409
4 x 300cc	0.0601	0.08	2000	8400	1646
4 x 400cc	0.047	0.064	2000	11200	1950

sh – Shaped conductor

cc – Circular compacted conductor

Product Technical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 90°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
5 x 1.5	12.1	15.43	2000	52	59
6 x 1.5	12.1	15.43	2000	63	66
7 x 1.5	12.1	15.43	2000	73	77
12 x 1.5	12.1	15.43	2000	126	103
19 x 1.5	12.1	15.43	2000	199	141
21 x 1.5	12.1	15.43	2000	220	147
27 x 1.5	12.1	15.43	2000	283	168
30 x 1.5	12.1	15.43	2000	315	181
37 x 1.5	12.1	15.43	2000	388	206
40 x 1.5	12.1	15.43	2000	420	214
48 x 1.5	12.1	15.43	2000	504	234
5 x 2.5	7.41	9.45	2000	87	89
6 x 2.5	7.41	9.45	2000	105	99
7 x 2.5	7.41	9.45	2000	122	116
12 x 2.5	7.41	9.45	2000	210	154
19 x 2.5	7.41	9.45	2000	332	210
21 x 2.5	7.41	9.45	2000	367	219
27 x 2.5	7.41	9.45	2000	472	250
30 x 2.5	7.41	9.45	2000	525	268
37 x 2.5	7.41	9.45	2000	647	305
40 x 2.5	7.41	9.45	2000	700	315
48 x 2.5	7.41	9.45	2000	840	344
5 x 4	4.61	5.88	2000	140	129
6 x 4	4.61	5.88	2000	168	142
7 x 4	4.61	5.88	2000	196	166
12 x 4	4.61	5.88	2000	336	219
19 x 4	4.61	5.88	2000	532	296
21 x 4	4.61	5.88	2000	588	310
27 x 4	4.61	5.88	2000	756	351
30 x 4	4.61	5.88	2000	840	374
37 x 4	4.61	5.88	2000	1036	426
40 x 4	4.61	5.88	2000	1120	440
48 x 4	4.61	5.88	2000	1344	477

Cable Gland Selection Data

Cross Section (mm^2)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
2 x 1.5	8.9	M20S	KM409-52	KM494-52
2 x 2.5	9.7	M20S	KM409-52	KM494-52
2 x 4	10.8	M20S	KM409-52	KM494-52
2 x 6	11.9	M20	KM409-53	KM494-53
2 x 10	13.8	M25	KM409-55	KM494-55
2 x 16	15.9	M25	KM409-55	KM494-55
2 x 25	19.4	M32	KM409-56	KM494-56
2 x 35	21.6	M32	KM409-56	KM494-56
2 x 50	24.7	M32	KM409-56	KM494-56
2 x 70	28.6	M40	KM409-57	KM494-57
2 x 95	33.0	M50S / M50	KM409-58	KM494-59
2 x 120	36.7	M50	KM409-59	KM494-59
2 x 150	41.1	M50	KM409-59	KM494-59
2 x 185	45.6	M63S / M63	KM409-60	KM494-61
2 x 240	51.3	M63	KM409-61	KM494-61
2 x 300	57.5	M75S	KM409-62	KM494-62
2 x 400	64.4	M75	KM409-63	KM494-63
2 x 16cc	15.3	M25	KM409-55	KM494-55
2 x 25cc	18.5	M25	KM409-55	KM494-55
2 x 35cc	20.7	M32	KM409-56	KM494-56
2 x 50cc	23.6	M32	KM409-56	KM494-56
2 x 70cc	27.0	M40	KM409-57	KM494-57
2 x 95cc	31.0	M40	KM409-57	KM494-57
2 x 120cc	34.5	M50S / M50	KM409-58	KM494-59
2 x 150cc	38.5	M50	KM409-59	KM494-59
2 x 185cc	42.9	M63S / M63	KM409-60	KM494-61
2 x 240cc	49.7	M63S / M63	KM409-60	KM494-61
2 x 300cc	53.3	M63	KM409-61	KM494-61
2 x 400cc	59.8	M75S	KM409-62	KM494-62

cc – Circular compacted conductor

Cable Gland Selection Data

Cross Section (mm^2)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
3 x 1.5	9.3	M20S	KM409-52	KM494-52
3 x 2.5	10.3	M20S	KM409-52	KM494-52
3 x 4	11.4	M20	KM409-53	KM494-53
3 x 6	12.6	M20	KM409-53	KM494-53
3 x 10	14.6	M25	KM409-55	KM494-55
3 x 16	16.9	M25	KM409-55	KM494-55
3 x 25	20.7	M32	KM409-56	KM494-56
3 x 35sh	20.0	M32	KM409-56	KM494-56
3 x 50sh	23.0	M32	KM409-56	KM494-56
3 x 70sh	26.6	M40	KM409-57	KM494-57
3 x 95sh	29.9	M40	KM409-57	KM494-57
3 x 120sh	33.5	M50S / M50	KM409-58	KM494-59
3 x 150sh	37.6	M50	KM409-59	KM494-59
3 x 185sh	41.6	M50	KM409-59	KM494-59
3 x 240sh	46.6	M63S / M63	KM409-60	KM494-61
3 x 300sh	51.5	M63	KM409-61	KM494-61
3 x 400sh	58.9	M75S	KM409-62	KM494-62
3 x 16cc	16.3	M25	KM409-55	KM494-55
3 x 25cc	19.9	M32	KM409-56	KM494-56
3 x 35cc	22.0	M32	KM409-56	KM494-56
3 x 50cc	25.2	M32	KM409-56	KM494-56
3 x 70cc	29.1	M40	KM409-57	KM494-57
3 x 95cc	33.3	M50S / M50	KM409-58	KM494-59
3 x 120cc	36.9	M50S / M50	KM409-58	KM494-59
3 x 150cc	41.4	M50	KM409-59	KM494-59
3 x 185cc	46.1	M63S / M63	KM409-60	KM494-61
3 x 240cc	53.4	M63	KM409-61	KM494-61
3 x 300cc	57.2	M75S	KM409-62	KM494-62
3 x 400cc	64.4	M75	KM409-63	KM494-63

sh – Shaped conductor

cc – Circular compacted conductor

Cable Gland Selection Data

Cross Section (mm^2)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
4 x 1.5	10.1	M20S	KM409-52	KM494-52
4 x 2.5	11.1	M20S	KM409-52	KM494-52
4 x 4	12.4	M20	KM409-53	KM494-53
4 x 6	13.8	M25	KM409-55	KM494-55
4 x 10	16.0	M25	KM409-55	KM494-55
4 x 16	18.6	M25	KM409-55	KM494-55
4 x 25	22.8	M32	KM409-56	KM494-56
4 x 35sh	22.9	M32	KM409-56	KM494-56
4 x 50sh	26.6	M40	KM409-57	KM494-57
4 x 70sh	30.7	M40	KM409-57	KM494-57
4 x 95sh	34.7	M50S / M50	KM409-58	KM494-59
4 x 120sh	38.8	M50	KM409-59	KM494-59
4 x 150sh	43.3	M63S / M63	KM409-60	KM494-61
4 x 185sh	48.2	M63S / M63	KM409-60	KM494-61
4 x 240sh	54.0	M63	KM409-61	KM494-61
4 x 300sh	59.6	M75S / M75	KM409-62	KM494-63
4 x 400sh	68.1	M90	KM409-65	-
4 x 16cc	17.8	M25	KM409-55	KM494-55
4 x 25cc	22.0	M32	KM409-56	KM494-56
4 x 35cc	24.4	M32	KM409-56	KM494-56
4 x 50cc	28.1	M40	KM409-57	KM494-57
4 x 70cc	32.4	M50S / M50	KM409-58	KM494-59
4 x 95cc	37.1	M50	KM409-59	KM494-59
4 x 120cc	41.2	M50 / M63	KM409-59	KM494-61
4 x 150cc	46.0	M63	KM409-61	KM494-61
4 x 185cc	51.5	M63	KM409-61	KM494-61
4 x 240cc	59.6	M75S / M75	KM409-62	KM494-63
4 x 300cc	63.8	M75	KM409-63	KM494-63
4 x 400cc	71.8	M90	KM409-65	-

sh – Shaped conductor

cc – Circular compacted conductor

Cable Gland Selection Data

Cross Section (mm^2)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
5 x 1.5	11.1	M20S	KM409-52	KM494-52
6 x 1.5	11.9	M20	KM409-53	KM494-53
7 x 1.5	11.9	M20	KM409-53	KM494-53
12 x 1.5	15.3	M25	KM409-55	KM494-55
19 x 1.5	17.7	M25	KM409-55	KM494-55
21 x 1.5	18.7	M25	KM409-55	KM494-55
27 x 1.5	21.1	M32	KM409-56	KM494-56
30 x 1.5	21.8	M32	KM409-56	KM494-56
37 x 1.5	23.5	M32	KM409-56	KM494-56
40 x 1.5	24.5	M32	KM409-56	KM494-56
48 x 1.5	26.9	M40	KM409-57	KM494-57
5 x 2.5	12.2	M20	KM409-53	KM494-53
6 x 2.5	13.2	M25	KM409-55	KM494-55
7 x 2.5	13.2	M25	KM409-55	KM494-55
12 x 2.5	17.0	M25	KM409-55	KM494-55
19 x 2.5	19.8	M32	KM409-56	KM494-56
21 x 2.5	20.9	M32	KM409-56	KM494-56
27 x 2.5	23.6	M32	KM409-56	KM494-56
30 x 2.5	24.5	M32	KM409-56	KM494-56
37 x 2.5	26.5	M40	KM409-57	KM494-57
40 x 2.5	27.8	M40	KM409-57	KM494-57
48 x 2.5	30.5	M40	KM409-57	KM494-57
5 x 4	13.6	M25	KM409-55	KM494-55
6 x 4	14.8	M25	KM409-55	KM494-55
7 x 4	14.8	M25	KM409-55	KM494-55
12 x 4	19.2	M32	KM409-56	KM494-56
19 x 4	22.5	M32	KM409-56	KM494-56
21 x 4	23.7	M32	KM409-56	KM494-56
27 x 4	26.9	M40	KM409-57	KM494-57
30 x 4	28.1	M40	KM409-57	KM494-57
37 x 4	30.4	M40	KM409-57	KM494-57
40 x 4	31.8	M50S / M50	KM409-58	KM494-59
48 x 4	35.2	M50	KM409-59	KM494-59

CU/XLPE/PVC/AWA/PVC 0.6/1 kV
General Power Cables

GENERAL INFO

Suitable for heavy operating conditions, laying and installation. Used underground and under normal and salty water if specially produced.

CABLE CONSTRUCTION

Conductor Material	: Copper
Conductor Surface	: Bare
Insulation Material	: Crosslinked Polyethylene (XLPE)
Inner Sheath Material	: Polyvinyl Chloride (PVC)
Armour Material	: Aluminium Wires
Sheath material	: Polyvinyl Chloride (PVC)

STANDARDS APPLIED

IEC 60502-1	Construction
IEC 60228 Class 2	Conductors
IEC 60502-1	Insulation
IEC 60502-1	Armour
IEC 60502-1	Sheath
IEC 60332-1	Flame retardant properties

Special feature available on request:

IEC 60332-3-22 (Category A)
IEC 60332-3-24 (Category C)
Anti-termite
Anti-rodent
Oil resistance
UV resistance
Low Smoke Halogen Free

CORE IDENTIFICATION

1-core	Natural

*Other core colours available upon request

APPLICATION PROPERTIES

Nominal voltage U0 [V]	600
Nominal voltage U [V]	1000
Test voltage [kV / min]	3.5 kV for 5mins
Flame retardant	In accordance with IEC 60332-1
Halogen free	No
Low smoke	No
Max. conductor operating temperature [°C]	90
Min. ambient temperature, fixed installation [°C]	-25
Max. ambient temperature, fixed installation [°C]	60
Outdoor installation	Yes
Bending radius (during installation)	12 x OD
Bending radius (fixed installed)	10 x OD

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Inner Covering Diameter (mm)	Armour Wire Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
1 x 50	8.7	1.0	12.9	1.6	19.3	764	193	2000
1 x 70	10.5	1.1	14.8	1.6	21.3	991	213	1800
1 x 95	12.4	1.1	16.7	1.6	23.4	1280	234	1600
1 x 120	13.9	1.2	18.5	1.6	25.4	1553	254	1400
1 x 150	15.6	1.4	20.6	1.6	27.5	1872	275	1200
1 x 185	17.4	1.6	22.8	1.6	29.9	2242	299	1000
1 x 240	19.8	1.7	25.4	1.6	32.7	2865	327	1000
1 x 300	22.5	1.8	28.3	1.6	35.8	3511	358	800
1 x 400	25.4	2.0	32.0	2.0	40.7	4510	407	600
1 x 500	28.6	2.2	35.6	2.0	44.5	5576	445	600
1 x 630	32.5	2.4	39.9	2.0	49.0	6942	490	500
1 x 50cc	8.2	1.0	12.3	1.6	18.8	756	188	2000
1 x 70cc	9.7	1.1	14.0	1.6	20.5	978	205	1800
1 x 95cc	11.5	1.1	15.8	1.6	22.5	1242	225	1600
1 x 120cc	12.8	1.2	17.0	1.6	23.2	1461	232	1400
1 x 150cc	14.3	1.4	18.9	1.6	25.1	1753	251	1200
1 x 185cc	16.0	1.6	21.4	1.6	28.5	2217	285	1000
1 x 240cc	18.4	1.7	24.0	1.6	31.3	2841	313	1000
1 x 300cc	20.4	1.8	26.2	1.6	33.7	3386	337	800
1 x 400cc	23.1	2.0	29.7	2.0	38.4	4345	384	600
1 x 500cc	26.1	2.2	33.1	2.0	42.0	5428	420	600
1 x 630cc	29.9	2.4	37.3	2.0	46.4	6938	464	500

cc – Circular compacted conductor

Product Electrical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 90°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
1 x 50	0.387	0.493	2000	350	181
1 x 70	0.268	0.342	2000	490	230
1 x 95	0.193	0.246	2000	665	284
1 x 120	0.153	0.195	2000	840	331
1 x 150	0.124	0.159	2000	1050	382
1 x 185	0.0991	0.127	2000	1295	433
1 x 240	0.0754	0.097	2000	1680	514
1 x 300	0.0601	0.078	2000	2100	587
1 x 400	0.047	0.061	2000	2800	688
1 x 500	0.0366	0.048	2000	3500	787
1 x 630	0.0283	0.038	2000	4410	900
1 x 50cc	0.387	0.493	2000	350	186
1 x 70cc	0.268	0.342	2000	490	239
1 x 95cc	0.193	0.246	2000	665	296
1 x 120cc	0.153	0.195	2000	840	362
1 x 150cc	0.124	0.159	2000	1050	418
1 x 185cc	0.0991	0.127	2000	1295	454
1 x 240cc	0.0754	0.097	2000	1680	537
1 x 300cc	0.0601	0.078	2000	2100	623
1 x 400cc	0.047	0.061	2000	2800	729
1 x 500cc	0.0366	0.048	2000	3500	833
1 x 630cc	0.0283	0.038	2000	4410	950

cc – Circular compacted conductor

Cable Gland Selection Data

Cross Section (mm^2)	Inner covering diameter (mm)	Armour wire diameter (mm)	Overall cable diameter (mm)	Recommended cable gland size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
1 x 50	12.9	1.6	19.3	M25	KA422-55	KCA455-55
1 x 70	14.8	1.6	21.3	M25	KA422-55	KCA455-55
1 x 95	16.7	1.6	23.4	M25	KA422-55	KCA455-55
1 x 120	18.5	1.6	25.4	M25	KA422-55	KCA455-55
1 x 150	20.6	1.6	27.5	M32	KA422-56	KCA455-56
1 x 185	22.8	1.6	29.9	M32	KA422-56	KCA455-56
1 x 240	25.4	1.6	32.7	M32	KA422-56	KCA455-56
1 x 300	28.3	1.6	35.8	M40	KA422-57	KCA455-57
1 x 400	32.0	2.0	40.7	M50S	KA422-58	KCA455-58
1 x 500	35.6	2.0	44.5	M50S	KA422-58	KCA455-58
1 x 630	39.9	2.0	49.0	M50	KA422-59	KCA455-59
1 x 50cc	12.3	1.6	18.8	M25	KA422-55	KCA455-55
1 x 70cc	14.0	1.6	20.5	M25	KA422-55	KCA455-55
1 x 95cc	15.8	1.6	22.5	M25	KA422-55	KCA455-55
1 x 120cc	17.0	1.6	23.2	M25	KA422-55	KCA455-55
1 x 150cc	18.9	1.6	25.1	M25	KA422-55	KCA455-55
1 x 185cc	21.4	1.6	28.5	M32	KA422-56	KCA455-56
1 x 240cc	24.0	1.6	31.3	M32	KA422-56	KCA455-56
1 x 300cc	26.2	1.6	33.7	M40	KA422-57	KCA455-57
1 x 400cc	29.7	2.0	38.4	M40	KA422-57	KCA455-57
1 x 500cc	33.1	2.0	42.0	M50S	KA422-58	KCA455-58
1 x 630cc	37.3	2.0	46.4	M50	KA422-59	KCA455-59

cc – Circular compacted conductor

CU/XLPE/PVC/SWA/PVC 0.6/1 kV
General Power and Control Cables

GENERAL INFO

High resistant against outer mechanical reactions with introduction of galvanized steel wires. Suitable for heavy operating conditions, laying and installation. Used underground and under normal and salty water if specially produced.

CABLE CONSTRUCTION

Conductor Material	: Copper
Conductor Surface	: Bare
Insulation Material	: Crosslinked Polyethylene (XLPE)
Filler Material	: Non-hygroscopic filler
Binder Material	: Polyester tape
Inner Sheath Material	: Polyvinyl Chloride (PVC)
Armour Material	: Round Steel Wires
Sheath material	: Polyvinyl Chloride (PVC)

STANDARDS APPLIED

IEC 60502-1	Construction
IEC 60228 Class 2	Conductors
IEC 60502-1	Insulation
IEC 60502-1	Armour
IEC 60502-1	Sheath
IEC 60332-1	Flame retardant properties

Special feature available on request:

IEC 60332-3-22 (Category A)	Oil resistance
IEC 60332-3-24 (Category C)	UV resistance
Anti-termite	Low smoke halogen free
Anti-rodent	

CORE IDENTIFICATION

2-cores	Brown, Blue
3-cores	Brown, Black, Blue
4-cores	Brown, Black, Grey, Blue
Multi-cores	Black with core numbering

* Other colours available upon request

APPLICATION PROPERTIES

Nominal voltage U0 [V]	600
Nominal voltage U [V]	1000
Test voltage [kV / min]	3.5 kV for 5mins
Flame retardant	In accordance with IEC 60332-1
Halogen free	No
Low smoke	No
Max. conductor operating temperature [°C]	90
Min. ambient temperature, fixed installation [°C]	-25
Max. ambient temperature, fixed installation [°C]	60
Outdoor installation	Yes
Bending radius (during installation)	12 x OD
Bending radius (fixed installed)	10 x OD

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Inner covering Diameter (mm)	Armour Wire Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
2 x 1.5	1.6	3.0	7.5	0.9	12.3	290	123	2000
2 x 2.5	2.0	3.4	8.3	0.9	13.2	334	132	2000
2 x 4	2.5	3.9	9.4	0.9	14.2	401	142	2000
2 x 6	3.1	4.5	10.5	0.9	15.4	484	154	2000
2 x 10	3.9	5.3	12.4	1.25	17.9	661	179	1800
2 x 16	5.0	6.4	14.5	1.25	20.1	842	201	1800
2 x 25	6.3	8.1	18.0	1.6	24.2	1269	242	1800
2 x 35	7.4	9.2	20.3	1.6	26.4	1522	264	2300
2 x 50	8.7	10.7	23.4	1.6	29.5	1885	295	1200
2 x 70	10.5	12.7	27.4	1.6	33.8	2477	338	1700
2 x 95	12.4	14.6	31.8	2.0	39.2	3450	392	1200
2 x 120	13.9	16.3	35.2	2.0	42.9	4103	429	1000
2 x 150	15.6	18.4	39.5	2.0	47.4	4963	474	800
2 x 185	17.4	20.6	44.2	2.5	53.4	6309	534	600
2 x 240	19.8	23.2	49.5	2.5	59.1	7793	591	500
2 x 300	22.5	26.1	55.7	2.5	65.5	9506	655	400
2 x 400	25.4	29.4	62.2	2.5	72.6	11059	726	300
2 x 16cc	4.7	6.1	13.9	1.25	19.4	798	194	2000
2 x 25cc	6.0	7.8	17.1	1.6	23.3	1196	233	1800
2 x 35cc	7.0	8.8	19.4	1.6	25.5	1471	255	1800
2 x 50cc	8.0	10.0	22.4	1.6	28.5	1851	285	1400
2 x 70cc	9.8	12.0	25.8	1.6	32.2	2374	322	1400
2 x 95cc	11.5	13.7	29.8	2.0	37.2	3285	372	1200
2 x 120cc	12.8	15.2	33.1	2.0	40.7	3986	407	1000
2 x 150cc	14.3	17.1	36.9	2.0	44.7	4810	447	1000
2 x 185cc	16.0	19.2	41.5	2.5	50.7	6120	507	600
2 x 240cc	19.0	22.4	47.9	2.5	57.5	7622	575	500
2 x 300cc	20.4	24.0	51.5	2.5	61.3	9041	613	400
2 x 400cc	23.1	27.1	57.6	2.5	68.0	11009	680	300

cc – Circular compacted conductor

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Inner covering Diameter (mm)	Armour Wire Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
3 x 1.5	1.6	3.0	8.0	0.9	12.8	315	128	2000
3 x 2.5	2.0	3.4	8.9	0.9	13.7	373	137	2000
3 x 4	2.5	3.9	10.0	0.9	14.8	453	148	2000
3 x 6	3.1	4.5	11.2	0.9	16.1	554	161	2000
3 x 10	3.9	5.3	13.2	1.25	18.8	788	188	1800
3 x 16	5.0	6.4	15.5	1.25	21.1	1027	211	1800
3 x 25	6.3	8.1	19.3	1.6	25.5	1563	255	1500
3 x 35sh	15.1	16.9	18.8	1.6	24.9	1777	249	2300
3 x 50sh	17.9	19.9	21.7	1.6	28.0	2244	280	2300
3 x 70sh	21.0	23.2	25.5	2.0	32.8	3207	328	1800
3 x 95sh	24.1	26.3	28.6	2.0	36.3	4092	363	1400
3 x 120sh	27.2	29.6	32.0	2.0	39.9	4985	399	1200
3 x 150sh	30.5	33.3	36.1	2.5	45.4	6392	454	800
3 x 185sh	33.9	37.1	40.0	2.5	49.4	7684	494	800
3 x 240sh	38.3	41.7	45.0	2.5	54.8	9633	548	600
3 x 300sh	42.7	46.3	49.5	2.5	59.7	11604	597	500
3 x 400sh	49.1	53.1	56.3	2.5	66.9	14459	669	300
3 x 16cc	4.7	6.1	14.9	1.25	20.4	988	204	1000
3 x 25cc	6.0	7.8	18.5	1.6	24.8	1499	248	1000
3 x 35cc	7.0	8.8	20.9	1.6	27.0	1834	270	1000
3 x 50cc	8.0	10.0	23.5	1.6	29.8	2334	298	1000
3 x 70cc	9.8	12.0	28.2	2.0	35.5	3334	355	1000
3 x 95cc	11.5	13.7	32.1	2.0	39.7	4259	397	1000
3 x 120cc	12.8	15.2	35.4	2.0	43.3	5143	433	1000
3 x 150cc	14.3	17.1	39.9	2.5	49.2	6651	492	800
3 x 185cc	16.0	19.2	44.5	2.5	53.9	7965	539	600
3 x 240cc	19.0	22.4	51.8	2.5	61.6	10009	616	500
3 x 300cc	20.4	24.0	55.2	2.5	65.4	12057	654	400
3 x 400cc	23.1	27.1	61.8	2.5	72.4	14694	724	300

sh – Shaped conductor

cc – Circular compacted conductor

Product Dimensional Data

Cross Section (mm²)	Conductor Diameter (mm)	Insulation Diameter (mm)	Inner covering Diameter (mm)	Armour Wire Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
4 x 1.5	1.6	3.0	8.7	0.9	13.5	353	135	2000
4 x 2.5	2.0	3.4	9.7	0.9	14.6	422	146	2000
4 x 4	2.5	3.9	11.0	0.9	15.8	523	158	2000
4 x 6	3.1	4.5	12.4	1.25	17.9	740	179	2000
4 x 10	3.9	5.3	14.6	1.25	20.1	918	201	1500
4 x 16	5.0	6.4	17.2	1.6	23.4	1364	234	1500
4 x 25	6.3	8.1	21.4	1.6	27.6	1898	276	1000
4 x 35sh	18.0	19.8	21.6	1.6	27.9	2220	279	2300
4 x 50sh	21.3	23.3	25.2	1.6	31.6	2827	316	2000
4 x 70sh	24.9	27.1	29.4	2.0	37.1	4054	371	1500
4 x 95sh	28.5	30.7	33.2	2.0	41.1	5219	411	1200
4 x 120sh	32.1	34.5	37.4	2.5	46.6	6758	466	800
4 x 150sh	36.0	38.8	41.7	2.5	51.1	8061	511	700
4 x 185sh	40.1	43.3	46.2	2.5	56.0	9758	560	600
4 x 240sh	45.3	48.7	52.0	2.5	62.1	12299	621	400
4 x 300sh	50.3	53.9	57.2	2.5	67.7	14896	677	300
4 x 400sh	57.8	61.8	65.5	3.15	77.9	19478	779	250
4 x 16cc	4.7	6.1	16.4	1.6	22.7	1295	227	2000
4 x 25cc	6.0	7.8	20.3	1.6	26.5	1785	265	1800
4 x 35cc	7.0	8.8	23.1	1.6	29.4	2267	294	2000
4 x 50cc	8.0	10.0	26.6	1.6	33.1	2895	331	1800
4 x 70cc	9.8	12.0	31.1	2.0	38.8	4149	388	1200
4 x 95cc	11.5	13.7	35.6	2.0	43.5	5261	435	1000
4 x 120cc	12.8	15.2	39.8	2.5	49.0	6850	490	800
4 x 150cc	14.3	17.1	44.4	2.5	53.8	8213	538	600
4 x 185cc	16.0	19.2	49.5	2.5	59.3	9995	593	500
4 x 240cc	19.0	22.4	57.6	2.5	67.8	12744	678	300
4 x 300cc	20.4	24.0	61.4	2.5	72.0	15142	720	300
4 x 400cc	23.1	27.1	69.3	3.15	81.7	19550	817	250

sh – Shaped conductor
cc – Circular compacted conductor

Product Dimensional Data

Cross Section (mm^2)	Conductor Diameter (mm)	Insulation Diameter (mm)	Inner covering Diameter (mm)	Armour Wire Diameter (mm)	Overall Cable Diameter (mm)	Cable Weight (kg/km)	Min. Bending Radius During Installation (mm)	Standard Packing Length (m)
5 x 1.5	1.6	3.0	9.7	0.9	14.5	378	145	2000
6 x 1.5	1.6	3.0	10.5	0.9	15.4	410	154	2000
7 x 1.5	1.6	3.0	10.5	0.9	15.4	437	154	2000
12 x 1.5	1.6	3.0	13.9	1.25	19.4	718	194	2000
19 x 1.5	1.6	3.0	16.3	1.25	21.9	917	219	2000
21 x 1.5	1.6	3.0	17.5	1.6	23.5	1109	235	1800
27 x 1.5	1.6	3.0	19.7	1.6	25.9	1305	259	1600
30 x 1.5	1.6	3.0	20.4	1.6	26.6	1381	266	1600
37 x 1.5	1.6	3.0	22.1	1.6	28.3	1573	283	1500
40 x 1.5	1.6	3.0	23.1	1.6	29.5	1685	295	1400
48 x 1.5	1.6	3.0	25.5	1.6	31.9	1923	319	1200
5 x 2.5	2.0	3.4	10.8	0.9	15.6	457	156	2000
6 x 2.5	2.0	3.4	11.8	1.25	17.3	595	173	1800
7 x 2.5	2.0	3.4	11.8	1.25	17.3	616	173	2000
12 x 2.5	2.0	3.4	15.6	1.25	21.2	887	212	2000
19 x 2.5	2.0	3.4	18.4	1.6	24.6	1286	246	1800
21 x 2.5	2.0	3.4	19.6	1.6	25.7	1381	257	1600
27 x 2.5	2.0	3.4	22.2	1.6	28.5	1646	285	1400
30 x 2.5	2.0	3.4	23.1	1.6	29.5	1780	295	1300
37 x 2.5	2.0	3.4	25.1	1.6	31.5	2041	315	1100
40 x 2.5	2.0	3.4	26.2	1.6	32.8	2184	328	1000
48 x 2.5	2.0	3.4	29.3	2.0	36.9	2791	369	800
5 x 4	2.5	3.9	12.2	1.25	17.8	655	178	2000
6 x 4	2.5	3.9	13.4	1.25	18.9	752	189	2000
7 x 4	2.5	3.9	13.4	1.25	18.9	777	189	2000
12 x 4	2.5	3.9	17.8	1.6	24.1	1255	241	1800
19 x 4	2.5	3.9	21.1	1.6	27.3	1663	273	1400
21 x 4	2.5	3.9	22.3	1.6	28.6	1895	286	1200
27 x 4	2.5	3.9	25.5	1.6	31.9	2195	319	1000
30 x 4	2.5	3.9	26.5	1.6	33.1	2378	331	1000
37 x 4	2.5	3.9	29.2	2.0	36.8	3038	368	700
40 x 4	2.5	3.9	30.4	2.0	38.1	3239	381	700
48 x 4	2.5	3.9	33.6	2.0	41.4	3744	414	600

Product Electrical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 90°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
2 x 1.5	12.1	15.43	2000	21	17
2 x 2.5	7.41	9.45	2000	35	27
2 x 4	4.61	5.88	2000	56	39
2 x 6	3.08	3.93	2000	84	55
2 x 10	1.83	2.33	2000	140	78
2 x 16	1.15	1.47	2000	224	111
2 x 25	0.727	0.927	2000	350	145
2 x 35	0.524	0.668	2000	490	186
2 x 50	0.387	0.493	2000	700	237
2 x 70	0.268	0.342	2000	980	290
2 x 95	0.193	0.246	2000	1330	339
2 x 120	0.153	0.196	2000	1680	392
2 x 150	0.124	0.159	2000	2100	443
2 x 185	0.0991	0.128	2000	2590	485
2 x 240	0.0754	0.098	2000	3360	569
2 x 300	0.0601	0.08	2000	4200	641
2 x 400	0.047	0.064	2000	5600	771
2 x 16cc	1.15	1.47	2000	224	115
2 x 25cc	0.727	0.927	2000	350	150
2 x 35cc	0.524	0.668	2000	490	192
2 x 50cc	0.387	0.493	2000	700	246
2 x 70cc	0.268	0.342	2000	980	304
2 x 95cc	0.193	0.246	2000	1330	358
2 x 120cc	0.153	0.196	2000	1680	413
2 x 150cc	0.124	0.159	2000	2100	470
2 x 185cc	0.0991	0.128	2000	2590	511
2 x 240cc	0.0754	0.098	2000	3360	584
2 x 300cc	0.0601	0.08	2000	4200	685
2 x 400cc	0.047	0.064	2000	5600	824

cc – Circular compacted conductor

Product Electrical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 90°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
3 x 1.5	12.1	15.43	2000	31	24
3 x 2.5	7.41	9.45	2000	52	38
3 x 4	4.61	5.88	2000	84	57
3 x 6	3.08	3.93	2000	126	78
3 x 10	1.83	2.33	2000	210	112
3 x 16	1.15	1.47	2000	336	159
3 x 25	0.727	0.927	2000	525	206
3 x 35sh	0.524	0.668	2000	735	295
3 x 50sh	0.387	0.493	2000	1050	375
3 x 70sh	0.268	0.342	2000	1470	448
3 x 95sh	0.193	0.246	2000	1995	550
3 x 120sh	0.153	0.196	2000	2520	632
3 x 150sh	0.124	0.159	2000	3150	694
3 x 185sh	0.0991	0.128	2000	3885	786
3 x 240sh	0.0754	0.098	2000	5040	920
3 x 300sh	0.0601	0.08	2000	6300	1055
3 x 400sh	0.047	0.064	2000	8400	1256
3 x 16cc	1.15	1.47	2000	336	165
3 x 25cc	0.727	0.927	2000	525	212
3 x 35cc	0.524	0.668	2000	735	272
3 x 50cc	0.387	0.493	2000	1050	352
3 x 70cc	0.268	0.342	2000	1470	414
3 x 95cc	0.193	0.246	2000	1995	503
3 x 120cc	0.153	0.196	2000	2520	582
3 x 150cc	0.124	0.159	2000	3150	640
3 x 185cc	0.0991	0.128	2000	3885	721
3 x 240cc	0.0754	0.098	2000	5040	818
3 x 300cc	0.0601	0.08	2000	6300	963
3 x 400cc	0.047	0.064	2000	8400	1160

sh – Shaped conductor

cc – Circular compacted conductor

Product Electrical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 90°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
4 x 1.5	12.1	15.43	2000	42	31
4 x 2.5	7.41	9.45	2000	70	48
4 x 4	4.61	5.88	2000	112	71
4 x 6	3.08	3.93	2000	168	94
4 x 10	1.83	2.33	2000	280	139
4 x 16	1.15	1.47	2000	448	191
4 x 25	0.727	0.927	2000	700	254
4 x 35sh	0.524	0.668	2000	980	351
4 x 50sh	0.387	0.493	2000	1400	443
4 x 70sh	0.268	0.342	2000	1960	528
4 x 95sh	0.193	0.246	2000	2660	647
4 x 120sh	0.153	0.196	2000	3360	721
4 x 150sh	0.124	0.159	2000	4200	822
4 x 185sh	0.0991	0.128	2000	5180	925
4 x 240sh	0.0754	0.098	2000	6720	1082
4 x 300sh	0.0601	0.08	2000	8400	1241
4 x 400sh	0.047	0.064	2000	11200	1438
4 x 16cc	1.15	1.47	2000	448	197
4 x 25cc	0.727	0.927	2000	700	264
4 x 35cc	0.524	0.668	2000	980	333
4 x 50cc	0.387	0.493	2000	1400	423
4 x 70cc	0.268	0.342	2000	1960	505
4 x 95cc	0.193	0.246	2000	2660	611
4 x 120cc	0.153	0.196	2000	3360	686
4 x 150cc	0.124	0.159	2000	4200	781
4 x 185cc	0.0991	0.128	2000	5180	874
4 x 240cc	0.0754	0.098	2000	6720	991
4 x 300cc	0.0601	0.08	2000	8400	1167
4 x 400cc	0.047	0.064	2000	11200	1371

sh – Shaped conductor

cc – Circular compacted conductor

Product Technical Data

Cross Section (mm^2)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. AC Conductor Resistance at 90°C (Ω/km)	Min. Insulation Resistance at 20°C (MΩ.km)	Max. Cable Pulling Tension (kgf)	Max. Sidewall Pressure to Cable (kgf/m)
5 x 1.5	12.1	15.43	2000	52	36
6 x 1.5	12.1	15.43	2000	63	41
7 x 1.5	12.1	15.43	2000	73	47
12 x 1.5	12.1	15.43	2000	126	65
19 x 1.5	12.1	15.43	2000	199	91
21 x 1.5	12.1	15.43	2000	220	94
27 x 1.5	12.1	15.43	2000	283	109
30 x 1.5	12.1	15.43	2000	315	118
37 x 1.5	12.1	15.43	2000	388	137
40 x 1.5	12.1	15.43	2000	420	142
48 x 1.5	12.1	15.43	2000	504	158
5 x 2.5	7.41	9.45	2000	87	56
6 x 2.5	7.41	9.45	2000	105	61
7 x 2.5	7.41	9.45	2000	122	71
12 x 2.5	7.41	9.45	2000	210	99
19 x 2.5	7.41	9.45	2000	332	135
21 x 2.5	7.41	9.45	2000	367	143
27 x 2.5	7.41	9.45	2000	472	166
30 x 2.5	7.41	9.45	2000	525	178
37 x 2.5	7.41	9.45	2000	647	205
40 x 2.5	7.41	9.45	2000	700	213
48 x 2.5	7.41	9.45	2000	840	228
5 x 4	4.61	5.88	2000	140	79
6 x 4	4.61	5.88	2000	168	89
7 x 4	4.61	5.88	2000	196	104
12 x 4	4.61	5.88	2000	336	139
19 x 4	4.61	5.88	2000	532	195
21 x 4	4.61	5.88	2000	588	205
27 x 4	4.61	5.88	2000	756	237
30 x 4	4.61	5.88	2000	840	254
37 x 4	4.61	5.88	2000	1036	282
40 x 4	4.61	5.88	2000	1120	294
48 x 4	4.61	5.88	2000	1344	325

Cable Gland Selection Data

Cross Section (mm^2)	Inner Covering Diameter (mm)	Armour Wire Diameter (mm)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
2 x 1.5	7.5	0.9	12.3	M16	KAA413-51	KCA472-51
2 x 2.5	8.3	0.9	13.2	M20S	KAA413-52	KCA472-52
2 x 4	9.4	0.9	14.2	M20S	KAA413-52	KCA472-52
2 x 6	10.5	0.9	15.4	M20	KAA413-53	KCA472-53
2 x 10	12.4	1.25	17.9	M20	KAA413-53	KCA472-53
2 x 16	14.5	1.25	20.1	M20	KAA413-53	KCA472-53
2 x 25	18.0	1.6	24.2	M25	KAA413-55	KCA472-55
2 x 35	20.3	1.6	26.4	M25	KAA413-55	KCA472-55
2 x 50	23.4	1.6	29.5	M32	KAA413-56	KCA472-56
2 x 70	27.4	1.6	33.8	M40	KAA413-57	KCA472-57
2 x 95	31.8	2.0	39.2	M40	KAA413-57	KCA472-57
2 x 120	35.2	2.0	42.9	M50S	KAA413-58	KCA472-58
2 x 150	39.5	2.0	47.4	M50	KAA413-59	KCA472-59
2 x 185	44.2	2.5	53.4	M63S	KAA413-60	KCA472-60
2 x 240	49.5	2.5	59.1	M63	KAA413-61	KCA472-61
2 x 300	55.7	2.5	65.5	M75S	KAA413-62	KCA472-62
2 x 400	62.2	2.5	72.6	M75	KAA413-63	KCA472-63
2 x 16cc	13.9	1.25	19.4	M20	KAA413-53	KCA472-53
2 x 25cc	17.1	1.6	23.3	M25	KAA413-55	KCA472-55
2 x 35cc	19.4	1.6	25.5	M25	KAA413-55	KCA472-55
2 x 50cc	22.4	1.6	28.5	M32	KAA413-56	KCA472-56
2 x 70cc	25.8	1.6	32.2	M40	KAA413-57	KCA472-57
2 x 95cc	29.8	2.0	37.2	M40	KAA413-57	KCA472-57
2 x 120cc	33.1	2.0	40.7	M50S	KAA413-58	KCA472-58
2 x 150cc	36.9	2.0	44.7	M50S	KAA413-58	KCA472-58
2 x 185cc	41.5	2.5	50.7	M50	KAA413-59	KCA472-59
2 x 240cc	47.9	2.5	57.5	M63S	KAA413-60	KCA472-60
2 x 300cc	51.5	2.5	61.3	M63	KAA413-61	KCA472-61
2 x 400cc	57.6	2.5	68.0	M75S	KAA413-62	KCA472-62

cc – Circular compacted conductor

Cable Gland Selection Data

Cross Section (mm^2)	Inner Covering Diameter (mm)	Armour Wire Diameter (mm)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
3 x 1.5	8.0	0.9	12.8	M16	KAA413-51	KCA472-51
3 x 2.5	8.9	0.9	13.7	M20S	KAA413-52	KCA472-52
3 x 4	10.0	0.9	14.8	M20S	KAA413-52	KCA472-52
3 x 6	11.2	0.9	16.1	M20	KAA413-53	KCA472-53
3 x 10	13.2	1.25	18.8	M20	KAA413-53	KCA472-53
3 x 16	15.5	1.25	21.1	M25	KAA413-55	KCA472-55
3 x 25	19.3	1.6	25.5	M25	KAA413-55	KCA472-55
3 x 35sh	18.8	1.6	24.9	M25	KAA413-55	KCA472-55
3 x 50sh	21.7	1.6	28.0	M32	KAA413-56	KCA472-56
3 x 70sh	25.5	2.0	32.8	M32	KAA413-56	KCA472-56
3 x 95sh	28.6	2.0	36.3	M40	KAA413-57	KCA472-57
3 x 120sh	32.0	2.0	39.9	M40	KAA413-57	KCA472-57
3 x 150sh	36.1	2.5	45.4	M50S	KAA413-58	KCA472-58
3 x 185sh	40.0	2.5	49.4	M50	KAA413-59	KCA472-59
3 x 240sh	45.0	2.5	54.8	M63S	KAA413-60	KCA472-60
3 x 300sh	49.5	2.5	59.7	M63	KAA413-61	KCA472-61
3 x 400sh	56.3	2.5	66.9	M75	KAA413-63	KCA472-63
3 x 16cc	14.9	1.25	20.4	M25	KAA413-55	KCA472-55
3 x 25cc	18.5	1.6	24.8	M25	KAA413-55	KCA472-55
3 x 35cc	20.9	1.6	27.0	M32	KAA413-56	KCA472-56
3 x 50cc	23.5	1.6	29.8	M32	KAA413-56	KCA472-56
3 x 70cc	28.2	2.0	35.5	M40	KAA413-57	KCA472-57
3 x 95cc	32.1	2.0	39.7	M50S	KAA413-58	KCA472-58
3 x 120cc	35.4	2.0	43.3	M50S	KAA413-58	KCA472-58
3 x 150cc	39.9	2.5	49.2	M50	KAA413-59	KCA472-59
3 x 185cc	44.5	2.5	53.9	M63S	KAA413-60	KCA472-60
3 x 240cc	51.8	2.5	61.6	M63	KAA413-61	KCA472-61
3 x 300cc	55.2	2.5	65.4	M75S	KAA413-62	KCA472-62
3 x 400cc	61.8	2.5	72.4	M75	KAA413-63	KCA472-63

sh – Shaped conductor

cc – Circular compacted conductor

Cable Gland Selection Data

Cross Section (mm^2)	Inner Covering Diameter (mm)	Armour Wire Diameter (mm)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
4 x 1.5	8.7	0.9	13.5	M20S	KAA413-52	KCA472-52
4 x 2.5	9.7	0.9	14.6	M20S	KAA413-52	KCA472-52
4 x 4	11.0	0.9	15.8	M20	KAA413-53	KCA472-53
4 x 6	12.4	1.25	17.9	M20	KAA413-53	KCA472-53
4 x 10	14.6	1.25	20.1	M25	KAA413-55	KCA472-55
4 x 16	17.2	1.6	23.4	M25	KAA413-55	KCA472-55
4 x 25	21.4	1.6	27.6	M32	KAA413-56	KCA472-56
4 x 35sh	21.6	1.6	27.9	M32	KAA413-56	KCA472-56
4 x 50sh	25.2	1.6	31.6	M32	KAA413-56	KCA472-56
4 x 70sh	29.4	2.0	37.1	M40	KAA413-57	KCA472-57
4 x 95sh	33.2	2.0	41.1	M50S	KAA413-58	KCA472-58
4 x 120sh	37.4	2.5	46.6	M50	KAA413-59	KCA472-59
4 x 150sh	41.7	2.5	51.1	M50	KAA413-59	KCA472-59
4 x 185sh	46.2	2.5	56.0	M63S	KAA413-60	KCA472-60
4 x 240sh	52.0	2.5	62.1	M63	KAA413-61	KCA472-61
4 x 300sh	57.2	2.5	67.7	M75S	KAA413-62	KCA472-62
4 x 400sh	65.5	3.15	77.9	M85	KAA413-64	KCA472-64
4 x 16cc	16.4	1.6	22.7	M25	KAA413-55	KCA472-55
4 x 25cc	20.3	1.6	26.5	M25	KAA413-55	KCA472-55
4 x 35cc	23.1	1.6	29.4	M32	KAA413-56	KCA472-56
4 x 50cc	26.6	1.6	33.1	M32	KAA413-56	KCA472-56
4 x 70cc	31.1	2.0	38.8	M40	KAA413-57	KCA472-57
4 x 95cc	35.6	2.0	43.5	M50S	KAA413-58	KCA472-58
4 x 120cc	39.8	2.5	49.0	M50	KAA413-59	KCA472-59
4 x 150cc	44.4	2.5	53.8	M63S	KAA413-60	KCA472-60
4 x 185cc	49.5	2.5	59.3	M63	KAA413-61	KCA472-61
4 x 240cc	57.6	2.5	67.8	M75S	KAA413-62	KCA472-62
4 x 300cc	61.4	2.5	72.0	M75	KAA413-63	KCA472-63
4 x 400cc	69.3	3.15	81.7	M85	KAA413-64	KCA472-64

sh – Shaped conductor

cc – Circular compacted conductor

Cable Gland Selection Data

Cross Section (mm^2)	Inner Covering Diameter (mm)	Armour Wire Diameter (mm)	Overall Cable Diameter (mm)	Recommended Cable Gland Size	BICON Cable Gland Part Number	BICON Ex-Proof Cable Gland Part Number
5 x 1.5	9.7	0.9	14.5	M20S	KAA413-52	KCA472-52
6 x 1.5	10.5	0.9	15.4	M20	KAA413-53	KCA472-53
7 x 1.5	10.5	0.9	15.4	M20	KAA413-53	KCA472-53
12 x 1.5	13.9	1.25	19.4	M20	KAA413-53	KCA472-53
19 x 1.5	16.3	1.25	21.9	M25	KAA413-55	KCA472-55
21 x 1.5	17.5	1.6	23.5	M25	KAA413-55	KCA472-55
27 x 1.5	19.7	1.6	25.9	M25	KAA413-55	KCA472-55
30 x 1.5	20.4	1.6	26.6	M32	KAA413-56	KCA472-56
37 x 1.5	22.1	1.6	28.3	M32	KAA413-56	KCA472-56
40 x 1.5	23.1	1.6	29.5	M32	KAA413-56	KCA472-56
48 x 1.5	25.5	1.6	31.9	M32	KAA413-56	KCA472-56
5 x 2.5	10.8	0.9	15.6	M20	KAA413-53	KCA472-53
6 x 2.5	11.8	1.25	17.3	M20	KAA413-53	KCA472-53
7 x 2.5	11.8	1.25	17.3	M20	KAA413-53	KCA472-53
12 x 2.5	15.6	1.25	21.2	M25	KAA413-55	KCA472-55
19 x 2.5	18.4	1.6	24.6	M25	KAA413-55	KCA472-55
21 x 2.5	19.6	1.6	25.7	M25	KAA413-55	KCA472-55
27 x 2.5	22.2	1.6	28.5	M32	KAA413-56	KCA472-56
30 x 2.5	23.1	1.6	29.5	M32	KAA413-56	KCA472-56
37 x 2.5	25.1	1.6	31.5	M32	KAA413-56	KCA472-56
40 x 2.5	26.2	1.6	32.8	M32	KAA413-56	KCA472-56
48 x 2.5	29.3	2.0	36.9	M40	KAA413-57	KCA472-57
5 x 4	12.2	1.25	17.8	M20	KAA413-53	KCA472-53
6 x 4	13.4	1.25	18.9	M20	KAA413-53	KCA472-53
7 x 4	13.4	1.25	18.9	M20	KAA413-53	KCA472-53
12 x 4	17.8	1.6	24.1	M25	KAA413-55	KCA472-55
19 x 4	21.1	1.6	27.3	M32	KAA413-56	KCA472-56
21 x 4	22.3	1.6	28.6	M32	KAA413-56	KCA472-56
27 x 4	25.5	1.6	31.9	M32	KAA413-56	KCA472-56
30 x 4	26.5	1.6	33.1	M40	KAA413-57	KCA472-57
37 x 4	29.2	2.0	36.8	M40	KAA413-57	KCA472-57
40 x 4	30.4	2.0	38.1	M40	KAA413-57	KCA472-57
48 x 4	33.6	2.0	41.4	M50S	KAA413-58	KCA472-58

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