

SPECIFICATION**For****FDLH-0.6/1KV-CCE**

0.6/1(1.2)kV Copper Conductor XLPE Insulated

Polyolefin Sheathed Flame Retardant

with Low Smoke and Zero Halogen Control Cable

(0.6/1(1.2)kV, Cu/XLPE/FR-LSOH)

BY



(Wachara Sangsomritphon)

MANAGER, Cable Design Section

Rev.	Date	Description
0	4/6/2020	Issued specification
1	13/11/2020	Add size 3x1.5 mm ² and 25x1.5 mm ²
2	3/02/2021	- Add size - Cancel cable code "0010"
3	5/7/2021	Add size
4	5/7/2021	Add size 2x1, 6x1 mm ² and 30x1 mm ²
5	25/11/2021	Add size 3x1 mm ²
6	27/12/2021	Add size 8x1 and 24x1 mm ²
7	2/3/2022	Add size 20x2.5 mm ²
8	13/7/2023	Change flame retardant to Cat A.
9	4/10/2023	Add size 28 x 1.5 mm ²
10	29/1/2024	Add size
11	13/2/2024	Add size
12	20/3/2024	Add size 6 x 6 mm ²
13	29/3/2024	Change marking on cable
14	8/4/2024	Add size
15	8/8/2024	Add size 34C, 40C
16	15/10/2024	Add flame retardant Cat.C
17	20/11/2024	Update Table 1
18	19/12/2024	Add orange color sheath and size 32, 38, 44, 46 x 1-6, 48 x 4 mm ²

APP. _____

()

CUSTOMER

Customer Document	Rev.
-	

Remark:

This document is based on the Customer Document for the structure and properties of electric wire and cable only. If there are different points, will be shown in deviation table.

1. Scope

This specification covers 1000V copper conductor cross-linked polyethylene (XLPE) insulated polyolefin sheathed flame retardant with low smoke and zero halogen control cable.

The cable shall be based on IEC 60502-1 : 2021.

The maximum conductor temperature shall be 90°C.

- Flame retardant test requirements per IEC 60332-1.
- Flame propagation test requirements per IEC 60332-3-22; Category A, IEC 60332-3-23; Category B and IEC 60332-3-24; Category C.
- Low smoke test requirements per IEC 61034.
- Halogen gases determinations test requirements per IEC 60754-1 and IEC 60754-2.
- Extremely low toxicity gases test requirements per IEC 60684-2 and Defence Standard 02-713.

For core and size of conductor as below :

Number of core	Size (mm ²)
2 - 48	1.5 - 2.5
2 - 35	4

2. Conductor

The conductor shall be non-compacted concentric stranded uncoated annealed copper conductor in accordance with IEC 60228 : 2004, Class 2.

The direction of lay shall be left-hand (S) lay.

3. Insulation

The insulation shall be cross-linked polyethylene (XLPE) compound meet the requirements of IEC 60502-1 : 2021.

The average thickness of the insulation shall be not less than that given in Table 1.

The minimum thickness shall be not fall below 90% of the nominal value in Table 1 by more than 0.1 mm.

4. Cabling

The individual insulated cores shall be cabled together with suitable non-hygroscopic filler to give the completed cable a substantially circular cross section.

The direction of lay shall be left-hand (S) lay.

A suitable binder tape shall be applied helically over the cabled core.

5. Core Identification

The cores shall be identified by colors or by numbers printed on the insulation, as follows:

- 2-cores : blue, brown
- 3-cores : brown, black, grey
- 4-cores : blue, brown, black, grey

For ≥ 5 -cores :

The cores shall be identified by the arabic numerals printed longitudinally and continuously on the surface of white insulation.

6. Sheath

The sheath shall be sunlight resistant, low smoke and zero halogen and flame retardant polyolefin (ST8) compound meet the requirements of the IEC 60502-1 : 2021.


The average thickness of the sheath shall be not less than that given in Table 1.

The minimum thickness shall not fall below 80% of the nominal value in Table 1 by more than 0.2 mm.

The color of the sheath shall be black or orange.

7. Marking on Cable

The marking items shall be marked by printed at intervals not exceeding 1 meter with suitable means throughout the length of cable.

1. Manufacturer's name and/or trade mark "  YAZAKI..... : TYE"
2. Year of manufacture
3. Cable property code "FDLH"
4. Rated circuit voltage "0.6/1KV"
5. Type of conductor "CU"
6. Type of insulation and sheath "XLPE/LSOH"
7. Type of cable "CONTROL CABLE"
8. Number cores and size of conductor
9. The continuous reel length marking (in figure) shall be made on the sheath at every 1 meter

8. Test and Properties

The cable shall meet the requirements in Test and Inspection and Table 1, when tested in accordance with IEC 60502-1 : 2021, IEC 60228 : 2004, IEC 60332-1, IEC 60332-3-22; Category A, IEC 60332-3-23; Category B, IEC 60332-3-24; Category C, IEC 61034, IEC 60754-1, IEC 60754-2, IEC 60684-2 and Defence Standard 02-713.

Remark: Sunlight resistant test meet the requirement of TIS 293-2541.


Except black color sheath; For longer life of cable should be avoid exposure to direct solar radiation it necessary, cover is required.

9. Packing

The cable shall be placed on non-returnable wooden reels.

The reels shall be covered with suitable covering to provide the cable with physical protection during transportation and during ordinary storage and handling operations.

Each reel shall be clearly marked as follows.

1. Designation "FDLH-0.6/1KV-CCE"
2. Number of cores and size of cable
3. Cable length
4. Net and gross weight
5. Manufacturer's name and/or trade mark "  **YAZAKI** "
6. Rolling direction of reel

Test and Inspection

Routine Tests

- Maximum conductor resistance, Ohm/km..... specified in Table 1
- AC test voltage for 5 minutes, kV..... 3.5

Sample Tests

- Construction specified in Table 1
- Hot set test at $200\text{ }^{\circ}\text{C} \pm 3\text{ }^{\circ}\text{C}$ for XLPE
 - Maximum elongation under load (%) 175
 - Maximum permanent elongation after cooling (%).....15

Type Tests

- Flame retardant tested according to IEC 60332-1.
- Flame propagation test according to IEC 60332-3-22; Category A or IEC 60332-3-23; Category B or IEC 60332-3-24; Category C.
- Smoke emission tested according to IEC 61034.
- Halogen gases tested according to IEC 60754-1 and IEC 60754-2.
- Extremely low toxicity gases test according to IEC 60684-2 and Defence Standard 02-713.

Definition concerning the tests

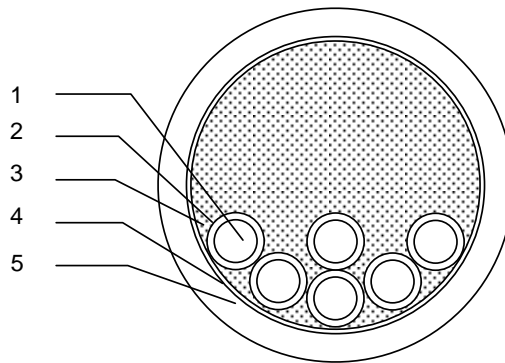
Routine tests: Tests made by the manufacturer on each manufactured length of cable to check that each length meets the specified requirements.

Sample tests: Tests made by the manufacturer on samples of completed cable or components taken from a completed cable, at a specified frequency, so as to verify that the finished product meets the specified requirements.

Type tests: Tests made before supplying, on a general commercial basis, a type of cable covered by this standard, in order to demonstrate satisfactory performance characteristics to meet the intended application.

Cable structure

Cross-sectional (Not scale)



No.	Structure	Material
1	Conductor	Stranded annealed copper
2	Insulation	Cross-linked polyethylene (XLPE) compound
3	Filler	Non-hygroscopic
4	Binder tape	PS tape or suitable tape
5	Sheath	Low smoke and zero halogen flame retardant polyolefin (ST8) compound

Application: For installed into tray, conduit, underground duct trench or direct burial in ground which provide flame retardant, low smoke and non toxic emission under fire. Maximum conductor temperature of 90 °C for normal operation and 250 °C for short circuit conditions.

Table 1

No. of cores	Size (mm ²)	Conductor (wires/type)	Conductor diameter approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ohm/km)	Weight of cable approx. (kg/km)	Standard packing length (m)
2	1	7/Non-compacted	1.29	0.7	1.8	10.5	18.1	108	300
2	1.5	7/Non-compacted	1.59	0.7	1.8	11.0	12.1	128	300
2	2.5	7/Non-compacted	2.01	0.7	1.8	12.0	7.41	157	300
2	4	7/Non-compacted	2.55	0.7	1.8	13.0	4.61	201	300
2	6	7/Non-compacted	3.12	0.7	1.8	14.0	3.08	257	300
3	1	7/Non-compacted	1.29	0.7	1.8	11.0	18.1	125	300
3	1.5	7/Non-compacted	1.59	0.7	1.8	11.5	12.1	152	300
3	2.5	7/Non-compacted	2.01	0.7	1.8	12.5	7.41	190	300
3	4	7/Non-compacted	2.55	0.7	1.8	13.5	4.61	250	300
3	6	7/Non-compacted	3.12	0.7	1.8	15.0	3.08	326	300
4	1	7/Non-compacted	1.29	0.7	1.8	11.5	18.1	150	300
4	1.5	7/Non-compacted	1.59	0.7	1.8	12.0	12.1	181	300
4	2.5	7/Non-compacted	2.01	0.7	1.8	13.5	7.41	229	300
4	4	7/Non-compacted	2.55	0.7	1.8	14.5	4.61	306	300
4	6	7/Non-compacted	3.12	0.7	1.8	16.0	3.08	407	300
5	1	7/Non-compacted	1.29	0.7	1.8	12.5	18.1	176	300
5	1.5	7/Non-compacted	1.59	0.7	1.8	13.0	12.1	213	300
5	2.5	7/Non-compacted	2.01	0.7	1.8	14.5	7.41	274	300
5	4	7/Non-compacted	2.55	0.7	1.8	16.0	4.61	370	300
5	6	7/Non-compacted	3.12	0.7	1.8	17.5	3.08	489	300
6	1	7/Non-compacted	1.29	0.7	1.8	13.0	18.1	197	300
6	1.5	7/Non-compacted	1.59	0.7	1.8	14.0	12.1	248	300
6	2.5	7/Non-compacted	2.01	0.7	1.8	15.5	7.41	319	300
6	4	7/Non-compacted	2.55	0.7	1.8	17.0	4.61	429	300
6	6	7/Non-compacted	3.12	0.7	1.8	19.0	3.08	577	300

Table 1

No. of cores	Size (mm ²)	Conductor (wires/type)	Conductor diameter approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ohm/km)	Weight of cable approx. (kg/km)	Standard packing length (m)
7	1	7/Non-compacted	1.29	0.7	1.8	13.0	18.1	209	300
7	1.5	7/Non-compacted	1.59	0.7	1.8	14.0	12.1	265	300
7	2.5	7/Non-compacted	2.01	0.7	1.8	15.5	7.41	345	300
7	4	7/Non-compacted	2.55	0.7	1.8	17.0	4.61	468	300
7	6	7/Non-compacted	3.12	0.7	1.8	19.0	3.08	635	300
8	1	7/Non-compacted	1.29	0.7	1.8	14.0	18.1	234	300
8	1.5	7/Non-compacted	1.59	0.7	1.8	15.0	12.1	297	300
8	2.5	7/Non-compacted	2.01	0.7	1.8	17.0	7.41	398	300
8	4	7/Non-compacted	2.55	0.7	1.8	18.5	4.61	543	300
8	6	7/Non-compacted	3.12	0.7	1.8	20.5	3.08	739	300
9	1	7/Non-compacted	1.29	0.7	1.8	15.0	18.1	268	300
9	1.5	7/Non-compacted	1.59	0.7	1.8	16.0	12.1	332	300
9	2.5	7/Non-compacted	2.01	0.7	1.8	18.0	7.41	448	300
9	4	7/Non-compacted	2.55	0.7	1.8	20.0	4.61	609	300
9	6	7/Non-compacted	3.12	0.7	1.8	22.0	3.08	829	300
10	1	7/Non-compacted	1.29	0.7	1.8	16.0	18.1	297	300
10	1.5	7/Non-compacted	1.59	0.7	1.8	17.0	12.1	367	300
10	2.5	7/Non-compacted	2.01	0.7	1.8	19.0	7.41	493	300
10	4	7/Non-compacted	2.55	0.7	1.8	21.0	4.61	676	300
10	6	7/Non-compacted	3.12	0.7	1.8	23.5	3.08	917	300
11	1	7/Non-compacted	1.29	0.7	1.8	16.0	18.1	305	300
11	1.5	7/Non-compacted	1.59	0.7	1.8	17.0	12.1	381	300
11	2.5	7/Non-compacted	2.01	0.7	1.8	19.0	7.41	518	300
11	4	7/Non-compacted	2.55	0.7	1.8	21.0	4.61	709	300
11	6	7/Non-compacted	3.12	0.7	1.8	23.5	3.08	971	300

Table 1 (continued)

No. of cores	Size (mm ²)	Conductor (wires/type)	Conductor diameter approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ohm/km)	Weight of cable approx. (kg/km)	Standard packing length (m)
12	1	7/Non-compacted	1.29	0.7	1.8	16.5	18.1	332	300
12	1.5	7/Non-compacted	1.59	0.7	1.8	18.0	12.1	418	300
12	2.5	7/Non-compacted	2.01	0.7	1.8	20.0	7.41	561	300
12	4	7/Non-compacted	2.55	0.7	1.8	22.0	4.61	770	300
12	6	7/Non-compacted	3.12	0.7	1.8	24.5	3.08	1053	300
13	1	7/Non-compacted	1.29	0.7	1.8	17.5	18.1	352	300
13	1.5	7/Non-compacted	1.59	0.7	1.8	18.5	12.1	451	300
13	2.5	7/Non-compacted	2.01	0.7	1.8	21.0	7.41	596	300
13	4	7/Non-compacted	2.55	0.7	1.8	23.0	4.61	827	300
13	6	7/Non-compacted	3.12	0.7	1.8	26.0	3.08	1130	300
14	1	7/Non-compacted	1.29	0.7	1.8	17.5	18.1	359	300
14	1.5	7/Non-compacted	1.59	0.7	1.8	18.5	12.1	455	300
14	2.5	7/Non-compacted	2.01	0.7	1.8	21.0	7.41	620	300
14	4	7/Non-compacted	2.55	0.7	1.8	23.0	4.61	857	300
14	6	7/Non-compacted	3.12	0.7	1.8	26.0	3.08	1172	300
15	1	7/Non-compacted	1.29	0.7	1.8	18.0	18.1	384	300
15	1.5	7/Non-compacted	1.59	0.7	1.8	19.0	12.1	486	300
15	2.5	7/Non-compacted	2.01	0.7	1.8	21.5	7.41	667	300
15	4	7/Non-compacted	2.55	0.7	1.8	24.0	4.61	925	300
15	6	7/Non-compacted	3.12	0.7	1.8	26.5	3.08	1265	300
16	1	7/Non-compacted	1.29	0.7	1.8	18.0	18.1	401	300
16	1.5	7/Non-compacted	1.59	0.7	1.8	19.5	12.1	508	300
16	2.5	7/Non-compacted	2.01	0.7	1.8	22.0	7.41	696	300
16	4	7/Non-compacted	2.55	0.7	1.8	24.5	4.61	967	300
16	6	7/Non-compacted	3.12	0.7	1.8	27.0	3.08	1325	300

Table 1 (continued)

No. of cores	Size (mm ²)	Conductor (wires/type)	Conductor diameter approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ohm/km)	Weight of cable approx. (kg/km)	Standard packing length (m)
17	1	7/Non-compacted	1.29	0.7	1.8	19.0	18.1	437	300
17	1.5	7/Non-compacted	1.59	0.7	1.8	20.5	12.1	553	300
17	2.5	7/Non-compacted	2.01	0.7	1.8	23.0	7.41	752	300
17	4	7/Non-compacted	2.55	0.7	1.8	25.5	4.61	1053	300
17	6	7/Non-compacted	3.12	0.7	1.8	28.5	3.08	1434	300
18	1	7/Non-compacted	1.29	0.7	1.8	19.0	18.1	442	300
18	1.5	7/Non-compacted	1.59	0.7	1.8	20.5	12.1	564	300
18	2.5	7/Non-compacted	2.01	0.7	1.8	23.0	7.41	762	300
18	4	7/Non-compacted	2.55	0.7	1.8	25.5	4.61	1067	300
18	6	7/Non-compacted	3.12	0.7	1.8	28.5	3.08	1468	300
19	1	7/Non-compacted	1.29	0.7	1.8	19.0	18.1	454	300
19	1.5	7/Non-compacted	1.59	0.7	1.8	20.5	12.1	581	300
19	2.5	7/Non-compacted	2.01	0.7	1.8	23.0	7.41	787	300
19	4	7/Non-compacted	2.55	0.7	1.8	25.5	4.61	1106	300
19	6	7/Non-compacted	3.12	0.7	1.8	28.5	3.08	1525	300
20	1	7/Non-compacted	1.29	0.7	1.8	19.5	18.1	474	300
20	1.5	7/Non-compacted	1.59	0.7	1.8	21.0	12.1	613	300
20	2.5	7/Non-compacted	2.01	0.7	1.8	23.5	7.41	830	300
20	4	7/Non-compacted	2.55	0.7	1.8	26.0	4.61	1165	300
20	6	7/Non-compacted	3.12	0.7	1.8	29.5	3.08	1612	300
21	1	7/Non-compacted	1.29	0.7	1.8	20.0	18.1	495	300
21	1.5	7/Non-compacted	1.59	0.7	1.8	21.5	12.1	637	300
21	2.5	7/Non-compacted	2.01	0.7	1.8	24.0	7.41	864	300
21	4	7/Non-compacted	2.55	0.7	1.8	27.0	4.61	1247	300
21	6	7/Non-compacted	3.12	0.7	1.9	30.5	3.08	1738	300

Table 1 (continued)

No. of cores	Size (mm ²)	Conductor (wires/type)	Conductor diameter approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ohm/km)	Weight of cable approx. (kg/km)	Standard packing length (m)
22	1	7/Non-compacted	1.29	0.7	1.8	21.0	18.1	529	300
22	1.5	7/Non-compacted	1.59	0.7	1.8	22.5	12.1	677	300
22	2.5	7/Non-compacted	2.01	0.7	1.8	25.5	7.41	919	300
22	4	7/Non-compacted	2.55	0.7	1.8	28.0	4.61	1291	300
22	6	7/Non-compacted	3.12	0.7	1.9	32.0	3.08	1798	300
23	1	7/Non-compacted	1.29	0.7	1.8	21.0	18.1	540	300
23	1.5	7/Non-compacted	1.59	0.7	1.8	22.5	12.1	693	300
23	2.5	7/Non-compacted	2.01	0.7	1.8	25.5	7.41	992	300
23	4	7/Non-compacted	2.55	0.7	1.8	28.0	4.61	1390	300
23	6	7/Non-compacted	3.12	0.7	1.9	32.0	3.08	1936	300
24	1	7/Non-compacted	1.29	0.7	1.8	22.0	18.1	567	300
24	1.5	7/Non-compacted	1.59	0.7	1.8	23.5	12.1	728	300
24	2.5	7/Non-compacted	2.01	0.7	1.8	26.5	7.41	989	300
24	4	7/Non-compacted	2.55	0.7	1.8	29.5	4.61	1392	300
24	6	7/Non-compacted	3.12	0.7	2.0	33.5	3.08	1957	300
25	1	7/Non-compacted	1.29	0.7	1.8	22.0	18.1	582	300
25	1.5	7/Non-compacted	1.59	0.7	1.8	23.5	12.1	749	300
25	2.5	7/Non-compacted	2.01	0.7	1.8	26.5	7.41	1021	300
25	4	7/Non-compacted	2.55	0.7	1.8	29.5	4.61	1438	300
25	6	7/Non-compacted	3.12	0.7	2.0	33.5	3.08	2024	300
26	1	7/Non-compacted	1.29	0.7	1.8	22.0	18.1	598	300
26	1.5	7/Non-compacted	1.59	0.7	1.8	23.5	12.1	771	300
26	2.5	7/Non-compacted	2.01	0.7	1.8	26.5	7.41	1052	300
26	4	7/Non-compacted	2.55	0.7	1.8	29.5	4.61	1486	300
26	6	7/Non-compacted	3.12	0.7	2.0	33.5	3.08	2092	300

Table 1 (continued)

No. of cores	Size (mm ²)	Conductor (wires/type)	Conductor diameter approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ohm/km)	Weight of cable approx. (kg/km)	Standard packing length (m)
27	1	7/Non-compacted	1.29	0.7	1.8	22.5	18.1	613	300
27	1.5	7/Non-compacted	1.59	0.7	1.8	24.0	12.1	791	300
27	2.5	7/Non-compacted	2.01	0.7	1.8	27.5	7.41	1081	300
27	4	7/Non-compacted	2.55	0.7	1.9	30.5	4.61	1542	300
27	6	7/Non-compacted	3.12	0.7	2.0	34.5	3.08	2151	300
28	1	7/Non-compacted	1.29	0.7	1.8	23.0	18.1	655	300
28	1.5	7/Non-compacted	1.59	0.7	1.8	25.0	12.1	844	300
28	2.5	7/Non-compacted	2.01	0.7	1.8	28.5	7.41	1151	300
28	4	7/Non-compacted	2.55	0.7	1.9	31.5	4.61	1638	300
28	6	7/Non-compacted	3.12	0.7	2.0	36.0	3.08	2283	300
29	1	7/Non-compacted	1.29	0.7	1.8	23.0	18.1	653	300
29	1.5	7/Non-compacted	1.59	0.7	1.8	25.0	12.1	843	300
29	2.5	7/Non-compacted	2.01	0.7	1.8	28.5	7.41	1154	300
29	4	7/Non-compacted	2.55	0.7	1.9	31.5	4.61	1648	300
29	6	7/Non-compacted	3.12	0.7	2.0	36.0	3.08	2301	300
30	1	7/Non-compacted	1.29	0.7	1.8	23.0	18.1	669	300
30	1.5	7/Non-compacted	1.59	0.7	1.8	25.0	12.1	865	300
30	2.5	7/Non-compacted	2.01	0.7	1.8	28.5	7.41	1186	300
30	4	7/Non-compacted	2.55	0.7	1.9	31.5	4.61	1695	300
30	6	7/Non-compacted	3.12	0.7	2.0	36.0	3.08	2369	300
32	1	7/Non-compacted	1.29	0.7	1.8	24.0	18.1	711	300
32	1.5	7/Non-compacted	1.59	0.7	1.8	26.0	12.1	919	300
32	2.5	7/Non-compacted	2.01	0.7	1.8	29.5	7.41	1262	300
32	4	7/Non-compacted	2.55	0.7	1.9	33.0	4.61	1806	300
32	6	7/Non-compacted	3.12	0.7	2.1	37.5	3.08	2541	300

Table 1 (continued)

No. of cores	Size (mm ²)	Conductor (wires/type)	Conductor diameter approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ohm/km)	Weight of cable approx. (kg/km)	Standard packing length (m)
34	1	7/Non-compacted	1.29	0.7	1.8	25.0	18.1	770	300
34	1.5	7/Non-compacted	1.59	0.7	1.8	27.0	12.1	996	300
34	2.5	7/Non-compacted	2.01	0.7	1.9	30.5	7.41	1380	300
34	4	7/Non-compacted	2.55	0.7	2.0	34.5	4.61	1968	300
34	6	7/Non-compacted	3.12	0.7	2.1	39.0	3.08	2746	300
36	1	7/Non-compacted	1.29	0.7	1.8	25.0	18.1	784	300
36	1.5	7/Non-compacted	1.59	0.7	1.8	27.0	12.1	1018	300
36	2.5	7/Non-compacted	2.01	0.7	1.9	30.5	7.41	1415	300
36	4	7/Non-compacted	2.55	0.7	2.0	34.5	4.61	2026	300
36	6	7/Non-compacted	3.12	0.7	2.1	39.0	3.08	2832	300
38	1	7/Non-compacted	1.29	0.7	1.8	25.5	18.1	828	300
38	1.5	7/Non-compacted	1.59	0.7	1.8	28.0	12.1	1075	300
38	2.5	7/Non-compacted	2.01	0.7	1.9	32.0	7.41	1494	300
38	4	7/Non-compacted	2.55	0.7	2.0	36.0	4.61	2141	300
40	1	7/Non-compacted	1.29	0.7	1.8	25.5	18.1	856	300
40	1.5	7/Non-compacted	1.59	0.7	1.8	28.0	12.1	1114	300
40	2.5	7/Non-compacted	2.01	0.7	1.9	32.0	7.41	1551	300
40	4	7/Non-compacted	2.55	0.7	2.0	36.0	4.61	2229	300
44	1	7/Non-compacted	1.29	0.7	1.8	27.5	18.1	942	300
44	1.5	7/Non-compacted	1.59	0.7	1.9	30.0	12.1	1241	300
44	2.5	7/Non-compacted	2.01	0.7	2.0	34.5	7.41	1725	300
44	4	7/Non-compacted	2.55	0.7	2.1	38.5	4.61	2470	300

Table 1 (continued)

No. of cores	Size (mm ²)	Conductor (wires/type)	Conductor diameter approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ohm/km)	Weight of cable approx. (kg/km)	Standard packing length (m)
46	1	7/Non-compacted	1.29	0.7	1.8	27.5	18.1	974	300
46	1.5	7/Non-compacted	1.59	0.7	1.9	30.0	12.1	1285	300
46	2.5	7/Non-compacted	2.01	0.7	2.0	34.5	7.41	1789	300
46	4	7/Non-compacted	2.55	0.7	2.1	38.5	4.61	2565	300
48	1	7/Non-compacted	1.29	0.7	1.8	28.0	18.1	1005	300
48	1.5	7/Non-compacted	1.59	0.7	1.9	31.0	12.1	1327	300
48	2.5	7/Non-compacted	2.01	0.7	2.0	35.0	7.41	1850	300
48	4	7/Non-compacted	2.55	0.7	2.2	39.5	4.61	2674	300