EXT-Type Ⅱ Series

EXT-Ⅱ/20276 LF

Electronic equipment robot cable

Multi core cable	
Heat resistance	★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★★

※The characteristic is an aim.

Multi pair cable	
Heat resistance	★★★
Oil resistance	★★★★★
Noise resistance	★★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★★

※The characteristic is an aim.

> Application

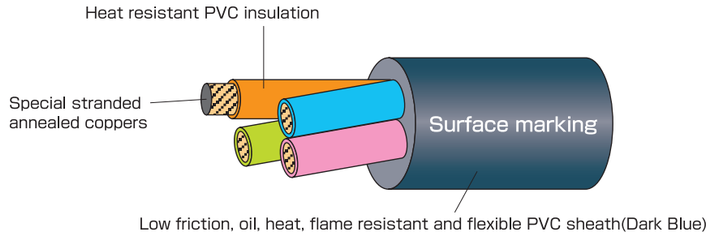
- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 50 million times or more. (or more ability 100 million times)
- Robot cable with UL and cUL at 30V 80℃. (Category : AVLV2, AVLV8)

> Feature

- Extremely fine special conductor use.
- Low friction and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

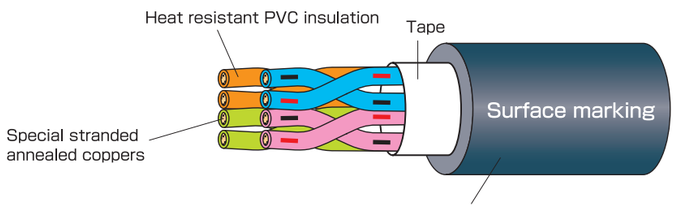
> Construction figure

·Multi core cable



※Cable with more than 10 cores : binder tape on cores.

·Multi pair cable



> Surface marking

> > > Meeting standard

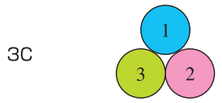
Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 20276	CSA AWM ⅡA/B
Voltage rating	30V	30V
Temperature rating	80℃	80℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Identification

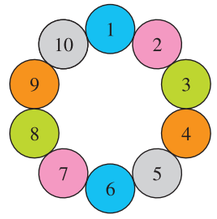
·Multi core cable

●Identification table1

3C



10C



Line number	Color of insulation	Dot mark
1	Sky	
2	Peach	
3	Grass	
4	Orange	
5	Gray	
6	Sky	▬
7	Peach	▬
8	Grass	▬
9	Orange	▬
10	Gray	▬
11	Sky	▬ ▬
12	Peach	▬ ▬
13	Grass	▬ ▬
14	Orange	▬ ▬
15	Gray	▬ ▬
16	Sky	▬ ▬ ▬
17	Peach	▬ ▬ ▬
18	Grass	▬ ▬ ▬
19	Orange	▬ ▬ ▬
20	Gray	▬ ▬ ▬

Line number	Color of insulation	Dot mark
21	Sky	▬ ▬ ▬ ▬
22	Peach	▬ ▬ ▬ ▬
23	Grass	▬ ▬ ▬ ▬
24	Orange	▬ ▬ ▬ ▬
25	Gray	▬ ▬ ▬ ▬
26	Sky	▬ ▬ ▬ ▬ ▬ (Continuation)
27	Peach	▬ ▬ ▬ ▬ ▬ (Continuation)
28	Grass	▬ ▬ ▬ ▬ ▬ (Continuation)
29	Orange	▬ ▬ ▬ ▬ ▬ (Continuation)
30	Gray	▬ ▬ ▬ ▬ ▬ (Continuation)
31	Sky	▬▬
32	Peach	▬▬
33	Grass	▬▬
34	Orange	▬▬
35	Gray	▬▬
36	Sky	▬▬ ▬▬
37	Peach	▬▬ ▬▬
38	Grass	▬▬ ▬▬
39	Orange	▬▬ ▬▬
40	Gray	▬▬ ▬▬

Figures ○ indicate core number in the identification table 1.
※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

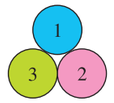
·Multi pair cable

●Identification table2

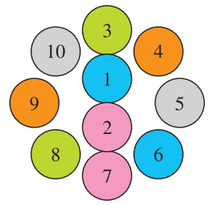
1P

※1P : Sky×Peach

3P



10P

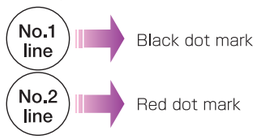


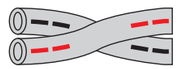
Pair number	Color of insulation	Dot mark
1	Sky	▬ / ▬
2	Peach	▬ / ▬
3	Grass	▬ / ▬
4	Orange	▬ / ▬
5	Gray	▬ / ▬
6	Sky	▬ ▬ / ▬ ▬
7	Peach	▬ ▬ / ▬ ▬
8	Grass	▬ ▬ / ▬ ▬
9	Orange	▬ ▬ / ▬ ▬
10	Gray	▬ ▬ / ▬ ▬
11	Sky	▬ ▬ ▬ / ▬ ▬ ▬
12	Peach	▬ ▬ ▬ / ▬ ▬ ▬
13	Grass	▬ ▬ ▬ / ▬ ▬ ▬
14	Orange	▬ ▬ ▬ / ▬ ▬ ▬
15	Gray	▬ ▬ ▬ / ▬ ▬ ▬

Pair number	Color of insulation	Dot mark
16	Sky	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
17	Peach	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
18	Grass	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
19	Orange	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
20	Gray	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
21	Sky	▬ ▬ ▬ ▬ ▬ (Continuation) / ▬ ▬ ▬ ▬ ▬ (Continuation)
22	Peach	▬ ▬ ▬ ▬ ▬ (Continuation) / ▬ ▬ ▬ ▬ ▬ (Continuation)
23	Grass	▬ ▬ ▬ ▬ ▬ (Continuation) / ▬ ▬ ▬ ▬ ▬ (Continuation)
24	Orange	▬ ▬ ▬ ▬ ▬ (Continuation) / ▬ ▬ ▬ ▬ ▬ (Continuation)
25	Gray	▬ ▬ ▬ ▬ ▬ (Continuation) / ▬ ▬ ▬ ▬ ▬ (Continuation)
26	Sky	▬▬ / ▬▬
27	Peach	▬▬ / ▬▬
28	Grass	▬▬ / ▬▬
29	Orange	▬▬ / ▬▬
30	Gray	▬▬ / ▬▬

Figures ○ indicate pair number in the identification table 2.
※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

●Example of pare





The 1st and 2nd core of the insulator is same color.

The 1st core is black and the 2nd core is red.

EXT-Ⅱ/20276 LF

Electronic equipment robot cable

> Construction table

No. of cores No. of pairs	Conductor			Heat-resistant PVC insulation		Low friction, oil, heat, flame resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P						0.150	3.8	12(18)	less than 143			2.7
3C						0.157	4.0	14(21)	less than 136			2.3
2P						0.193	4.9	19(28)				2.2
3P						0.224	5.7	24(36)				1.9
4P						0.240	6.1	28(41)				1.7
5P						0.260	6.6	32(48)				1.6
6P	26 (0.128㎟)	30/0.08 (30/3.2mil)	0.51 (20mil)	0.038	0.97	0.280	7.1	37(55)	less than 143	more than 10	500	1.5
7P						0.299	7.6	44(65)				1.4
8P						0.327	8.3	50(75)				1.4
10P						0.331	8.4	57(85)				1.2
12P						0.362	9.2	64(95)				1.2
15P						0.398	10.1	77(115)				1.1
20P						0.445	11.3	101(150)				1.0
25P						0.504	12.8	121(180)				0.96
2C						0.169	4.3	17(25)				4.4
3C						0.177	4.5	19(28)				3.7
4C						0.189	4.8	22(33)				3.4
5C						0.205	5.2	25(37)				3.1
6C						0.220	5.6	29(43)				3.0
8C	24 (0.204㎟)	48/0.08 (48/3.2mil)	0.75 (30mil)	0.048	1.21	0.256	6.5	40(60)	less than 97.9	more than 10	500	2.8
10C						0.291	7.4	44(65)				2.6
12C						0.287	7.3	47(70)				2.3
16C						0.315	8.0	60(90)				2.1
20C						0.350	8.9	74(110)				2.0
30C						0.417	10.6	108(160)				1.7
40C						0.472	12.0	138(205)				1.6
2C						0.181	4.6	19(29)				5.7
3C						0.189	4.8	23(34)				4.8
4C						0.205	5.2	26(39)				4.4
5C						0.228	5.8	34(50)				4.1
6C						0.244	6.2	37(55)				3.9
8C	22 (0.324㎟)	72/0.08 (72/3.2mil)	0.90 (35mil)	0.054	1.36	0.280	7.1	50(75)	less than 62.2	more than 10	500	3.6
10C						0.315	8.0	57(85)				3.3
12C						0.311	7.9	60(90)				3.0
16C						0.350	8.9	81(120)				2.8
20C						0.382	9.7	94(140)				2.6
30C						0.465	11.8	141(210)				2.3
40C						0.520	13.2	181(270)				2.1
2C						0.201	5.1	26(38)				7.6
3C						0.209	5.3	30(44)				6.4
4C						0.236	6.0	37(55)				5.9
5C						0.252	6.4	44(65)				5.4
6C						0.272	6.9	50(75)				5.2
8C						0.311	7.9	67(100)				4.8
10C	20 (0.518㎟)	119/0.08 (119/3.2mil)	1.1 (43mil)	0.063	1.60	0.366	9.3	84(125)	less than39.1	more than 10	500	4.5
12C						0.358	9.1	87(130)				4.1
16C						0.394	10.0	111(165)				3.7
20C						0.441	11.2	141(210)				3.4
24C						0.484	12.3	168(250)				3.3
30C						0.531	13.5	205(305)				3.0
40C						0.598	15.2	265(395)				2.7

※The test of 500V/5 minutes besides the withstand voltage test on above mentioned UL standard and CSA standard is applied.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

> Movement characteristic

＊)1 Bending	Bend	＊)2 U-shaped turn-back	90° bending	Twist		＊)3 Move bending
				Straight	Bending	
A	A	SS	A	A	A	C

Examination's time:
SS= More than 50 million times　B= More than 5 million times
S= More than 20 million times　C= More than 3 million times
A= More than 10 million times　D= More than 1 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

＊)2 Our original test showed that no case of wire breakage could be detected for EXT-Ⅱ-SB/20276 5PX24AWG even after **100 million cycles.**

＊)3 When overall diameter of the cable is 20mm or less.

※ The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

> Standard sales length

100m
(Sales by short length is available for large sizes. Please contact us which sizes are available.)

EXT-Type Ⅱ Series

EXT-Ⅱ-SB/20276 LF

Electronic equipment robot cable

Heat resistance	★★★
Oil resistance	★★★★★
Noise resistance	★★★★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★★

※The characteristic is an aim.

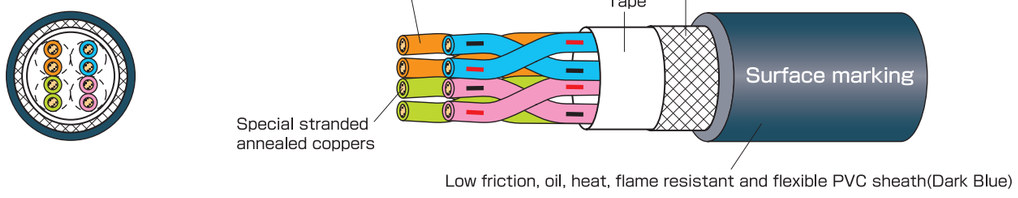
> Application

- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 50 million times or more. (or more ability 100 million times)
- Shielded Robot cable with UL and cUL at 30V 80℃. (Category : AVLV2, AVLV8)

> Feature

- Extremely fine special conductor use.
- Low friction and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure



> Surface marking

—EXT-Ⅱ TAIYO □□AWG LF R15 E67647 AWM 20276 80℃ VW-1 AWM ⅡA/B 80℃ 30V FT1—

> > > Meeting standard

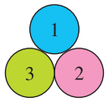
Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 20276	CSA AWM ⅡA/B
Voltage rating	30V	30V
Temperature rating	80℃	80℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Identification

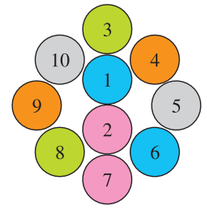
1P

※1P : Sky×Peach

3P



10P



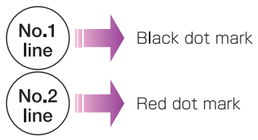
Figures ○ indicate pair number in the identification table.

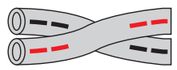
●Identification table

Pair number	Color of insulation	Dot mark
1	Sky	
2	Peach	
3	Grass	
4	Orange	
5	Gray	
6	Sky	
7	Peach	
8	Grass	
9	Orange	
10	Gray	
11	Sky	
12	Peach	
13	Grass	
14	Orange	
15	Gray	
16	Sky	
17	Peach	
18	Grass	
19	Orange	
20	Gray	
21	Sky	(Continuation)
22	Peach	(Continuation)
23	Grass	(Continuation)
24	Orange	(Continuation)
25	Gray	(Continuation)
26	Sky	
27	Peach	
28	Grass	
29	Orange	
30	Gray	

※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

●Example of pare





The 1st and 2nd core of the insulator is same color.
The 1st core is black and the 2nd core is red.

EXT-Ⅱ-SB/20276 LF

Electronic equipment robot cable

Construction table

No. of pairs	Conductor			Heat-resistant PVC insulation		Low friction, oil, heat, flame resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P						0.173	4.4	18(27)				2.8
2P						0.217	5.5	28(41)				2.2
3P						0.248	6.3	34(50)				1.9
4P						0.264	6.7	37(55)				1.7
5P						0.283	7.2	44(65)				1.6
6P						0.303	7.7	50(75)				1.5
7P	26 (0.128㎟)	30/0.08 (30/3.2mil)	0.51 (20mil)	0.038	0.97	0.323	8.2	57(85)	less than 143	more than 10	500	1.4
8P						0.350	8.9	71(105)				1.4
10P						0.354	9.0	74(110)				1.2
12P						0.390	9.9	84(125)				1.2
15P						0.425	10.8	101(150)				1.1
20P						0.472	12.0	131(195)				1.0
25P						0.535	13.6	155(230)				0.98
1P						0.193	4.9	22(33)				4.5
2P						0.252	6.4	37(55)				3.6
3P						0.280	7.1	44(65)				3.1
4P						0.303	7.7	54(80)				2.8
5P						0.335	8.5	60(90)				2.6
6P						0.358	9.1	71(105)				2.4
7P	24 (0.204㎟)	48/0.08 (48/3.2mil)	0.75 (30mil)	0.048	1.21	0.382	9.7	81(120)	less than 102.7	more than 10	500	2.3
8P						0.413	10.5	94(140)				2.3
10P						0.413	10.5	101(150)				2.0
12P						0.465	11.8	118(175)				1.9
15P						0.508	12.9	141(210)				1.8
20P						0.567	14.4	185(275)				1.6
25P						0.646	16.4	225(335)				1.5
1P						0.205	5.2	26(38)				5.8
2P						0.268	6.8	44(65)				4.6
3P						0.299	7.6	54(80)				4.0
4P						0.323	8.2	64(95)				3.6
5P						0.358	9.1	77(115)				3.4
6P						0.390	9.9	91(135)				3.2
7P	22 (0.324㎟)	72/0.08 (72/3.2mil)	0.90 (35mil)	0.054	1.36	0.417	10.6	101(150)	less than 65.3	more than 10	500	3.0
8P						0.453	11.5	118(175)				2.9
10P						0.457	11.6	128(190)				2.7
12P						0.500	12.7	148(220)				2.5
15P						0.563	14.3	188(280)				2.4
20P						0.626	15.9	239(355)				2.1
25P						0.701	17.8	289(430)				2.0
1P						0.232	5.9	34(50)				7.7
2P						0.299	7.6	57(85)				6.2
3P						0.343	8.7	74(110)				5.3
4P						0.370	9.4	87(130)				4.8
5P						0.406	10.3	108(160)				4.5
6P	20 (0.518㎟)	119/0.08 (119/3.2mil)	1.1 (43mil)	0.063	1.60	0.445	11.3	121(180)	less than 41.1	more than 10	500	4.2
8P						0.512	13.0	158(235)				3.9
10P						0.520	13.2	181(270)				3.5
15P						0.646	16.4	269(400)				3.1
20P						0.713	18.1	333(495)				2.8
25P						0.811	20.6	413(615)				2.6

※The test of 500V/5 minutes besides the withstand voltage test on above mentioned UL standard and CSA standard is applied.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

Movement characteristic

＊)1 Bending	Bend	＊)2 U-shaped turn-back	90° bending	Twist		＊)3 Move bending
				Straight	Bending	
A	A	SS	A	A	A	C

Examination's time:
SS= More than 50 million times　B= More than 5 million times
S= More than 20 million times　C= More than 3 million times
A= More than 10 million times　D= More than 1 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

＊)2 Our original test showed that no case of wire breakage could be detected for EXT-Ⅱ-SB/20276 5PX24AWG even after **100 million cycles.**

＊)3 When overall diameter of the cable is 20mm or less.

※ The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

Standard sales length

100m
(Sales by short length is available for large sizes. Please contact us which sizes are available.)

EXT-Type Ⅱ Series

300V EXT-Ⅱ/2517 LF

Electronic equipment robot cable

Heat resistance ★★★★★
Oil resistance ★★★★★
Noise resistance ★
Flame resistance ★★★★
Torsion resistance ★★★★★
Flexibility resistance ★★★★★
Cable carrier ★★★★★★★
※The characteristic is an aim.

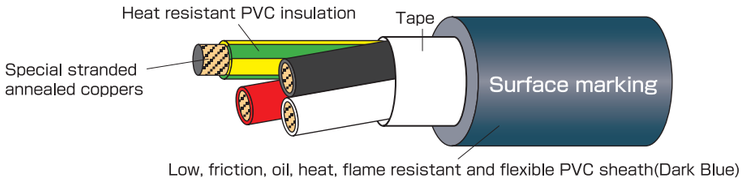
> Application

- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 50 million times or more. (or more ability 100 million times)
- Robot cable with UL and cUL at 300V 105℃. (Category : AVLV2, AVLV8)

> Feature

- Extremely fine special conductor use.
- Low friction and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

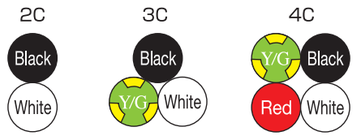


> Surface marking

—300V EXT-Ⅱ TAIYO □□AWG LF R15 E67647 AWM 2517 105℃ VW-1 AWM ⅡA/B 105℃ 300V FT1—

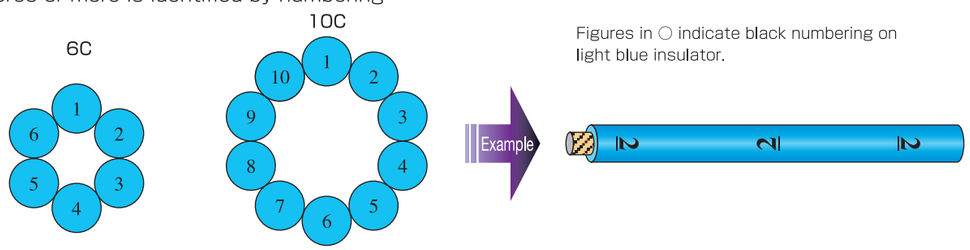
> Identification

·2C, 3C, 4C



※Y/G indicates green core with yellow stripe (30~50%).

·6 cores or more is identified by numbering



Figures in ○ indicate black numbering on light blue insulator.

> Standard sales length

100m
(Sales by short length is available for large sizes. Please contact us which sizes are available.)

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2517	CSA AWM ⅡA/B
Voltage rating	300V	300V
Temperature rating	105℃	105℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Construction table

No. of cores	Conductor			Heat-resistant PVC insulation		Low friction, oil, heat, flame resistant flexible PVC sheath		Approx. weight	Electrical Characteristics			Allowable ampacity
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	(A)
2C	20 (0.518㎟)	119/0.08 (119/3.2mil)	1.1 (43mil)	0.079	2.0	0.240	6.1	30(45)	less than 39.1	more than10	2000	9.6
3C						0.252	6.4	37(55)				9.8
4C						0.272	6.9	44(65)				8.3
6C						0.327	8.3	60(90)				6.4
8C						0.382	9.7	84(125)				5.9
10C						0.433	11.0	104(155)				5.6
12C						0.425	10.8	111(165)				5.1
16C						0.476	12.1	141(210)				4.6
20C						0.524	13.3	171(255)				4.3
30C						0.661	16.8	272(405)				3.8
2C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31 (52mil)	0.087	2.21	0.256	6.5	37(55)	less than 24.0	more than10	2000	12
3C						0.272	6.9	44(65)				12
4C						0.299	7.6	57(85)				11
6C						0.350	8.9	77(115)				8.4
8C						0.413	10.5	104(155)				7.8
10C						0.476	12.1	131(195)				7.4
12C						0.469	11.9	144(215)				6.7
16C						0.516	13.1	181(270)				6.1
20C						0.575	14.6	225(335)				5.7
30C						0.728	18.5	353(525)				5.1
2C	16 (1.30㎟)	266/0.08 (266/3.2mil)	1.64 (65mil)	0.100	2.54	0.291	7.4	47(70)	less than 15.5	more than10	2000	16
3C						0.307	7.8	60(90)				16
4C						0.331	8.4	77(115)				14
6C						0.398	10.1	108(160)				11
8C						0.469	11.9	148(220)				10
10C						0.531	13.5	178(265)				9.6
2C	14 (2.08㎟)	420/0.08 (420/3.2mil)	2.07 (81mil)	0.117	2.97	0.323	8.2	64(95)	less than 9.75	more than10	2000	22
3C						0.343	8.7	84(125)				22
4C						0.382	9.7	104(155)				19

※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.
·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.
·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

*)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		*)2 Move bending
				Straight	Bending	
A	A	SS	A	A	A	C

Examination's time:
SS= More than 50 million times
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times

*)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.
*)2 When overall diameter of the cable is 20mm or less.
※ The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-Type Ⅱ Series

300V EXT-Ⅱ-SB/2517 LF

Electronic equipment robot cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★★

※The characteristic is an aim.

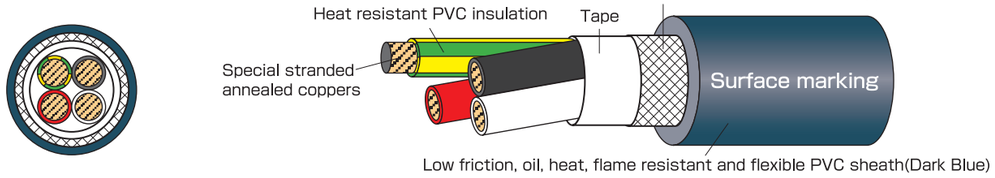
> Application

- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 50 million times or more. (or more ability 100 million times)
- Shielded Robot cable with UL and cUL at 300V 105℃.(Category : AVLV2, AVLV8)

> Feature

- Extremely fine special conductor use.
- Low friction and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

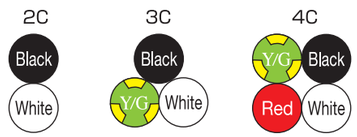


> Surface marking

—300V EXT-Ⅱ TAIYO □□AWG LF R15 E67647 AWM 2517 105℃ VW-1 AWM ⅡA/B 105℃ 300V FT1—

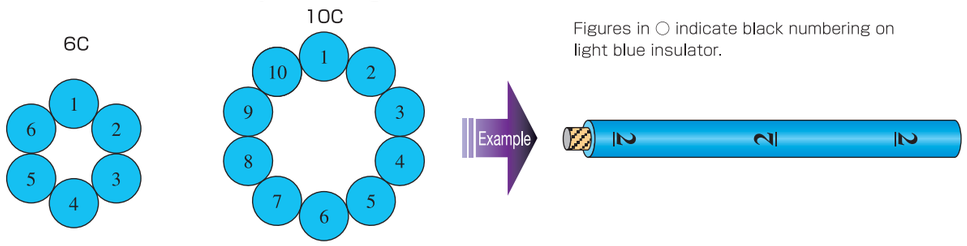
> Identification

·2C, 3C, 4C



※Y/G indicates green core with yellow stripe (30~50%).

·6 cores or more is identified by numbering



Figures in ○ indicate black numbering on light blue insulator.

> Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2517	CSA AWM ⅡA/B
Voltage rating	300V	300V
Temperature rating	105℃	105℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat-resistant PVC insulation Outside diameter (inch)	Heat-resistant PVC insulation Outside diameter (mm)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(inch)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C	20 (0.518㎟)	119/0.08 (119/3.2mil)	1.1	0.079	2.0	0.264	6.7	40(60)	less than 39.1	more than 10	2000	9.7
3C						0.283	7.2	50(75)				9.7
4C						0.303	7.7	60(90)				8.4
6C						0.350	8.9	77(115)				6.5
8C						0.409	10.4	104(155)				6.0
10C						0.469	11.9	131(195)				5.6
12C						0.461	11.7	134(200)				5.2
16C						0.504	12.8	168(250)				4.7
20C						0.563	14.3	212(315)				4.4
30C						0.693	17.6	316(470)				3.9
2C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31	0.087	2.21	0.287	7.3	50(75)	less than 24.0	more than 10	2000	12
3C						0.303	7.7	60(90)				12
4C						0.323	8.2	71(105)				11
6C						0.382	9.7	97(145)				8.6
8C						0.441	11.2	128(190)				7.9
10C						0.504	12.8	161(240)				7.4
12C						0.496	12.6	171(255)				6.8
16C						0.555	14.1	222(330)				6.2
20C						0.606	15.4	265(395)				5.7
30C						0.760	19.3	403(600)				5.1
2C	16 (1.30㎟)	266/0.08 (266/3.2mil)	1.64	0.100	2.54	0.315	8.0	60(90)	less than 15.5	more than 10	2000	16
3C						0.331	8.4	74(110)				16
4C						0.354	9.0	91(135)				14
6C						0.425	10.8	131(195)				11
8C						0.496	12.6	175(260)				10
10C						0.571	14.5	218(325)				9.7

※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.
·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.
·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

＊)1 Bending	Bend	U-shaped turn-back	90° bending	Twist Straight	Twist Bending	＊)2 Move bending
A	A	SS	A	A	A	C

Examination's time:
SS= More than 50 million times
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.
＊)2 When overall diameter of the cable is 20mm or less.
※ The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-Type Ⅱ Series

600V EXT-Ⅱ/2501 LF

Electronic equipment robot cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★★

※The characteristic is an aim.

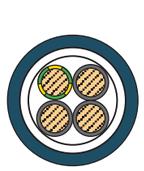
> Application

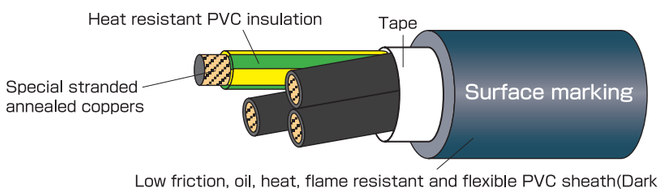
- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 50 million times or more. (or more ability 100 million times)
- Robot cable with UL and cUL at 600V 105℃. (Category : AVLV2, AVLV8)

> Feature

- Extremely fine special conductor use.
- Low friction and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure



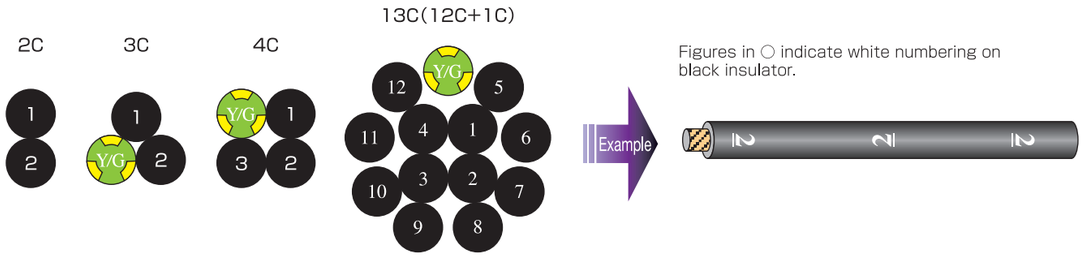


Low friction, oil, heat, flame resistant and flexible PVC sheath(Dark Blue)

> Surface marking

—600V EXT-Ⅱ TAIYO □□AWG LF R15 E67647 AWM 2501 105℃ VW-1 AWM ⅡA/B 105℃ 600V FT1—

> Identification



※Y/G indicates green core with yellow stripe(30~50%).

> Standard sales length

100m
(Sales by short length is available for large sizes. Please contact us which sizes are available.)

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2501	CSA AWM ⅡA/B
Voltage rating	600V	600V
Temperature rating	105℃	105℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat-resistant PVC insulation Outside diameter (inch)	Heat-resistant PVC insulation Outside diameter (mm)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(inch)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31 (52mil)	0.118	3.0	0.378	9.6	67(100)	less than 24.0	more than 50	2000	13
3C						0.398	10.1	81(120)				13
4C						0.429	10.9	94(140)				11
6C+1C						0.547	13.9	161(240)				9.5
8C+1C						0.618	15.7	198(295)				8.7
10C+1C						0.650	16.5	222(330)				8.0
12C+1C						0.681	17.3	245(365)				7.5
20C+1C						0.819	20.8	373(555)				6.3
30C+1C						0.996	25.3	544(810)				5.5
2C	16 (1.30㎟)	266/0.08 (266/3.2mil)	1.64 (65mil)	0.130	3.3	0.406	10.3	81(120)	less than 15.5	more than 50	2000	17
3C						0.425	10.8	97(145)				17
4C						0.461	11.7	118(175)				15
6C+1C						0.583	14.8	192(285)				12
10C+1C						0.697	17.7	269(400)				10
12C+1C						0.732	18.6	309(460)				9.6
20C+1C						0.933	23.7	497(740)				8.1
30C+1C						1.079	27.4	692(1030)				7.0
40C+1C						1.197	30.4	874(1300)				6.3
2C	14 (2.08㎟)	420/0.08 (420/3.2mil)	2.07 (81mil)	0.150	3.8	0.437	11.1	97(145)	less than 9.75	more than 50	2000	23
3C						0.461	11.7	121(180)				23
4C						0.500	12.7	148(220)				20
7C						0.634	16.1	242(360)				16
11C						0.760	19.3	343(510)				13
13C						0.795	20.2	393(585)				12
21C						1.024	26.0	652(970)				10

●Ground core

Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat-resistant PVC insulation Thickness (mm)	Heat-resistant PVC insulation Outside diameter (mm)
14	420/0.08	2.07	0.85	3.8

※Core number mark "+1C" has the [Y/G] ground core of 14AWG size.

※3 or 4 and 14AWG size has the [Y/G] ground core of an equal size.

※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.
·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.
·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

*)1 Bending	Bend	U-shaped turn-back	90° bending	Twist Straight	Twist Bending	*)2 Move bending
A	A	SS	A	A	A	C

Examination's time:
SS= More than 50 million times
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times

*)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.
*)2 When overall diameter of the cable is 20mm or less.
※ The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-Type Ⅱ Series

600V EXT-Ⅱ-SB/2501 LF

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★★

※The characteristic is an aim.

Electronic equipment robot cable

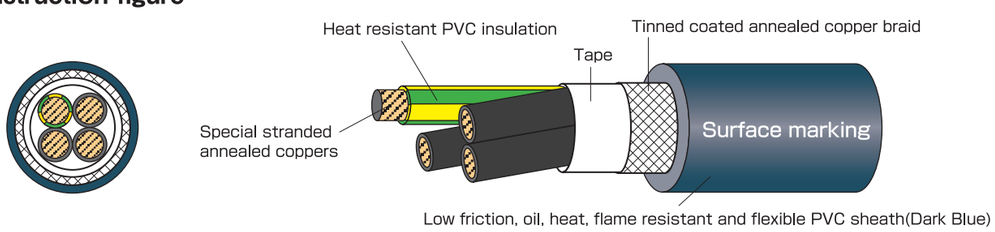
> Application

- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 50 million times or more. (or more ability 100 million times)
- Shielded Robot cable with UL and cUL at 600V 105℃.(Category : AVLV2, AVLV8)

> Feature

- Extremely fine special conductor use.
- Low friction and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

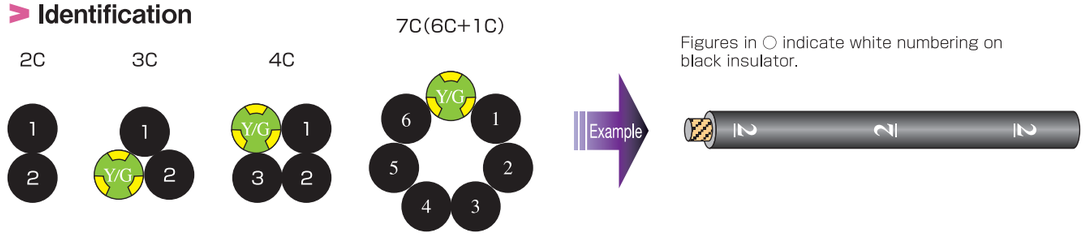
> Construction figure



> Surface marking

—600V EXT-Ⅱ TAIYO □□AWG LF R15 E67647 AWM 2501 105℃ VW-1 AWM ⅡA/B 105℃ 600V FT1—

> Identification



※Y/G indicates green core with yellow stripe(30～50%).

> Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2501	CSA AWM ⅡA/B
Voltage rating	600V	600V
Temperature rating	105℃	105℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat-resistant PVC insulation Outside diameter (inch)	Heat-resistant PVC insulation Outside diameter (mm)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx. (inch)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx. (mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31 (52mil)	0.118	3.0	0.402	10.2	84(125)	less than 24.0	more than 50	2000	13
3C						0.421	10.7	97(145)				13
4C						0.457	11.6	118(175)				12
6C+1C						0.579	14.7	195(290)				9.6
2C	16 (1.30㎟)	266/0.08 (266/3.2mil)	1.64 (65mil)	0.130	3.3	0.429	10.9	97(145)	less than 15.5	more than 50	2000	17
3C						0.453	11.5	121(180)				17
4C						0.488	12.4	144(215)				15
6C+1C						0.614	15.6	228(340)				12
2C	14 (2.08㎟)	420/0.08 (420/3.2mil)	2.07 (81mil)	0.150	3.8	0.465	11.8	121(180)	less than 9.75	more than 50	2000	23
3C						0.488	12.4	148(220)				23
4C						0.528	13.4	175(260)				20
7C						0.665	16.9	282(420)				16

●Ground core

Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat-resistant PVC insulation Thickness (mm)	Heat-resistant PVC insulation Outside diameter (mm)
14	420/0.08	2.07	0.85	3.8

※Core number mark "+1C" has the [Y/G] ground core of 14AWG size.
※3 or 4 and 14AWG size has the [Y/G] ground core of an equal size.

※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.
·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.
·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

*)1 Bending	Bend	U-shaped turn-back	90° bending	Twist Straight	Twist Bending	*)2 Move bending
A	A	SS	A	A	A	C

Examination's time:
SS= More than 50 million times
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times

*)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.
*)2 When overall diameter of the cable is 20mm or less.
※ The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-Type Ⅱ Series

600V EXT-X/2501 LF

Electronic equipment robot cable

Heat resistance ★★★★★
Oil resistance ★★★★★
Noise resistance ★
Flame resistance ★★★★
Torsion resistance ★★★★★
Flexibility resistance ★★★★★
Cable carrier ★★★★★★★

※The characteristic is an aim.

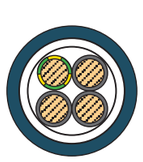
> Application

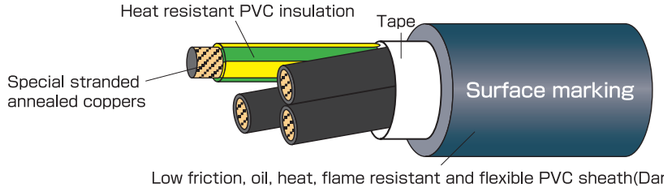
- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 50 million times or more. (or more ability 100 million times)
- Robot cable with UL and cUL at 600V 105℃. (Category : AVLV2, AVLV8)

> Feature

- Fine wire conductor use.
- Low friction and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure



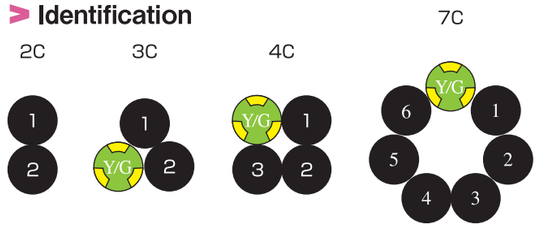


※10AWG or larger : annealed copper.

> Surface marking

—600V EXT-X TAIYO □□AWG LF R15 E67647 AWM 2501 105℃ VW-1 AWM ⅡA/B 105℃ 600V FT1—

> Identification



※Y/G indicates green core with yellow stripe(30~50%).

Figures in ○ indicate white numbering on black insulator.

> Standard sales length

100m
(Sales by short length is available for large sizes. Please contact us which sizes are available.)

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2501	CSA AWM ⅡA/B
Voltage rating	600V	600V
Temperature rating	105℃	105℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat-resistant PVC insulation Outside diameter (inch)	Heat-resistant PVC insulation Outside diameter (mm)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(inch)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C	12 (3.30㎟)	441/0.10 (441/3.9mil)	2.7 (106mil)	0.173	4.4	0.484	12.3	131(195)	less than 5.79	more than 50	2000	31
3C						0.512	13.0	165(245)				31
4C						0.555	14.1	205(305)				27
7C						0.709	18.0	336(500)				21
3C	10 (5.26㎟)	693/0.10 (693/3.9mil)	3.3 (130mil)	0.197	5.0	0.567	14.4	222(330)	less than 3.50	more than 50	2000	43
4C						0.618	15.7	279(415)				37
3C	8 (8.36㎟)	350/0.18 (350/7.1mil)	4.3 (169mil)	0.303	7.7	0.795	20.2	403(600)	less than 2.33	more than 50	2000	58
4C						0.921	23.4	548(815)				49
3C	6 (13.3㎟)	588/0.18 (588/7.1mil)	5.7 (224mil)	0.358	9.1	0.961	24.4	625(930)	less than 1.41	more than 50	2000	79
4C						1.055	26.8	793(1180)				67

※3 cores or more has the [Y/G] ground core of an equal size.

※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.
·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.
·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

＊)1 Bending	Bend	U-shaped turn-back	90° bending	Twist Straight	Twist Bending	＊)2 Move bending
A	A	SS	A	A	A	C

Examination's time:
SS= More than 50 million times
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.
＊)2 When overall diameter of the cable is 20mm or less.
※ The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-Type Ⅱ Series

600V EXT-X-SB/2501 LF

Electronic equipment robot cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★★

※The characteristic is an aim.

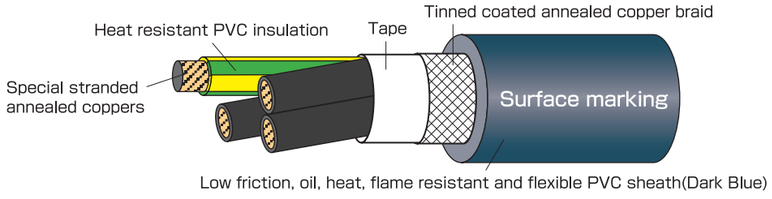
> Application

- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 50 million times or more. (or more ability 100 million times)
- Shield Robot cable with UL and cUL at 600V 105℃. (Category : AVLV2, AVLV8)

> Feature

- Fine wire conductor use.
- Low friction and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

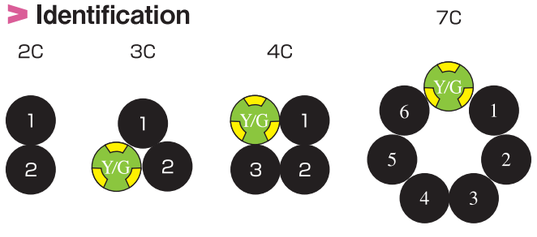


※10AWG : annealed copper.

> Surface marking

—600V EXT-X TAIYO □□AWG LF R15 E67647 AWM 2501 105℃ VW-1 AWM ⅡA/B 105℃ 600V FT1—

> Identification



※Y/G indicates green core with yellow stripe(30~50%).

Figures in ○ indicate white numbering on black insulator.

> Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2501	CSA AWM ⅡA/B
Voltage rating	600V	600V
Temperature rating	105℃	105℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Construction table

No. of cores	Conductor			Heat-resistant PVC insulation		Low friction, oil, heat, flame resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
3C	12 (3.30㎟)	441/0.10 (441/3.9mil)	2.7 (106mil)	0.173	4.4	0.539	13.7	195(290)	less than 5.79	more than 50	2000	32
4C						0.587	14.9	242(360)				27
7C						0.740	18.8	383(570)				21
3C	10 (5.26㎟)	693/0.10 (693/3.9mil)	3.3 (130mil)	0.197	5.0	0.598	15.2	259(385)	less than 3.50	more than 50	2000	43
4C						0.650	16.5	319(475)				37

※[Y/G] ground core of an equal size.

※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.
·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.
·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

＊)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		＊)2 Move bending
				Straight	Bending	
A	A	SS	A	A	A	C

Examination's time:
SS= More than 50 million times
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.
＊)2 When overall diameter of the cable is 20mm or less.
※ The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-Type 3D Series

EXT-3D/CL3X/2517 300V LF

Electronic equipment robot cable

Multi core cable		Multi pair cable	
Heat resistance	★★★★★	Heat resistance	★★★★
Oil resistance	★★★★★	Oil resistance	★★★★★
Noise resistance	★	Noise resistance	★★
Flame resistance	★★★★	Flame resistance	★★★★
Torsion resistance	★★★★★★	Torsion resistance	★★★★★★
Flexibility resistance	★★★★★	Flexibility resistance	★★★★★
Cable carrier	★★★★★★	Cable carrier	★★★★★★

※The characteristic is an aim. ※The characteristic is an aim.

> Application

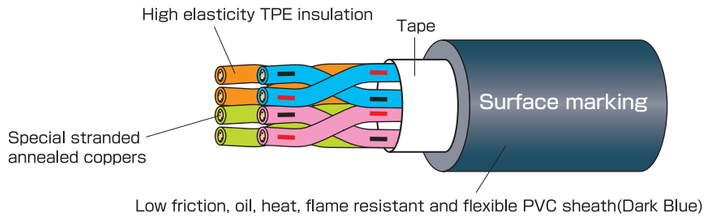
- Appropriate wiring for multi-joint unit portion. (Twist test 20 million times or more.)
- Appropriate for cable bare wiring for high-speed moving. (Cable Bear test 20 million times or more.)
- CL3X tha is the listing standard is acquired and it correspomds to NFPA70,79.
- Robot cable with UL and cUL at 300V, 105℃. (Category : AVLV2, AVLV8, QPTZ)

> Feature

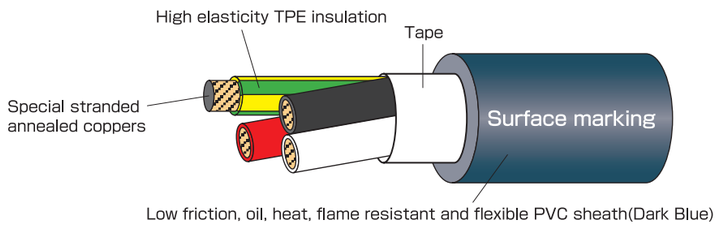
- Extremely fine conductor use.
- High bending elasticity and heat resistant TPE is used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

· 24~20AWG



· 18~14AWG



> Surface marking

TAIYO EXT-3D □□AWG LF R15 E242171 (UL) CL3X 105℃ □□AWG or AWM 2517 105℃ 300V VW-1 , AWM ⅡA/B 105℃ 300V FT1

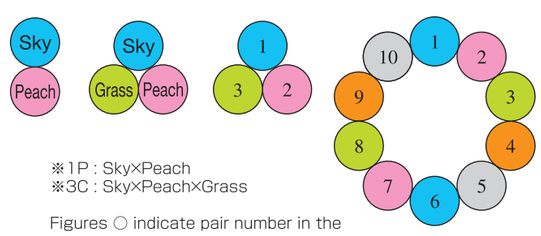
> > > Meeting standard

Certification	EXT-3D LF		
	UL CL3X	UL AWM	cUL AWM
Applicable standard	UL13	UL758	CSA C22.2 No.210
Official symbol	CL3X	UL STYLE 2517	CSA AWM ⅡA/B
Voltage rating	300V	300V	300V
Temperature rating	105℃	105℃	105℃
Conductor	UL13	UL758	CSA C22.2 No.210
Flame rating	VW-1	VW-1	FT1

> Identification

· 24~20AWG

1P 3C 3P 10P



※1P : Sky×Peach
※3C : Sky×Peach×Grass

Figures ○ indicate pair number in the identification table.

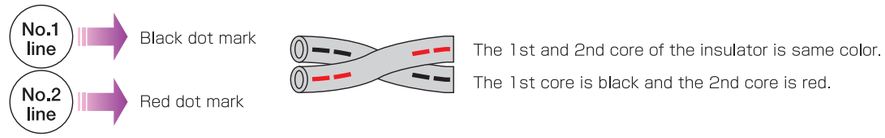
※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

●Identification table

Pair number	Color of insulation	Dot mark
1	Sky	
2	Peach	
3	Grass	
4	Orange	
5	Gray	
6	Sky	
7	Peach	
8	Grass	
9	Orange	
10	Gray	
11	Sky	
12	Peach	
13	Grass	
14	Orange	
15	Gray	

Pair number	Color of insulation	Dot mark
16	Sky	
17	Peach	
18	Grass	
19	Orange	
20	Gray	
21	Sky	(Continuation)
22	Peach	(Continuation)
23	Grass	(Continuation)
24	Orange	(Continuation)
25	Gray	(Continuation)
26	Sky	
27	Peach	
28	Grass	
29	Orange	
30	Gray	

●Example of pare

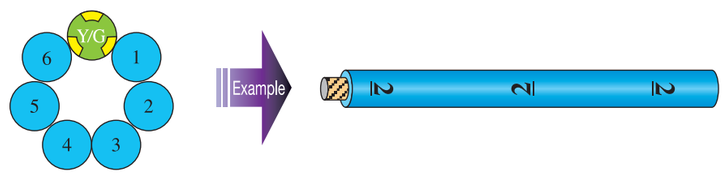


· 18~14AWG

2C 3C 4C

· 7 cores or more is identified by numbering

7C(6C+1C)



※Y/G indicates green core with yellow stripe(30~50%). Figures in ○ indicate black numbering on light blue insulator.

EXT-3D/CL3X/2517 300V LF

Electronic equipment robot cable

> Construction table

No. of cores No. of pairs	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	High elasticity TPE insulation Outside diameter (inch)	High elasticity TPE insulation Outside diameter (mm)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(inch)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
1P						0.154	3.9	12(18)	less than 91.1			5.3
3C						0.157	4.0	15(22)	less than 89.3			4.4
2P						0.193	4.9	19(29)				4.2
3P						0.217	5.5	25(37)				3.6
4P	24 (0.204㎟)	41/0.08 (41/3.2mil)	0.59 (23mil)	0.039	0.99	0.236	6.0	30(45)	less than 91.1	more than 100	2000	3.2
5P						0.252	6.4	37(55)				3.0
7P						0.295	7.5	47(70)				2.7
8P						0.315	8.0	50(75)				2.6
10P						0.370	9.4	71(105)				2.5
12P						0.413	10.5	84(125)				2.4
1P						0.165	4.2	15(22)	less than 57.6			6.9
3C						0.173	4.4	19(28)	less than 56.5			5.8
2P						0.213	5.4	26(38)				5.5
3P						0.240	6.1	32(48)				4.8
4P	22 (0.324㎟)	65/0.08 (65/3.2mil)	0.75 (30mil)	0.045	1.15	0.260	6.6	37(55)	less than 57.6	more than 100	2000	4.3
5P						0.283	7.2	47(70)				4.0
7P						0.346	8.8	67(100)				3.6
8P						0.370	9.4	74(110)				3.5
10P						0.417	10.6	94(140)				3.3
12P						0.472	12.0	104(155)				3.2
1P						0.181	4.6	19(29)	less than 35.7			9.2
3C						0.189	4.8	24(35)	less than 35.0			7.8
2P						0.240	6.1	34(50)				7.4
3P						0.272	6.9	44(65)				6.4
4P	20 (0.518㎟)	108/0.08 (108/3.2mil)	0.96 (38mil)	0.054	1.36	0.295	7.5	54(80)	less than 35.7	more than 100	2000	5.8
5P						0.335	8.5	71(105)				5.4
7P						0.390	9.9	94(140)				4.9
8P						0.421	10.7	108(160)				4.7
10P						0.484	12.3	138(205)				4.4
12P						0.547	13.9	168(250)				4.2
2C						0.224	5.7	30(44)				12
3C						0.236	6.0	37(55)				12
4C						0.256	6.5	44(65)				11
7C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31 (52mil)	0.075	1.91	0.339	8.6	77(115)	less than 22.3	more than 100	2000	8.8
9C						0.386	9.8	101(150)				8.1
11C						0.441	11.2	124(185)				7.6
13C						0.488	12.4	151(225)				7.3
3C	16 (1.30㎟)	266/0.08 (266/3.2mil)	1.64 (65mil)	0.088	2.24	0.264	6.7	50(75)	less than 13.9	more than 100	2000	17
4C						0.287	7.3	64(95)				14
7C						0.382	9.7	108(160)				11
3C	14 (2.08㎟)	420/0.08 (420/3.2mil)	2.07 (81mil)	0.109	2.77	0.311	7.9	71(105)	less than 8.77	more than 100	2000	23
4C						0.354	9.0	94(140)				20

※18AWG and 3C or more has the [Y/G] earth cable of an equal size.
※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standerd and the CSA standard is applied.

> > > Meeting standard

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30°C.

·Allowable ampacity is calculated based on JCS0168.

·Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following adjustment factors by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA 70 or NFPA 79.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

＊)1 Bending	Bend	U-shaped turn-back	90° bending	Twist Straight	Twist Bending	＊)2 Move bending
A	A	S	A	S	A	C

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.
＊)2 When overall diameter of the cable is 20mm or less.

※The longevity of the cable inside a cable bearing is dependent on the travel distance.
Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

> Standard sales length

100m
(Sales by short length is available for large sizes. Please contact us which sizes are available.)

EXT-Type 3D Series

EXT-3D-SB/CL3X/2517 300V LF

Electronic equipment robot cable

Multi core cable		Multi pair cable	
Heat resistance	★★★★★	Heat resistance	★★★★★
Oil resistance	★★★★★	Oil resistance	★★★★★
Noise resistance	★★★	Noise resistance	★★★★
Flame resistance	★★★★	Flame resistance	★★★★
Torsion resistance	★★★★★★	Torsion resistance	★★★★★★
Flexibility resistance	★★★★★	Flexibility resistance	★★★★★
Cable carrier	★★★★★★	Cable carrier	★★★★★★

※The characteristic is an aim. ※The characteristic is an aim.

> Application

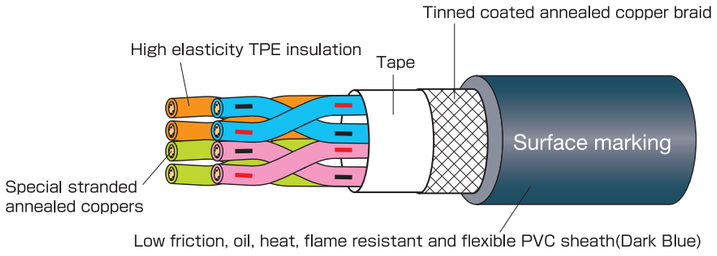
- Appropriate wiring for multi-joint unit portion. (Twist test 20 million times or more.)
- Appropriate for cable bare wiring for high-speed moving. (Cable Bear test 20 million times or more.)
- CL3X tha is the listing standard is acquired and it correspomds to NFPA70,79.
- Sheiled Robot cable with UL and cUL at 300V, 105℃. (Category : AVLV2, AVLV8, QPTZ)

> Feature

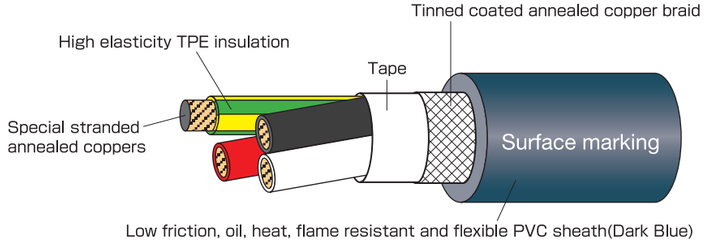
- Extremely fine conductor use.
- High bending elasticity and heat resistant TPE is used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

· 24~20AWG



· 18AWG



> Surface marking

TAIYO EXT-3D □□AWG LF R15 E242171 (UL) CL3X 105℃ □□AWG or AWM 2517 105℃ 300V VW-1 AWM ⅡA/B 105℃ 300V FT1

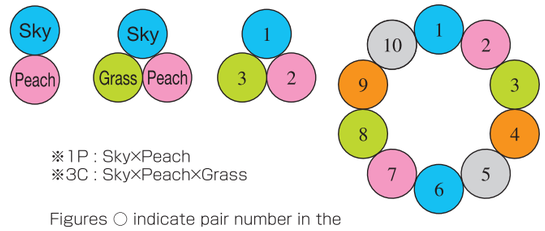
> > > Meeting standard

Certification	EXT-3D LF		
	UL CL3X	UL AWM	cUL AWM
Applicable standard	UL13	UL758	CSA C22.2 No.210
Official symbol	CL3X	UL STYLE 2517	CSA AWM ⅡA/B
Voltage rating	300V	300V	300V
Temperature rating	105℃	105℃	105℃
Conductor	UL13	UL758	CSA C22.2 No.210
Flame rating	VW-1	VW-1	FT1

> Identification

· 24~20AWG

1P 3C 3P 10P



※1P : Sky×Peach
※3C : Sky×Peach×Grass

Figures ○ indicate pair number in the identification table.

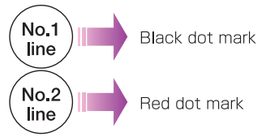
※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

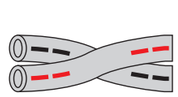
●Identification table

Pair number	Color of insulation	Dot mark
1	Sky	
2	Peach	
3	Grass	
4	Orange	
5	Gray	
6	Sky	
7	Peach	
8	Grass	
9	Orange	
10	Gray	
11	Sky	
12	Peach	
13	Grass	
14	Orange	
15	Gray	

Pair number	Color of insulation	Dot mark
16	Sky	
17	Peach	
18	Grass	
19	Orange	
20	Gray	
21	Sky	Continuation
22	Peach	Continuation
23	Grass	Continuation
24	Orange	Continuation
25	Gray	Continuation
26	Sky	
27	Peach	
28	Grass	
29	Orange	
30	Gray	

●Example of pare





The 1st and 2nd core of the insulator is same color.
The 1st core is black and the 2nd core is red.

· 18AWG

2C 3C 4C

※Y/G indicates green core with yellow stripe(30~50%).

EXT-3D-SB/CL3X/2517 300V LF

Electronic equipment robot cable

> Construction table

No. of cores No. of pairs	Conductor			High elasticity TPE insulation		Low friction, oil, heat, flame resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P	24 (0.204㎟)	41/0.08 (41/3.2mil)	0.59 (23mil)	0.039	0.99	0.173	4.4	17(26)	less than 91.1	more than 100	2000	5.4
3C						0.177	4.5	20(30)	less than 89.3			4.6
2P						0.213	5.4	27(40)				4.3
3P						0.236	6.0	33(49)				3.7
4P						0.256	6.5	40(60)				3.3
5P						0.272	6.9	47(70)	less than 91.1			3.1
7P						0.315	8.0	60(90)				2.8
8P						0.350	8.9	71(105)				2.7
10P						0.394	10.0	87(130)				2.5
1P	22 (0.324㎟)	65/0.08 (65/3.2mil)	0.75 (30mil)	0.045	1.15	0.185	4.7	21(31)	less than 57.6	more than 100	2000	7.1
3C						0.193	4.9	25(37)	less than 56.5			6.0
2P						0.232	5.9	34(50)				5.6
3P						0.260	6.6	40(60)				4.9
4P						0.280	7.1	47(70)				4.4
5P						0.303	7.7	57(85)	less than 57.6			4.1
7P						0.366	9.3	81(120)				3.7
8P						0.394	10.0	94(140)				3.6
10P						0.449	11.4	118(175)				3.3
1P	20 (0.518㎟)	108/0.08 (108/3.2mil)	0.96 (38mil)	0.054	1.36	0.201	5.1	26(38)	less than 35.7	more than 100	2000	9.4
3C						0.209	5.3	32(47)	less than 35.0			8.0
2P						0.260	6.6	44(65)				7.5
3P						0.291	7.4	54(80)				6.4
4P						0.315	8.0	67(100)				5.9
5P						0.354	9.0	84(125)	less than 35.7			5.5
7P						0.413	10.5	114(170)				4.9
8P						0.453	11.5	131(195)				4.8
10P						0.508	12.9	161(240)				4.5
2C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31 (52mil)	0.075	1.91	0.244	6.2	40(60)	less than 22.3	more than 100	2000	13
3C						0.256	6.5	47(70)				13
4C						0.276	7.0	54(80)				11

※18AWG,3C or more has the [Y/G] earth cable of an equal size.
※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standerd and the CSA standard is applied.

> > > Meeting standard

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30°C.

·Allowable ampacity is calculated based on JCS0168.

·Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following adjustment factors by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA 70 or NFPA 79.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

＊)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		＊)2 Move bending
				Straight	Bending	
A	A	S	A	S	A	C

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

＊)2 When overall diameter of the cable is 20mm or less.

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

> Standard sales length

100m
(Sales by short length is available for large sizes. Please contact us which sizes are available.)

EXT-3D/CL3X/2586 600V LF

Electronic equipment robot cable

Heat resistance ★★★★★
Oil resistance ★★★★★
Noise resistance ★
Flame resistance ★★★★
Torsion resistance ★★★★★★
Flexibility resistance ★★★★★
Cable carrier ★★★★★★

※The characteristic is an aim.

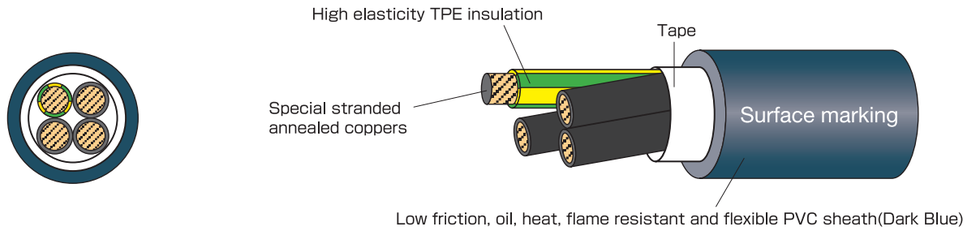
Application

- Appropriate wiring for multi-joint unit portion. (Twist test 20 million times or more.)
- Appropriate for cable bare wiring for high-speed moving. (Cable Bear test 20 million times or more.)
- CL3X tha is the listing standard is acquired and it correspomds to NFPA70,79.
- Robot cable with UL and cUL at 600V, 105℃. (Category : AVLV2, AVLV8, QPTZ)

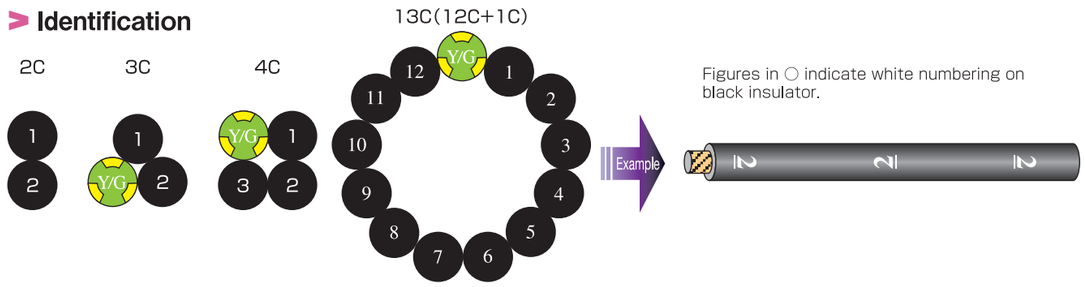
Feature

- Extremely fine conductor use.
- High bending elasticity and heat resistant TPE is used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

Construction figure



Identification



※Y/G indicates green core with yellow stripe(30~50%).

Surface marking

TAIYO EXT-3D □□AWG LF R15 E242171 (UL) CL3X 105℃ □□AWG or AWM 2586 105℃ 600V VW-1 c AWM ⅡA/B 105℃ 600V FT1

Meeting standard

Certification	EXT-3D LF		
	UL CL3X	UL AWM	cUL AWM
Applicable standard	UL13	UL758	CSA C22.2 No.210
Official symbol	CL3X	UL STYLE 2586	CSA AWM ⅡA/B
Voltage rating	300V	600V	600V
Temperature rating	105℃	105℃	105℃
Conductor	UL13	UL758	CSA C22.2 No.210
Flame rating	VW-1	VW-1	FT1

Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	High elasticity TPE insulation Outside diameter (inch)	High elasticity TPE insulation Outside diameter (mm)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(inch)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31 (52mil)	0.075	1.91	0.224	5.7	30(44)	less than 22.3	more than 100	2000	12
3C						0.236	6.0	37(55)				12
4C						0.256	6.5	44(65)				11
6C+1C						0.354	9.0	94(140)				9.0
8C+1C						0.402	10.2	118(175)				8.2
10C+1C						0.453	11.5	141(210)				7.7
12C+1C						0.500	12.7	165(245)				7.3
2C	16 (1.30㎟)	266/0.08 (266/3.2mil)	1.64 (65mil)	0.088	2.24	0.252	6.4	40(60)	less than 13.9	more than 100	2000	17
3C						0.264	6.7	50(75)				17
4C						0.287	7.3	64(95)				14
6C+1C						0.394	10.0	114(170)				11
10C+1C						0.508	12.9	178(265)				10
12C+1C						0.571	14.5	218(325)				9.8
2C	14 (2.08㎟)	420/0.08 (420/3.2mil)	2.07 (81mil)	0.109	2.77	0.291	7.4	54(80)	less than 8.77	more than 100	2000	23
3C						0.311	7.9	71(105)				23
4C						0.354	9.0	94(140)				20
6C+1C						0.461	11.7	161(240)				16

※Core number mark "+1C" has the [Y/G] earth cable of 14AWG size.
※3,4 core has the [Y/G] earth cable of an equal size.
※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30°C.

·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following adjustment factors by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70 or NFPA79.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

Movement characteristic

*)1 Bending	Bend	U-shaped turn-back	90° bending	Twist Straight	Twist Bending	*)2 Move bending
A	A	S	A	S	A	C

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

*)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

*)2 When overall diameter of the cable is 20mm or less.

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

Standard sales length

100m
(Sales by short length is available for large sizes. Please contact us which sizes are available.)

EXT-Type 3D Series

EXT-3D-SB/CL3X/2586 600V LF

Electronic equipment robot cable

Heat resistance ★★★★★
Oil resistance ★★★★★
Noise resistance ★★★
Flame resistance ★★★★
Torsion resistance ★★★★★★
Flexibility resistance ★★★★★
Cable carrier ★★★★★★

※The characteristic is an aim.

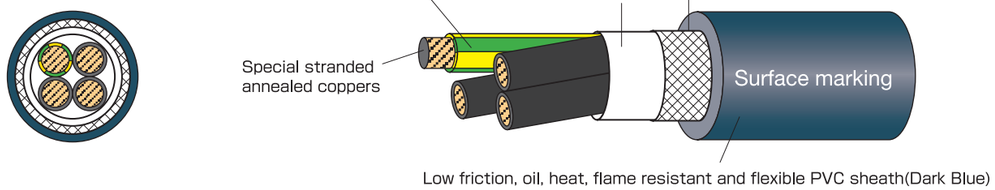
Application

- Appropriate wiring for multi-joint unit portion. (Twist test 20 million times or more.)
- Appropriate for cable bare wiring for high-speed moving. (Cable Bear test 20 million times or more.)
- CL3X tha is the listing standard is acquired and it correspomds to NFPA70,79.
- Sheilded Robot cable with UL and cUL at 600V, 105°C. (Category : AVLV2, AVLV8, QPTZ)

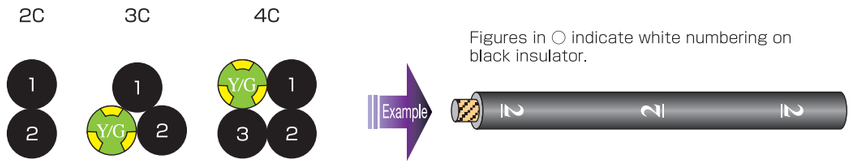
Feature

- Extremely fine conductor use.
- High bending elasticity and heat resistant TPE is used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

Construction figure



Identification



※Y/G indicates green core with yellow stripe(30~50%).

Surface marking

TAIYO EXT-3D □□AWG LF R15 E242171 (UL) CL3X 105℃ □□AWG or AWM 2586 105℃ 600V VW-1 c UL us AWM ⅡA/B 105℃ 600V FT1

Meeting standard

Certification	EXT-3D LF		
	UL CL3X	UL AWM	cUL AWM
Applicable standard	UL13	UL758	CSA C22.2 No.210
Official symbol	CL3X	UL STYLE 2586	CSA AWM ⅡA/B
Voltage rating	300V	600V	600V
Temperature rating	105℃	105℃	105℃
Conductor	UL13	UL758	CSA C22.2 No.210
Flame rating	VW-1	VW-1	FT1

Construction table

No. of cores	Conductor			High elasticity TPE insulation		Low friction, oil, heat, flame resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31 (52mil)	0.075	1.91	0.244	6.2	40(60)	less than 22.3	more than 100	2000	13
3C						0.256	6.5	47(70)				13
4C						0.276	7.0	54(80)				11
2C	16 (1.30㎟)	266/0.08 (266/3.2mil)	1.64 (65mil)	0.088	2.24	0.272	6.9	50(75)	less than 13.9	more than 100	2000	17
3C						0.283	7.2	60(90)				17
4C						0.307	7.8	74(110)				15
2C	14 (2.08㎟)	420/0.08 (420/3.2mil)	2.07 (81mil)	0.109	2.77	0.311	7.9	67(100)	less than 8.77	more than 100	2000	23
3C						0.346	8.8	91(135)				23
4C						0.374	9.5	111(165)				20

※3,4 core has the [Y/G] earth cable of an equal size.

※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30°C.

·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following adjustment factors by the ambient temperature.

Note) Please refer to P.274 when you use this cable accoding to NFPA70 or NFPA79.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

Movement characteristic

＊)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		＊)2 Move bending
				Straight	Bending	
A	A	S	A	S	A	C

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

＊)2 When overall diameter of the cable is 20mm or less.

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

EXT-PREM/CMX/2517 LF

Electronic equipment robot cable

Heat resistance ★★★★★
Oil resistance ★★★★★
Noise resistance ★
Flame resistance ★★★★
Torsion resistance ★★★★★★
Flexibility resistance ★★★★★
Cable carrier ★★★★★★★
※The characteristic is an aim.

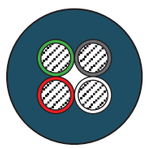
> Application

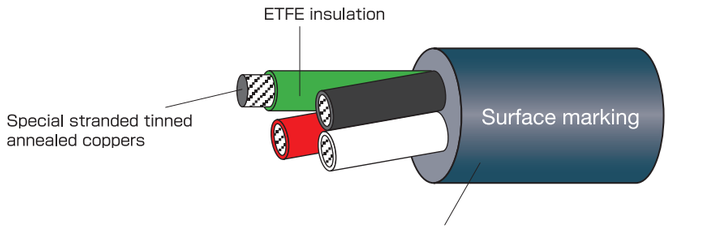
- Appropriate wiring for multi-joint unit portion. (Twist test 40 million times or more.)
- Appropriate for cable bare wiring for high-speed moving. (Cable Bear test 50 million times or more.)
- CMX tha is the listing standard is acquired and it correspomds to NFPA70,79.
- Robot cable with UL and cUL at 300V, 105℃. (Category : AVLV2, AVLV8, DUZX, DUZX7)

> Feature

- Tinned annealed copper superfine conductor use.
- Fluorine resin(ETFE) is used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.
- Coolant resistant.

> Construction figure





※Cable with more than 10 cores : binder tape on cores.

> Surface marking

―EXT-PREM TAIYO □□AWG LF R15 E176892 (UL) CMX □□AWG 105℃ or AWM 2517 105℃ 300V VW-1 or c(UL) CMH □□AWG 105℃ or c AWM Ⅱ A/B 105℃ 300V FT1―

> Standard sales length

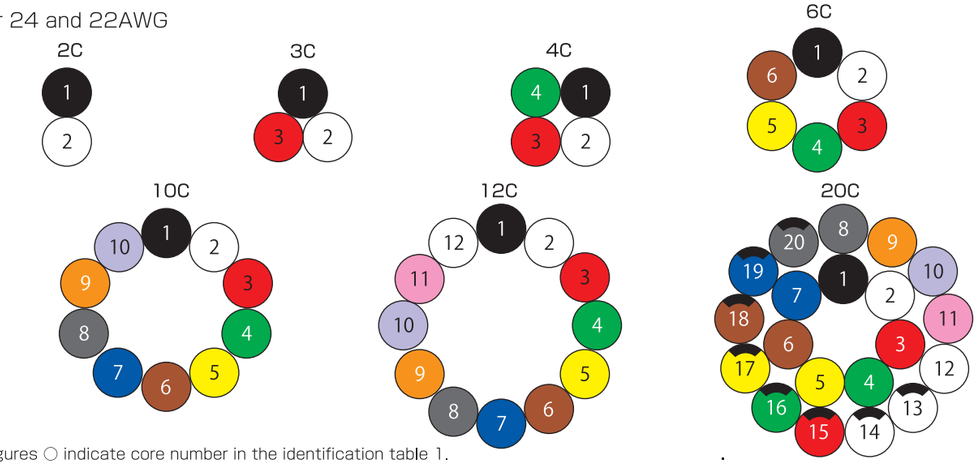
Make-to-order products.
(Depending on size, it is in stock. Please contact us which sizes are available.)

> > > Meeting standard

Certification	UL CMX	cUL CMH	UL AWM	cUL AWM
Applicable standard	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Official symbol	CMX	CMH	UL STYLE 2517	CSA AWM Ⅱ A/B
Voltage rating	300V	300V	300V	300V
Temperature rating	105℃	105℃	105℃	105℃
Conductor	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1	VW-1	FT1

> Identification

· For 24 and 22AWG



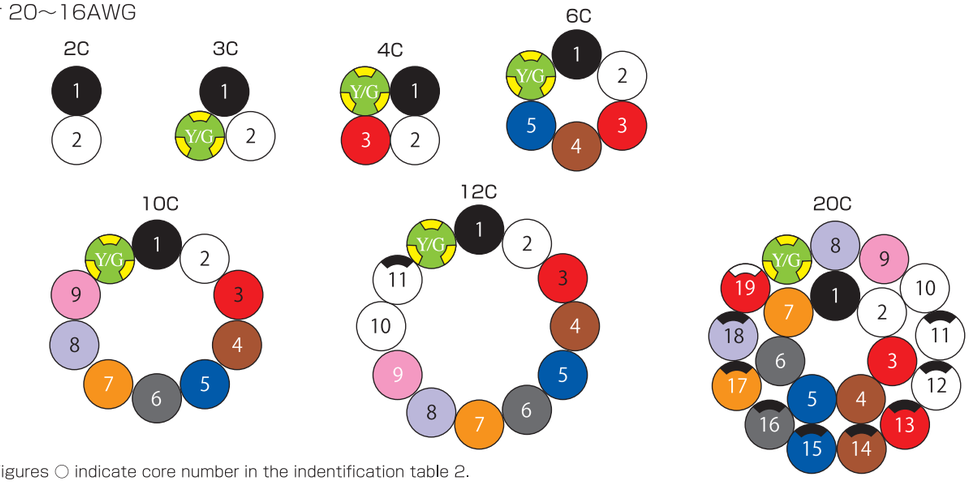
Figures ○ indicate core number in the identification table 1.

●Identification table1

Pair number	1	2	3	4	5	6	7	8	9	10
Line Color	Black	White	Red	Green	Yellow	Brown	Blue	Gray	Orange	Purple
Pair number	11	12	13	14	15	16	17	18	19	20
Line Color	Peach	Natural color	B/N.C.	B/W	B/R	B/G	B/Y	B/Brown	B/Blue	B/G

※Black/White indicates white core with black stripe.

· For 20～16AWG



Figures ○ indicate core number in the indentification table 2.

●Identification table2

Pair number	1	2	3	4	5	6	7	8	9	10
Line Color	Black	White	Red	Brown	Blue	Gray	Orange	Purple	Pink	Natural color
Pair number	11	12	13	14	15	16	17	18	19	
Line Color	B/N.C.	B/W	B/R	B/Brown	B/Blue	B/G	B/O	B/P	W/R	

※Y/G indicates green core with yellow stripe(30%～50%).
※Black/White indicates white core with black stripe.

EXT-PREM/CMX/2517 LF

Electronic equipment robot cable

Construction table

No. of cores	Conductor			ETFE insulation		Low friction, oil, heat, flame resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C						0.157	4.0	14(21)				5.0
3C						0.161	4.1	16(24)				4.2
4C	24 (0.204㎟)	42/0.08 (42/3.2mil)	0.68 (27mil)	0.043	1.08	0.173	4.4	19(28)	less than 105	more than 100	2000	3.8
6C						0.205	5.2	27(40)				3.3
10C						0.268	6.8	40(60)				2.8
12C						0.303	7.7	50(75)				2.7
20C						0.319	8.1	67(100)				2.2
2C						0.169	4.3	17(26)				7.0
3C						0.177	4.5	21(31)				5.9
4C	22 (0.324㎟)	70/0.08 (70/3.2mil)	0.87 (34mil)	0.050	1.27	0.201	5.1	27(40)	less than 57.5	more than 100	2000	5.4
6C						0.228	5.8	37(55)				4.8
10C						0.307	7.8	57(85)				4.1
12C						0.339	8.6	67(100)				3.9
20C						0.358	9.1	94(140)				3.1
2C						0.205	5.2	26(39)				9.6
3C						0.217	5.5	32(47)				9.6
4C	20 (0.518㎟)	112/0.08 (112/3.2mil)	1.11 (44mil)	0.063	1.61	0.232	5.9	37(55)	less than 36.2	more than 100	2000	8.4
6C						0.268	6.8	50(75)				7.0
10C						0.370	9.4	87(130)				5.8
12C						0.409	10.4	108(160)				5.5
20C						0.437	11.1	141(210)				4.3
2C						0.232	5.9	34(50)				12
3C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.36 (54mil)	0.077	1.96	0.244	6.2	44(65)	less than 24.0	more than 100	2000	12
4C						0.264	6.7	50(75)				10
6C						0.319	8.1	74(110)				9.2
2C						0.264	6.7	47(70)				16
3C	16 (1.30㎟)	280/0.08 (280/3.2mil)	1.75 (69mil)	0.093	2.35	0.287	7.3	60(90)	less than 15.5	more than 100	2000	16
4C						0.311	7.9	77(115)				14
6C						0.374	9.5	111(165)				12

※20AWG and 3C or more cores has the [Y/G] ground core of an equal size.

>>> Meeting standard

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following adjustment factors by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA 70.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

Movement characteristic

＊)1 Bending	Bend	＊)2 U-shaped turn-back	90° bending	Twist		＊)3 Move bending
				Straight	Bending	
A	A	SS	A	S	A	C

Examination's time:
SS= More than 50 million times　B= More than 5 million times
S= More than 20 million times　C= More than 3 million times
A= More than 10 million times　D= More than 1 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

＊)2 Our original test showed that no case of wire breakage could be detected for EXT-PREM-SB/CMX/2517 5PX24AWG even after **100 million cycles.**

＊)3 When overall diameter of the cable is 20mm or less.

※ The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-PREM-SB/CMX/2517 LF

Electronic equipment robot cable

Multi core cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Torsion resistance	★★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★★

※The characteristic is an aim.

Multi pair cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★★
Flame resistance	★★★★
Torsion resistance	★★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★★

※The characteristic is an aim.

> Application

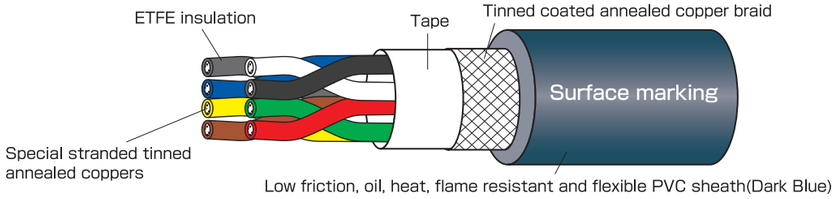
- Appropriate wiring for multi-joint unit portion. (Twist test 40 million times or more.)
- Appropriate for cable bare wiring for high-speed moving. (Cable Bear test 50 million times or more.)
- CMX tha is the listing standard is acquired and it correspomds to NFPA70,79.
- Shielded Robot cable with UL and cUL at 300V, 105℃.(Category: AVLV2, AVLV8, DUZX, DUZX7)

> Feature

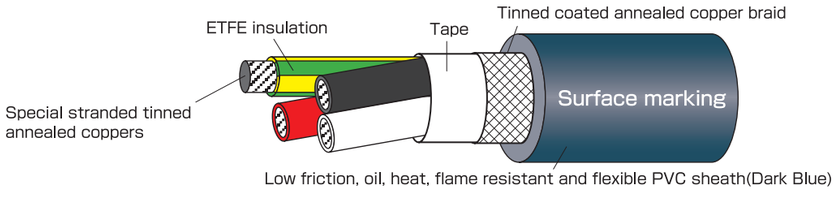
- Tinned annealed copper superfine conductor use.
- Fluorine resin(ETFE) is used for insulation.
- Oil and heat resistant PVC used for sheath.
- Low friction material used for sheath.
- Flame resisting : UL VW-1, cUL FT1.
- Coolant resistant.

> Construction figure

·Multi pair cable



·Multi core cable



> Surface marking

—EXT-PREM TAIYO □□AWG LF R15 E176892 (UL) CMX □□AWG 105℃ or AWM 2517 105℃ 300V VW-1 or c(UL) CMH □□AWG 105℃ or c AWM Ⅱ A/B 105℃ 300V FT1—

> Standard sales length

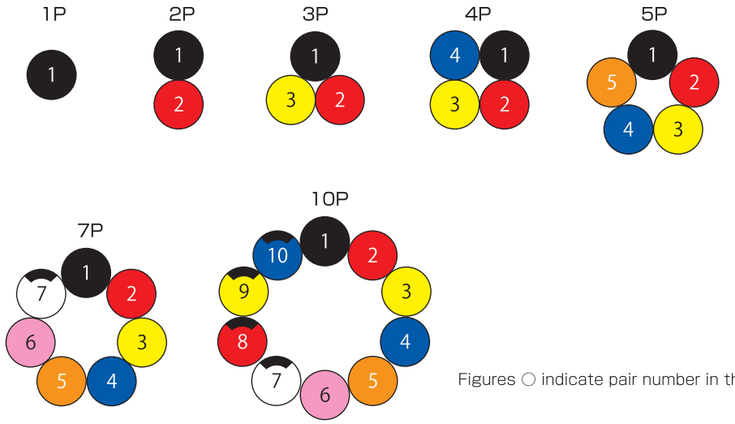
Make-to-order products.
(Depending on size, it is in stock. Please contact us which sizes are available.)

> > > Meeting standard

Certification	UL CMX	cUL CMH	UL AWM	cUL AWM
Applicable standard	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Official symbol	CMX	CMH	UL STYLE 2517	CSA AWM Ⅱ A/B
Voltage rating	300V	300V	300V	300V
Temperature rating	105℃	105℃	105℃	105℃
Conductor	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1	VW-1	FT1

> Identification

· For 24 and 22AWG



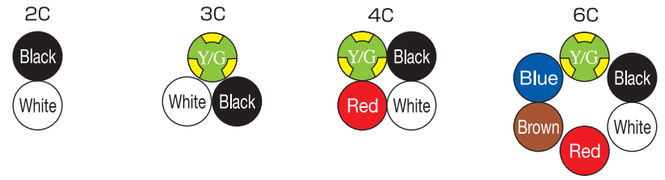
Figures ○ indicate pair number in the identification table.

●Identification table

Pair number	1	2	3	4	5	6	7	8	9	10
No.1 kind line	Black	Red	Yellow	Blue	Orange	Pink	B/N.C.	B/R	B/Y	B/Blue
No.2 kind line	White	Green	Brown	Gray	Purple	Natural color	B/W	B/G	B/Brown	B/G

※Black/White indicates white core with black stripe.

· For 20～16AWG



※Y/G indicates green core with yellow stripe(30%～50%).

EXT-PREM-SB/CMX/2517 LF

Electronic equipment robot cable

Construction table

No. of cores No. of pairs	Conductor			ETFE insulation		Low friction, oil, heat, flame resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P	24 (0.204㎟)	42/0.08 (42/3.2mil)	0.68 (27mil)	0.043	1.08	0.189	4.8	121(31)	less than 105	more than 100	2000	5.2
2P						0.240	6.1	34(50)				4.2
3P						0.268	6.8	40(60)				3.6
4P						0.283	7.2	47(70)				3.2
5P						0.307	7.8	54(80)				3.0
7P						0.358	9.1	74(110)				2.7
10P						0.429	10.9	101(150)				2.4
1P	22 (0.324㎟)	70/0.08 (70/3.2mil)	0.87 (34mil)	0.050	1.27	0.201	5.1	25(37)	less than 57.5	more than 100	2000	7.3
2P						0.264	6.7	44(65)				5.9
3P						0.295	7.5	54(80)				5.1
4P						0.315	8.0	60(90)				4.6
5P						0.346	8.8	74(110)				4.2
7P						0.402	10.2	97(145)				3.8
10P						0.488	12.4	138(205)				3.5
2C	20 (0.518㎟)	112/0.08 (112/3.2mil)	1.11 (44mil)	0.063	1.61	0.236	6.0	34(50)	less than 36.2	more than 100	2000	9.9
3C						0.248	6.3	40(60)				9.9
4C						0.264	6.7	50(75)				8.6
6C						0.307	7.8	64(95)				7.1
2C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.36 (54mil)	0.077	1.96	0.264	6.7	44(65)	less than 24.0	more than 100	2000	12
3C						0.283	7.2	54(80)				12
4C						0.303	7.7	67(100)				11
6C						0.350	8.9	91(135)				9.2
2C	16 (1.30㎟)	280/0.08 (280/3.2mil)	1.75 (69mil)	0.093	2.35	0.303	7.7	60(90)	less than 15.5	more than 100	2000	16
3C						0.319	8.1	74(110)				17
4C						0.343	8.7	87(130)				14
6C						0.409	10.4	128(190)				12

※20AWG and 3C or more cores has the [Y/G] ground core of an equal size.

> > > Meeting standard

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following adjustment factors by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA 70.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

Movement characteristic

＊)1 Bending	Bend	＊)2 U-shaped turn-back	90° bending	Twist		＊)3 Move bending
				Straight	Bending	
A	A	SS	A	S	A	C

Examination's time:
SS= More than 50 million times
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

＊)2 Our original test showed that no case of wire breakage could be detected for EXT-PREM-SB/CMX/2517 5PX24AWG even after **100 million cycles.**

＊)3 When overall diameter of the cable is 20mm or less.

※ The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-01G Series

EXT-01G/20276 LF

Electronic equipment robot cable

Multi core cable		Multi pair cable	
Heat resistance	★★★	Heat resistance	★★★
Oil resistance	★★★★★	Oil resistance	★★★★★
Noise resistance	★	Noise resistance	★★
Flame resistance	★★★★	Flame resistance	★★★★
Torsion resistance	★★★★★	Torsion resistance	★★★★★
Flexibility resistance	★★★★★	Flexibility resistance	★★★★★
Cable carrier	★★★★★★	Cable carrier	★★★★★★

※The characteristic is an aim. ※The characteristic is an aim.

> Application

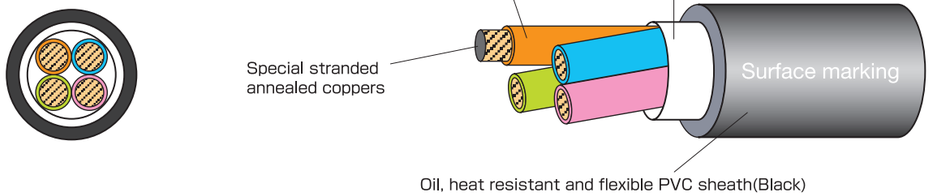
- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 20 million times or more.
- Robot cable with UL and cUL at 30V 80°C. (Category : AVLV2, AVLV8)

> Feature

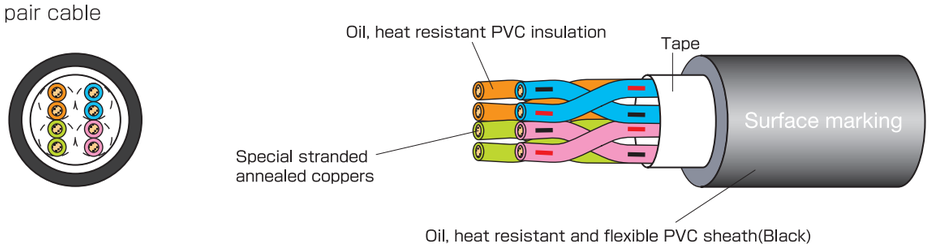
- Extremely fine conductor use.
- Oil and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

·Multi core cable



·Multi pair cable



> Surface marking

TAIYO EXT-01G □□AWG LF R15 E67647 c UL us AWM 20276 VW-1 ⅡA/B 80℃ 30V FT1

> > > Meeting standard

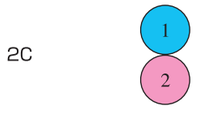
Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 20276	CSA AWM ⅡA/B
Voltage rating	30V	30V
Temperature rating	80℃	80℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Identification

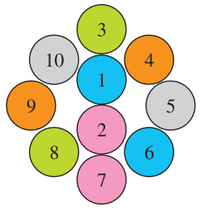
·Multi core cable

●Identification table1

2C



10C



Line number	Color of insulation	Dot mark
1	Sky	
2	Peach	
3	Grass	
4	Orange	
5	Gray	
6	Sky	▬
7	Peach	▬
8	Grass	▬
9	Orange	▬
10	Gray	▬
11	Sky	▬ ▬
12	Peach	▬ ▬
13	Grass	▬ ▬
14	Orange	▬ ▬
15	Gray	▬ ▬
16	Sky	▬ ▬ ▬
17	Peach	▬ ▬ ▬
18	Grass	▬ ▬ ▬
19	Orange	▬ ▬ ▬
20	Gray	▬ ▬ ▬

Line number	Color of insulation	Dot mark
21	Sky	▬ ▬ ▬ ▬
22	Peach	▬ ▬ ▬ ▬
23	Grass	▬ ▬ ▬ ▬
24	Orange	▬ ▬ ▬ ▬
25	Gray	▬ ▬ ▬ ▬
26	Sky	▬ ▬ ▬ ▬ ▬ (Continuation)
27	Peach	▬ ▬ ▬ ▬ ▬ (Continuation)
28	Grass	▬ ▬ ▬ ▬ ▬ (Continuation)
29	Orange	▬ ▬ ▬ ▬ ▬ (Continuation)
30	Gray	▬ ▬ ▬ ▬ ▬ (Continuation)
31	Sky	▬▬
32	Peach	▬▬
33	Grass	▬▬
34	Orange	▬▬
35	Gray	▬▬
36	Sky	▬▬ ▬▬
37	Peach	▬▬ ▬▬
38	Grass	▬▬ ▬▬
39	Orange	▬▬ ▬▬
40	Gray	▬▬ ▬▬

Figures ○ indicate core number in the identification table 1.
※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

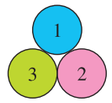
·Multi pair cable

●Identification table2

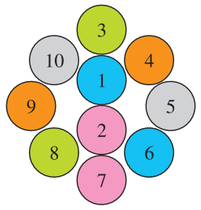
1P

※1P : Sky×Peach

3P



10P



Pair number	Color of insulation	Dot mark
1	Sky	▬ / ▬
2	Peach	▬ / ▬
3	Grass	▬ / ▬
4	Orange	▬ / ▬
5	Gray	▬ / ▬
6	Sky	▬ ▬ / ▬ ▬
7	Peach	▬ ▬ / ▬ ▬
8	Grass	▬ ▬ / ▬ ▬
9	Orange	▬ ▬ / ▬ ▬
10	Gray	▬ ▬ / ▬ ▬
11	Sky	▬ ▬ ▬ / ▬ ▬ ▬
12	Peach	▬ ▬ ▬ / ▬ ▬ ▬
13	Grass	▬ ▬ ▬ / ▬ ▬ ▬
14	Orange	▬ ▬ ▬ / ▬ ▬ ▬
15	Gray	▬ ▬ ▬ / ▬ ▬ ▬

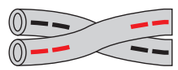
Pair number	Color of insulation	Dot mark
16	Sky	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
17	Peach	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
18	Grass	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
19	Orange	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
20	Gray	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
21	Sky	▬ ▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬ ▬ (Continuation)
22	Peach	▬ ▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬ ▬ (Continuation)
23	Grass	▬ ▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬ ▬ (Continuation)
24	Orange	▬ ▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬ ▬ (Continuation)
25	Gray	▬ ▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬ ▬ (Continuation)
26	Sky	▬▬ / ▬▬
27	Peach	▬▬ / ▬▬
28	Grass	▬▬ / ▬▬
29	Orange	▬▬ / ▬▬
30	Gray	▬▬ / ▬▬

Figures ○ indicate pair number in the identification table 2.
※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

●Example of pare

No.1 line → Black dot mark

No.2 line → Red dot mark



The 1st and 2nd core of the insulator is same color.
The 1st core is black and the 2nd core is red.

EXT-01G/20276 LF

Electronic equipment robot cable

Construction table

No. of cores No. of pairs	Conductor			Oil,heat resistant PVC insulation		Oil, heat resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P	26 (0.128㎟)	30/0.08 (30/3.2mil)	0.63 (25mil)	0.041	1.03	0.157	4.0	12(18)	less than 146	more than 10	500	2.8
3C						0.161	4.1	14(21)				2.3
2P						0.197	5.0	20(30)				2.2
3P						0.220	5.6	24(36)				1.9
4P						0.236	6.0	27(40)				1.7
5P						0.256	6.5	32(47)				1.5
6P						0.276	7.0	37(55)				1.5
7P						0.295	7.5	44(65)				1.4
8P						0.315	8.0	47(70)				1.3
10P						0.319	8.1	54(80)				1.2
12P						0.354	9.0	64(95)				1.2
15P						0.390	9.9	74(110)				1.1
20P						0.429	10.9	94(140)				1.0
25P						0.488	12.4	121(180)				0.95
2C	24 (0.204㎟)	44/0.08 (44/3.2mil)	0.67 (26mil)	0.046	1.17	0.165	4.2	15(22)	less than 105	more than 10	500	4.2
3C						0.173	4.4	16(24)				3.5
4C						0.185	4.7	19(29)				3.2
5C						0.201	5.1	23(34)				3.0
6C						0.213	5.4	26(39)				2.8
8C						0.240	6.1	34(50)				2.5
10C						0.260	6.6	37(55)				2.4
12C						0.268	6.8	44(65)				2.2
16C						0.291	7.4	54(80)				2.0
20C						0.319	8.1	67(100)				1.8
30C						0.390	9.9	97(145)				1.6
40C						0.425	10.8	131(195)				1.5
2C	22 (0.324㎟)	68/0.08 (68/3.2mil)	0.83 (33mil)	0.052	1.33	0.181	4.6	17(26)	less than 57.5	more than 10	500	6.0
3C						0.189	4.8	20(30)				5.0
4C						0.201	5.1	24(36)				4.5
5C						0.217	5.5	29(43)				4.2
6C						0.232	5.9	34(50)				3.9
8C						0.264	6.7	44(65)				3.6
10C						0.283	7.2	50(75)				3.3
12C						0.291	7.4	57(85)				3.1
16C						0.323	8.2	71(105)				2.8
20C						0.354	9.0	87(130)				2.6
30C						0.433	11.0	131(195)				2.3
40C						0.472	12.0	175(260)				2.1
2C	20 (0.518㎟)	112/0.08 (112/3.2mil)	1.07 (42mil)	0.062	1.57	0.197	5.0	24(35)	less than 36.2	more than 10	500	7.9
3C						0.209	5.3	26(39)				6.7
4C						0.224	5.7	32(48)				6.0
5C						0.240	6.1	40(60)				5.5
6C						0.260	6.6	47(70)				5.2
8C						0.299	7.6	60(90)				4.8
10C						0.323	8.2	71(105)				4.5
12C						0.331	8.4	77(115)				4.1
16C						0.366	9.3	101(150)				3.7
20C						0.402	10.2	124(185)				3.5
24C						0.441	11.2	148(220)				3.3
30C						0.500	12.7	188(280)				3.1
40C						0.547	13.9	245(365)				2.8

※Please contact us which sizes are available.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

Movement characteristic

*)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		*)2 Move bending
				Straight	Bending	
A	A	S	A	A	A	C

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

*)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

*)2 When overall diameter of the cable is 20mm or less.

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-01G-SB/20276 LF

Heat resistance	★★★
Oil resistance	★★★★★
Noise resistance	★★★★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★

※The characteristic is an aim.

Electronic equipment robot cable

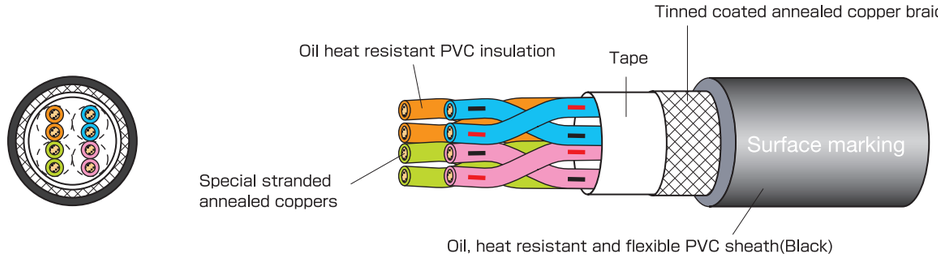
> Application

- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 20 million times or more.
- Shielded Robot cable with UL and cUL at 30V 80°C. (Category : AVLV2, AVLV8)

> Feature

- Extremely fine conductor use.
- Oil and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure



> Surface marking

TAIYO EXT-01G □□AWG LF R15 E67647 c UL us AWM 20276 VW-1 ⅡA/B 80℃ 30V FT1

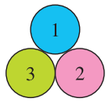
Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 20276	CSA AWM ⅡA/B
Voltage rating	30V	30V
Temperature rating	80℃	80℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Identification

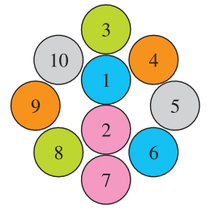
1P

※1P : Sky×Peach

3P



10P



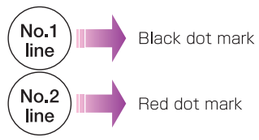
Figures ○ indicate pair number in the identification table.

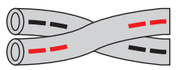
●Identification table

Pair number	Color of insulation	Dot mark
1	Sky	
2	Peach	
3	Grass	
4	Orange	
5	Gray	
6	Sky	
7	Peach	
8	Grass	
9	Orange	
10	Gray	
11	Sky	
12	Peach	
13	Grass	
14	Orange	
15	Gray	
16	Sky	
17	Peach	
18	Grass	
19	Orange	
20	Gray	
21	Sky	(Continuation)
22	Peach	(Continuation)
23	Grass	(Continuation)
24	Orange	(Continuation)
25	Gray	(Continuation)
26	Sky	
27	Peach	
28	Grass	
29	Orange	
30	Gray	

※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

●Example of pare





The 1st and 2nd core of the insulator is same color.
The 1st core is black and the 2nd core is red.

EXT-01G-SB/20276 LF

Electronic equipment robot cable

Construction table

No. of pairs	Conductor			Oil,heat resistant PVC insulation		Oil, heat resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P	26 (0.128㎟)	30/0.08 (30/3.2mil)	0.63 (25mil)	0.041	1.03	0.181	4.6	18(27)	less than 146	more than 10	500	2.8
2P						0.220	5.6	29(43)				2.2
3P						0.244	6.2	34(50)				1.9
4P						0.260	6.6	37(55)				1.7
5P						0.280	7.1	44(65)				1.6
6P						0.299	7.6	50(75)				1.5
7P						0.319	8.1	57(85)				1.4
8P						0.339	8.6	64(95)				1.4
10P						0.343	8.7	71(105)				1.2
12P						0.382	9.7	84(125)				1.2
15P						0.417	10.6	97(145)				1.1
20P						0.457	11.6	121(180)				1.0
25P						0.520	13.2	155(230)				0.97
1P	24 (0.204㎟)	44/0.08 (44/3.2mil)	0.67 (26mil)	0.046	1.17	0.189	4.8	20(30)	less than 105	more than 10	500	4.4
2P						0.236	6.0	34(50)				3.5
3P						0.264	6.7	40(60)				3.0
4P						0.283	7.2	47(70)				2.7
5P						0.303	7.7	54(80)				2.5
6P						0.327	8.3	64(95)				2.4
7P						0.350	8.9	71(105)				2.2
8P						0.378	9.6	84(125)				2.2
10P						0.378	9.6	91(135)				2.0
12P						0.417	10.6	104(155)				1.9
15P						0.461	11.7	124(185)				1.7
20P						0.508	12.9	158(235)				1.6
25P						0.614	15.6	218(325)				1.5
1P	22 (0.324㎟)	68/0.08 (68/3.2mil)	0.83 (33mil)	0.052	1.33	0.205	5.2	26(38)	less than 57.5	more than 10	500	6.1
2P						0.256	6.5	40(60)				4.9
3P						0.283	7.2	50(75)				4.2
4P						0.307	7.8	60(90)				3.8
5P						0.331	8.4	71(105)				3.5
6P						0.358	9.1	77(115)				3.3
7P						0.390	9.9	94(140)				3.2
8P						0.413	10.5	104(155)				3.1
10P						0.417	10.6	118(175)				2.8
12P						0.461	11.7	134(200)				2.6
15P						0.512	13.0	165(245)				2.5
20P						0.563	14.3	205(305)				2.2
25P						0.677	17.2	282(420)				2.1
1P	20 (0.518㎟)	112/0.08 (112/3.2mil)	1.07 (42mil)	0.062	1.57	0.220	5.6	32(48)	less than 36.2	more than 10	500	8.1
2P						0.283	7.2	54(80)				6.4
3P						0.319	8.1	67(100)				5.6
4P						0.346	8.8	81(120)				5.0
5P						0.378	9.6	97(145)				4.7
6P						0.409	10.4	114(170)				4.4
8P						0.472	12.0	148(220)				4.1
10P						0.476	12.1	158(235)				3.7
15P						0.626	15.9	249(370)				3.3
20P						0.685	17.4	312(465)				3.0
25P						0.772	19.6	383(570)				2.8

※Please contact us which sizes are available.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30°C.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

Movement characteristic

＊)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		＊)2 Move bending
				Straight	Bending	
A	A	S	A	A	A	C

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

＊)2 When overall diameter of the cable is 20mm or less.

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-01G/2517 300V LF

Electronic equipment robot cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★

※The characteristic is an aim.

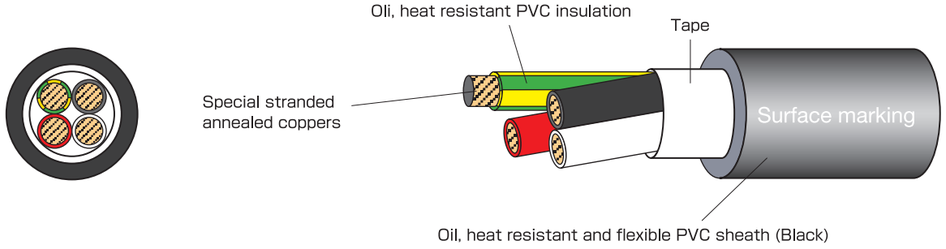
> Application

- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 20 million times or more.
- Robot cable with UL and cUL at 300V 105°C. (Category : AVLV2, AVLV8)

> Feature

- Extremely fine conductor use.
- Oil and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

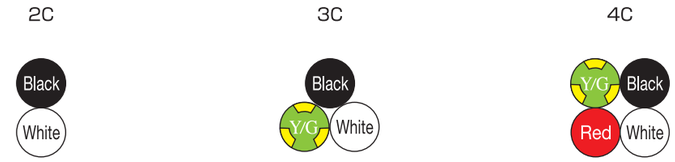


> Surface marking

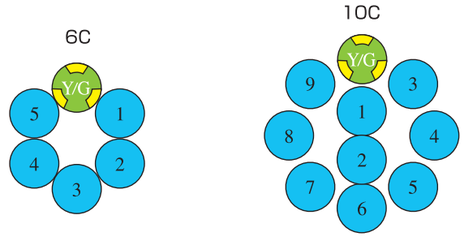
> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2517	CSA AWM ⅡA/B
Voltage rating	300V	300V
Temperature rating	105℃	105℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Identification

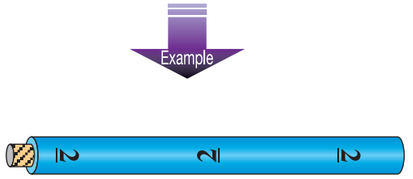


·6 cores or more is identified by numbering



Figures in ○ indicate black numbering on light blue insulator.

※Y/G indicates green core with yellow stripe (30~50%).



EXT-01G/2517 300V LF

Electronic equipment robot cable

> Construction table

No. of cores	Conductor			Oil,heat resistant PVC insulation		Oil, heat resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C						0.228	5.8	29(43)				10
3C						0.240	6.1	34(50)				10
4C						0.264	6.7	40(60)				8.8
6C						0.307	7.8	57(85)				7.3
8C	20 (0.518㎟)	112/0.08 (112/3.2mil)	1.07 (42mil)	0.078	1.97	0.354	9.0	74(110)	less than 34.6	more than 10	2000	6.6
10C						0.386	9.8	87(130)				6.1
12C						0.398	10.1	97(145)				5.6
16C						0.441	11.2	124(185)				5.0
20C						0.488	12.4	154(230)				4.6
30C						0.646	16.4	255(380)				4.1
2C						0.248	6.3	34(50)				13
3C						0.264	6.7	44(65)				13
4C						0.283	7.2	54(80)				11
6C						0.335	8.5	74(110)				9.6
8C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31 (52mil)	0.087	2.21	0.390	9.9	97(145)	less than 21.8	more than 10	2000	8.7
10C						0.421	10.7	114(170)				7.9
12C						0.437	11.1	131(195)				7.3
16C						0.484	12.3	168(250)				6.6
20C						0.535	13.6	205(305)				6.1
30C						0.713	18.1	336(500)				5.4
2C						0.276	7.0	47(70)				16
3C						0.291	7.4	57(85)				16
4C	16 (1.30㎟)	266/0.08 (266/3.2mil)	1.64 (65mil)	0.100	2.54	0.315	8.0	74(110)	less than 15.5	more than 10	2000	14
6C						0.374	9.5	104(155)				12
8C						0.437	11.1	131(195)				10
10C						0.476	12.1	158(235)				9.9
2C						0.307	7.8	64(95)				23
3C	14 (2.08㎟)	420/0.08 (420/3.2mil)	2.07 (81mil)	0.117	2.97	0.327	8.3	81(120)	less than 8.62	more than 10	2000	23
4C						0.358	9.1	101(150)				20

※3C or more has the [Y/G] earth cable of an equal size.
※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standerd and the CSA standard is applied.

※Please contact us which sizes are available.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30°C.

·Allowable ampacity is calculated based on JCS0168.

·Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

*)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		*)2 Move bending
				Straight	Bending	
A	A	S	A	A	A	C

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

*)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

*)2 When overall diameter of the cable is 20mm or less.

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-01G Series

EXT-01G-SB/2517 300V LF

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★

※The characteristic is an aim.

Electronic equipment robot cable

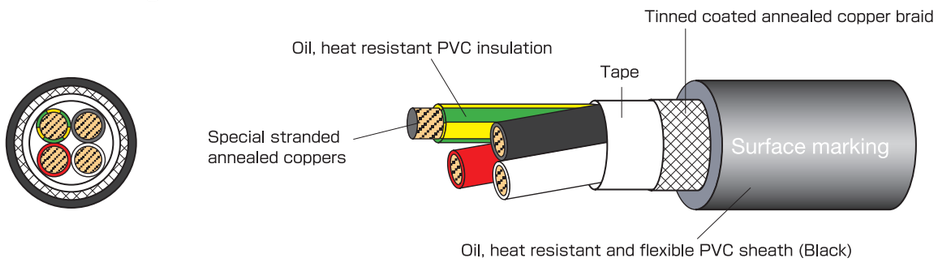
> Application

- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 20 million times or more.
- Shielded Robot cable with UL and cUL at 300V 105°C. (Category : AVLV2, AVLV8)

> Feature

- Extremely fine conductor use.
- Oil and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

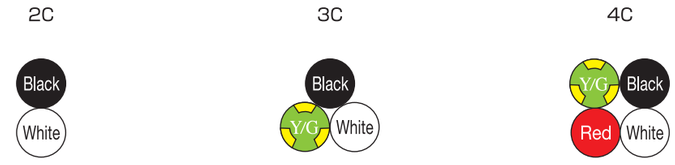


> Surface marking

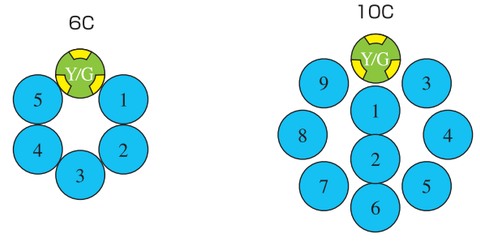
> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2517	CSA AWM ⅡA/B
Voltage rating	300V	300V
Temperature rating	105℃	105℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Identification

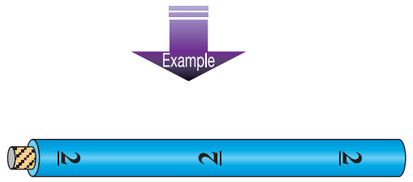


·6 cores or more is identified by numbering



Figures in ○ indicate black numbering on light blue insulator.

※Y/G indicates green core with yellow stripe (30~50%).



EXT-01G-SB/2517 300V LF

Electronic equipment robot cable

Construction table

No. of cores	Conductor			Oil,heat resistant PVC insulation		Oil, heat resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C						0.252	6.4	40(60)				10
3C						0.264	6.7	44(65)				10
4C						0.287	7.3	50(75)				8.9
6C						0.331	8.4	71(105)				7.4
8C	20	112/0.08	1.07	0.078	1.97	0.382	9.7	94(140)	less than 34.6	more than 10	2000	6.7
10C	(0.518㎟)	(112/3.2mil)	(42mil)			0.413	10.5	111(165)				6.1
12C						0.425	10.8	121(180)				5.6
16C						0.469	11.9	151(225)				5.1
20C						0.520	13.2	188(280)				4.7
30C						0.677	17.2	299(445)				4.2
2C						0.272	6.9	47(70)				13
3C						0.287	7.3	57(85)				13
4C						0.307	7.8	67(100)				11
6C						0.358	9.1	87(130)				9.7
8C	18	168/0.08	1.31	0.087	2.21	0.417	10.6	118(175)	less than 21.8	more than 10	2000	8.8
10C	(0.823㎟)	(168/3.2mil)	(52mil)			0.449	11.4	138(205)				8.0
12C						0.465	11.8	155(230)				7.4
16C						0.516	13.1	202(300)				6.6
20C						0.567	14.4	242(360)				6.2
30C						0.744	18.9	383(570)				5.5
2C						0.299	7.6	60(90)				16
3C						0.315	8.0	71(105)				16
4C	16	266/0.08	1.64	0.100	2.54	0.339	8.6	87(130)	less than 15.5	more than 10	2000	14
6C	(1.30㎟)	(266/3.2mil)	(65mil)			0.402	10.2	124(185)				12
8C						0.465	11.8	158(235)				10
10C						0.508	12.9	188(280)				10

※3C or more has the [Y/G] earth cable of an equal size.
※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standerd and the CSA standard is applied.

※Please contact us which sizes are available.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

Movement characteristic

＊)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		＊)2 Move bending
				Straight	Bending	
A	A	S	A	A	A	C

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

＊)2 When overall diameter of the cable is 20mm or less.

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-01G Series

EXT-01G/2501 600V LF

Electronic equipment robot cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★

※The characteristic is an aim.

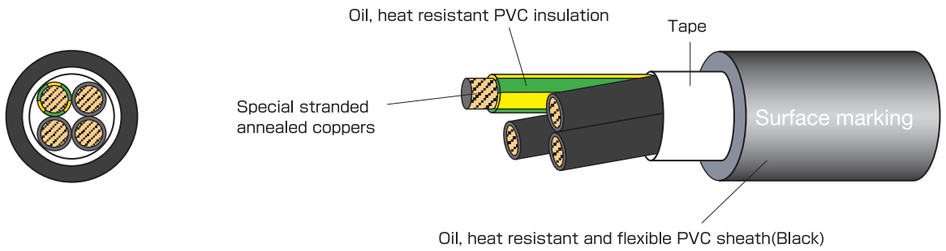
> Application

- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 20 million times or more.
- Robot cable with UL and cUL at 600V 105°C. (Category : AVLV2, AVLV8)

> Feature

- Extremely fine conductor use.
- Oil and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

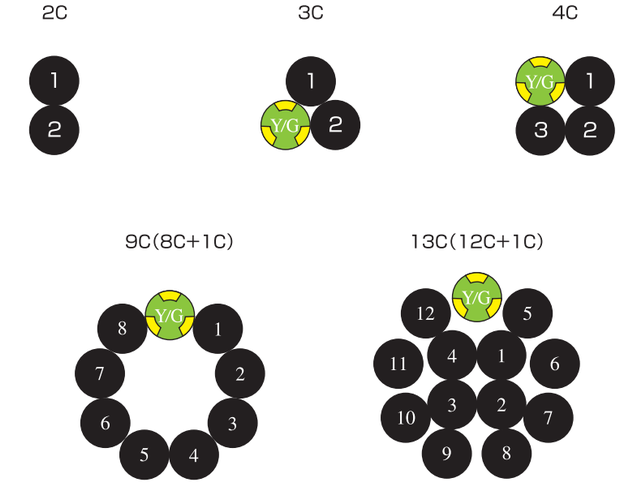


> Surface marking

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2501	CSA AWM ⅡA/B
Voltage rating	600V	600V
Temperature rating	105℃	105℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Identification



Figures in ○ indicate white numbering on black insulator.

※Y/G indicates green core with yellow stripe (30~50%).

EXT-01G/2501 600V LF

Electronic equipment robot cable

> Construction table

No. of cores	Conductor			Oil,heat resistant PVC insulation		Oil, heat resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C						0.366	9.3	67(100)				14
3C						0.386	9.8	81(120)				14
4C						0.413	10.5	94(140)				12
6C+1C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31 (52mil)	0.115	2.91	0.531	13.5	158(235)	less than 21.8	more than 50	2000	9.9
8C+1C						0.602	15.3	198(295)				9.1
10C+1C						0.626	15.9	208(310)				8.3
12C+1C						0.654	16.6	235(350)				7.8
20C+1C						0.787	20.0	356(530)				6.6
30C+1C						0.961	24.4	548(815)				5.7
2C						0.394	10.0	81(120)				18
3C						0.413	10.5	97(145)				18
4C						0.445	11.3	118(175)				16
6C+1C						0.567	14.4	195(290)				12
10C+1C	16 (1.30㎟)	266/0.08 (266/3.2mil)	1.64 (65mil)	0.128	3.24	0.673	17.1	259(385)	less than 13.7	more than 50	2000	10
12C+1C						0.705	17.9	296(440)				10
20C+1C						0.945	24.0	504(750)				8.6
30C+1C						1.043	26.5	702(1045)				7.4
40C+1C						1.157	29.4	863(1285)				6.7
2C						0.425	10.8	101(150)				24
3C						0.449	11.4	124(185)				24
4C						0.488	12.4	148(220)				21
7C	14 (2.08㎟)	420/0.08 (420/3.2mil)	2.07 (81mil)	0.144	3.67	0.614	15.6	242(360)	less than 8.62	more than 50	2000	16
11C						0.736	18.7	333(495)				14
13C						0.776	19.7	380(565)				13
21C						1.039	26.4	719(1070)				11

※Core number mark "+1C" has the [Y/G] ground core of 14AWG size.
※3C or 4C and 14AWG or more size has the [Y/G] ground core of an equal size.
※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standerd and the CSA standard is applied.

※Please contact us which sizes are available.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

*)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		*)2 Move bending
				Straight	Bending	
A	A	S	A	A	A	C

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

*)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

*)2 When overall diameter of the cable is 20mm or less.

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

EXT-01G Series

EXT-01G-SB/2501 600V LF

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★★

※The characteristic is an aim.

Electronic equipment robot cable

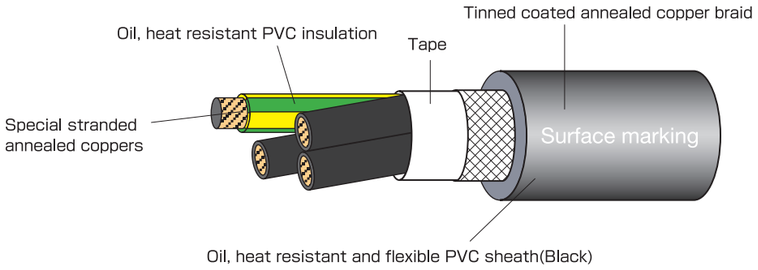
> Application

- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 20 million times or more.
- Shielded Robot cable with UL and cUL at 600V 105℃. (Category : AVLV2, AVLV8)

> Feature

- Extremely fine conductor use.
- Oil and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

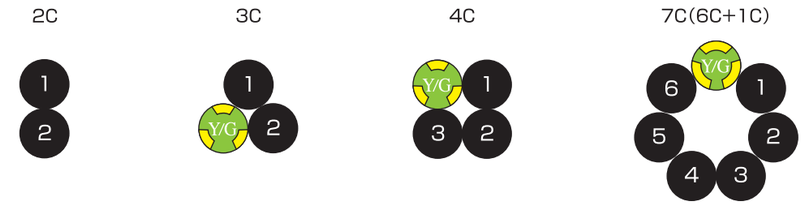


> Surface marking

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2501	CSA AWM ⅡA/B
Voltage rating	600V	600V
Temperature rating	105℃	105℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Identification



Figures in ○ indicate white numbering on black insulator.

※Y/G indicates green core with yellow stripe (30~50%).

EXT-01G-SB/2501 600V LF

Electronic equipment robot cable

> Construction table

No. of cores	Conductor			Oil, heat resistant PVC insulation		Oil, heat resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C						0.390	9.9	84(125)				14
3C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31 (52mil)	0.115	2.91	0.409	10.4	97(145)	less than 21.8	more than 50	2000	14
4C						0.441	11.2	118(175)				12
6C+1C						0.563	14.3	192(285)				10
2C						0.417	10.6	97(145)				18
3C	16 (1.30㎟)	266/0.08 (266/3.2mil)	1.64 (65mil)	0.128	3.24	0.441	11.2	121(180)	less than 13.7	more than 50	2000	18
4C						0.472	12.0	141(210)				16
6C+1C						0.598	15.2	232(345)				12
2C						0.453	11.5	124(185)				24
3C	14 (2.08㎟)	420/0.08 (420/3.2mil)	2.07 (81mil)	0.144	3.67	0.476	12.1	148(220)	less than 8.62	more than 50	2000	24
4C						0.516	13.1	175(260)				21
7C						0.646	16.4	282(420)				16

※Core number mark "+1C" has the [Y/G] ground core of 14AWG size.
※3C or 4C and 14AWG or more size has the [Y/G] ground core of an equal size.
※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standerd and the CSA standard is applied.

※Please contact us which sizes are available.

> > > Meeting standard

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

＊)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		＊)2 Move bending
				Straight	Bending	
A	A	S	A	A	A	C

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

＊)2 When overall diameter of the cable is 20mm or less.

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

TBF Series

TBF/2517 300V LF

Electronic equipment cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Torsion resistance	★★★
Flexibility resistance	★★★★ ※1
Cable carrier	★★★★

※1 More than 10 cores is「3」

※The characteristic is an aim.

> Application

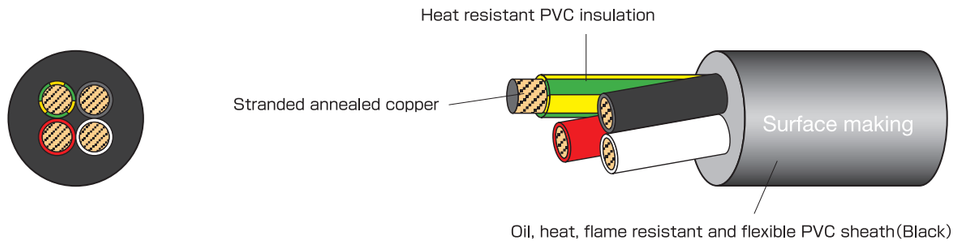
- It is possible to use it for wiring medium or low-speed operational components of machine tool.
- Cable Bear test 5 million times or more. (or more ability 10 million times)
- Vibration resistant cable with UL and cUL at 300V,105℃. (Category : AVLV2, AVLV8)
- Fit to Electrical Appliance and Material Safety Law. (19～15AWG)

> Feature

- Fine wire conductor use.
- Heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

·Multi core cable



※Cable with more than 10 cores : binder tape on cores.

> Surface marking

(1)22AWG～20AWG cables

TAIYO TBF □□AWG(○○mm²) LF R15 E67647 c UL us AWM 2517 VW-1 ⅡA/B 105℃ 300V FT1

(2)19AWG～15AWG cables

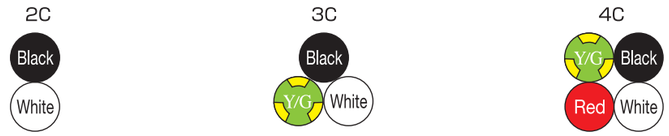
TAIYO TBF □□AWG(○○mm²) LF R15 E67647 c UL us AWM 2517 VW-1 ⅡA/B 105℃ 300V FT1 〈PS〉E ** 耐熱 耐震

> > > Meeting standard

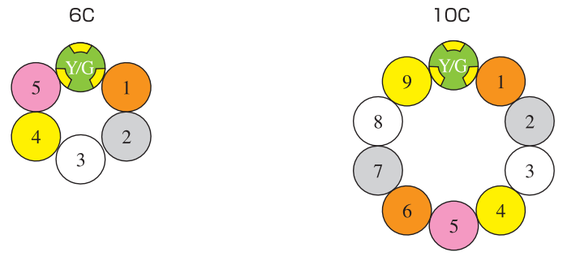
Certification	UL AWM	cUL AWM	Electrical Appliance and Material Safety
Applicable standard	UL 758	CSA C22.2 No.210	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	UL STYLE 2517	CSA AWM ⅡA/B	ASEISMATIC HVCTF
Voltage rating	300V	300V	300V
Temperature rating	105℃	105℃	75℃
Conductor	UL 758	CSA C22.2 No.210	JIS C 3102,JIS C 3152
Flame rating	VW-1	FT1	JIS C 3005 4.26.2 b)

> Identification

·2C～4C



·5C～
22AWG



Figures ○ indicate core number in the identification table.

※Y/G indicates green core with yellow stripe(30～50%).

●Identification table

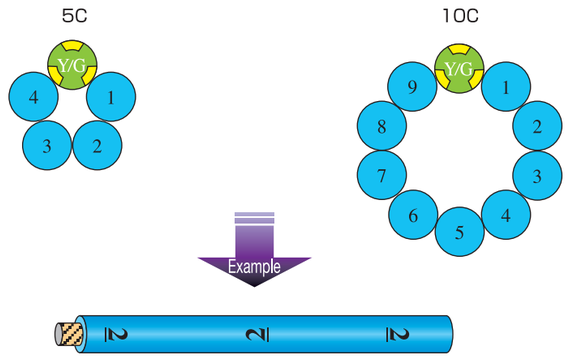
Line number	Color of insulation	Dot mark
1	Orange	
2	Gray	
3	White	
4	Yellow	
5	Peach	
6	Orange	▬
7	Gray	▬
8	White	▬
9	Yellow	▬
10	Peach	▬

Line number	Color of insulation	Dot mark
11	Orange	▬ ▬
12	Gray	▬ ▬
13	White	▬ ▬
14	Yellow	▬ ▬
15	Peach	▬ ▬
16	Orange	▬ ▬ ▬
17	Gray	▬ ▬ ▬
18	White	▬ ▬ ▬
19	Yellow	▬ ▬ ▬
20	Peach	▬ ▬ ▬

Line number	Color of insulation	Dot mark
21	Orange	▬ ▬ ▬ ▬
22	Gray	▬ ▬ ▬ ▬
23	White	▬ ▬ ▬ ▬
24	Yellow	▬ ▬ ▬ ▬
25	Peach	▬ ▬ ▬ ▬
26	Orange	▬ ▬ ▬ ▬ ▬ (Continuation)
27	Gray	▬ ▬ ▬ ▬ ▬ (Continuation)
28	White	▬ ▬ ▬ ▬ ▬ (Continuation)
29	Yellow	▬ ▬ ▬ ▬ ▬ (Continuation)
30	Peach	▬ ▬ ▬ ▬ ▬ (Continuation)

※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

·5C～
20～15AWG



※Figures ○ indicate black numbering on light blue insulator.

※Y/G indicates green core with yellow stripe(30～50%).

TBF/2517 300V LF

Electronic equipment cable

> Construction table

No. of cores	Conductor			Oil, heat resistant PVC insulation		Oil, heat resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	22 (0.3㎟)	65/0.08 (65/3.2mil)	0.75 (30mil)	0.061	1.55	0.193	4.9	20(30)	less than 59.1	more than 10	2000	7.0
3C						0.201	5.1	24(35)				7.0
4C						0.217	5.5	28(42)				6.1
5C						0.236	6.0	34(50)				5.6
6C						0.256	6.5	40(60)				5.2
8C						0.291	7.4	50(75)				4.7
10C						0.339	8.6	60(90)				4.4
12C						0.382	9.7	74(110)				4.1
16C						0.374	9.5	81(120)				3.5
20C						0.409	10.4	97(145)				3.3
30C						0.512	13.0	148(220)				2.9
2C	20 (0.5㎟)	108/0.08 (108/3.2mil)	0.96 (38mil)	0.077	1.96	0.232	5.9	30(45)	less than 35.6	more than 10	2000	9.7
3C						0.244	6.2	37(55)				9.7
4C						0.264	6.7	44(65)				8.5
5C						0.287	7.3	50(75)				7.8
6C						0.311	7.9	60(90)				7.2
7C						0.335	8.5	71(105)				6.9
8C						0.358	9.1	77(115)				6.6
10C						0.413	10.5	91(135)				6.1
12C						0.461	11.7	118(175)				5.7
16C						0.449	11.4	124(185)				4.9
20C						0.496	12.6	151(225)				4.6
30C						0.650	16.5	249(370)				4.1
2C	19 (0.75㎟)	67/0.12 (67/4.7mil)	1.1 (43mil)	0.091	2.30	0.264	6.7	40(60)	less than 25.3	more than 10	2000	12
3C						0.280	7.1	47(70)				12
4C						0.303	7.7	57(85)				10
5C						0.331	8.4	67(100)				9.7
6C						0.358	9.1	77(115)				9.1
7C						0.386	9.8	94(140)				8.6
8C						0.417	10.6	108(160)				8.2
10C						0.469	11.9	124(185)				7.5
12C						0.528	13.4	151(225)				7.2
16C						0.512	13.0	161(240)				6.1
20C						0.575	14.6	205(305)				5.7
30C						0.740	18.8	326(485)				5.1
2C	17 (1.25㎟)	112/0.12 (112/4.7mil)	1.5 (59mil)	0.106	2.70	0.299	7.6	54(80)	less than 15.2	more than 10	2000	16
3C						0.315	8.0	64(95)				16
4C						0.343	8.7	77(115)				14
5C						0.374	9.5	94(140)				13
6C						0.406	10.3	108(160)				12
7C						0.441	11.2	128(190)				11
8C						0.472	12.0	144(215)				11
10C						0.543	13.8	175(260)				10
12C						0.634	16.1	228(340)				9.8
16C						0.618	15.7	252(375)				8.4
20C						0.681	17.3	306(455)				7.8
2C	15 (2㎟)	80/0.18 (80/7.1mil)	1.8 (71mil)	0.118	3.0	0.323	8.2	67(100)	less than 9.83	more than 10	2000	21
3C						0.343	8.7	84(125)				21
4C						0.374	9.5	104(155)				18
5C						0.406	10.3	124(185)				17
6C						0.445	11.3	148(220)				15
7C						0.480	12.2	171(255)				15

※3c or more has the [Y/G] earth cable of an equal size.
※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.
※The size indicated within parenthesis in the above table, describes the appropriate size of Japanese domestic use.

> Allowable ampacity

·The allowable ampacity in this catalog is a recommended value at one in the air construction and the ambient temperature 30°C and in the case of use for Japanese equipment in the wiring.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following adjustment factors by the ambient temperature.

·Please select the allowable ampacity value to much of usage.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

●2~8C

*)1 Bending	Bend	*)2 U-shaped turn-back	90° bending	Twist		*)3 Move bending
				Straight	Bending	
A	B	B	B	C	C	D

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

*)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.
*)2 Our original test showed that no case of wire breakage could be detected for TBF even after 10 million cycles.
*)3 When overall diameter of the cable is 20mm or less.

●More than 10C

*)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		*)3 Move bending
				Straight	Bending	
B	B	B	C	C	C	E

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

> Standard sales length

Please contact us (sales rap).

TBF Series

TBF/2501 600V LF

Portable power cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Torsion resistance	★★★
Flexibility resistance	★★★★ ※1
Cable carrier	★★★★

※1 More than 10 cores is「3」

※The characteristic is an aim.

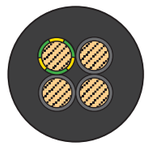
> Application

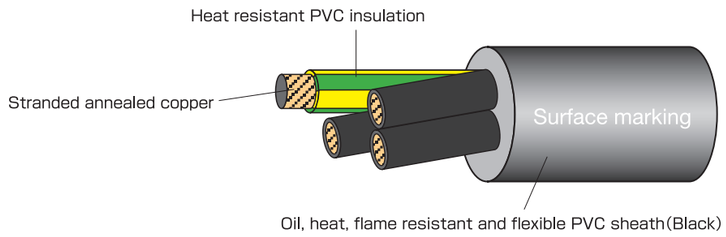
- It is possible to use it for wiring medium or low-speed operational components of machine tool.
- Cable Bear test 5 million times or more. (or more ability 10 million times)
- Vibration resistant cable with UL and cUL at 600V, 105℃. (Category : AVLV2, AVLV8)
- CE marking.
- Fit to Electrical Appliance and Material Safety Law. (7 cores or less cable.)

> Feature

- Fine wire conductor use.
- Heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure





※Cable with more than 10 cores : binder tape on cores.

> Surface marking

(1)7 cores or less, 19~8AWG cables

TAIYO TBF □□AWG(○○mm²) LF R15 E67647 AWM 2501 VW-1 ⅡA/B 105℃ 600V FT1
<PS>E ** 耐熱 耐震 CE 05VV5-F 300/500V

(2)7 cores or less, 6~4AWG cables

TAIYO TBF □□AWG(○○mm²) LF R15 E67647 AWM 2501 VW-1 ⅡA/B 105℃ 600V FT1
<PS>E** 耐熱 CE 05VV5-F 300/500V

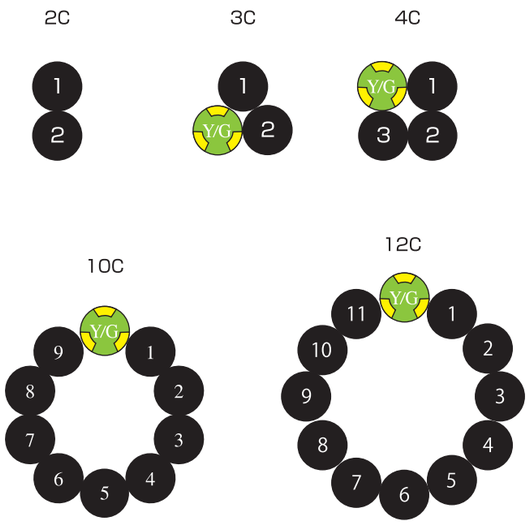
(3)8 cores or less, 19~8AWG cables

TAIYO TBF □□AWG(○○mm²) LF R15 E67647 AWM 2501 VW-1 ⅡA/B 105℃ 600V FT1
CE 05VV5-F 300/500V

> > > Meeting standard

Certification	UL AWM	cUL AWM	CE marking	Electrical Appliance and Material Safety Law(19~8AWG)	Electrical Appliance and Material Safety Law(6~4AWG)
Applicable standard	UL 758	CSA C22.2 No.210	EN50525-2-51	LawDepartmental order to determine a technical standard of the electrical equipment	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	UL STYLE 2501	CSA AWM ⅡA/B	Equivalent of H05VV5-F	ASEISMATIC HVCT	HVCT
Voltage rating	600V	600V	300/500V	600V	600V
Temperature rating	105℃	105℃	70℃	75℃	75℃
Conductor	UL 758	CSA C22.2 No.210	EN60228	JIS C 3102	JIS C 3102
Flame rating	VW-1	FT1	EN50264-2-1	JIS C 3005 4.26.2 b)	JIS C 3005 4.26.2 b)

> Identification



※Y/G indicates green core with yellow stripe (30~50%).

Figures in ○ indicate white numbering on black insulator.

TBF/2501 600V LF

Portable power cable

> Construction table

No. of cores	Conductor			Heat-resistant PVC insulation		Oil, heat, flame resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	19 (0.75㎟)	67/0.12 (67/4.7mil)	1.1 (43mil)	0.106	2.7	0.346	8.8	64(95)	less than 25.3	more than 50	3000	12
3C						0.362	9.2	71(105)				12
4C						0.390	9.9	84(125)				11
6C						0.461	11.7	118(175)				9.6
8C						0.543	13.8	161(240)				8.8
10C						0.622	15.8	188(280)				7.9
○12C						0.697	17.7	239(355)				7.5
16C						0.681	17.3	249(370)				6.4
20C						0.752	19.1	302(450)				6.0
30C						0.933	23.7	457(680)				5.2
2C	17 (1.25㎟)	112/0.12 (112/4.7mil)	1.5 (59mil)	0.122	3.1	0.378	9.6	81(120)	less than 15.2	more than 50	3000	17
3C						0.398	10.1	91(135)				17
4C						0.437	11.1	111(165)				15
6C						0.516	13.1	158(235)				13
8C						0.598	15.2	208(310)				11
10C						0.697	17.7	259(385)				11
12C						0.783	19.9	319(475)				10
16C						0.764	19.4	333(495)				8.7
○20C						0.843	21.4	410(610)				8.0
○30C						1.059	26.9	628(935)				7.0
2C	15 (2㎟)	80/0.18 (80/7.1mil)	1.8 (71mil)	0.134	3.4	0.409	10.4	97(145)	less than 9.83	more than 50	3000	22
3C						0.429	10.9	114(170)				22
4C						0.465	11.8	141(210)				19
6C						0.559	14.2	202(300)				16
8C						0.650	16.5	269(400)				15
○10C						0.756	19.2	333(495)				13
○12C						0.846	21.5	383(570)				12
○16C						0.827	21.0	447(665)				11
○20C						0.913	23.2	551(820)				10
○30C						1.154	29.3	820(1220)				9.0
○ 2C	12 (3.5㎟)	65/0.26 (65/10.2mil)	2.4 (94mil)	0.157	4.0	0.465	11.8	121(180)	less than 5.60	more than 40	3000	31
○ 3C						0.496	12.6	155(230)				31
4C						0.547	13.9	195(290)				27
○ 6C						0.646	16.4	276(410)				22
4C	10 (5.5㎟)	104/0.26 (104/10.2mil)	3.1 (122mil)	0.201	5.10	0.657	16.7	289(430)	less than 3.63	more than 40	3000	36
○ 8C						0.929	23.6	561(835)				27
4C	8 (8㎟)	7/15/0.32 (7/15/12.6mil)	4.2 (165mil)	0.261	6.64	0.827	21.0	464(690)	less than 2.40	more than 40	3000	47
4C	6 (13.5㎟)	7/24/0.32 (7/24/12.6mil)	5.3 (209mil)	0.339	8.6	1.039	26.4	732(1090)	less than 1.40	more than 40	3000	66
4C	4 (21.4㎟)	7/38/0.32 (7/38/12.6mil)	6.6 (260mil)	0.390	9.9	1.177	29.9	1025(1525)	less than 0.887	more than 30	3000	87

※3c or more has the [Y/G] earth cable of an equal size.
※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.
※The size indicated within parenthesis in the above table, describes the appropriate size of Japanese domestic use.

○:Indicates Make-to-order products.

> > > Meeting standard

> Allowable ampacity

·The allowable ampacity in this catalog is a recommended value at one in the air construction and the ambient temperature 30℃ and in the case of use for Japanese equipment in the wiring.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following adjustment factors by the ambient temperature.

·Please select the allowable ampacity value to much of usage.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

●2~8C

*)1 Bending	Bend	*)2 U-shaped turn-back	90° bending	Twist		*)3 Move bending
				Straight	Bending	
A	B	B	B	C	C	D

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

*)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.
*)2 Our original test showed that no case of wire breakage could be detected for TBF even after 10 million cycles.
*)3 When overall diameter of the cable is 20mm or less.

●More than 10C

*)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		*)3 Move bending
				Straight	Bending	
B	B	B	C	C	C	E

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

> Standard sales length

Please contact us about production lot.

TURBO-FLEX Series

300V TURBO-FLEX/2517 LF

Electronic equipment cable

Heat resistance ★★★★★
Oil resistance ★★★★★
Noise resistance ★
Flame resistance ★★★★
Torsion resistance ★★★
Flexibility resistance ★★★★ ※1
Cable carrier ★★★★

※1 More than 10 cores is「3」
※The characteristic is an aim.

> Application

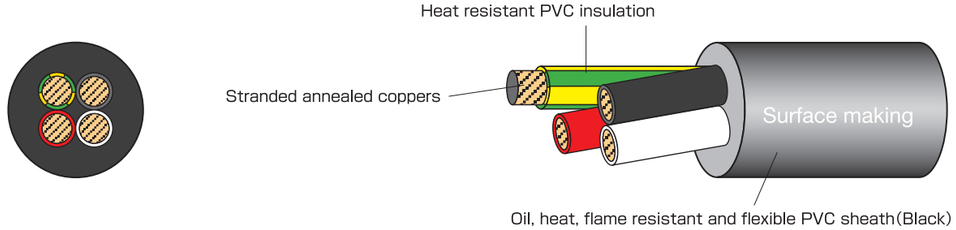
- It is possible to use it for wiring medium or low-speed operational components of machine tool.
- Cable Bear test 5 million times or more. (or more ability 10 million times)
- Vibration resistant cable with UL and cUL at 300V, 105℃. (Category : AVLV2, AVLV8)
- Fit to Electrical Appliance and Material Safety Law. (19～15AWG)

> Feature

- Fine wire conductor use.
- Heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure

·Multi core cable



※Cable with more than 10 cores : binder tape on cores.

> Surface marking

(1)22AWG～20AWG cables

TEIKOKU TURBO-FLEX □□AWG(○○mm²) LF R15 E67647 c UL us AWM 2517 VW-1 ⅡA/B 105℃ 300V FT1 耐熱 耐震 耐油

(2)19AWG～15AWG cables

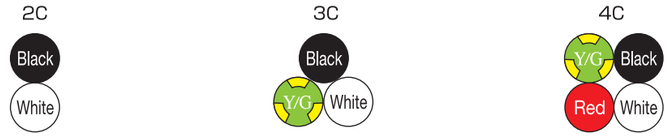
TEIKOKU TURBO-FLEX □□AWG(○○mm²) LF R15 -F- E67647 c UL us AWM 2517 VW-1 ⅡA/B 105℃ 300V FT1 <PS>E ** 耐熱 耐震 耐油

> > > Meeting standard

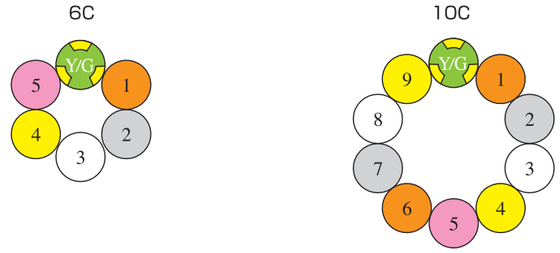
Certification	UL AWM	cUL AWM	Electrical Appliance and Material Safety	CMJ registration
Applicable standard	UL 758	CSA C22.2 No.210	LawDepartmental order to determine a technical standard of the electrical equipment	F mark
Official symbol	UL STYLE 2517	CSA AWM ⅡA/B	ASEISMATIC HVCTF	
Voltage rating	300V	300V	300V	
Temperature rating	105℃	105℃	75℃	
Conductor	UL 758	CSA C22.2 No.210	JIS C 3102,JIS C 3152	
Flame rating	VW-1	FT1	JIS C 3005 4.26.2 b)	Flame test of insulated for apparat us

> Identification

·2C～4C



·5C～
22AWG



Figures ○ indicate core number in the identification table.

※Y/G indicates green core with yellow stripe(30～50%).

●Identification table

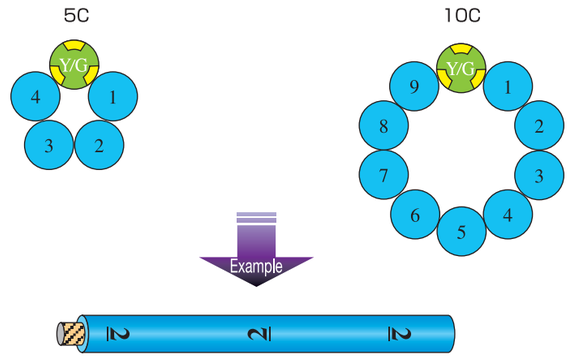
Line number	Color of insulation	Dot mark
1	Orange	
2	Gray	
3	White	
4	Yellow	
5	Peach	
6	Orange	▬
7	Gray	▬
8	White	▬
9	Yellow	▬
10	Peach	▬

Line number	Color of insulation	Dot mark
11	Orange	▬ ▬
12	Gray	▬ ▬
13	White	▬ ▬
14	Yellow	▬ ▬
15	Peach	▬ ▬
16	Orange	▬ ▬ ▬
17	Gray	▬ ▬ ▬
18	White	▬ ▬ ▬
19	Yellow	▬ ▬ ▬
20	Peach	▬ ▬ ▬

Line number	Color of insulation	Dot mark
21	Orange	▬ ▬ ▬ ▬
22	Gray	▬ ▬ ▬ ▬
23	White	▬ ▬ ▬ ▬
24	Yellow	▬ ▬ ▬ ▬
25	Peach	▬ ▬ ▬ ▬
26	Orange	▬ ▬ ▬ ▬ ▬ (Continuation)
27	Gray	▬ ▬ ▬ ▬ ▬ (Continuation)
28	White	▬ ▬ ▬ ▬ ▬ (Continuation)
29	Yellow	▬ ▬ ▬ ▬ ▬ (Continuation)
30	Peach	▬ ▬ ▬ ▬ ▬ (Continuation)

※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

·5C～
20～15AWG



※Figures ○ indicate core number in the identification table 1.

※Y/G indicates green core with yellow stripe(30～50%).

300V TURBO-FLEX/2517 LF

Electronic equipment cable

Heat resistance ★★★★★
Oil resistance ★★★★★
Noise resistance ★
Flame resistance ★★★★
Torsion resistance ★★★
Flexibility resistance ★★★★ ※1
Cable carrier ★★★★

※1 More than 10 cores is「3」
※The characteristic is an aim.

> Construction table

No. of cores	Conductor			Heat-resistant PVC insulation		Oil, heat, flame resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	22 (0.3㎟)	65/0.08 (65/3.2mil)	0.75 (30mil)	0.061	1.55	0.193	4.9	20(30)	59.1			7
3C						0.201	5.1	24(35)				7
4C						0.217	5.5	27(40)				6.1
5C						0.236	6.0	34(50)				5.6
6C						0.256	6.5	40(60)				5.2
7C						0.272	6.9	44(65)				4.9
8C						0.291	7.4	50(75)				4.7
10C						0.339	8.6	60(90)				4.4
12C						0.382	9.7	74(110)				4.1
16C						0.374	9.5	81(120)				3.5
20C						0.409	10.4	97(145)				3.3
30C						0.512	13.0	148(220)				2.9
2C	20 (0.5㎟)	108/0.08 (108/3.2mil)	0.96 (38mil)	0.077	1.96	0.232	5.9	30(45)	35.6			9.7
3C						0.244	6.2	37(55)				9.7
4C						0.264	6.7	44(65)				8.5
5C						0.287	7.3	50(75)				7.8
6C						0.311	7.9	60(90)				7.2
7C						0.335	8.5	71(105)				6.9
8C						0.358	9.1	77(115)				6.6
10C						0.413	10.5	91(135)				6.1
12C						0.461	11.7	118(175)				5.7
16C						0.449	11.4	124(185)				4.9
20C						0.496	12.6	151(225)				4.6
30C						0.650	16.5	249(370)				4.1
2C	19 (0.75㎟)	67/0.12 (67/4.2mil)	1.1 (43mil)	0.091	2.3	0.264	6.7	40(60)	25.3	10	under water 2000	12
3C						0.280	7.1	47(70)				12
4C						0.303	7.7	57(85)				10
5C						0.331	8.4	67(100)				9.7
6C						0.358	9.1	77(115)				9.1
7C						0.386	9.8	94(140)				8.6
8C						0.417	10.6	107(160)				8.2
10C						0.469	11.9	124(185)				7.5
12C						0.535	13.6	151(225)				7.2
16C						0.520	13.2	161(240)				6.1
20C						0.575	14.6	205(305)				5.7
30C						0.740	18.8	326(485)				5.1
2C	17 (1.25㎟)	112/0.12 (112/4.2mil)	1.5 (59mil)	0.106	2.7	0.299	7.6	54(80)	15.2			16
3C						0.315	8.0	64(95)				16
4C						0.343	8.7	77(115)				14
5C						0.374	9.5	94(140)				13
6C						0.406	10.3	107(160)				12
7C						0.441	11.2	128(190)				11
8C						0.472	12.0	144(215)				11
10C						0.543	13.8	175(260)				10
12C						0.634	16.1	228(340)				9.8
16C						0.618	15.7	252(375)				8.4
20C						0.681	17.3	306(455)				7.8
30C						0.846	21.5	453(675)				6.4
2C	15 (2㎟)	80/0.18 (80/7.1mil)	1.8 (71mil)	0.118	3.0	0.323	8.2	67(100)	9.83			21
3C						0.343	8.7	84(125)				21
4C						0.374	9.5	104(155)				18
5C						0.406	10.3	124(185)				17
6C						0.445	11.3	148(220)				15
7C						0.480	12.2	171(255)				15
8C						0.520	13.2	195(290)				14
10C						0.618	15.7	252(375)				13
12C						0.693	17.6	302(450)				12
16C						0.673	17.1	343(510)				11
20C						0.744	18.9	423(630)				10

※3c or more has the [Y/G] earth cable of an equal size.
※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.
※The size indicated within parenthesis in the above table, describes the appropriate size of Japanese domestic use.

> Allowable ampacity

·The allowable ampacity in this catalog is a recommended value at one in the air construction and the ambient temperature 30℃ and in the case of use for Japanese equipment in the wiring.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following adjustment factors by the ambient temperature.

·Please select the allowable ampacity value to much of usage.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

●2~8C

*)1 Bending	Bend	*)2 U-shaped turn-back	90° bending	Twist		*)3 Move bending
				Straight	Bending	
A	B	B	B	C	C	D

Examination's time:
S= More than 20 million times
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

*)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.
*)2 Our original test showed that no case of wire breakage could be detected for TBF even after 10 million cycles.
*)3 When overall diameter of the cable is 20mm or less.

●More than 10C

*)1 Bending	Bend	U-shaped turn-back	90° bending	Twist		*)3 Move bending
				Straight	Bending	
B	B	B	C	C	C	E

※The longevity of the cable inside a cable bearing is dependent on the travel distance.
Please consult our Sales Department when wiring a travel distance of 5m or greater.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

> Standard sales length

Please contact us (sales rap).

TURBO-FLEX Series

600V TURBO-FLEX/2501 LF

Portable power cable

Heat resistance ★★★★★
Oil resistance ★★★★★
Noise resistance ★
Flame resistance ★★★★
Torsion resistance ★★★
Flexibility resistance ★★★★※1
Cable carrier ★★★★

※1 More than 10 cores is「3」

※The characteristic is an aim.

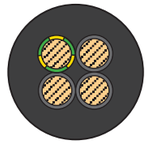
> Application

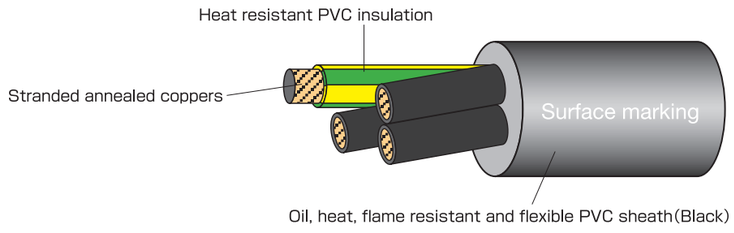
- It is possible to use it for wiring medium or low-speed operational components of machine tool.
- Cable Bear test 5 million times or more. (or more ability 10 million times)
- Vibration resistant cable with UL and cUL at 600V, 105℃. (Category : AVLV2, AVLV8)
- CE marking.
- Fit to Electrical Appliance and Material Safety Law. (7 cores or less cable.)

> Feature

- Fine wire conductor use.
- Heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure





※Cable with more than 10 cores : binder tape on cores.

> Surface marking

(1)7 cores or less, 19～10AWG cables

TEIKOKU TURBO-FLEX □□AWG(○○㎟) LF R15 -F- E67647 c𝐑us AWM 2501 VW-1 ⅡA/B 105℃ 600V FT1 <PS>E ** 耐熱 耐震 耐油 CE 05VV5-F 300/500V

(2)8 cores or more, 19～10AWG cables

TEIKOKU TURBO-FLEX □□AWG(○○㎟) LF R15 -F- E67647 c𝐑us AWM 2501 VW-1 ⅡA/B 105℃ 600V FT1 耐熱 耐震 耐油 CE 05VV5-F 300/500V

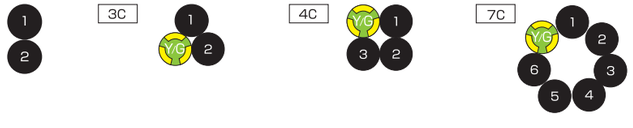
(3)7 cores or less, 8AWG cables

TEIKOKU TURBO-FLEX □□AWG(○○㎟) LF R15 E67647 c𝐑us AWM 2501 VW-1 ⅡA/B 105℃ 600V FT1 <PS>E ** 耐熱 耐震 耐油 CE 05VV5-F 300/500V

(4)7 cores or less, 6～4AWG cables

TEIKOKU TURBO-FLEX □□AWG(○○㎟) LF R15 E67647 c𝐑us AWM 2501 VW-1 ⅡA/B 105℃ 600V FT1 <PS>E ** 耐熱 耐震 耐油 CE 05VV5-F 300/500V

> Identification



Figures in ○ indicate white numbering on black insulator.

※3C or more has the Y/G earth.

> > > Meeting standard

Certification	UL AWM	cUL AWM	CE marking	Electrical Appliance and Material Safety Law(19-8AWG)	Electrical Appliance and Material Safety Law(6-4AWG)	CMJ registration
Applicable standard	UL 758	CSA C22.2 No.210	EN50525-2-51	LawDepartmental order to determine a technical standard of the electrical equipment	LawDepartmental order to determine a technical standard of the electrical equipment	F mark
Official symbol	UL STYLE 2501	CSA AWM ⅡA/B	Equivalent of H05VV5-F	ASEISMATIC HVCT	HVCT	
Voltage rating	600V	600V	300/500V	600V	600V	
Temperature rating	105℃	105℃	70℃	75℃	75℃	
Conductor	UL 758	CSA C22.2 No.210	EN60228	JIS C 3102	JIS C 3102	
Flame rating	VW-1	FT1	EN50264-2-1	JIS C 3005 4.26.2 b)	JIS C 3005 4.26.2 b)	Flame test of insulated for apparat us

※ 19AWG-10AWG size indicate a F mark from CMJ registration system.

> Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat-resistant PVC insulation Outside diameter (inch)	Heat-resistant PVC insulation Outside diameter (mm)	Oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(inch)	Oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C	19 (0.75㎟)	67/0.12 (67/4.2mil)	1.1 (43mil)	0.106	2.7	0.346	8.8	64(95)	25.3	50	under water 3000	12
3C						0.362	9.2	71(105)				12
4C						0.390	9.9	84(125)				11
5C						0.429	10.9	104(155)				10
6C						0.461	11.7	118(175)				9.6
7C						0.500	12.7	138(205)				9.1
8C						0.543	13.8	161(240)				8.8
10C						0.622	15.8	188(280)				7.9
12C						0.697	17.7	238(355)				7.5
20C						0.752	19.1	302(450)				6
30C						0.933	23.7	457(680)				5.2
2C	17 (1.25㎟)	112/0.12 (112/4.2mil)	1.5 (59mil)	0.122	3.1	0.378	9.6	81(120)	15.2			17
3C						0.398	10.1	91(135)				17
4C						0.437	11.1	111(165)				15
5C						0.480	12.2	134(200)				14
6C						0.516	13.1	158(235)				13
7C						0.559	14.2	185(275)				12
8C						0.598	15.2	208(310)				11
10C						0.697	17.7	259(385)				11
2C	15 (2㎟)	80/0.18 (80/7.1mil)	1.8 (71mil)	0.134	3.4	0.409	10.4	97(145)	9.83			22
3C						0.429	10.9	114(170)				22
4C						0.465	11.8	141(210)				19
5C						0.512	13.0	168(250)				17
6C						0.559	14.2	202(300)				16
7C						0.598	15.2	232(345)				15
8C						0.650	16.5	269(400)				15
10C						0.756	19.2	333(495)				13
12C						0.846	21.5	383(570)				12
2C	12 (3.5㎟)	65/0.26 (65/10.2mil)	2.4 (94mil)	0.157	4.0	0.465	11.8	121(180)	5.6	40		31
3C						0.496	12.6	155(230)				31
4C						0.547	13.9	195(290)				27
5C						0.591	15.0	232(345)				24
6C						0.646	16.4	275(410)				22
7C						0.701	17.8	319(475)				21
2C	10 (5.5㎟)	104/0.26 (104/10.2mil)	3.1 (122mil)	0.201	5.1	0.567	14.4	181(270)	3.63			41
3C						0.598	15.2	228(340)				41
4C						0.657	16.7	289(430)				36
2C	8 (8㎟)	7/15/0.32 (7/15/12.6mil)	4.2 (165mil)	0.261	6.64	0.705	17.9	282(420)	2.4			55
3C						0.752	19.1	366(545)				55
4C						0.827	21.0	464(690)				47
4C	6(14㎟)	7/24/0.32 (7/24/12.6mil)	5.3 (209mil)	0.339	8.6	1.039	26.4	732(1090)	1.4			66
4C	4(22㎟)	7/38/0.32 (7/38/12.6mil)	6.6 (260mil)	0.390	9.9	1.177	29.9	1025(1525)	0.887			87

※Please contact our sales staffs for stock.

> Allowable ampacity

·The allowable ampacity in this catalog is a recommended value at one in the air construction and the ambient temperature 30℃ and in the case of use for Japanese equipment in the wiring.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following adjustment factors by the ambient temperature.

·Please select the allowable ampacity value to much of usage.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Standard sales length

100m & 500m

TTC-Ⅱ/2501 LF

Electronic equipment robot cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Torsion resistance	★★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★

※The characteristic is an aim.

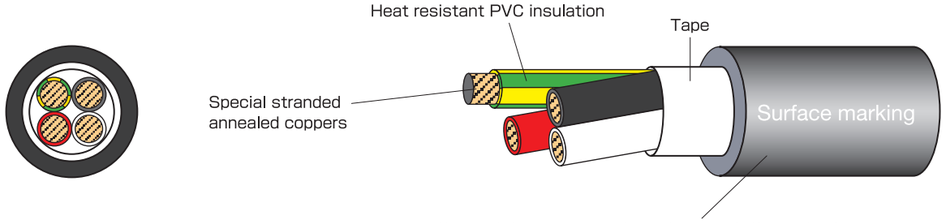
> Application

- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 10 million times or more.
- Robot cable with UL and cUL at 600V 105°C. (Category : AVLV2, AVLV8)

> Feature

- Extremely fine special conductor use.
- Low friction and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

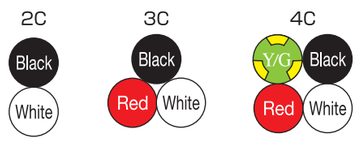
> Construction figure



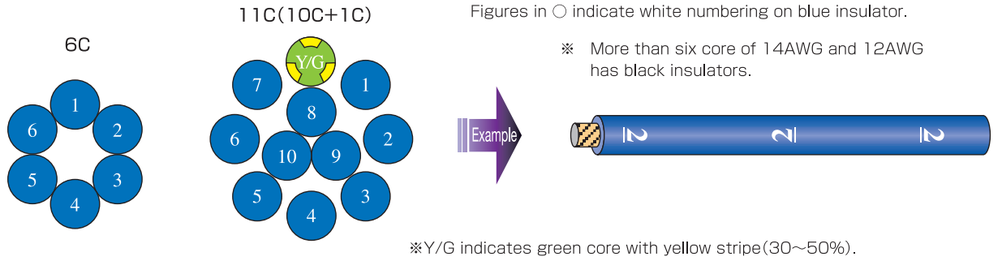
> Surface marking

> Identification

·2C~4C



·6 cores or more is identified by numbering



※Y/G indicates green core with yellow stripe(30~50%).

> Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2501	CSA AWM ⅡA/B
Voltage rating	600V	600V
Temperature rating	105℃	105℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat-resistant PVC insulation Outside diameter (inch)	Heat-resistant PVC insulation Outside diameter (mm)	Oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(inch)	Oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C						0.378	9.6	67(100)				13
3C						0.398	10.1	81(120)				11
4C						0.429	10.9	97(145)				11
6C						0.496	12.6	131(195)				9.2
8C						0.571	14.5	171(255)				8.5
10C+1C	18 (0.823mm²)	168/0.08 (168/3,2mil)	1.31 (52mil)	0.118	3.0	0.650	16.5	222(330)	less than 24.0	more than 50	2000	8.0
12C+1C						0.681	17.3	252(375)				7.5
16C+1C						0.748	19.0	306(455)				6.8
20C+1C						0.819	20.8	370(550)				6.3
30C+1C						0.996	25.3	554(825)				5.5
40C+1C						1.102	28.0	699(1040)				4.9
2C						0.406	10.3	81(120)				17
3C						0.425	10.8	97(145)				14
4C						0.461	11.7	118(175)				14
6C						0.535	13.6	161(240)				11
8C	16 (1.30mm²)	266/0.08 (266/3,2mil)	1.64 (65mil)	0.130	3.3	0.618	15.7	215(320)	less than 15.5	more than 50	2000	10
10C+1C						0.697	17.7	272(405)				10
12C+1C						0.732	18.6	309(460)				9.6
16C+1C						0.807	20.5	386(575)				8.7
20C+1C						0.933	23.7	511(760)				8.1
30C+1C						1.079	27.4	712(1060)				7.0
2C						0.437	11.1	101(150)				23
3C						0.461	11.7	124(185)				19
4C	14 (2.08mm²)	420/0.08 (420/3,2mil)	2.07 (81mil)	0.150	3.8	0.500	12.7	151(225)	less than 9.75	more than 50	2000	19
7C						0.634	16.1	245(365)				16
11C						0.760	19.3	349(520)				13
21C						1.024	26.0	662(985)				10
4C	12 (3.30mm²)	441/0.10 (441/3,9mil)	2.7 (106mil)	0.173	4.4	0.555	14.1	205(305)	less than 5.79	more than 50	2000	27
7C						0.709	18.0	333(495)				21

※Core number mark "+1C" has the [Y/G] ground core of 14AWG size.
※4 or more cores of 14AWG, 12AWG size has the [Y/G] ground core of an equal size.

●Ground core

Conductor Size (AWG)	Conductor Construction (mm)	Conductor Outside diameter(mm)	Heat-resistant PVC insulation Thickness (mm)
14 (2,08mm²)	420/0.08	2.07	0.85
12 (3.30mm²)	441/0.10	2.7	0.85

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30°C.
·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.
·Please multiply the following adjustment factors by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Movement characteristic

＊)1 Bending	Bend	U-shaped turn-back	90° bending	Twist Straight	Twist Bending	＊)2 Move bending
B	A	A	B	A	A	C

Examination's time:
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

＊)1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

＊)2 When overall diameter of the cable is 20mm or less.

※The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

UE/SSX1015 LF

Electric wire for wiring equipment

Heat resistance	★★★★★
Oil resistance	★★★
Noise resistance	★
Flame resistance	★★★★
Torsion resistance	★★★★
Flexibility resistance	★★★★★
Cable carrier	★★★★★

※The characteristic is an aim.

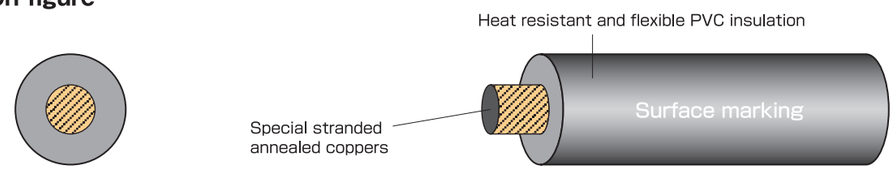
> Application

- Appropriate for wiring in a narrow place is excellent in flexibility.
- It is possible to use it for wiring medium or low-speed operational components of machine tool.
- Cable Bear test 10 million times or more.
- Electrical insulated wire for internal Wiring equipment with UL and cUL at 600V, 105℃. (Category : AVLV2, AVLV8)
- CE marking.(TUV recognition goods) (Certificate of TÜV No.J2050493)

> Feature

- Extremely fine special conductor use.
- Super flexible heat resistant PVC used for insulation.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure



> Surface marking

E67647 AWM 1015 105℃ 600V □□AWG VW-1 TAIYO c AWM IA/B 105℃ 600V FT1 TAIYO CE 07V-K 450/750V LF R15

> Identification

·Black, white, red, blue and Y/G.

※Y/G show the core with yellow line on the green color insulation (30~50%).

> Construction table

No. of cores	Conductor			heat −resistant flexible − PVC insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1C	14(2.08㎟)	7/60/0.08 (7/60/3.2mil)	2.07 (81mil)	0.150	3.8	20(30)	less than 8.62	more than 50	2000	35(＊28)
1C	12(3.30㎟)	7/63/0.10 (7/63/3.9mil)	2.65 (104mil)	0.173	4.4	31(46)	less than 5.43	more than 50	2000	48(＊38)
1C	10(5.26㎟)	7/99/0.10 (7/99/3.9mil)	3.3 (130mil)	0.197	5.0	44(65)	less than 3.30	more than 50	2000	66(＊52)

※The test of 2500V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

※The Allowable ampacity of in ( ) is reference then it is used to moving.

Certification	UL AWM	cUL AWM	TÜV.CE marking
Applicable standard	UL 758	CSA C22.2 No.210	EN50525-2-31
Official symbol	UL STYLE 1015	CSA AWM Ⅰ A/B	Equivalent of H07V-K
Voltage rating	600V	600V	450/750V
Temperature rating	105℃	105℃	70℃
Conductor	UL 758	CSA C22.2 No.210	EN60228
Flame rating	VW-1	FT1	EN50264-2-1

> > > Meeting standard

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Please multiply the following adjustment factors by the ambient temperature and the cable-laying conditions, etc.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

●Adjustment factors(for multiple-line laying)

No. of condoctors	2~3	4	5~6	7~15	16~40	41~60	61~
Adjustment factors	0.70	0.63	0.56	0.49	0.43	0.39	0.34

> Movement characteristic

Bending	Bend	U-shaped turn-back	90° bending	Twist		Move bending
				Straight	Bending	
C	A	A	C	B	B	C

Examination's time:
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

※Please consult our Sales Department when using by moving part.

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
C	C	C	C	C	C

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.

B:Deterioration slightly no problem almost on practical use.

C:It is sometimes deteriorated to some degree, and not possible to use it.

> Standard sales length

100m

UE/SSX83 LF, UE/SSX84 LF

Electric wire for wiring in equipment and power supply

UE/SSX83 LF		UE/SSX84 LF	
Heat resistance	★★★★★	Heat resistance	★★★★★
Oil resistance	★★★	Oil resistance	★★★
Noise resistance	★	Noise resistance	★
Flame resistance	★★★★	Flame resistance	★★★★
Torsion resistance	★★★★	Torsion resistance	★★★★
Flexibility resistance	★★★★★	Flexibility resistance	★★★★★
Cable carrier	★★★★★	Cable carrier	★★★★★

※The characteristic is an aim. ※The characteristic is an aim.

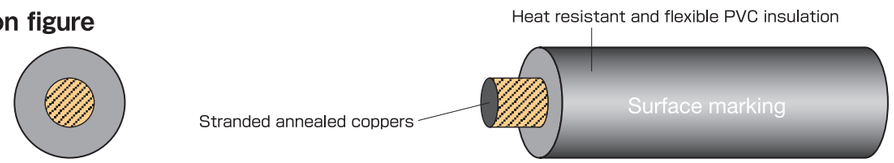
Application

- Electric wire for wiring in power supply.※
  ※It is not possible to use it as an electric wire for the power supply on the CSA standard.
- Appropriate for wiring in a narrow place is excellent in flexibility.
- It is possible to use it for wiring medium or low-speed operational components of machine tool.
- Cable Bear test 10 million times or more.
- Electrical insulated wire for internal Wiring equipment with UL and cUL at 600V, 105℃.
  (Category : AVLV2, AVLV8)
- CE marking. (TÜV recognition goods) (Certificate of TÜV No.J9950730)

Feature

- Fine wire conductor use.
- Super flexible heat resistant PVC used for insulation.
- Flame resisting : UL VW-1, cUL FT1.

Construction figure



Surface marking

·UE/SSX83 LF

E67647 AWM 1283 105℃ 600V □□AWG VW-1 TAIYO c AWM IA/B 105℃ 600V FT1 TAIYO CE 07V-K 450/750V <PS>E TY LF R15

·UE/SSX84 LF

(1)1～3/0AWG wires

E67647 AWM 1284 105℃ 600V □□AWG VW-1 TAIYO c AWM IA/B 105℃ 600V FT1 TAIYO CE 07V-K 450/750V <PS>E TY LF R15

(2)4/0AWG wires

E67647 AWM 1284 105℃ 600V □□AWG VW-1 TAIYO c AWM IA/B 105℃ 600V FT1 TAIYO CE 07V-K 450/750V LF R15

Identification

●UE/SSX83 LF

·Black, white, red, blue and Y/G.

●UE/SSX84 LF

·1AWG:black and Y/G. 1/0AWG:black and Y/G.
2/0, 3/0AWG:black and Y/G. 4/0AWG:black.

※Y/G indicates green core with yellow stripe(30～50%).

	AWG	Black	White	Red	Blue	Brown	Y/G
UE/SSX83 LF	8	○	○	○	○		○
	6	○	○	○	○		○
	4	○	○	○	○		○
	2	○	○	○	○		○
UE/SSX84 LF	1	○					○
	1/0	○					○
	2/0	○					○
	3/0	○					○
	4/0	○					

○:Standard stock color

Meeting standard

Certification	UL AWM	cUL AWM	TÜV.CE marking	Electrical Appliance and Material Safety
Applicable standard	UL 758	CSA C22.2 No.210	EN50525-2-31	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	UL STYLE 1283 1284	CSA AWM Ⅰ A/B	Equivalent of H07V-K	Synthetic resin insulated electric wire
Voltage rating	600V	600V	450/750V	600V
Temperature rating	105℃	105℃	70℃	60℃
Conductor	UL 758	CSA C22.2 No.210	EN60228	JIS C 3102
Flame rating	VW-1	FT1	EN50264-2-1	JIS C 3005 4.26.2 b)

Construction table

·UE/SSX83 LF

No. of cores	Conductor			Heat - resistant flexible - PVC insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1C	8(8.36㎟)	7/50/0.18 (7/50/7.1mil)	4.30 (169mil)	0.303	7.7	87(130)	less than 2.18	more than 50	2000	93(＊74)
1C	6(13.3㎟)	7/84/0.18 (7/84/7.1mil)	5.70 (224mil)	0.358	9.1	134(200)	less than 1.32	more than 50	2000	130(＊100)
1C	4(21.1㎟)	7/126/0.18 (7/126/7.1mil)	6.90 (272mil)	0.406	10.3	188(280)	less than 0.882	more than 40	2000	160(＊130)
1C	2(33.6㎟)	7/200/0.18 (7/200/7.1mil)	8.70 (343mil)	0.484	12.3	286(425)	less than 0.554	more than 40	2000	220(＊180)

※The test of 2500V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

·UE/SSX84 LF

No. of cores	Conductor			Heat - resistant flexible - PVC insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1C	1(42.4㎟)	7/252/0.18 (7/252/7.1mil)	9.70 (382mil)	0.563	14.3	373(555)	less than 0.441	more than 40	2500	260(＊210)
1C	1/0(53.4㎟)	12/186/0.18 (12/186/7.1mil)	11.20 (441mil)	0.622	15.8	464(690)	less than 0.349	more than 40	2500	310(＊240)
1C	2/0(67.4㎟)	12/240/0.18 (12/240/7.1mil)	12.70 (500mil)	0.681	17.3	581(865)	less than 0.270	more than 30	2500	360(＊290)
1C	3/0(85.0㎟)	12/300/0.18 (12/300/7.1mil)	14.20 (559mil)	0.740	18.8	712(1060)	less than 0.206	more than 30	2500	430(＊340)
1C	4/0(107㎟)	19/240/0.18 (19/240/7.1mil)	15.80 (622mil)	0.803	20.4	880(1310)	less than 0.161	more than 30	2500	500(＊400)

※The test of 2500V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.
※The Allowable ampacity of in ( ) is reference then it is used to moving.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Please multiply the following adjustment factors by the ambient temperature and the cable-laying conditions, etc.

●Adjustment factors(at ambient temperature)

Ambient temperature (℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

●Adjustment factors(for multiple-line laying)

No. of condoctors	2～3	4	5～6	7～15	16～40	41～60	61～
Adjustment factors	0.70	0.63	0.56	0.49	0.43	0.39	0.34

Movement characteristic

Bending	Bend	U-shaped turn-back	90° bending	Twist		Move bending
				Straight	Bending	
C	A	A	C	B	B	C

Examination's time:
A= More than 10 million times
B= More than 5 million times
C= More than 3 million times
D= More than 1 million times
E= More than 0.5 million times

※Please consult our Sales Department when using by moving part.

Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
C	C	C	C	C	C

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.

B:Deterioration slightly no problem almost on practical use.

C:It is sometimes deteriorated to some degree, and not possible to use it.

Standard sales length

100m

(50m length is available for 6AWG or larger sizes.)

FAMV-5E26SB(BK)

CAT5e Ethernet high flexible cable

Heat resistance	★★★
Oil resistance	★★★★
Noise resistance	★★★★
Flame resistance	★★★★
Torsion resistance	—
Flexibility resistance	—
Cable carrier	★★★★★★

※The characteristic is an aim.

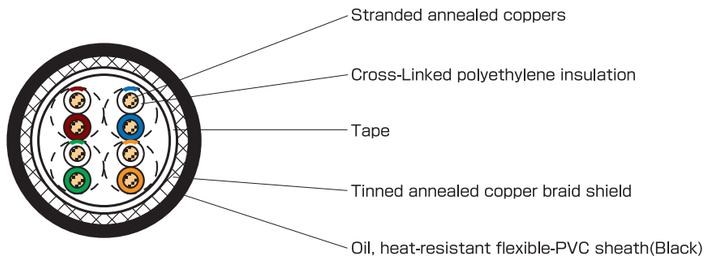
> Application

- Appropriate for cable　bare wiring for high-speed moving.
- CAT5e
- High flexible cable with UL at 30V 80℃. (Category : AVLV2,)

> Features

- Flame resisting : UL VW-1.
- Heat resistant Cross Linked PE used for insulation.
- Oil, heat, fleme resisting flexible PVC material is used for sheath.

> Construction figure



> Surface marking

TAIYO/TSUNET FAMV-5E26SB E67647-TK AWM 20276 VW-1 LF R15 length mark

> Identification

Pair number	1	2	3	4
No.1 kind line	Blue/White	Orange/White	Green/White	Brown/White
No.2 kind line	Blue	Orange	Green	Brown

※Blue/White : Blue line is marked on white insulation.

> > > Meeting standard

Certification	UL AWM
Applicable standard	UL 758
Official symbol	UL STYLE 20276
Voltage rating	30V
Temperature rating	80℃
Conductor	UL 758
Flame rating	VW-1

> Construction table

No. of pairs	Conductor		Cross-linked polyethylene insulation		Oil, heat-resistant flexible-PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)
4P	26	30/0.08 (30/3.2mil)	0.035	0.9	0.252	6.4	33(49)	less than 146	more than 5,000	AC700

> Electric characteristics (High Frequency)

Electric Characteristics	Frequency (MHz)				
	1	4	16	31.25	100
Insertion Loss (dB/35m)	less than 2.0	less than 4.1	less than 8.2	less than 11.7	less than 22.0
NEXT loss (dB)	more than 65.3	more than 56.3	more than 47.2	more than 42.9	more than 35.3
PSNEXT Loss (dB)	more than 62.3	more than 53.3	more than 44.2	more than 39.9	more than 32.3
Characteristic Impedance (Ω)	85-115				

> Standard sales length

200m

FAMV-5E26SBX(BK)

CAT5e Ethernet high flexible cable

Heat resistance	★★★
Oil resistance	★★★★
Noise resistance	★★★★
Flame resistance	★★★★
Torsion resistance	—
Flexibility resistance	—
Cable carrier	★★★★★★

※The characteristic is an aim.

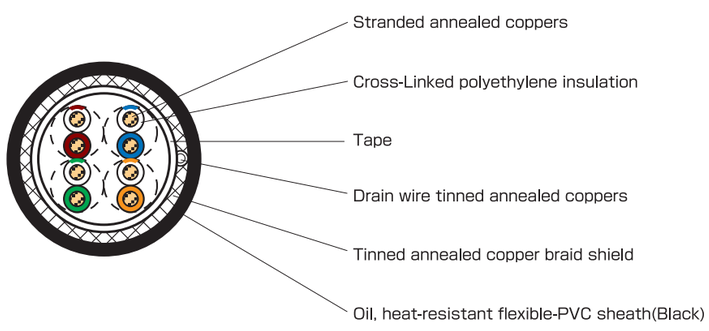
> Application

- Appropriate for cable　bare wiring for high-speed moving.
- CAT5e
- High flexible cable with UL at 30V 80℃. (Category : AVLV2,)

> Features

- Flame resisting : UL VW-1.
- Heat resistant Cross Linked PE used for insulation.
- Oil, heat, fleme resisting flexible PVC material is used for sheath.
- With drain wire.

> Construction figure



> Surface marking

TAIYO/TSUNET FAMV-5E26SBX E67647-TK AWM 20276 30V LF R15 length mark

> Identification

Pair number	1	2	3	4
No.1 kind line	Blue/White	Orange/White	Green/White	Brown/White
No.2 kind line	Blue	Orange	Green	Brown

※Blue/White : Blue line is marked on white insulation.

> > > Meeting standard

Certification	UL AWM
Applicable standard	UL 758
Official symbol	UL STYLE 20276
Voltage rating	30V
Temperature rating	80℃
Conductor	UL 758
Flame rating	VW-1

> Construction table

No. of pairs	Conductor		Cross-linked polyethylene insulation		Oil, heat-resistant flexible-PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)
4P	26	30/0.08 (30/3.2mil)	0.035	0.9	0.252	6.4	34(50)	less than 146	more than 5,000	AC700

> Electric characteristics (High Frequency)

Electric Characteristics	Frequency (MHz)				
	1	4	16	31.25	100
Insertion Loss (dB/35m)	less than 2.0	less than 4.1	less than 8.2	less than 11.7	less than 22.0
NEXT loss (dB)	more than 65.3	more than 56.3	more than 47.2	more than 42.9	more than 35.3
PSNEXT Loss (dB)	more than 62.3	more than 53.3	more than 44.2	more than 39.9	more than 32.3
Characteristic Impedance (Ω)	85-115				

> Standard sales length

Make-to-order Products.

FAFX-5E25SB(BK)

CAT5e Ethernet flexible cable

Heat resistance	★★★
Oil resistance	★★★★
Noise resistance	★★★★
Flame resistance	★★★★
non-migratory	★★★★★
Transport property	★

※The characteristic is an aim.

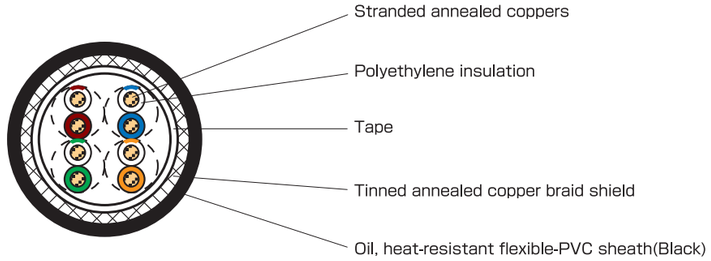
> Application

- Appropriate for wiring in excellent flexibility.
- CAT5e
- Flexible cable with UL, cUL at 30V 80℃. (Category : AVLV2, AVLV8)

> Features

- Flame resisting : UL VW-1, cUL FT1.
- Oil, heat, fleme resisting flexible PVC material is used for sheath.

> Construction figure



> Surface marking

TAIYO/TSUNET FAFX-5E25SB E67647-TK c UL us AWM 20276 VW-1 Ⅱ A/B 80℃ 30V FT1 LF R15 length mark

> Identification

Pair number	1	2	3	4
No.1 kind line	Blue/White	Orange/White	Green/White	Brown/White
No.2 kind line	Blue	Orange	Green	Brown

※Blue/White : Blue line is marked on white insulation.

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	UL C22.2 No.210
Official symbol	UL STYLE 20276	CSA AWM Ⅱ A/B
Voltage rating	30V	30V
Temperature rating	80℃	80℃
Conductor	UL 758	UL C22.2 No.210
Flame rating	VW-1	FT1

> Construction table

No. of pairs	Conductor		Polyethylene insulation		Oil,heat-resistant flexible-PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)
4P	25	7/0.18 (7/7.1mil)	0.039	0.95	0.252	6.4	45	less than 120	more than 5,000	AC700

> Electric characteristics (High Frequency)

Electric Characteristics	Frequency (MHz)				
	1	4	16	31.25	100
Insertion Loss (dB/65m)	less than 2.0	less than 4.1	less than 8.2	less than 11.7	less than 22.0
NEXT loss (dB)	more than 65.3	more than 56.3	more than 47.2	more than 42.9	more than 35.3
PSNEXT Loss (dB)	more than 62.3	more than 53.3	more than 44.2	more than 39.9	more than 32.3
Characteristic Impedance (Ω)	85-115				

> Standard sales length

200m

FAFX-5E25SBX(BK)

CAT5e Ethernet flexible cable

Heat resistance ★★★
Oil resistance ★★★★
Noise resistance ★★★★
Flame resistance ★★★★
non-migratory ★★★★★
Transport property ★

※The characteristic is an aim.

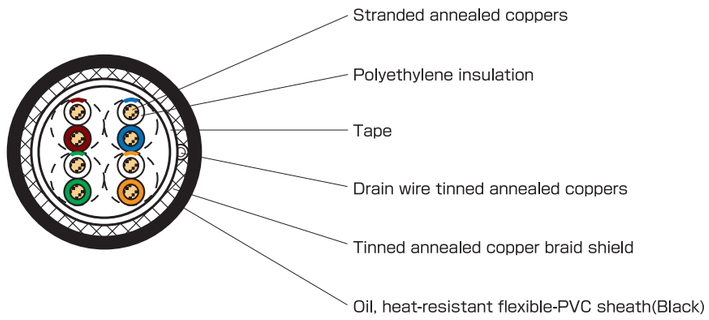
Application

- Appropriate for wiring in excellent flexibility.
- CAT5e
- Flexible cable with UL, cUL at 30V 80℃. (Category : AVLV2, AVLV8)

Features

- Flame resisting : UL VW-1, cUL FT1.
- Oil, heat, fleme resisting flexible PVC material is used for sheath.
- With drain wire.

Construction figure



Surface marking

TAIYO/TSUNET FAFX-5E25SBX E67647-TK c UL us AWM 20276 VW-1 Ⅱ A/B 80℃ 30V FT1 LF R15 length mark

Identification

Pair number	1	2	3	4
No.1 kind line	Blue/White	Orange/White	Green/White	Brown/White
No.2 kind line	Blue	Orange	Green	Brown

※Blue/White : Blue line is marked on white insulation.

Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	UL C22.2 No.210
Official symbol	UL STYLE 20276	CSA AWM Ⅱ A/B
Voltage rating	30V	30V
Temperature rating	80℃	80℃
Conductor	UL 758	UL C22.2 No.210
Flame rating	VW-1	FT1

Construction table

No. of pairs	Conductor		Polyethylene insulation		Oil,heat-resistant flexible-PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)
4P	25	7/0.18 (7/7.1mil)	0.039	0.95	0.256	6.5	46	less than 120	more than 5,000	AC700

Electric characteristics (High Frequency)

Electric Characteristics	Frequency (MHz)				
	1	4	16	31.25	100
Insertion Loss (dB/65m)	less than 2.0	less than 4.1	less than 8.2	less than 11.7	less than 22.0
NEXT loss (dB)	more than 65.3	more than 56.3	more than 47.2	more than 42.9	more than 35.3
PSNEXT Loss (dB)	more than 62.3	more than 53.3	more than 44.2	more than 39.9	more than 32.3
Characteristic Impedance (Ω)	85-115				

Standard sales length

Make-to-order Products.

FAFX-5E25SLAB(BK)

CAT5e Ethernet flexible cable

Heat resistance ★★★
Oil resistance ★★★★
Noise resistance ★★★★★
Flame resistance ★★★★
non-migratory ★★★★★
Transport property ★
※The characteristic is an aim.

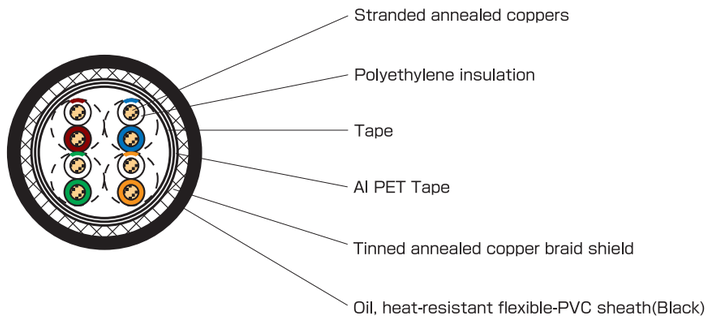
Application

- Appropriate for wiring in excellent flexibility.
- CAT5e
- Flexible cable with UL,cUL at 30V 80℃. (Category : AVLV2, AVLV8)
- CC-Link IE, EtherCAT

Features

- Flame resisting : UL VW-1 , cUL FT1.
- Oil, heat, fleme resisting flexible PVC material is used for sheath.
- Dounle shielded.

Construction figure



Surface marking

TAIYO/TSUNET FAFX-5E25SLAB E67647-TK c UL us AWM 20276 VW-1 Ⅱ A/B 80℃ 30V FT1 LF R15 length mark

Identification

Pair number	1	2	3	4
No.1 kind line	Blue/White	Orange/White	Green/White	Brown/White
No.2 kind line	Blue	Orange	Green	Brown

※Blue/White : Blue line is marked on white insulation.

Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	UL C22.2 No.210
Official symbol	UL STYLE 20276	CSA AWM Ⅱ A/B
Voltage rating	30V	30V
Temperature rating	80℃	80℃
Conductor	UL 758	UL C22.2 No.210
Flame rating	VW-1	FT1

EtherCAT
CC-Link IE Field
RoHS

Construction table

No. of pairs	Conductor		Polyethylene insulation		Oil,heat-resistant flexible-PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)
4P	25	7/0.18 (7/7.1mil)	0.039	1.0	0.256	6.5	34(51)	less than 120	more than 5,000	AC700

Electric characteristics (High Frequency)

Electric Characteristics	Frequency (MHz)				
	1	4	16	31.25	100
Insertion Loss (dB/70m)	less than 2.0	less than 4.1	less than 8.2	less than 11.7	less than 22.0
NEXT loss (dB)	more than 65.3	more than 56.3	more than 47.2	more than 42.9	more than 35.3
PSNEXT Loss (dB)	more than 62.3	more than 53.3	more than 44.2	more than 39.9	more than 32.3
Characteristic Impedance (Ω)	85-115				

Standard sales length

200m

FAFX-6A26SLAB(BK)

CAT6A Ethernet flexible cable

Heat resistance	★★★
Oil resistance	★★★★
Noise resistance	★★★★★
Flame resistance	★★★★
non-migratory	★★★★★
Transport property	★

※The characteristic is an aim.

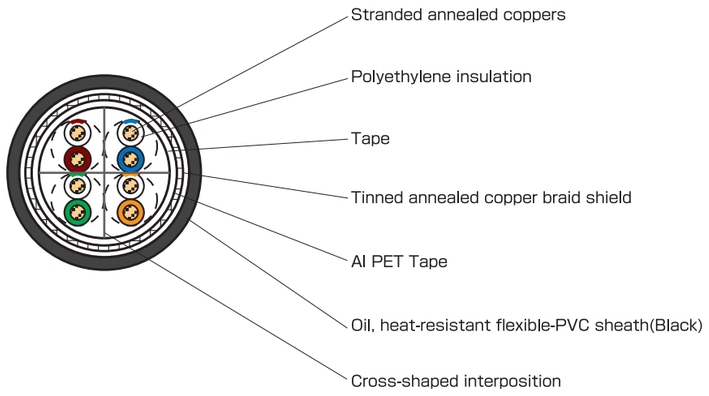
> Application

- Appropriate for wiring in excellent flexibility.
- CAT6A
- Flexible cable with UL,cUL at 30V 80℃. (Category : AVLV2, AVLV8)
- EtherCAT

> Features

- Flame resisting : UL VW-1, cUL FT1.
- Oil, heat, fleme resisting flexible PVC material is used for sheath.

> Construction figure



> Surface marking

TAIYO/TSUNET FAFX-6A26SLAB E67647-TK c UL us AWM 20276 VW-1 Ⅱ A/B 80℃ 30V FT1 LF R15 length mark

> Identification

Pair number	1	2	3	4
No.1 kind line	Blue/White	Orange/White	Green/White	Brown/White
No.2 kind line	Blue	Orange	Green	Brown

※Blue/White : Blue line is marked on white insulation.

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	UL C22.2 No.210
Official symbol	UL STYLE 20276	CSA AWM Ⅱ A/B
Voltage rating	30V	30V
Temperature rating	80℃	80℃
Conductor	UL 758	UL C22.2 No.210
Flame rating	VW-1	FT1

EtherCAT

> Construction table

No. of pairs	Conductor		Polyethylene insulation		Oil,heat-resistant flexible-PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)
4P	26	7/0.17 (7/6.7mil)	0.033	0.84	0.252	6.5	54	less than 168	more than 5,000	AC700

> Electric characteristics (High Frequency)

Electric Characteristics	Frequency (MHz)							
	1	4	16	31.25	100	200	300	500
Insertion Loss (dB/60m)	less than 2.1	less than 3.8	less than 7.5	less than 10.5	less than 19.1	less than 27.6	less than 34.3	less than 45.3
NEXT loss (dB)	more than 74.3	more than 65.3	more than 56.2	more than 51.9	more than 44.3	more than 39.8	more than 37.1	more than 33.8
PSNEXT Loss (dB)	more than 72.3	more than 63.3	more than 54.2	more than 49.9	more than 42.3	more than 37.8	more than 35.1	more than 31.8
Characteristic Impedance (Ω)	85-115							

> Standard sales length

200m

FAFXQ-5E22SLAB/CM(BU)

QUAD CAT5e Ethernet flexible cable

(Cannot be used for 1000BASE-T because of the 2-pair specification)

Heat resistance	★★★
Oil resistance	★★★★
Noise resistance	★★★★★
Flame resistance	★★★★★
non-migratory	★★★★★
Transport property	★

※The characteristic is an aim.

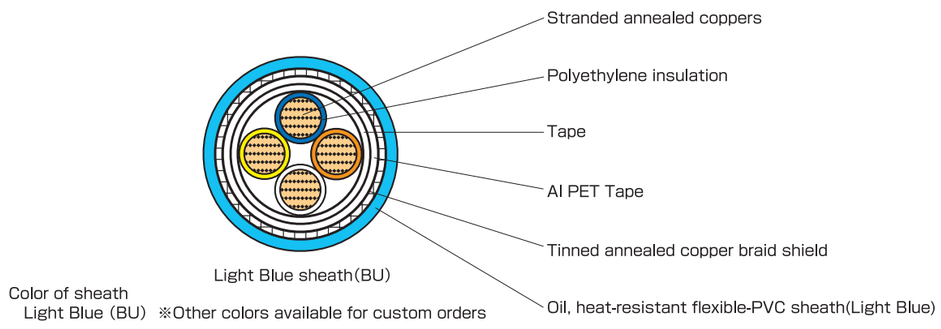
> Application

- Appropriate for wiring in excellent flexibility.
- CAT5e
- QUAD(2P)
- Flexible cable with UL, cUL at 30V 80℃. (Category : AVLV2, AVLV8)
- Mechatrolink-Ⅲ, EtherCAT

> Features

- It passes Vertical-trai Fleme Test of UL, cUL.
- Flame resisting : UL VW-1, cUL FT1.
- Oil, heat, fleme resisting flexible PVC material is used for sheath.
- CM listing standard is acquired and it corresponds to NFPA70.
- Dounle shielded

> Construction figure



Color of sheath
Light Blue (BU) ※Other colors available for custom orders

> Surface marking

TAIYO/TSUNET FAFXQ-5E22SLAB/CM E176892-TK C(UL)US CM 22AWG 75℃ or AWM 20276 VW-1 or AWM Ⅱ A/B 80℃ 30V FT1 LF R15 length mark

> Identification

Pair number	1	2
No.1 kind line	Blue	Orange
No.2 kind line	White	Yellow

> > > Meeting standard

Certification	UL CM	cUL CM	UL AWM	cUL AWM
Applicable standard	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Official symbol	CM	CM	UL STYLE 20276	CSA AWM Ⅱ A/B
Voltage rating	300V	300V	30V	30V
Temperature rating	75℃	75℃	80℃	80℃
Conductor	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Flame rating	Vertical-Tray Flame Test	Vertical-Tray Flame Test	VW-1	FT1

> Construction table

No. of quads	Conductor		Polyethylene insulation		Oil,heat-resistant flexible-PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)
1	22	7/0.26 (7/10.2mil)	0.054	1.38	0.252	6.4	38(57)	less than 55.5	more than 5,000	AC700

> Electric characteristics (High Frequency)

Electric Characteristics	Frequency (MHz)				
	1	4	16	31.25	100
Insertion Loss (dB/100m)	less than 2.0	less than 4.1	less than 8.2	less than 11.7	less than 22.0
NEXT loss (dB)	more than 65.3	more than 56.3	more than 47.2	more than 42.9	more than 35.3
Characteristic Impedance (Ω)	85-115				

> Standard sales length

200m
(Black and Light Blue cables are in stock.)
※If black sheath is required, it will be (BK).

FA-5E24SLAB/CM(GY)

CAT5e Ethernet fix cable

Heat resistance	★★★
Oil resistance	★★★★
Noise resistance	★★★★★
Flame resistance	★★★★★
non-migratory	★★★★★
Transport property	★

※The characteristic is an aim.

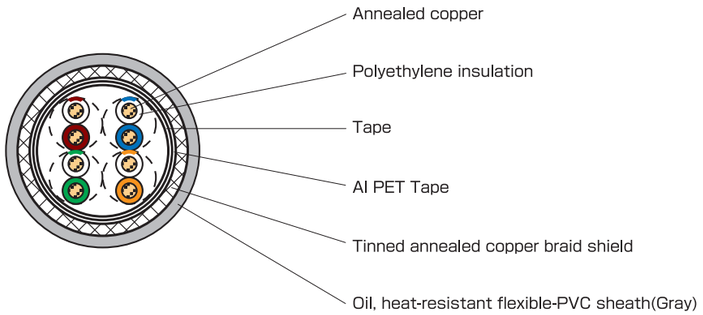
Application

- FA standard cable with UL and cUL.
- CAT5e
- Flexible cable with UL, cUL at 30V 80℃. (Category : AVLV2, AVLV8)

Features

- Flame resisting : UL VW-1, cUL FT1.
- It passes Vertical-trai Fleme Test of UL, cUL.
- Oil, heat, fleme resisting flexible PVC material is used for sheath.
- CM listing standard is acquired and it corresponds to NFPA70.
- Dounle shielded.

Construction figure



Surface marking

TAIYO/TSUNET FA-5E24SLAB/CM E176892-TK C(UL)US CM 24AWG 75℃ or AWM 20276 VW-1 or AWM Ⅱ A/B 80℃ 30V FT1 LF R15 length mark

Identification

Pair number	1	2	3	4
No.1 kind line	Blue/White	Orange/White	Green/White	Brown/White
No.2 kind line	Blue	Orange	Green	Brown

※Blue/White : Blue line is marked on white insulation.

Meeting standard

Certification	UL CM	cUL CM	UL AWM	cUL AWM
Applicable standard	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Official symbol	CM	CM	UL STYLE 20276	CSA AWM ⅡA/B
Voltage rating	300V	300V	30V	30V
Temperature rating	75℃	75℃	80℃	80℃
Conductor	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Flame rating	Vertical-Tray Flame Test	Vertical-Tray Flame Test	VW-1	FT1

Construction table

No. of pairs	Conductor			Polyethylene insulation		Oil,heat-resistant flexible-PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)
4P	24	SOLID	0.53 (20.9mil)	0.041	1.03	0.272	6.9	37(55)	less than 93.8	more than 5,000	AC700

Electric characteristics (High Frequency)

Electric Characteristics	Frequency (MHz)				
	1	4	16	31.25	100
Insertion Loss (dB/100m)	less than 2.0	less than 4.1	less than 8.2	less than 11.7	less than 22.0
NEXT Loss (dB)	more than 65.3	more than 56.3	more than 47.2	more than 42.9	more than 35.3
PSNEXT Loss (dB)	more than 62.3	more than 53.3	more than 44.2	more than 39.9	more than 32.3
Characteristic Impedance (Ω)	85-115				

Standard sales length

200m

FA-5E24SLA/CM(BK)

CAT5e Ethernet fix cable

Heat resistance ★★★
Oil resistance ★★★★
Noise resistance ★★★★
Flame resistance ★★★★★
non-migratory ★★★★★
Transport property ★

※The characteristic is an aim.

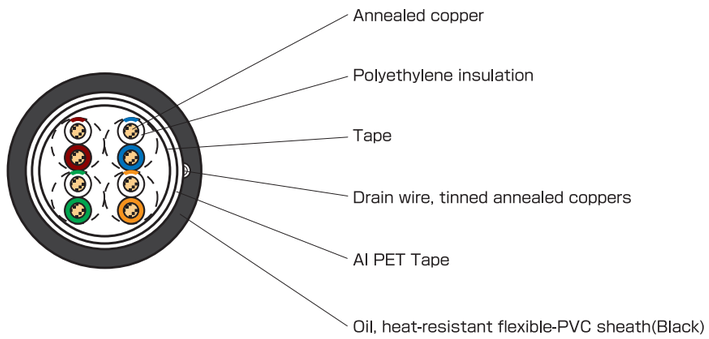
> Application

- FA standard cable with UL and cUL.
- CAT5e
- Flexible cable with UL, cUL at 30V 80℃. (Category : AVLV2, AVLV8)

> Features

- Flame resisting : UL VW-1, cUL FT1.
- It passes Vertical-trai Fleme Test of UL, cUL.
- Oil, heat, fleme resisting flexible PVC material is used for sheath.
- CM listing standard is acquired and it corresponds to NFPA70.

> Construction figure



> Surface marking

TAIYO/TSUNET FA-5E24SLA/CM E176892-TK C(UL)US CM 24AWG 75℃ or AWM 20276 VW-1 or AWM Ⅱ A/B 80℃ 30V FT1 LF R15 length mark

> Identification

Pair number	1	2	3	4
No.1 kind line	Blue/White	Orange/White	Green/White	Brown/White
No.2 kind line	Blue	Orange	Green	Brown

※Blue/White : Blue line is marked on white insulation.

> > > Meeting standard

Certification	UL CM	cUL CM	UL AWM	cUL AWM
Applicable standard	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Official symbol	CM	CM	UL STYLE 20276	CSA AWM Ⅱ A/B
Voltage rating	300V	300V	30V	30V
Temperature rating	75℃	75℃	80℃	80℃
Conductor	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Flame rating	Vertical-Tray Flame Test	Vertical-Tray Flame Test	VW-1	FT1

> Construction table

No. of pairs	Conductor			Polyethylene insulation		Oil,heat-resistant flexible-PVC sheath		Approx. weight	Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)
4P	24	SOLID	0.53 (20.9mil)	0.041	1.03	0.283	7.2	35(52)	less than 93.8	more than 5,000	AC700

> Electric characteristics (High Frequency)

Electric Characteristics	Frequency (MHz)				
	1	4	16	31.25	100
Insertion Loss (dB/100m)	less than 2.0	less than 4.1	less than 8.2	less than 11.7	less than 22.0
NEXT Loss (dB)	more than 65.3	more than 56.3	more than 47.2	more than 42.9	more than 35.3
PSNEXT Loss (dB)	more than 62.3	more than 53.3	more than 44.2	more than 39.9	more than 32.3
Characteristic Impedance (Ω)	85-115				

> Standard sales length

200m
500m

FA-6A26SLA/CM(BK)

CAT6A Ethernet fix cable for plant

Heat resistance ★★★
Oil resistance ★★★★
Noise resistance ★★★★★
Flame resistance ★★★★
non-migratory ★★★★★
Transport property ★

※The characteristic is an aim.

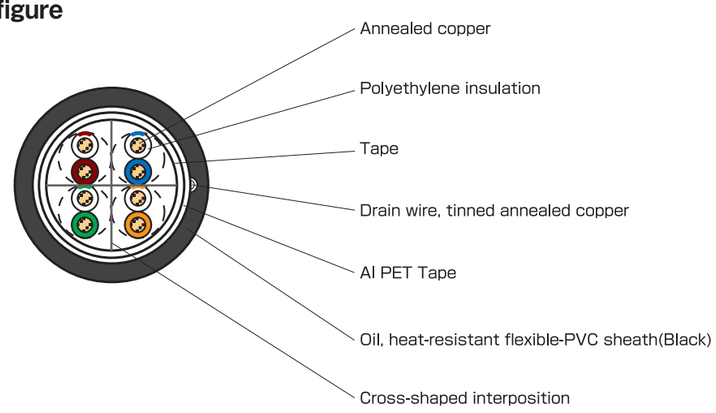
> Application

- FA standard cable with UL and cUL.
- CAT6A
- Flexible cable with UL, cUL at 30V 80℃. (Category : AVLV2, AVLV8)
- Obtaining UL Listed CM, this cable compliants to NFPA70.

> Features

- Flame resisting : UL VW-1, cUL FT1.
- Oil, heat, fleme resisting flexible PVC material is used for sheath.

> Construction figure



> Surface marking

TAIYO/TSUNET FA-6A26SLA/CM E176892-TK C(UL)US CM 26AWG 75℃ or AWM 20276 VW-1 or AWM Ⅱ A/B 80℃ 30V FT1 LF R15 length mark

> Identification

Pair number	1	2	3	4
No.1 kind line	Blue/White	Orange/White	Green/White	Brown/White
No.2 kind line	Blue	Orange	Green	Brown

※Blue/White : Blue line is marked on white insulation.

> > > Meeting standard

Certification	UL CM	cUL CM	UL AWM	cUL AWM
Applicable standard	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Official symbol	CM	CM	UL STYLE 20276	CSA AWM Ⅱ A/B
Voltage rating	300V	300V	30V	30V
Temperature rating	75℃	75℃	80℃	80℃
Conductor	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Flame rating	Vertical-Tray Flame Test	Vertical-Tray Flame Test	VW-1	FT1

> Construction table

No. of pairs	Conductor			Polyethylene insulation		Oil,heat-resistant flexible-PVC sheath		Approx. weight	Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)
4P	26	SOLID	0.43 (16.9mil)	0.031	0.81	0.252	6.4	32(48)	less than 147	more than 5,000	AC700

> Electric characteristics (High Frequency)

Electric Characteristics	Frequency (MHz)							
	1	4	16	31.25	100	200	300	500
Insertion Loss (dB/70m)	less than 2.1	less than 3.8	less than 7.5	less than 10.5	less than 19.1	less than 27.6	less than 34.3	less than 45.3
NEXT loss (dB)	more than 74.3	more than 65.3	more than 56.2	more than 51.9	more than 44.3	more than 39.8	more than 37.1	more than 33.8
PSNEXT Loss (dB)	more than 72.3	more than 63.3	more than 54.2	more than 49.9	more than 42.3	more than 37.8	more than 35.1	more than 31.8
Characteristic Impedance (Ω)	85-115							

> Standard sales length

Make-to-order Products.

FAFX-5E25SB-IP□M

□: Cable length (m) such as 1, 3, 5, 7

Ethernet flexible patch cord for plant

Heat resistance ★★★
Oil resistance ★★★★
Noise resistance ★★★★
Flame resistance ★★★★
non-migratory ★★★★★
Transport property ★
※The characteristic is an aim.

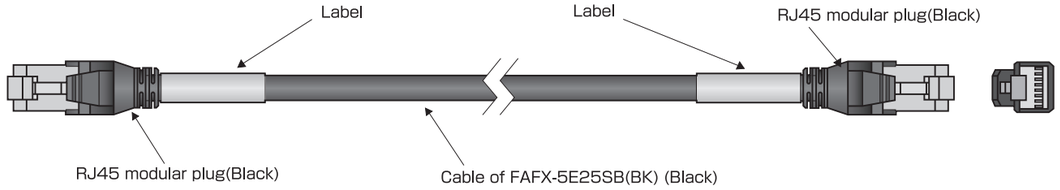
Application

- Ethernet flexible patch cord for plant
- CAT5e

Features

- FA standard cable with UL
- Flame resisting : UL VW-1, cUL FT1
- Oil, heat, fleme resisting flexible PVC material is used

Construction figure



Label marking

TS SB XXXXXX NMC-XXX

Section indicated with "XXXX": Control symbol

	Section indicated with "N" (length)			
Indicated symbol	1	3	5	7
Overall length	1m	3m	5m	7m

	Section indicated with "C" (connection method)		
Indicated symbol	No symbol	A	X
Connection	B connection on both ends Straight connection	A connection on both ends Straight connection	Cross connection

Meeting standard

Construction table

No. of pairs	Conductor		Diameter (inch/mm)	Shield		Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)		Cable	Connector	Allowable ampacity (A)	Insulation resistance (MΩ)	Electrical strength (V/1min.)
4P	25 (0.2㎟)	7/0.18 (7/7.1mil)	0.252(6.4)	Tinned annealed copper braid shield	With RJ45 shield contact	1	more than 500	AC 500

Electric characteristics (High Frequency)

This cable is based upon ANSI/TIA568-C.2
Category5e

Connection

RJ45 Pin Number	A connection	B connection
1	White/Green	White/Orange
2	Green	Orange
3	White/Orange	White/Green
4	Blue	Blue
5	White/Blue	White/Blue
6	Orange	Green
7	White/Brown	White/Brown
8	Brown	Brown

※Blue/White indicates white core with blue stripe.

1m, 3m, 5m, and 7m length are stocked product.
Please contact us when you need outside of above length.

FAFX-5E25SLAB-IP□M

Ethernet flexible patch cord for plant in noisy environment

□: Cable length (m) such as 1, 3, 5, 7

Heat resistance	★★★
Oil resistance	★★★★
Noise resistance	★★★★★
Flame resistance	★★★★
non-migratory	★★★★★
Transport property	★

※The characteristic is an aim.

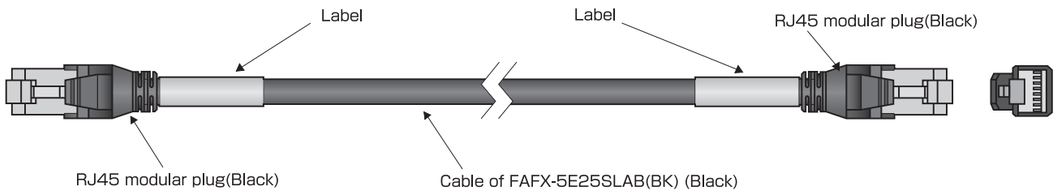
> Application

- FA Ethernet flexible patch cord for plant in noisy environment
- CAT5e

> Features

- FA standard cable with UL
- Flame resisting : UL VW-1, cUL FT1
- Oil, heat, fleme resisting flexible PVC material is used
- Ether CAT

> Construction figure



> Label marking

Section indicated with "XXXX": Control symbol

	Section indicated with "N" (length)			
Indicated symbol	1	3	5	7
Overall length	1m	3m	5m	7m

	Section indicated with "C" (connection method)		
Indicated symbol	No symbol	A	X
Connection	B connection on both ends Straight connection	A connection on both ends Straight connection	Cross connection

> Construction table

No. of pairs	Conductor		Diameter (inch/mm)	Shield		Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)		Cable	Connector	Allowable ampacity (A)	Insulation resistance (MΩ)	Electrical strength (V/1min.)
4P	25 (0.2㎟)	7/0.18 (7/7.1mil)	0.256(6.5)	Double shield Tinned annealed copper braid shield Aluminum PET tape	With RJ45 shield contact	1	more than 500	AC 500

> Electric characteristics (High Frequency)

This cable is based upon ANSI/TIA568-C.2
Category5e

> Connection

RJ45 Pin Number	A connection	B connection
1	White/Green	White/Orange
2	Green	Orange
3	White/Orange	White/Green
4	Blue	Blue
5	White/Blue	White/Blue
6	Orange	Green
7	White/Brown	White/Brown
8	Brown	Brown

※Blue/White indicates white core with blue stripe.

1m, 3m, 5m, and 7m length are stocked product.
Please contact us when you need outside of above length.

FAMV-5E26SB-IP□M

□: Cable length (m) such as 1, 3, 5, 7

Ethernet high flexible patch cord for plant

Heat resistance	★★★
Oil resistance	★★★★
Noise resistance	★★★★
Flame resistance	★★★★
Torsion resistance	—
Flexibility resistance	—
Cable carrier	★★★★★★

※The characteristic is an aim.

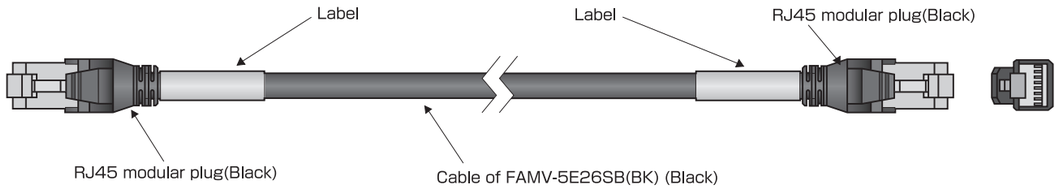
> Application

- Appropriate for cable bare wiring for high-speed moving
- CAT5e

> Features

- FA standard cable with UL
- Flame resisting : UL VW-1, cUL FT1
- Oil, heat, flame resisting flexible PVC material is used

> Construction figure



> Label marking

Section indicated with "XXXX": Control symbol

	Section indicated with "N" (length)			
Indicated symbol	1	3	5	7
Overall length	1m	3m	5m	7m

	Section indicated with "C" (connection method)		
Indicated symbol	No symbol	A	X
Connection	B connection on both ends Straight connection	A connection on both ends Straight connection	Cross connection

> > > Meeting standard

> Construction table

No. of pairs	Conductor		Diameter (inch/mm)	Shield		Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)		Cable	Connector	Allowable ampacity (A)	Insulation resistance (MΩ)	Electrical strength (V/1min.)
4P	26 (0.128㎟)	30/0.08 (30/3.2mil)	0.252(6.4)	Tinned annealed copper braid shield	With RJ45 shield contact	1	more than 500	AC 500

> Electric characteristics (High Frequency)

This cable is based upon ANSI/TIA568-C.2
Category5e

> Connection

RJ45 Pin Number	A connection	B connection
1	White/Green	White/Orange
2	Green	Orange
3	White/Orange	White/Green
4	Blue	Blue
5	White/Blue	White/Blue
6	Orange	Green
7	White/Brown	White/Brown
8	Brown	Brown

※Blue/White indicates white core with blue stripe.

1m, 3m, 5m, and 7m length are stocked product.
Please contact us when you need outside of above length.

FAMV-5E26SB-IPGV□M

□: Cable length (m) such as 3, 4, 5

Ethernet cable with screw lock Patch cord

Heat resistance	★★★
Oil resistance	★★★★
Noise resistance	★★★★
Flame resistance	★★★★
Torsion resistance	—
Flexibility resistance	—
Cable carrier	★★★★★★

※The characteristic is an aim.

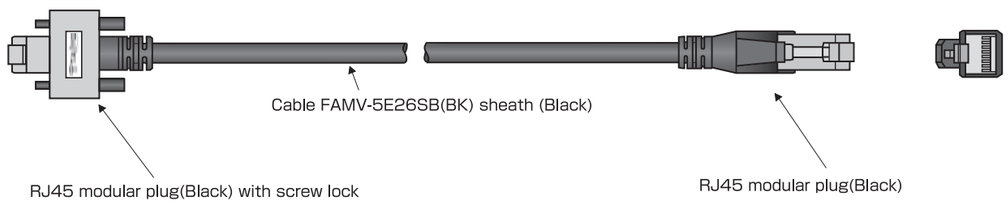
> Application

- Moving Ethernet cable to connect to a product of the GigE Vision conformity
- The cable is used modular plug which a screw locking mechanism is included in
  —GigE Vision is new standard of camera inferface which is using the communication protocol by the Gigabit Ethernet

> Features

- Ethernet cable corresponding the 1000 Base-T method
- The high flexural Ethernet cable which cleard Cable Bear test 40 million times or more
- Oil, heat, flame resistant and flexible PVC material used for sheath
- Flame rating : UL VW-1
- PoE correspondence : IEEE802.3af conformity

> Construction figure



> Label Marking

GVMV SB XXXXXX NMC-XXX

Section indicated with "XXXX": Control symbol

	Section indicated with "C" (connection method)		
Indicated symbol	No symbol	A	X
Connection	B connection on both ends Straight connection	A connection on both ends Straight connection	Cross connection

> > > Meeting standard

> Construction table

No. of pairs	Conductor		Diameter (inch/mm)	Shield		Electrical Characteristics		
	Size (AWG)	Construction (Line/mm)		Cable	Connector	Allowable ampacity (A)	Insulation resistance (MΩ)	Electrical strength (V/1min.)
4P	26 (0.128㎟)	30/0.08 (30/3.2mil)	0.252(6.4)	Tinned annealed copper braid shield	With RJ45 shield contact	1	more than 500	AC 500

> Electric characteristics (High Frequency)

This cable is based upon ANSI/TIA568-C.2
Category5e

> Connection

RJ45 Pin Number	A connection	B connection
1	White/Green	White/Orange
2	Green	Orange
3	White/Orange	White/Green
4	Blue	Blue
5	White/Blue	White/Blue
6	Orange	Green
7	White/Brown	White/Brown
8	Brown	Brown

※Blue/White indicates white core with blue stripe.

1m, 3m, 5m, and 7m length are stocked product.
It is custom order for outside of above length.

SSX10516 LF

Wiring inside equipment

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Flexibility	★
non-migratory	★★★★★
Transport property	★

※The characteristic is an aim.

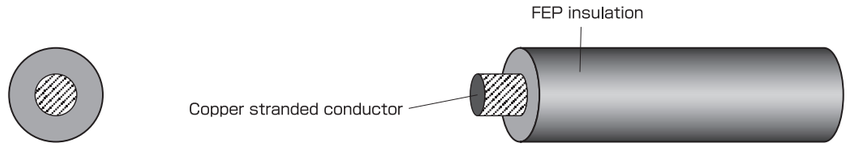
> Application

- The permittivity and the dielectric substance loss are small, andit is the best for the electric circuit where the transmisson speed improvement is required.
- Fluoroprastics resin insulated wire with UL at 600V, 200℃. (Category : AVLV2)

> Feature

- Fluoroplastics is used for the insulation.
- Making to a minute diameter is achieved.
- It is excellent to heat, cold, oil, chemical, and solvents resistant.
- Flame resisting:UL VW-1.

> Construction figure



> Identification

·black, white, red, yellow, blue, transparency, Y/G

※Y/G indicates green core with yellow stripe(30~50%).

> > > Meeting standard

Certification	UL AWM (10516)
Applicable standard	UL 758
Official symbol	UL STYLE 10516
Voltage rating	600V
Temperature rating	200℃
Conductor	UL 758
Flame rating	VW-1

> Construction table

No. of cores	Conductor			FEP insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Overall diameter (inch)	Overall diameter (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1C	28 (0.0804㎟)	7/0.127 (7/5mil)	0.38 (15mil)	0.031	0.78	1(2)	less than 222	more than 1000	2000	4.5
1C	26 (0.128㎟)	7/0.16 (7/6.3mil)	0.48 (19mil)	0.035	0.88	2(3)	less than 140	more than 1000	2000	6.1
1C	24 (0.204㎟)	7/0.203 (7/8mil)	0.61 (24mil)	0.040	1.01	3(4)	less than 89.4	more than 1000	2000	8.2
1C	22 (0.324㎟)	7/0.26 (7/10.2mil)	0.78 (31mil)	0.046	1.18	3(5)	less than 52.4	more than 1000	2000	11
1C	20 (0.518㎟)	7/0.32 (7/12.6mil)	0.96 (38mil)	0.054	1.36	5(8)	less than 34.6	more than 1000	2000	15
1C	18 (0.823㎟)	19/0.24 (19/9.4mil)	1.2 (47mil)	0.067	1.7	7(11)	less than 22.1	more than 1000	2000	21
1C	16 (1.30㎟)	19/0.30 (19/11.8mil)	1.5 (59mil)	0.079	2.0	11(16)	less than 14.1	more than 1000	2000	28

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Please multiply the following correction coefficient by the ambient temperature and the cable-laying conditions, etc.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100	110	120	130
Adjustment factors	1.00	0.97	0.94	0.91	0.87	0.84	0.80	0.77	0.73	0.69	0.64
Ambient temperature(℃)	140	150	160	170	180	190					
Adjustment factors	0.59	0.54	0.49	0.42	0.34	0.24					

●Adjustment factors(for multiple-line laying)

No. of condoctors	2~3	4	5~6	7~15	16~40	41~60	61~
Adjustment factors	0.70	0.63	0.56	0.49	0.43	0.39	0.34

> Standard sales length

(28AWG~26AWG is 500m length)
(24AWG~22AWG is 300m length)
(20AWG~16AWG is 200m length or longer)

HRF-SB/20276PEF LF

Heat resistance	★★★
Oil resistance	★★★★★
Noise resistance	★★★★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★★
Transport property	★

※The characteristic is an aim.

Electronic equipment cable

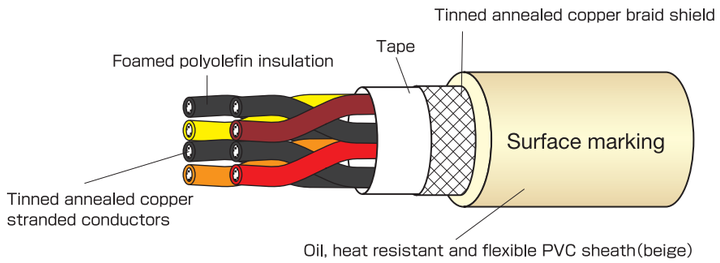
> Application

- Cable for RS485, RS422.
- For a high-speed interface of the SCSI standard.
- Shielded Electric equipment cable with UL at 30V, 80℃. (Category : AVLV2)

> Feature

- The foamed polyolefin is used for the insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Characteristic impedance:100±10Ω(single-end),130±10Ω. (differential)
- The color of the sheath is beige.
- Flame resisting:UL VW-1.

> Construction figure

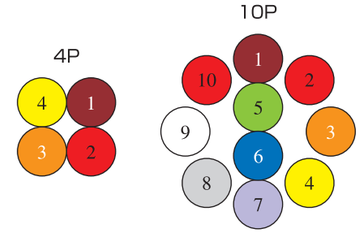


> Surface marking

> > > Meeting standard

Certification	UL AWM
Applicable standard	UL 758
Official symbol	UL STYLE 20276
Voltage rating	30V
Temperature rating	80℃
Conductor	UL 758
Flame rating	VW-1

> Identification



Figures ○ indicate pair number in the identification table.

●Identification table

Pair number	1	2	3	4	5	6	7	8	9	10
No.1 kind line	Black	Black	Black	Black	Black	Black	Black	Black	Black	Brown
No.2 kind line	Brown	Red	Orange	Yellow	Green	Blue	Purple	Gray	White	Red
Pair number	11	12	13	14	15	16	17	18	19	20
No.1 kind line	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Red	Red	Red
No.2 kind line	Orange	Yellow	Green	Blue	Purple	Gray	White	Orange	Yellow	Green
Pair number	21	22	23	24	25	26	27	28	29	30
No.1 kind line	Red	Red	Red	Red	Orange	Orange	Orange	Orange	Orange	Orange
No.2 kind line	Blue	Purple	Gray	White	Yellow	Green	Blue	Purple	Gray	White
Pair number	31	32	33	34						
No.1 kind line	Yellow	Yellow	Yellow	Yellow						
No.2 kind line	Green	Blue	Purple	Gray						

> Construction table

No. of pairs	Conductor			Foamed polyolefin insulation		Oil, heat, resistant flexible PVC sheath		Approx. weight	Electrical Characteristics			Allowable ampacity
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	(A)
○ 2P						0.189	4.8	20(30)				2.4
○ 3P						0.205	5.2	20(30)				2.0
○ 4P						0.217	5.5	27(40)				1.8
○ 5P						0.228	5.8	29(43)				1.7
○ 6P						0.244	6.2	34(50)				1.6
○ 7P						0.252	6.4	33(49)				1.5
○ 8P	30	7/0.10	0.30			0.283	7.2	37(55)				1.4
○10P	(0.0506㎟)	(7/3.9mil)	(12mil)	0.028	0.72	0.283	7.2	40(60)	less than 375	more than 100	500	1.3
○13P						0.319	8.1	44(65)				1.2
○14P						0.319	8.1	47(70)				1.2
○18P						0.346	8.8	57(85)				1.1
○20P						0.382	9.7	67(100)				1.0
○25P						0.406	10.3	74(110)				1.0
○30P						0.417	10.6	81(120)				0.93
○34P						0.441	11.2	91(135)				0.89

○:Indicates Make-to-order products.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

> Standard sales length

100m

HP-SB/20276SR LF

Electronic equipment cable

Heat resistance ★★★
Oil resistance ★★★★★
Noise resistance ★★★★
Flame resistance ★★★★
Flexibility ★★★
non-migratory ★★★★★
Transport property ★

※The characteristic is an aim.

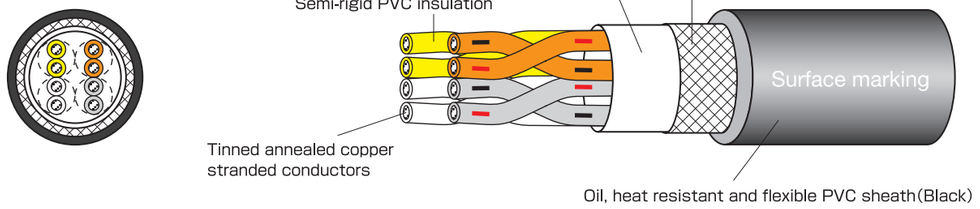
> Application

- Cable for RS232C.
- It is the best for the hafe pitch connector of the insulation displacement type.
- Shielded Electric equipment cable with UL at 30V, 80℃. (Category : AVLV2)

> Feature

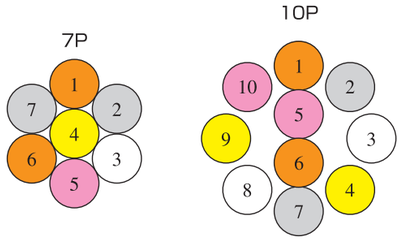
- Semi-rigid PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1.

> Construction figure



> Surface marking

> Identification



Figures ○ indicate pair number in the identification table.

> Standard sales length

100m

> > > Meeting standard

Certification	UL AWM
Applicable standard	UL 758
Official symbol	UL STYLE 20276
Voltage rating	30V
Temperature rating	80℃
Conductor	UL 758
Flame rating	VW-1

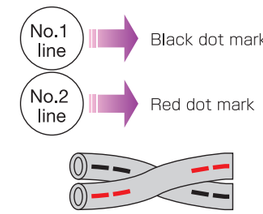
> Identification

●Identification table

Pair number	Color of insulation	Dot mark
1	Orange	
2	Gray	
3	White	
4	Yellow	
5	Peach	
6	Orange	
7	Gray	
8	White	
9	Yellow	
10	Peach	
11	Orange	
12	Gray	
13	White	
14	Yellow	
15	Peach	
16	Orange	
17	Gray	
18	White	
19	Yellow	
20	Peach	
21	Orange	(Continuation)
22	Gray	(Continuation)
23	White	(Continuation)
24	Yellow	(Continuation)
25	Peach	(Continuation)
26	Orange	
27	Gray	
28	White	
29	Yellow	
30	Peach	
31	Orange	
32	Gray	
33	White	
34	Yellow	
35	Peach	

※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

●Example of pare



In the color of the insulator, the 1st and 2nd wick line is the same color.

The color of the 1st kind and the 2nd kind of dot mark is a black and red.

> Construction table

No. of pairs	Conductor			Semi-rigid PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2P	28 (0.0804㎟)	7/0.127 (7/5mil)	0.38 (15mil)	0.023	0.58	0.165	4.2	16(24)	less than 211	more than 10	500	3.0
3P						0.181	4.6	20(30)				2.5
5P						0.201	5.1	26(38)				2.1
7P						0.220	5.6	31(46)				1.8
10P						0.228	5.8	37(55)				1.6
14P						0.252	6.4	47(70)				1.4
18P						0.283	7.2	57(85)				1.3
20P						0.295	7.5	60(90)				1.3
25P						0.319	8.1	71(105)				1.2
34P						0.346	8.8	87(130)				1.0

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

HK/20276XL LF

Electronic equipment cable

Heat resistance	★★★
Oil resistance	★★★★★
Noise resistance	★★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

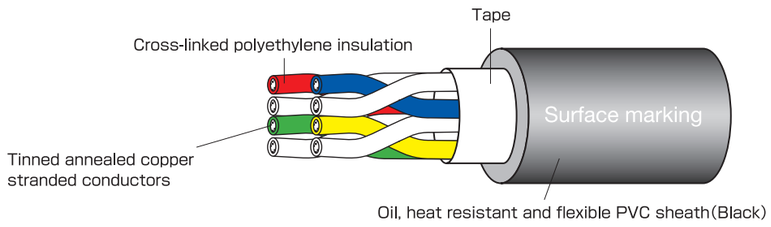
> Application

- Electric equipment cable with UL and cUL at 30V, 80℃. (Category : AVLV2, AVLV8)
- Cable for RS485, RS422.

> Feature

- Cross-linked polyethylene used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Filler of which dust doesn't go out easily is used.
- Flame resisting:UL VW-1, cUL FT1.

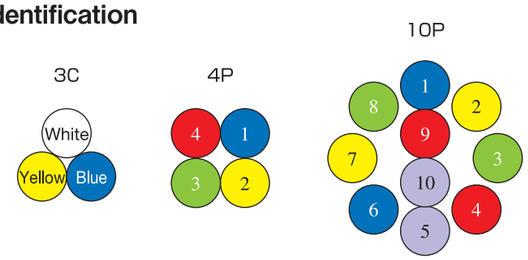
> Construction figure



> Surface marking

E67647 AWM 20276 80℃ 30V VW-1 TAIYO c AWM IIA 80℃ 30V FT1 TAIYO LF R15

> Identification



Figures ○ indicate pair number in the identification table.

●Identification table

Pair number	1	2	3	4	5	6	7	8	9	10
No.1 kind line	Blue	Yellow	Green	Red	Purple	Blue	Yellow	Green	Red	Purple
No.2 kind line	White					Brown				
Pair number	11	12	13	14	15	16	17	18	19	20
No.1 kind line	Blue	Yellow	Green	Red	Purple	Blue	Yellow	Green	Red	Purple
No.2 kind line	Black					Gray				
Pair number	21	22	23	24	25					
No.1 kind line	Blue	Yellow	Green	Red	Purple					
No.2 kind line	Orange									

> > > Meeting standard

Certification	UL AWM	cUL
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 20276	CSA AWM ⅡA
Voltage rating	30V	30V
Temperature rating	80℃	80℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Construction table

No. of cores	Conductor			Cross-linked polyethylene insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
3C	26 (0.128㎟)	7/0.16 (7/6.3mil)	0.48 (19mil)	0.035	0.88	0.150	3.8	11(17)	less than 154	more than 1000	500	4.0
3C	24 (0.204㎟)	7/0.203 (7/8mil)	0.61 (24mil)	0.044	1.11	0.169	4.3	15(22)	less than 98.3	more than 1000	500	5.3
3C	22 (0.324㎟)	7/0.26 (7/10.2mil)	0.78 (31mil)	0.054	1.38	0.193	4.9	20(30)	less than 63.2	more than 1000	500	7.0

No. of pairs	Conductor			Cross-linked polyethylene insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P	26 (0.128㎟)	7/0.16 (7/6.3mil)	0.48 (19mil)	0.035	0.88	0.146	3.7	10(15)	less than 154	more than 1000	500	4.8
2P						0.177	4.5	15(23)				3.7
3P						0.197	5.0	20(30)				3.2
4P						0.213	5.4	22(33)				2.9
5P						0.228	5.8	26(39)				2.7
6P						0.248	6.3	30(45)				2.5
7P						0.248	6.3	32(47)				2.3
8P						0.283	7.2	37(55)				2.3
10P						0.283	7.2	44(65)				2.1
12P						0.311	7.9	50(75)				2.0
15P						0.343	8.7	57(85)				1.8
18P						0.370	9.4	71(105)				1.7
20P						0.406	10.3	77(115)				1.7
25P						0.433	11.0	94(140)				1.6
1P	24 (0.204㎟)	7/0.203 (7/8mil)	0.61 (24mil)	0.044	1.11	0.161	4.1	13(19)	less than 98.3	more than 1000	500	6.3
2P						0.205	5.2	22(32)				5.0
3P						0.228	5.8	26(39)				4.3
4P						0.248	6.3	32(47)				3.9
5P						0.268	6.8	37(55)				3.6
6P						0.287	7.3	40(60)				3.4
7P						0.287	7.3	44(65)				3.1
8P						0.335	8.5	54(80)				3.1
10P						0.335	8.5	60(90)				2.8
12P						0.378	9.6	74(110)				2.7
15P						0.417	10.6	87(130)				2.5
18P						0.441	11.2	101(150)				2.3
20P						0.488	12.4	114(170)				2.3
25P						0.524	13.3	134(200)				2.1
1P	22 (0.324㎟)	7/0.26 (7/10.2mil)	0.78 (31mil)	0.054	1.38	0.185	4.7	17(25)	less than 63.2	more than 1000	500	8.3
2P						0.236	6.0	30(44)				6.6
3P						0.268	6.8	37(55)				5.7
4P						0.291	7.4	44(65)				5.2
5P						0.315	8.0	50(75)				4.8
6P						0.343	8.7	60(90)				4.6
7P						0.343	8.7	64(95)				4.2
8P						0.409	10.4	81(120)				4.2
10P						0.409	10.4	94(140)				3.8
12P						0.457	11.6	111(165)				3.6
15P						0.504	12.8	131(195)				3.4
18P						0.531	13.5	155(230)				3.2
20P						0.622	15.8	192(285)				3.1
25P						0.665	16.9	228(340)				2.9

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

> Standard sales length

100m (Sales by short length is available for large sizes. Please contact us which sizes are available.)

HK-SB/20276XL LF

Electronic equipment cable

Heat resistance	★★★
Oil resistance	★★★★★
Noise resistance	★★★★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

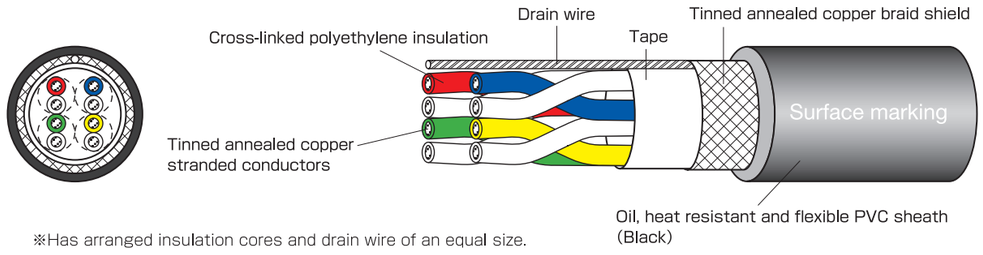
> Application

- Shielded Electric equipment cable with UL and cUL at 30V, 80℃. (Category : AVLV2, AVLV8)
- Cable for RS485, RS422.

> Feature

- Cross-linked polyethylene used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Filler of which dust doesn't go out easily is used.
- With drain wire.
- Flame resisting:UL VW-1, cUL FT1.

> Construction figure

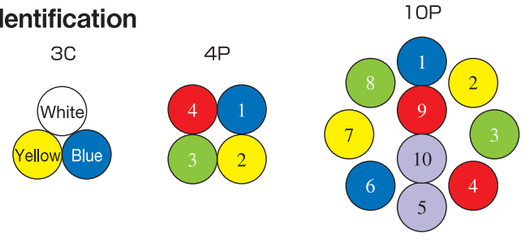


※Has arranged insulation cores and drain wire of an equal size.

> Surface marking

E67647 AWM 20276 80℃ 30V VW-1 TAIYO c AWM IIA 80℃ 30V FT1 TAIYO LF R15

> Identification



Figures ○ indicate pair number in the identification table.

●Identification table

Pair number	1	2	3	4	5	6	7	8	9	10
No.1 kind line	Blue	Yellow	Green	Red	Purple	Blue	Yellow	Green	Red	Purple
No.2 kind line	White					Brown				
Pair number	11	12	13	14	15	16	17	18	19	20
No.1 kind line	Blue	Yellow	Green	Red	Purple	Blue	Yellow	Green	Red	Purple
No.2 kind line	Black					Gray				
Pair number	21	22	23	24	25					
No.1 kind line	Blue	Yellow	Green	Red	Purple					
No.2 kind line	Orange									

> > > Meeting standard

Certification	UL AWM	cUL
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 20276	CSA AWM ⅡA
Voltage rating	30V	30V
Temperature rating	80℃	80℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

> Construction table

No. of cores	Conductor			Cross-linked polyethylene insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
3C	26 (0.128㎟)	7/0.16 (7/6.3mil)	0.48 (19mil)	0.035	0.88	0.173	4.4	19(28)	less than 154	more than 1000	500	4.1
3C	24 (0.204㎟)	7/0.203 (7/8mil)	0.61 (24mil)	0.044	1.11	0.193	4.9	24(36)	less than 98.3	more than 1000	500	5.5
3C	22 (0.324㎟)	7/0.26 (7/10.2mil)	0.78 (31mil)	0.054	1.38	0.217	5.5	32(47)	less than 63.2	more than 1000	500	7.2

No. of pairs	Conductor			Cross-linked polyethylene insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P	26 (0.128㎟)	7/0.16 (7/6.3mil)	0.48 (19mil)	0.035	0.88	0.169	4.3	17(26)	less than 154	more than 1000	500	5.0
2P						0.201	5.1	25(37)				3.9
3P						0.220	5.6	30(45)				3.3
4P						0.236	6.0	34(50)				3.0
5P						0.252	6.4	37(55)				2.7
6P						0.272	6.9	44(65)				2.6
7P						0.272	6.9	47(70)				2.4
8P						0.307	7.8	54(80)				2.4
10P						0.307	7.8	57(85)				2.1
12P						0.335	8.5	67(100)				2.0
15P						0.374	9.5	81(120)				1.9
18P						0.398	10.1	94(140)				1.8
20P						0.433	11.0	104(155)				1.7
25P						0.461	11.7	121(180)				1.6
1P	24 (0.204㎟)	7/0.203 (7/8mil)	0.61 (24mil)	0.044	1.11	0.185	4.7	21(31)	less than 98.3	more than 1000	500	6.5
2P						0.228	5.8	32(48)				5.1
3P						0.252	6.4	40(60)				4.4
4P						0.272	6.9	47(70)				4.0
5P						0.291	7.4	50(75)				3.7
6P						0.311	7.9	57(85)				3.5
7P						0.311	7.9	60(90)				3.2
8P						0.366	9.3	77(115)				3.2
10P						0.366	9.3	84(125)				2.9
12P						0.406	10.3	97(145)				2.7
15P						0.445	11.3	114(170)				2.6
18P						0.469	11.9	131(195)				2.4
20P						0.520	13.2	151(225)				2.4
25P						0.555	14.1	175(260)				2.2
1P	22 (0.324㎟)	7/0.26 (7/10.2mil)	0.78 (31mil)	0.054	1.38	0.209	5.3	28(41)	less than 63.2	more than 1000	500	8.6
2P						0.260	6.6	44(65)				6.8
3P						0.291	7.4	54(80)				5.9
4P						0.315	8.0	64(95)				5.3
5P						0.339	8.6	71(105)				4.9
6P						0.374	9.5	84(125)				4.7
7P						0.374	9.5	91(135)				4.3
8P						0.437	11.1	111(165)				4.3
10P						0.437	11.1	124(185)				3.9
12P						0.484	12.3	144(215)				3.7
15P						0.535	13.6	171(255)				3.5
18P						0.563	14.3	195(290)				3.2
20P						0.654	16.6	239(355)				3.2
25P						0.697	17.7	279(415)				2.9

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

> Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

CL2/2464-3599-DS LF

Electronic equipment cable

Heat resistance	★★★
Oil resistance	★★★★★
Noise resistance	★★★★★
Flame resistance	★★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

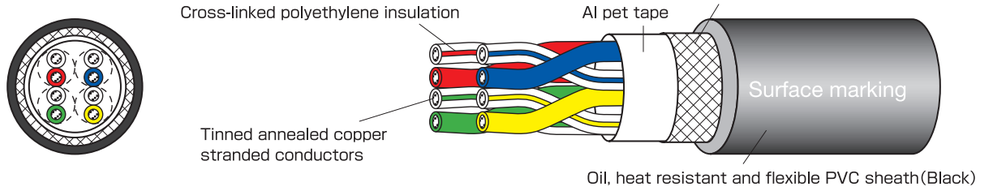
> Application

- Cable for RS485, RS422.
- It is possible to use it as a signal, remote control tray cable.
- Double Shielded Electric equipment cable with UL and cUL at 300V, 80℃.
  (Category : QPTZ, AVLV2, AVLV8)
- Obtaining UL Listed CL2, this cable compliants to NFPA70,79.

> Feature

- Cross-linked polyethylene used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Characteristic impedance : 100±15Ω(5MHz)(differential).
- Flame resisting:UL VW-1, cUL FT1.
- It passes Vertical-Tray Flame Test of UL.

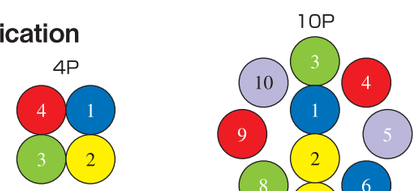
> Construction figure



> Surface marking

E242171 (UL) CL2 75℃ □□AWG or AWM 2464 80℃ 300V VW-1 E67647 c AWM IIA 80℃ 300V FT1 TAIYO LF R15

> Identification



Figures ○ indicate pair number in the identification table.

●Identification table

Pair number	1	2	3	4	5	6	7	8	9	10
No.1 kind line	Blue	Yellow	Green	Red	Purple	Blue	Yellow	Green	Red	Purple
No.2 kind line	Blue/White	Yellow/White	Green/White	Red/White	Purple/White	Blue/Brown	Yellow/Brown	Green/Brown	Red/Brown	Purple/Brown
Pair number	11	12	13	14	15					
No.1 kind line	Blue	Yellow	Green	Red	Purple					
No.2 kind line	Blue/Black	Yellow/Black	Green/Black	Red/Black	Purple/Black					

White/Black indicates black core with white stripe.

> > > Meeting standard

Certification	UL CL2	UL AWM	cUL AWM
Applicable standard	UL 13	UL 758	CSA C22.2 No.210
Official symbol	CL2	UL STYLE 2464	CSA AWM ⅡA
Voltage rating	150V	300V	300V
Temperature rating	75℃	80℃	80℃
Conductor	UL 13	UL 758	CSA C22.2 No.210
Flame rating	Vertical-Tray Flame Test	VW-1	FT1

> Construction table

No. of pairs	Conductor			Cross-linked polyethylene insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P	24 (0.204㎟)	7/0.203 (7/8mil)	0.61 (24mil)	0.047	1.2	0.201	5.1	24(35)	less than 97.5	more than 100	2000	6.6
2P						0.264	6.7	37(55)				5.3
3P						0.280	7.1	44(65)				4.5
4P						0.303	7.7	50(75)				4.1
5P						0.327	8.3	57(85)				3.8
7P						0.350	8.9	67(100)				3.3
10P						0.406	10.3	94(140)				3.0
15P						0.492	12.5	124(185)				2.6
1P	22 (0.324㎟)	7/0.26 (7/10.2mil)	0.78 (31mil)	0.059	1.5	0.224	5.7	29(43)	less than 57.5	more than 100	2000	9.0
2P						0.299	7.6	50(75)				7.3
3P						0.319	8.1	57(85)				6.2
4P						0.346	8.8	71(105)				5.6
5P						0.374	9.5	81(120)				5.2
7P						0.406	10.3	97(145)				4.6
10P						0.472	12.0	131(195)				4.1
15P						0.618	15.7	205(305)				3.7
1P	20 (0.518㎟)	21/0.18 (21/7.1mil)	0.95 (37mil)	0.069	1.75	0.244	6.2	34(50)	less than 36.2	more than 100	2000	11
2P						0.335	8.5	60(90)				9.7
3P						0.358	9.1	74(110)				8.3
4P						0.394	10.0	91(135)				7.5
5P						0.425	10.8	104(155)				7.0
7P						0.461	11.7	124(185)				6.1
10P						0.543	13.8	175(260)				5.5
15P						0.705	17.9	269(400)				4.9
1P	18 (0.823㎟)	35/0.18 (35/7.1mil)	1.20 (47mil)	0.094	2.4	0.295	7.5	50(75)	less than 22.8	more than 100	2000	16
2P						0.425	10.8	94(140)				13
3P						0.457	11.6	114(170)				11
5P						0.551	14.0	168(250)				9.6
10P						0.744	18.9	309(460)				7.6
1P	16 (1.30㎟)	26/0.26 (26/10.2mil)	1.50 (59mil)	0.114	2.9	0.339	8.6	64(95)	less than 14.3	more than 100	2000	21
2P						0.492	12.5	124(185)				17
3P						0.535	13.6	158(235)				15

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

> Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

CM/2464-1061/ⅡA LF

Electronic equipment cable

Multi core cable		Multi pair cable	
Heat resistance	★★★	Heat resistance	★★★
Oil resistance	★★★★★	Oil resistance	★★★★★
Noise resistance	★	Noise resistance	★★
Flame resistance	★★★★★	Flame resistance	★★★★★
Flexibility	★★★	Flexibility	★★★
non-migratory	★★★★	non-migratory	★★★★
Transport property	★	Transport property	★

※The characteristic is an aim.　※The characteristic is an aim.

> Application

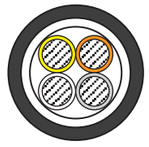
- Cable for RS232C (Only multi pair cables).
- It is possible to use it as a communication tray cable.
- The substitutions for UL13 CL3, CL3X shall be permitted.
- Electric equipment cable with UL and cUL at 300V, 80℃.
  (Category: DUZX, DUZX7, AVLV2, AVLV8)
- Obtaining UL Listed CM, this cable compliants to NFPA70,79.

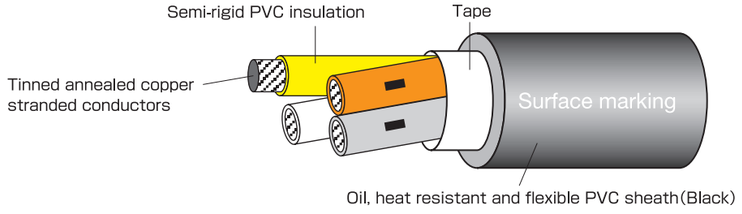
> Feature

- Semi-rigid PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.
- It passes Vertical-Tray Flame Test of UL.

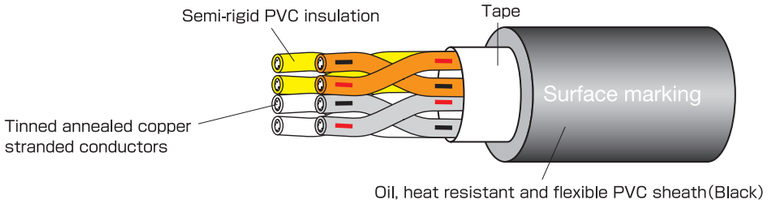
> Construction figure

·Multi core cable





·Multi pair cable



> Surface marking

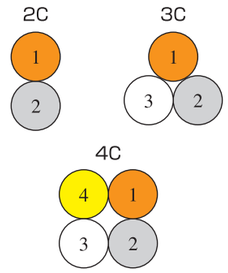
E176892(UL) CM □□AWG 75℃ or AWM 2464 80℃ 300V VW-1 or c(UL) CM □□AWG 75℃ or AWM ⅡA 80℃ 300V FT1 TAIYO LF R15

> > > Meeting standard

Certification	UL CM	cUL CM	UL AWM	cUL AWM
Applicable standard	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Official symbol	CM	CM	UL STYLE 2464	CSA AWM ⅡA
Voltage rating	300V	300V	300V	300V
Temperature rating	75℃	75℃	80℃	80℃
Conductor	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Flame rating	Vertical-Tray Flame Test	Vertical-Tray Flame Test	VW-1	FT1

> Identification

·2C～4C

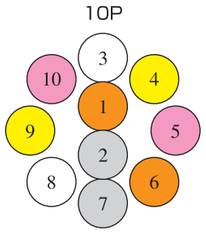


●Identification table1

Line number	Color of insulation	Dot mark
1	Orange	▬
2	Gray	▬
3	White	▬
4	Yellow	▬
5	Peach	▬
6	Orange	▬ ▬
7	Gray	▬ ▬
8	White	▬ ▬
9	Yellow	▬ ▬
10	Peach	▬ ▬

Figures ○ indicate core number in the identification table 1.
※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

·Multi pair cable



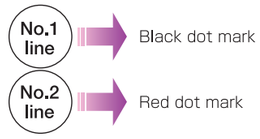
●Identification table2

Pair number	Color of insulation	Dot mark
1	Orange	▬ / ▬
2	Gray	▬ / ▬
3	White	▬ / ▬
4	Yellow	▬ / ▬
5	Peach	▬ / ▬
6	Orange	▬ ▬ / ▬ ▬
7	Gray	▬ ▬ / ▬ ▬
8	White	▬ ▬ / ▬ ▬
9	Yellow	▬ ▬ / ▬ ▬
10	Peach	▬ ▬ / ▬ ▬
11	Orange	▬ ▬ ▬ / ▬ ▬ ▬
12	Gray	▬ ▬ ▬ / ▬ ▬ ▬
13	White	▬ ▬ ▬ / ▬ ▬ ▬
14	Yellow	▬ ▬ ▬ / ▬ ▬ ▬
15	Peach	▬ ▬ ▬ / ▬ ▬ ▬

Pair number	Color of insulation	Dot mark
16	Orange	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
17	Gray	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
18	White	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
19	Yellow	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
20	Peach	▬ ▬ ▬ ▬ / ▬ ▬ ▬ ▬
21	Orange	▬ ▬ ▬ ▬ ▬ (Continuation) / ▬ ▬ ▬ ▬ ▬ (Continuation)
22	Gray	▬ ▬ ▬ ▬ ▬ (Continuation) / ▬ ▬ ▬ ▬ ▬ (Continuation)
23	White	▬ ▬ ▬ ▬ ▬ (Continuation) / ▬ ▬ ▬ ▬ ▬ (Continuation)
24	Yellow	▬ ▬ ▬ ▬ ▬ (Continuation) / ▬ ▬ ▬ ▬ ▬ (Continuation)
25	Peach	▬ ▬ ▬ ▬ ▬ (Continuation) / ▬ ▬ ▬ ▬ ▬ (Continuation)
26	Orange	▬ / ▬
27	Gray	▬ / ▬
28	White	▬ / ▬
29	Yellow	▬ / ▬
30	Peach	▬ / ▬

Figures ○ indicate pair number in the identification table 2.
※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

●Example of pare



The color of the insulator, the 1st and 2nd core is the same color.

The color of the 1st kind and the 2nd kind of dot mark is a black and red.

CM/2464-1061/ⅡA LF

Electronic equipment cable

> Construction table

No. of cores	Conductor			Semi-rigid PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
3C	26 (0.128㎟)	7/0.16 (7/6.3mil)	0.48 (19mil)	0.039	1.00	0.161	4.1	13(19)	less than 146	more than 10	2000	4.1
2C						0.165	4.2	13(20)				6.3
3C	24 (0.204㎟)	7/0.203 (7/8mil)	0.61 (24mil)	0.045	1.15	0.173	4.4	15(23)	less than 97.5	more than 10	2000	5.3
4C						0.185	4.7	19(28)				4.7

No. of pairs	Conductor			Semi-rigid PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P	26 (0.128㎟)	7/0.16 (7/6.3mil)	0.48 (19mil)	0.039	1.00	0.154	3.9	11(16)	less than 146	more than 10	2000	4.9
2P						0.185	4.7	18(27)				3.8
3P						0.209	5.3	22(33)				3.3
4P						0.224	5.7	26(38)				3.0
5P						0.240	6.1	30(44)				2.8
6P						0.260	6.6	34(50)				2.6
7P						0.260	6.6	37(55)				2.4
8P						0.299	7.6	40(60)				2.4
10P						0.299	7.6	47(70)				2.2
12P						0.331	8.4	57(85)				2.1
15P						0.366	9.3	67(100)				1.9
18P						0.386	9.8	77(115)				1.8
20P						0.425	10.8	87(130)				1.8
25P						0.457	11.6	104(155)				1.6
30P						0.472	12.0	121(180)				1.5
3P	24 (0.204㎟)	7/0.203 (7/8mil)	0.61 (24mil)	0.045	1.15	0.228	5.8	26(39)	less than 97.5	more than 10	2000	4.3
4P						0.248	6.3	32(47)				3.8
5P						0.268	6.8	37(55)				3.6
6P						0.287	7.3	44(65)				3.4
7P						0.287	7.3	47(70)				3.1
8P						0.335	8.5	54(80)				3.1
10P						0.335	8.5	64(95)				2.8
12P						0.370	9.4	74(110)				2.7
15P						0.409	10.4	91(135)				2.5
18P						0.429	10.9	104(155)				2.3
20P						0.476	12.1	118(175)				2.3
25P						0.512	13.0	141(210)				2.1
30P						0.531	13.5	165(245)				2.0

> > > Meeting standard

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

> Standard sales length

100m

CM/2464-1007/ⅡA LF

Electronic equipment cable

Heat resistance	★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

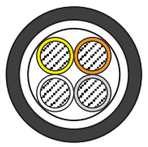
> Application

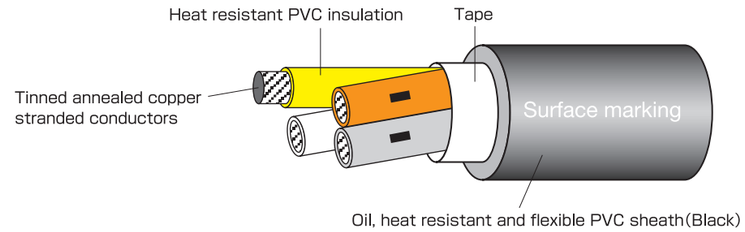
- It is possible to use it as a communication tray cable.
- The substitutions for UL13 CL3, CL3X shall be permitted.
- Electric equipment cable with UL and cUL at 300V, 80℃.
  (Category : DUZX, DUZX7, AVLV2, AVLV8)
- Obtaining UL Listed CM, this cable compliants to NFPA70,79.

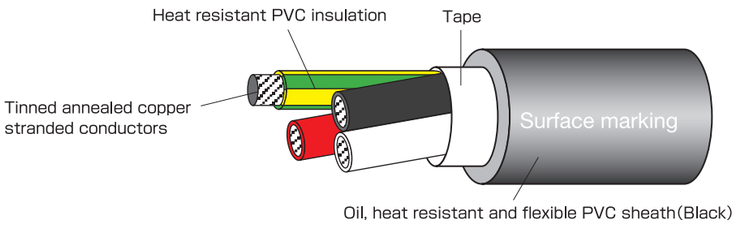
> Feature

- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.
- It passes Vertical-Tray Flame Test of UL.

> Construction figure







> Surface marking

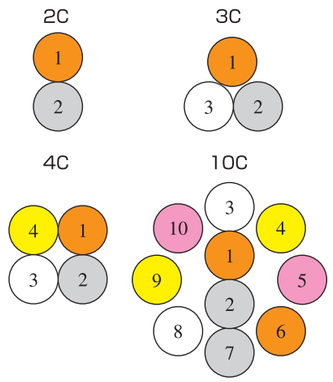
E176892 (UL) CM □□AWG 75℃ or AWM 2464 80℃ 300V VW-1 or c(UL) CM □□AWG 75℃ or AWM ⅡA 80℃ 300V FT1 TAIYO LF R15

> > > Meeting standard

Certification	UL CM	cUL CM	UL AWM	cUL AWM
Applicable standard	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Official symbol	CM	CM	UL STYLE 2464	CSA AWM ⅡA
Voltage rating	300V	300V	300V	300V
Temperature rating	75℃	75℃	80℃	80℃
Conductor	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Flame rating	Vertical-Tray Flame Test	Vertical-Tray Flame Test	VW-1	FT1

> Identification

(1)For 22 and 20AWG



●Identification table

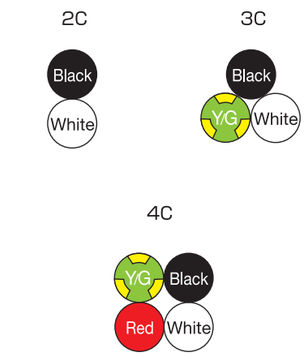
Line number	Color of insulation	Dot mark
1	Orange	▬
2	Gray	▬
3	White	▬
4	Yellow	▬
5	Peach	▬
6	Orange	▬ ▬
7	Gray	▬ ▬
8	White	▬ ▬
9	Yellow	▬ ▬
10	Peach	▬ ▬
11	Orange	▬ ▬ ▬
12	Gray	▬ ▬ ▬
13	White	▬ ▬ ▬
14	Yellow	▬ ▬ ▬
15	Peach	▬ ▬ ▬

Line number	Color of insulation	Dot mark
16	Orange	▬ ▬ ▬ ▬
17	Gray	▬ ▬ ▬ ▬
18	White	▬ ▬ ▬ ▬
19	Yellow	▬ ▬ ▬ ▬
20	Peach	▬ ▬ ▬ ▬
21	Orange	▬ ▬ ▬ ▬ ▬ (Continuation)
22	Gray	▬ ▬ ▬ ▬ ▬ (Continuation)
23	White	▬ ▬ ▬ ▬ ▬ (Continuation)
24	Yellow	▬ ▬ ▬ ▬ ▬ (Continuation)
25	Peach	▬ ▬ ▬ ▬ ▬ (Continuation)
26	Orange	▬▬
27	Gray	▬▬
28	White	▬▬
29	Yellow	▬▬
30	Peach	▬▬

Figures ○ indicate core number in the identification table.
※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

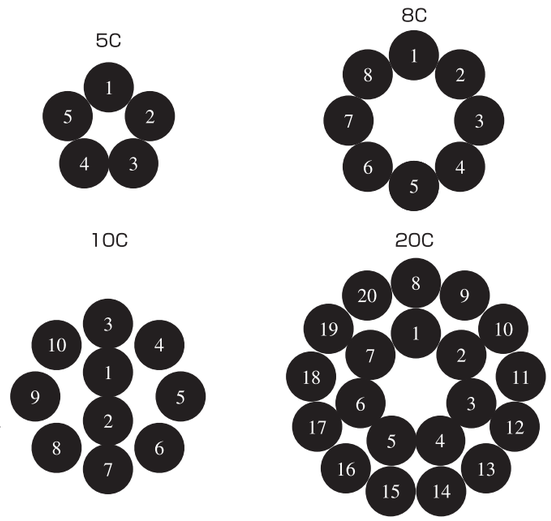
(2)For 18 and 16AWG(※20AWG is 2, 3, 4C only).

·2C~4C



※Y/G indicates green core with yellow stripe(30~50%).

·5 cores or more is identified by numbering



Figures in ○ indicate white numbering on black insulator.

CM/2464-1007/ⅡA LF

Electronic equipment cable

> Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C						0.217	5.5	23(34)				9.0
3C						0.224	5.7	26(38)				7.6
4C						0.244	6.2	31(46)				6.8
5C						0.260	6.6	37(55)				6.3
6C						0.280	7.1	40(60)				6.0
8C	22 (0.324㎟)	17/0.16 (17/6.3mil)	0.76 (30mil)	0.066	1.68	0.323	8.2	54(80)	less than 57.5	more than 10	2000	5.5
10C						0.346	8.8	64(95)				5.1
12C						0.358	9.1	71(105)				4.8
16C						0.394	10.0	87(130)				4.3
20C						0.433	11.0	108(160)				4.0
30C						0.508	12.9	151(225)				3.5
2C						0.228	5.8	26(39)				11
3C						0.240	6.1	32(48)				9.9
4C						0.260	6.6	37(55)				8.9
6C						0.303	7.7	54(80)				7.8
8C						0.350	8.9	67(100)				7.3
10C	20 (0.518㎟)	21/0.18 (21/7.1mil)	0.95 (37mil)	0.074	1.87	0.378	9.6	81(120)	less than 36.2	more than 10	2000	6.7
12C						0.390	9.9	91(135)				6.2
16C						0.429	10.9	114(170)				5.7
20C						0.472	12.0	141(210)				5.3
24C						0.524	13.3	168(250)				5.0
30C						0.555	14.1	198(295)				4.6
2C						0.252	6.4	34(50)				15
3C						0.264	6.7	44(65)				15
4C						0.283	7.2	50(75)				13
6C						0.335	8.5	71(105)				10
8C	18 (0.823㎟)	35/0.18 (35/7.1mil)	1.2 (47mil)	0.083	2.1	0.386	9.8	94(140)	less than 22.8	more than 10	2000	9.5
10C						0.417	10.6	111(165)				8.9
12C						0.433	11.0	128(190)				8.2
16C						0.476	12.1	161(240)				7.5
20C						0.528	13.4	198(295)				7.0
30C						0.661	16.8	306(455)				6.1
2C						0.276	7.0	44(65)				20
3C	16 (1.30㎟)	26/0.26 (26/10.2mil)	1.5 (59mil)	0.096	2.45	0.291	7.4	57(85)	less than 14.3	more than 10	2000	20
4C						0.315	8.0	71(105)				17
6C						0.374	9.5	94(140)				13

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168. Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following correction coefficient by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70.

● Adjustment factors (at ambient temperature)

Ambient temperature (℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

> Standard sales length

100m

CM/2464-1061/ⅡA-SB LF

Electronic equipment cable

Multi core cable		Multi pair cable	
Heat resistance	★★★	Heat resistance	★★★
Oil resistance	★★★★★	Oil resistance	★★★★★
Noise resistance	★★★	Noise resistance	★★★★
Flame resistance	★★★★★	Flame resistance	★★★★★
Flexibility	★★★	Flexibility	★★★
non-migratory	★★★★	non-migratory	★★★★
Transport property	★	Transport property	★

※The characteristic is an aim.　※The characteristic is an aim.

> Application

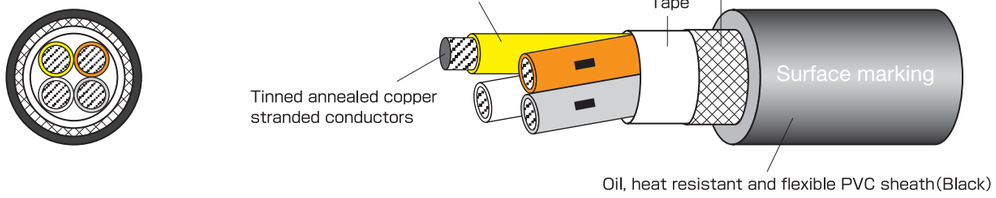
- Cable for RS232C (Only multi pair cables).
- It is possible to use it as a communication tray cable.
- The substitutions for UL13 CL3, CL3X shall be permitted.
- Shielded Electric equipment cable with UL and cUL at 300V, 80℃.
  (Category : DUZX, DUZX7, AVLV2, AVLV8)
- Obtaining UL Listed CM, this cable compliants to NFPA70,79.

> Feature

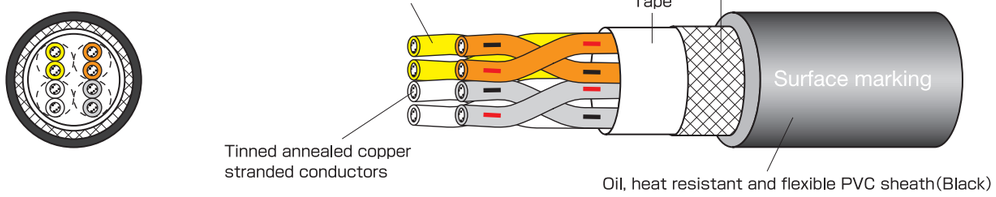
- Semi-rigid PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.
- It passes Vertical-Tray Flame Test of UL.

> Construction figure

·Multi core cable



·Multi pair cable



> Surface marking

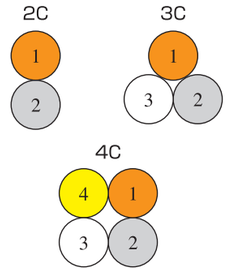
E176892 (UL) CM □□AWG 75℃ or AWM 2464 80℃ 300V VW-1 or c(UL) CM □□AWG 75℃ or AWM ⅡA 80℃ 300V FT1 TAIYO LF R15

> > > Meeting standard

Certification	UL CM	cUL CM	UL AWM	cUL AWM
Applicable standard	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Official symbol	CM	CM	UL STYLE 2464	CSA AWM ⅡA
Voltage rating	300V	300V	300V	300V
Temperature rating	75℃	75℃	80℃	80℃
Conductor	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Flame rating	Vertical-Tray Flame Test	Vertical-Tray Flame Test	VW-1	FT1

> Identification

·2C～4C

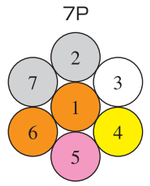


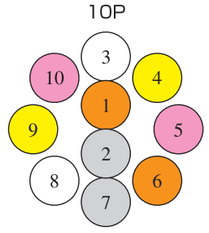
●Identification table1

Line number	Color of insulation	Dot mark
1	Orange	—
2	Gray	—
3	White	—
4	Yellow	—
5	Peach	—
6	Orange	— —
7	Gray	— —
8	White	— —
9	Yellow	— —
10	Peach	— —

Figures ○ indicate core number in the identification table 1.
※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

·Multi pair cable





●Identification table2

Pair number	Color of insulation	Dot mark
1	Orange	—
		—
2	Gray	—
		—
3	White	—
		—
4	Yellow	—
		—
5	Peach	—
		—
6	Orange	— —
		— —
7	Gray	— —
		— —
8	White	— —
		— —
9	Yellow	— —
		— —
10	Peach	— —
		— —
11	Orange	— — —
		— — —
12	Gray	— — —
		— — —
13	White	— — —
		— — —
14	Yellow	— — —
		— — —
15	Peach	— — —
		— — —

Pair number	Color of insulation	Dot mark
16	Orange	— — — —
		— — — —
17	Gray	— — — —
		— — — —
18	White	— — — —
		— — — —
19	Yellow	— — — —
		— — — —
20	Peach	— — — —
		— — — —
21	Orange	— — — — (Continuation)
		— — — — (Continuation)
22	Gray	— — — — (Continuation)
		— — — — (Continuation)
23	White	— — — — (Continuation)
		— — — — (Continuation)
24	Yellow	— — — — (Continuation)
		— — — — (Continuation)
25	Peach	— — — — (Continuation)
		— — — — (Continuation)
26	Orange	— — — —
		— — — —
27	Gray	— — — —
		— — — —
28	White	— — — —
		— — — —
29	Yellow	— — — —
		— — — —
30	Peach	— — — —
		— — — —

Figures ○ indicate pair number in the identification table 2.
※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

●Example of pare

The color of the insulator, the 1st and 2nd core is the same color.

The color of the 1st kind and the 2nd kind of dot mark is a black and red.

CM/2464-1061/ⅡA-SB LF

Electronic equipment cable

Construction table

No. of cores	Conductor			Semi-rigid PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	24 (0.204㎟)	7/0.203 (7/8mil)	0.61 (24mil)	0.045	1.15	0.189	4.8	21(31)	less than 97.5	more than 10	2000	6.4
3C						0.197	5.0	24(35)				5.4
4C						0.209	5.3	28(41)				4.9

No. of pairs	Conductor			Semi-rigid PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P	26 (0.128㎟)	7/0.16 (7/6.3mil)	0.48 (19mil)	0.039	1.00	0.177	4.5	18(27)	less than 146	more than 10	2000	5.1
2P						0.209	5.3	27(40)				4.0
3P						0.232	5.9	32(48)				3.4
4P						0.248	6.3	37(55)				3.1
5P						0.264	6.7	40(60)				2.8
6P						0.283	7.2	47(70)				2.7
7P						0.283	7.2	50(75)				2.5
8P						0.323	8.2	57(85)				2.5
10P						0.323	8.2	64(95)				2.2
12P						0.354	9.0	74(110)				2.1
15P						0.394	10.0	91(135)				2.0
18P						0.413	10.5	104(155)				1.8
20P						0.453	11.5	114(170)				1.8
25P						0.484	12.3	134(200)				1.7
30P						0.504	12.8	158(235)				1.6
3P	24 (0.204㎟)	7/0.203 (7/8mil)	0.61 (24mil)	0.045	1.15	0.252	6.4	37(55)	less than 97.5	more than 10	2000	4.4
4P						0.272	6.9	44(65)				3.9
5P						0.291	7.4	50(75)				3.6
6P						0.311	7.9	60(90)				3.4
7P						0.311	7.9	64(95)				3.2
8P						0.358	9.1	74(110)				3.2
10P						0.358	9.1	81(120)				2.9
12P						0.398	10.1	97(145)				2.7
15P						0.437	11.1	118(175)				2.5
18P						0.457	11.6	134(200)				2.4
20P						0.508	12.9	155(230)				2.3
25P						0.543	13.8	181(270)				2.2
30P						0.563	14.3	205(305)				2.0

> > > Meeting standard

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

Standard sales length

100m

CM/2464-1007/ⅡA-SB LF

Electronic equipment cable

Multi core cable		Multi pair cable	
Heat resistance	★★★	Heat resistance	★★★
Oil resistance	★★★★★	Oil resistance	★★★★★
Noise resistance	★★★	Noise resistance	★★★★
Flame resistance	★★★★★	Flame resistance	★★★★★
Flexibility	★★★	Flexibility	★★★
non-migratory	★★★★	non-migratory	★★★★
Transport property	★	Transport property	★

※The characteristic is an aim. ※The characteristic is an aim.

> Application

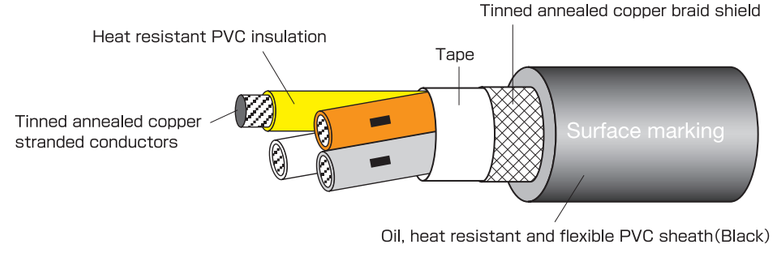
- Cable for RS232C (Only multi pair cables).
- It is possible to use it as a communication tray cable.
- The substitutions for UL13 CL3, CL3X shall be permitted.
- Shielded Electric equipment cable with UL and cUL at 300V, 80℃.
  (Category : DUZX, DUZX7, AVLV2, AVLV8)
- Obtaining UL Listed CM, this cable compliants to NFPA70,79.

> Feature

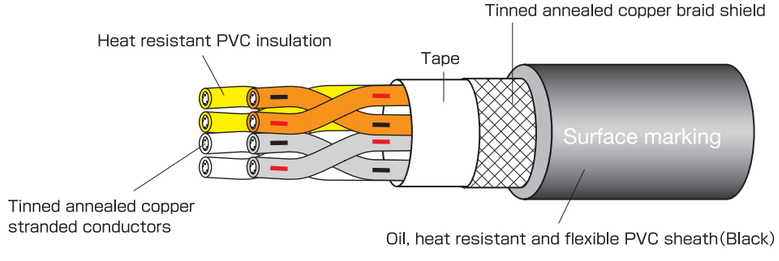
- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.
- It passes Vertical-Tray Flame Test of UL.

> Construction figure

·Multi core cable



·Multi pair cable



> Surface marking

E176892(UL) CM □□AWG 75℃ or AWM 2464 80℃ 300V VW-1 or c(UL) CM □□AWG 75℃ or AWM ⅡA 80℃ 300V FT1 TAIYO LF R15

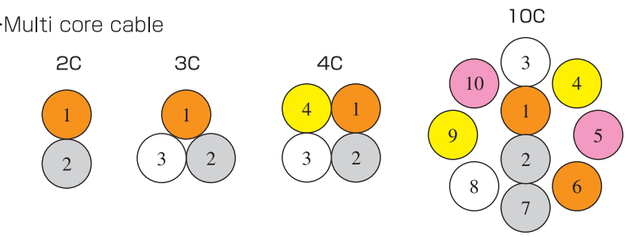
> > > Meeting standard

Certification	UL CM	cUL CM	UL AWM	cUL AWM
Applicable standard	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Official symbol	CM	CM	UL STYLE 2464	CSA AWM ⅡA
Voltage rating	300V	300V	300V	300V
Temperature rating	75℃	75℃	80℃	80℃
Conductor	UL 444	CSA C22.2 No.214	UL 758	CSA C22.2 No.210
Flame rating	Vertical-Tray Flame Test	Vertical-Tray Flame Test	VW-1	FT1

> Identification

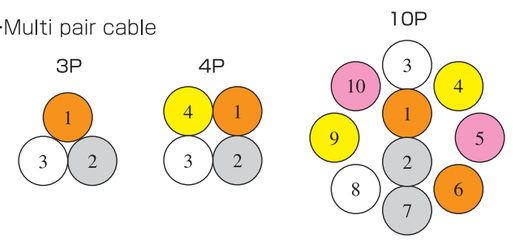
(1)For 22 and 20AWG

·Multi core cable



Figures ○ indicate core number in the identification table 1.

·Multi pair cable



Figures ○ indicate pair number in the identification table 2.

●Identification table1

Line number	Color of insulation	Dot mark
1	Orange	
2	Gray	
3	White	
4	Yellow	
5	Peach	
6	Orange	
7	Gray	
8	White	
9	Yellow	
10	Peach	
11	Orange	
12	Gray	
13	White	
14	Yellow	
15	Peach	

Line number	Color of insulation	Dot mark
16	Orange	
17	Gray	
18	White	
19	Yellow	
20	Peach	
21	Orange	(Continuation)
22	Gray	(Continuation)
23	White	(Continuation)
24	Yellow	(Continuation)
25	Peach	(Continuation)
26	Orange	
27	Gray	
28	White	
29	Yellow	
30	Peach	

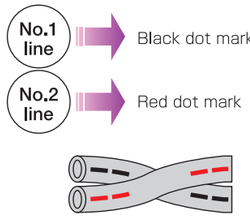
●Identification table2

Pair number	Color of insulation	Dot mark
1	Orange	
2	Gray	
3	White	
4	Yellow	
5	Peach	
6	Orange	
7	Gray	
8	White	
9	Yellow	
10	Peach	
11	Orange	
12	Gray	
13	White	
14	Yellow	
15	Peach	

Pair number	Color of insulation	Dot mark
16	Orange	
17	Gray	
18	White	
19	Yellow	
20	Peach	
21	Orange	(Continuation)
22	Gray	(Continuation)
23	White	(Continuation)
24	Yellow	(Continuation)
25	Peach	(Continuation)
26	Orange	
27	Gray	
28	White	
29	Yellow	
30	Peach	

※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

●Example of pare



The color of the insulator, the 1st and 2nd core is the same color.

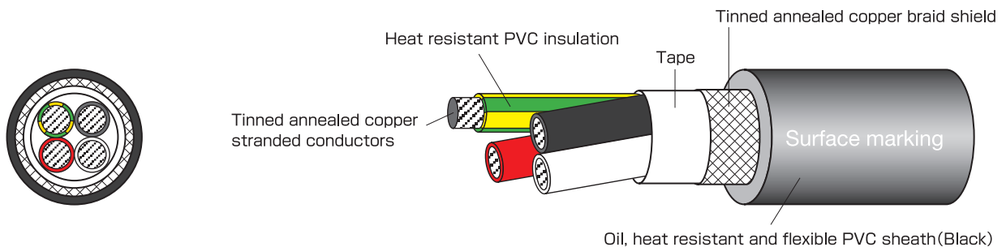
The color of the 1st kind and the 2nd kind of dot mark is a black and red.

CM/2464-1007/ⅡA-SB LF

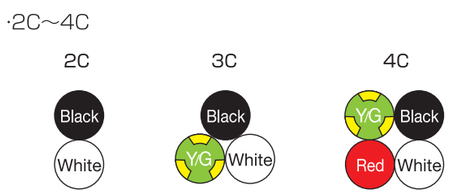
Electronic equipment cable

> Identification

(2)For 18 and 16AWG.(※20AWG is 2, 3, 4C only)

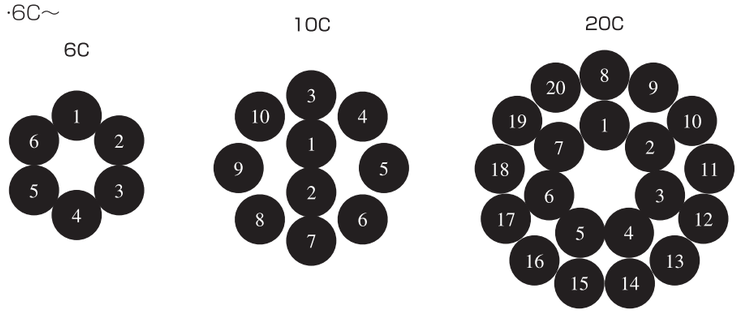


·2C～4C



※Y/G indicates green core with yellow stripe(30～50%).

·6C～



Figures in ○ indicate white numbering on black insulator.

> Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	22 (0.324mm²)	17/0.16 (17/6.3mil)	0.76 (30mil)	0.066	1.68	0.240	6.1	33(49)	less than 57.5	more than 10	2000	9.2
3C						0.248	6.3	37(55)				7.7
4C						0.268	6.8	44(65)				7.0
2C	20 (0.518mm²)	21/0.18 (21/7.1mil)	0.95 (37mil)	0.074	1.87	0.252	6.4	37(55)	less than 36.2	more than 10	2000	11
3C						0.264	6.7	44(65)				10
4C						0.283	7.2	50(75)				9.1
6C						0.327	8.3	67(100)				8.0
8C						0.374	9.5	87(130)				7.4
10C						0.406	10.3	101(150)				6.8
12C						0.417	10.6	114(170)				6.3
16C						0.457	11.6	141(210)				5.7
20C						0.504	12.8	175(260)				5.4
○30C						0.626	15.9	262(390)				4.7
2C	18 (0.823mm²)	35/0.18 (35/7.1mil)	1.2 (47mil)	0.083	2.1	0.276	7.0	47(70)	less than 22.8	more than 10	2000	15
3C						0.287	7.3	57(85)				15
4C						0.307	7.8	64(95)				13
6C						0.358	9.1	91(135)				10
10C						0.445	11.3	138(205)				9.0
20C						0.559	14.2	235(350)				7.1
30C						0.693	17.6	353(525)				6.2
2C	16 (1.30mm²)	26/0.26 (26/10.2mil)	1.5 (59mil)	0.096	2.45	0.299	7.6	57(85)	less than 14.3	more than 10	2000	20
3C						0.315	8.0	71(105)				20
4C						0.339	8.6	87(130)				18
6C						0.402	10.2	118(175)				13

○:Order production

No. of pairs	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
3P	22 (0.324mm²)	17/0.16 (17/6.3mil)	0.76 (30mil)	0.066	1.68	0.331	8.4	64(95)	less than 57.5	more than 10	2000	6.3
4P						0.358	9.1	74(110)				5.7
5P						0.390	9.9	87(130)				5.3
6P						0.421	10.7	101(150)				5.0
8P						0.488	12.4	124(185)				4.6
10P						0.488	12.4	138(205)				4.2
12P						0.547	13.9	168(250)				4.0
15P						0.642	16.3	225(335)				3.7
20P						0.740	18.8	282(420)				3.4

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168. Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following correction coefficient by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

> Standard sales length

100m

> > > Meeting standard

UE/2517(N) LF

Electronic equipment cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

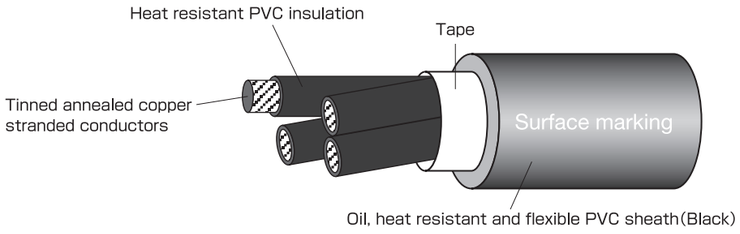
> Application

- Multi-cable for North America and EU.
- Electric equipment cable with UL and cUL at 300V,105℃. (Category : AVLV2, AVLV8)
- CE marking (TÜV recognition product). (Certificate of TÜV No.J2150115)

> Feature

- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.

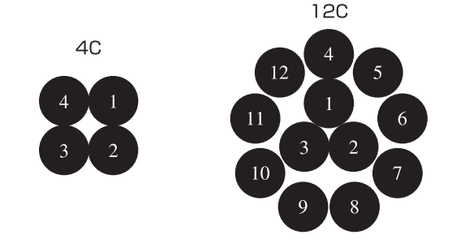
> Construction figure



> Surface marking

E67647 AWM 2517 105℃ 300V VW-1 TAIYO AWM IIA 105℃ 300V FT1 TAIYO CE 05VV5-F 300/500V LF R15

> Identification



Figures in ○ indicate white numbering on black insulator.

Certification	UL AWM	cUL AWM	TÜV,CE marking
Applicable standard	UL 758	CSA C22.2 No.210	EN50525-2-51
Official symbol	UL STYLE 2517	CSA AWM ⅡA	Equivalent of H05VV5-F
Voltage rating	300V	300V	300/500V
Temperature rating	105℃	105℃	70℃
Conductor	UL 758	CSA C22.2 No.210	EN60228
Flame rating	VW-1	FT1	EN50264-2-1

> > > Meeting standard

> Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C						0.295	7.5	40(60)				14
3C						0.311	7.9	47(70)				12
4C	20 (0.5㎟)	21/0.18 (21/7.1mil)	0.95 (37mil)	0.106	2.7	0.339	8.6	57(85)	less than 36.2	more than 10	2000	11
5C						0.370	9.4	71(105)				10
7C						0.441	11.2	91(135)				9.7
12C						0.543	13.8	144(215)				8.1
2C						0.311	7.9	44(65)				17
3C						0.331	8.4	54(80)				15
4C	19 (0.75㎟)	31/0.18 (31/7.1mil)	1.2 (47mil)	0.114	2.9	0.358	9.1	67(100)	less than 26.7	more than 10	2000	13
5C						0.390	9.9	81(120)				12
7C						0.476	12.1	111(165)				11
12C						0.587	14.9	175(260)				9.8

※The examination of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.
※The size indicated within parenthesis in the above table, describes the appropriate size of Japanese domestic use.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

UE/2517(N) [Y/G]LF

Electronic equipment cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

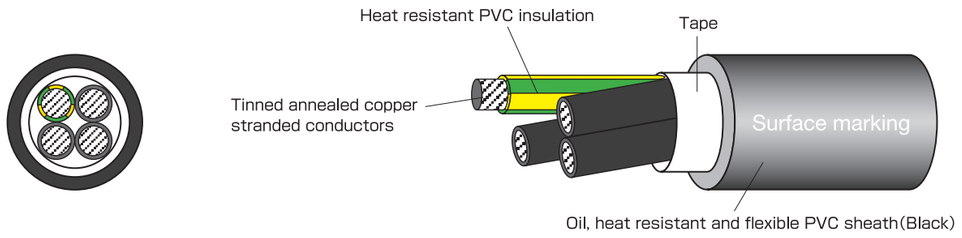
> Application

- Multi-cable for North America and EU.
- Electric equipment cable with UL and cUL at 300V, 105℃. (Category : AVLV2, AVLV8)
- CE marking (TÜV recognition product). (Certificate of TÜV No.J2150115)

> Feature

- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.

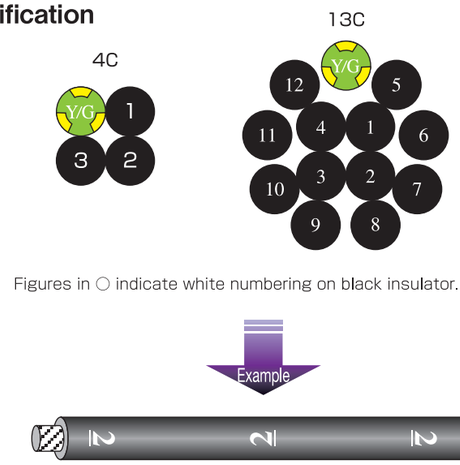
> Construction figure



> Surface marking

E67647 AWM 2517 105℃ 300V VW-1 TAIYO AWM IIA 105℃ 300V FT1 TAIYO CE 05VV5-F 300/500V LF R15

> Identification



※Y/G indicates green core with yellow stripe (30~50%).

Figures in ○ indicate white numbering on black insulator.

Certification	UL AWM	cUL AWM	TÜV.CE marking
Applicable standard	UL 758	CSA C22.2 No.210	EN50525-2-51
Official symbol	UL STYLE 2517	CSA AWM ⅡA	Equivalent of H05VV5-F
Voltage rating	300V	300V	300/500V
Temperature rating	105℃	105℃	70℃
Conductor	UL 758	CSA C22.2 No.210	EN60228
Flame rating	VW-1	FT1	EN50264-2-1

> > > Meeting standard

> Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
3C	20 (0.5㎟)	21/0.18 (21/7.1mil)	0.95 (37mil)	0.106	2.7	0.311	7.9	47(70)	less than 36.2	more than 10	2000	15
4C						0.339	8.6	57(85)				13
5C						0.370	9.4	71(105)				11
7C						0.441	11.2	91(135)				10
13C						0.579	14.7	158(235)				8.3
3C	19 (0.75㎟)	31/0.18 (31/7.1mil)	1.2 (47mil)	0.114	2.9	0.331	8.4	54(80)	less than 26.7	more than 10	2000	18
4C						0.358	9.1	67(100)				15
5C						0.390	9.9	81(120)				14
7C						0.476	12.1	111(165)				12
13C						0.614	15.6	188(280)				9.9

※[Y/G] earth cable of an equal size.
※The examination of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

※The size indicated within parenthesis in the above table, describes the appropriate size of Japanese domestic use.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168. Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following correction coefficient by the ambient temperature.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

UE/2517-SB(N)LF

Electronic equipment cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

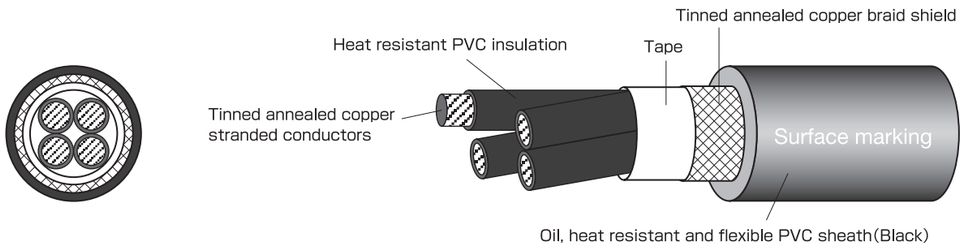
> Application

- Multi-cable for North America and EU.
- Shielded Electric equipment cable with UL and cUL at 300V, 105℃. (Category : AVLV2, AVLV8)
- CE marking.

> Feature

- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.

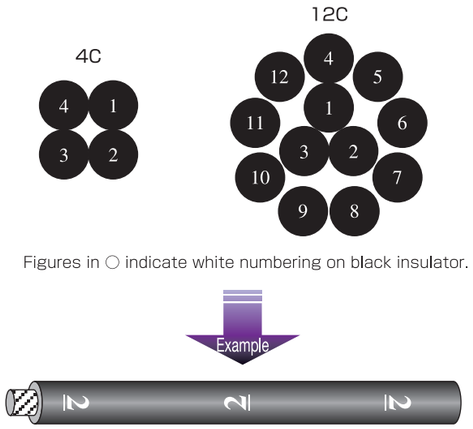
> Construction figure



> Surface marking

E67647 AWM 2517 105℃ 300V VW-1 TAIYO E67647 AWM IIA 105℃ 300V FT1 TAIYO CE 05VV5-F 300/500V LF R15

> Identification



Figures in ○ indicate white numbering on black insulator.

Certification	UL AWM	cUL AWM	CE marking
Applicable standard	UL 758	CSA C22.2 No.210	EN50525-2-51
Official symbol	UL STYLE 2517	CSA AWM ⅡA	Equivalent of H05VV5-F
Voltage rating	300V	300V	300/500V
Temperature rating	105℃	105℃	70℃
Conductor	UL 758	CSA C22.2 No.210	EN60228
Flame rating	VW-1	FT1	EN50264-2-1

> > > Meeting standard

> Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	20 (0.5㎟)	21/0.18 (21/7.1mil)	0.95 (37mil)	0.106	2.7	0.319	8.1	54(80)	less than 36.2	more than 10	2000	14
3C						0.335	8.5	64(95)				12
4C						0.362	9.2	74(110)				11
5C						0.398	10.1	94(140)				10
7C						0.461	11.7	118(175)				9.8
12C						0.551	14.0	171(255)				8.2
2C	19 (0.75㎟)	31/0.18 (31/7.1mil)	1.2 (47mil)	0.114	2.9	0.335	8.5	60(90)	less than 26.7	more than 10	2000	17
3C						0.354	9.0	74(110)				15
4C						0.386	9.8	87(130)				13
5C						0.417	10.6	108(160)				12
7C						0.488	12.4	134(200)				11
12C						0.626	15.9	222(330)				9.9

※The examination of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

※The size indicated within parenthesis in the above table, describes the appropriate size of Japanese domestic use.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

UE/2517-SB(N) [Y/G]LF

Electronic equipment cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

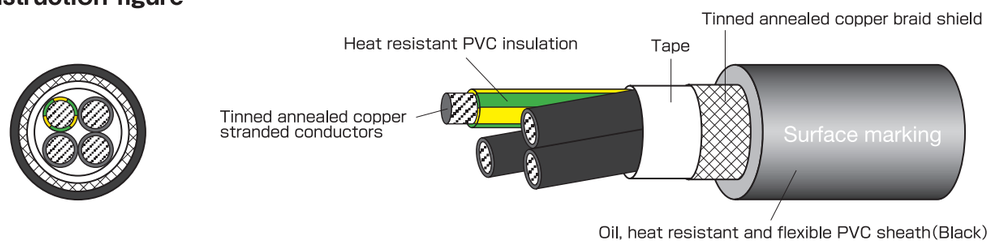
> Application

- Multi-cable for North America and EU.
- Shielded Electric equipment cable with UL and cUL at 300V, 105℃. (Category : AVLV2, AVLV8)
- CE marking.

> Feature

- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.

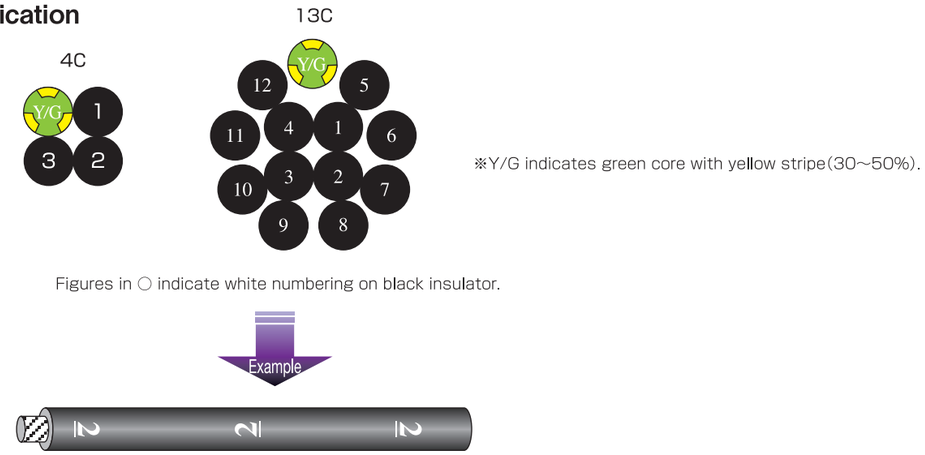
> Construction figure



> Surface marking

E67647 AWM 2517 105℃ 300V VW-1 TAIYO AWM IIA 105℃ 300V FT1 TAIYO CE 05VV5-F 300/500V LF R15

> Identification



※Y/G indicates green core with yellow stripe(30~50%).

Figures in ○ indicate white numbering on black insulator.

Certification	UL AWM	cUL AWM	CE marking
Applicable standard	UL 758	CSA C22.2 No.210	EN50525-2-51
Official symbol	UL STYLE 2517	CSA AWM ⅡA	Equivalent of H05VV5-F
Voltage rating	300V	300V	300/500V
Temperature rating	105℃	105℃	70℃
Conductor	UL 758	CSA C22.2 No.210	EN60228
Flame rating	VW-1	FT1	EN50264-2-1

> > > Meeting standard

> Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
3C	20 (0.5㎟)	21/0.18 (21/7.1mil)	0.95 (37mil)	0.106	2.7	0.335	8.5	64(95)	less than 36.2	more than 10	2000	15
4C						0.362	9.2	74(110)				13
5C						0.398	10.1	94(140)				11
7C						0.461	11.7	118(175)				10
13C						0.579	14.7	185(275)				8.4
3C	19 (0.75㎟)	31/0.18 (31/7.1mil)	1.2 (47mil)	0.114	2.9	0.354	9.0	74(110)	less than 26.7	more than 10	2000	18
4C						0.386	9.8	87(130)				15
5C						0.417	10.6	108(160)				14
7C						0.488	12.4	134(200)				12
13C						0.654	16.6	235(350)				10

※[Y/G] earth cable of an equal size.
※The examination of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

※The size indicated within parenthesis in the above table, describes the appropriate size of Japanese domestic use.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following correction coefficient by the ambient temperature.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

UE/2501 (N) /TC LF

For tray cable, race way and electronic equipment cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

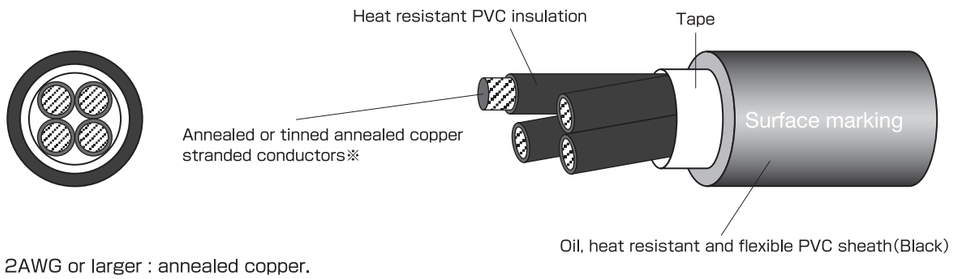
Application

- Multi-cable for North America and EU.
- Cable tray, for Raceway wiring.
- Electric equipment cable with UL and cUL at 600V, 105℃.
  (Category QPTZ, AVLA2, ZKHZ, AVLV8)
- CE marking (TÜV recognition product).
  (Certificate of TÜV No.(18～12AWG)J2151249)
  (Certificate of TÜV No.(10～6AWG)J2051252)
- Obtaining UL Listed MTW and TC, this cable compliants to NFPA70 and 79.

Feature

- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.
- It passes Vertical-Tray Flame Test of UL.

Construction figure



※12AWG or larger : annealed copper.

Surface marking

(1)18～10AWG cables

E209288(UL)TC 600V 90℃ DRY 75℃ WET Size/Line number or MTW 600V Size/Line number FLEXING VW-1 or AWM 2501 VW-1 E67647 AWM ⅡA/B 105℃ 600V FT1 TAIYO CE 05VV5-F 300/500V <PS>E ※※ LF R15

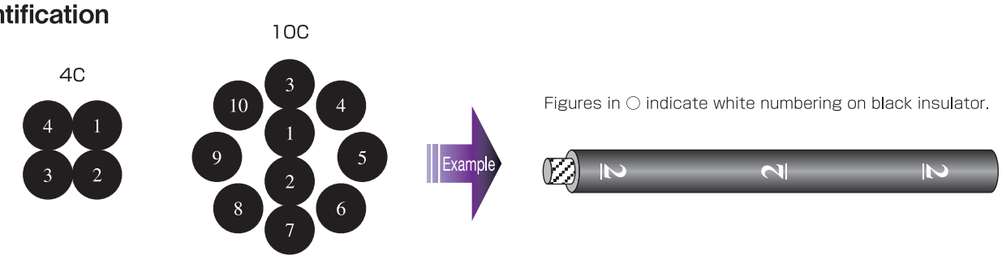
(2)8～6AWG cables

E209288(UL)TC 600V 90℃ DRY 75℃ WET Size/Line number or MTW 600V Size/Line number VW-1 or AWM 2501 VW-1 E67647 AWM ⅡA/B 105℃ 600V FT1 TAIYO CE 05VV5-F 300/500V LF R15

Certification	UL AWM.cUL AWM	UL TC	UL MTW	TÜV.CE marking	Electrical Appliance and Material Safety Law (Only 18~10AWG)
Applicable standard	UL 758 CSA C22.2 No.210	UL 1277	UL 1063	EN50525-2-51	Departmental order to determine a technical standard of the electrical equipment
Official symbol	UL STYLE 2501 CSA AWM ⅡA/B	TC	MTW	Equivalent of H05VV5-F	Vinyl cab tire cord
Voltage rating	600V	600V	600V	300/500V	300V
Temperature rating	105℃	DRY90℃ WET75℃	DRY90℃ WET60℃	70℃	60℃
Conductor	UL 758 CSA C22.2 No.210	UL 1277	UL 1063	EN60228	JIS C 3102 JIS C 3152
Flame rating	VW-1.FT1	Vertical-Tray Flame Test	VW-1	EN50264-2-1	JIS C 3005 4.26.2 b)

Meeting standard

Identification



Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat resistant PVC insulation Outside diameter (inch)	Heat resistant PVC insulation Outside diameter (mm)	Oil, heat - resistant flexible - PVC sheath Overall diameter approx.(inch)	Oil, heat - resistant flexible - PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C	18 (0.823㎟)	35/0.18 (35/7.1mil)	1.2 (47mil)	0.114	2.9	0.370	9.4	64(95)	less than 22.8	more than 60	2000	19
3C						0.390	9.9	77(115)				16
4C						0.417	10.6	91(135)				15
2C	16 (1.30㎟)	26/0.26 (26/10.2mil)	1.5 (59mil)	0.126	3.2	0.398	10.1	77(115)	less than 14.3	more than 60	2000	26
3C						0.417	10.6	94(140)				22
4C						0.449	11.4	114(170)				19
2C	14 (2.08㎟)	41/0.26 (41/10.2mil)	1.9 (75mil)	0.142	3.6	0.425	10.8	94(140)	less than 9.01	more than 60	2000	34
3C						0.449	11.4	118(175)				28
4C						0.484	12.3	141(210)				25
10C						0.713	18.1	299(445)				19
2C	12 (3.30㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.161	4.1	0.465	11.8	121(180)	less than 5.45	more than 50	2000	45
3C						0.488	12.4	151(225)				38
4C						0.531	13.5	185(275)				34
2C	10 (5.26㎟)	104/0.254 (104/10mil)	3.1 (122mil)	0.189	4.8	0.520	13.2	161(240)	less than 3.44	more than 50	2000	61
3C						0.547	13.9	205(305)				51
4C						0.598	15.2	259(385)				46
2C	8 (8.36㎟)	7/15/0.32 (7/15/12.6mil)	4.2 (165mil)	0.299	7.6	0.740	18.8	282(420)	less than 2.41	more than 50	2500	79
3C						0.787	20.0	366(545)				67
4C						0.909	23.1	501(745)				60
2C	6 (13.3㎟)	7/24/0.32 (7/24/12.6mil)	5.3 (209mil)	0.343	8.7	0.835	21.2	386(575)	less than 1.53	more than 50	2500	100
3C						0.925	23.5	534(795)				88
4C						1.016	25.8	685(1020)				79

※The examination of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70 or NFPA79.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

Standard sales length

100m

UE/2501-SB(N)/TC LF

For tray cable, race way and electronic equipment cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

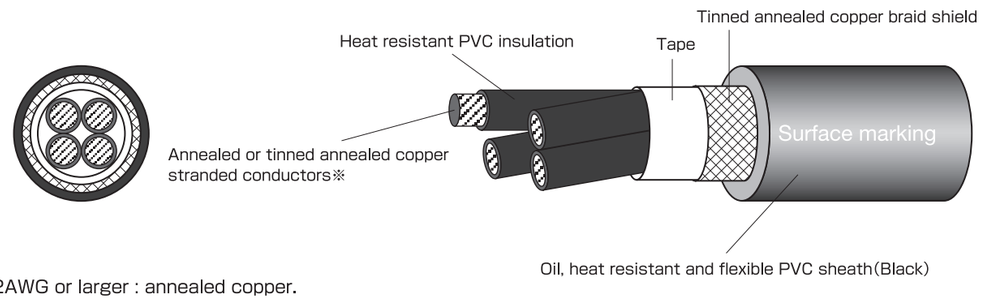
Application

- Cable tray, for Raceway wiring.
- Multi-cable for North America and EU.
- Shielded Electric equipment cable with UL and cUL at 600V, 105℃.
  (Category QPTZ, AVLA2, ZKHZ, AVLV8)
- CE marking.
- Obtaining UL Listed MTW and TC, this cable compliants to NFPA70 and 79.

Feature

- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.
- It passes Vertical-Tray Flame Test of UL.

Construction figure



※12AWG or larger : annealed copper.

Surface marking

(1)18～10AWG cables

E209288(UL)TC 600V 90℃ DRY 75℃ WET Size/Line number or MTW 600V Size/Line number FLEXING VW-1 or AWM 2501 VW-1 E67647 c UL AWM ⅡA/B 105℃ 600V FT1 TAIYO CE 05VV5-F 300/500V <PS>E ** LF R15

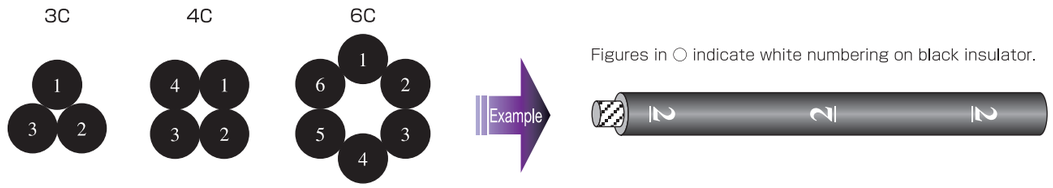
(2)8～6AWG cables

E209288(UL)TC 600V 90℃ DRY 75℃ WET Size/Line number or MTW 600V Size/Line number VW-1 or AWM 2501 VW-1 E67647 c UL AWM ⅡA/B 105℃ 600V FT1 TAIYO CE 05VV5-F 300/500V LF R15

Certification	UL AWM.cUL AWM	UL TC	UL MTW	CE marking	Electrical Appliance andMaterial Safety Law (Only 18~10AWG)
Applicable standard	UL 758 CSA C22.2 No.210	UL 1277	UL 1063	EN50525-2-51	Departmental order to determine a technical standard of the electrical equipment
Official symbol	UL STYLE 2501 CSA AWM ⅡA/B	TC	MTW	Equivalent of H05VV5-F	Vinyl cab tire cord
Voltage rating	600V	600V	600V	300/500V	300V
Temperature rating	105℃	DRY90℃ WET75℃	DRY90℃ WET60℃	70℃	60℃
Conductor	UL 758 CSA C22.2 No.210	UL 1277	UL 1063	EN60228	JIS C 3102 JIS C 3152
Flame rating	VW-1.FT1	Vertical-Tray Flame Test	VW-1	EN50264-2-1	JIS C 3005 4.26.2 b)

Meeting standard

Identification



Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat resistant PVC insulation Outside diameter (inch)	Heat resistant PVC insulation Outside diameter (mm)	Oil, heat - resistant flexible - PVC sheath Overall diameter approx.(inch)	Oil, heat - resistant flexible - PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C	18 (0.823㎟)	35/0.18 (35/7.1mil)	1.2 (47mil)	0.114	2.9	0.394	10.0	84(125)	less than 22.8	more than 60	2000	19
3C						0.413	10.5	97(145)				16
4C						0.445	11.3	114(170)				15
6C						0.512	13.0	155(230)				13
2C	16 (1.30㎟)	26/0.26 (26/10.2mil)	1.5 (59mil)	0.126	3.2	0.421	10.7	97(145)	less than 14.3	more than 60	2000	26
3C						0.445	11.3	118(175)				22
4C						0.476	12.1	141(210)				20
2C	14 (2.08㎟)	41/0.26 (41/10.2mil)	1.9 (75mil)	0.142	3.6	0.453	11.5	118(175)	less than 9.01	more than 60	2000	34
3C						0.476	12.1	141(210)				28
4C						0.512	13.0	171(255)				26
2C	12 (3.30㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.161	4.1	0.492	12.5	148(220)	less than 5.45	more than 50	2000	45
3C						0.516	13.1	178(265)				38
4C						0.563	14.3	222(330)				34
2C	10 (5.26㎟)	104/0.254 (104/10mil)	3.1 (122mil)	0.189	4.8	0.547	13.9	192(285)	less than 3.44	more than 50	2000	60
3C						0.579	14.7	242(360)				51
4C						0.630	16.0	299(445)				46
3C	8 (8.36㎟)	7/15/0.32 (7/15/12.6mil)	4.2 (165mil)	0.299	7.6	0.827	21.0	430(640)	less than 2.41	more than 50	2500	67
4C						0.941	23.9	568(845)				60
3C	6 (13.3㎟)	7/24/0.32 (7/24/12.6mil)	5.3 (209mil)	0.343	8.7	0.957	24.3	605(900)	less than 1.53	more than 50	2500	88
4C						1.047	26.6	759(1130)				79

※The examination of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70 or NFPA79.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

Standard sales length

100m

UE/2501E(N)/TC[Y/G] LF

For tray cable, race way and electronic equipment cable

Heat resistance ★★★★★
Oil resistance ★★★★★
Noise resistance ★
Flame resistance ★★★★★
Flexibility ★★★
non-migratory ★★★★
Transport property ★
※The characteristic is an aim.

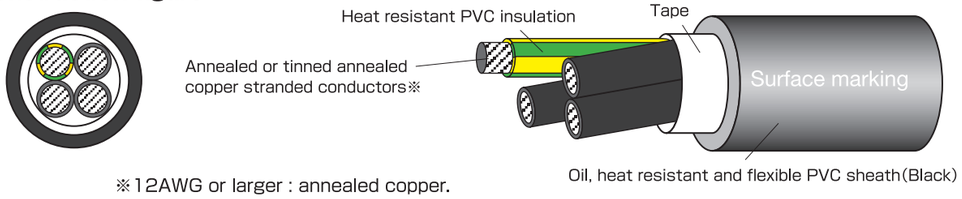
Application

- Cable tray, for Raceway wiring.
- Multi-cable for North America and EU.
- Electric equipment cable with UL and cUL at 600V, 105℃. (Category QPTZ, AVLA2, ZKHZ, AVLV8)
- CE marking (TÜV recognition product).
  (Certificate of TÜV No.(nx18AWG+1x14AWG) J2051273) (nx16AWG)
  (Certificate of TÜV No.(14～12AWG)J2151249)
  (Certificate of TÜV No.(10AWG)J2051252)
- Obtaining UL Listed MTW and TC, this cable compliants to NFPA70 and 79.

Feature

- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.
- It passes Vertical-Tray Flame Test of UL.

Construction figure



※12AWG or larger : annealed copper.

Surface marking

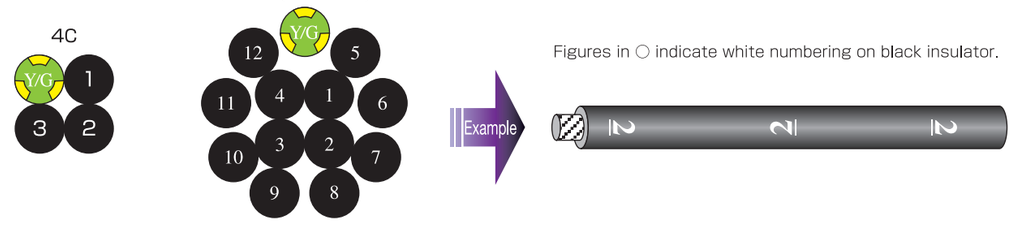
(1)6 cores or less

E209288(UL)TC 600V 90℃ DRY 75℃ WET Size/Line number or MTW 600V Size/Line number FLEXING VW-1 or AWM 2501 VW-1 E67647 c AWM ⅡA/B 105℃ 600V FT1 TAIYO △ CE 05VV5-F 300/500V <PS>E ※※ LF R15

(2)7 cores or more

E209288(UL)TC 600V 90℃ DRY 75℃ WET Size/Line number+Size(Y/G)/1C or MTW 600V Size/Line number+Size(Y/G)/1C FLEXING VW-1 or AWM 2501 VW-1 E67647 c AWM ⅡA/B 105℃ 600V FT1 TAIYO △ CE 05VV5-F 300/500V <PS>E ※※ LF R15

Identification



※Y/G indicates green core with yellow stripe(30～50%).

Certification	UL AWM.cUL AWM	UL TC	UL MTW	TÜV.CE marking	Electrical Appliance and Material Safety Law
Applicable standard	UL 758 CSA C22.2 No.210	UL 1277	UL 1063	EN50525-2-51	Departmental order to determine a technical standard of the electrical equipment
Official symbol	UL STYLE 2501 CSA AWM ⅡA/B	TC	MTW	Equivalent of H05VV5-F	Vinyl cab tire cord
Voltage rating	600V	600V	600V	300/500V	300V
Temperature rating	105℃	DRY90℃ WET75℃	DRY90℃ WET60℃	70℃	60℃
Conductor	UL 758 CSA C22.2 No.210	UL 1277	UL 1063	EN60228	JIS C 3102 JIS C 3152
Flame rating	VW-1.FT1	Vertical-Tray Flame Test	VW-1	EN50264-2-1	JIS C 3005 4.26.2 b)

Meeting standard

Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight	Electrical Characteristics			Allowable ampacity
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	(A)
3C	18 (0.823㎟)	35/0.18 (35/7.1mil)	1.2 (47mil)	0.114	2.9	0.390	9.9	77(115)	less than 22.8	more than 60	2000	20
4C						0.417	10.6	91(135)				17
6C+1C						0.535	13.6	155(230)				13
10C+1C						0.614	15.6	205(305)				11
12C+1C						0.646	16.4	235(350)				10
15C+1C						0.677	17.2	265(395)				9.9
20C+1C						0.783	19.9	336(500)				9.1
30C+1C						0.953	24.2	501(745)				7.9
40C+1C						1.059	26.9	625(930)				7.2
3C	16 (1.30㎟)	26/0.26 (26/10.2mil)	1.5 (59mil)	0.126	3.2	0.417	10.6	94(140)	less than 14.3	more than 60	2000	26
4C						0.449	11.4	114(170)				22
6C+1C						0.571	14.5	185(275)				18
10C+1C						0.665	16.9	252(375)				15
12C+1C						0.705	17.9	289(430)				14
20C+1C						0.898	22.8	464(690)				11
30C+1C						1.031	26.2	628(935)				10
40C+1C						1.157	29.4	806(1200)				9.3
3C	14 (2.08㎟)	41/0.26 (41/10.2mil)	1.9 (75mil)	0.142	3.6	0.449	11.4	118(175)	less than 9.01	more than 60	2000	34
4C						0.484	12.3	141(210)				29
7C						0.614	15.6	228(340)				23
11C						0.732	18.6	326(485)				19
13C						0.772	19.6	370(550)				18
21C						0.988	25.1	615(915)				15
3C	12 (3.30㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.161	4.1	0.488	12.4	151(225)	less than 5.45	more than 50	2000	46
4C						0.531	13.5	188(280)				39
7C						0.677	17.2	306(455)				31
3C	10 (5.26㎟)	104/0.254 (104/10mil)	3.1 (122mil)	0.189	4.8	0.547	13.9	205(305)	less than 3.44	more than 50	2000	62
4C						0.598	15.2	259(385)				52
7C						0.768	19.5	427(635)				41

※Core number mark "+1C" has the [Y/G] earth cable of 14AWG size.
※3 or 4 and 7 or more cores of 14AWG more size has the [Y/G] earth cable of an equal size.
※The examination of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following correction coefficient by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70 or NFPA79.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

Standard sales length

100m
(Sales by short length is available for large sizes. Please contact us which sizes are available.)

UE/2501E-SB(N)/TC[Y/G] LF

For tray cable, race way and electronic equipment cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

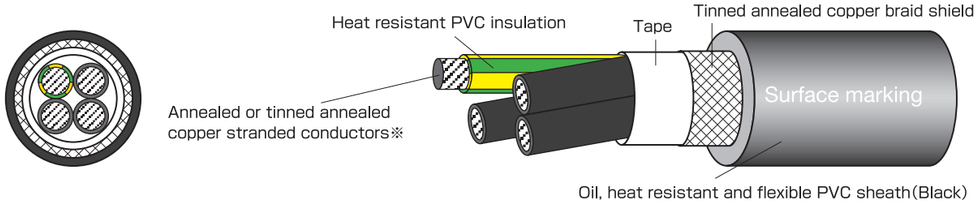
Application

- Multi-cable for North America and EU.
- Cable tray, for Raceway wiring.
- Shielded Electric equipment cable with UL and cUL at 600V, 105℃.
  (Category QPTZ, AVLA2, ZKHZ, AVLV8)
- CE marking.
- Obtaining UL Listed MTW and TC, this cable compliants to NFPA70 and 79.

Feature

- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.
- It passes Vertical-Tray Flame Test of UL.

Construction figure



※12AWG or larger : annealed copper.

Surface marking

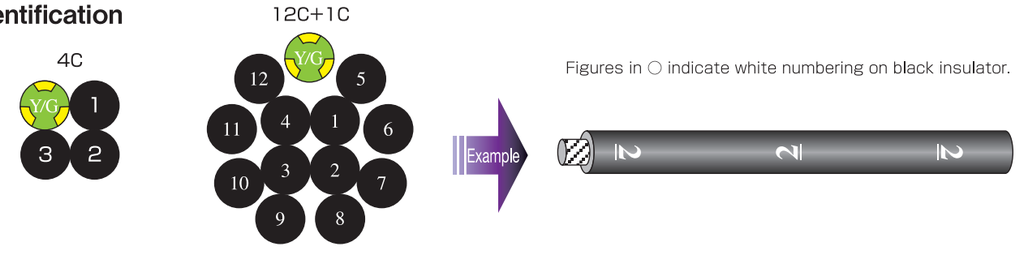
(1)6 cores or less

E209288(UL)TC 600V 90℃ DRY 75℃ WET Size/Line number or MTW 600V Size/Line number FLEXING VW-1 or AWM 2501 VW-1 E67647 c AWM ⅡA/B 105℃ 600V FT1 TAIYO CE 05VV5-F 300/500V <PS>E ** LF R15

(2)7 cores or more

E209288(UL)TC 600V 90℃ DRY 75℃ WET Size/Line number+Size(Y/G)/1C or MTW 600V Size/Line number+Size(Y/G)/1C FLEXING VW-1 or AWM 2501 VW-1 E67647 c AWM ⅡA/B 105℃ 600V FT1 TAIYO CE 05VV5-F 300/500V <PS>E ** LF R15

Identification



※Y/G indicates green core with yellow stripe(30~50%).

Certification	UL AWM.cUL AWM	UL TC	UL MTW	CE marking	Electrical Appliance and Material Safety Law
Applicable standard	UL 758 CSA C22.2 No.210	UL 1277	UL 1063	EN50525-2-51	Departmental order to determine a technical standard of the electrical equipment
Official symbol	UL STYLE 2501 CSA AWM ⅡA/B	TC	MTW	Equivalent of H05VV5-F	Vinyl cab tire cord
Voltage rating	600V	600V	600V	300/500V	300V
Temperature rating	105℃	DRY90℃ WET75℃	DRY90℃ WET60℃	70℃	60℃
Conductor	UL 758 CSA C22.2 No.210	UL 1277	UL 1063	EN60228	JIS C 3102 JIS C 3152
Flame rating	VW-1.FT1	Vertical-Tray Flame Test	VW-1	EN50264-2-1	JIS C 3005 4.26.2 b)

Meeting standard

Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
3C	18 (0.823㎟)	35/0.18 (35/7.1mil)	1.2 (47mil)	0.114	2.9	0.413	10.5	97(145)	less than 22.8	more than 60	2000	20
4C						0.445	11.3	114(170)				17
6C+1C						0.567	14.4	192(285)				13
10C+1C						0.646	16.4	245(365)				11
12C+1C						0.677	17.2	279(415)				10
20C+1C						0.823	20.9	396(590)				9.2
30C+1C						0.984	25.0	568(845)				7.9
3C	16 (1.30㎟)	26/0.26 (26/10.2mil)	1.5 (59mil)	0.126	3.2	0.445	11.3	118(175)	less than 14.3	more than 60	2000	26
4C						0.476	12.1	138(205)				22
6C+1C						0.602	15.3	225(335)				18
3C	14 (2.08㎟)	41/0.26 (41/10.2mil)	1.9 (75mil)	0.142	3.6	0.476	12.1	141(210)	less than 9.01	more than 60	2000	34
4C						0.512	13.0	171(255)				29
3C	12 (3.30㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.161	4.1	0.516	13.1	178(265)	less than 5.45	more than 50	2000	46
4C						0.563	14.3	222(330)				39

※Core number mark "+1C" has the [Y/G] earth cable of 14AWG size.
※3 or 4 and 7 or more cores of 14AWG more size has the [Y/G] earth cable of an equal size.
※The examination of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following correction coefficient by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70 or NFPA79.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

UE/2501E(N)/TC[Y/G]LG LF

For tray cable, race way and electronic equipment cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

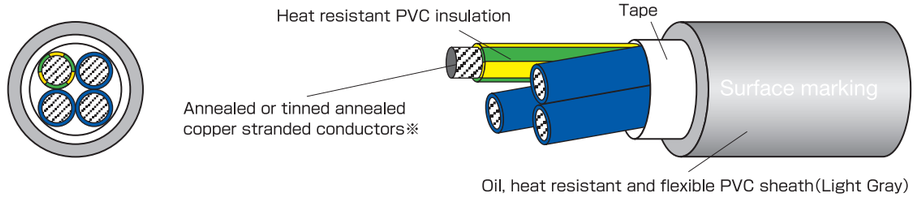
Application

- Multi-cable for North America and EU.
- Cable tray, for Raceway wiring.
- Electric equipment cable with UL and cUL at 600V, 105℃. (Category QPTZ, AVLA2, ZKHZ, AVLV8)
- CE marking (TÜV recognition product).
  (Certificate of TÜV No.(nx18AWG+1x14AWG) J2051273) (nx16AWG)
  (Certificate of TÜV No.(14～12AWG)J2151249)
  (Certificate of TÜV No.(10AWG)J2051252)
- Obtaining UL Listed MTW and TC, this cable compliants to NFPA70 and 79.

Feature

- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.
- It passes Vertical-Tray Flame Test of UL.

Construction figure

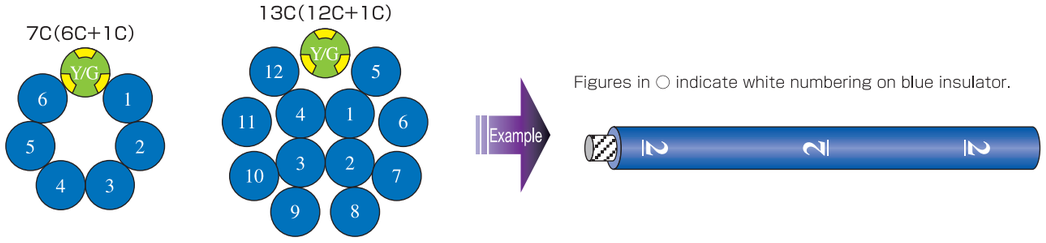


※12AWG or larger : annealed copper.

Surface marking

E209288(UL)TC 600V 90℃ DRY 75℃ WET Size/Line number+Size(Y/G)/1C or MTW 600V Size/Line number+Size(Y/G)/1C FLEXING VW-1 or AWM 2501 VW-1 E67647 AWM ⅡA/B 105℃ 600V FT1 TAIYO CE 05VV5-F 300/500V <PS>E ※※ LF R15

Identification



※Y/G indicates green core with yellow stripe(30～50%).

Certification	UL AWM.cUL AWM	UL TC	UL MTW	TÜV.CE marking	Electrical Appliance and Material Safety Law
Applicable standard	UL 758 CSA C22.2 No.210	UL 1277	UL 1063	EN50525-2-51	Departmental order to determine a technical standard of the electrical equipment
Official symbol	UL STYLE 2501 CSA AWM ⅡA/B	TC	MTW	Equivalent of H05VV5-F	Vinyl cab tire cord
Voltage rating	600V	600V	600V	300/500V	300V
Temperature rating	105℃	DRY90℃ WET75℃	DRY90℃ WET60℃	70℃	60℃
Conductor	UL 758 CSA C22.2 No.210	UL 1277	UL 1063	EN60228	JIS C 3102 JIS C 3152
Flame rating	VW-1.FT1	Vertical-Tray Flame Test	VW-1	EN50264-2-1	JIS C 3005 4.26.2 b)

Meeting standard

Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat resistant PVC insulation Outside diameter (inch)	Heat resistant PVC insulation Outside diameter (mm)	Oil, heat - resistant flexible - PVC sheath Overall diameter approx.(inch)	Oil, heat - resistant flexible - PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
6C+1C						0.535	13.6	155(230)				13
10C+1C						0.614	15.6	205(305)				11
12C+1C						0.646	16.4	235(350)				10
16C+1C	18 (0.823㎟)	35/0.18 (35/7.1mil)	1.2 (47mil)	0.114	2.9	0.713	18.1	282(420)	less than 22.8	more than 60	2000	9.8
20C+1C						0.783	19.9	336(500)				9.1
30C+1C						0.953	24.2	501(745)				7.9
40C+1C						1.059	26.9	625(930)				7.2
6C+1C						0.571	14.5	185(275)				18
10C+1C						0.665	16.9	252(375)				15
12C+1C						0.705	17.9	289(430)				14
20C+1C	16 (1.30㎟)	26/0.26 (26/10.2mil)	1.5 (59mil)	0.126	3.2	0.898	22.8	464(690)	less than 14.3	more than 60	2000	11
24C+1C						0.965	24.5	538(800)				11
30C+1C						1.031	26.2	628(935)				10
40C+1C						1.157	29.4	806(1200)				9.3
7C						0.614	15.6	228(340)				23
11C						0.732	18.6	326(485)				19
13C	14	41/0.26	1.9	0.142	3.6	0.772	19.6	370(550)				18
17C	(2.08㎟)	(41/10.2mil)	(75mil)			0.902	22.9	507(755)	less than 9.01	more than 60	2000	16
21C						0.988	25.1	615(915)				15
25C						1.067	27.1	706(1050)				14
7C	12 (3.30㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.161	4.1	0.677	17.2	302(450)	less than 5.45	more than 50	2000	31
4C	10	104/0.254	3.1	0.189	4.8	0.598	15.2	259(385)	less than 3.44	more than 50	2000	52
7C	(5.26㎟)	(104/10mil)	(122mil)			0.768	19.5	427(635)				41

※Core number mark "+1C" has the [Y/G] earth cable of 14AWG size.
※Core number mark only has the [Y/G] earth cable of an equal size.
※The examination of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following correction coefficient by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70 or NFPA79.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

UE/2501E(N)/TC[Y/G]LG LF

UE/2587-SB(N)[Y/G] LF

Heat resistance ★★★★
Oil resistance ★★★★★
Noise resistance ★★★
Flame resistance ★★★★
Flexibility ★★★
non-migratory ★★★★
Transport property ★

※The characteristic is an aim.

Electronic equipment cable

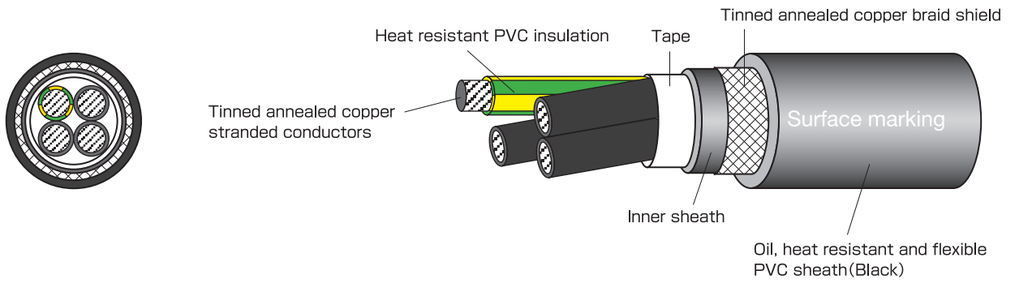
> Application

- Shielded multi-cable for EU.
- Shielded Electric equipment cable with UL and cUL at 600V, 90℃. (Category AVLA2, AVLV8)
- CE marking (TÜV recognition product). (Certificate of TÜV No.J2150116)

> Features

- It is an inner sheath type and a cable with the shield.
- Heat resistant PVC used for insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- Flame resisting:UL VW-1, cUL FT1.

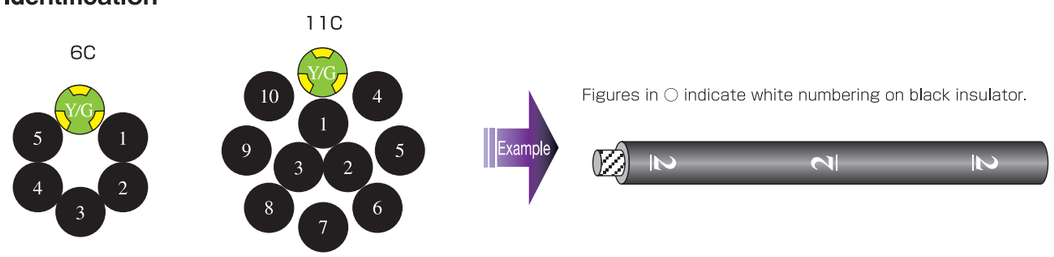
> Construction figure



> Surface marking

E67647 AWM 2587 90℃ 600V VW-1 TAIYO AWM IIA/B 90℃ 600V FT1 TAIYO CE 05VVC4V5-K 300/500V LF R15

> Identification



※Y/G indicates green core with yellow stripe(30~50%).

> > > Meeting standard

Certification	UL AWM	cUL AWM	TÜV,CE marking
Applicable standard	UL 758	CSA C22.2 No.210	EN50525-2-51
Official symbol	UL STYLE 2587	CSA AWM ⅡA/B	Equivalent of H05VVC4V5-K
Voltage rating	600V	600V	300/500V
Temperature rating	90℃	90℃	70℃
Conductor	UL 758	CSA C22.2 No.210	EN60228
Flame rating	VW-1	FT1	EN50264-2-1

> Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
6C	18 (0.823㎟)	35/0.18 (35/7.1mil)	1.2 (47mil)	0.094	2.4	0.469	11.9	134(200)	less than 22.8	more than 10	2000	13
8C						0.547	13.9	181(270)				11
11C						0.606	15.4	222(330)				10
13C						0.638	16.2	249(370)				9.7
16C						0.665	16.9	279(415)				8.9
21C						0.776	19.7	366(545)				8.2
31C						0.909	23.1	494(735)				7.1
41C						1.004	25.5	632(940)				6.4
6C	16 (1.30㎟)	26/0.26 (26/10.2mil)	1.5 (59mil)	0.106	2.7	0.528	13.4	178(265)	less than 14.3	more than 10	2000	17
11C						0.665	16.9	279(415)				13
13C						0.705	17.9	316(470)				12
21C						0.909	23.1	470(700)				10
31C						1.004	25.5	655(975)				9.3
41C						1.118	28.4	827(1230)				8.3
6C	14 (2.08㎟)	41/0.26 (41/10.2mil)	1.9 (75mil)	0.130	3.3	0.606	15.4	245(365)	less than 9.01	more than 10	2000	22
11C						0.787	20.0	403(600)				17
13C						0.831	21.1	457(680)				16
21C						1.016	25.8	685(1020)				14

※[Y/G] earth cable of an equal size.
※The examination of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following correction coefficient by the ambient temperature.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.91	0.82	0.71	0.58	0.41	—	—

> Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

UE/THHW LF

Electric wire for general wiring

Heat resistance	★★★★
Oil resistance	★★★
Noise resistance	★
Flame resistance	★★★★
Flexibility	★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

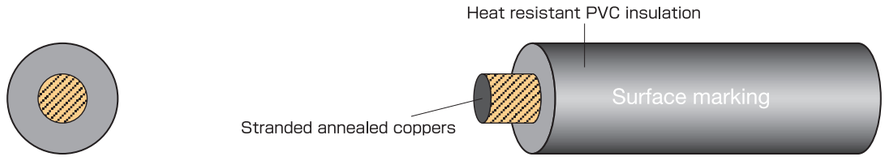
> Application

- Electric wire for North America and EU.
- Passed the UL vertical tray flame-retardant test, it can be used in the cable tray, Raceway. and the race way,(circuit conductor=1/0AWG or more, grand conductor=4AWG or more).
- Electric wire with UL and cUL at 600V,90℃.
  (Category ZKHZ, ZLGR, ZLGR7)
- CE marking (TÜV recognition product).
  (Certificate of TÜV No.J50005945)
- Obtaining UL Listed MTW, this wire compliants to NFPA 70 and 79.

> Feature

- Heat resistant PVC material is used to insulation.
- Flame resisting:UL VW-1, cUL FT1.

> Construction figure



> Surface marking

(1)14AWG～10AWG(circuit conductor), 14AWG～10AWG(Y/G)

E242557(UL) MTW FLEXING or THHW 600V □□AWG VW-1 c(UL) TW75 600V □□AWG(○○mm²) FT1 TAIYO △ CE 07V-K 450/750V LF R15

(2)8AWG～1AWG(circuit conductor), 8AWG～6AWG(Y/G)

E242557(UL) MTW or THHW 600V □□AWG VW-1 c(UL) TW75 600V □□AWG(○○mm²) FT1 TAIYO △ CE 07V-K 450/750V LF R15

(3)1/0AWG or more(circuit conductor), 4AWG or more(Y/G)

E242557(UL) MTW or THHW 600V □□AWG CT c(UL) TW75 600V □□AWG(○○mm²) FT1 TAIYO △ CE 07V-K 450/750V LF R15

Certification	UL THHW	UL MTW	cUL TW75	TÜV.CE marking
Applicable standard	UL 83	UL 1063	CSA C22.2 No.75	EN50525-2-31
Official symbol	THHW	MTW	TW75	Equivalent of H07V-K
Voltage rating	600V	600V	600V	450/750V
Temperature rating	DRY90℃ WET75℃	DRY90℃ WET60℃	DRY75℃ WET75℃	70℃
Conductor	UL 83	UL 1063	CSA C22.2 No.75	EN60228
Flame rating	VW-1 Vertical-Tray Flame Test	VW-1	FT1	EN50264-2-1

> > > Meeting standard

> Identification

·14AWG～2/0AWG wire is a black and Y/G.

·3/0AWG～500MCM wire is a black.

※Y/G indicates green core with yellow stripe(30～50%).

> Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Approx. weight	Electrical Characteristics			Allowable ampacity (A)	
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	Single insulated wire (a)	3 or less (b)
1C	14 (2.08㎟)	84/0.18 (84/7.1mil)	1.9 (75mil)	0.142	3.6	19 (29)	less than 8.61	more than 175	2000	35	25
1C	12 (3.31㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.161	4.1	29 (43)	less than 5.33	more than 150	2000	40	30
1C	10 (5.26㎟)	104/0.254 (104/10mil)	3.1 (122mil)	0.189	4.8	44 (65)	less than 3.42	more than 125	2000	55	40
1C	8 (8.37㎟)	7/15/0.32 (7/15/12.6mil)	4.2 (165mil)	0.264	6.7	74 (110)	less than 2.14	more than 130	2000	80	55
1C	6 (13.3㎟)	7/24/0.32 (7/24/12.6mil)	5.3 (209mil)	0.343	8.7	121 (180)	less than 1.34	more than 135	2000	105	75
1C	4 (21.2㎟)	7/38/0.32 (7/38/12.6mil)	6.6 (260mil)	0.394	10.0	178 (265)	less than 0.848	more than 115	2000	140	95
1C	2 (33.6㎟)	7/60/0.32 (7/60/12.6mil)	8.3 (327mil)	0.461	11.7	265 (395)	less than 0.533	more than 95	2000	190	130
1C	1 (42.4㎟)	19/30/0.32 (19/30/12.6mil)	9.8 (386mil)	0.567	14.4	370 (550)	less than 0.408	more than 105	2500	220	145
1C	1/0 (53.5㎟)	19/18/0.45 (19/18/17.7mil)	10.7 (421mil)	0.602	15.3	430 (640)	less than 0.335	more than 95	2500	260	170
1C	2/0 (67.4㎟)	19/23/0.45 (19/23/17.7mil)	12.1 (476mil)	0.657	16.7	538 (800)	less than 0.266	more than 85	2500	300	195
1C	3/0 (85.0㎟)	19/30/0.45 (19/30/17.7mil)	13.8 (543mil)	0.724	18.4	685 (1020)	less than 0.206	more than 80	2500	350	225
1C	4/0 (107㎟)	19/39/0.45 (19/39/17.7mil)	15.7 (618mil)	0.799	20.3	867 (1290)	less than 0.159	more than 70	2500	405	260
1C	300MCM (152㎟)	19/51/0.45 (19/51/17.7mil)	18.0 (709mil)	0.921	23.4	1142 (1700)	less than 0.118	more than 70	3000	500	320
1C	400MCM (203㎟)	37/35/0.45 (37/35/17.7mil)	20.7 (815mil)	1.035	26.3	1472 (2190)	less than 0.088	more than 65	3000	615	380
1C	500MCM (253㎟)	37/44/0.45 (37/44/17.7mil)	23.2 (913mil)	1.134	28.8	1821 (2710)	less than 0.070	more than 55	3000	700	430

※UE/THHW might give the separator.
※The examination of 2500V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

> Allowable ampacity

·Allowable current of this catalog NFPA70 Table 310.15 (B) rated temperature 90 ℃ ambient temperature 30 ℃.

·For the current correction factor, please refer to the P274.

·For please confirm the NFPA70(National Electric cord) and NFPA79(Electrical Standard for Industrial Machinery) more use.

> Standard sales length

100m

(Sale by cutting short length is available for 8AWG-500MCM products. Please contact us which sizes are available.)

STO(A)/TC LF

For tray cable, race way and electronic equipment power supply code

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★★

※The characteristic is an aim.

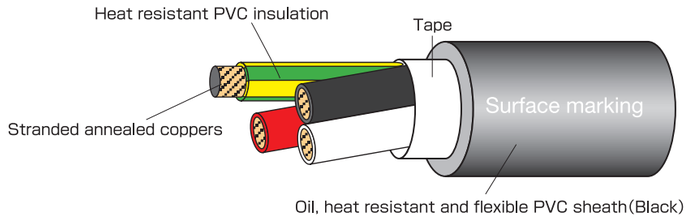
Application

- Multi cable for North America.
- Electric equipment cable with UL and cUL at 600V, 105℃.
  (Category QPOR, ZJCZ, ZKHZ, ZJCZ7)
- Obtaining UL Listed STO, TC and MTW, this cable compliants to NFPA 70 and 79.

Feature

- Heat resistant PVC material is used to insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- It passes Vertical-Tray Flame Test of UL.

Construction figure



Surface marking

(1)18AWG～10AWG cables

E209288(UL)TC 600V 90℃ DRY 75℃ WET or MTW FLEXING VW-1 or STO 105℃ 600V VW-1 Line number×□□AWG
c(UL) STO 105℃ 600V Line number×□□AWG(○○mm²) FT1 TAIYO <PS>E ** LF R15

(2)8AWG～2AWG cables

E209288(UL)TC 600V 90℃ DRY 75℃ WET or MTW VW-1 or STO 105℃ 600V VW-1 Line number×□□AWG
c(UL) STO 105℃ 600V Line number×□□AWG(○○mm²) FT1 TAIYO <PS>E ** LF R15

Identification

※Y/G indicates green core with yellow stripe(30～50%).

Standard sales length

100m

(Sales by cutting short length is available for 10-2AWG products. Please contact us which sizes are available.)

Certification	UL STO	cUL STO	UL TC	UL MTW	Electrical Appliance and Material Safety Law (18～10AWG)	Electrical Appliance and Material Safety Law (8～2AWG)
Applicable standard	UL 62	CSA C22.2 No.49	UL 1277	UL 1063	Departmental order to determine a technical standard of the electrical equipment	Departmental order to determine a technical standard of the electrical equipment
Official symbol	STO	STO	TC	MTW	Vinyl cab tire cord	Vinyl cab tire cord
Voltage rating	600V	600V	600V	600V	300V	600V
Temperature rating	105℃	105℃	DRY90℃ WET75℃	DRY90℃ WET60℃	60℃	60℃
Conductor	UL 62	CSA C22.2 No.49	UL 1277	UL 1063	JIS C 3102	JIS C 3102
Flame rating	VW-1	FT1	Vertical-Tray Flame Test	VW-1	JIS C 3005 4.26.2 b)	JIS C 3005 4.26.2 b)

Meeting standard

Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat resistant PVC insulation Outside diameter (inch)	Heat resistant PVC insulation Outside diameter (mm)	Oil, heat - resistant flexible - PVC sheath Overall diameter approx.(inch)	Oil, heat - resistant flexible - PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)
2C	18 (0.824㎟)	33/0.18 (33/7.1mil)	1.2 (47mil)	0.114	2.9	0.366	9.3	64(95)
3C						0.382	9.7	77(115)
4C						0.413	10.5	91(135)
2C	16 (1.31㎟)	53/0.18 (53/7.1mil)	1.5 (59mil)	0.126	3.2	0.390	9.9	77(115)
3C						0.413	10.5	91(135)
4C						0.445	11.3	111(165)
2C	14 (2.08㎟)	84/0.18 (84/7.1mil)	1.9 (75mil)	0.173	4.4	0.531	13.5	138(205)
3C						0.559	14.2	165(245)
4C						0.602	15.3	198(295)
2C	12 (3.31㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.193	4.9	0.602	15.3	185(275)
3C						0.634	16.1	222(330)
4C						0.681	17.3	269(400)
2C	10 (5.26㎟)	104/0.254 (104/10mil)	3.1 (122mil)	0.220	5.6	0.657	16.7	232(345)
3C						0.693	17.6	286(425)
4C						0.748	19.0	353(525)
3C	8 (8.37㎟)	7/15/0.32 (7/15/12.6mil)	4.2 (165mil)	0.299	7.6	0.898	22.8	464(690)
4C						1.004	25.5	601(895)
2C	6 (13.3㎟)	7/24/0.32 (7/24/12.6mil)	5.3 (209mil)	0.343	8.7	0.969	24.6	514(765)
3C						1.020	25.9	642(955)
4C						1.142	29.0	827(1230)
3C	4 (21.2㎟)	7/38/0.32 (7/38/12.6mil)	6.6 (260mil)	0.394	10.0	1.165	29.6	894(1330)
4C						1.295	32.9	1149(1710)
3C	2 (33.6㎟)	7/60/0.32 (7/60/12.6mil)	8.3 (327mil)	0.469	11.9	1.354	34.4	1283(1910)
4C						1.508	38.3	1653(2460)

※3, 4 core has the [Y/G] earth cable of an equal size.

Allowable ampacity

·Allowable current of this catalog NFPA70 Table 400.5(A)(1) STO ambient temperature 30℃.

·For the current correction factor, please refer to the P274.

·For please confirm the NFPA70(National Electrical cord) and NFPA79(Electrical Standard for Industrial Machinery) more use.

Electrical property

Size (AWG)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	Allowable ampacity (A) a	Allowable ampacity (A) b
18	less than 22.1	more than 60	2000	7	10
16	less than 13.7	more than 60	2000	10	13
14	less than 8.64	more than 60	3000	15	18
12	less than 5.42	more than 50	3000	20	25
10	less than 3.42	more than 50	3000	25	30
8	less than 2.14	more than 50	4000	35	40
6	less than 1.34	more than 50	4000	45	55
4	less than 0.848	more than 50	4000	60	70
2	less than 0.533	more than 40	4000	80	95

※Allowable ampacity By National Electrical Code(NEC)
a:Apply to 3-conductor cords and other multiconductor cords connected to utilization equipment so that only 3 conductors are current-carrying.
b:Apply to 2-conductor cords and other multiconductor cords connected to utilization equipment so that only 2 conductors are current-carrying.

STO-SB(A)/TC LF

For tray cable, race way and electronic equipment power supply code

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★★

※The characteristic is an aim.

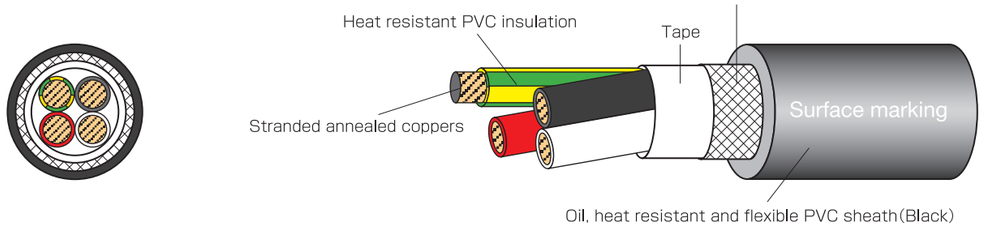
Application

- Multi cable for North America.
- Electric equipment cable with UL and cUL at 600V, 105℃.
  (Category QPOR, ZJCZ, ZKHZ, ZJCZ7)
- Obtaining UL Listed STO, TC and MTW, this cable compliants to NFPA 70 and 79.

Feature

- Heat resistant PVC material is used to insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- It passes Vertical-Tray Flame Test of UL.

Construction figure



Surface marking

E209288(UL)TC 90℃ DRY 75℃ WET or MTW FLEXING VW-1 or STO SHIELDED 105℃ 600V VW-1 Line number×□□AWG
c(UL) STO SHIELDED 105℃ 600V Line number×□□AWG(○○mm²) FT1 TAIYO <PS>E ** LF R15

Identification

※Y/G indicates green core with yellow stripe(30~50%).

Meeting standard

Certification	UL STO	cUL STO	UL TC	UL MTW	Electrical Appliance and Material Safety Law
Applicable standard	UL 62	CSA C22.2 No.49	UL 1277	UL 1063	Departmental order to determine a technical standard of the electrical equipment
Official symbol	STO	STO	TC	MTW	Vinyl cab tire cord
Voltage rating	600V	600V	600V	600V	300V
Temperature rating	105℃	105℃	DRY90℃ WET75℃	DRY90℃ WET60℃	60℃
Conductor	UL 62	CSA C22.2 No.49	UL 1277	UL 1063	JIS C 3102
Flame rating	VW-1	FT1	Vertical-Tray Flame Test	VW-1	JIS C 3005 4.26.2 b)

Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	
2C	18 (0.824㎟)	33/0.18 (33/7.1mil)	1.2 (47mil)	0.114	2.9	0.394	10.0	87(130)
3C						0.409	10.4	97(145)
4C						0.441	11.2	114(170)
2C	16 (1.31㎟)	53/0.18 (53/7.1mil)	1.5 (59mil)	0.126	3.2	0.417	10.6	97(145)
3C						0.441	11.2	118(175)
4C						0.472	12.0	138(205)
2C	14 (2.08㎟)	84/0.18 (84/7.1mil)	1.9 (75mil)	0.173	4.4	0.559	14.2	168(250)
3C						0.587	14.9	195(290)
4C						0.634	16.1	239(355)
2C	12 (3.31㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.193	4.9	0.634	16.1	225(335)
3C						0.665	16.9	265(395)
4C						0.713	18.1	316(470)
2C	10 (5.26㎟)	104/0.254 (104/10mil)	3.1 (122mil)	0.220	5.6	0.689	17.5	276(410)
3C						0.724	18.4	333(495)
4C						0.780	19.8	403(600)

※3, 4 core has the [Y/G] earth cable of an equal size.

Allowable ampacity

·Allowable current of this catalog NFPA70 Table 400.5(A)(1) STO ambient temperature 30℃.

·For the current correction factor, please refer to the P274.

·For please confirm the NFPA70 (National Electrical cord) and NFPA79(Electrical Standard for Industrial Machinery) more use.

Electrical property

Size (AWG)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	Allowable ampacity (A)	
				a	b
18	less than 22.1	more than 60	2000	7	10
16	less than 13.7	more than 60	2000	10	13
14	less than 8.64	more than 60	3000	15	18
12	less than 5.42	more than 50	3000	20	25
10	less than 3.42	more than 50	3000	25	30

※Allowable ampacity By National Electrical Code(NEC)
a:Apply to 3-conductor cords and other multiconductor cords connected to utilization equipment so that only 3 conductors are current-carrying.
b:Apply to 2-conductor cords and other multiconductor cords connected to utilization equipment so that only 2 conductors are current-carrying.

Standard sales length

100m

UE/STO(N)/TC LF

For tray cable, race way and electronic equipment power supply code

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★★

※The characteristic is an aim.

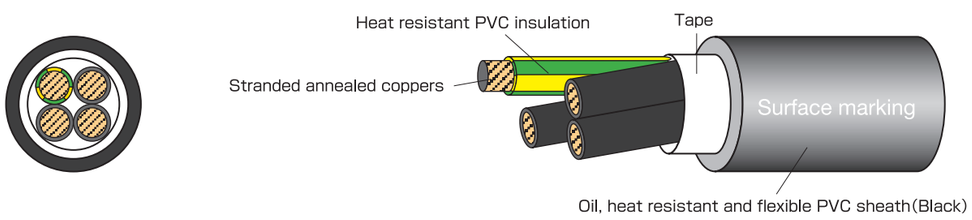
Application

- Multi cable for North America and EU.
- Electric equipment cable with UL and cUL at 600V, 105℃.
  (Category QPOR, ZJCZ, ZKHZ, ZJCZ7)
- Obtaining UL Listed STO, TC and MTW, this cable compliants to NFPA 70 and 79.
- CE marking (TÜV recognition product).
  (Certificate of TÜV No.J50004167)

Feature

- Heat resistant PVC material is used to insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- It passes Vertical-Tray Flame Test of UL.

Construction figure



Surface marking

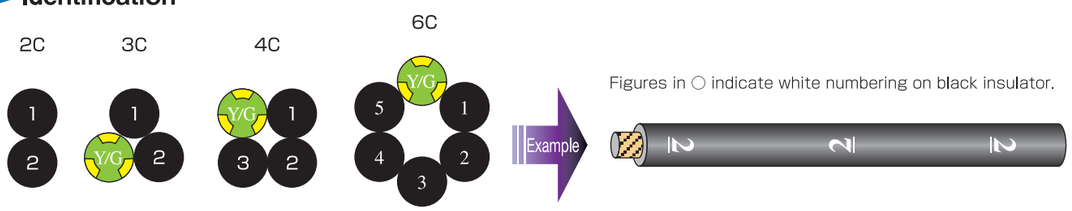
(1)18AWG～10AWG cables

E209288(UL)TC 90℃ DRY 75℃ WET or MTW FLEXING VW-1 or STO 105℃ 600V VW-1 Line number×□□AWG
c(UL) STO 105℃ 600V Line number×□□AWG(○○mm²) FT1 TAIYO △ CE 05VV-F 300/500V <PS>E ** LF R15

(2)8AWG～2AWG cables

E209288(UL)TC 90℃ DRY 75℃ WET or MTW VW-1 or STO 105℃ 600V VW-1 Line number×□□AWG
c(UL) STO 105℃ 600V Line number×□□AWG(○○mm²) FT1 TAIYO △ CE 05VV-F 300/500V <PS>E ** LF R15

Identification



※Y/G indicates green core with yellow stripe(30～50%).

Certification	UL STO	cUL STO	UL TC	TÜV.CE marking	UL MTW	Electrical Appliance and Material Safety Law (18～10AWG)	Electrical Appliance and Material Safety Law (8～2AWG)
Applicable standard	UL 62	CSA C22.2 No.49	UL 1277	EN50525-2-11	UL 1063	Departmental order to determine a technical standard of the electrical equipment	Departmental order to determine a technical standard of the electrical equipment
Official symbol	STO	STO	TC	Equivalent of H05VV-F	MTW	Vinyl cab tire cord	Vinyl cab tire cord
Voltage rating	600V	600V	600V	300/500V	600V	300V	600V
Temperature rating	105℃	105℃	DRY90℃ WET75℃	70℃	DRY90℃ WET60℃	60℃	60℃
Conductor	UL 62	CSA C22.2 No.49	UL 1277	EN60228	UL 1063	JIS C 3102	JIS C 3102
Flame rating	VW-1	FT1	Vertical-Tray Flame Test	EN50264-2-1	VW-1	JIS C 3005 4.26.2 b)	JIS C 3005 4.26.2 b)

Meeting standard

Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat resistant PVC insulation Outside diameter (inch)	Heat resistant PVC insulation Outside diameter (mm)	Oil, heat - resistant flexible - PVC sheath Overall diameter approx. (inch)	Oil, heat - resistant flexible - PVC sheath Overall diameter approx. (mm)	Approx. weight (lbs/1000ft) (kg/km)
2C						0.366	9.3	64(95)
3C	18 (0.824㎟)	33/0.18 (33/7.1mil)	1.2 (47mil)	0.114	2.9	0.382	9.7	77(115)
4C						0.413	10.5	91(135)
6C						0.528	13.4	148(220)
2C						0.390	9.9	77(115)
3C	16 (1.31㎟)	53/0.18 (53/7.1mil)	1.5 (59mil)	0.126	3.2	0.413	10.5	91(135)
4C						0.445	11.3	111(165)
6C						0.563	14.3	175(260)
2C						0.531	13.5	138(205)
3C	14 (2.08㎟)	84/0.18 (84/7.1mil)	1.9 (75mil)	0.173	4.4	0.559	14.2	165(245)
4C						0.602	15.3	198(295)
6C						0.736	18.7	296(440)
2C	12 (3.31㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.193	4.9	0.602	15.3	185(275)
3C						0.634	16.1	222(330)
4C						0.681	17.3	269(400)
2C						0.657	16.7	232(345)
3C	10 (5.26㎟)	104/0.254 (104/10mil)	3.1 (122mil)	0.220	5.6	0.693	17.6	286(425)
4C						0.748	19.0	353(525)
6C						0.878	22.3	491(730)
3C	8 (8.37㎟)	7/15/0.32 (7/15/12.6mil)	4.2 (165mil)	0.299	7.6	0.898	22.8	464(690)
4C						1.004	25.5	601(895)
3C	6 (13.3㎟)	7/24/0.32 (7/24/12.6mil)	5.3 (209mil)	0.343	8.7	1.020	25.9	642(955)
4C						1.142	29.0	827(1230)
3C	4 (21.2㎟)	7/38/0.32 (7/38/12.6mil)	6.6 (260mil)	0.394	10.0	1.165	29.6	894(1330)
4C						1.295	32.9	1149(1710)
3C	2 (33.6㎟)	7/60/0.32 (7/60/12.6mil)	8.3 (327mil)	0.469	11.9	1.354	34.4	1283(1910)
4C						1.508	38.3	1653(2460)

※3 core or more has the [Y/G] earth cable of an equal size.

Allowable ampacity

·Allowable current of this catalog NFPA70 Table 400.5(A)(1) STO ambient temperature 30℃.

·For the current correction factor, please refer to the P274.

·For please confirm the NFPA70(National Electrical cord) and NFPA79(Electrical Standard for Industrial Machinery) more use.

Electrical property

Size (AWG)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	*1 Electrical strength (V/1min.)	*2 Allowable ampacity (A) a	b	c
18	less than 22.1	more than 60	2000	7	10	5.6
16	less than 13.7	more than 60	2000	10	13	8
14	less than 8.64	more than 60	3000	15	18	12
12	less than 5.42	more than 50	3000	20	25	–
10	less than 3.42	more than 50	3000	25	30	20
8	less than 2.14	more than 50	4000	35	40	–
6	less than 1.34	more than 50	4000	45	55	–
4	less than 0.848	more than 50	4000	60	70	–
2	less than 0.533	more than 40	4000	80	95	–

*1 The examination of 2000V/5 minute besides the withstand voltage test on the UL standard and the CSA standard that has been described to the top is applied.

*2 Allowable ampacity By National Electrical Code(NEC)
a:Apply to 3-conductor cords and other multiconductor cords connected to utilization equipment so that only 3 conductors are current-carrying.
b:Apply to 2-conductor cords and other multiconductor cords connected to utilization equipment so that only 2 conductors are current-carrying.
c:Apply to 5-conductor cords and other multiconductor cords connected to utilization equipment so that only 5 conductors are current-carrying.

Standard sales length

100m

(Sales by short length is available for large sizes. Please contact us which sizes are available.)

UE/STO-SB(N)/TC LF

For tray cable, race way and electronic equipment power supply code

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★★

※The characteristic is an aim.

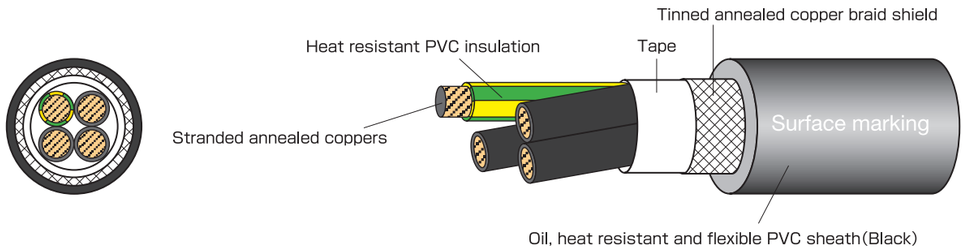
Application

- Multi cable for North America.
- Electric equipment cable with UL and cUL at 600V, 105℃.
  (Category QPOR, ZJCZ, ZKHZ, ZJCZ7)
- Obtaining UL Listed STO, TC and MTW, this cable compliants to NFPA 70 and 79.
- CE marking (TÜV recognition product).
  (※It is recognized as a cable with the cover based on H05VV-F.)
  (Certificate of TÜV No.J2050492)

Feature

- Heat resistant PVC material is used to insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- It passes Vertical-Tray Flame Test of UL.

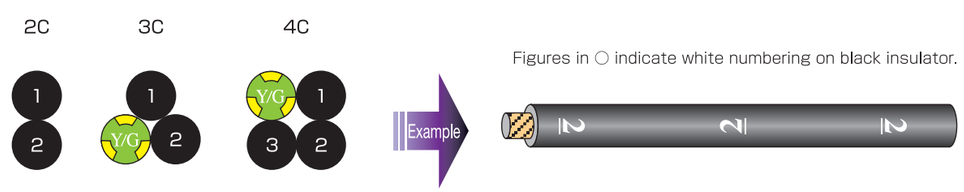
Construction figure



Surface marking

E209288(UL)TC 90℃ DRY 75℃ WET or MTW FLEXING VW-1 or STO SHIELDED 105℃ 600V VW-1 Line number×□□AWG
c(UL) STO SHIELDED 105℃ 600V Line number×□□AWG(○○mm²) FT1 TAIYO △CE 05VV-F 300/500V <PS>E ** LF R15

Identification



※Y/G indicates green core with yellow stripe(30~50%).

Certification	UL STO,cUL STO	UL TC	UL MTW	TÜV,CE marking	Electrical Appliance and Material Safety Law
Applicable standard	UL 62 CSA C22.2 No.49	UL 1277	UL 1063	EN50525-2-11	Departmental order to determine a technical standard of the electrical equipment
Official symbol	STO	TC	MTW	Equivalent of H05VV-F	Vinyl cab tire cord
Voltage rating	600V	600V	600V	300/500V	300V
Temperature rating	105℃	DRY90℃ WET75℃	DRY90℃ WET60℃	70℃	60℃
Conductor	UL 62 CSA C22.2 No.49	UL 1277	UL 1063	EN60228	JIS C 3102
Flame rating	VW-1,FT1	Vertical-Tray Flame Test	VW-1	EN50264-2-1	JIS C 3005 4.26.2 b)

Meeting standard

Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	
2C	18 (0.824㎟)	33/0.18 (33/7.1mil)	1.2 (47mil)	0.114	2.9	0.394	10.0	87(130)
3C						0.409	10.4	97(145)
4C						0.441	11.2	114(170)
2C	16 (1.31㎟)	53/0.18 (53/7.1mil)	1.5 (59mil)	0.126	3.2	0.417	10.6	97(145)
3C						0.441	11.2	118(175)
4C						0.472	12.0	138(205)
2C	14 (2.08㎟)	84/0.18 (84/7.1mil)	1.9 (75mil)	0.173	4.4	0.559	14.2	168(250)
3C						0.587	14.9	195(290)
4C						0.634	16.1	239(355)
2C	12 (3.31㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.193	4.9	0.634	16.1	225(335)
3C						0.665	16.9	265(395)
4C						0.713	18.1	316(470)

※3, 4 core has the [Y/G] earth cable of an equal size.

Allowable ampacity

·Allowable current of this catalog NFPA70 Table 400.5(A)(1) STO ambient temperature 30℃.

·For the current correction factor, please refer to the P274.

·For please confirm the NFPA70(National Electrical cord) and NFPA79(Electrical Standard for Industrial Machinery) more use.

Electrical property

Size (AWG)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	*1 Electrical strength (V/1min.)	*2 Allowable ampacity (A)	
				a	b
18	less than 22.1	more than 60	2000	7	10
16	less than 13.7	more than 60	2000	10	13
14	less than 8.64	more than 60	3000	15	18
12	less than 5.42	more than 50	3000	20	25

*1 The examination of 2000V/5 minute besides the withstand voltage test on the UL standard and the CSA standard that has been described to the top is applied.

*2 Allowable ampacity By National Electrical Code(NEC)
a:Apply to 3-conductor cords and other multiconductor cords connected to utilization equipment so that only 3 conductors are current-carrying.
b:Apply to 2-conductor cords and other multiconductor cords connected to utilization equipment so that only 2 conductors are current-carrying.

Standard sales length

100m

UE/STO-SB(N)/TC LF

For tray cable, race way and electronic equipment power supply code

Heat resistance ★★★★★
Oil resistance ★★★★★
Noise resistance ★★★
Flame resistance ★★★★★
Flexibility ★★★
non-migratory ★★★★
Transport property ★★

※The characteristic is an aim.

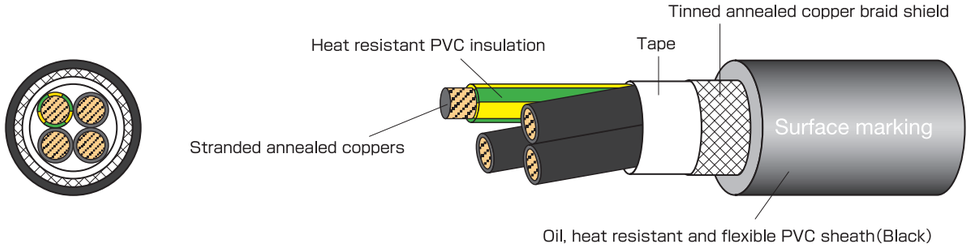
Application

- Multi cable for North America and EU.
- Electric equipment cable with UL and cUL at 600V, 105℃.
  (Category QPOR, ZJCZ, ZKHZ, ZJCZ7)
- Obtaining UL Listed STO, TC and MTW, this cable compliants to NFPA 70 and 79.
- CE marking.

Feature

- Heat resistant PVC material is used to insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- It passes Vertical-Tray Flame Test of UL.

Construction figure



Surface marking

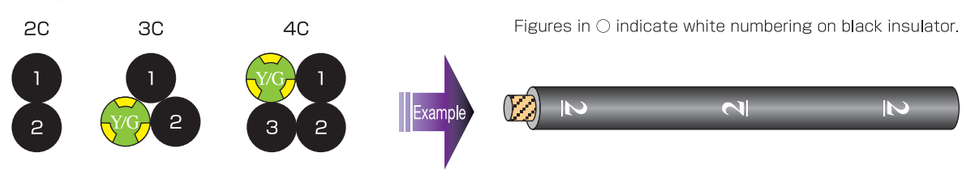
(1)10AWG cables

E209288(UL)TC 90℃ DRY 75℃ WET or MTW FLEXING VW-1 or STO SHIELDED 105℃ 600V VW-1 Line number×□□AWG
c(UL) STO SHIELDED 105℃ 600V Line number×□□AWG(○○mm²) FT1 TAIYO CE 300/500V <PS>E ** LF R15

(2)8AWG~6AWG cables

E209288(UL)TC 90℃ DRY 75℃ WET or MTW VW-1 or STO SHIELDED 105℃ 600V VW-1 Line number×□□AWG
c(UL) STO SHIELDED 105℃ 600V Line number×□□AWG(○○mm²) FT1 TAIYO CE 300/500V <PS>E ** LF R15

Identification



※Y/G indicates green core with yellow stripe(30~50%).

Certification	UL STO,cUL STO	UL TC	UL MTW	CE marking	Electrical Appliance and Material Safety Law (Only 10 AWG)	Electrical Appliance and Material Safety Law (8~6AWG)
Applicable standard	UL 62 CSA C22.2 No.49	UL 1277	UL 1063	EN50525-2-11	Departmental order to determine a technical standard of the electrical equipment	Departmental order to determine a technical standard of the electrical equipment
Official symbol	STO	TC	MTW	Equivalent of H05VV-F	Vinyl cab tire cord	Vinyl cab tire cord
Voltage rating	600V	600V	600V	300/500V	300V	600V
Temperature rating	105℃	DRY90℃ WET75℃	DRY90℃ WET60℃	70℃	60℃	60℃
Conductor	UL 62 CSA C22.2 No.49	UL 1277	UL 1063	EN60228	JIS C 3102	JIS C 3102
Flame rating	VW-1,FT1	Vertical-Tray Flame Test	VW-1	EN50264-2-1	JIS C 3005 4.26.2 b)	JIS C 3005 4.26.2 b)

Meeting standard

Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	
2C	10 (5.26㎟)	104/0.254 (104/10mil)	3.10 (122mil)	0.220	5.6	0.689	17.5	276(410)
3C						0.724	18.4	333(495)
4C						0.780	19.8	403(600)
2C	8 (8.37㎟)	7/15/0.32 (7/15/12.6mil)	4.20 (165mil)	0.299	7.6	0.902	22.9	470(700)
3C						0.949	24.1	564(840)
4C						1.055	26.8	712(1060)
3C	6 (13.3㎟)	7/24/0.32 (7/24/12.6mil)	5.30 (209mil)	0.343	8.7	1.071	27.2	759(1130)
4C						1.193	30.3	954(1420)

※3, 4 core has the [Y/G] earth cable of an equal size.

Allowable ampacity

·Allowable current of this catalog NFPA70 Table 400.5(A)(1) STO ambient temperature 30℃.

·For the current correction factor, please refer to the P274.

·For please confirm the NFPA70(National Electrical cord) and NFPA79(Electrical Standard for Industrial Machinery) more use.

Electrical property

Size (AWG)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	*1 Electrical strength (V/1min.)	*2 Allowable ampacity (A)	
				a	b
10	less than 3.42	more than 50	3000	25	30
8	less than 2.14	more than 50	4000	35	40
6	less than 1.34	more than 50	4000	45	55

*1 The examination of 2000V/5 minute besides the withstand voltage test on the UL standard and the CSA standard that has been described to the top is applied.

*2 Allowable ampacity By National Electrical Code(NEC)
a:Apply to 3-conductor cords and other multiconductor cords connected to utilization equipment so that only 3 conductors are current-carrying.
b:Apply to 2-conductor cords and other multiconductor cords connected to utilization equipment so that only 2 conductors are current-carrying.

Standard sales length

100m

STOW (A) LF

For electronic equipment power supply code

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★★

※The characteristic is an aim.

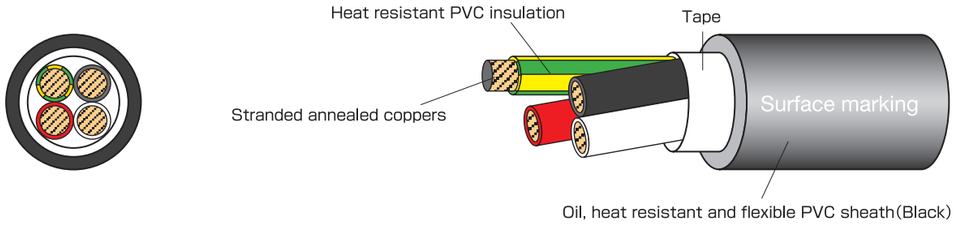
Application

- It is possible to use it for a moist place.

Feature

- Standard UL, cUL.
  (Category ZJCZ, ZJCZ7)
- Obtaining UL Listed STOW, this cable compliants to NFPA 70 and 79.
  (8～2AWG size)
- Heat resistant PVC material is used to insulation.
- Oil, heat resistant and flexible PVC material is used.
- Flame resisting:UL VW-1, cUL FT1.

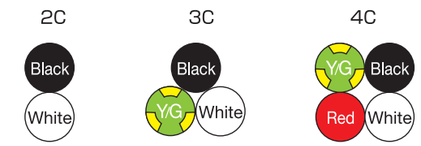
Construction figure



Surface marking

E65955(UL)STOW 105℃ 600V Line number×□□AWG VW-1 WATER RESISTANT TAIYO
c(UL)STOW 105℃ 600V Line number×□□AWG(○○mm²) FT1 WATER RESISTANT TAIYO <PS>E ** LF R15

Identification



※Y/G indicates green core with yellow stripe(30～50%).

Certification	UL STOW	cUL STOW	Electrical Appliance and Material Safety Law (18～10 AWG)	Electrical Appliance and Material Safety Law (8～2 AWG)
Applicable standard	UL 62	CSA C22.2 No.49	Departmental order to determine a technical standard of the electrical equipment	Departmental order to determine a technical standard of the electrical equipment
Official symbol	STOW	STOW	Vinyl cab tire cord	Vinyl cab tire cord
Voltage rating	600V	600V	300V	600V
Temperature rating	105℃	105℃	60℃	60℃
Conductor	UL 62	CSA C22.2 No.49	JIS C 3102	JIS C 3102
Flame rating	VW-1	FT1	JIS C 3005 4.26.2 b)	JIS C 3005 4.26.2 b)

Meeting standard

Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	
2C	18 (0.824㎟)	33/0.18 (33/7.1mil)	1.2 (47mil)	0.114	2.9	0.366	9.3	64(95)
3C						0.382	9.7	77(115)
4C						0.413	10.5	91(135)
2C	16 (1.31㎟)	53/0.18 (53/7.1mil)	1.5 (59mil)	0.126	3.2	0.390	9.9	77(115)
3C						0.413	10.5	91(135)
4C						0.445	11.3	111(165)
2C	14 (2.08㎟)	84/0.18 (84/7.1mil)	1.9 (75mil)	0.173	4.4	0.531	13.5	138(205)
3C						0.559	14.2	165(245)
4C						0.602	15.3	198(295)
2C	12 (3.31㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.193	4.9	0.602	15.3	185(275)
3C						0.634	16.1	222(330)
4C						0.681	17.3	269(400)
2C	10 (5.26㎟)	104/0.254 (104/10mil)	3.1 (122mil)	0.220	5.6	0.657	16.7	232(345)
3C						0.693	17.6	286(425)
4C						0.748	19.0	353(525)
3C	8 (8.37㎟)	7/15/0.32 (7/15/12.6mil)	4.2 (165mil)	0.299	7.6	0.898	22.8	464(690)
4C						1.004	25.5	601(895)
2C	6 (13.3㎟)	7/24/0.32 (7/24/12.6mil)	5.3 (209mil)	0.343	8.7	0.969	24.6	514(765)
3C						1.020	25.9	642(955)
4C						1.142	29.0	833(1240)
3C	4 (21.2㎟)	7/38/0.32 (7/38/12.6mil)	6.6 (260mil)	0.394	10.0	1.165	29.6	894(1330)
4C						1.295	32.9	1156(1720)
3C	2 (33.6㎟)	7/60/0.32 (7/60/12.6mil)	8.3 (327mil)	0.469	11.9	1.354	34.4	1283(1910)
4C						1.508	38.3	1653(2460)

※3, 4 core has the [Y/G] earth cable of an equal size.

Allowable ampacity

·Allowable current of this catalog NFPA70 Table 400.5(A)(1) STOW ambient temperature 30℃.

·For the current correction factor, please refer to the P274.

·For please confirm the NFPA70 (National Electrical cord) and NFPA79 (Electrical Standard for Industrial Machinery) more use.

Electrical property

Size (AWG)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm15℃)	Electrical strength (V/1min.)	* Allowable ampacity (A)	
				a	b
18	less than 22.8	more than 52	2000	7	10
16	less than 14.3	more than 45	2000	10	13
14	less than 9.05	more than 50	3000	15	18
12	less than 5.69	more than 40	3000	20	25
10	less than 3.58	more than 34	3000	25	30
8	less than 2.27	more than 34	4000	35	40
6	less than 1.42	more than 29	4000	45	55
4	less than 0.899	more than 24	4000	60	70
2	less than 0.566	more than 20	4000	80	95

※Allowable ampacity By National Electrical Code(NEC)
a:Apply to 3-conductor cords and other multiconductor cords connected to utilization equipment so that only 3 conductors are current-carrying.
b:Apply to 2-conductor cords and other multiconductor cords connected to utilization equipment so that only 2 conductors are current-carrying.

Standard sales length

Make-to-order Products.
(Please contact us about production lot.)

Environment type cable (non-halogen)

SE/ST(N)LF

For environmental electronic equipment power supply code

Heat resistance	★★★★★
Oil resistance	★
Noise resistance	★
Flame resistance	★★
Flexibility	★★
non-migratory	★★★★
Transport property	★★

※The characteristic is an aim.

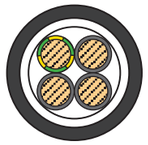
> Application

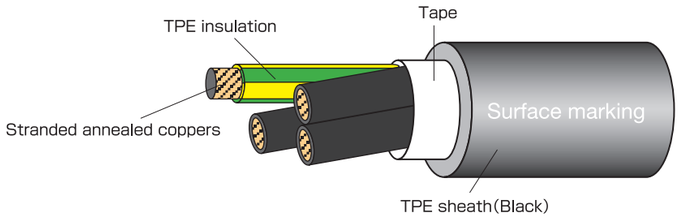
- For environmental electronic equipment power supply code.

> Feature

- Standard UL, cUL. (Category ZJCZ, ZJCZ7)
- Considers for environment material is used to product.
- Obtaining UL Listed SE, ST, this cable compliants to NFPA 70 and 79.
- Non-lead and no halogen.
- Low smoke evolution.
- It is a specification that controls the out gas generation.
- Excels in the low temperature resistance.

> Construction figure

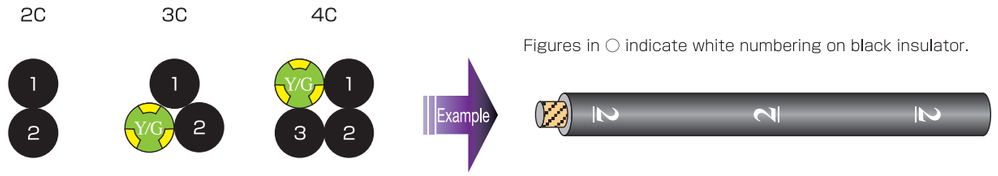




> Surface marking

E65955(UL)SE 105℃ 600V Line number×□□AWG TAIYO c(UL)ST 105℃ 600V Line number×□□AWG(○○mm²) FT2 TPE TAIYO LF R15

> Identification



※Y/G indicates green core with yellow stripe(30~50%).

> Standard sales length

Make-to-order Products.

(Please contact us about production lot.)

> > > Meeting standard

Certification	UL SE	cUL ST
Applicable standard	UL 62	CSA C22.2 No.49
Official symbol	SE	ST
Voltage rating	600V	600V
Temperature rating	105℃	105℃
Conductor	UL 62	CSA C22.2 No.49
Flame rating	Horizontal	FT2

> Construction table

No. of cores	Conductor			TPE insulation		TPE sheath		Approx. weight (lbs/1000ft) (kg/km)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	
2C	18 (0.824㎟)	33/0.18 (33/7.1mil)	1.2 (47mil)	0.114	2.9	0.366	9.3	60(90)
3C						0.382	9.7	74(110)
4C						0.413	10.5	87(130)
2C	16 (1.31㎟)	53/0.18 (53/7.1mil)	1.5 (59mil)	0.126	3.2	0.394	10.0	74(110)
3C						0.413	10.5	87(130)
4C						0.445	11.3	108(160)
2C	14 (2.08㎟)	84/0.18 (84/7.1mil)	1.9 (75mil)	0.173	4.4	0.531	13.5	131(195)
3C						0.559	14.2	151(225)
4C						0.602	15.3	188(280)
2C	12 (3.31㎟)	65/0.254 (65/10mil)	2.4 (94mil)	0.193	4.9	0.602	15.3	175(260)
3C						0.634	16.1	215(320)
4C						0.681	17.3	262(390)
2C	10 (5.26㎟)	104/0.254 (104/10mil)	3.1 (122mil)	0.220	5.6	0.657	16.7	228(340)
3C						0.693	17.6	279(415)
4C						0.748	19.0	343(510)

※3, 4 core has the [Y/G] earth cable of an equal size.

(Example)3C×18AWG:2×18AWG+1×18AWG (earth)

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Please multiply the following correction coefficient by the ambient temperature.

Note) Please refer to P.274 when you use this cable according to NFPA70 or NFPA79.

● Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

> Electrical property

Size (AWG)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	*1 Electrical strength (V/1min.)	*2 Allowable ampacity (A)	
				a	b
18	less than 22.8	more than 60	2000	7	10
16	less than 14.3	more than 60	2000	10	13
14	less than 9.05	more than 60	3000	15	18
12	less than 5.69	more than 50	3000	20	25
10	less than 3.58	more than 50	3000	25	30

*1 The examination of 2000V/5 minute besides the withstand voltage test on the UL standard and the CSA standard that has been described to the top is applied.

*2 Allowable ampacity By National Electrical Code(NEC)

a:Apply to 3-conductor cords and other multiconductor cords connected to utilization equipment so that only 3 conductors are current-carrying.

b:Apply to 2-conductor cords and other multiconductor cords connected to utilization equipment so that only 2 conductors are current-carrying.

C3/RV-90 LF

Equipment in the wiring for the heat-resistant vinyl wire

Heat resistance	★★★★
Oil resistance	★★★
Noise resistance	★
Flame resistance	★★★
Flexibility	★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

Application

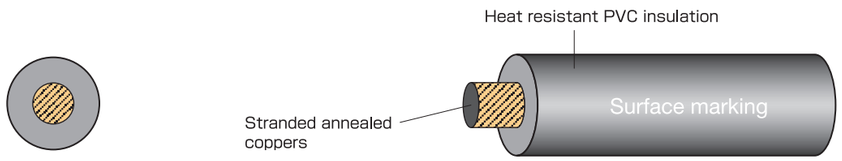
- Equipment in the wiring for the heat-resistant vinyl wire.

Feature

- Product that corresponds to CCC attestation.
- It passes GB standard (GB/T18380) vertical test※.
- CE marking.
- It suits Electrical Appliance and Material Safety Law.

※ Refer to JIS C3665 (IEC60332-1) for the test method.

Construction figure



Surface marking

·Core color: black, white, red, blue and Y/G

(1)0.5～1.0mm² wires

CCC A018704 太阳电线（東莞）有限公司 60227 IEC 08（RV-90）300/500V 90℃ ○○SQ GB/T5023.3-2008/IEC 60227-3：1997<PS>E TY TAIYO CABLETEC CE 300/500V LF R15

(2)1.5～2.5mm² wires

CCC A018704 太阳电线（東莞）有限公司 60227 IEC 08（RV-90）300/500V 90℃ ○○SQ GB/T5023.3-2008/IEC 60227-3：1997<PS>E TY TAIYO CABLETEC CE 450/750V LF R15

·Core color: Yellow(no CE marking)

CCC A018704 太阳电线（東莞）有限公司 60227 IEC 08（RV-90）300/500V 90℃ ○○SQ GB/T5023.3-2008/IEC 60227-3：1997<PS>E TY TAIYO CABLETEC LF R15

Identification

·Black, white, red, yellow, blue and Y/G.

※Y/G indicates green core with yellow stripe (30～50%).

Meeting standard

Certification	CCC	CE marking		Electrical Appliance and Material Safety Law
		0.5mm²～1.0mm²	1.5mm²～2.5mm²	
Applicable standard	GB/T5023.3	EN50525-2-31	EN50525-2-31	J60227-03
Official symbol	RV-90(60227 IEC 08)	Equivalent of H05V-K	Equivalent of H07V-K	60227 IEC 08
Voltage rating	300/500V	300/500V	450/750V	300/500V
Temperature rating	90℃	70℃	70℃	90℃
Conductor	GB/T 3956 Class 5	EN 60228	EN 60228	IEC 60228 Class 5
Flame rating	GB/T 18380.12	EN 50265-2-1	EN 50265-2-1	IEC 60332-1

Construction table

No. of cores	Conductor			Heat - resistant PVC insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1C	0.5	20/0.18 (20/7.1mil)	0.9 (35mil)	0.087	2.2	7(10)	less than 39.0	more than 0.013	2000	11
1C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.094	2.4	9(13)	less than 26.0	more than 0.012	2000	15
1C	1.0	40/0.18 (40/7.1mil)	1.3 (51mil)	0.102	2.6	11(16)	less than 19.5	more than 0.010	2000	18
1C	1.5	30/0.25 (30/9.8mil)	1.6 (63mil)	0.122	3.1	15(23)	less than 13.3	more than 0.010	2500	24
1C	2.5	50/0.25 (50/9.8mil)	2.04 (80mil)	0.147	3.74	23(34)	less than 7.98	more than 0.0095	2500	33

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature and the cable-laying conditions, etc.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.91	0.82	0.71	0.58	0.41	—	—

●Adjustment factors(for multiple-line laying)

No. of condoctors	2～3	4	5～6	7～15	16～40	41～60	61～
Adjustment factors	0.70	0.63	0.56	0.49	0.43	0.39	0.34

Standard sales length

Order production
(Please contact us about production lot.)

C3/RV LF

Vinyl insulated wire for fixed wiring

Heat resistance	★★
Oil resistance	★★★
Noise resistance	★
Flame resistance	★★★
Flexibility	★★
non-migratory	★★★★
Transport property	★

※The characteristic is an aim.

Application

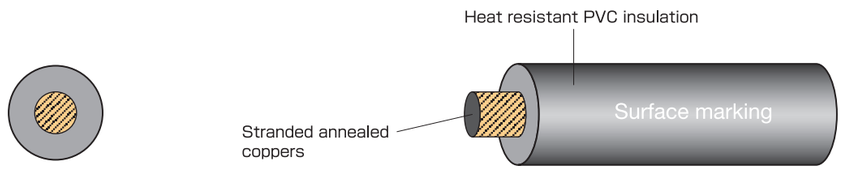
- Vinyl insulated wire for fixed wiring.

Feature

- Product that corresponds to CCC attestation.
- It passes GB standard(GB/T18380) vertical test※.
- CE marking.
- It suits Electrical Appliance and Material Safety Law.

※ Refer to JIS C3665(IEC60332-1)for the test method.

Construction figure



Surface marking

·Core color: black, white, red, blue and Y/G

CCC A035686 太阳电线（苏州）有限公司 60227 IEC 02（RV） ○○mm² 450/750V GB/T5023.3 <PS>E TY TAIYO CABLETEC CE 450/750V LF R15

·Core color:Yellow(no CE marking)

CCC A035686 太阳电线（苏州）有限公司 60227 IEC 02（RV） ○○mm² 450/750V GB/T5023.3 <PS>E TY TAIYO CABLETEC LF R15

Meeting standard

Certification	CCC	CE marking	Electrical Appliance and Material Safety Law
Applicable standard	GB/T5023.3	EN50525-2-31	J60227-03
Official symbol	RV（60227 IEC 02）	Equivalent of H07V-K	J60227 IEC 02
Voltage rating	450/750V	450/750V	450/750V
Temperature rating	70℃	70℃	70℃
Conductor	GB/T 3956 Class 5	EN 60228	IEC 60228 Class 5
Flame rating	GB/T 18380.12	EN 50265-2-1	IEC 60332-1

Identification

·4.0mm²～25mm²wire is a black, white, red, blue, and Y/G.
·35mm²wire is a black, and Y/G.
·50mm²wire is a black.

※Y/G indicates green core with yellow stripe (30～50%).

Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1C	4.0	82/0.25 (82/9.8mil)	2.6 (102mil)	0.169	4.3	34(50)	less than 4.95	more than 0.0078	2500	38
1C	6.0	7/17/0.25 (7/17/9.8mil)	3.4 (134mil)	0.201	5.1	50(75)	less than 3.30	more than 0.0068	2500	51
1C	10	7/29/0.25 (7/29/9.8mil)	4.5 (177mil)	0.260	6.6	81(120)	less than 1.91	more than 0.0065	2500	75
1C	16	7/48/0.25 (7/48/9.8mil)	5.8 (228mil)	0.311	7.9	128(190)	less than 1.21	more than 0.0053	2500	100
1C	25	7/75/0.25 (7/75/9.8mil)	7.3 (287mil)	0.386	9.8	202(300)	less than 0.780	more than 0.0050	2500	130
1C	35	19/27/0.30 (19/75/11.8mil)	8.7 (343mil)	0.445	11.3	272(405)	less than 0.554	more than 0.0043	2500	170
1C	50	19/39/0.30 (19/39/11.8mil)	10.5 (413mil)	0.528	13.4	390(580)	less than 0.386	more than 0.0042	2500	220

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature and the cable-laying conditions, etc.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.87	0.71	0.50	—	—	—	—

●Adjustment factors(for multiple-line laying)

No. of condoctors	2～3	4	5～6	7～15	16～40	41～60	61～
Adjustment factors	0.70	0.63	0.56	0.49	0.43	0.39	0.34

Standard sales length

Make-to-order Products.
(Please Contact us about production lot.)

SL-TVV(STD5)LF SL-TVV(STD4)LF

For electrical equipment power supply, electronic equipment cable

Heat resistance	★★★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★
Transport property	★★

※The characteristic is an aim.

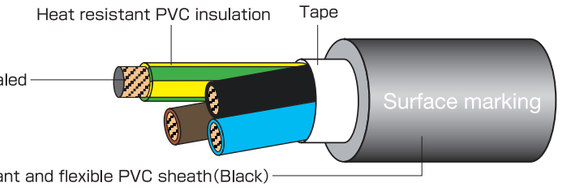
> Application

- Electrical equipment power supply, electronic equipment cable.

> Feature

- Product that corresponds to CCC attestation. (TVV)
- It passes GB standard (GB/T18380) vertical test※.
- CE marking.
- It suits Electrical Appliance and Material Safety Law. (2~7 cores)
- Product that corresponds to UL, cUL attestation. (for AWM2501 wiring in equipment)
- Heat resistant PVC material is used to insulation.
- Multi making cable.
- Oil, heat resistant and flexible PVC material is used to sheath.

> Construction figure



> Surface marking

<Example>

① SL-TVV(STD5) LF　0.75~1.0SQ(2~7 cores)

CCC A035686 太阳电线（苏州）有限公司 60227 IEC 71c(TVV) 線心数×○○mm² 300/500V GB/T5023.6
E250083 AWM 2501 105℃ 600V VW-1 AWM ⅡA 105℃ 600V FT1 TAIYO CE 300/500V <PS>E TY タイネツ LF R15

② SL-TVV(STD5) LF　1.5~25SQ(2~7 cores)

CCC A035686 太阳电线（苏州）有限公司 60227 IEC 71c(TVV) 線心数×○○mm² 450/750V GB/T5023.6
E250083 AWM 2501 105℃ 600V VW-1 AWM ⅡA 105℃ 600V FT1 TAIYO CE 450/750V <PS>E TY タイネツ LF R15

③ SL-TVV(STD4) LF　0.75~1.0SQ(8 cores or more)

CCC A035686 太阳电线（苏州）有限公司 60227 IEC 71c(TVV) 線心数×○○mm² 300/500V GB/T5023.6
E250083 AWM 2501 105℃ 600V VW-1 AWM ⅡA 105℃ 600V FT1 TAIYO CE 300/500V LF R15

④ SL-TVV(STD4) LF　1.5~25SQ(8 cores or more)

CCC A035686 太阳电线（苏州）有限公司 60227 IEC 71c(TVV) 線心数×○○mm² 450/750V GB/T5023.6
E250083 AWM 2501 105℃ 600V VW-1 AWM ⅡA 105℃ 600V FT1 TAIYO CE 450/750V LF R15

> Identification

※Figures in ○ indicate white numberling on black insulator.
※Y/G indicates green core with yellow stripe(30~50%).

> > > Meeting standard

Certification	IEC	CCC	Electrical Appliance and Material Safety Law (Law Departmental order to determine a technical standard of the electrical equipment)	UL	CSA
Applicable standard	IEC60227-6	GB/T5023.6		UL758	CSA C22.2 No.210
Official symbol	60227 IEC 71c	60227 IEC 71c (TVV)	Heat-resistamt flexibe cable	AWM STYLE 2501	AWM ⅡA
Voltage rating	300/500V	300/500V	600V	600V	600V
Temperature rating	70℃	70℃	75℃	105℃	105℃
Conductor	IEC60228 Class5	GB/T3956 Class5	JIS C 3102	UL758	CSA C22.2 No.210
Flame rating	IEC60332-1	GB/T18380	JIS C 3005-4.26.2-b	VW-1	FT1

2-7 core types are (STD5) and 8 or more types are (STD4) becaues PSE is applied to only 2 to 7 core types of these cables.

> Construction table

① SL-TVV(STD5) LF、SL-TVV(STD4) LF　0.75~1.0SQ

NO.of cores	Conductor Size (mm²)	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Foamed polyolefin insulation Outside diameter (inch)	Foamed polyolefin insulation Outside diameter (mm)	Oil, heat - resistant flexible - PVC sheath Outside diameter approx. (inch)	Oil, heat - resistant flexible - PVC sheath Outside diameter approx. (mm)	Electrical Characteristics Conductor resistance (Ω/km 20℃)	Electrical Characteristics Electrical strength (V/5min)	Electrical Characteristics Insulation resistance (MΩ・km 20℃)	Electrical Characteristics Insulation resistance (MΩ・km 70℃)	Approx. weight (lbs/1000ft) (kg/km)	70℃ Allowable ampacity (A)	105℃ Allowable ampacity (A)
○ 2C	0.75	19AWG	30/0.18 (30/7.1mil)	1.14 (45mil)	0.108	2.74	0.354	9.0	less than 26.0	2000	more than 50	more than 500.011	60(90)	14	18
○ 3C							0.370	9.4					71(105)	11	18
○ 4C							0.398	10.1					84(125)	10	15
○ 6C							0.476	12.1					121(180)	9.5	13
○10C							0.626	15.9					202(300)	8.2	11
○12C							0.701	17.8					249(370)	7.8	10
○20C							0.756	19.2					319(475)	6.3	8.4
○30C							0.949	24.1					487(725)	5.6	7.4
○ 2C	1.0	18AWG	40/0.18 (40/7.1mil)	1.31 (52mil)	0.115	2.91	0.366	9.3	less than 19.5	2000	more than 50	more than 0.010	67(100)	16	21
○ 3C							0.386	9.8					77(115)	14	22
○ 4C							0.421	10.7					97(145)	12	18
○ 6C							0.496	12.6					138(205)	11	15
○10C							0.654	16.6					228(340)	9.7	13
○12C							0.744	18.9					289(430)	9.2	12
○20C							0.791	20.1					366(545)	7.5	9.9
○30C							0.996	25.3					564(840)	6.6	8.7

Certification	IEC	CCC	Electrical Appliance and Material Safety Law (Law Departmental order to determine a technical standard of the electrical equipment)	UL	CSA
Applicable standard	IEC60227-6	GB/T5023.6		UL758	CSA C22.2 No.210
Official symbol	60227 IEC 71c	60227 IEC 71c (TVV)	Heat-resistant cab tire cord	AWM STYLE 2501	AWM ⅡA
Voltage rating	450/750V	450/750V	600V	600V	600V
Temperature rating	70℃	70℃	75℃	105℃	105℃
Conductor	IEC60228 Class5	GB/T3956 Class5	JIS C 3102	UL758	CSA C22.2 No.210
Flame rating	IEC60332-1	GB/T18380	JIS C 3005-4.26.2-b	VW-1	FT1

2-7 core types are (STD5) and 8 or more types are (STD4) becaues PSE is applied to only 2 to 7 core types of these cables.

② SL-TVV(STD5) LF、SL-TVV(STD4) LF　1.5~25SQ

NO.of cores	Conductor Size (mm²)	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat-resistant PVC insulation Outside diameter (inch)	Heat-resistant PVC insulation Outside diameter (mm)	Oil, heat resistant flexible sheath Overall diameter approx.(inch)	Oil, heat resistant flexible sheath Overall diameter approx.(mm)	Electrical Characteristics Conductor resistance (Ω/km 20℃)	Electrical Characteristics Electrical strength (V/5min)	Electrical Characteristics Insulation resistance (MΩ・km 20℃)	Electrical Characteristics Insulation resistance (MΩ・km 70℃)	Approx. weight (kg/km)	70℃ Allowable ampacity (A)	105℃ Allowable ampacity (A)
○ 2C	1.5	16AWG	60/0.18 (60/7.1mil)	1.61 (63mil)	0.126	3.21	0.390	9.9	less than 13.3	2500	more than 50	more than 0.010	749(1115)	20	27
○ 3C							0.417	10.6					97(145)	21	27
○ 4C							0.449	11.4					118(175)	18	23
○ 6C							0.531	13.5					168(250)	15	19
○10C							0.713	18.1					286(425)	12	16
○12C							0.799	20.3					353(525)	12	15
○20C							0.862	21.9					467(695)	9.6	12
○30C							1.091	27.7					726(1080)	8.4	10
○ 2C	2.5	14AWG	50/0.25 (50/9.8mil)	2.04 (80mil)	0.146	3.72	0.437	11.1	less than 7.98	2500	more than 50	more than 0.009	101(150)	28	36
3C							0.461	11.7					128(190)	28	37
4C							0.508	12.9					158(235)	24	31
○ 6C							0.610	15.5					232(345)	20	26
○10C							0.815	20.7					397(590)	17	22
○12C							0.913	23.2					487(725)	16	21
○20C							0.984	25.0					655(975)	12	16
3C	4	12AWG	82/0.25 (82/9.8mil)	2.61 (103mil)	0.181	4.61	0.551	14.0	less than 4.95	2500	more than 40	more than 0.007	188(280)	38	50
4C							0.598	15.2					232(345)	33	42
3C	6	10AWG	7/17/0.25 (7/17/9.8mil)	3.46 (136mil)	0.231	5.86	0.665	16.9	less than 3.30	2500	more than 40	more than 0.006	272(405)	50	65
4C							0.732	18.6					346(515)	43	56
3C	10	8AWG	7/29/0.25 (7/29/9.8mil)	4.52 (178mil)	0.288	7.32	0.815	20.7	less than 1.91	2500	more than 40	more than 0.0056	427(635)	70	92
4C							0.898	22.8					541(805)	60	78
3C	16	6AWG	7/48/0.25 (7/48/9.8mil)	5.82 (229mil)	0.355	9.02	0.972	24.7	less than 1.21	2500	more than 40	more than 0.0046	642(955)	94	122
4C							1.083	27.5					827(1230)	80	103
3C	25	4AWG	7/75/0.25 (7/75/9.8mil)	7.28 (287mil)	0.413	10.48	1.114	28.3	less than 0.780	2500	more than 30	more than 0.0044	901(1340)	123	160
4C							1.236	31.4					1169(1740)	104	135

○ : Indicates make-to-order product.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.
Allowable ampacity is calculated excluding grounding conductor.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.87	0.71	0.50	—	—	—	—

> Standard sales length

100m
(Sale by cutting short length is available)

SUNLIGHT DX(NE) LF

Multipurpose twisted pair type instrumentation cable

Multi core cable		Multi pair cable	
Heat resistance	★★★	Heat resistance	★★★
Oil resistance	★★★★★	Oil resistance	★★★★★
Noise resistance	★	Noise resistance	★★
Flame resistance	★★★★	Flame resistance	★★★★
Flexibility	★★★	Flexibility	★★★
non-migratory	★★★★★	non-migratory	★★★★★
Transport property	★	Transport property	★

※The characteristic is an aim. ※The characteristic is an aim.

> Application

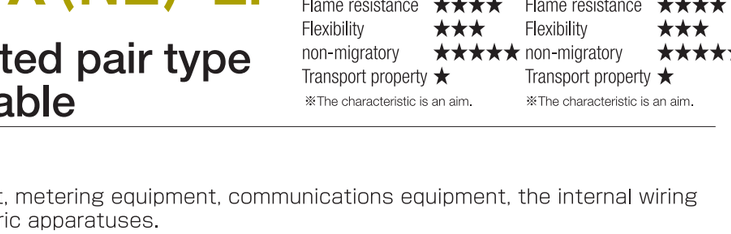
- Cable for a terminal equipment, metering equipment, communications equipment, the internal wiring of every other electrons, electric apparatuses.
- Oil, flexibility of use.
  Cable for RS232C.
- UL and cUL AWM at 150V, 80℃(Category : AVLV2, AVLV8).

> Feature

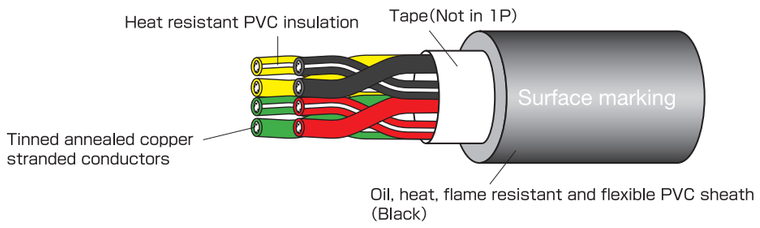
- Heat resistant PVC for insulation.
- Oil, heat, flame retardant and soft PVC for sheath.
- Sheath material is non-migratory against ABS and PS resin.
- Chemical, water, abrasion, cold resistance PVC for sheath.
- Flame resisting : UL VW-1, cUL FT1(1P.3C: FT2).

> Construction figure

·3C



·1P~50P



> Surface marking

(1)1pair, 3core cables

SUNLIGHT DX □□AWG(○○) E67647 AWM 2936 80℃ 150V FT2 AWM ⅡA 80℃ 150V FT2 TAIYO LF R15

(2)2pair~50pair cables

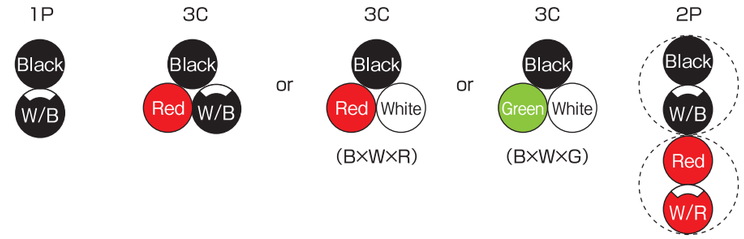
SUNLIGHT DX □□AWG(○○) E67647 AWM 2936 80℃ 150V VW-1 AWM ⅡA 80℃ 150V FT1 TAIYO LF R15

> > > Meeting standard

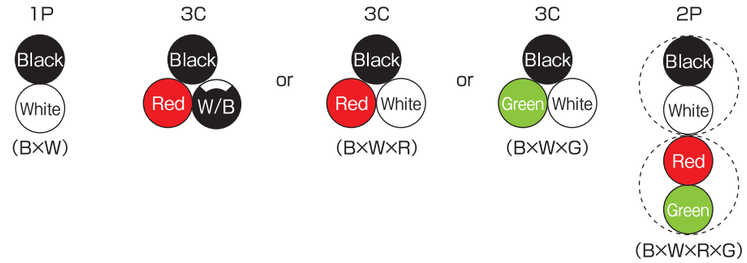
Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2936	CSA AWM ⅡA
Voltage rating	150V	150V
Temperature rating	80℃	80℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	1P,3C／FT2 2P~50P／VW-1	1P,3C／FT2 2P~50P／FT1

> Identification

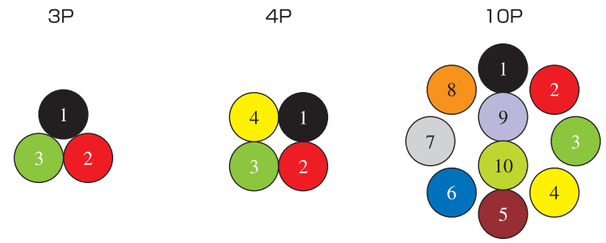
·25AWG(0.2mm²), 23AWG(0.3mm²)



·21AWG(0.5mm²) (Following identification table isn't applied to 1P & 2P.)



·3P~



Figures in ○ indicate pair number in the identification table.

●Identification table

Pair number	1	2	3	4	5	6	7	8	9	10
No.1 kind line	Black	Red	Green	Yellow	Brown	Blue	Gray	Orange	Purple	Bright Green
No.2 kind line	White/Black	White/Red	White/Green	White/Yellow	White/Brown	White/Blue	White/Gray	White/Orange	White/Purple	White/B Green
Pair number	11	12	13	14	15	16	17	18	19	20
No.1 kind line	Peach	Sky	White	Black/Green	Black/Yellow	Black/Brown	Black/Blue	Black/Gray	Black/Orange	Black/Purple
No.2 kind line	White/Peach	White/Sky	Black/White	Red/Green	Red/Yellow	Red/Brown	Red/Blue	Red/Gray	Red/Orange	Red/Purple
Pair number	21	22	23	24	25	26	27	28	29	30
No.1 kind line	Black/Grass	Black/Peach	Black/Sky	Black/Red	Green/Black	Green/White	Green/Brown	Green/Blue	Green/Gray	Green/Orange
No.2 kind line	Red/Grass	Red/Peach	Red/Sky	Green/Red	Yellow/Black	Yellow/White	Yellow/Brown	Yellow/Blue	Yellow/Gray	Yellow/Orange
Pair number	31	32	33	34	35	36	37	38	39	40
No.1 kind line	Green/Purple	Green/Grass	Green/Peach	Green/Sky	Brown/Black	Brown/White	Brown/Red	Brown/Green	Brown/Yellow	Brown/Gray
No.2 kind line	Yellow/Purple	Yellow/Grass	Yellow/Peach	Yellow/Sky	Blue/Black	Blue/White	Blue/Red	Blue/Green	Blue/Yellow	Blue/Gray
Pair number	41	42	43	44	45	46	47	48	49	50
No.1 kind line	Brown/Orange	Brown/Purple	Brown/Grass	Brown/Peach	Brown/Sky	Gray/Black	Gray/White	Gray/Red	Gray/Green	Gray/Yellow
No.2 kind line	Blue/Orange	Blue/Purple	Blue/Grass	Blue/Peach	Blue/Sky	Orange/Black	Orange/White	Orange/Red	Orange/Green	Orange/Yellow

White/Black indicates black core with white stripe.

SUNLIGHT DX(NE) LF

Multipurpose twisted pair type instrumentation cable

> Construction table

No. of cores No. of pairs	Conductor			Heat-resistant PVC insulation		Oil heat flame-resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P	25 (0.2㎟)	7/0.18 (7/7.1mil)	0.54 (21mil)	0.042	1.06	0.122	3.1	9(13)	less than 113	more than 50	1500	5.2
3C						0.130	3.3	10(15)				4.4
2P						0.189	4.8	17(26)				4.4
3P						0.201	5.1	21(31)				3.8
4P						0.224	5.7	26(38)				3.4
5P						0.236	6.0	30(45)				3.1
6P						0.272	6.9	40(60)				3.0
7P						0.272	6.9	44(65)				2.8
8P						0.291	7.4	47(70)				2.7
10P						0.327	8.3	57(85)				2.5
12P						0.350	8.9	67(100)				2.4
○ 13P						0.366	9.3	74(110)				2.3
○ 15P						0.374	9.5	81(120)				2.2
18P						0.413	10.5	97(145)				2.1
20P						0.429	10.9	108(160)				2.0
○ 25P						0.469	11.9	131(195)				1.9
30P						0.516	13.1	155(230)				1.8
○ 40P						0.579	14.7	202(300)				1.6
○ 50P						0.650	16.5	245(365)				1.5
1P	23 (0.3㎟)	12/0.18 (12/7.1mil)	0.7 (28mil)	0.051	1.3	0.150	3.8	13(20)	less than 66.3	more than 50	1500	7.4
3C						0.157	4.0	16(24)				6.3
2P						0.228	5.8	25(37)				6.3
3P						0.264	6.7	34(50)				5.5
4P						0.283	7.2	40(60)				4.9
5P						0.311	7.9	47(70)				4.6
6P						0.343	8.7	60(90)				4.3
7P						0.343	8.7	64(95)				4.0
8P						0.370	9.4	74(110)				3.9
10P						0.413	10.5	91(135)				3.6
12P						0.445	11.3	108(160)				3.4
○ 13P						0.469	11.9	114(170)				3.4
15P						0.480	12.2	128(190)				3.2
○ 18P						0.524	13.3	151(225)				3.0
20P						0.547	13.9	168(250)				2.9
25P						0.606	15.4	208(310)				2.7
30P						0.654	16.6	242(360)				2.5
○ 40P						0.736	18.7	312(465)				2.3
○ 50P						0.835	21.2	390(580)				2.1
1P	21 (0.5㎟)	20/0.18 (20/7.1mil)	0.9 (35mil)	0.059	1.5	0.165	4.2	17(26)	less than 39.8	more than 50	1500	10
3C						0.173	4.4	22(32)				8.5
2P						0.260	6.6	37(55)				8.6
3P						0.280	7.1	44(65)				7.3
4P						0.303	7.7	57(85)				6.5
5P						0.339	8.6	71(105)				6.1
6P						0.366	9.3	81(120)				5.8
7P						0.366	9.3	87(130)				5.4
8P						0.390	9.9	101(150)				5.2
10P						0.461	11.7	128(190)				4.9
12P						0.500	12.7	148(220)				4.7
15P						0.535	13.6	178(265)				4.3
○ 20P						0.622	15.8	239(355)				3.9
○ 25P						0.669	17.0	286(425)				3.6
○ 30P						0.728	18.5	336(500)				3.4
○ 40P						0.827	21.0	444(660)				3.1
○ 50P						0.933	23.7	548(815)				2.9

○ : Indicates make-to-order products.

※The size indicated within parenthesis in the above table, describes the appropriate size of Japanese domestic use.

> Allowable Ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

> Standard sales length

100m

(Sale by cutting short length is available Min.5 Pairs.)

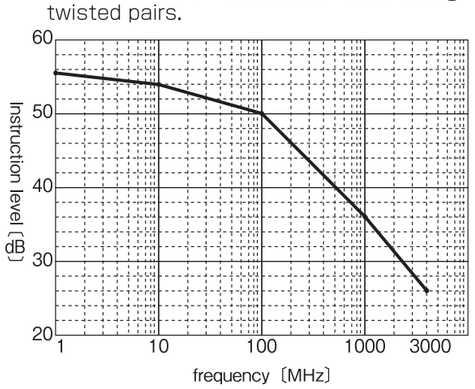
> Electrical property

However, Capacitance, Characteristic impedance and Delay time are a reference value, not the guarantee value.

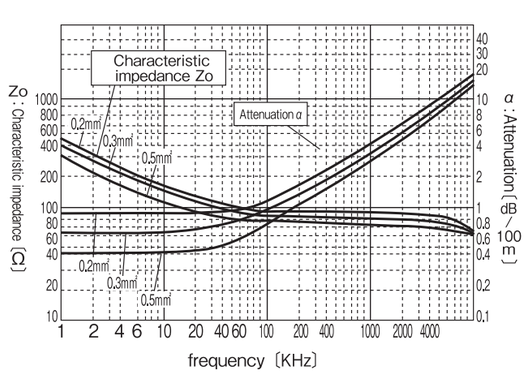
Size (㎟)	Conductor resistance (20℃Ω/km)	Dielectric withstand voltage (V/min.)	Conductor resistance (20℃MΩ-km)	Capacitance (1kHz approx.nF/km)	Characteristic impedance (10MHz approx.Ω)	Delay time (approx.ns/m)
25 (0.2mm²)	less than 113	1500	more than 50	110	70	6
23 (0.3mm²)	less than 66.3	1500	more than 50	110	70	6
21 (0.5mm²)	less than 39.8	1500	more than 50	110	70	6

SUNLIGHT SX(NE), DX(NE) Cable

Measurement of inductance noise during twisted pairs.



SUNLIGHT SX(NE), DX(NE) Characteristic impedance



SUNLIGHT SX(NE) LF

Shielded multipurpose twisted pair type instrumentation cable

Heat resistance	★★★
Oil resistance	★★★★★
Noise resistance	★★★★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★★
Transport property	★

※The characteristic is an aim.

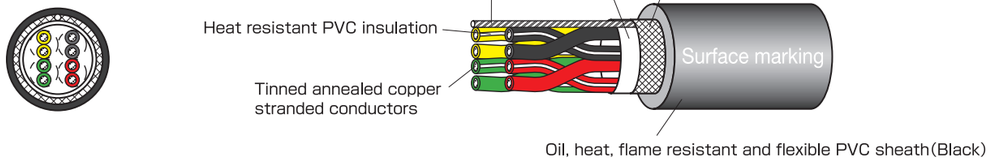
> Application

- Cable for a terminal equipment, metering equipment, communications equipment, the internal wiring of every other electrons, electric apparatuses.
- Oil, flexibility, use of shielded.
  Cable for RS232C.
- UL and cUL AWM at 150V, 80℃. (Category : AVLV2, AVLV8).

> Feature

- Heat resistant PVC for insulation.
- Oil, heat, flame retardant and soft PVC for sheath.
- Sheath material is non-migratory against ABS and PS resin.
- Chemical, water, abrasion, cold resistance PVC for sheath.
- Flame resisting : UL VW-1, cUL FT1. (1P: FT2)
- With drain wire.

> Construction figure



※Has arranged insulation cores and drain wire of an equal size.

> Surface marking

(1) 1pair cables

SUNLIGHT SX □□AWG(○○) E67647 AWM 2936 80℃ 150V FT2 AWM ⅡA 80℃ 150V FT2 TAIYO LF R15

(2) 2pair~50pair cables

SUNLIGHT SX □□AWG(○○) E67647 AWM 2936 80℃ 150V VW-1 AWM ⅡA 80℃ 150V FT1 TAIYO LF R15

> > > Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2936	CSA AWM ⅡA
Voltage rating	150V	150V
Temperature rating	80℃	80℃
Conductor	UL 758	CSA C22.2 No.210
Flame rating	1P/FT2 2P~50P/VW-1	1P/FT2 2P~50P/FT1

> Identification

4P

10P

Figures in ○ indicate pair number in the identification table.

●Identification table

Pair number	1	2	3	4	5	6	7	8	9	10
No.1 kind line	Black	Red	Green	Yellow	Brown	Blue	Gray	Orange	Purple	Bright Green
No.2 kind line	White/Black	White/Red	White/Green	White/Yellow	White/Brown	White/Blue	White/Gray	White/Orange	White/Purple	White/B Green
Pair number	11	12	13	14	15	16	17	18	19	20
No.1 kind line	Peach	Sky	White	Black/Green	Black/Yellow	Black/Brown	Black/Blue	Black/Gray	Black/Orange	Black/Purple
No.2 kind line	White/Peach	White/Sky	Black/White	Red/Green	Red/Yellow	Red/Brown	Red/Blue	Red/Gray	Red/Orange	Red/Purple
Pair number	21	22	23	24	25	26	27	28	29	30
No.1 kind line	Black/Grass	Black/Peach	Black/Sky	Black/Red	Green/Black	Green/White	Green/Brown	Green/Blue	Green/Gray	Green/Orange
No.2 kind line	Red/Grass	Red/Peach	Red/Sky	Green/Red	Yellow/Black	Yellow/White	Yellow/Brown	Yellow/Blue	Yellow/Gray	Yellow/Orange
Pair number	31	32	33	34	35	36	37	38	39	40
No.1 kind line	Green/Purple	Green/Grass	Green/Peach	Green/Sky	Brown/Black	Brown/White	Brown/Red	Brown/Green	Brown/Yellow	Brown/Gray
No.2 kind line	Yellow/Purple	Yellow/Grass	Yellow/Peach	Yellow/Sky	Blue/Black	Blue/White	Blue/Red	Blue/Green	Blue/Yellow	Blue/Gray
Pair number	41	42	43	44	45	46	47	48	49	50
No.1 kind line	Brown/Orange	Brown/Purple	Brown/Grass	Brown/Peach	Brown/Sky	Gray/Black	Gray/White	Gray/Red	Gray/Green	Gray/Yellow
No.2 kind line	Blue/Orange	Blue/Purple	Blue/Grass	Blue/Peach	Blue/Sky	Orange/Black	Orange/White	Orange/Red	Orange/Green	Orange/Yellow

White/Black indicates black core with white stripe.

> Standard sales length

100m
(Sale by cutting short length is available Min.5 pairs.)

SUNLIGHT SX(NE) LF

Shielded multipurpose twisted pair type instrumentation cable

> Construction table

No. of pairs	Conductor			Heat-resistant PVC insulation		Oil heat flame-resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P						0.150	3.8	15(22)				5.6
2P						0.213	5.4	28(41)				4.6
3P						0.224	5.7	32(47)				3.9
4P						0.248	6.3	37(55)				3.5
5P						0.260	6.6	44(65)				3.2
6P						0.295	7.5	54(80)				3.1
7P						0.295	7.5	57(85)				2.9
8P	25 (0.2㎟)	7/0.18 (7/7.1mil)	0.54 (21mil)	0.042	1.06	0.315	8.0	64(95)	less than 113	more than 50	1500	2.8
10P						0.350	8.9	74(110)				2.6
12P						0.374	9.5	87(130)				2.4
13P						0.390	9.9	91(135)				2.4
15P						0.398	10.1	101(150)				2.2
18P						0.437	11.1	118(175)				2.1
20P						0.453	11.5	128(190)				2.0
○25P						0.492	12.5	155(230)				1.9
○30P						0.539	13.7	181(270)				1.8
○40P						0.602	15.3	232(345)				1.6
○50P						0.673	17.1	279(415)				1.5
1P						0.177	4.5	22(32)				7.8
2P						0.252	6.4	37(55)				6.4
3P						0.287	7.3	50(75)				5.6
4P						0.307	7.8	57(85)				5.0
5P						0.335	8.5	67(100)				4.7
6P						0.366	9.3	77(115)				4.4
7P						0.366	9.3	84(125)				4.1
8P	23 (0.3㎟)	12/0.18 (12/7.1mil)	0.7 (28mil)	0.051	1.3	0.394	10.0	94(140)	less than 66.3	more than 50	1500	3.9
10P						0.437	11.1	114(170)				3.7
12P						0.469	11.9	131(195)				3.5
○13P						0.492	12.5	141(210)				3.4
15P						0.504	12.8	155(230)				3.2
18P						0.547	13.9	181(270)				3.0
20P						0.571	14.5	195(290)				2.9
25P						0.622	15.8	235(350)				2.7
30P						0.669	17.0	272(405)				2.5
○40P						0.752	19.1	346(515)				2.3
○50P						0.858	21.8	433(645)				2.1
1P						0.193	4.9	28(41)				10
2P						0.283	7.2	50(75)				8.7
3P						0.303	7.7	60(90)				7.4
4P						0.327	8.3	74(110)				6.6
5P						0.362	9.2	87(130)				6.2
6P						0.390	9.9	104(155)				5.9
7P						0.390	9.9	111(165)				5.4
8P	21 (0.5㎟)	20/0.18 (20/7.1mil)	0.9 (35mil)	0.059	1.5	0.413	10.5	121(180)	less than 39.8	more than 50	1500	5.2
10P						0.484	12.3	151(225)				5.0
12P						0.524	13.3	175(260)				4.7
○13P						0.547	13.9	188(280)				4.6
15P						0.559	14.2	208(310)				4.3
○18P						0.610	15.5	245(365)				4.1
20P						0.646	16.4	272(405)				4.0
25P						0.693	17.6	323(480)				3.6
○30P						0.752	19.1	376(560)				3.4
○40P						0.850	21.6	491(730)				3.1
○50P						0.957	24.3	598(890)				2.9

○ : Indicates make-to-order products.

※The size indicated within parenthesis in the above table, describes the appropriate size of Japanese domestic use.

> Allowable Ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.89	0.77	0.63	0.45	—	—	—

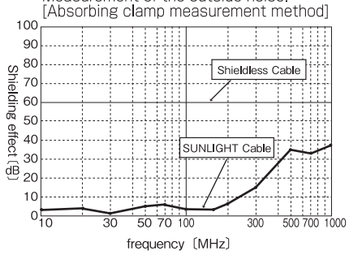
> Electrical property

However, Capacitance, Characteristic impedance and Delay time are a reference value, not the guarantee value.

Size (㎟)	Conductor resistance (20℃Ω/km)	Dielectric withstand voltage (V/min.)	Conductor resistance (20℃MΩ-km)	Capacitance (1kHz approx.nF/km)	Characteristic impedance (10MHz approx.Ω)	Delay time (approx.ns/m)
25 (0.2mm²)	less than 113	1500	more than 50	110	70	6
23 (0.3mm²)	less than 66.3	1500	more than 50	110	70	6
21 (0.5mm²)	less than 39.8	1500	more than 50	110	70	6

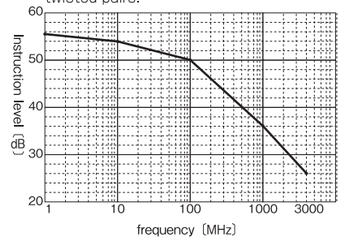
SUNLIGHT SX(NE) Cable

Measurement of the outside noise.
[Absorbing clamp measurement method]

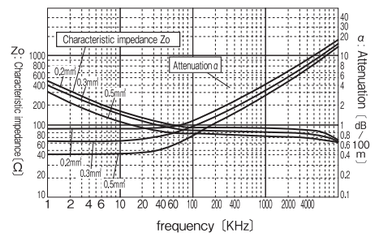


SUNLIGHT SX(NE), DX(NE) Cable

Measurement of inductance noise during twisted pairs.



SUNLIGHT SX(NE), DX(NE) Characteristic impedance



SUNLIGHT SX-E LF

Shielded multipurpose twisted pair type instrumentation cable

Heat resistance	★★
Oil resistance	★★★★★
Noise resistance	★★★★
Flame resistance	★★★
Flexibility	★★
non-migratory	★★★★★
Transport property	★

※The characteristic is an aim.

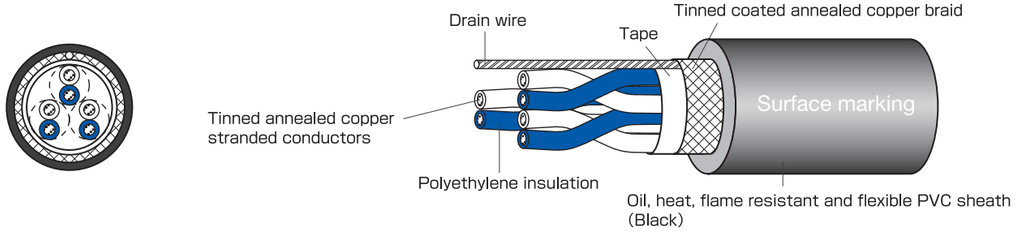
> Application

- Weak electric instrumentation cable wiring of the automatic control system of various kinds of production equipment in the factory, or for small power circuit to be used, for example, line of computer systems in the office.
- Oil, flexibility, flame retardant, use of shielded.
- Cable for RS485, RS422, RS232C.
- Rated voltage:Less than 100V. Temp:75℃.

> Feature

- PE with excellent electrical characteristics for insulation.
- Oil, heat, flame retardant and soft PVC for sheath.
- Sheath material is non-migratory against ABS and PS resin.
- Chemical, water, abrasion, cold resistance PVC for sheath.
- Flame resisting : UL VW-1.
- With drain wire.

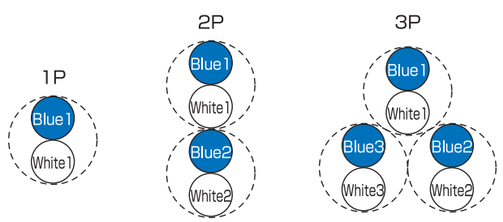
> Construction figure



※Has arranged insulation cores and drain wire of an equal size.

> Surface marking

> Identification



The first core is white insulator, the second core is blue insulator. Moreover, numbering the pair number.

RoHS

> Construction table

No. of pairs	Conductor			Polyethylene insulation		Oil heat flame-resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1P	19 (0.75㎟)	30/0.18 (30/7.1mil)	1.1 (43mil)	0.083	2.1	0.311	7.9	57(85)	less than 26.6	more than 10K	1000	11
2P						0.409	10.4	91(135)				9.5
3P						0.433	11.0	111(165)				8.1
1P	16 (1.25㎟)	50/0.18 (50/7.1mil)	1.5 (59mil)	0.106	2.7	0.358	9.1	77(115)	less than 16.0	more than 10K	1000	16
2P						0.488	12.4	131(195)				13
3P						0.516	13.1	158(235)				11

> Allowable Ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.88	0.75	0.58	0.33	—	—	—

> Standard sales length

100m
(Sale by cutting short length is available.)

SUNLIGHT 3DX LF

PVC insulated oil flexible cord for electronics wiring

Heat resistance	★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★★
Transport property	★★

※The characteristic is an aim.

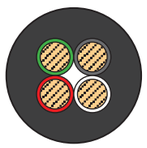
> Application

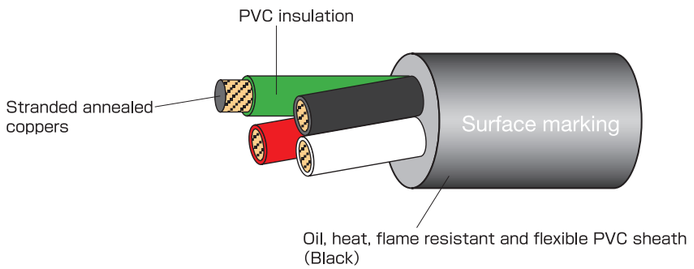
- AC 300V or less of the environmental type cable as machine tools,construction machinery, applications under harsh conditions, such as a robot power circuit.
- Oil, flexibility of use.
  Rated voltage:300V. Temp:60℃.

> Feature

- Oil, heat, flame retardant and soft PVC for sheath.
- Sheath material is non-migratory against ABS and PS resin.
- Chemical, water, abrasion, cold resistance PVC for sheath.
- Flame resisting : UL VW-1.
- 0.75mm²～5.5mm² cables conform to Electrical Appliance and Material Safety Law.
  (0.5mm² cables used in less than 100V out of Electrical Appliance and Material Safety Law)

> Construction figure





※Cables with more than 8 cores : binder tape on cores.

> Surface marking

(1)0.5mm² cables

サンライト3DX(耐油 難燃 柔軟) 0.5mm² TAIYO CABLETEC ** LF R15

(2)0.75mm² or larger

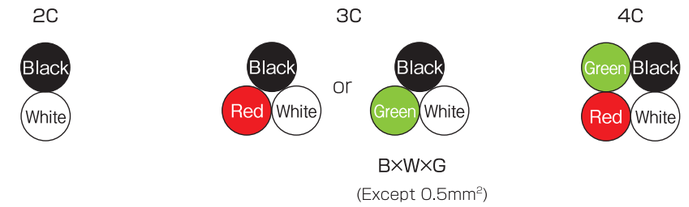
サンライト3DX(耐油 難燃 柔軟) 300V ○○mm²<PS> E ** TAIYO CABLETEC LF R15

> > > Meeting standard

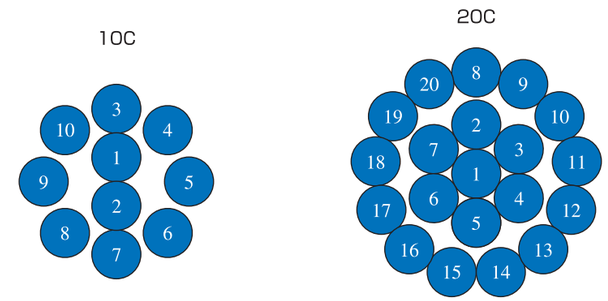
Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	VCTF
Voltage rating	300V
Temperature rating	60℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

> Identification

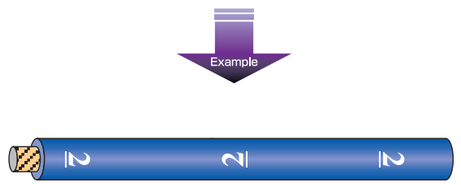
·2C～4C



·5 cores or more is identified by numbering



Figures in ○ indicate white numbering on blue insulator.



SUNLIGHT 3DX LF

PVC insulated oil flexible cord for electronics wiring

> Construction table

No. of cores	Conductor			PVC insulation		Oil heat flame-resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.5㎟	20/0.18 (20/7.1mil)	0.9 (35mil)	0.075	1.9	0.228	5.8	30(44)	less than 37.8	more than 5	1000	5.0
3C						0.240	6.1	34(50)				5.0
4C						0.260	6.6	40(60)				5.0
5C						0.280	7.1	47(70)				5.0
6C						0.303	7.7	57(85)				5.0
7C						0.303	7.7	60(90)				5.0
8C						0.335	8.5	67(100)				5.0
10C						0.386	9.8	81(120)				5.0
12C						0.398	10.1	91(135)				4.9
16C						0.437	11.1	114(170)				4.4
20C						0.472	12.0	141(210)				4.1
24C						0.543	13.8	175(260)				4.0
30C						0.575	14.6	208(310)				3.6
36C						0.618	15.7	245(365)				3.4
40C						0.650	16.5	272(405)				3.3
50C						0.713	18.1	339(505)				3.1
○60C						0.783	19.9	396(590)				2.9
2C	0.75㎟	30/0.18 (30/7.1mil)	1.1 (43mil)	0.091	2.3	0.260	6.6	40(60)	less than 25.1	more than 5	1000	7.0
3C						0.276	7.0	47(70)				7.0
4C						0.299	7.6	57(85)				7.0
5C						0.323	8.2	67(100)				7.0
6C						0.350	8.9	77(115)				7.0
7C						0.350	8.9	84(125)				7.0
8C						0.386	9.8	91(135)				7.0
10C						0.449	11.4	111(165)				6.9
12C						0.465	11.8	128(190)				6.4
16C						0.512	13.0	161(240)				5.8
20C						0.563	14.3	205(305)				5.4
24C						0.646	16.4	249(370)				5.2
30C						0.685	17.4	296(440)				4.8
36C						0.744	18.9	356(530)				4.5
40C						0.772	19.6	390(580)				4.3
○50C						0.858	21.8	487(725)				4.0
2C	1.25㎟	50/0.18 (50/7.1mil)	1.5 (59mil)	0.106	2.7	0.291	7.4	50(75)	less than 15.1	more than 5	1000	12
3C						0.307	7.8	64(95)				12
4C						0.335	8.5	77(115)				12
5C						0.366	9.3	91(135)				11
6C						0.398	10.1	108(160)				11
7C						0.398	10.1	118(175)				10
8C						0.437	11.1	124(185)				9.8
10C						0.512	13.0	158(235)				9.4
12C						0.535	13.6	185(275)				8.7
16C						0.594	15.1	235(350)				7.9
20C						0.654	16.6	296(440)				7.3
○24C						0.748	19.0	366(545)				7.0
30C						0.791	20.1	430(640)				6.5
36C						0.862	21.9	517(770)				6.1
○40C						0.894	22.7	564(840)				5.9
○50C						0.992	25.2	706(1050)				5.4
2C	2.0㎟	37/0.26 (37/10.2mil)	1.8 (71mil)	0.118	3.0	0.315	8.0	64(95)	less than 9.79	more than 5	1000	17
3C						0.335	8.5	81(120)				17
4C						0.362	9.2	101(150)				15
5C						0.398	10.1	121(180)				14
6C						0.433	11.0	141(210)				14
7C						0.433	11.0	155(230)				13
8C						0.476	12.1	168(250)				12
10C						0.567	14.4	215(320)				12
12C						0.587	14.9	249(370)				11
16C						0.657	16.7	326(485)				10
20C						0.713	18.1	396(590)				9.4
○24C						0.819	20.8	494(735)				9.1
○30C						0.874	22.2	595(885)				8.3

Note:Six times of overall diameter is needed when you bend cables, and more diameter is needed when you bend cables repeatedly by cable reel, curtain, etc.
○:Indicates Make-to-order products.

> Allowable Ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	35	40	45	50	55	60	70	80	90	100
Adjustment factors	1.00	0.91	0.82	0.71	0.58	0.41	—	—	—	—	—

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

> Standard sales length

100m
(Sale by cutting short length is available Min.5 cores.)

SUNLIGHT 3SX LF

PVC insulated oil flexible cord for electronics wiring (with shield)

Heat resistance	★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★★
Transport property	★★

※The characteristic is an aim.

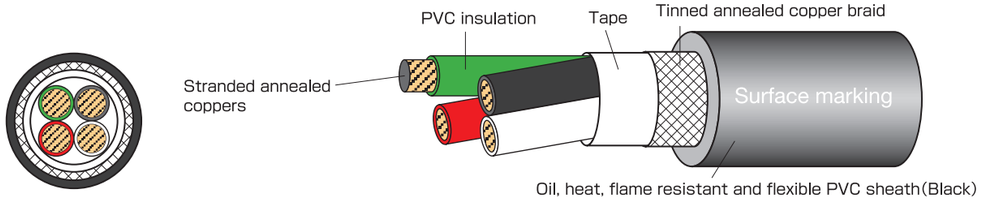
Application

- AC 300V or less of the environmental type cable as machine tools,construction machinery, applications under harsh conditions, such as a robot power circuit.
- Oil, flexibility, use of shielded.
  Rated voltage:300V. Temp:60℃.

Feature

- Oil, heat, flame retardant and soft PVC for sheath.
- Sheath material is non-migratory against ABS and PS resin.
- Chemical, water, abrasion, cold resistance PVC for sheath.
- Flame resisting : UL VW-1.
- 0.75mm²～5.5mm² cables conform to Electrical Appliance and Material Safety Law.
  (0.5mm² cables used in less than 100V out of Electrical Appliance and Material Safety Law)

Construction figure



Surface marking

(1)0.5mm² cables

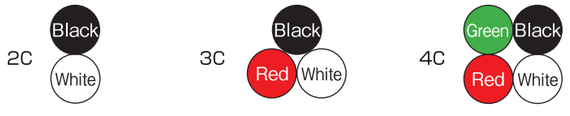
サンライト3SX(耐油 難燃 柔軟 耐ノイズ) 0.5mm² TAIYO CABLETEC ** LF R15

(2)0.75mm² or larger

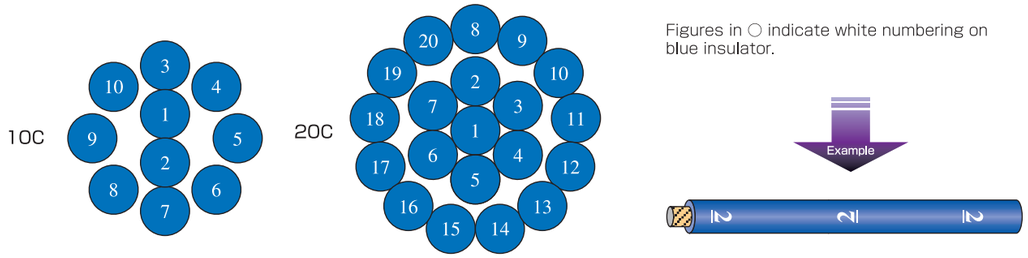
サンライト3SX(耐油 難燃 柔軟 耐ノイズ) 300V ○○mm²<PS>E ** TAIYO CABLETEC LF R15

Identification

·2C～4C



·5 cores or more is identified by numbering



Figures in ○ indicate white numbering on blue insulator.

> > > Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	VCTF
Voltage rating	300V
Temperature rating	60℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

Construction table

No. of cores	Conductor			PVC insulation		Oil heat flame-resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.5㎟	20/0.18 (20/7.1mil)	0.9 (35mil)	0.075	1.9	0.256	6.5	37(55)	less than 37.8	more than 5	1500	5.0
3C						0.268	6.8	44(65)				5.0
4C						0.287	7.3	54(80)				5.0
6C						0.331	8.4	67(100)				5.0
8C						0.358	9.1	84(125)				5.0
10C						0.413	10.5	104(155)				5.0
12C						0.425	10.8	114(170)				5.0
16C						0.465	11.8	141(210)				4.5
20C						0.500	12.7	168(250)				4.2
30C						0.606	15.4	249(370)				3.7
2C	0.75㎟	30/0.18 (30/7.1mil)	1.1 (43mil)	0.091	2.3	0.287	7.3	47(70)	less than 25.1	more than 5	1500	7.0
3C						0.303	7.7	57(85)				7.0
4C						0.327	8.3	67(100)				7.0
6C						0.386	9.8	94(140)				7.0
8C						0.413	10.5	114(170)				7.0
10C						0.476	12.1	141(210)				7.0
12C						0.492	12.5	158(235)				6.5
16C						0.543	13.8	198(295)				5.9
20C						0.594	15.1	242(360)				5.5
30C						0.717	18.2	346(515)				4.8
2C	1.25㎟	50/0.18 (50/7.1mil)	1.5 (59mil)	0.106	2.7	0.319	8.1	60(90)	less than 15.1	more than 5	1500	12
3C						0.335	8.5	74(110)				12
4C						0.366	9.3	91(135)				12

Note:Six times of outer diameter is needed when you bend cables, and more diameter is needed when you bend cables repeatedly by cable reel, curtain, etc.

Allowable Ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	35	40	45	50	55	60	70	80	90	100
Adjustment factors	1.00	0.91	0.82	0.71	0.58	0.41	—	—	—	—	—

Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A～C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

Standard sales length

100m
(Sale by cutting short length is available Min.6 cores.)

SUNLIGHT 6DX LF

PVC insulated oil flexible cable for electrical power supply

Heat resistance	★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★★
Transport property	★★

※The characteristic is an aim.

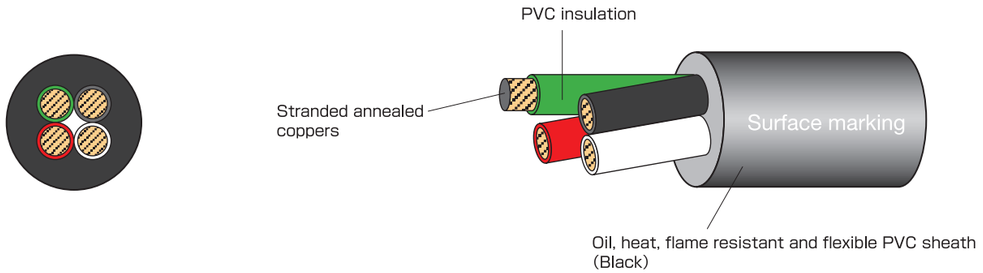
> Application

- Environmental type cable as machine tools, construction machinery, applications under harsh conditions, such as a robot power circuit not higher than 600V .
- Oil, flexibility of use.
  Rated voltage:600V. Temp:60℃.

> Feature

- Oil, heat, flame retardant and soft PVC for sheath.
- Sheath material is non-migratory against ABS and PS resin.
- Chemical, water, abrasion, weather, light, cold resistance PVC for sheath.
- Flame resisting : UL VW-1.
- Conform to Electrical Appliance and Material Safety Law.

> Construction figure



※Cables with more than 8 cores : binder tape on cores.

> Surface marking

(1)7 cores or less

サンライト6DX(耐油 難燃 柔軟) 600V ○○mm²<PS> E ** TAIYO CABLETEC LF R15

(2)8 cores or more

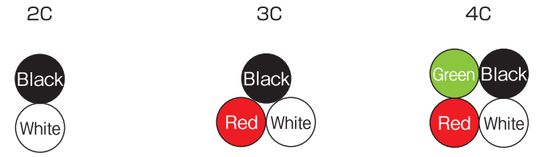
サンライト6DX(耐油 難燃 柔軟) 600V ○○mm² TAIYO CABLETEC ** LF R15

> > > Meeting standard

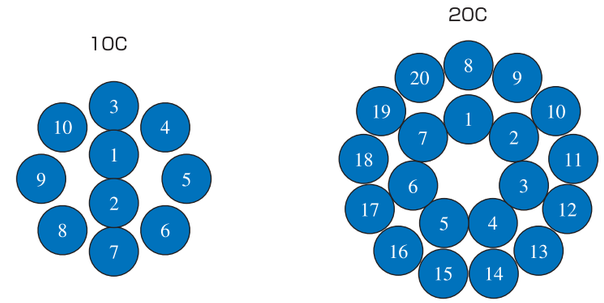
Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	VCT
Voltage rating	600V
Temperature rating	60℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

> Identification

·2C~4C



·5 cores or more is identified by numbering



Figures in ○ indicate white numbering on blue insulator.

SUNLIGHT 6DX LF

PVC insulated oil flexible cable for electrical power supply

> Construction table

No. of cores	Conductor			PVC insulation		Oil heat flame-resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.75㎟	30/0.18 (30/7.1mil)	1.1 (43mil)	0.106	2.7	0.346	8.8	64(95)	less than 25.1	more than 50	3000	12
3C						0.362	9.2	74(110)				10
4C						0.390	9.9	87(130)				9.0
5C						0.429	10.9	104(155)				9.0
6C						0.461	11.7	118(175)				8.7
7C						0.461	11.7	124(185)				8.2
8C						0.508	12.9	138(205)				7.6
10C						0.591	15.0	175(260)				7.2
12C						0.606	15.4	195(290)				6.7
16C						0.673	17.1	245(365)				6.1
20C						0.752	19.1	306(455)				5.7
24C						0.835	21.2	366(545)				5.4
30C						0.886	22.5	433(645)				4.9
2C	1.25㎟	50/0.18 (50/7.1mil)	1.5 (59mil)	0.122	3.1	0.378	9.6	77(115)	less than 15.1	more than 50	3000	16
3C						0.398	10.1	94(140)				14
4C						0.437	11.1	114(170)				13
5C						0.480	12.2	138(205)				13
6C						0.516	13.1	158(235)				11
7C						0.516	13.1	168(250)				11
8C						0.559	14.2	181(270)				10
10C						0.661	16.8	232(345)				9.8
12C						0.689	17.5	265(395)				9.1
16C						0.764	19.4	333(495)				8.2
20C						0.843	21.4	410(610)				7.6
24C						0.937	23.8	497(740)				7.2
30C						0.996	25.3	588(875)				6.6
2C	2.0㎟	37/0.26 (37/10.2mil)	1.8 (71mil)	0.134	3.4	0.409	10.4	97(145)	less than 9.79	more than 50	3000	22
3C						0.429	10.9	114(170)				19
4C						0.465	11.8	138(205)				17
5C						0.512	13.0	168(250)				17
6C						0.559	14.2	202(300)				15
7C						0.559	14.2	215(320)				14
8C						0.614	15.6	242(360)				12
10C						0.717	18.2	302(450)				12
12C						0.736	18.7	336(500)				11
16C						0.827	21.0	433(645)				10
20C						0.913	23.2	534(795)				9.7
24C						1.024	26.0	648(965)				9.2
30C						1.087	27.6	773(1150)				8.5
2C	3.5㎟	45/0.32 (45/12.6mil)	2.5 (98mil)	0.161	4.1	0.465	11.8	134(200)	less than 5.24	more than 40	3000	32
3C						0.496	12.6	168(250)				28
4C						0.547	13.9	212(315)				25
5C						0.594	15.1	249(370)				25
6C						0.650	16.5	296(440)				21
8C						0.717	18.2	356(530)				19
10C						0.843	21.4	457(680)				18
12C						0.866	22.0	521(775)				16
2C	5.5㎟	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	0.559	14.2	202(300)	less than 3.37	more than 40	3000	41
3C						0.591	15.0	245(365)				36
4C						0.650	16.5	309(460)				32
5C						0.717	18.2	373(555)				32
6C						0.783	19.9	444(660)				28
2C	8.0㎟	50/0.45 (50/17.7mil)	3.7 (146mil)	0.240	6.1	0.646	16.4	272(405)	less than 2.39	more than 40	3000	51
3C						0.689	17.5	339(505)				44
4C						0.760	19.3	427(635)				39
3C	14㎟	88/0.45 (88/17.7mil)	4.9 (193mil)	0.303	7.7	0.843	21.4	541(805)	less than 1.36	more than 40	3000	62
4C						0.929	23.6	679(1010)				55
3C	22㎟	7/20/0.45 (7/20/17.7mil)	6.8 (268mil)	0.394	10.0	1.063	27.0	867(1290)	less than 0.869	more than 30	3000	83
4C						1.177	29.9	1095(1630)				74
3C	38㎟	7/34/0.45 (7/34/17.7mil)	8.8 (346mil)	0.488	12.4	1.295	32.9	1364(2030)	less than 0.511	more than 30	3000	110
4C						1.437	36.5	1727(2570)				100

Note:Six times of outer diameter is needed when you bend cables, and more diameter is needed when you bend cables repeatedly by cable reel, curtain, etc.

> Allowable Ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.82	0.58	—	—	—	—	—

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

> Standard sales length

100m
(Sale by cutting short length is available for 0.75-2.0mm㎡ Min.5 cores and Min.3.5mm㎡.)

SUNLIGHT 6SX LF

PVC insulated oil flexible cable for electrical power supply(with shield)

Heat resistance	★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★★
Transport property	★★

※The characteristic is an aim.

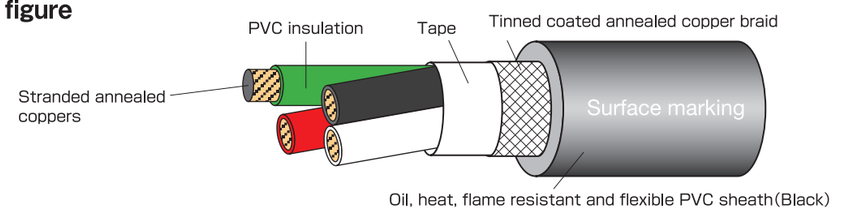
> Application

- Environmental type cable as machine tools, construction machinery, applications under harsh conditions, such as a robot power circuit not higher than 600V .
- Oil, flexibility, use of shielded.
  Rated voltage:600V. Temp:60℃.

> Feature

- Oil, heat, flame retardant and soft PVC for sheath.
- Sheath material is non-migratory against ABS and PS resin.
- Chemical, water, abrasion, weather, light, cold resistance PVC for sheath.
- Flame resisting : UL VW-1.
- Conform to Electrical Appliance and Material Safety Law.

> Construction figure



> Surface marking

(1)7 cores or less

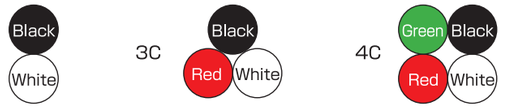
サンライト6SX(耐油 難燃 柔軟 耐ノイズ) 600V ○○mm²<PS>E ** TAIYO CABLETEC LF R15

(2)8 cores or more

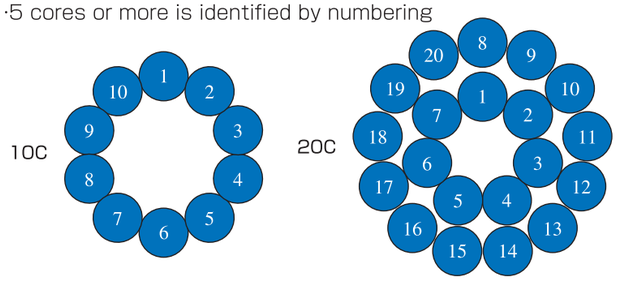
サンライト6SX(耐油 難燃 柔軟 耐ノイズ) 600V ○○mm² TAIYO CABLETEC ** LF R15

> Identification

·2C~4C



·5 cores or more is identified by numbering



Figures in ○ indicate white numbering on blue insulator.

> > > Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	VCT
Voltage rating	600V
Temperature rating	60℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

> Construction table

No. of cores	Conductor			PVC insulation		Oil heat flame-resistant flexible PVC sheath		Approx. weight	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.75㎟	30/0.18 (30/7.1mil)	1.1 (43mil)	0.106	2.7	0.378	9.6	74(110)	less than 25.1	more than 50	2000	12
3C						0.394	10.0	87(130)				10
4C						0.429	10.9	104(155)				9.7
6C						0.504	12.8	141(210)				8.5
8C						0.579	14.7	181(270)				7.9
10C						0.654	16.6	228(340)				7.4
12C						0.646	16.4	239(355)				6.8
20C						0.783	19.9	356(530)				5.7
2C	1.25㎟	50/0.18 (50/7.1mil)	1.5 (59mil)	0.122	3.1	0.417	10.6	94(140)	less than 15.1	more than 50	2000	16
3C						0.437	11.1	111(165)				14
4C						0.480	12.2	134(200)				13
5C						0.516	13.1	158(235)				12
6C						0.559	14.2	185(275)				11
7C						0.598	15.2	212(315)				11
8C						0.646	16.4	239(355)				10
10C						0.728	18.5	296(440)				9.9
12C						0.720	18.3	312(465)				9.1
16C						0.795	20.2	386(575)				8.2
20C						0.882	22.4	474(705)				7.7
30C						1.035	26.3	669(995)				6.7
2C	2.0㎟	37/0.26 (37/10.2mil)	1.8 (71mil)	0.134	3.4	0.441	11.2	108(160)	less than 9.79	more than 50	2000	21
3C						0.465	11.8	134(200)				18
4C						0.508	12.9	165(245)				16
6C						0.598	15.2	228(340)				14
8C						0.697	17.7	299(445)				13
10C						0.787	20.0	373(555)				12
12C						0.776	19.7	390(580)				11
○20C						0.953	24.2	608(905)				9.8
30C						1.118	28.4	853(1270)				8.5
2C	3.5㎟	45/0.32 (45/12.6mil)	2.5 (98mil)	0.161	4.1	0.508	12.9	155(230)	less than 5.24	more than 40	2000	31
3C						0.531	13.5	188(280)				26
4C						0.587	14.9	239(355)				24
2C	5.5㎟	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	0.598	15.2	218(325)	less than 3.37	more than 40	2000	41
3C						0.638	16.2	276(410)				35
4C						0.697	17.7	346(515)				31
2C	8.0㎟	50/0.45 (50/17.7mil)	3.7 (146mil)	0.240	6.1	0.693	17.6	292(435)	less than 2.39	more than 40	2000	51
3C						0.728	18.5	366(545)				43
4C						0.799	20.3	460(685)				39
3C	14㎟	88/0.45 (88/17.7mil)	4.9 (193mil)	0.303	7.7	0.890	22.6	578(860)	less than 1.36	more than 40	2000	61
4C						0.976	24.8	712(1060)				55
3C	22㎟	7/20/0.45 (7/20/17.7mil)	6.8 (268mil)	0.394	10.0	1.110	28.2	894(1330)	less than 0.869	more than 30	2000	83
4C						1.224	31.1	1136(1690)				74
3C	38㎟	7/34/0.45 (7/34/17.7mil)	8.8 (346mil)	0.488	12.4	1.350	34.3	1398(2080)	less than 0.511	more than 30	2500	110
4C						1.504	38.2	1814(2700)				100

Note:Six times of outer diameter is needed when you bend cables, and more diameter is needed when you bend cables repeatedly by cable reel, curtain, etc.

> Allowable Ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	35	40	45	50	55	60	70	80	90	100
Adjustment factors	1.00	0.91	0.82	0.71	0.58	0.41	—	—	—	—	—

> Oil resistance

Insulating oil	Lubricating oil	Cutting oil Ⅰ	Cutting oil Ⅱ	Hydraulic oil	Grease
A	A	B	B	B	B

※A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.
B:Deterioration slightly no problem almost on practical use.
C:It is sometimes deteriorated to some degree, and not possible to use it.

> Standard sales length

100m
(The cut cable is available.)

Environment type cable (non-halogen)

SUNLIGHT ECO120 LF

The environment type flexible cable for electrical power supply

Heat resistance	★★★★
Oil resistance	★★
Noise resistance	★
Flame resistance	★★
Flexibility	★★
non-migratory	★★★★
Transport property	★★

※The characteristic is an aim.

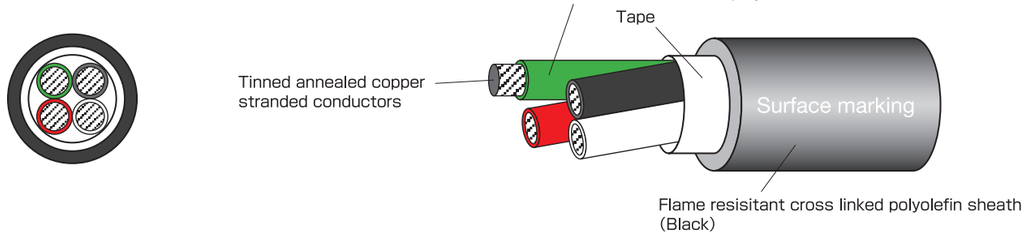
Application

- Power supply circuit of the mobile electrical machinery and apparatus not higher than 600V.
- Corresponds to halogen-free requirement.
- Rated voltage:600V. Temp:90℃.

Feature

- Non-halogen flame-resistant cross-linked polyolefin for insulation and sheath.
- Halogen-free, low smoke evolution.
- Heat resistance 90 ℃ (ability UL105 ℃).
- Cold -50℃.
- Conform to Electrical Appliance and Material Safety Law.

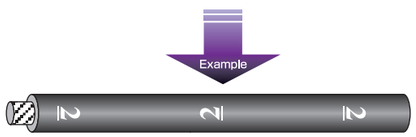
Construction figure



Surface marking

Identification

Figures in ○ indicate white numbering on black insulator.



Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	Flame resistant cross linked polyolefin Flexible cable
Voltage rating	600V
Temperature rating	90℃
Conductor	JIS C 3152
Flame rating	JIS C 3005-4.26.2-b)

>>> Meeting standard

Construction table

No. of cores	Conductor			Flame resistant cross linked polyolefin insulation		Flame resistant cross linked polyolefin sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.75㎟	30/0.18 (30/7.1mil)	1.1 (43mil)	0.106	2.7	0.354	9.0	57(85)	less than 26.6	more than 500	3000	17
3C						0.370	9.4	67(100)				14
4C						0.398	10.1	81(120)				13
6C						0.476	12.1	111(165)				11
2C	1.25㎟	50/0.18 (50/7.1mil)	1.5 (59mil)	0.122	3.1	0.386	9.8	71(105)	less than 16.0	more than 500	3000	23
3C						0.413	10.5	87(130)				19
4C						0.445	11.3	104(155)				17
6C						0.524	13.3	144(215)				15
2C	2.0㎟	37/0.26 (37/10.2mil)	1.8 (71mil)	0.134	3.4	0.417	10.6	87(130)	less than 10.2	more than 500	3000	30
3C						0.437	11.1	108(160)				25
4C						0.480	12.2	131(195)				22
6C						0.567	14.4	185(275)				20
2C	3.5㎟	45/0.32 (45/12.6mil)	2.5 (98mil)	0.161	4.1	0.480	12.2	124(185)	less than 5.54	more than 500	3000	43
3C						0.504	12.8	155(230)				36
4C						0.555	14.1	195(290)				33
6C						0.657	16.7	279(415)				29
2C	5.5㎟	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	0.567	14.4	178(265)	less than 3.56	more than 500	3000	57
3C						0.598	15.2	225(335)				48
4C						0.657	16.7	282(420)				43

Allowable Ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.91	0.82	0.71	0.58	0.41	–	–

Standard sales length

100m

(Sale by cutting short length is available.)

KIV LF

Poly vinyl chloride insulated wires for electorical apparatus

Heat resistance ★
Oil resistance ★★
Noise resistance ★
Flame resistance ★★★
Flexibility ★★
non-migratory ★
Transport property ★
※The characteristic is an aim.

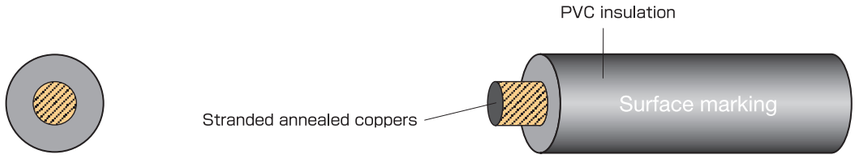
> Application

- Wiring of electrical machinery and apparatus not exceeding 600V.
- Rated voltage:600V. Temp:60℃.

> Feature

- Flexible annealed copper stranded conductor.
- Flexibility, 8mm²-100mm² is, use the 0.32㎜ wire instead of 0.45㎜ conductor wire.
- Reference to JIS C 3316.
- 0.75mm²～100mm² wires conform to Electrical Appliance and Material Safety Law. (0.5mm² wires out of Electrical Appliance and Material Safety Law)

> Construction figure



> Surface marking

(1)0.75～100mm² wires

KIV ○○mm²　<PS>E ** TAIYO CABLETEC 製造年 LFV R15

(2)0.5, 125～325mm² wires

KIV ○○mm²　TAIYO CABLETEC ** 製造年 LFV R15

※Only surface marking displays LFV.

> Identification

·0.5mm² wire is black, white, red, green, yellow, blue.

·0.75mm²～100mm² wire is black, white, red, green, yellow, blue, and Y/G

·80SQ is black or green.

·150mm²～250mm² wire is black, white, red, green, yellow, and blue.

·325mm² wire is black, white, red, yellow, and blue.

※Y/G indicates green core with yellow stripe (30～50%)

> > > Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	KIT
Voltage rating	600V
Temperature rating	60℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

> Construction table

No. of cores	Conductor			Flame resistant polyethlehe insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1C	0.5	20/0.18 (20/7.1mil)	0.9 (35mil)	0.098	2.5	7 (11)	less than 36.7	more than 50	2000	9.6
1C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.106	2.7	9 (14)	less than 24.4	more than 50	2000	12
1C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.122	3.1	13 (20)	less than 14.7	more than 50	2000	19
1C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.134	3.4	18 (27)	less than 9.50	more than 50	2000	27
1C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.161	4.1	30 (45)	less than 5.09	more than 50	2000	37
1C	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	47 (70)	less than 3.27	more than 50	2000	49
1C	8	98/0.32 (98/12.6mil)	3.7 (146mil)	0.240	6.1	67 (100)	less than 2.32	more than 50	2000	61
1C	14	172/0.32 (172/12.6mil)	4.9 (193mil)	0.303	7.7	111 (165)	less than 1.32	more than 40	2000	88
1C	22	7/39/0.32 (7/39/12.6mil)	6.7 (264mil)	0.390	9.9	185 (275)	less than 0.844	more than 40	2000	115
1C	38	7/67/0.32 (7/67/12.6mil)	8.8 (346mil)	0.488	12.4	302 (450)	less than 0.496	more than 40	2500	162
1C	60	19/39/0.32 (19/39/12.6mil)	11.2 (441mil)	0.583	14.8	457 (680)	less than 0.311	more than 30	2500	217
1C	80	19/52/0.32 (19/52/12.6mil)	13.1 (516mil)	0.673	17.1	605 (900)	less than 0.230	more than 30	2500	270
1C	100	19/67/0.32 (19/67/12.6mil)	14.7 (579mil)	0.736	18.7	759 (1130)	less than 0.183	more than 30	2500	298
1C	150	27/34/0.45 (27/34/17.7mil)	18.0 (709mil)	0.882	22.4	1068 (1590)	less than 0.129	more than 20	3000	395
1C	200	37/34/0.45 (37/34/17.7mil)	20.4 (803mil)	0.992	25.2	1445 (2150)	less than 0.0939	more than 20	3000	469
1C	250	37/42/0.45 (37/42/17.7mil)	22.7 (894mil)	1.083	27.5	1761 (2620)	less than 0.0760	more than 20	3000	556
1C	325	37/55/0.45 (37/55/17.7mil)	25.9 (1020mil)	1.224	31.1	2291 (3410)	less than 0.0581	more than 20	3000	650

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Please multiply the following correction coefficient by the ambient temperature and the cable-laying conditions, etc.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	35	40	45	50	55	60
Adjustment factors	1.00	0.91	0.82	0.71	0.58	0.41	—

●Adjustment factors(for multiple-line laying)

No. of conductors	2～3	4	5～6	7～15	16～40	41～60	61～
Adjustment factors	0.70	0.63	0.56	0.49	0.43	0.39	0.34

> Standard sales length

Size (mm²)	Standard length (m)				
	100	200	300	600	1000
0.5～2		○			
3.5	○				
5.5～14	○				○
22～38	○			○	
60			○		
80	○		○		
100～200			○		
250,325		○			

325mm² : Make-to-order product.

Halogen-free insulated wire

EM-KIE/F HF

Flame retardant polyethylene insulated wires for electrical equipment

Heat resistance	★★
Oil resistance	★
Noise resistance	★
Flame resistance	★★★
Flexibility	★★
non-migratory	★★★★★
Transport property	★

※The characteristic is an aim.

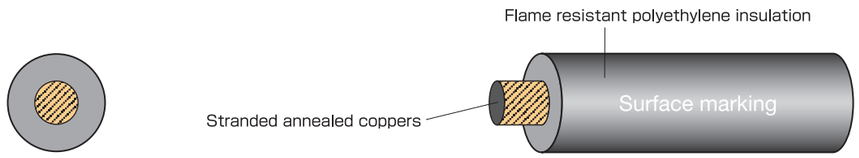
> Application

- Wiring of electrical machinery and apparatus not exceeding 600V.
- Corresponds to halogen-free requirement.
- Rated voltage:600V. Temp:75℃.

> Feature

- Flexible annealed copper stranded conductor.
- Non-halogen flame-resistant polyethylene for insulation.
- Halogen-free, low smoke evolution.
- Heat resistance 75 ℃.
- Cold -50 ℃.
- Reference to JIS C3612,JIS C 3316.
- 0.75mm²～5.5mm² wires conform to Electrical Appliance and Material Safety Law. (0.5mm² wires out of Electrical Appliance and Material Safety Law)

> Construction figure



> Surface marking

(1)0.5mm² wires

EM KIE/F 0.5mm² ** タイネン TAIYO-TEIKOKU 製造年 HF R15

(2)0.75mm²～5.5mm² wires

EM KIE/F ○○mm² <PS>E ** タイネン TAIYO-TEIKOKU 製造年 HF R15

> Identification

·Black, white, red, green, yellow, blue.

> > > Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	EM-KIE/F
Voltage rating	600V
Temperature rating	75℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

> Construction table

No. of cores	Conductor			Flame resistant Polyethlehe insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1C	0.5	20/0.18 (20/7.1mil)	0.9 (35mil)	0.098	2.5	7 (10)	less than 36.7	more than 50	1500	10
1C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.106	2.7	9 (13)	less than 24.4	more than 50	1500	14
1C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.122	3.1	13 (19)	less than 14.7	more than 50	1500	20
1C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.134	3.4	18 (27)	less than 9.50	more than 50	1500	26
1C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.161	4.1	30 (44)	less than 5.09	more than 50	1500	39
1C	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	46 (69)	less than 3.27	more than 50	1500	54

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.88	0.75	0.58	0.33	—	—	—

●Adjustment factors(for multiple-line laying)

No. of condoctors	2～3	4	5～6	7～15	16～40	41～60	61～
Adjustment factors	0.70	0.63	0.56	0.49	0.43	0.39	0.34

> Standard sales length

Please contact us which sizes are available.

HIV LF

600V Grade heat-resistant polyvinyl chloride insulated wires

Heat resistance	★★
Oil resistance	★★★
Noise resistance	★
Flame resistance	★★★
Flexibility	★
non-migratory	★
Transport property	★

※The characteristic is an aim.

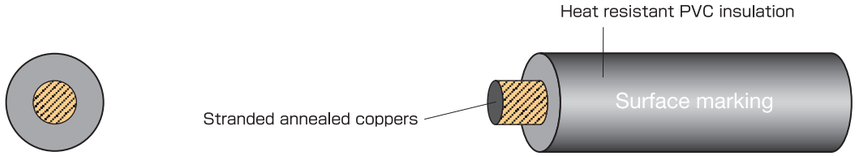
> Application

- Wiring of electrical installation and apparatus not exceeding 600V.
- Applications of high temperature location.
- Rated voltage:600V. Temp:75℃.

> Feature

- Use a heat-resistant PVC to insulation compared to IV 1.2 times the allowable current.
- Heat resistance75℃ (ability 90 ℃).
- Reference to JIS C 3317.
- 1.25mm²～100mm² wires conform to Electrical Appliance and Material Safety Law.

> Construction figure



> Surface marking

(1)1.25～100mm² wires

HIV <PS>E ** タイネツ TAIYO CABLETEC 製造年 LFV R15

(2)150～200mm² wires

HIV TAIYO CABLETEC ** タイネツ 製造年 LFV R15

※Only surface marking displays LFV.

> Identification

·Black, White, Red, Green, Yellow, Brown, Blue, Gray.

> > > Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	HIV
Voltage rating	600V
Temperature rating	75℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

> Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1C	1.25	7/0.45 (7/17.7mil)	1.35 (53mil)	0.118	3.0	11 (17)	less than 16.5	more than 50	1500	23
1C	2.0	7/0.6 (7/23.6mil)	1.8 (71mil)	0.134	3.4	18 (27)	less than 9.24	more than 50	1500	33
1C	3.5	7/0.8 (7/31.5mil)	2.4 (94mil)	0.157	4.0	30 (45)	less than 5.20	more than 50	1500	45
1C	5.5	7/1.0 (7/39.4mil)	3.0 (118mil)	0.197	5.0	44 (65)	less than 3.33	more than 50	1500	60
1C	8.0	7/1.2 (7/47.2mil)	3.6 (142mil)	0.236	6.0	64 (95)	less than 2.31	more than 50	1500	74
1C	14	7/1.6 (7/63mil)	4.8 (189mil)	0.299	7.6	111 (165)	less than 1.30	more than 40	2000	107
1C	22	7/2.0 (7/78.7mil)	6.0 (236mil)	0.362	9.2	171 (255)	less than 0.824	more than 40	2000	140
1C	38	7/2.6 (7/102.4mil)	7.8 (307mil)	0.453	11.5	279 (415)	less than 0.487	more than 40	2500	197
1C	60	19/2.0 (19/78.7mil)	10.0 (394mil)	0.551	14.0	427 (635)	less than 0.303	more than 30	2500	264
1C	100	19/2.6 (19/102.4mil)	13.0 (512mil)	0.669	17.0	706 (1050)	less than 0.180	more than 30	2500	363
1C	150	37/2.3 (37/90.6mil)	16.1 (634mil)	0.827	21.0	1062 (1580)	less than 0.118	more than 20	3000	482
1C	200	37/2.6 (37/102.4mil)	18.2 (717mil)	0.906	23.0	1351 (2010)	less than 0.0922	more than 20	3000	572

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Please multiply the following correction coefficient by the ambient temperature and the cable-laying conditions, etc.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.88	0.75	0.58	0.33	—	—	—

●Adjustment factors(for multiple-line laying)

No. of conductors	2～3	4	5～6	7～15	16～40	41～60	61～
Adjustment factors	0.70	0.63	0.56	0.49	0.43	0.39	0.34

> Standard sales length

Please contact us (sales rep).

HKIV LF

Heat-resistant polyvinyl chloride insulated wires for electorical apparatus

Heat resistance	★★
Oil resistance	★★★
Noise resistance	★
Flame resistance	★★★
Flexibility	★★
non-migratory	★
Transport property	★

※The characteristic is an aim.

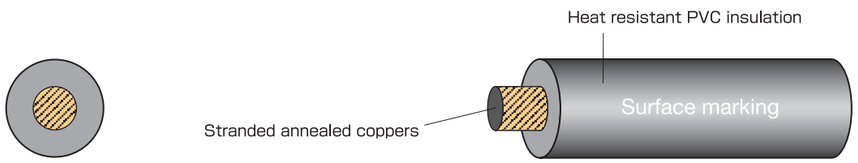
> Application

- Wiring of electrical machinery and apparatus not exceeding 600V.
- Applications of high temperature location.
- Rated voltage:600V. Temp:75℃.

> Feature

- Flexible annealed copper stranded conductor.
- Use a heat-resistant PVC to insulation compared to KIV 1.2 times the allowable current.
- Heat resistance75℃ (ability 90 ℃).
- Reference to JIS C 3316.
- 0.75mm²～100mm² wires conform to Electrical Appliance and Material Safety Law.
  (0.5mm² wires out of Electrical Appliance and Material Safety Law)

> Construction figure



> Surface marking

(1)0.75～100mm² wires

HKIV <PS>E ** タイネツ TAIYO CABLETEC 製造年 LFV R15

(2)0.5, 150～200mm² wires

HKIV TAIYO CABLETEC ** タイネツ 製造年 LFV R15

※Only surface marking displays LFV.

> Identification

·Black, White, Red, Green, Yellow, Brown, Blue, Gray, Orange.

> > > Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	HKIV
Voltage rating	600V
Temperature rating	75℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

> Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
1C	0.5	20/0.18 (20/7.1mil)	0.9 (35mil)	0.098	2.5	7 (10)	less than 36.7	more than 600	2000	11
1C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.106	2.7	9 (13)	less than 24.4	more than 500	2000	14
1C	0.9	35/0.18 (35/7.1mil)	1.2 (47mil)	0.110	2.8	12 (18)	less than 20.9	more than 500	2000	20
1C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.122	3.1	13 (19)	less than 14.7	more than 400	2000	23
1C	2.0	37/0.26 (37/10.2mil)	1.8 (71mil)	0.134	3.4	17 (26)	less than 9.50	more than 400	2000	33
1C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.161	4.1	30 (44)	less than 5.09	more than 300	2000	45
1C	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	47 (70)	less than 3.27	more than 300	2000	60
1C	8.0	50/0.45 (50/17.7mil)	3.7 (146mil)	0.240	6.1	64 (95)	less than 2.32	more than 300	2000	74
1C	14	88/0.45 (88/17.7mil)	4.9 (193mil)	0.303	7.7	111 (165)	less than 1.32	more than 300	2500	107
1C	22	7/20/0.45 (7/20/17.7mil)	7.0 (276mil)	0.402	10.2	181 (270)	less than 0.844	more than 200	2500	140
1C	30	7/27/0.45 (7/27/17.7mil)	8.1 (319mil)	0.445	11.3	239 (355)	less than 0.625	more than 200	2500	169
1C	38	7/34/0.45 (7/34/17.7mil)	9.1 (358mil)	0.500	12.7	306 (455)	less than 0.496	more than 200	2500	197
1C	50	19/16/0.45 (19/16/17.7mil)	10.4 (409mil)	0.551	14.0	370 (550)	less than 0.389	more than 200	2500	232
1C	60	19/20/0.45 (19/20/17.7mil)	11.6 (457mil)	0.598	15.2	454 (675)	less than 0.311	more than 200	2500	264
1C	80	19/27/0.45 (19/27/17.7mil)	13.5 (531mil)	0.689	17.5	608 (905)	less than 0.230	more than 200	2500	313
1C	100	19/34/0.45 (19/34/17.7mil)	15.2 (598mil)	0.756	19.2	753 (1120)	less than 0.189	more than 200	3000	363
1C	150	27/34/0.45 (27/34/17.7mil)	18.7 (736mil)	0.909	23.1	1062 (1580)	less than 0.129	more than 200	3000	482
1C	200	37/34/0.45 (37/34/17.7mil)	21.2 (835mil)	1.024	26.0	1431 (2130)	less than 0.0939	more than 100	3000	572

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Please multiply the following correction coefficient by the ambient temperature and the cable-laying conditions, etc.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.88	0.75	0.58	0.33	—	—	—

●Adjustment factors(for multiple-line laying)

No. of conductors	2～3	4	5～6	7～15	16～40	41～60	61～
Adjustment factors	0.70	0.63	0.56	0.49	0.43	0.39	0.34

> Standard sales length

Please contact us (sales rep).

PVC cabtire code (Round type)

VCTF LF

Polyvinyl chloride insulated flexible cords

Heat resistance	★
Oil resistance	★
Noise resistance	★
Flame resistance	★★★
Flexibility	★★
non-migratory	★
Transport property	★★

※The characteristic is an aim.

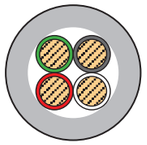
> Application

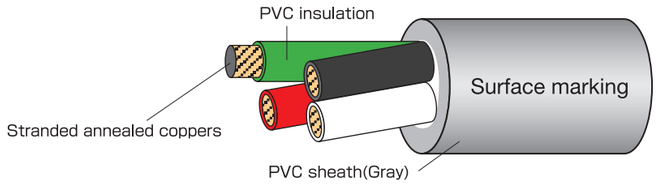
- Small electric appliances of a.c. 300V or under principally for indoor service.
- Rated voltage:300V. Temp:60℃.

> Feature

- Easy identification by insulation multicolor.
- Flexibility, Processing work efficiency.
- 0.75mm²～2mm², 2C～4C cords conform to JIS C 3306.
- 0.75mm²～100mm² wires conform to Electrical Appliance and Material Safety Law.
  (0.3mm², 0.5mm² cords used in less than 100V out of Electrical Appliance and Material Safety Law)

> Construction figure





※Cables with more than 10 cores : binder tape on cores.

> Surface marking

(1)0.3, 0.5mm² cables

○○mm² VCTF ** 製造年 LFV R15 *TAIYO･TEIKOKU*

(2)0.75～2mm²　2～4 cores

○○mm² VCTF (JIS) ◇◇ 認証番号 <PS>E JCT ** 製造年 LFV R15 *TAIYO･TEIKOKU*

(3)0.75mm² or larger, except(2)

○○mm² VCTF <PS>E ◇◇ ** 製造年 LFV R15 *TAIYO･TEIKOKU*

※Only surface marking displays LFV.
◇◇: Name of the registered conformity assessment body

> Identification

Cores are 12 and under	Identification by insulation color (Black, White, Red, Green, Yellow, Brown, Blue,……)
Cores are 13 and over	Identification by insulation color and colored dot mark

No. of cores	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Color of insulation	Black	White	Red	Green	Yellow	Brown	Blue	Gray	Orange	Sky	Pink	B Green	White	Red	Green	Yellow	Brown
Color of dot mark	—	—	—	—	—	—	—	—	—	—	—	—	Black	Black	Black	Black	Black
No. of cores	18	19	20	21	22	23	24	25	26	27	28	29	30				
Color of insulation	Blue	Gray	Orange	Sky	Pink	B Green	Black	Red	Green	Brown	Blue	White	Yellow				
Color of dot mark	Black	Black	Black	Black	Black	Black	White	White	White	White	White	Blue	Blue				

> Standard sales length

100m

Please contact us which sizes are available.

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment JIS C3306(2～4 cores, 0.75～2mm²)
Official symbol	VCTF
Voltage rating	300V
Temperature rating	60℃
Conductor	JIS C 3102
Flame rating	JIS 3005-4.26.2-b)

> > > Meeting standard

JIS C 3306 conformance

> Construction table

No. of cores	Conductor Size (AWG) (mm²)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	PVC insulation Outside diameter (inch)	PVC insulation Outside diameter (mm)	PVC sheath Outside diameter approx.(inch)	PVC sheath Outside diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C						0.181	4.6	19(29)				3.0
3C						0.189	4.8	24(35)				3.0
4C						0.205	5.2	27(40)				3.0
5C						0.224	5.7	34(50)				3.0
6C						0.240	6.1	40(60)				3.0
7C												3.0
8C	0.3	12/0.18 (12/7.1mil)	0.7 (28mil)	0.059	1.5	0.260	6.6	47(70)	less than 62.9	more than 5	2000	3.0
10C						0.307	7.8	50(75)				3.0
12C						0.323	8.2	60(90)				3.0
16C						0.358	9.1	74(110)				3.0
20C						0.386	9.8	91(135)				2.9
○ 24C						0.429	10.9	917(1365)				2.8
○ 30C						0.465	11.8	131(195)				2.6
2C						0.228	5.8	30(45)				5.0
3C						0.240	6.1	37(55)				5.0
4C						0.260	6.6	44(65)				5.0
5C						0.280	7.1	54(80)				5.0
6C						0.303	7.7	64(95)				5.0
7C												5.0
8C	0.5	20/0.18 (20/7.1mil)	0.9 (35mil)	0.075	1.9	0.327	8.3	74(110)	less than 37.8	more than 5	2000	5.0
10C						0.386	9.8	84(125)				5.0
12C						0.398	10.1	94(140)				4.9
16C						0.437	11.1	118(175)				4.4
20C						0.472	12.0	141(210)				4.1
○ 24C						0.520	13.2	168(250)				3.9
30C						0.575	14.6	208(310)				3.6
2C						0.260	6.6	40(60)				7.0
3C						0.276	7.0	50(75)				7.0
4C						0.299	7.6	60(90)				7.0
5C						0.323	8.2	71(105)				7.0
6C						0.350	8.9	84(125)				7.0
7C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.091	2.3			87(130)	less than 25.1	more than 5	2000	7.0
8C						0.378	9.6	101(150)				7.0
10C						0.449	11.4	114(170)				6.9
12C						0.465	11.8	131(195)				6.4
16C						0.512	13.0	165(245)				5.8
20C						0.563	14.3	202(300)				5.4
○ 24C						0.622	15.8	242(360)				5.1
○ 30C						0.685	17.4	299(445)				4.8
2C						0.291	7.4	54(80)				12
3C						0.307	7.8	67(100)				12
4C						0.335	8.5	81(120)				12
5C						0.366	9.3	97(145)				11
6C						0.398	10.1	118(175)				11
7C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.106	2.7			124(185)	less than 15.1	more than 5	2000	10
8C						0.429	10.9	141(210)				10
10C						0.512	13.0	161(240)				9.4
12C						0.535	13.6	188(280)				8.7
16C						0.594	15.1	239(355)				7.9
20C						0.654	16.6	292(435)				7.3
○ 24C						0.720	18.3	349(520)				7.0
○ 30C						0.791	20.1	433(645)				6.5
2C						0.315	8.0	67(100)				17
3C						0.335	8.5	84(125)				17
4C						0.362	9.2	104(155)				15
5C						0.398	10.1	128(190)				14
6C						0.433	11.0	151(225)				14
7C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.118	3.0			161(240)	less than 9.79	more than 5	2000	13
8C						0.469	11.9	185(275)				12
10C						0.567	14.4	218(325)				12
○ 12C						0.587	14.9	252(375)				11
○ 16C						0.657	16.7	336(500)				10
○ 20C						0.713	18.1	396(590)				9.4
○ 24C						0.795	20.2	480(715)				9.0
○ 30C						0.874	22.2	591(880)				8.3
2C						0.370	9.4	104(155)				30
3C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.146	3.7	0.394	10.0	131(195)	less than 5.24	more than 5	2000	25
4C						0.429	10.9	158(235)				23

※○:Indicates make-to-order product.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	35	40	45	50	55	60
Adjustment factors	1.00	0.91	0.82	0.71	0.58	0.41	—

HYPERSOFT (HPF) #300 LF

Heat resistance	★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★★
Transport property	★★

※The characteristic is an aim.

Oil&Heat resistance and flexible code

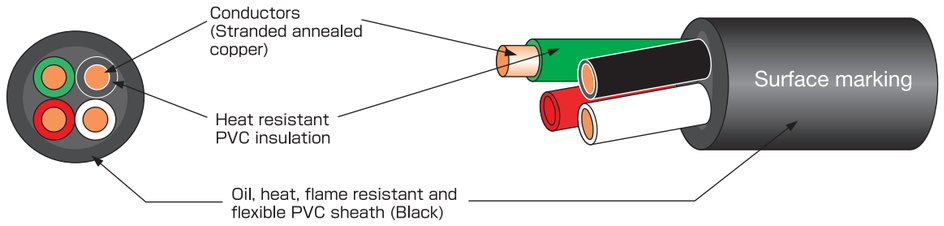
> Application

- Wiring such as the machine tools where the oil is scattered at a high temperature
- Rated voltage:300V.Temp:75℃(ability 90 ℃)

> Feature

- Heat resistant PVC used for insulation.
- Oil, heat, flame resistant and soft PVC for sheath.

> Construction figure



> Surface marking

(1)0.3~0.5mm² cables

○○mm²《ハイパーソフト#300》耐油 耐熱 TEIKOKU ** LFV R15 -F-

(2)0.75~2mm² cables

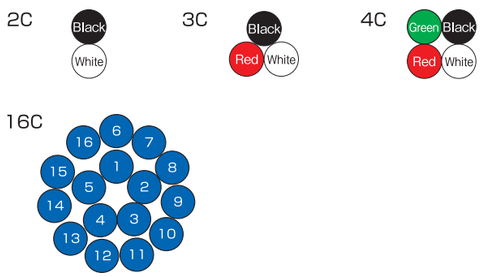
○○mm²《ハイパーソフト#300》耐油 耐熱 TEIKOKU <PS>E ** タイネツ LFV R15 -F-

〈PS〉E	Indication that was passed to Electrical Appliance and Material Safety Act in Japan (The mark is indicated for conductor size is 1.75 mm and over)
LFV	Abbreviated name: Lead Free Vinyl
—F—	Pussing to rertical flame test from CMJ registration system

※Cables with more than 5 cores : binder tape on cores.

> Identification

Cores are 12 and under	Color distinction (Black, White, Red, Green, Yellow, Brown, Blue, Gray, Orange, SkyBlue, Pink, BlightGreen)
Cores are 13 and over	Numbering(1,2,3,…) on 「Blue」 insulation



Figures in ○ indicate white numbering on blue insulator.

> Standard sales length

100m or 500m

(Sales by short length is available for large sizes. Plsease contact us which sizes are available.)

> > > Meeting standard

Certification	Electrical Appliance and Material Safety	CMJ registration
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment	F mark
Official symbol	HVCTF	
Voltage rating	300V	
Temperature rating	75℃	
Conductor	JIS C 3102	
Flame rating	JIS C 3005-4.26.2-b)	Flame test of insulated for apparat us

> Construction table

No. of cores	Conductor			PVC insulation		PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.3	12/0.18 (12/7.1mil)	0.7 (28mil)	0.059	1.5	0.181	4.6	20(30)	62.9			4
3C						0.189	4.8	24(35)				
4C						0.205	5.2	27(40)				
5C						0.232	5.9	30(45)				
6C						0.248	6.3	37(55)				3
7C						0.268	6.8	40(60)				
8C						0.283	7.2	47(70)				
10C						0.307	7.8	50(75)				
12C						0.323	8.2	60(90)				
16C						0.358	9.1	81(120)				
20C						0.394	10.0	97(145)				2
30C						0.465	11.8	138(205)				
2C	0.5	20/0.18 (20/7.1mil)	0.9 (35mil)	0.075	1.9	0.228	5.8	30(45)	37.8			6
3C						0.240	6.1	37(55)				
4C						0.260	6.6	44(65)				
5C						0.287	7.3	47(70)				5
6C						0.311	7.9	57(85)				
7C						0.335	8.5	64(95)				
8C						0.358	9.1	74(110)				
10C						0.386	9.8	81(120)				4
12C						0.398	10.1	91(135)				
16C						0.437	11.1	124(185)				3
20C						0.484	12.3	155(230)				
30C						0.575	14.6	215(320)				
2C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.091	2.3	0.260	6.6	40(60)	25.1	5	under water AC2000	8
3C						0.276	7.0	50(75)				
4C						0.299	7.6	60(90)				
5C						0.331	8.4	64(95)				7
6C						0.358	9.1	77(115)				
7C						0.386	9.8	91(135)				6
8C						0.413	10.5	104(155)				
10C						0.449	11.4	114(170)				
12C						0.465	11.8	131(195)				5
16C						0.512	13.0	178(265)				
20C						0.575	14.6	225(335)				4
30C						0.685	17.4	319(475)				
2C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.106	2.7	0.291	7.4	54(80)	15.1			
3C						0.307	7.8	64(95)				14
4C						0.335	8.5	81(120)				
5C						0.374	9.5	87(130)				11
6C						0.406	10.3	104(155)				10
7C						0.437	11.1	124(185)				9
8C						0.472	12.0	141(210)				
10C						0.512	13.0	161(240)				8
12C						0.535	13.6	188(280)				
16C						0.594	15.1	255(380)				7
20C						0.665	16.9	322(480)				6
30C						0.791	20.1	460(685)				5
2C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.118	3.0	0.315	8.0	67(100)	9.79			
3C						0.335	8.5	84(125)				20
4C						0.362	9.2	104(155)				
5C						0.406	10.3	114(170)				14
6C						0.441	11.2	138(205)				13
7C						0.476	12.1	161(240)				12
8C						0.512	13.0	188(280)				
10C						0.567	14.4	215(320)				11
12C						0.587	14.9	252(375)				10
16C						0.657	16.7	349(520)				9
20C						0.728	18.5	433(645)				8
30C						0.866	22.0	628(935)				7

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.
·Allowable ampacity is calculated based on JCS0168.
·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70
Adjustment factors	1.00	0.88	0.75	0.58	0.33

HYPERSOFT (HPF) #300SB LF

Noise&Oil&Heat resistance and flexible code

Heat resistance	★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★★
Transport property	★★

※The characteristic is an aim.

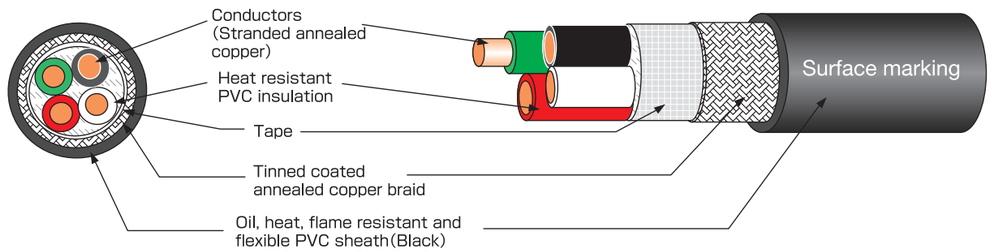
> Application

- The place which is need to oil, heat, noise resistant
- Rated voltage:300V.Temp:75℃(ability 90 ℃)

> Feature

- Heat resistant PVC used for insulation.
- Oil, heat, flame resistant and soft PVC for sheath.

> Construction figure



> Surface marking

(1)0.3~0.5mm² cables

○○mm²《ハイパーソフト#300SB》 耐油 耐熱 TEIKOKU ** LFV R15 -F-

(2)0.75~2mm² cables

○○mm²《ハイパーソフト#300SB》 耐油 耐熱 TEIKOKU <PS>E ** タイネツ LFV R15 -F-

〈PS〉E	Indication that was passed to Electrical Appliance and Material Safety Act in Japan (The mark is indicated for conductor size is 1.75 mm and over)
LFV	Abbreviated name: Lead Free Vinyl
—F—	Pussing to rertical flame test from CMJ resistration system

> Identification

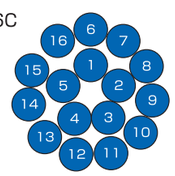
Cores are 12 and under	Color distinction (Black, White, Red, Green, Yellow, Brown, Blue, Gray, Orange, SkyBlue, Pink, BlightGreen)
Cores are 13 and over	Numbering(1,2,3,...) on 「Blue」 insulation

2C

3C

4C

16C



Figures in ○ indicate white numbering on blue insulator.

> Standard sales length

100m or 500m

(Sales by short length is available for large sizes. Plsease contact us which sizes are available.)

> > > Meeting standard

Certification	Electrical Appliance and Material Safety	CMJ registration
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment	F mark
Official symbol	HVCTF	
Voltage rating	300V	
Temperature rating	75℃	
Conductor	JIS C 3102	
Flame rating	JIS C 3005-4.26.2-b)	Flame test of insulated for apparat us

> Construction table

No. of cores	Conductor			PVC insulation		PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.3	12/0.18 (12/7.1mil)	0.7 (28mil)	0.059	1.5	0.236	6.0	30(45)	62.9			
3C						0.244	6.2	34(50)				4
4C						0.260	6.6	40(60)				
5C						0.280	7.1	50(75)				
6C						0.295	7.5	54(80)				
7C						0.315	8.0	64(95)				
8C						0.331	8.4	71(105)				
10C						0.354	9.0	74(110)				3
12C						0.362	9.2	84(125)				
16C						0.402	10.2	104(155)				
20C						0.437	11.1	124(185)				2
30C						0.500	12.7	168(250)				
2C	0.5	20/0.18 (20/7.1mil)	0.9 (35mil)	0.075	1.9	0.268	6.8	40(60)	37.8			
3C						0.280	7.1	47(70)				6
4C						0.299	7.6	57(85)				
5C						0.319	8.1	67(100)				
6C						0.343	8.7	74(110)				5
7C						0.366	9.3	87(130)				
8C						0.394	10.0	97(145)				
10C						0.421	10.7	111(165)				4
12C						0.433	11.0	118(175)				
16C						0.472	12.0	148(220)				
20C						0.524	13.3	181(270)				3
30C						0.606	15.4	255(380)				
2C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.091	2.3	0.299	7.6	50(75)	25.1	5	under water AC2000	
3C						0.315	8.0	64(95)				8
4C						0.339	8.6	74(110)				
5C						0.362	9.2	87(130)				7
6C						0.390	9.9	101(150)				
7C						0.421	10.7	114(170)				6
8C						0.449	11.4	131(195)				
10C						0.484	12.3	148(220)				
12C						0.500	12.7	161(240)				5
16C						0.551	14.0	208(310)				
20C						0.606	15.4	255(380)				4
2C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.106	2.7	0.331	8.4	67(100)	15.1			
3C						0.346	8.8	81(120)				14
4C						0.374	9.5	97(145)				
5C						0.409	10.4	114(170)				11
6C						0.441	11.2	134(200)				10
7C						0.472	12.0	155(230)				9
8C						0.512	13.0	175(260)				
10C						0.551	14.0	198(295)				8
12C						0.567	14.4	222(330)				
16C						0.626	15.9	286(425)				7
20C						0.697	17.7	349(520)				6
2C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.118	3.0	0.354	9.0	81(120)	9.79			
3C						0.374	9.5	101(150)				20
4C						0.406	10.3	121(180)				
5C						0.441	11.2	144(215)				14
6C						0.476	12.1	171(255)				13
7C						0.516	13.1	202(300)				12
8C						0.551	14.0	228(340)				11
10C						0.598	15.2	255(380)				
12C						0.618	15.7	296(440)				10

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70
Adjustment factors	1.00	0.88	0.75	0.58	0.33

TF-HIGH-SOFT VCTF LF

Polyvinyl chloride insulated high-flexible cords

Heat resistance	★
Oil resistance	★
Noise resistance	★
Flame resistance	★★★
Flexibility	★★★★
non-migratory	★
Transport property	★★

※The characteristic is an aim.

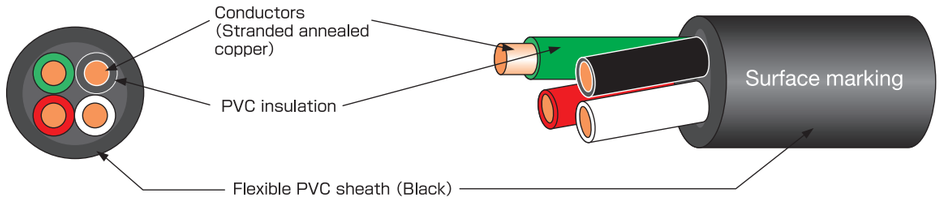
> Application

- Polyvinyl chloride insulated soft and flexible cords
- Rated voltage:300V.Temp:60℃

> Feature

- 60℃ lead free PVC for insulation
- Flexible, shine, PVC for sheath.

> Construction figure



> Surface marking

(1)0.5mm² cables

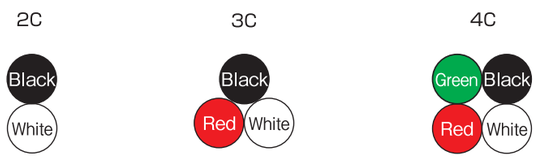
○○mm² TFハイソフト VCTF ** TEIKOKU 製造年 LFV R15

(2)0.75～2mm² cables

○○mm² TFハイソフト VCTF JIS ◇◇ 認証番号 <PS>E JCT ** TEIKOKU 製造年 S LFV R15

LFV	Abbreviated name: Lead Free Vinyl
〈PS〉E	Indication that was passed to Electrical Appliance and Material Safety Act in Japan (The mark is indicated for conductor size is 1.75 mm and over)
JIS	Coverage of JIS standerd (0.75 ～ 2 mm² 2 ～ 4 cores)
◇◇	Name of the registered conformity assessment body

> Identification



> > > Meeting standard

JIS C 3306 conformance

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment JIS C 3312
Official symbol	VCTF
Voltage rating	300V
Temperature rating	60℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

> Construction table

No. of cores	Conductor			Heat resistant flexible-PVC insulation		Oil, heat resistant flexible sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.5	20/0.18 (20/7.1mil)	0.9 (35mil)	0.075	1.9	0.228	5.8	30(44)	37.8			5
3C						0.240	6.1	35(52)				
4C						0.260	6.6	42(62)				
2C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.091	2.3	0.260	6.6	40(59)	25.1	5	under water AC2000	7
3C						0.276	7.0	48(71)				
4C						0.299	7.6	56(83)				
2C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.106	2.7	0.291	7.4	53(79)	15.1			12
3C						0.307	7.8	64(95)				
4C						0.335	8.5	74(110)				
2C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.118	3.0	0.315	8.0	67(100)	9.79			17
3C						0.335	8.5	81(120)				
4C						0.362	9.2	97(145)				

※Standard sales length:100m

※ ▭ 0.5～2mm² are standard stock product. The other size are product to produce after having accepted an order.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	35	40	45	50
Adjustment factors	1.00	0.91	0.82	0.71	0.58

Flame-resistant polyolefin round flexible cord

EM-ECTF/F HF

Flexible cord insulated and sheathed with polyolefin

Heat resistance	★★
Oil resistance	★
Noise resistance	★
Flame resistance	★★★
Flexibility	★★
non-migratory	★★★★★
Transport property	★★

※The characteristic is an aim.

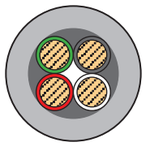
> Application

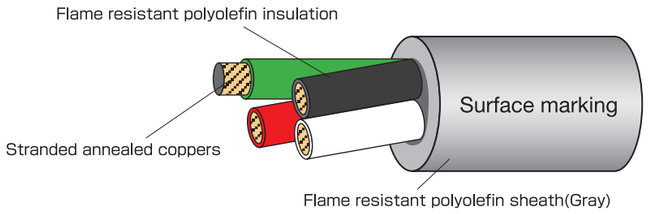
- Small electric appliances of a.c. 300V or under principally for indoor service.
- Use of halogen-free specification.
- Rated voltage:300V. Temp:75℃.

> Feature

- Non-halogen flame-resistant polyolefin for insulation and sheath.
- Halogen-free, low smoke evolution.
- Heat resistance 75 ℃.
- Cold -40 ℃.
- Conform to Electrical Appliance and Material Safety Law.

> Construction figure

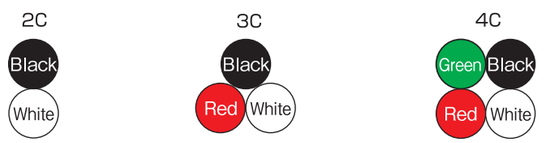




> Surface marking

◇◇ : Name of the registered conformity assessment body

> Identification



> > > Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	Flame resistant polyolefin
Voltage rating	300V
Temperature rating	75℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

> Construction table

No. of cores	Conductor			Flame resistant polyolefin insulation		Flame resistant polyolefin sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C						0.260	6.6	40 (60)				14
3C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.091	2.3	0.276	7.0	47 (70)	less than 25.1	more than 50	2000	12
4C						0.299	7.6	60 (90)				11
2C						0.291	7.4	54 (80)				19
3C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.106	2.7	0.307	7.8	64 (95)	less than 15.1	more than 50	2000	16
4C						0.335	8.5	81 (120)				15
2C						0.315	8.0	67 (100)				25
3C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.118	3.0	0.335	8.5	81 (120)	less than 9.79	more than 50	2000	21
4C						0.362	9.2	101 (150)				19

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	35	40	45	50	55	60
Adjustment factors	1.00	0.94	0.88	0.82	0.75	0.67	0.58

> Standard sales length

100m/500m

Please contact us which sizes are available.

PVC cabtire cable (600V)

VCT LF

600V Grade polyvinyl chloride insulated and sheathed portable power cables

Heat resistance	★
Oil resistance	★★★
Noise resistance	★
Flame resistance	★★★
Flexibility	★★
non-migratory	★
Transport property	★★

※The characteristic is an aim.

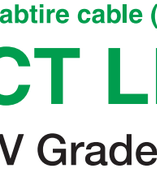
> Application

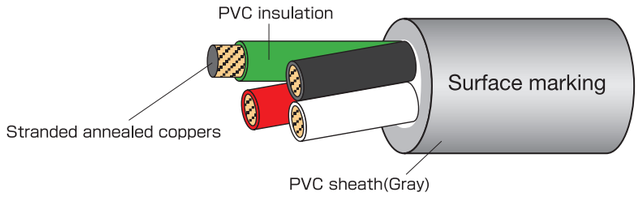
- Power supply circuit of the mobile electrical machinery and apparatus not higher than 600V.
- Rated voltage:600V. Temp:60℃.

> Feature

- Flexibility, Processing work efficiency.
- Easy identification by insulation multicolor.
- Flexibility, 8mm²~38mm² is, use the 0.32㎜ wire instead of 0.45㎜ conductor wire.
- Reference to JIS C 3312.
- Conform to Electrical Appliance and Material Safety Law.

> Construction figure





※Cables with more than 8 cores : binder tape on cores.

> Surface marking

(1)7 cores or less

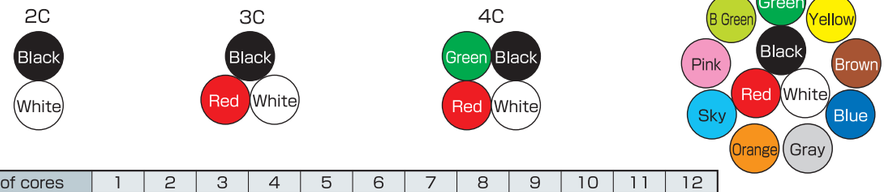
○○mm² VCT <PS>E ◇◇ ** 製造年 LFV R15 *TAIYO･TEIKOKU*

(2)8 cores or more

○○mm² VCT ** 製造年 LFV R15 *TAIYO･TEIKOKU*

※Only surface marking displays LFV.
◇◇ : Name of testing/inspection institution

> Identification



No. of cores	1	2	3	4	5	6	7	8	9	10	11	12
Color of insulation	Black	White	Red	Green	Yellow	Brown	Blue	Gray	Orange	Sky	Pink	B Green

> Standard sales length

100m
Please contact us which sizes are available.

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment JIS C3312(0.75~14mm²)
Official symbol	VCT
Voltage rating	600V
Temperature rating	60℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

> > > Meeting standard

JIS C 3312 conformance

> Construction table

No. of cores	Conductor Size (AWG) (mm²)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	PVC insulation Outside diameter (inch)	PVC insulation Outside diameter (mm)	PVC sheath Overall diameter approx.(inch)	PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C						0.346	8.8	71(105)				12
3C						0.362	9.2	77(115)				10
4C						0.390	9.9	94(140)				9.0
○ 5C						0.429	10.9	111(165)				9.0
○ 6C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.106	2.7	0.461	11.7	128(190)	less than 25.1	more than 50	3000	8.7
○ 7C								134(200)				8.2
○ 8C						0.500	12.7	141(210)				7.6
○ 10C						0.583	14.8	178(265)				7.2
○ 12C						0.606	15.4	198(295)				6.7
2C						0.378	9.6	87(130)				16
3C						0.398	10.1	101(150)				14
4C						0.437	11.1	121(180)				13
○ 5C						0.480	12.2	148(220)				13
○ 6C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.122	3.1	0.516	13.1	171(255)	less than 15.1	more than 50	3000	11
○ 7C								175(260)				11
○ 8C						0.559	14.2	188(280)				10
○ 10C						0.654	16.6	235(350)				9.8
○ 12C						0.681	17.3	262(390)				9.1
2C						0.409	10.4	108(160)				22
3C						0.429	10.9	124(185)				19
4C						0.465	11.8	148(220)				17
○ 5C						0.512	13.0	181(270)				17
○ 6C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.134	3.4	0.559	14.2	215(320)	less than 9.79	more than 50	3000	15
○ 7C								225(335)				14
○ 8C						0.606	15.4	235(350)				13
○ 10C						0.709	18.0	302(450)				12
○ 12C						0.736	18.7	336(500)				11
2C						0.465	11.8	144(215)				32
3C						0.496	12.6	178(265)				28
4C						0.547	13.9	222(330)				25
○ 5C						0.594	15.1	265(395)				25
○ 6C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.161	4.1	0.650	16.5	316(470)	less than 5.24	more than 40	3000	21
○ 7C								336(500)				20
○ 8C						0.709	18.0	356(530)				19
○ 10C						0.835	21.2	457(680)				18
○ 12C						0.858	21.8	511(760)				16
2C						0.559	14.2	215(320)				41
3C						0.591	15.0	259(385)				36
4C						0.650	16.5	323(480)				32
○ 5C						0.717	18.2	393(585)				32
○ 6C	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	0.783	19.9	470(700)	less than 3.37	more than 40	3000	28
○ 7C								497(740)				26
○ 8C						0.854	21.7	524(780)				25
○ 10C						1.016	25.8	685(1020)				23
○ 12C						1.047	26.6	766(1140)				22
2C						0.646	16.4	282(420)				51
3C	8	98/0.32 (98/12.6mil)	3.7 (146mil)	0.240	6.1	0.689	17.5	349(520)	less than 2.39	more than 40	3000	44
4C						0.760	19.3	430(640)				39
2C						0.787	20.0	444(660)				71
3C	14	172/0.32 (172/12.6mil)	4.9 (193mil)	0.303	7.7	0.843	21.4	558(830)	less than 1.36	more than 40	3000	62
4C						0.929	23.6	685(1020)				55
○ 2C						0.984	25.0	719(1070)				95
3C	22	7/39/0.32 (7/39/12.6mil)	6.7 (264mil)	0.390	9.9	1.051	26.7	900(1340)	less than 0.869	more than 30	3000	83
4C						1.169	29.7	1115(1660)				74
○ 2C						1.213	30.8	1115(1660)				130
3C	38	7/67/0.32 (7/67/12.6mil)	8.8 (346mil)	0.488	12.4	1.295	32.9	1404(2090)	less than 0.511	more than 30	3000	110
4C						1.441	36.6	1761(2620)				100

※○:Indicates make-to-order product.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	35	40	45	50	55	60
Adjustment factors	1.00	0.91	0.82	0.71	0.58	0.41	—

HYPERSOFT (HPF) #600 LF

Oil&Heat resistance and flexible cable

Heat resistance	★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★★
Transport property	★★

※The characteristic is an aim.

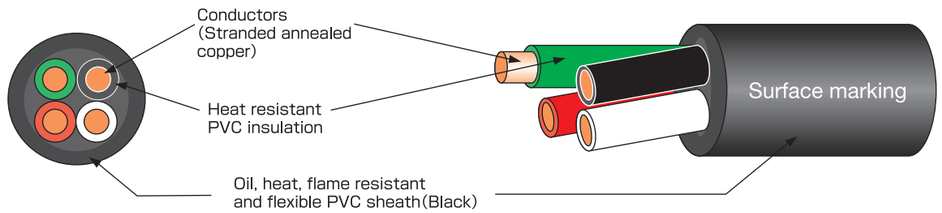
> Application

- Wiring such as the machine tools where the oil is scattered at a high temperature
- Rated voltage:600V.Temp:75℃(ability 90 ℃)

> Feature

- Heat resistant PVC used for insulation.
- Oil, heat, flame resistant and soft PVC for sheath.

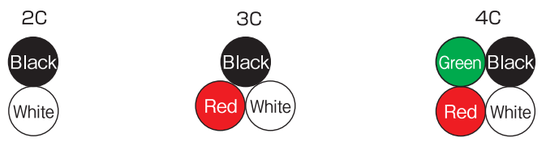
> Construction figure



> Surface marking

〈PS〉E	Indication that was passed to Electrical Appliance and Material Safety Act in Japan
LFV	Abbreviated name: Lead Free Vinyl
—F—	Pussing to rertical flame test from CMJ resistration system

> Identification



> > > Meeting standard

Certification	Electrical Appliance and Material Safety	CMJ registration
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment	F mark
Official symbol	HVCT	
Voltage rating	600V	
Temperature rating	75℃	
Conductor	JIS C 3102	
Flame rating	JIS C 3005-4.26.2-b)	Flame test of insulated for apparat us

> Construction table

No. of cores	Conductor			Heat resistant flexible-PVC insulation		Oil, heat resistant flexible sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.106	2.7	0.346	8.8	64(95)	25.1			14
3C						0.362	9.2	74(110)				12
4C						0.390	9.9	87(130)				11
2C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.122	3.1	0.378	9.6	81(120)	15.1	50		19
3C						0.398	10.1	91(135)				17
4C						0.437	11.1	114(170)				16
2C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.134	3.4	0.409	10.4	97(145)	9.79			27
3C						0.429	10.9	114(170)				23
4C						0.465	11.8	141(210)			under water AC3000	20
2C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.161	4.1			134(200)	5.24			39
3C						0.496	12.6	168(250)				34
4C						0.547	13.9	212(315)				30
2C	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	0.559	14.2	202(300)	3.37	40		50
3C						0.591	15.0	245(365)				44
4C						0.650	16.5	309(460)				39
2C	8	50/0.45 (50/17.7mil)	3.7 (146mil)	0.240	6.1	0.646	16.4	272(405)	2.39			62
3C						0.689	17.5	339(505)				53
4C						0.760	19.3	427(635)				47

※Standard sales length: 100m/500m (The length changes according to the size. We can cat sale other length at left.)
※ ▭ 0.75~5.5mm² are standard stock product. 8mm² are product to produce after having accepted an order.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70
Adjustment factors	1.00	0.88	0.75	0.58	0.33

HYPERSOFT (HPF) #600SB LF

Noise&Oil&Heat resistance and flexible cable

Heat resistance	★★
Oil resistance	★★★★★
Noise resistance	★★★
Flame resistance	★★★★
Flexibility	★★★
non-migratory	★★★★★
Transport property	★★

※The characteristic is an aim.

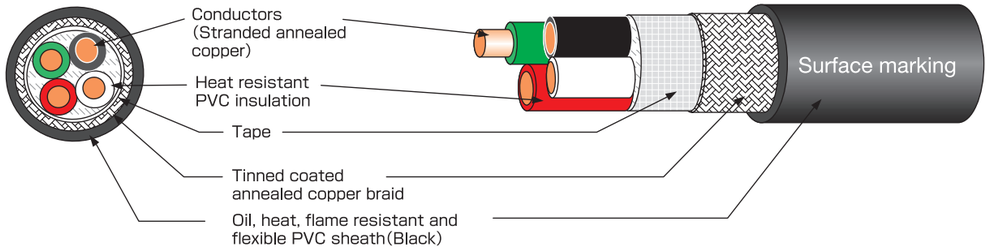
> Application

- The place which is need to oil, heat, noise resistant
- Rated voltage:600V.Temp:75℃(ability 90 ℃)

> Feature

- Heat resistant PVC used for insulation.
- Oil, heat, flame resistant and soft PVC for sheath.

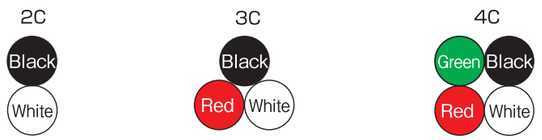
> Construction figure



> Surface marking

〈PS〉E	Indication that was passed to Electrical Appliance and Material Safety Act in Japan
LFV	Abbreviated name: Lead Free Vinyl
—F—	Pussing to rertical flame test from CMJ resistration system

> Identification



> > > Meeting standard

Certification	Electrical Appliance and Material Safety	CMJ registration
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment	F mark
Official symbol	HVCT	
Voltage rating	600V	
Temperature rating	75℃	
Conductor	JIS C 3102	
Flame rating	JIS C 3005-4.26.2-b)	Flame test of insulated for apparat us

> Construction table

No. of cores	Conductor			Heat resistant flexible-PVC insulation		Oil, heat resistant flexible sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.106	2.7	0.378	9.6	74(110)	25.1			14
3C						0.394	10.0	87(130)				12
4C						0.429	10.9	104(155)				11
2C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.122	3.1	0.417	10.6	94(140)	15.1	50		19
3C						0.437	11.1	111(165)				17
4C						0.480	12.2	138(205)				16
2C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.134	3.4	0.445	11.3	107(160)	9.79			27
3C						0.465	11.8	134(200)				23
4C						0.508	12.9	165(245)				20
2C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.161	4.1	0.508		155(230)	5.24		under water AC2000	39
3C						0.531	13.5	188(280)				34
4C						0.587	14.9	238(355)				30
2C	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	0.598	15.2	218(325)	3.37	40		50
3C						0.638	16.2	275(410)				44
4C						0.697	17.7	339(505)				39
2C	8	50/0.45 (50/17.7mil)	3.7 (146mil)	0.240	6.1	0.693	17.6	289(430)	2.39			62
3C						0.736	18.7	363(540)				53
4C						0.807	20.5	457(680)				47
2C	14	88/0.45 (88/17.7mil)	4.9 (193mil)	0.303	7.7	0.835	21.2	443(660)	1.36			85
3C						0.890	22.6	564(840)				73
4C						0.976	24.8	705(1050)				67
2C	22	7/20/0.45 (7/20/17.7mil)	6.8 (268mil)	0.394	10.0	1.039	26.4	679(1010)	0.869	30		115

※Standard sales length: 100m/500m (The length changes according to the size. We can cat sale other length at left.)

※ ▭ 0.75~5.5mm² are standard stock product. 8 mm² are product to produce after having accepted an order.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70
Adjustment factors	1.00	0.88	0.75	0.58	0.33

CR-CVCT LF

Cold resistance cross-linked polyethylene insulated PVC sheathed flexible cable

Heat resistance	★
Oil resistance	★★
Noise resistance	★
Flame resistance	★★★
Flexibility	★★★
non-migratory	★
Transport property	★★

※The characteristic is an aim.

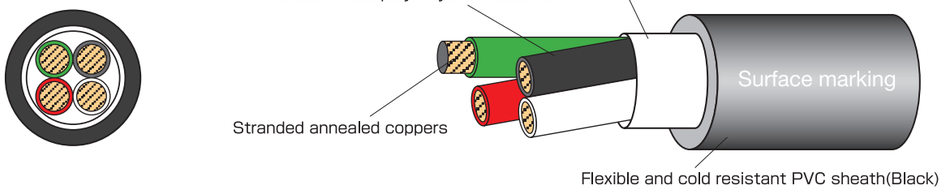
> Application

- Power supply circuit of the mobile electrical machinery and apparatus not higher than 600V.
- Applications requiring cold -50℃.
- Rated voltage:600V. Temp:90℃.

> Feature

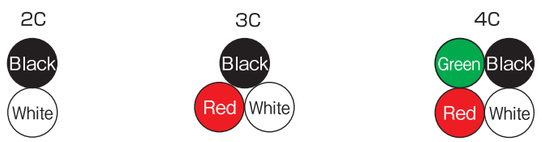
- Cross-linked polyethylene for insulation.
- High maximum allowable temperature of the crosslinked PE insulation, take large allowable current, use a conductor size down possible.
- It retain flexibility at low temperature and can be used in cold resistant -50℃.
  (used in fixed,no shock and no vibration)
- Water resistant.
- Conform to Electrical Appliance and Material Safety Law.

> Construction figure



> Surface marking

> Identification



> > > Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	CVCT
Voltage rating	600V
Temperature rating	90℃
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)

> Construction table

No. of cores	Conductor			Cross-linked polyethylene insulation		Flexible and cold resistant -PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.106	2.7	0.354	9.0	54(80)	less than 25.1	more than 2500	3000	17
3C						0.370	9.4	64(95)				14
4C						0.398	10.1	77(115)				12
2C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.122	3.1	0.386	9.8	67(100)	less than 15.1	more than 2500	3000	22
3C						0.413	10.5	84(125)				19
4C						0.445	11.3	101(150)				18
2C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.134	3.4	0.417	10.6	84(125)	less than 9.79	more than 2500	3000	31
3C						0.437	11.1	101(150)				26
4C						0.480	12.2	128(190)				24
2C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.161	4.1	0.480	12.2	121(180)	less than 5.24	more than 2000	3000	45
3C						0.504	12.8	151(225)				39
4C						0.555	14.1	188(280)				35
2C	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	0.567	14.4	171(255)	less than 3.37	more than 2000	3000	58
3C						0.598	15.2	218(325)				50
4C						0.657	16.7	272(405)				45
2C	8	98/0.32 (98/12.6mil)	3.7 (146mil)	0.224	5.7	0.622	15.8	218(325)	less than 2.39	more than 2000	3000	72
3C						0.657	16.7	279(415)				62
4C						0.724	18.4	353(525)				55
2C	14	172/0.32 (172/12.6mil)	4.9 (193mil)	0.272	6.9	0.724	18.4	326(485)	less than 1.36	more than 1500	3000	100
3C						0.776	19.7	433(645)				87
4C						0.854	21.7	548(815)				77
2C	22	7/39/0.32 (7/39/12.6mil)	6.7 (264mil)	0.358	9.1	0.921	23.4	524(780)	less than 0.869	more than 1500	3000	134
3C						0.984	25.0	695(1035)				117
4C						1.094	27.8	890(1325)				104

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	40	50	60	70	80	90
Adjustment factors	1.00	0.91	0.82	0.71	0.58	0.41	—

> Standard sales length

100m

Please contact us which sizes are available.

2PNCT

Class 2 EP rubber insulated chloroprene rubber sheathed flexible cable

Heat resistance	★★★
Oil resistance	★★★★★
Noise resistance	★
Flame resistance	★★
Flexibility	★★★
non-migratory	★
Transport property	★★

※The characteristic is an aim.

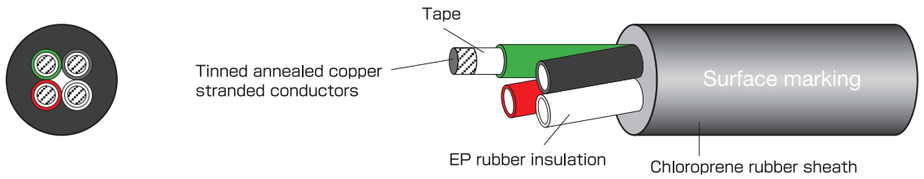
> Application

- Power supply circuit of portable electrical machinery and apparatus not higher than 600V and in other cases where flexibility and bending resistance are required.
  (It is not suitable for applications where it undergoes repeated bending)
- Rated voltage:600V. Temp:80℃.

> Features

- EP rubber for insulation.
- Electrical characteristics, heat resistance, ozone resistance.
- High allowable current.
- Chloroprene rubber for sheath.
- Abrasion resistance, oil resistance, flame retardance.
- Compared to 2CT,2RNCT, diameter reduction, weight reduction.
- Reference to JIS C 3327.
- Conform to Electrical Appliance and Material Safety Law.
  (125mm² or more and, 8 cores or more is excluded)

> Construction figure



※Cables with more than 12 cores : binder tape on cores.

> Surface marking

(1) 100mm² or smaller, 7 cores or less

TAIYO—FUJI 2PNCT ○○mm² <PS> E FUJIDENSEN K.K

(2) 125mm² or larger, or 8 cores or more.

TAIYO—FUJI 2PNCT ○○mm²

> > > Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	2PNCT
Voltage rating	600V
Temperature rating	80℃
Conductor	JIS C 3152
Flame rating	JIS C 3005-4.26.2-a)

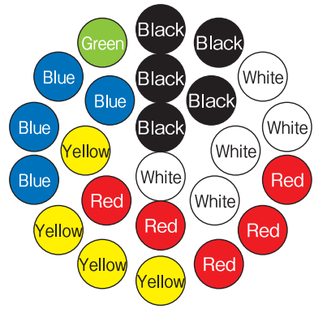
PS E

> Identification

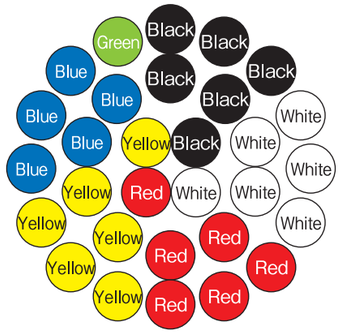
4C

12C

24C



30C



2PNCT

Class 2 EP rubber insulated chloroprene rubber sheathed flexible cable

> Construction table

No. of cores	Conductor			EP rubber insulation		Chloroprene rubber sheath		Approx. weight	Electrical Characteristics			Allowable ampacity
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	(A)
2C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.110	2.8	0.354	9.0	74(110)	less than 26.6	more than 500	3000	15
3C						0.370	9.4	87(130)				13
4C						0.409	10.4	108(160)				11
6C						0.480	12.2	134(200)				10
7C						0.516	13.1	148(220)				10
8C						0.555	14.1	175(260)				10
10C						0.634	16.1	208(310)				9.6
12C						0.630	16.0	222(330)				8.4
16C						0.701	17.8	269(400)				7.6
20C						0.776	19.7	329(490)				7.1
30C						0.913	23.2	470(700)				6.2
2C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.126	3.2	0.386	9.8	94(140)	less than 16.0	more than 500	3000	20
3C						0.413	10.5	108(160)				18
4C						0.445	11.3	128(190)				16
5C						0.488	12.4	148(220)				16
6C						0.528	13.4	168(250)				14
7C						0.575	14.6	202(300)				14
8C						0.622	15.8	235(350)				13
10C						0.709	18.0	282(420)				12
12C						0.705	17.9	296(440)				11
15C						0.780	19.8	349(520)				10
16C						0.780	19.8	161(240)				10
20C						0.866	22.0	437(650)				9.6
24C						0.969	24.6	531(790)				9.1
30C						1.028	26.1	625(930)				8.3
1C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.138	3.5	0.256	6.5	47(70)	less than 9.91			32
2C						0.417	10.6	114(170)				28
3C						0.437	11.1	128(190)				24
4C						0.480	12.2	161(240)				22
5C						0.524	13.3	181(270)				22
6C						0.571	14.5	215(320)				18
7C						0.622	15.8	249(370)				18
8C						0.661	16.8	282(420)	less than 10.2	more than 500	3000	17
10C						0.764	19.4	349(520)				16
12C						0.760	19.3	376(560)				14
15C						0.846	21.5	437(650)				13
16C						0.846	21.5	457(680)				13
20C						0.945	24.0	564(840)				12
24C						1.047	26.6	679(1010)				11
30C						1.110	28.2	813(1210)				10
1C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.165	4.2	0.291	7.4	60(90)	less than 5.38			47
2C						0.480	12.2	161(240)				41
3C						0.508	12.9	195(290)				36
4C						0.555	14.1	235(350)				32
5C						0.610	15.5	269(400)				32
6C						0.661	16.8	309(460)				27
7C						0.720	18.3	356(530)				25
8C						0.780	19.8	410(610)	less than 5.54	more than 400	3000	25
10C						0.898	22.8	517(770)				23
12C						0.894	22.7	558(830)				21
15C						0.988	25.1	665(990)				19
16C						0.988	25.1	699(1040)				19
20C						1.106	28.1	867(1290)				17
30C						1.311	33.3	1263(1880)				15
1C	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.205	5.2	0.331	8.4	87(130)	less than 3.46			63
2C						0.567	14.4	228(340)				53
3C						0.598	15.2	276(410)				46
4C						0.661	16.8	343(510)				41
6C						0.795	20.2	464(690)	less than 3.56	more than 400	3000	35
7C						0.882	22.4	511(760)				34
8C						0.953	24.2	578(860)				33
10C						1.094	27.8	766(1140)				31
12C						1.079	27.4	867(1290)				27
1C	8.0	50/0.45 (50/17.7mil)	3.7 (146mil)	0.228	5.8	0.362	9.2	108(160)	less than 2.45			80
2C						0.622	15.8	289(430)				65
3C						0.657	16.7	349(520)	less than 2.52	more than 400	3000	56
4C						0.724	18.4	437(650)				50
5C						0.799	20.3	470(700)				50
6C						0.882	22.4	564(840)				43
1C	14	88/0.45 (88/17.7mil)	4.9 (193mil)	0.276	7.0	0.417	10.6	161(240)	less than 1.39			113
2C						0.724	18.4	423(630)				91
3C						0.776	19.7	524(780)	less than 1.43	more than 300	3000	80
4C						0.854	21.7	659(980)				71
5C						0.949	24.1	719(1070)				71
6C						1.039	26.4	847(1260)				61

No. of cores	Conductor			EP rubber insulation		Chloroprene rubber sheath		Approx. weight	Electrical Characteristics			Allowable ampacity
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	(A)
1C	22	7/20/0.45 (7/20/17.7mil)	6.8 (268mil)	0.370	9.4	0.520	13.2	249(370)	less than 0.892	more than 300	3000	148
2C						0.945	24.0	706(1050)				122
3C						1.012	25.7	867(1290)				107
4C						0.327	8.3	1089(1620)	less than 0.919			95
5C						1.236	31.4	1230(1830)				95
6C						1.362	34.6	1431(2130)				81
3C	30	7/27/0.45 (7/27/17.7mil)	7.9 (311mil)	0.413	10.5	1.110	28.2	1075(1600)	less than 0.681	more than 300	3000	126
4C						1.232	31.3	1364(2030)				115
1C	38	7/34/0.45 (7/34/17.7mil)	8.8 (346mil)	0.449	11.4	0.614	15.6	376(560)	less than 0.525	more than 200	3000	213
2C						1.126	28.6	1042(1550)				167
3C						1.197	30.4	1310(1950)	less than 0.541			142
4C						1.327	33.7	1666(2480)				129
6C						1.630	41.4	2285(3400)				110
1C	50	19/16/0.45 (19/16/17.7mil)	10.1 (398mil)	0.524	13.3	0.697	17.7	470(700)	less than 0.411	more than 200	3000	251
3C						1.382	35.1	1640(2440)	less than 0.423			161
4C						1.531	38.9	2097(3120)				148
1C	60	19/20/0.45 (19/20/17.7mil)	11.3 (445mil)	0.571	14.5	0.752	19.1	558(830)	less than 0.329	more than 200	3000	290
2C						1.394	35.4	1546(2300)				219
3C						1.496	38.0	2009(2990)	less than 0.339			193
4C						1.661	42.2	2553(3800)				174
1C	80	19/27/0.45 (19/27/17.7mil)	13.1 (516mil)	0.681	17.3	0.878	22.3	766(1140)	less than 0.243	more than 200	3000	348
3C						1.768	44.9	2937(4370)	less than 0.250			220
4C						1.969	50.0	3481(5180)				200
1C	100	19/34/0.45 (19/34/17.7mil)	14.7 (579mil)	0.744	18.9	0.949	24.1	934(1390)	less than 0.193	more than 200	3000	406
2C						1.787	45.4	2627(3910)				300
3C						1.917	48.7	3299(4910)	less than 0.199			260
4C						2.134	54.2	4267(6350)				240
1C	125	19/42/0.45 (19/42/17.7mil)	16.3 (642mil)	0.807	20.5	1.020	25.9	1115(1660)	less than 0.156	more than 100	3000	430
1C	150	27/34/0.45 (27/34/17.7mil)	18.0 (709mil)	0.874	22.2	1.094	27.8	1250(1860)	less than 0.136	more than 100	3000	480
3C						2.236	56.8	4563(6790)	less than 0.140			330
1C	200	37/34/0.45 (37/34/17.7mil)	21.1 (831mil)	1.035	26.3	1.283	32.6	1714(2550)	less than 0.0993	more than 100	3000	580
1C	250	37/42/0.45 (37/42/17.7mil)	23.6 (929mil)	1.134	28.8	1.386	35.2	2050(3050)	less than 0.0803	more than 100	3000	660
1C	325	37/55/0.45 (37/55/17.7mil)	27.0 (1063mil)	1.268	32.2	1.535	39.0	2634(3920)	less than 0.0614	more than 100	3000	790

Note:Six times of outer diameter is needed when you bend cables, and more diameter is needed when you bend cables repeatedly by cable reel, curtain, etc.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	35	40	45	50	55	60	65	70	75	80
Adjustment factors	1.00	0.95	0.89	0.84	0.77	0.71	0.63	0.55	0.45	0.31	—

> Standard sales length

Sale by cutting short length is available.

2PNCT-SB, T-2PNCT-SB

Class 2 EP rubber insulated chloroprene rubber sheathed shielded flexible cable

2PNCT-SB		T-2PNCT-SB	
Heat resistance	★★★	Heat resistance	★★★
Oil resistance	★★★★★	Oil resistance	★★★★★
Noise resistance	★★★	Noise resistance	★★★
Flame resistance	★★	Flame resistance	★★
Flexibility	★★★	Flexibility	★★★★
non-migratory	★	non-migratory	★
Transport property	★★	Transport property	★★★

※The characteristic is an aim.　※The characteristic is an aim.

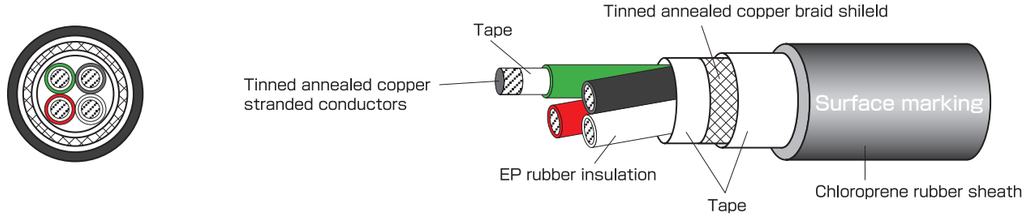
> Application

- Power supply circuit of portable electrical machinery and apparatus not higher than 600V and in other cases where flexibility and bending resistance and shielded are required.(It is not suitable for applications where it undergoes repeated bending)
- Rated voltage:600V. Temp:80℃.

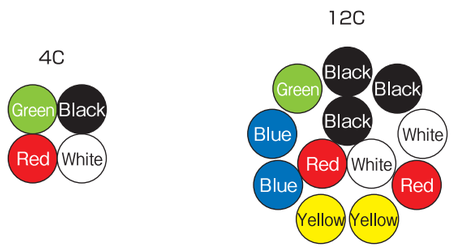
> Feature

- EP rubber for insulation.
- Electrical characteristics, heat resistance, ozone resistance.
- High allowable current.
- Chloroprene rubber for sheath.
- Abrasion resistance, oil resistance, flame retardance.
- Conform to Electrical Appliance and Material Safety Law. (8 cores or more is excluded)

> Construction figure



> Identification



> Standard sales length

Sale by cutting short length is available.

> > > Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	2PNCT
Voltage rating	600V
Temperature rating	80℃
Conductor	JIS C 3152
Flame rating	JIS C 3005-4.26.2-a)

> Construction table

●2PNCT-SB

No. of cores	Conductor			EP rubber insulation		Chloroprene rubber sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.126	3.2	0.425	10.8	108(160)	less than 16.0	more than 500	2000	21
3C						0.445	11.3	121(180)				18
4C						0.484	12.3	148(220)				16
6C						0.567	14.4	202(300)				14
8C						0.661	16.8	269(400)				13
10C						0.760	19.3	336(500)				12
12C						0.748	19.0	356(530)				11
16C						0.819	20.8	437(650)				10
20C						0.909	23.1	511(760)				9.6
30C						1.063	27.0	726(1080)				8.4
2C	2.0	37/0.26 (37/10.2mil)	1.8 (71mil)	0.138	3.5	0.449	11.4	128(190)	less than 10.2	more than 500	2000	27
3C						0.480	12.2	155(230)				23
4C						0.516	13.1	181(270)				21
5C						0.563	14.3	215(320)				19
6C						0.618	15.7	255(380)				18
8C						0.713	18.1	329(490)				17
10C						0.815	20.7	417(620)				16
12C						0.799	20.3	417(620)				14
16C						0.890	22.6	524(780)				13
20C						0.980	24.9	652(970)				12
30C						1.157	29.4	907(1350)				10
2C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.165	4.2	0.516	13.1	168(250)	less than 5.54	more than 400	2000	40
3C						0.547	13.9	208(310)				34
4C						0.594	15.1	262(390)				30

●T-2PNCT-SB

No. of cores	Conductor			EP rubber insulation		Chloroprene rubber sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)		Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	
2C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.110	2.8	0.386	9.8	77(115)	less than 27.7	more than 500	2000	15
3C						0.425	10.8	101(150)				13
4C						0.457	11.6	114(170)				12
6C						0.535	13.6	161(240)				10
8C						0.630	16.0	215(320)				9.9
12C						0.795	20.2	309(460)				8.9

Note:Six times of outer diameter is needed when you bend cables, and more diameter is needed when you bend cables repeatedly by cable reel, curtain, etc.

> Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.

·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	35	40	45	50	55	60	65	70	75	80
Adjustment factors	1.00	0.95	0.89	0.84	0.77	0.71	0.63	0.55	0.45	0.31	—

3PNCT

Class 3 EP rubber insulated chloroprene rubber sheathed flexible cable

Heat resistance ★★★
Oil resistance ★★★★★
Noise resistance ★
Flame resistance ★★
Flexibility ★★★
non-migratory ★
Transport property ★★
※The characteristic is an aim.

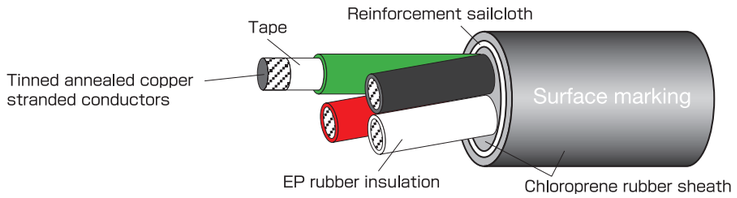
> Application

- Power supply circuit of portable electrical machinery and apparatus not higher than 600V and in other cases where flexibility and bending resistance are required.
  (It is not suitable for applications where it undergoes repeated bending)
- Rated voltage:600V. Temp:80℃.

> Feature

- EP rubber for insulation.
- Electrical characteristics, heat resistance, ozone resistance.
- High allowable current.
- Chloroprene rubber for sheath.
- Oil resistance, flame retardance.
- Reinforcement layer to the internal sheath.
- Abrasion resistance,Impact resistance.
- Conform to Electrical Appliance and Material Safety Law.(8 cores or more is excluded)

> Construction figure



※Cables with more than 12 cores : binder tape on cores.

> Surface marking

(1)7 cores or less

TAIYO—FUJI 3PNCT サイズ <PS> E FUJIDENSEN K.K

(2)8 cores or more

TAIYO—FUJI 3PNCT サイズ

> Identification

4C

12C

> Standard sales length

Sale by cutting short length is available.

> > > Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	3PNCT
Voltage rating	600V
Temperature rating	80℃
Conductor	JIS C 3152
Flame rating	JIS C 3005-4.26.2-a)

> Construction table

No. of cores	Conductor			EP rubber insulation		Chloroprene rubber sheath		Approx. weight	Electrical Characteristics			Allowable ampacity
	Size (AWG) (mm²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx.(mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20℃)	Insulation resistance (MΩkm20℃)	Electrical strength (V/1min.)	(A)
2C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.169	4.3	0.598	15.2	188(280)	less than 10.2	more than 500	3000	28
3C						0.626	15.9	215(320)				24
4C						0.677	17.2	255(380)				22
5C						0.732	18.6	302(450)				22
6C						0.791	20.1	349(520)				20
7C						0.843	21.4	396(590)				18
8C						0.902	22.9	444(660)				18
10C						1.024	26.0	551(820)				16
12C						1.020	25.9	578(860)				15
20C						1.276	32.4	860(1280)				13
30C						1.496	38.0	1216(1810)				11
2C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.197	5.0	0.661	16.8	242(360)	less than 5.54	more than 500	3000	41
3C						0.693	17.6	282(420)				36
4C						0.752	19.1	343(510)				32
5C						0.815	20.7	423(630)				32
6C						0.882	22.4	484(720)				28
7C						0.949	24.1	551(820)				26
8C						1.020	25.9	618(920)				25
10C						1.157	29.4	773(1150)				23
12C						1.150	29.2	827(1230)				21
20C						1.445	36.7	1297(1930)				18
30C						1.697	43.1	1794(2670)				16
2C	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.220	5.6	0.709	18.0	296(440)	less than 3.56	more than 500	3000	53
3C						0.752	19.1	349(520)				46
4C						0.815	20.7	430(640)				41
5C						0.886	22.5	544(810)				41
6C						0.961	24.4	645(960)				36
10C						1.319	33.5	1062(1580)				31
12C						1.303	33.1	1021(1520)				28
3C	8	50/0.45 (50/17.7mil)	3.7 (146mil)	0.244	6.2	0.811	20.6	430(640)	less than 2.52	more than 400	3000	56
4C						0.882	22.4	531(790)				50
2C	14	88/0.45 (88/17.7mil)	4.9 (193mil)	0.291	7.4	0.874	22.2	517(770)	less than 1.43	more than 400	3000	91
3C						0.925	23.5	632(940)				80
4C						1.012	25.7	793(1180)				71
2C	22	7/20/0.45 (7/20/17.7mil)	6.8 (268mil)	0.402	10.2	1.126	28.6	840(1250)	less than 0.919	more than 300	3000	122
3C						1.197	30.4	1028(1530)				107
4C						1.346	34.2	1277(1900)				95
2C	38	7/34/0.45 (7/34/17.7mil)	8.8 (346mil)	0.480	12.2	1.339	34.0	1196(1780)	less than 0.541	more than 300	3000	167
3C						1.429	36.3	1505(2240)				142
4C						1.571	39.9	1888(2810)				129

Note:Six times of outer diameter is needed when you bend cables, and more diameter is needed when you bend cables repeatedly by cable reel, curtain, etc.

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·Allowable ampacity is calculated based on JCS0168.

·Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(℃)	30	35	40	45	50	55	60	65	70	75	80
Adjustment factors	1.00	0.95	0.89	0.84	0.77	0.71	0.63	0.55	0.45	0.31	—