



日合通信電線株式会社
Nichigoh Communication Electric Wire Co., Ltd.

1	ECO CABLE SERIES
	0.14mm ² – 0.75mm ²

対象ケーブル
Product list

製品名 Product name	サイズ(mm ²) Size
ECOLEX140T(S)	0.14 – 0.75

参照規格 Reference standard	IEC 60364-5-52 Low-voltage electrical installations – Part 5-52: Selection and erection of electrical equipment – Wiring systems
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<p>許容電流(A) 周囲温度が30°C以外の 場合の許容電流</p> <p>Current carrying capacities(A) (Ambient temperature other than 30°C)</p>	=	1	<p>サイズと芯数に於ける 許容電流値</p> <p>Current carrying capacities applied by size and the number of cores.</p>	X	2	<p>周囲温度に於ける 補正係数</p> <p>Temperature Correction Factor</p>
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1 サイズと芯数に於ける許容電流値(A) (周囲温度30°Cエアフリー)
Current carrying capacities(A) applied by size and the number of cores.(At30 deg.,Ambient temperature,Air free)

サイズ(mm ²) Size	2c	3c	4c	5c	6c	7c	8c	10c	12c	14c	16c	18c	20c	24c	25c	30c	32c	40c
0.14	5.8	4.9	4.3	4.0	3.8	3.7	3.5	3.3	3.0	2.8	2.7	2.6	2.6	2.5	2.4	2.2	2.2	2.1
0.25	8.0	6.6	6.0	5.5	5.2	5.0	4.9	4.5	4.1	4.0	3.8	3.6	3.5	3.4	3.3	3.1	3.1	2.9
0.34	9.5	8.0	7.2	6.6	6.3	6.1	5.9	5.4	5.1	4.8	4.6	4.4	4.3	4.1	4.0	3.8	3.7	3.5
0.5	12	10	9.3	8.6	8.3	7.9	7.7	7.1	6.6	6.2	6.0	5.8	5.6	5.4	5.3	4.9		
0.75	16	13	12	11	11	10	9.9	9.2	8.5	8.0	7.7	7.5	7.3	7.0	6.8	6.4		

2 温度補正係数
Temperature Correction Factor

温度(°C) Ambient temperature(°C)	係数 Correction Factor
10	1.22
11 – 15	1.17
16 – 20	1.12
21 – 25	1.06
26 – 30	1.00
31 – 35	0.94
36 – 40	0.87
41 – 45	0.79
46 – 50	0.71
51 – 55	0.61
56 – 60	0.50



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Nichigoh Communication Electric Wire Co.,Ltd.

2

ECO CABLE SERIES

1.5mm² - 35mm²

対象ケーブル
Product list

製品名 Product name	サイズ(mm ²) Size
ECOLEX140T(S)	1.5
ECOLEX70T(S)	2.5 - 35

参照規格
Reference standard

IEC 60364-5-52
Low-voltage electrical installations -
Part 5-52: Selection and erection of electrical equipment
- Wiring systems

$$\begin{array}{l}
 \text{許容電流(A)} \\
 \text{周囲温度が30℃以外の} \\
 \text{場合の許容電流} \\
 \text{Current carrying capacities(A)} \\
 \text{(Ambient temperature other than 30℃)}
 \end{array}
 =
 \begin{array}{c}
 \boxed{1} \\
 \text{サイズと芯数に於ける} \\
 \text{許容電流値} \\
 \text{Current carrying capacities applied} \\
 \text{by size and the number of cores.}
 \end{array}
 \times
 \begin{array}{c}
 \boxed{2} \\
 \text{周囲温度に於ける} \\
 \text{補正係数} \\
 \text{Temperature Correction Factor}
 \end{array}$$

1 サイズと芯数に於ける許容電流値(A) (周囲温度30℃エアフリー)

Current carrying capacities(A) applied by size and the number of cores.(At30 deg.,Ambient temperature,Air free)

サイズ(mm ²) Size	2c	3c	4c	5c	6c	7c	8c	10c	12c	16c	18c	20c	25c	30c
1.5	23	19	17	16	15	15	14	13	12	11	11	11	9.9	9.3
2.5	33	28	25	24	22	22	21	19	18	16	16	16	15	14
4	43	37	33	31										
6	57	48	44	41										
10	82	69	63	59										
16	112	95	87	81										
25	155	131	119	112										
35	189	160	146	136										

2 温度補正係数

Temperature Correction Factor

温度(℃) Ambient temperature(℃)	係数 Correction Factor
21 - 25	1.05
26 - 30	1.00
31 - 35	0.94
36 - 40	0.88
41 - 45	0.82
46 - 50	0.75
51 - 55	0.67
56 - 60	0.58
61 - 70	0.33



3 ECO CABLE SERIES
18AWG - 2AWG

対象ケーブル
Product list

製品名 Product name	サイズ Size
ECOLEX79T(S)	18AWG - 2AWG

参照規格
Reference standard

IEC 60364-5-52
Low-voltage electrical installations -
Part 5-52: Selection and erection of electrical equipment
- Wiring systems

許容電流(A)
周囲温度が30℃以外の
場合の許容電流
Current carrying capacities(A)
(Ambient temperature other than 30℃)

=

1

サイズと芯数に於ける
許容電流値
Current carrying capacities applied
by size and the number of cores.

X

2

周囲温度に於ける
補正係数
Temperature Correction Factor

1 サイズと芯数に於ける許容電流値(A) (周囲温度30℃エアフリー)
Current carrying capacities(A) applied by size and the number of cores.(At30 deg.,Ambient temperature,Air free)

サイズ(AWG) Size	2c	3c	4c	5c	6c	7c	8c	10c	12c	16c	18c	20c	25c	30c
18	19	16	14	14	13	12	12	11	9.9	9.1	8.8	8.5	7.9	7.4
16	25	21	19	18	17	16	15	14	13	12	12	11	11	10
14	35	29	26	25	23	23	22	20	19	17	16	16	15	14
12	46	39	35	33										
10	61	51	46	43										
8	83	70	64	60										
6	110	93	85	79										
4	150	126	115	107										
2	195	164	149	139										

2 温度補正係数
Temperature Correction Factor

温度(℃) Ambient temperature(℃)	係数 Correction Factor
21 - 25	1.05
26 - 30	1.00
31 - 35	0.94
36 - 40	0.88
41 - 45	0.82
46 - 50	0.75
51 - 55	0.67
56 - 60	0.58
61 - 70	0.33



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Nichioon Communication Electric Wire Co., Ltd.

4 ECO CABLE SERIES
0.14mm² - 35mm²

対象ケーブル
Product list

製品名 Product name	サイズ(mm ²) Size
PURELEX100T(S)	0.14 - 0.34
PURELEX110T(S)	0.5 - 35
PURELEX300F(S)	0.14 - 0.34
PURELEX500F(S)	0.5 - 6.0

参照規格
Reference standard

IEC 60364-5-52
Low-voltage electrical installations -
Part 5-52: Selection and erection of electrical equipment
- Wiring systems

許容電流(A)
周囲温度が30℃以外の
場合の許容電流
Current carrying capacities(A)
(Ambient temperature other than 30°C)

=

1

サイズと芯数に於ける
許容電流値
Current carrying capacities applied
by size and the number of cores.

X

2

周囲温度に於ける
補正係数
Temperature Correction Factor

1 サイズと芯数に於ける許容電流値(A) (周囲温度30℃エアフリー)
Current carrying capacities(A) applied by size and the number of cores.(At30 deg.,Ambient temperature,Air free)

サイズ(mm ²) Size	2c	3c	4c	5c	6c	7c	8c	10c	12c	14c	16c	18c	20c	24c	32c	40c
0.14	4.4	3.7	3.2	3.0	2.8	2.7	2.6	2.4	2.2	2.1	2.0	1.9	1.9	1.8	1.6	1.5
0.25	6.1	5.1	4.5	4.2	4.0	3.8	3.6	3.3	3.1	3.0	2.8	2.7	2.7	2.5	2.3	2.2
0.34	7.5	6.2	5.6	5.2	4.9	4.7	4.5	4.2	3.9	3.7	3.5	3.4	3.3	3.1	2.8	2.7
0.5	9.3	7.8	7.0	6.5	6.2	5.9	5.8	5.3	5.0	4.7	4.5	4.4	4.2			
0.75	13	11	10	9.4	9.0	8.6	8.4	7.7	7.1	6.8	6.5	6.3	6.1			
1.5	19	16	15	14	13	12	12	11	10	9.8	9.4	9.1	8.9			
2.5	27	23	21	19	18	18	17	16	15	13	13	13	13			
4	37	31	29	27												
6	46	38	35	33												
10	60	51	46	43												
16	75	64	58	54												
25	97	82	75	70												
35	116	98	89	83												

2 温度補正係数
Temperature Correction Factor

温度(℃) Ambient temperature(℃)	係数 Correction Factor
20	1.10
21 - 25	1.05
26 - 30	1.00
31 - 35	0.95
36 - 40	0.89
41 - 45	0.84
46 - 50	0.77
51 - 55	0.71
56 - 60	0.63
61 - 65	0.55
66 - 70	0.45



5 ECO CABLE SERIES
単線
Non-sheathed cables

対象ケーブル
Product list

製品名 Product name	サイズ(mm ²) Size
05Z1-K	0.14 - 0.75
07Z1-K	1.5 - 240

参照規格
Reference standard

IEC 60364-5-52
Low-voltage electrical installations -
Part 5-52: Selection and erection of electrical equipment
- Wiring systems

$$\begin{array}{c}
 \text{許容電流(A)} \\
 \text{周囲温度が30°C以外の} \\
 \text{場合の許容電流} \\
 \text{Current carrying capacities(A)} \\
 \text{(Ambient temperature other than 30°C)}
 \end{array}
 =
 \begin{array}{c}
 \mathbf{1} \\
 \text{サイズに於ける} \\
 \text{許容電流値} \\
 \text{Current carrying capacities} \\
 \text{of each size.}
 \end{array}
 \times
 \begin{array}{c}
 \mathbf{2} \\
 \text{周囲温度に於ける} \\
 \text{補正係数} \\
 \text{Temperature Correction Factor}
 \end{array}$$

1 サイズに於ける許容電流値(A) (周囲温度30°Cエアーフリー)
Current carrying capacities(A) of each size.(At30 deg.,Ambient temperature,Air free)

サイズ(mm ²) Size	1c	サイズ(mm ²) Size	1c
0.14	7.5	16	127
0.25	10	25	174
0.34	12	35	213
0.5	15	50	280
0.75	20	70	368
1.5	30	95	434
2.5	40	120	517
4	52	150	601
6	68	185	692
10	96	240	790

2 温度補正係数
Temperature Correction Factor

温度(°C) Ambient temperature(°C)	係数 Correction Factor
21 - 25	1.05
26 - 30	1.00
31 - 35	0.94
36 - 40	0.88
41 - 45	0.82
46 - 50	0.75
51 - 55	0.67
56 - 60	0.58
61 - 70	0.33