

# 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.

Meeting standard

Certification	Electrical Appliance and Material Safety
Applicable standard	Law/Departmental order to determine a technical standard of the electrical equipment
Official symbol	2PNCT
Voltage rating	600V
Temperature rating	80°C
Conductor	JIS C 3152
Flame rating	JIS C 3005-4.26.2-a)



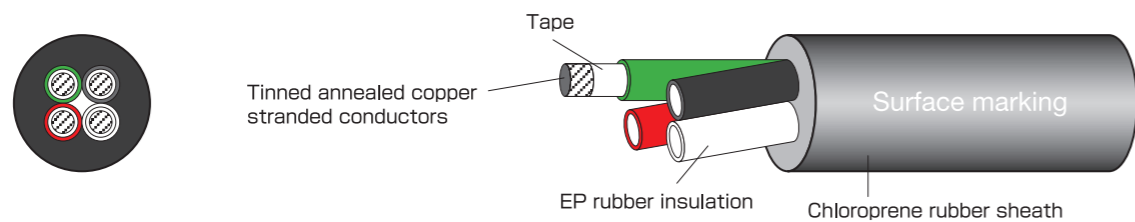
### Application

- 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°C.

### 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. (125mm<sup>2</sup> or more and, 8 cores or more is excluded)

### Construction figure



※Cables with more than 12 cores : binder tape on cores.

### Surface marking

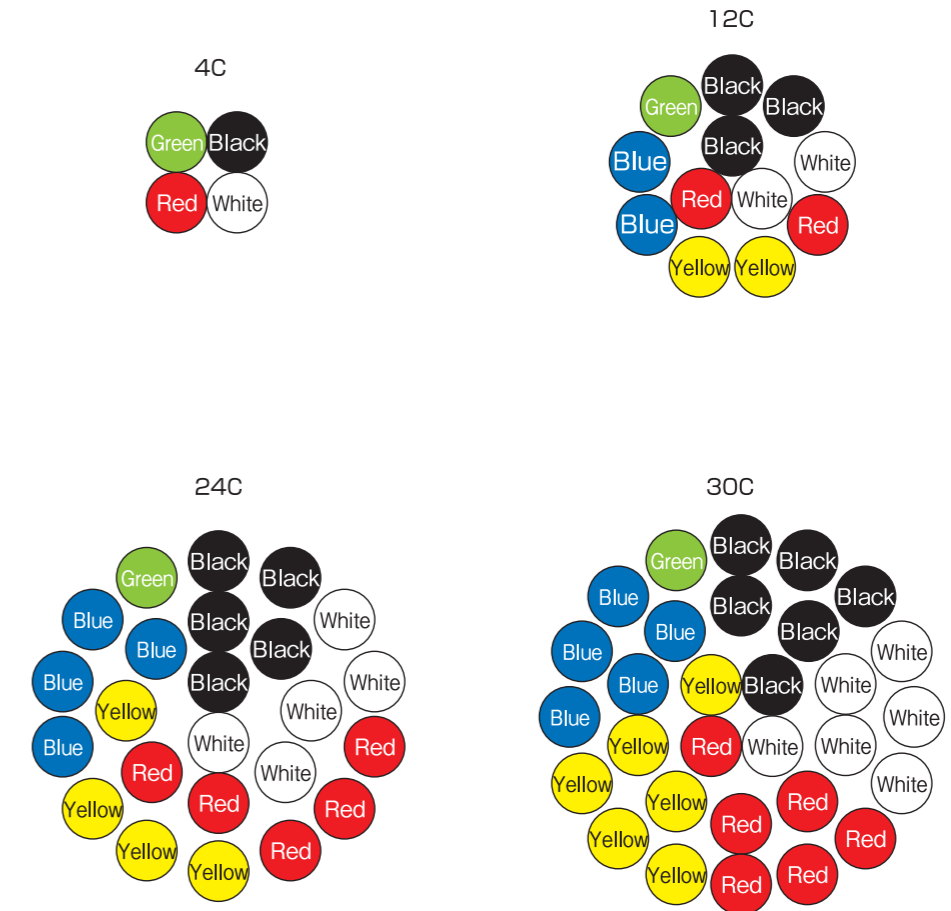
(1) 100mm<sup>2</sup> or smaller, 7 cores or less



(2) 125mm<sup>2</sup> or larger, or 8 cores or more.



### Identification



# 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 (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm <sup>2</sup> )	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20°C)	Insulation resistance (MΩkm20°C)	Electrical strength (V/1min.)	
2C						0.354	9.0	74(110)				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	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.110	2.8	0.555	14.1	175(260)	less than 26.6	more than 500	3000	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						0.386	9.8	94(140)				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	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.126	3.2	0.622	15.8	235(350)	less than 16.0	more than 500	3000	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						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	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.138	3.5	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						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	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.165	4.2	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						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	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.205	5.2	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						0.362	9.2	108(160)	less than 2.45			80
2C						0.622	15.8	289(430)				65
3C	8.0	50/0.45 (50/17.7mil)	3.7 (146mil)	0.228	5.8	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						0.417	10.6	161(240)	less than 1.39			113
2C						0.724	18.4	423(630)				91
3C	14	88/0.45 (88/17.7mil)	4.9 (193mil)	0.276	7.0	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

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1C						0.520	13.2	249(370)	less than 0.892			148
2C						0.945	24.0	706(1050)				122
3C						1.012	25.7	867(1290)				107
4C	22	7/20/0.45 (7/20/17.7mil)	6.8 (268mil)	0.370	9.4	0.327	8.3	1089(1620)	less than 0.919	more than 300	3000	95
5C						1.236	31.4	1230(1830)				95
6C						1.362	34.6	1431(2130)				81
3C						1.110	28.2	1075(1600)				126
4C	30	7/27/0.45 (7/27/17.7mil)	7.9 (311mil)	0.413	10.5	1.232	31.3	1364(2030)	less than 0.681	more than 300	3000	115
1C						0.614	15.6	376(560)	less than 0.525			213
2C						1.126	28.6	1042(1550)				167
3C	38	7/34/0.45 (7/34/17.7mil)	8.8 (346mil)	0.449	11.4	1.197	30.4	1310(1950)	less than 0.541	more than 200	3000	142
4C						1.327	33.7	1666(2480)				129
6C						1.630	41.4	2285(3400)				110
1C						0.697	17.7	470(700)	less than 0.411			251
3C	50	19/16/0.45 (19/16/17.7mil)	10.1 (398mil)	0.524	13.3	1.382	35.1	1640(2440)	less than 0.423	more than 200	3000	161
4C						1.531	38.9	2097(3120)				148
1C						0.752	19.1	558(830)	less than 0.329			290
2C						1.394	35.4	1546(2300)				219
3C	60	19/20/0.45 (19/20/17.7mil)	11.3 (445mil)	0.571	14.5	1.496	38.0	2009(2990)	less than 0.339	more than 200	3000	193
4C						1.661	42.2	2553(3800)				174
1C						0.878	22.3	766(1140)	less than 0.243			348
3C	80	19/27/0.45 (19/27/17.7mil)	13.1 (516mil)	0.681	17.3	1.768	44.9	2937(4370)	less than 0.250	more than 200	3000	220
4C						1.969	50.0	3481(5180)				200
1C						0.949	24.1	934(1390)	less than 0.193			406
2C	100	19/34/0.45 (19/34/17.7mil)	14.7 (579mil)	0.744	18.9	1.787	45.4	2627(3910)	less than 0.199	more than 200	3000	300
3C						1.917	48.7	3299(4910)				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						1.394	35.4	1546(2300)	less than 0.136	more than 100	3000	480
3C	150	27/34/0.45 (27/34/17.7mil)	18.0 (709mil)	0.874	22.2	2.236	56.8	4563(6790)	less than 0.140	more than 100	3000	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°C.

Allowable ampacity is calculated based on JCS0168.

Please multiply the following correction coefficient by the ambient temperature.

#### Adjustment factors (at ambient temperature)

Ambient temperature (°C)	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.