



JIS rubber cabtyre cables

PNCT / 2PNCT / 3PNCT

600 V Rubber Cabtyre Cable

JIS C 3327 tinned copper EP rubber / chloroprene cabtyre cables for cranes and reels

JIS C 3327

600 V AC

2PNCT & 3PNCT

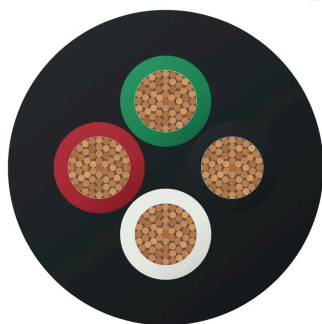
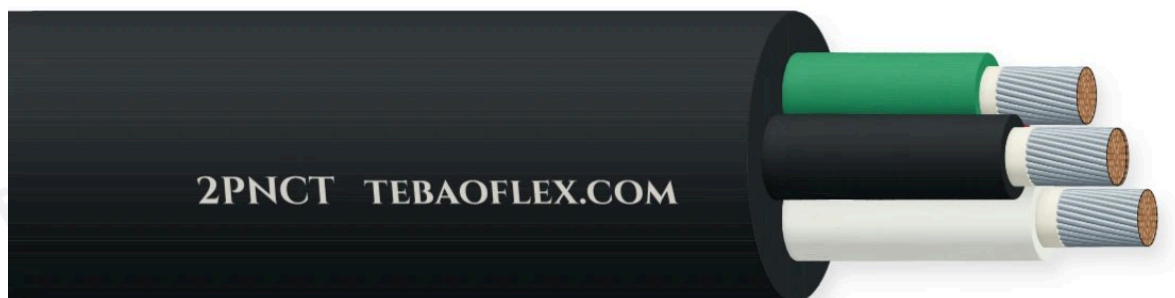


Application

JIS C 3327 600 V flexible cabtyre cables with tinned annealed copper conductors, +80 °C EP rubber insulation and heavy-duty chloroprene (CR) outer sheaths — available in Class 2 (2PNCT) and cord-reinforced Class 3 (3PNCT).

Typical uses: Port & harbour gantry cranes, Steelworks, hoists & lifting magnets, Civil engineering & tunnelling plant, Shipyards & marine deck equipment, Heavy industrial machinery, Dewatering pumps & drainage plant

Construction



Cross-section, not to scale

- 1 Conductor
- 2 Conductor separator
- 3 Core insulation
- 4 Core lay-up & filler
- 5 Reinforcing layer (3PNCT)
- 6 Outer sheath

Technical data

Typical values

Rated voltage	600 V AC	AC test voltage	3000 V AC for 1 min
Min. insulation resistance	200–500 MΩ·km at 20 °C (size dependent)	Current rating	JCS 0168 (one cable in free air at 30 °C)
Max. conductor temperature	+80 °C (2PNCT / 3PNCT EP rubber) · +60 °C (1PNCT natural rubber)	Short-circuit temperature	+230 °C
Operating ambient range	–25 to +60 °C flexing · –35 to +60 °C fixed (derate above 30 °C)	Min. bending radius, moving	10 × OD (moving) · 15 × OD (frequent festoon/reeling)
Min. bending radius, fixed	4 × OD (multicore fixed) · 6 × OD (single-core fixed & carrier drum)	Allowed conductor tensile stress	19.8 N/mm ² (up to 29.4 N/mm ² with steel support element)
Sheath reinforcement (3PNCT)	Synthetic cord reinforcing layer between inner and outer chloroprene sheaths	Flame retardance	JIS C 3005 horizontal flame test · IEC 60332-1-2
Oil & chemical resistance	Chloroprene rubber outer sheath resistant to heavy oil, silicone oil, alcohols and weak acids	Abrasion & crush resistance	Class 2 heavy-duty (2PNCT) · Class 3 extra-heavy reinforced (3PNCT)
Standards	JIS C 3327	Standard packing	Fumigated export timber drums with sealed cable ends

Sizes

120 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Cores × mm ²	AWG ≈	Conductor Ø mm	Insulation mm	Sheath mm	Outer Ø ≈ mm	Weight ≈ kg/km	Min. bend R mm	Max. pull N
2PNCT Power (1–4c) 51 sizes									
☐ 2PNCT 1×0.75	1 × 0.75	18	1.1	0.8	1.5	5.8	45	35	15
☐ 2PNCT 1×1.25	1 × 1.25	16	1.5	0.8	1.5	6.2	55	37	25
☐ 2PNCT 1×2	1 × 2	14	1.8	0.8	1.5	6.5	65	39	40
☐ 2PNCT 1×3.5	1 × 3.5	12	2.5	0.8	1.6	7.4	90	44	69
☐ 2PNCT 1×5.5	1 × 5.5	10	3.1	1.0	1.6	8.4	125	50	109
☐ 2PNCT 1×8	1 × 8	8	3.7	1.0	1.7	9.2	160	55	158
☐ 2PNCT 1×14	1 × 14	6	4.9	1.0	1.8	11.0	235	66	277
☐ 2PNCT 1×22	1 × 22	4	6.7	1.2	1.9	13.0	360	78	436
☐ 2PNCT 1×38	1 × 38	1	8.7	1.2	2.0	15.5	545	93	752
☐ 2PNCT 1×60	1 × 60	2/0	11.2	1.5	2.3	19.0	845	114	1,188
☐ 2PNCT 1×100	1 × 100	4/0	14.6	2.0	2.6	24.0	1,390	144	1,980
☐ 2PNCT 1×150	1 × 150	300 kcmil	17.4	2.0	2.7	27.0	1,870	162	2,970
☐ 2PNCT 1×200	1 × 200	400 kcmil	20.4	2.5	3.0	32.0	2,560	192	3,960
☐ 2PNCT 1×250	1 × 250	500 kcmil	22.1	2.5	3.1	34.0	3,050	204	4,950
☐ 2PNCT 1×325	1 × 325	650 kcmil	26.0	2.5	3.4	38.0	3,930	228	6,435
☐ 2PNCT 2×0.75	2 × 0.75	18	1.1	0.8	1.7	9.0	110	54	30
☐ 2PNCT 2×1.25	2 × 1.25	16	1.5	0.8	1.7	9.8	135	59	50
☐ 2PNCT 2×2	2 × 2	14	1.8	0.8	1.8	10.5	160	63	79
☐ 2PNCT 2×3.5	2 × 3.5	12	2.5	0.8	1.9	12.5	230	75	139
☐ 2PNCT 2×5.5	2 × 5.5	10	3.1	1.0	2.0	14.5	330	87	218
☐ 2PNCT 2×8	2 × 8	8	3.7	1.0	2.1	16.0	415	96	317
☐ 2PNCT 2×14	2 × 14	6	4.9	1.0	2.2	18.5	605	111	554
☐ 2PNCT 2×22	2 × 22	4	6.7	1.2	2.5	24.0	975	144	871
☐ 2PNCT 2×38	2 × 38	1	8.7	1.2	2.8	28.0	1,490	168	1,505
☐ 2PNCT 2×60	2 × 60	2/0	11.2	1.5	3.2	35.0	2,320	210	2,376
☐ 2PNCT 2×100	2 × 100	4/0	14.6	2.0	3.8	45.0	3,870	270	3,960

Order designation	Cores × mm ²	AWG ≈	Conductor Ø mm	Insulation mm	Sheath mm	Outer Ø ≈ mm	Weight ≈ kg/km	Min. bend R mm	Max. pull N
☐ 2PNCT 2×150	2 × 150	300 kcmil	17.4	2.0	4.2	52.0	5,210	312	5,940
☐ 2PNCT 3×0.75	3 × 0.75	18	1.1	0.8	1.7	9.4	125	56	45
☐ 2PNCT 3×1.25	3 × 1.25	16	1.5	0.8	1.8	10.5	160	63	74
☐ 2PNCT 3×2	3 × 2	14	1.8	0.8	1.8	11.5	190	69	119
☐ 2PNCT 3×3.5	3 × 3.5	12	2.5	0.8	1.9	13.0	275	78	208
☐ 2PNCT 3×5.5	3 × 5.5	10	3.1	1.0	2.0	15.5	395	93	327
☐ 2PNCT 3×8	3 × 8	8	3.7	1.0	2.1	17.0	500	102	475
☐ 2PNCT 3×14	3 × 14	6	4.9	1.0	2.3	20.0	760	120	832
☐ 2PNCT 3×22	3 × 22	4	6.7	1.2	2.6	25.0	1,230	150	1,307
☐ 2PNCT 3×38	3 × 38	1	8.7	1.2	2.9	30.0	1,890	180	2,257
☐ 2PNCT 3×60	3 × 60	2/0	11.2	1.5	3.4	38.0	2,960	228	3,564
☐ 2PNCT 3×100	3 × 100	4/0	14.6	2.0	4.0	49.0	4,940	294	5,940
☐ 2PNCT 3×150	3 × 150	300 kcmil	17.4	2.0	4.4	56.0	6,670	336	8,910
☐ 2PNCT 4×0.75	4 × 0.75	18	1.1	0.8	1.7	10.5	145	63	59
☐ 2PNCT 4×1.25	4 × 1.25	16	1.5	0.8	1.8	11.5	190	69	99
☐ 2PNCT 4×2	4 × 2	14	1.8	0.8	1.9	12.5	235	75	158
☐ 2PNCT 4×3.5	4 × 3.5	12	2.5	0.8	2.0	14.5	340	87	277
☐ 2PNCT 4×5.5	4 × 5.5	10	3.1	1.0	2.1	17.0	495	102	436
☐ 2PNCT 4×8	4 × 8	8	3.7	1.0	2.2	18.5	625	111	634
☐ 2PNCT 4×14	4 × 14	6	4.9	1.0	2.4	22.0	950	132	1,109
☐ 2PNCT 4×22	4 × 22	4	6.7	1.2	2.8	28.0	1,550	168	1,742
☐ 2PNCT 4×38	4 × 38	1	8.7	1.2	3.1	34.0	2,380	204	3,010
☐ 2PNCT 4×60	4 × 60	2/0	11.2	1.5	3.6	42.0	3,740	252	4,752
☐ 2PNCT 4×100	4 × 100	4/0	14.6	2.0	4.3	54.0	6,260	324	7,920
☐ 2PNCT 4×150	4 × 150	300 kcmil	17.4	2.0	4.8	62.0	8,530	372	11,880
2PNCT Control (5–30c) 27 sizes									
☐ 2PNCT 5×1.25	5 × 1.25	16	1.5	0.8	1.9	12.5	225	75	124
☐ 2PNCT 6×1.25	6 × 1.25	16	1.5	0.8	1.9	13.5	260	81	148
☐ 2PNCT 7×1.25	7 × 1.25	16	1.5	0.8	2.0	15.5	295	93	173
☐ 2PNCT 8×1.25	8 × 1.25	16	1.5	0.8	2.1	16.5	340	99	198
☐ 2PNCT 10×1.25	10 × 1.25	16	1.5	0.8	2.2	18.5	425	111	248
☐ 2PNCT 12×1.25	12 × 1.25	16	1.5	0.8	2.2	18.5	455	111	297
☐ 2PNCT 16×1.25	16 × 1.25	16	1.5	0.8	2.3	21.0	570	126	396
☐ 2PNCT 20×1.25	20 × 1.25	16	1.5	0.8	2.5	23.0	705	138	495
☐ 2PNCT 30×1.25	30 × 1.25	16	1.5	0.8	2.7	27.0	995	162	742
☐ 2PNCT 5×2	5 × 2	14	1.8	0.8	1.9	13.5	275	81	198
☐ 2PNCT 6×2	6 × 2	14	1.8	0.8	2.0	14.5	325	87	238
☐ 2PNCT 7×2	7 × 2	14	1.8	0.8	2.1	16.5	365	99	277
☐ 2PNCT 8×2	8 × 2	14	1.8	0.8	2.2	17.5	425	105	317
☐ 2PNCT 10×2	10 × 2	14	1.8	0.8	2.3	20.0	530	120	396
☐ 2PNCT 12×2	12 × 2	14	1.8	0.8	2.3	20.0	575	120	475
☐ 2PNCT 16×2	16 × 2	14	1.8	0.8	2.4	22.0	725	132	634
☐ 2PNCT 20×2	20 × 2	14	1.8	0.8	2.6	25.0	900	150	792
☐ 2PNCT 30×2	30 × 2	14	1.8	0.8	2.8	29.0	1,280	174	1,188
☐ 2PNCT 5×3.5	5 × 3.5	12	2.5	0.8	2.1	15.5	385	93	346
☐ 2PNCT 6×3.5	6 × 3.5	12	2.5	0.8	2.1	17.0	455	102	416
☐ 2PNCT 7×3.5	7 × 3.5	12	2.5	0.8	2.2	19.0	530	114	485
☐ 2PNCT 8×3.5	8 × 3.5	12	2.5	0.8	2.3	21.0	615	126	554
☐ 2PNCT 10×3.5	10 × 3.5	12	2.5	0.8	2.5	23.0	745	138	693

Order designation	Cores × mm ²	AWG ≈	Conductor Ø mm	Insulation mm	Sheath mm	Outer Ø ≈ mm	Weight ≈ kg/km	Min. bend R mm	Max. pull N
☐ 2PNCT 12×3.5	12 × 3.5	12	2.5	0.8	2.5	24.0	845	144	832
☐ 2PNCT 16×3.5	16 × 3.5	12	2.5	0.8	2.7	26.0	1,080	156	1,109
☐ 2PNCT 20×3.5	20 × 3.5	12	2.5	0.8	2.8	29.0	1,340	174	1,386
☐ 2PNCT 30×3.5	30 × 3.5	12	2.5	0.8	3.0	34.0	1,610	204	2,079
3PNCT Reinforced (1–4c) 42 sizes									
☐ 3PNCT 1×2	1 × 2	14	1.8	1.2	2.5	10.5	140	63	40
☐ 3PNCT 1×3.5	1 × 3.5	12	2.5	1.2	2.5	11.0	165	66	69
☐ 3PNCT 1×5.5	1 × 5.5	10	3.1	1.2	2.6	12.0	200	72	109
☐ 3PNCT 1×8	1 × 8	8	3.7	1.2	2.6	12.5	230	75	158
☐ 3PNCT 1×14	1 × 14	6	4.9	1.2	2.7	14.0	320	84	277
☐ 3PNCT 1×22	1 × 22	4	6.7	1.6	2.9	17.0	485	102	436
☐ 3PNCT 1×38	1 × 38	1	8.7	1.6	3.0	19.5	695	117	752
☐ 3PNCT 1×60	1 × 60	2/0	11.2	2.1	3.2	24.0	1,050	144	1,188
☐ 3PNCT 1×100	1 × 100	4/0	14.6	2.1	3.5	27.0	1,560	162	1,980
☐ 3PNCT 1×150	1 × 150	300 kcmil	17.4	2.7	3.7	32.0	2,170	192	2,970
☐ 3PNCT 1×200	1 × 200	400 kcmil	20.4	3.3	4.0	37.0	2,910	222	3,960
☐ 3PNCT 1×250	1 × 250	500 kcmil	22.1	3.3	4.1	39.0	3,430	234	4,950
☐ 3PNCT 1×325	1 × 325	650 kcmil	26.0	3.3	4.3	43.0	4,330	258	6,435
☐ 3PNCT 2×2	2 × 2	14	1.8	1.2	2.8	15.0	295	90	79
☐ 3PNCT 2×3.5	2 × 3.5	12	2.5	1.2	2.9	17.0	380	102	139
☐ 3PNCT 2×5.5	2 × 5.5	10	3.1	1.2	2.9	18.5	465	111	218
☐ 3PNCT 2×8	2 × 8	8	3.7	1.2	3.0	19.5	560	117	317
☐ 3PNCT 2×14	2 × 14	6	4.9	1.2	3.2	23.0	815	138	554
☐ 3PNCT 2×22	2 × 22	4	6.7	1.6	3.5	29.0	1,290	174	871
☐ 3PNCT 2×38	2 × 38	1	8.7	1.6	3.8	34.0	1,850	204	1,505
☐ 3PNCT 2×60	2 × 60	2/0	11.2	2.1	4.3	42.0	2,840	252	2,376
☐ 3PNCT 2×100	2 × 100	4/0	14.6	2.1	4.7	50.0	4,240	300	3,960
☐ 3PNCT 2×150	2 × 150	300 kcmil	17.4	2.7	5.3	59.0	5,980	354	5,940
☐ 3PNCT 3×2	3 × 2	14	1.8	1.2	2.8	16.0	340	96	119
☐ 3PNCT 3×3.5	3 × 3.5	12	2.5	1.2	2.9	18.0	445	108	208
☐ 3PNCT 3×5.5	3 × 5.5	10	3.1	1.2	3.0	19.5	550	117	327
☐ 3PNCT 3×8	3 × 8	8	3.7	1.2	3.1	21.0	660	126	475
☐ 3PNCT 3×14	3 × 14	6	4.9	1.2	3.3	25.0	990	150	832
☐ 3PNCT 3×22	3 × 22	4	6.7	1.6	3.6	31.0	1,560	186	1,307
☐ 3PNCT 3×38	3 × 38	1	8.7	1.6	3.9	36.0	2,280	216	2,257
☐ 3PNCT 3×60	3 × 60	2/0	11.2	2.1	4.4	44.0	3,520	264	3,564
☐ 3PNCT 3×100	3 × 100	4/0	14.6	2.1	4.9	53.0	5,330	318	5,940
☐ 3PNCT 3×150	3 × 150	300 kcmil	17.4	2.7	5.5	62.0	7,540	372	8,910
☐ 3PNCT 4×2	4 × 2	14	1.8	1.2	2.9	17.0	390	102	158
☐ 3PNCT 4×3.5	4 × 3.5	12	2.5	1.2	3.0	19.5	530	117	277
☐ 3PNCT 4×5.5	4 × 5.5	10	3.1	1.2	3.1	21.0	660	126	436
☐ 3PNCT 4×8	4 × 8	8	3.7	1.2	3.2	23.0	810	138	634
☐ 3PNCT 4×14	4 × 14	6	4.9	1.2	3.4	27.0	1,210	162	1,109
☐ 3PNCT 4×22	4 × 22	4	6.7	1.6	3.8	34.0	1,930	204	1,742
☐ 3PNCT 4×38	4 × 38	1	8.7	1.6	4.1	39.0	2,840	234	3,010
☐ 3PNCT 4×60	4 × 60	2/0	11.2	2.1	4.7	49.0	4,410	294	4,752
☐ 3PNCT 4×100	4 × 100	4/0	14.6	2.1	5.2	58.0	6,720	348	7,920

– Minimum bending radius is 4 × OD for fixed multicore, 6 × OD for single-core and carrier drums (shown in table), and 10 × OD for general moving/reeling duty.

Electrical & JCS 0168 ampacity

15 sizes

Cross-section mm ²	Stranding No./mm	Conductor Ø mm	Max. R (1-core) 20 °C, Ω/km	Max. R (multicore) 20 °C, Ω/km	Min. IR 20 °C, MΩ·km	1-core 30 °C, A	2-core 30 °C, A	3-core 30 °C, A	4-core 30 °C, A
0.75	30/0.18	1.1	25.8	26.6	500	18	15	13	12
1.25	50/0.18	1.5	15.5	16	500	25	21	18	16
2	37/0.26	1.8	9.91	10.2	500	32	27	23	21
3.5	45/0.32	2.5	5.38	5.54	400	47	39	33	30
5.5	70/0.32	3.1	3.46	3.56	400	62	51	44	40
8	50/0.45	3.7	2.45	2.52	400	77	63	54	49
14	88/0.45	4.9	1.39	1.43	300	105	89	76	69
22	7/20/0.45	6.7	0.892	0.919	300	145	120	100	93
38	7/34/0.45	8.7	0.525	0.541	200	205	165	140	125
60	19/20/0.45	11.2	0.329	0.339	200	280	220	185	170
100	19/34/0.45	14.6	0.193	0.199	200	390	310	265	240
150	27/34/0.45	17.4	0.136	0.14	200	528	408	348	305
200	37/34/0.45	20.4	0.0993	0.102	200	619	470	400	—
250	37/42/0.45	22.1	0.0803	0.0827	200	695	—	—	—
325	37/55/0.45	26.0	0.0614	0.0632	200	820	—	—	—

– Current ratings per JCS 0168 for one cable in free air at 30 °C ambient (80 °C conductor temperature). Ambient temperature rating factors: 0.95 at 35 °C, 0.89 at 40 °C, 0.84 at 45 °C, 0.77 at 50 °C, 0.71 at 55 °C, 0.65 at 60 °C.

Standards and approvals

✓ JIS C 3327 · PSE (Electrical Appliance and Material Safety Act)

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/pnct-2pnct-3pnct-rubber-cabtyre-cable



Typical values for this cable type, based on JIS C 3327. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.