



Control & signal cables

JZ-35400 CP / JZ-40415 CP

Copper-Braid Screened PVC/PUR Control

300/500 V inner-sheathed tinned-copper braid screened PVC/PUR control cable



300/500 V · 4 kV Test

Extruded Inner Sheath + Cu Braid

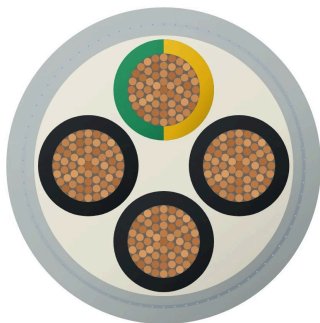
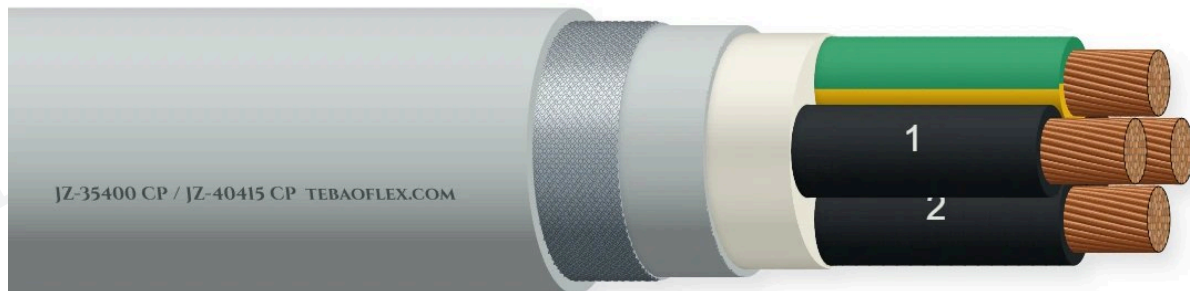
TMPU Polyurethane Outer (CP)

Application

Heavy-duty 300/500 V EMC-screened control cable (‘JZ-35400 CP / JZ-40415 CP’, ‘YSLCY-PUR’) with Class 5 copper conductors (0.5–16 mm²), numbered TI2 PVC cores, extruded PVC inner bedding, ≥80 % tinned-copper braid (‘C’) and TMPU polyurethane sheath (‘P’).

Typical uses: Wet-sump CNC machining & grinding lines, Steelworks, rolling mills & metalforming, Beverage bottling, dairy & washdown plants, Automated assembly & conveyor controls, Outdoor cranes, hoists & municipal vehicles

Construction



Cross-section, not to scale

1	Class 5 flexible copper conductor	IEC 60228 Class 5
2	TI2 PVC core insulation	EN 50363-3 TI2 · EN 50334
3	Extruded PVC inner sheath	DIN VDE 0285
4	Tinned-copper braid screen (C)	DIN VDE 0285 · EN 55011 EMC
5	TMPU polyurethane outer sheath (P)	EN 50363-10-2 TMPU · EN 60811-404

Technical data

Typical values

Rated voltage U0/U	300/500 V AC	AC test voltage (50 Hz)	4000 V AC (core/core) · 2000 V AC (core/screen)
Transfer impedance (30 MHz)	≤ 250 mΩ/m via tinned-copper wire braid	Insulation resistance (20 °C)	≥ 20 MΩ·km
Temperature, flexing	−15 °C to +80 °C	Temperature, fixed	−40 °C to +80 °C
Max. conductor temperature	+80 °C continuous · +150 °C short-circuit	Min. bending radius, fixed	6 × overall diameter
Min. bending radius, flexing	15 × overall diameter	Double-sheathed CP design	Extruded PVC inner bedding + tinned-copper braid ('C') + TMPU polyurethane outer sheath ('P')
Oil, coolant & emulsion	EN 60811-404 resistant to mineral oils, synthetic cutting fluids and hydraulic oils	Hydrolysis, UV & abrasion	Polyether TMPU jacket resists water, microbes, UV weathering and sharp metal swarf
Standards	DIN VDE 0285-525-2-51 & DIN VDE 0207-20 (11YM1)	Standard packing	Heat-treated ISPM-15 timber drums with sealed cable ends

Sizes

36 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 ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
0.50 mm ² JZ-35400 CP / JZ-40415 CP Screened PVC/PUR 6 sizes							
☐ OZ-35400 CP 2×0.5	2×0.5	20	6.3	6.8	28	68	41
☐ JZ-35400 CP 3G0.5	3×0.5	20	6.6	7.2	35	79	43
☐ JZ-35400 CP 4G0.5	4×0.5	20	7.2	7.8	43	94	47
☐ JZ-35400 CP 7G0.5	7×0.5	20	8.6	9.3	65	138	56
☐ JZ-35400 CP 12G0.5	12×0.5	20	10.8	11.7	99	214	70
☐ JZ-35400 CP 18G0.5	18×0.5	20	12.5	13.6	138	296	82
0.75 mm ² JZ-35400 CP / JZ-40415 CP Screened PVC/PUR 7 sizes							
☐ JZ-35400 CP 3G0.75	3×0.75	18	7.1	7.7	45	94	46
☐ JZ-35400 CP 4G0.75	4×0.75	18	7.6	8.3	55	112	50
☐ JZ-35400 CP 5G0.75	5×0.75	18	8.3	9.0	66	134	54
☐ JZ-35400 CP 7G0.75	7×0.75	18	9.4	10.2	86	174	61
☐ JZ-35400 CP 12G0.75	12×0.75	18	11.8	12.8	136	268	77
☐ JZ-35400 CP 18G0.75	18×0.75	18	13.7	14.9	194	376	89
☐ JZ-35400 CP 25G0.75	25×0.75	18	16.2	17.6	260	508	106
1.00 mm ² JZ-35400 CP / JZ-40415 CP Screened PVC/PUR 7 sizes							
☐ JZ-35400 CP 3G1.0	3×1.0	17	7.5	8.1	53	108	49
☐ JZ-35400 CP 4G1.0	4×1.0	17	8.1	8.8	66	130	53
☐ JZ-35400 CP 5G1.0	5×1.0	17	8.8	9.6	79	156	58
☐ JZ-35400 CP 7G1.0	7×1.0	17	10.0	10.9	106	204	65
☐ JZ-35400 CP 12G1.0	12×1.0	17	12.5	13.6	168	318	82
☐ JZ-35400 CP 18G1.0	18×1.0	17	14.6	15.9	240	448	95
☐ JZ-35400 CP 25G1.0	25×1.0	17	17.3	18.8	326	608	113
1.50 mm ² JZ-35400 CP / JZ-40415 CP Screened PVC/PUR 7 sizes							
☐ JZ-35400 CP 3G1.5	3×1.5	16	8.3	9.0	70	138	54
☐ JZ-35400 CP 4G1.5	4×1.5	16	9.0	9.8	89	168	59
☐ JZ-35400 CP 5G1.5	5×1.5	16	9.9	10.8	108	202	65

Order designation	Cores × mm ²	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
☐ JZ-35400 CP 7G1.5	7×1.5	16	11.3	12.3	146	268	74
☐ JZ-35400 CP 12G1.5	12×1.5	16	14.3	15.5	238	426	93
☐ JZ-35400 CP 18G1.5	18×1.5	16	16.7	18.1	342	598	109
☐ JZ-35400 CP 25G1.5	25×1.5	16	19.8	21.5	462	812	129
2.5–16 mm ² JZ-35400 CP / JZ-40415 CP Screened Control 9 sizes							
☐ JZ-35400 CP 3G2.5	3×2.5	14	9.8	10.6	105	195	64
☐ JZ-35400 CP 4G2.5	4×2.5	14	10.7	11.6	134	242	70
☐ JZ-35400 CP 5G2.5	5×2.5	14	11.8	12.8	166	294	77
☐ JZ-35400 CP 7G2.5	7×2.5	14	13.4	14.6	226	392	88
☐ JZ-35400 CP 12G2.5	12×2.5	14	17.0	18.5	368	628	111
☐ JZ-35400 CP 4G4	4×4	12	12.3	13.4	206	345	80
☐ JZ-35400 CP 4G6	4×6	10	14.2	15.4	296	478	92
☐ JZ-35400 CP 4G10	4×10	8	17.5	19.0	475	745	114
☐ JZ-35400 CP 4G16	4×16	6	21.0	22.8	735	1,110	137

– Dimensions and weights are typical values per DIN VDE 0285 / EN 50363-10-2 (CP = Cu Braid + PUR). Minimum fixed bending radius shown is 6 × OD.

Electrical & current ratings

9 sizes

Cross-section mm ²	AWG ≈	Max. DC resistance 20 °C, Ω/km	Single pair/core 30 °C, A	Multi-core bundle 30 °C, A
0.5	20	39	9.0	6.0
0.75	18	26	12.0	10.0
1	17	19.5	15.0	13.0
1.5	16	13.3	23.0	18.0
2.5	14	7.98	30.0	25.0
4	12	4.95	41.0	34.0
6	10	3.3	53.0	44.0
10	8	1.91	74.0	61.0
16	6	1.21	99.0	82.0

– Current ratings at 30 °C ambient in free air per DIN VDE 0298-4 / DIN VDE 0891-1. Apply grouping derating factors for multi-core control and signal bundles.

Standards and approvals

✓ DIN VDE 0285 / EN 50363-10-2 (CP = Cu Braid + PUR)

✓ CE · RoHS 2 (2011/65/EU) · REACH

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

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/copper-braid-screened-pvc-pur-control-cable



Typical values for this cable type, based on DIN VDE 0285 / EN 50363-10-2 (CP = Cu Braid + PUR). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.