



Control & signal cables

CY / YSLCY

Screened Control Cable

300/500 V tinned-copper braid screened EMC flexible PVC control cable (JZ / OZ)



DIN VDE 0285

U0/U 300/500 V

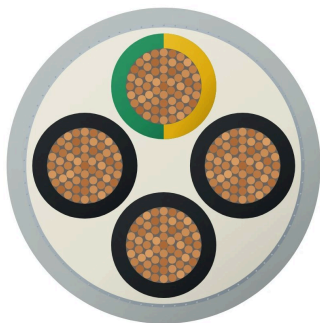
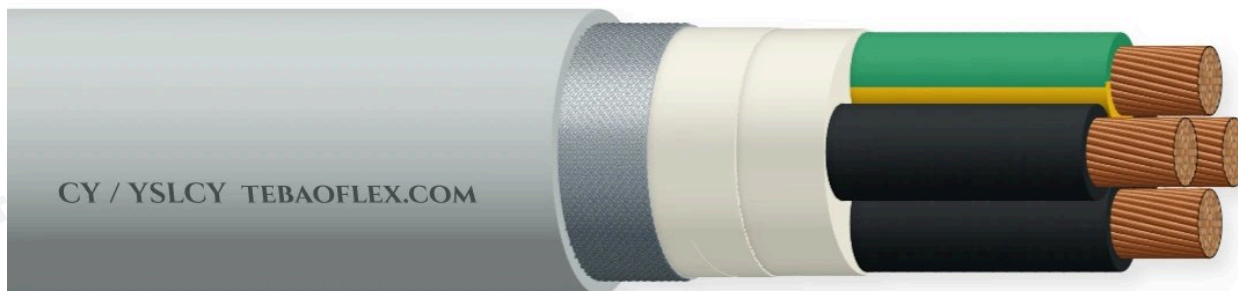
Cu Braid Screen · EMC

Application

EMC-screened 300/500 V flexible PVC control cable (CY / YSLCY) with Class 5 copper conductors, numbered T12 PVC cores, polyester separator tape, ≥80 % tinned-copper wire braid screen and grey or transparent TM2 PVC outer sheath for noise-free automation.

Typical uses: CNC machine tools & robotics cells, PLC, SCADA & cabinet interconnect, Process measurement & weighing lines, Packaging, printing & textile lines, HVAC & building management systems

Construction



Cross-section, not to scale

1	Flexible copper conductor	IEC 60228 Class 5
2	PVC core insulation	EN 50363-3 T12 · EN 50334
3	Separator wrapping tape	
4	Tinned copper braid screen (C)	
5	PVC outer sheath	EN 50363-4-1 TM2 · IEC 60332-1-2

Technical data

Typical values

Rated voltage U0/U	300/500 V AC	AC test voltage	4000 V AC core/core · 2000 V AC core/screen
Mutual capacitance	Approx. 120 nF/km (core/core) · 160 nF/km (core/screen)	Transfer impedance	≤ 250 mΩ/m at 30 MHz (tinned Cu braid ≥ 80 % coverage)
Insulation resistance	≥ 20 MΩ·km at +20 °C	Temperature, flexing	−5 °C to +70 °C
Temperature, fixed	−40 °C to +80 °C	Max. conductor temperature	+70 °C (+80 °C fixed) continuous operation
Short-circuit temperature	+160 °C max. (up to 5 s)	Min. bending radius, fixed	6 × overall diameter
Min. bending radius, flexing	10 × overall diameter (occasional free movement)	Max. tensile load	15 N/mm ² of total copper cross-section
Screen termination	360° EMC gland clamping on the tinned-copper braid recommended	Flame retardance	IEC 60332-1-2 / EN 60332-1-2 self-extinguishing · CPR Eca
Oil resistance	Resistant to standard industrial machine oils and greases	EMC compliance	Meets EU EMC Directive 2014/30/EU shielding requirements
Standards	DIN VDE 0285-525-2-51 / BS EN 50525-2-51 / VDE 0245	Standard packing	Heat-treated ISPM-15 timber drums with sealed cable ends

Sizes

23 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
0.75 mm ² Screened Control Configurations (2 to 12 cores) 6 sizes							
☐ YSLCY-OZ 2×0.75	2×0.75	18	5.4	5.9	35	54	35
☐ YSLCY-JZ 3G0.75	3G0.75	18	5.7	6.2	45	66	37
☐ YSLCY-JZ 4G0.75	4G0.75	18	6.2	6.7	56	81	40
☐ YSLCY-JZ 5G0.75	5G0.75	18	6.7	7.3	68	97	44
☐ YSLCY-JZ 7G0.75	7G0.75	18	7.3	7.9	89	125	47
☐ YSLCY-JZ 12G0.75	12G0.75	18	9.5	10.3	142	202	62
1.0 mm ² Screened Control Configurations (3 to 12 cores) 5 sizes							
☐ YSLCY-JZ 3G1.0	3G1.0	17	6.0	6.5	54	78	39
☐ YSLCY-JZ 4G1.0	4G1.0	17	6.4	7.0	68	96	42
☐ YSLCY-JZ 5G1.0	5G1.0	17	7.1	7.7	84	116	46
☐ YSLCY-JZ 7G1.0	7G1.0	17	7.9	8.6	112	152	52
☐ YSLCY-JZ 12G1.0	12G1.0	17	10.0	10.9	178	245	65
1.5 mm ² Screened Control Configurations (3 to 18 cores) 6 sizes							
☐ YSLCY-JZ 3G1.5	3G1.5	16	6.7	7.3	75	104	44
☐ YSLCY-JZ 4G1.5	4G1.5	16	7.3	7.9	94	128	47
☐ YSLCY-JZ 5G1.5	5G1.5	16	8.1	8.8	116	158	53
☐ YSLCY-JZ 7G1.5	7G1.5	16	8.8	9.6	154	206	58
☐ YSLCY-JZ 12G1.5	12G1.5	16	11.5	12.5	248	332	75
☐ YSLCY-JZ 18G1.5	18G1.5	16	13.5	14.7	355	475	88
2.5–10 mm ² Screened Control & Drive Configurations 6 sizes							
☐ YSLCY-JZ 3G2.5	3G2.5	14	8.1	8.8	115	158	53
☐ YSLCY-JZ 4G2.5	4G2.5	14	8.8	9.6	148	198	58
☐ YSLCY-JZ 5G2.5	5G2.5	14	9.8	10.7	182	244	64
☐ YSLCY-JZ 4G4	4G4	12	10.5	11.4	224	302	68

Order designation	Cores × mm ²	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
☐ YSLCY-JZ 4G6	4G6	10	12.1	13.2	318	425	79
☐ YSLCY-JZ 4G10	4G10	8	15.3	16.6	512	685	100

– Dimensions and weights are typical values per DIN VDE 0285 / BS EN 50525-2-51. Minimum fixed bending radius shown is 6 × OD.

Electrical & current ratings

7 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
0.75	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

– 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 / BS EN 50525-2-51

✓ 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/cy-screened-control-cable



Typical values for this cable type, based on DIN VDE 0285 / BS EN 50525-2-51. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.