



Screened power & VFD / motor supply cables

2YSLCY-JB / 2YSLCYK-JB

Low-Capacitance Double-Screened JB VFD

HD 308 S2 colour-coded low-capacitance PE 0.6/1 kV double-screened drive cable



HD 308 S2 Colour Cores

U0/U 0.6/1 kV

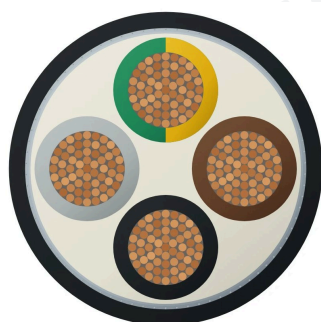
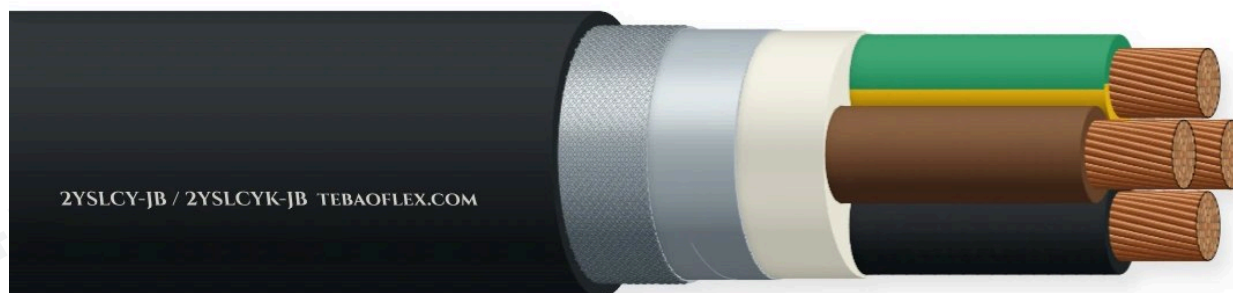
Low-Capacitance 2Y · EMC

Application

Double-screened 0.6/1 kV VFD motor cable with HD 308 S2 colour-coded phase cores (-JB: brown, black, grey + GNYE), low-capacitance PE (2Y) insulation, Al/PET foil plus ≥ 85 % tinned-copper braid, in transparent or black UV/burial PVC.

Typical uses: Industrial VFD motor drives, Pumps, fans & compressors, Process & chemical plants, Conveyor & extruder lines, Water & HVAC stations

Construction



Cross-section, not to scale

1	Conductor	IEC 60228 / DIN EN 60228 Class 5
2	Core insulation	
3	Binding tape	
4	First EMC screen (foil)	
5	Second EMC screen (braid)	Low transfer impedance per EN 61800-3
6	Outer sheath	DIN VDE 0207-5 (YM2 / DMV6)

Technical data

Typical values

Rated voltage U0/U	600/1000 V	Max. operating voltage AC	1200 V
Max. operating voltage DC	1800 V	AC test voltage	4000 V (5 min)
Capacitance (core/core)	70–252 pF/m (size dependent)	Screen / Field control	100% Al/PET tape + ≥ 85% tinned Cu braid
Current rating	Per DIN VDE 0298-4 (+90 °C XLPE)	Max. conductor temperature	+70 °C (+80 °C fixed)
Short-circuit temperature	+160 °C (max. 5 s)	Temperature, fixed installation	–40 °C to +80 °C
Temperature, flexing	–5 °C to +70 °C	Min. bending radius, fixed	4 × OD
Min. bending radius, moving	15 × OD (occasional flexing)	Max. tensile load (static)	50 N/mm ² (fixed) · 15 N/mm ² (pulling)
Direct burial suitability	Yes, reinforced K-grade PVC sheath	Flame retardance	IEC 60332-1-2 / EN 60332-1-2
Oil resistance	Industrial oils & coolants (EN 50290-2-22)	UV & ozone	UV-stabilised black PVC (ISO 4892-2)
Water	AD7 / direct burial in damp ground	Standards	DIN VDE 0276-603 / IEC 60502-1

Sizes

16 standard constructions

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

Order designation 2YSLCY-JB Transparent	Order designation 2YSLCYK-JB Black/UV/Burial	Cores × mm ²	AWG ≈	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
4G concentric (3 phase + 1 GNYE earth) 6 sizes							
☐ 2YSLCY-JB 4G1.5	2YSLCYK-JB 4G1.5	4G1.5	16	10.6	95	165	42
☐ 2YSLCY-JB 4G2.5	2YSLCYK-JB 4G2.5	4G2.5	14	12.2	150	230	49
☐ 2YSLCY-JB 4G4	2YSLCYK-JB 4G4	4G4	12	13.9	235	325	56
☐ 2YSLCY-JB 4G6	2YSLCYK-JB 4G6	4G6	10	15.6	320	435	62
☐ 2YSLCY-JB 4G10	2YSLCYK-JB 4G10	4G10	8	19.2	533	685	77
☐ 2YSLCY-JB 4G16	2YSLCYK-JB 4G16	4G16	6	22.8	789	1,010	91
Symmetrical 3+3G (3 phase + 3 split GNYE earths) 10 sizes							
☐ 2YSLCY-JB 3×16 + 3G2.5	2YSLCYK-JB 3×16 + 3G2.5	3×16 + 3G2.5	6	21.4	662	895	86
☐ 2YSLCY-JB 3×25 + 3G4	2YSLCYK-JB 3×25 + 3G4	3×25 + 3G4	4	25.2	1,025	1,310	101
☐ 2YSLCY-JB 3×35 + 3G6	2YSLCYK-JB 3×35 + 3G6	3×35 + 3G6	2	28.4	1,410	1,740	114
☐ 2YSLCY-JB 3×50 + 3G10	2YSLCYK-JB 3×50 + 3G10	3×50 + 3G10	1/0	32.8	2,015	2,430	131
☐ 2YSLCY-JB 3×70 + 3G10	2YSLCYK-JB 3×70 + 3G10	3×70 + 3G10	2/0	37.2	2,690	3,180	149
☐ 2YSLCY-JB 3×95 + 3G16	2YSLCYK-JB 3×95 + 3G16	3×95 + 3G16	3/0	42.6	3,685	4,290	170
☐ 2YSLCY-JB 3×120 + 3G16	2YSLCYK-JB 3×120 + 3G16	3×120 + 3G16	4/0	46.8	4,510	5,180	187
☐ 2YSLCY-JB 3×150 + 3G25	2YSLCYK-JB 3×150 + 3G25	3×150 + 3G25	300 kcmil	51.9	5,680	6,490	208
☐ 2YSLCY-JB 3×185 + 3G35	2YSLCYK-JB 3×185 + 3G35	3×185 + 3G35	350 kcmil	57.4	7,090	8,050	230
☐ 2YSLCY-JB 3×240 + 3G50	2YSLCYK-JB 3×240 + 3G50	3×240 + 3G50	500 kcmil	64.2	9,320	10,480	257

– Select 2YSLCY-J for indoor plant wiring or 2YSLCYK-J for outdoor UV and direct-burial installations.

Electrical & capacitance data

15 sizes

Phase conductor mm ²	Max. DC R @ 20 °C Ω/km	C (core/core) pF/m≈	C (core/screen) pF/m≈	Inductance mH/km≈	Current rating +70 °C PE (A)
1.5	13.300	70	120	0.34	18
2.5	7.980	78	135	0.31	25
4	4.950	85	148	0.29	34
6	3.300	94	162	0.28	43
10	1.910	105	182	0.26	60
16	1.210	118	205	0.25	80
25	0.780	132	230	0.24	101
35	0.554	145	252	0.23	126
50	0.386	160	278	0.23	153
70	0.272	175	305	0.22	196
95	0.206	192	334	0.22	238
120	0.161	205	358	0.21	276
150	0.129	220	382	0.21	319
185	0.106	235	410	0.21	364
240	0.080	252	440	0.20	430

– Low-permittivity PE (2Y, $\epsilon_r \approx 2.3$) reduces cable charging capacitance by ~40 % compared with standard PVC-insulated control cables.

Standards and approvals

- ✓ CE (2014/35/EU Low Voltage Directive)
- ✓ EN 61800-3 / EN 55011 EMC Class A/B
- ✓ IEC 60332-1-2 Flame Retardant

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/low-capacitance-double-screened-jb-vfd-motor-cable



Typical values for this cable type, based on DIN VDE 0250 · DIN VDE 0207 · EN 61800-3. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.