



EN 50525 & HD 361 Industrial Rubber Cables

S05BC4B-F / S07BC4B-F / S1BC4B-F

Screened EPR Flexible Industrial

EN 50525-2-21 / HD 361 · 300/500 V to 0.6/1 kV · +90 °C EPR ('B') · Cu braid ('C4') ·



HD 361 / EN 50525

300/500 V-0.6/1 kV

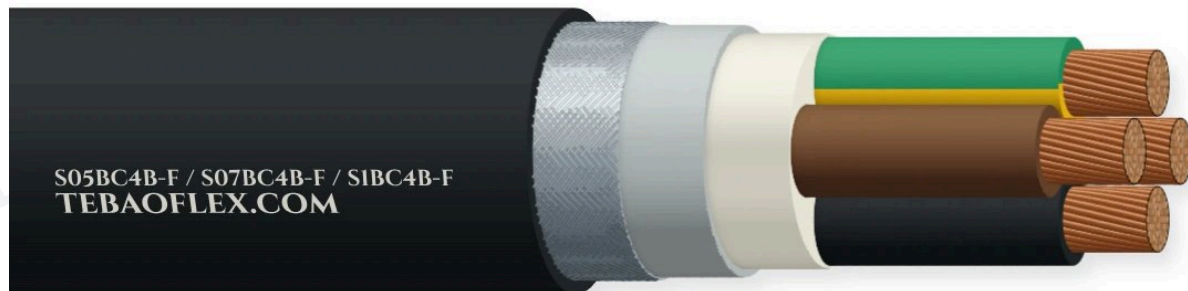
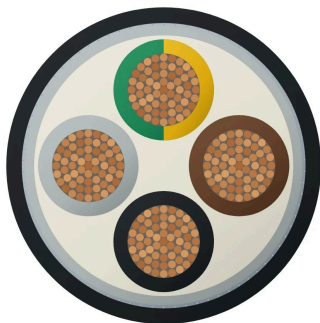
Cu-Braid Screened 'C4'

Application

S05BC4B-F (300/500 V), S07BC4B-F (450/750 V), and S1BC4B-F (0.6/1 kV) are EMC-screened flexible industrial rubber cables coded to CENELEC HD 361 and based on EN 50525-2-21. Built with +90 °C EPR core insulation ('B'), a tinned copper wire braid screen

Typical uses: Industrial VFD & Servo Drives, Wind Turbine & Renewable Energy, Cold-Storage & Arctic Logistics, Crane Festoon & Hoist Control, Public Infrastructure & Tunnelling

Construction

S05BC4B-F / S07BC4B-F / S1BC4B-F
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Cross-section, not to scale

1	Flexible copper conductor ('-F')	EN 60228 Class 5
2	+90 °C EPR core insulation ('B')	EN 50363-1
3	Inner elastomeric bedding	EN 50525-2-21
4	Tinned copper braid screen ('C4')	HD 361 S3
5	Cross-linked EPR outer sheath ('B')	EN 50363-2-1

Technical data

Typical values

Rated voltage (S05 / S07 / S1)	300/500 V · 450/750 V · 0.6/1 kV
Screen optical coverage ('C4')	≥ 85 % tinned copper wire braid
Conductor stranding class	EN 60228 Class 5
Max. conductor operating temp.	+90 °C continuous ('B' EPR)
Mobile flexing ambient range	-40 °C to +60 °C
Current rating advantage	+15 % higher ampacity vs +60 °C H07RN-F
Min. bend radius (fixed)	5 × overall diameter (D)
Max. tensile pull on copper	15 N/mm²
Sub-zero cold impact	No cracking down to -40 °C
Halogen-free composition	EN 60754-1/2 halogen-free EPR/EPR
Cold-climate flexibility	Remains flexible down to -40 °C
EMC electromagnetic shielding	EN 55011 / EN 61800-3 VFD compliant
Standards	CENELEC HD 361 S3 ('S..BC4B-F')

Routine AC test voltage	2.0 kV (S05) / 2.5 kV (S07) / 3.5 kV (S1)
Transfer impedance at 30 MHz	≤ 250 mΩ/m
Operating frequency	50 / 60 Hz & VFD PWM
Max. short-circuit temperature	+250 °C (max. 5 s)
Fixed installation ambient	-50 °C to +80 °C
Min. installation temperature	-40 °C
Min. bend radius (flexing)	8 × overall diameter (D)
Impact & abrasion resistance	Heavy-duty industrial Type EM7 EPR
Braid fatigue durability	Fine-wire high-angle tinned Cu braid
Ozone & UV weather resistance	EN 60811-403 ozone-proof EPR sheath
Water & humidity resistance	Suitable for damp & outdoor locations
RoHS / REACH status	CE & RoHS 3 compliant

Sizes

12 standard constructions

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

Order designation	Type, Voltage & Configuration	Phase size mm²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
S05BC4B-F (300/500 V) — Screened EPR control & instrumentation 4 sizes						
☐ S05BC4B-F 4G1.0 (300/500 V)	300/500 V 4G1.0	1.0	10.2	64	152	51
☐ S05BC4B-F 7G1.5 (300/500 V)	300/500 V 7G1.5	1.5	14.2	145	295	71
☐ S05BC4B-F 12G1.5 (300/500 V)	300/500 V 12G1.5	1.5	18.0	235	465	90
☐ S05BC4B-F 18G1.5 (300/500 V)	300/500 V 18G1.5	1.5	20.8	340	640	104
S07BC4B-F (450/750 V) & S1BC4B-F (0.6/1 kV) — Screened EPR power & VFD 8 sizes						
☐ S07BC4B-F 4G1.5 (450/750 V)	450/750 V 4G1.5	1.5	11.8	92	205	59
☐ S07BC4B-F 4G2.5 (450/750 V)	450/750 V 4G2.5	2.5	13.8	142	285	69
☐ S07BC4B-F 4G4.0 (450/750 V)	450/750 V 4G4.0	4.0	16.0	212	395	80
☐ S07BC4B-F 4G6.0 (450/750 V)	450/750 V 4G6.0	6.0	18.0	302	525	90
☐ S1BC4B-F 4G10 (0.6/1 kV)	0.6/1 kV 4G10	10	22.8	485	845	114
☐ S1BC4B-F 4G16 (0.6/1 kV)	0.6/1 kV 4G16	16	26.2	735	1,185	131
☐ S1BC4B-F 4G25 (0.6/1 kV)	0.6/1 kV 4G25	25	31.0	1,110	1,720	155
☐ S1BC4B-F 4G35 (0.6/1 kV)	0.6/1 kV 4G35	35	34.6	1,520	2,240	173

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per EN 50525-2-21 / HD 361 / VDE 0285.

Electrical & ampacity data

12 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V _{rms}
300/500 V 4G1.0	19.500	17	14	79	2,500
300/500 V 7G1.5	13.300	22	19	80	2,500
300/500 V 12G1.5	13.300	22	19	80	2,500
300/500 V 18G1.5	13.300	22	19	80	2,500
450/750 V 4G1.5	13.300	22	19	80	2,500
450/750 V 4G2.5	7.980	30	26	82	2,500
450/750 V 4G4.0	4.950	40	34	84	2,500
450/750 V 4G6.0	3.300	51	43	87	2,500
0.6/1 kV 4G10	1.910	70	60	92	2,500
0.6/1 kV 4G16	1.210	93	79	101	2,500
0.6/1 kV 4G25	0.780	123	105	114	2,500
0.6/1 kV 4G35	0.554	152	129	129	2,500

– Current ratings apply at +25/+30 °C ambient in free air; apply standard derating factors for elevated ambient or drum coiling.

Standards and approvals

✓ HD 361 / EN 50525-2-21

✓ EN 60754-1/2

✓ CE / RoHS

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/s05bc4b-f-s07bc4b-f-s1bc4b-f-screened-epr-flexible-industrial-rubber-cable



Typical values for this cable type, based on EN 50525-2-21 / HD 361 / VDE 0285. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.