

**AD8 Permanent-Submersion Rubber & Pump Cables**

S1BC4N8-F

0.6/1 kV Screened Heavy-Duty Submersible & Industrial

EN 50525-2-21 AD8 / HD 361 · 0.6/1 kV ('S1') · +90 °C EPR ('B') · Cu braid ('C4') · AD8



HD 361 / AD8

0.6/1 kV

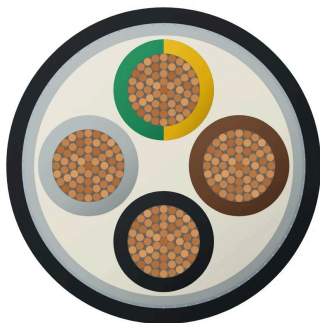
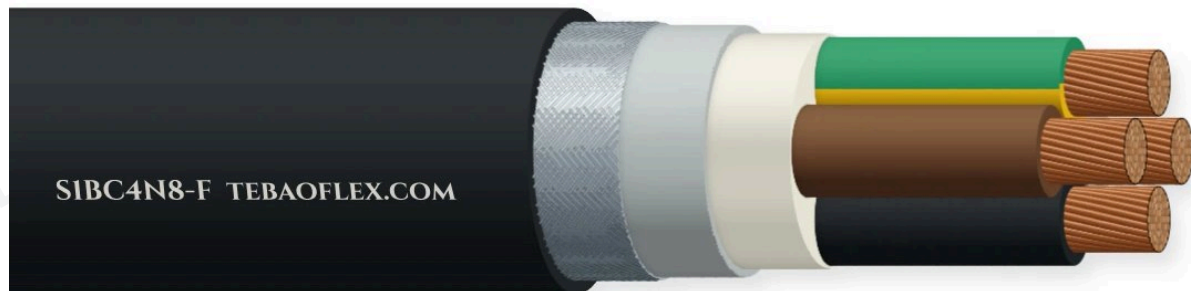
Screened +90 °C 'S1BC4N8-F'

Application

S1BC4N8-F is a heavy-duty 0.6/1 kV EMC-screened AD8 submersible and industrial rubber power cable coded to CENELEC HD 361. Combining 0.6/1 kV +90 °C EPR insulation ('1B'), a tinned copper braid screen ('C4'), and an AD8 water- and oil-resistant

Typical uses: High-Power VFD Submersible Pumps, Deep Mine & Tunnel Dewatering, Dredging & Port Ballast Systems, Municipal Stormwater Pump Stations, Heavy Wet-Process Industrial Drives

Construction



Cross-section, not to scale

1	Flexible copper conductor ('-F')	EN 60228 Class 5
2	0.6/1 kV +90 °C EPR insulation ('1B')	EN 50363-1
3	Extruded elastomeric inner sheath	EN 50525-2-21
4	Tinned copper wire braid screen ('C4')	HD 361 S3
5	AD8 submersible polychloroprene sheath	EN 50363-2-1 / EN 50525-2-21

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV AC (Um 1.2 kV)
Screen optical coverage ('C4')	≥ 85 % tinned copper wire braid
Conductor stranding class	EN 60228 Class 5
Max. conductor temp. (in air)	+90 °C continuous ('B' EPR)
Max. short-circuit temperature	+250 °C (max. 5 s)
Fixed ambient range (in air)	-40 °C to +80 °C
Min. bend radius (fixed)	5 × overall diameter (D)
Max. submersion depth (AD8)	Up to 100 m water head (10 bar)
Crush & abrasion resistance	Heavy-duty 0.6/1 kV EM2 PCP
AD8 permanent water immersion	EN 50525-2-21 Annex D/E certified
Flame retardance	EN 60332-1-2 self-extinguishing
EMC & bearing-current mitigation	Low-impedance 'C4' tinned Cu braid
Standards	CENELEC HD 361 S3 ('S1BC4N8-F')

Routine AC test voltage	3.5 kV rms / 5 min
VFD system compatibility	400 V & 690 V PWM inverter drives
Specific insulation resistance	≥ 500 MΩ·km at +20 °C
Max. water temperature (AD8)	+40 °C (+50 °C short-term)
Mobile ambient range (in air)	-25 °C to +60 °C
Current rating advantage	+15 % higher ampacity vs S07RC4N8-F
Min. bend radius (flexing)	8 × overall diameter (D)
Max. tensile pull on copper	15 N/mm ²
Gland termination	360° EMC submersible cable entry
Oil, diesel & sewage sludge	EN 60811-404 oil-resistant EM2 PCP
Ozone & UV weather resistance	EN 60811-403 ozone-proof
Halogen status	Polychloroprene outer sheath

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	Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard S1BC4N8-F configurations 12 sizes						
☐ S1BC4N8-F 4G2.5	4G2.5	2.5	15.0	146	345	75
☐ S1BC4N8-F 4G4.0	4G4.0	4.0	17.2	218	465	86
☐ S1BC4N8-F 4G6.0	4G6.0	6.0	19.4	310	615	97
☐ S1BC4N8-F 4G10	4G10	10	24.2	495	960	121
☐ S1BC4N8-F 4G16	4G16	16	27.8	748	1,340	139
☐ S1BC4N8-F 4G25	4G25	25	32.8	1,125	1,940	164
☐ S1BC4N8-F 4G35	4G35	35	36.5	1,540	2,520	182
☐ S1BC4N8-F 4G50	4G50	50	42.0	2,160	3,460	210
☐ S1BC4N8-F 4G70	4G70	70	47.5	2,980	4,610	238
☐ S1BC4N8-F 4G95	4G95	95	53.6	4,010	5,980	268
☐ S1BC4N8-F 7G2.5	7G2.5	2.5	18.6	242	540	93
☐ S1BC4N8-F 12G2.5	12G2.5	2.5	23.6	395	835	118

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per EN 50525-2-21 AD8 / 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}
4G2.5	7.980	30	26	82	3,500
4G4.0	4.950	40	34	84	3,500
4G6.0	3.300	51	43	87	3,500
4G10	1.910	70	60	92	3,500
4G16	1.210	93	79	101	3,500
4G25	0.780	123	105	114	3,500
4G35	0.554	152	129	129	3,500
4G50	0.386	189	161	150	3,500
4G70	0.272	233	198	180	3,500
4G95	0.206	282	240	216	3,500
7G2.5	7.980	30	26	82	3,500
12G2.5	7.980	30	26	82	3,500

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

Standards and approvals

✓ EN 50525-2-21 AD8 / HD 361

✓ EN 60332-1-2

✓ 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

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/s1bc4n8-f-0-6-1-kv-screened-heavy-duty-submersible-industrial-rubber-cable



Typical values for this cable type, based on EN 50525-2-21 AD8 / 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.