General rubber flexible cables

Submersible Pump Power & Monitoring

Submersible Pump Power and Monitoring Hybrid Rubber Cable



450/750 V (0.6/1 kV) AD8 submersible pump power + control monitoring hybrid rubber cable

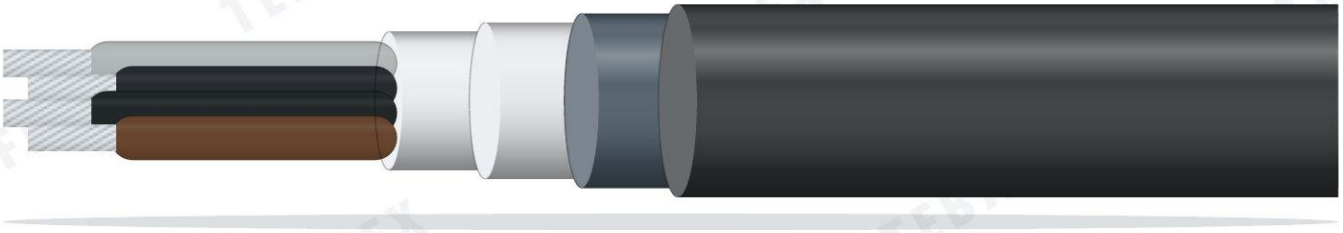
AD8 Submersible · 500 m | **450/750 V / 0.6/1 kV** | **Power + 2×1.5 Monitoring**

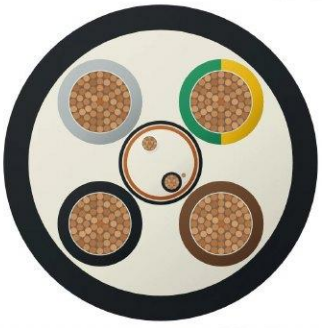
Application

Heavy-duty AD8 permanent-submersion hybrid rubber cable combining Class 5 power conductors (1.5–120 mm²) and dedicated thermal/seal-monitoring control cores (2×1.5 mm² or screened pair) inside a water-, sewage- and oil-resistant chlorinated elastomer jacket.

Typical uses: Submersible wastewater & sewage pumps, Mine & tunnel dewatering sumps, Submersible mixers & aerators, Stormwater & flood-control stations, Offshore & quarry slurry pumping

Construction





Cross-section, not to scale

1	Power & monitoring conductors	IEC 60228 Class 5
2	Water-resistant EPR insulation	DIN VDE 0207-20 3GI3
3	Inner elastomeric bedding	
4	Heavy-duty AD8 outer sheath	

Technical data

Typical values

Rated voltage (power cores)	450/750 V / 0.6/1 kV U0/U (max. 1200 V AC)	**Rated voltage (control cores)**	300/500 V U0/U (thermal & seal sensor circuits)
AC test voltage	3000 V AC on power cores · 2000 V AC on control cores	**Conductor stranding**	IEC 60228 Class 5 fine-stranded copper
Current rating basis	DIN VDE 0298-4 (+90 °C EPR conductor rating)	**Max. conductor temperature**	+90 °C continuous operation
Max. water temperature	+70 °C continuous submersion	**Short-circuit temperature**	+250 °C max. (up to 5 s)
Ambient temperature range	−25 °C to +80 °C flexing · −40 °C to +80 °C fixed	**Min. bending radius, fixed**	4 × overall diameter
Min. bending radius, moving	6 × overall diameter	**Max. tensile load**	15 N/mm² of total copper cross-section
Max. submersion depth	500 m water column (50 bar hydrostatic pressure, AD8)	**Water & sewage resistance**	AD8 permanent immersion in wastewater, sludge & seawater (pH 3–10)
Oil & grease resistance	EN 60811-404 mineral oil & effluent grease resistant	**Flame retardance**	IEC 60332-1-2 self-extinguishing
Ozone, UV & abrasion	EN 60811-403 ozone-resistant chlorinated elastomer jacket	**Standards**	EN 50525-2-21 (AD8) & DIN VDE 0250
Standard packing	Heat-treated ISPM-15 timber drums with sealed cable ends		

Sizes

13 standard constructions

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

Order designation	Cores × mm²	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
4G Power + 2×1.5 mm² Monitoring Hybrid Configurations (1.5–70 mm²) 11 sizes							
☐ Submersible Pump Power & Monitoring 3G1.5+2×1.5	3G1.5+2×1.5	16	12.0	13.0	72	225	52
☐ Submersible Pump Power & Monitoring 4G1.5+2×1.5	4G1.5+2×1.5	16	13.1	14.2	86	265	57
☐ Submersible Pump Power & Monitoring 4G2.5+2×1.5	4G2.5+2×1.5	14	14.7	16.0	125	345	64
☐ Submersible Pump Power & Monitoring 4G4+2×1.5	4G4+2×1.5	12	16.4	17.8	182	455	71
☐ Submersible Pump Power & Monitoring 4G6+2×1.5	4G6+2×1.5	10	18.2	19.8	259	595	79
☐ Submersible Pump Power & Monitoring 4G10+2×1.5	4G10+2×1.5	8	21.7	23.6	413	910	94
☐ Submersible Pump Power & Monitoring 4G16+2×1.5	4G16+2×1.5	6	24.8	27.0	643	1,265	108
☐ Submersible Pump Power & Monitoring 4G25+2×1.5	4G25+2×1.5	4	29.6	32.2	989	1,850	129
☐ Submersible Pump Power & Monitoring 4G35+2×1.5	4G35+2×1.5	2	32.9	35.8	1,373	2,410	143
☐ Submersible Pump Power & Monitoring 4G50+2×1.5	4G50+2×1.5	1	37.9	41.2	1,949	3,290	165
☐ Submersible Pump Power & Monitoring 4G70+2×1.5	4G70+2×1.5	2/0	42.8	46.5	2,717	4,380	186
3×Phase + 3G Split Earth + 2×1.5 mm² High-Power Pump Configurations (95–120 mm²) 2 sizes							
☐ Submersible Pump Power & Monitoring 3×95+3G16+2×1.5	3×95+3G16+2×1.5	3/0	45.8	49.8	3,226	5,120	199
☐ Submersible Pump Power & Monitoring 3×120+3G16+2×1.5	3×120+3G16+2×1.5	4/0	49.7	54.0	3,946	6,150	216

– Dimensions and weights are typical values per EN 50525-2-21 AD8 / DIN VDE 0250. Minimum fixed bending radius shown is 4 × OD.

Electrical & current ratings

12 sizes

Cross-section mm²	AWG ≈	Max. DC resistance 20 °C, Ω/km	1-core in air 30 °C, A	3–4 core in air 30 °C, A
1.5	16	13.3	23	18
2.5	14	7.98	30	25
4	12	4.95	41	34
6	10	3.3	53	44
10	8	1.91	74	61
16	6	1.21	99	82
25	4	0.78	131	108
35	2	0.554	162	135
50	1	0.386	202	168
70	2/0	0.272	250	207
95	3/0	0.206	301	250
120	4/0	0.161	352	292

– Current ratings at 30 °C ambient in free air per DIN VDE 0298-4 / EN 50565-1. Apply derating factors for elevated ambient temperature or reeling layer grouping.

Standards and approvals

- ✓ EN 50525-2-21 AD8 / DIN VDE 0250
- ✓ 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
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Web
tebaoflex.com/cables/submersible-pump-power-and-monitoring-hybrid-cable

Typical values for this cable type, based on EN 50525-2-21 AD8 / DIN VDE 0250. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.