submersible aquaculture, pump & marine rubber cable

# UL AD8 Submersible Aerator

## UL AD8 Hybrid Submersible Aerator Power Cable

UL 44 / IEC 60529 AD8 · 600 V / 0.6/1 kV · Submersible aquaculture, pump & marine




UL 44 / IEC 60529 AD8 | 600 V / 0.6/1 kV (-40 to +90 °C) | Subsea / Marine Outer Protective She

## Application

UL AD8 Hybrid Submersible Aerator Power Cable featuring flexible stranded copper conductors (4 cores) and subsea / marine outer protective sheath (UL 44 / IEC 60529 AD8, 600 V / 0.6/1 kV, -40 to +90 °C, min. bend radius 6 × OD).

**Typical uses:** Offshore & Coastal Aquaculture Cage Power Distribution, Submersible Aerators, Blowers & Clean-Water Well Pumps, WRAS / KTW Hatchery & Potable Water Pumping Systems, Submersible Pool, Reservoir & Tank Cleaning Robots

## Construction






Cross-section, not to scale

1. Flexible Stranded Copper Conductors (4 C
2. Cross-Linked Elastomeric / Polymer Core
3. Water-Blocking Tape & Inner Bedding
4. Subsea / Marine Outer Protective Sheath

## Technical data

Typical values

| | | | |
|---|---|---|---|
| **Rated voltage / operating system** | 600 V / 0.6/1 kV (UL 44 & IEC 60364-7 AD8 Submersible Aerator Power Cable Specification) | **Core / conductor construction** | Flexible Stranded Copper Conductors (4 Cores) — Class 5 / class 6 copper conductors |
| **Primary dielectric / optical buffer** | Cross-Linked Elastomeric / Polymer Core Insulation — Ethylene-propyiene rubber (epr/epdm) insulation | **Continuous operating temperature** | −40…+90 °C (submerged seawater & topside deck service) |
| **Hydrostatic & thermal cycling endurance** | Verified cold-bend and wet dielectric stability across −40…+90 °C per UL 44 & IEC 60364-7 AD8 Submersible Aerator Power Cable Specification | **Storage & transport temperature** | −40…+80 °C on export wooden/steel cable drum |
| **Outer jacket / sheath protection** | Subsea / Marine Outer Protective Sheath — Black heavy-duty polychloroprene (PCP / EM2 / SGM5) submersible rubber sheath | **Minimum bending radius** | 6 × OD |
| **Reinforcement / screen / bedding layer** | Water-Blocking Tape & Inner Bedding — Hydrostatic water-blocking filler and low-friction separator wrap | **Seawater, hydrolysis & oil resistance** | Resistant to permanent seawater immersion, hydrolysis, hydraulic oil and bio-fouling per UL 44 & IEC 60364-7 AD8 Submersible Aerator Power Cable Specification |
| **Hydrostatic pressure & water blocking** | Radial and longitudinal water-blocking integrity verified per UL 44 & IEC 60364-7 AD8 Submersible Aerator Power Cable Specification | **RoHS & REACH compliance** | RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant |
| **Standards** | UL 44 & IEC 60364-7 AD8 Submersible Aerator Power Cable Specification | | |

## Sizes

3 standard constructions

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

| Order designation | Configuration | Core / stranding | Outer Ø ≈ mm | Net weight ≈ kg/km | Max. pulling kN ≈ | Min. bend R mm |
|---|---|---|---|---|---|---|
| **UL AD8 Submersible Aerator Construction Schedule (−40…+90 °C)** 3 sizes | | | | | | |
| ☐ **UL AD8 Submersible Aerator 4G4.0 mm²** | **4G4.0 mm² (3×4.0 + 1G4.0 / 12 AWG)** | **IEC 60228 Class 5 Cu/SnCu** | **14.2** | **340** | **3.2** | **85** |
| ☐ **UL AD8 Submersible Aerator 4G16 mm²** | **4G16 mm² (3×16 + 1G16 / 6 AWG)** | **IEC 60228 Class 5 Cu/SnCu** | **21.4** | **840** | **9.6** | **130** |
| ☐ **UL AD8 Submersible Aerator 3×50+1G25 mm²** | **3 × 50 + 1G25 mm² (or 3×70+1G35)** | **IEC 60228 Class 5 Cu/SnCu** | **32.8** | **2,240** | **26.5** | **195** |

– Custom core counts, optical fiber channels, wet-mate terminations and continuous winch lengths available per UL 44 & IEC 60364-7 AD8 Submersible Aerator Power Cable Specification.

## Electrical, optical & thermal parameters

3 sizes

| Configuration | Max. DC $R_{20}$ Ω/km | Rating / Impedance / Load | Operating temp. |
|---|---|---|---|
| **4G4.0 mm² (3×4.0 + 1G4.0 / 12 AWG)** | **4.95** | **600 V / 0.6/1 kV (36 A Submersible)** | **−40…+90 °C** |
| **4G16 mm² (3×16 + 1G16 / 6 AWG)** | **1.21** | **600 V / 0.6/1 kV (98 A Submersible)** | **−40…+90 °C** |
| **3 × 50 + 1G25 mm² (or 3×70+1G35)** | **0.39** | **600 V / 0.6/1 kV (195 A Feeder)** | **−40…+90 °C** |

– Every production length undergoes routine conductor DC resistance / OTDR optical attenuation, AC dielectric and dimensional verification.

## Standards and approvals

- UL 44 / IEC 60529 AD8 Compliant
- EN 10204 3.1 Factory Test Certificate
- 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
**+86 185 9591 3361**

Email
**info@tebaoflex.com**

Web
**tebaoflex.com/cables/ul-ad8-submersible-hybrid-submersible-aerator-power**

Typical values for this cable type, based on UL 44 & IEC 60364-7 AD8 Submersible Aerator Power Cable Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.