aquaculture feeder drag-chain & subsea robotic torsion cable

FD 855 P Halogen-Free Chain

FD 855 P Halogen-Free PUR Power Chain Cable

VDE 0285 / UL AWM 21576 · 300/500 V (600 V UL) · Aquaculture feeder drag-chain &



VDE 0285 / UL AWM 21576 | 300/500 V (600 V UL) (-40 to +80 °C) | Subsea / Marine Outer Protective She

Application

FD 855 P Halogen-Free PUR Power Chain Cable featuring flexible stranded copper conductors (12 cores) and subsea / marine outer protective sheath (VDE 0285 / UL AWM 21576, 300/500 V (600 V UL), -40 to +80 °C, min. bend radius 5 × OD).

Typical uses: Automated Aquaculture Rail & Gantry Feeding Systems, Subsea ROV Electric Manipulator Wrists & Pan-Tilt Units, Hatchery Grading, Vaccination & Fish-Counting Automation, Seafood Cold-Storage & Automated Packaging Drag Chains

Construction





Cross-section, not to scale

1. Flexible Stranded Copper Conductors (12
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	300/500 V (600 V UL) (VDE 0285 & UL 21576 FD 855 P Halogen-Free PUR Power Chain Specification)	**Core / conductor construction**	Flexible Stranded Copper Conductors (12 Cores) — Class 5 / class 6 copper conductors
Primary dielectric / optical buffer	Cross-Linked Elastomeric / Polymer Core Insulation — Thermoplastic elastomer (tpe) core insulation	**Continuous operating temperature**	−40…+80 °C (submerged seawater & topside deck service)
Hydrostatic & thermal cycling endurance	Verified cold-bend and wet dielectric stability across −40…+80 °C per VDE 0285 & UL 21576 FD 855 P Halogen-Free PUR Power Chain Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	Subsea / Marine Outer Protective Sheath — Black hydrolysis- & abrasion-resistant marine Polyurethane (PUR) outer sheath	**Minimum bending radius**	5 × 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 VDE 0285 & UL 21576 FD 855 P Halogen-Free PUR Power Chain Specification
Hydrostatic pressure & water blocking	Radial and longitudinal water-blocking integrity verified per VDE 0285 & UL 21576 FD 855 P Halogen-Free PUR Power Chain Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	VDE 0285 & UL 21576 FD 855 P Halogen-Free PUR Power Chain 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
FD 855 P Halogen-Free Chain Construction Schedule (−40…+80 °C) 3 sizes						
☐ **FD 855 P Halogen-Free Chain 4G1.5 / 5C18AWG**	**4G1.5 mm² (or 5C × 18 AWG)**	**IEC 60228 Class 5/6 Cu/SnCu**	**9.6**	**145**	**2.2**	**55**
☐ **FD 855 P Halogen-Free Chain 7G1.5 / 8C16AWG**	**7G1.5 mm² (or 8C × 16 AWG)**	**IEC 60228 Class 5/6 Cu/SnCu**	**12.2**	**235**	**3.6**	**70**
☐ **FD 855 P Halogen-Free Chain 12G2.5 / 16C16AWG**	**12G2.5 mm² (or 16C × 16 AWG)**	**IEC 60228 Class 5/6 Cu/SnCu**	**17.4**	**510**	**7.5**	**105**

– Custom core counts, optical fiber channels, wet-mate terminations and continuous winch lengths available per VDE 0285 & UL 21576 FD 855 P Halogen-Free PUR Power Chain Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance / Load	Operating temp.
4G1.5 mm² (or 5C × 18 AWG)	**13.30**	**300/500 V (600 V UL) (18 A)**	**−40…+80 °C**
7G1.5 mm² (or 8C × 16 AWG)	**13.30**	**300/500 V (600 V UL) (16 A)**	**−40…+80 °C**
12G2.5 mm² (or 16C × 16 AWG)	**7.98**	**300/500 V (600 V UL) (22 A)**	**−40…+80 °C**

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

Standards and approvals

- VDE 0285 / UL AWM 21576 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/fd-855-p-halogen-free-pur-power-chain-cable

Typical values for this cable type, based on VDE 0285 & UL 21576 FD 855 P Halogen-Free PUR Power Chain Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.