Aggressive thermal-water & oil-sludge submersible cable

07BN2-F & H07RN-F OR

450/750 V Thermal & Oil Water Pump Cable

EN 50525-2-21 · 450/750 V · Aggressive thermal-water & oil-sludge submersible cable



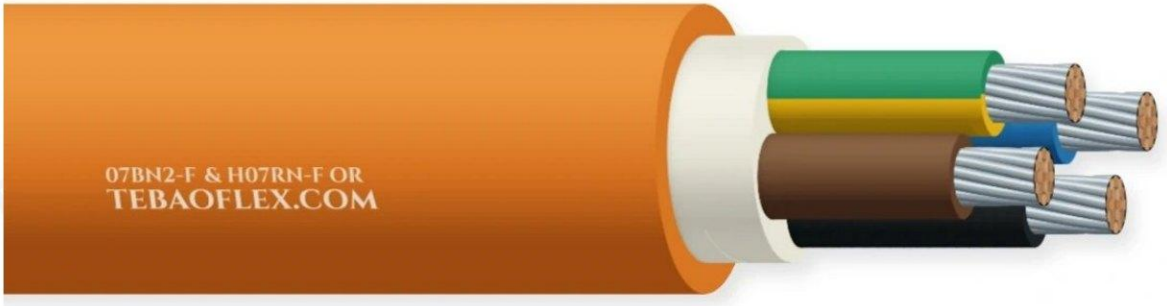
EN 50525-2-21 | 450/750 V (+85 °C Water) | 100 m Submersible

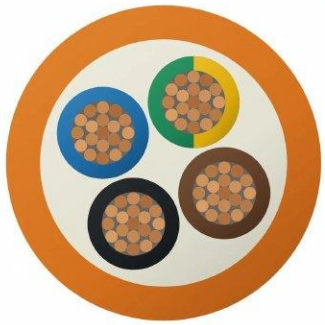
Application

07BN2-F (Thermal-Water +85°C Thermal/Aggressive-Water Orange CPE Submersible Pump Cable) & H07RN-F OR (Oil-Resistant Tinned-Copper Oil-Polluted Water Submersible Cable) (EN 50525-2-21, 450/750 V, -25 to +85 °C).

Typical uses: Deep-Well Potable Water Pumping, Municipal Sewage & Wastewater Plants, Mine Dewatering & Slurry Dredging, Geothermal, Spa & Pool Installations

Construction





Cross-section, not to scale

1. Class 5 Tinned Copper Conductors
2. Heat-Resistant EPR Insulation (450/750 V)
3. Orange CPE Thermal-Water Sheath (+85 °C)

Technical data

Typical values

Rated voltage / transmission duty	450/750 V (DIN EN 50525-2-21 / IEC 60245)	**Core / conductor construction**	Class 5 Tinned Copper Conductors — IEC 60228 Class 5 flexible tinned copper resisting sulfurous & acidic water corrosion
Primary dielectric / buffering	Heat-Resistant EPR Insulation (450/750 V) — Cross-linked EPR core insulation color-coded Brown, Black, Blue & Green/Yellow	**Continuous operating temperature**	−25…+85 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per DIN EN 50525-2-21 / IEC 60245	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Orange CPE Thermal-Water Sheath (+85 °C) — Orange CPE-based elastomer for +85 °C aggressive thermal/spa wells (Black OR rubber on Oil-Resistant)	**Minimum bending radius**	6 × OD
Hydrostatic, tensile & crush duty	Heat-Resistant EPR Insulation (450/750 V) — Cross-linked EPR core insulation color-coded Brown, Black, Blue & Green/Yellow	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per DIN EN 50525-2-21 / IEC 60245
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per DIN EN 50525-2-21 / IEC 60245	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	DIN EN 50525-2-21 / IEC 60245		

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	Tensile rating kN ≈	Min. bend R mm
07BN2-F & H07RN-F OR Construction Schedule (−25…+85 °C) 3 sizes						
☐ 07BN2-F 4G16 mm²	4G16 mm² (3×16 + 1G16)	IEC 60228 Class 5 flexible Cu/SnCu	21.8	840	2.4	130
☐ 07BN2-F 4G35 mm²	4G35 mm² (3×35 + 1G16)	IEC 60228 Class 5 flexible Cu/SnCu	28.6	1,620	5.2	172
☐ 07BN2-F 3×70 + 3G16 mm²	3 × 70 mm² + 3G16 mm²	IEC 60228 Class 5 flexible Cu/SnCu	38.4	3,180	10.5	230

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per DIN EN 50525-2-21 / IEC 60245.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4G16 mm² (3×16 + 1G16)	1.21	450/750 V (94 A submerged)	−25…+85 °C
4G35 mm² (3×35 + 1G16)	0.55	450/750 V (152 A submerged)	−25…+85 °C
3 × 70 mm² + 3G16 mm²	0.27	450/750 V (235 A submerged)	−25…+85 °C

– Every production length undergoes routine conductor DC resistance, high-voltage dielectric or OTDR continuity and dimensional verification.

Standards and approvals

- EN 50525-2-21 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/07bn2-f-h07rn-f-or

Typical values for this cable type, based on DIN EN 50525-2-21 / IEC 60245. Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.