0.6/1 kV 3GI3 EPR & EM2 round/screened/flat submersible cable

S1RN8-F / S1RC4N8-F & S1BNH2-F

0.6/1 kV 3GI3/EM2 Submersible Cable

VDE 0207-20 / EN 50363 · 0.6/1 kV · 0.6/1 kv 3gi3 epr & em2 round/screened/flat



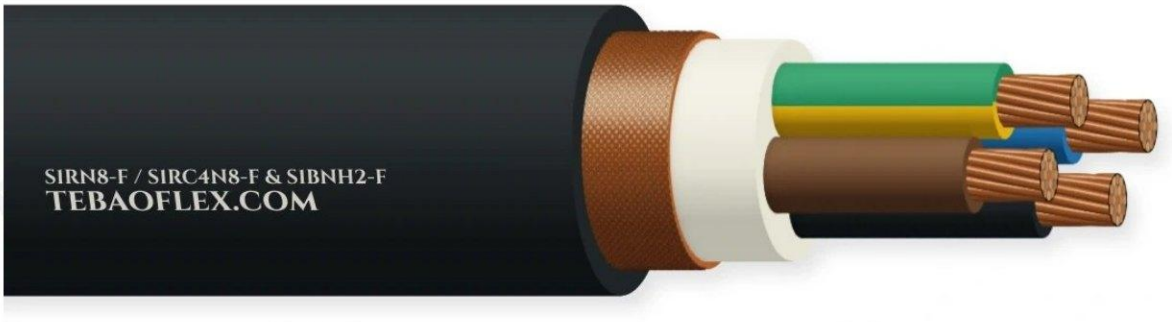
VDE 0207-20 3GI3 / EM2 | **0.6/1 kV (4.0 kV Test)** | **100–300 m Round & Flat**

Application

S1RN8-F (SUBMERSIBLE), S1RC4N8-F (SUBMERSIBLE S) & S1BNH2-F (Flat Submersible 300m Flat) 0.6/1 kV 3GI3 EPR-Insulated EM2 Rubber Submersible Pump Cable (VDE 0207-20 / EN 50363, 0.6/1 kV, -25 to +80 °C, min. bend radius 6 × OD).

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 Copper Conductors (Bare / Tinned)
2. 3GI3 Grade EPR Core Insulation (0.6/1 kV)
3. Rubber Inner Sheath & Bare Copper Braid (C4)
4. Black EM2 Submersible Elastomer Sheath

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (VDE 0207-20 3GI3 & EN 50363-2-1 EM2 Submersible Standard)	**Core / conductor construction**	Class 5 Copper Conductors (Bare / Tinned) — Class 5 bare Cu (S1RN8-F / S1RC4N8-F) or parallel tinned Cu in 300 m S1BNH2-F Flat Submersible
Primary dielectric / buffering	3GI3 Grade EPR Core Insulation (0.6/1 kV) — VDE 0207-20 3GI3 cross-linked ethylene propylene rubber (4.0 kV test, +90 °C)	**Continuous operating temperature**	−25…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per VDE 0207-20 3GI3 & EN 50363-2-1 EM2 Submersible Standard	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Black EM2 Submersible Elastomer Sheath — EN 50363-2-1 EM2 synthetic rubber jacket for 100 m (round) to 300 m (Flat Submersible) depth	**Minimum bending radius**	6 × OD
Hydrostatic, tensile & crush duty	Rubber Inner Sheath & Bare Copper Braid (C4) — Extruded rubber inner sheath + bare copper wire braid screen on S1RC4N8-F SUBMERSIBLE S	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per VDE 0207-20 3GI3 & EN 50363-2-1 EM2 Submersible Standard
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per VDE 0207-20 3GI3 & EN 50363-2-1 EM2 Submersible Standard	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	VDE 0207-20 3GI3 & EN 50363-2-1 EM2 Submersible Standard		

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
S1RN8-F / S1RC4N8-F & S1BNH2-F Construction Schedule (−25…+80 °C) 3 sizes						
☐ **S1RN8-F 4G16 mm²**	**4G16 mm² (3×16 + 1G16)**	**IEC 60228 Class 5 flexible Cu/SnCu**	**21.8**	**840**	**2.4**	**130**
☐ **S1RN8-F 4G35 mm²**	**4G35 mm² (3×35 + 1G16)**	**IEC 60228 Class 5 flexible Cu/SnCu**	**28.6**	**1,620**	**5.2**	**172**
☐ **S1RN8-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 VDE 0207-20 3GI3 & EN 50363-2-1 EM2 Submersible Standard.

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**	**0.6/1 kV (94 A submerged)**	**−25…+80 °C**
4G35 mm² (3×35 + 1G16)	**0.55**	**0.6/1 kV (152 A submerged)**	**−25…+80 °C**
3 × 70 mm² + 3G16 mm²	**0.27**	**0.6/1 kV (235 A submerged)**	**−25…+80 °C**

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

Standards and approvals

- VDE 0207-20 / EN 50363 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/s1rn8-f-s1rc4n8-f-s1bnh2-f

Typical values for this cable type, based on VDE 0207-20 3GI3 & EN 50363-2-1 EM2 Submersible Standard. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.