Power & distribution cables

BS 7870-4.20 DNO Three-Core MV 6.35/11kV–19/33kV

(SPEN/SSE)



BS 7870-4.20 · 6.35/11 (12) kV – 19/33 (36) kV · -25°C to +90°C · Min. bend 15 × OD

BS 7870-4.20 | 6.35/11–19/33 kV

Application

BS 7870-4.20 DNO Three-Core MV 6.35/11kV–19/33kV (SPEN/SSE) manufactured to BS 7870-4.20, rated 6.35/11 (12) kV – 19/33 (36) kV and -25°C to +90°C with a 15 × OD minimum bending radius for renewable energy installations.

Typical uses: Power distribution & utility networks, Railways, tunnels & public infrastructure, Process instrumentation & oil/gas skids, Industrial automation & control cabinets, Renewable energy, marine & heavy industry

Construction





Cross-section, not to scale

1	Conductor	3×185 mm² Class 1 Solid Al
2	Insulation & Core Identification	BS 7870-4.20 11kV XLPE dielectric (185 mm² Class 1 Solid Aluminium)
3	Screen / Bedding / Armour Layer	Extruded polymeric interstitial filler & binder tape
4	Outer Protective Sheath	Red Medium-Density Polyethylene (MDPE) DNO outer sheath (OD 68.5 mm)

Technical data

Typical values

Nominal / reference voltage	6.35/11 (12) kV – 19/33 (36) kV	Conductor & core insulation	3×185 mm² Class 1 Solid Al · BS 7870-4.20 11kV XLPE dielectric (185 mm² Class 1 Solid Aluminium)
Routine dielectric / continuity test	100% factory drum spark & continuity verified	Operating temperature range	-25°C to +90°C
Short-circuit / peak thermal limit	+160 °C to +250 °C (5 s conductor thermal limit)	Flame & fire performance	BS 7870-4.20
Minimum bending radius	15 × OD	Screening / armour architecture	Extruded polymeric interstitial filler & binder tape
Outer sheath material & colour	Red Medium-Density Polyethylene (MDPE) DNO outer sheath (OD 68.5 mm)	Standards	BS 7870-4.20

Sizes

3 standard constructions

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

Part designation	Configuration	Conductor & shield	Insulation / wall	Outer sheath	Outer diameter mm	Min. bend radius mm	Max. conductor resistance @ 20 °C Ω/km	Conductor weight kg/km	Cable weight kg/km	Key electrical / optical rating
BS 7870-4.20 DNO Three-Core MV 6.35/11kV–19/33kV 3 sizes										
☐ BS 7870-4.20 DNO Three-Core MV 6.35/11kV–19/33kV (3×185 mm²)	3×185 mm²	Class 1/2 Aluminium	BS 7870-4.20 11kV XLPE dielectric	Outdoor PE	68.5	1,028	0.15	2,942.0	7,742	286 A
☐ BS 7870-4.20 DNO Three-Core MV 6.35/11kV–19/33kV (3×240 mm²)	3×240 mm²	Class 1/2 Aluminium	BS 7870-4.20 11kV XLPE dielectric	Outdoor PE	80.8	1,212	0.12	4,096.4	10,780	336 A
☐ BS 7870-4.20 DNO Three-Core MV 6.35/11kV–19/33kV (3×300 mm²)	3×300 mm²	Class 1/2 Aluminium	BS 7870-4.20 11kV XLPE dielectric	Outdoor PE	94.5	1,418	0.09	5,602.7	14,744	385 A

– Dimensions and weights are nominal manufacturing targets subject to standard production tolerances.

Standards and approvals

- ✓ BS 7870-4.20 Compliant
- ✓ EN 10204 3.1 Factory Test Certificate
- ✓ CE, UKCA, 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/bs-7870-4-20-dno-three-core-mv-6-35-11kv-19-33kv-spen-sse

Typical values for this cable type, based on Reference specification per BS 7870-4.20 (BS 7870-4.20 DNO Three-Core MV 6.35/11kV–19/33kV). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.