Power & distribution cables

BS 7870-4.10 DNO Single-Core MV

6.35/11kV–19/33kV Utility Cable

BS 7870-4.10 · 6.35/11–19/33 kV · -25°C to +90°C · Min. bend 15 × OD

BS 7870-4.10 | 6.35/11–19/33 kV



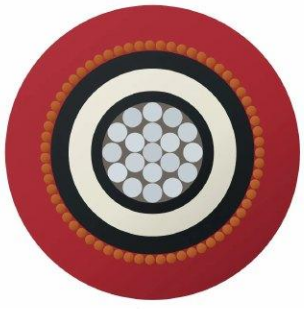
Application

BS 7870-4.10 DNO Single-Core MV 6.35/11kV–19/33kV Utility Cable manufactured to BS 7870-4.10, rated 6.35/11 (12) kV / 12.7/22 (24) 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**	1×185 mm² Class 1 Solid / Class 2 Stranded Al
2	**Insulation & Core Identification**	BS 7870-4.10 XLPE utility dielectric (185 mm² Aluminium)
3	**Screen / Bedding / Armour Layer**	Semi-conducting water-blocking swellable tape + Helical copper wire earth screen (35 mm²) + equalising tape
4	**Outer Protective Sheath**	Red Medium-Density Polyethylene (MDPE Type DMP2) utility outer sheath (OD 32.8 mm)

Technical data

Typical values

Nominal / reference voltage	6.35/11 (12) kV / 12.7/22 (24) kV / 19/33 (36) kV	**Conductor & core insulation**	1×185 mm² Class 1 Solid / Class 2 Stranded Al · BS 7870-4.10 XLPE utility dielectric (185 mm² 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 7870-4.10
Minimum bending radius	15 × OD	**Screening / armour architecture**	Semi-conducting water-blocking swellable tape + Helical copper wire earth screen (35 mm²) + equalising tape
Outer sheath material & colour	Red Medium-Density Polyethylene (MDPE Type DMP2) utility outer sheath (OD 32.8 mm)	**Standards**	BS 7870-4.10

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 7870-4.10 DNO Single-Core MV 3 sizes										
☐ BS 7870-4.10 DNO Single-Core MV (1×185 mm²)	1×185 mm²	Class 1/2 Aluminium	BS 7870-4.10 XLPE utility dielectric	Outdoor PE	32.8	492	0.15	674.5	1,775	286 A
☐ BS 7870-4.10 DNO Single-Core MV (1×240 mm²)	1×240 mm²	Class 1/2 Aluminium	BS 7870-4.10 XLPE utility dielectric	Outdoor PE	38.7	580	0.12	939.4	2,472	336 A
☐ BS 7870-4.10 DNO Single-Core MV (1×300 mm²)	1×300 mm²	Class 1/2 Aluminium	BS 7870-4.10 XLPE utility dielectric	Outdoor PE	45.3	680	0.09	1,284.8	3,381	385 A

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

Standards and approvals

- ✓ BS 7870-4.10 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-7870-4-10-dno-single-core-mv-6-35-11kv-19-33kv-enw-nged-spen-sse-ukpn

Typical values for this cable type, based on Reference specification per BS 7870-4.10 (BS 7870-4.10 DNO Single-Core MV). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.