Aluminium HEPR screened MV power cable

ARG7H1OR

12/20 kV Aluminium HEPR Screened MV Power Cable

CEI UNEL 35755 / IEC 60502-2 · 12/20 (24) kV · −25…+90 °C three-core MV distribution cable

12/20 (24) kV | Al + G7 HEPR | CEI UNEL 35755



Application

ARG7H1OR 12/20 (24) kV medium-voltage three-core distribution cable featuring compact Class 2 aluminium conductors, triple-extruded G7 HEPR dielectric, per-phase H1 copper tape screens and a flame-retardant red Rz PVC outer sheath.

Typical uses: Medium-Voltage Industrial Power Distribution, Utility Substations & Switchgear Interconnections, Renewable Energy Collector & Transformer Feeders, Heavy Manufacturing & Process Plant Networks

Construction





Cross-section, not to scale

1	Aluminium Conductors (3x50 mm²)	CEI UNEL 35755 / IEC 60502-2
2	Triple-Extruded Core Stack	CEI UNEL 35755 / IEC 60502-2
3	Individual Phase Screen (H1)	CEI UNEL 35755 / IEC 60502-2
4	Interstitial Filler Bedding	CEI UNEL 35755 / IEC 60502-2
5	Common Outer Sheath (OR)	CEI UNEL 35755 / IEC 60502-2

Technical data

Typical values

Rated voltage / transmission duty	12/20 (24) kV (CEI UNEL 35755 / IEC 60502-2)	**Core / conductor construction**	Aluminium Conductors (3x50 mm²) — Class 2 compact circular stranded aluminium alloy conductors (Code A) for medium-voltage distribution networks
Primary dielectric / insulation	Triple-Extruded Core Stack — Simultaneously extruded inner semiconductive screen, high-modulus G7 HEPR insulation (105 °C rated), and strippable outer semicon	**Continuous operating temperature**	−25…+90 °C (rated operating envelope)
Storage & transport temperature	−40…+80 °C on export drum or reel	**Outer protection / sheath**	Common Outer Sheath (OR) — Abrasion- and flame-retardant red Rz polyvinyl chloride (PVC) overall outer jacket
Minimum bending radius	14 × OD	**Structural layer count**	5 concentric functional layers
Environmental & chemical resistance	Industrial moisture, oils and mechanical wear per CEI UNEL 35755 / IEC 60502-2	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	CEI UNEL 35755 / IEC 60502-2		

Sizes

5 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	Weight ≈ kg/km	Tensile load kN ≈	Min. bend R mm
ARG7H1OR Construction Schedule (−25…+90 °C) 5 sizes						
☐ ARG7H1OR 3×35 mm² 12/20 kV	3 × 35 mm² Al	Class 2 compact Al + H1 screen	46.0	1,820	10.5	645
☐ ARG7H1OR 3×50 mm² 12/20 kV	3 × 50 mm² Al	Class 2 compact Al + H1 screen	49.0	2,090	15.0	690
☐ ARG7H1OR 3×70 mm² 12/20 kV	3 × 70 mm² Al	Class 2 compact Al + H1 screen	53.0	2,480	21.0	745
☐ ARG7H1OR 3×95 mm² 12/20 kV	3 × 95 mm² Al	Class 2 compact Al + H1 screen	56.5	2,910	28.5	790
☐ ARG7H1OR 3×120 mm² 12/20 kV	3 × 120 mm² Al	Class 2 compact Al + H1 screen	60.0	3,340	36.0	840

– Custom core counts, cross-sections, sheath colours and factory-tested cut lengths available per CEI UNEL 35755 / IEC 60502-2.

Electrical, optical & thermal parameters

5 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Capacity	Operating temp.
3 × 35 mm² Al	0.87	12/20 kV / 135 A	−25…+90 °C
3 × 50 mm² Al	0.64	12/20 kV / 162 A	−25…+90 °C
3 × 70 mm² Al	0.44	12/20 kV / 200 A	−25…+90 °C
3 × 95 mm² Al	0.32	12/20 kV / 242 A	−25…+90 °C
3 × 120 mm² Al	0.25	12/20 kV / 278 A	−25…+90 °C

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

Standards and approvals

- CEI UNEL 35755 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/arg7h1or-12-20kv-aluminium-hepr-screened-mv-power-cable

Typical values for this cable type, based on CEI UNEL 35755 / IEC 60502-2. Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.