



Mining trailing & reeling cables

BS 6708 Type 201 / 211

BS 6708 Type 201 & Type 211 Screened Armoured Trailing Cable

640/1,100 V 3P (Type 201) & 3P+E (Type 211) screened pliable wire-armoured cables



BS 6708:1998

640/1,100 V · Types 201 & 211

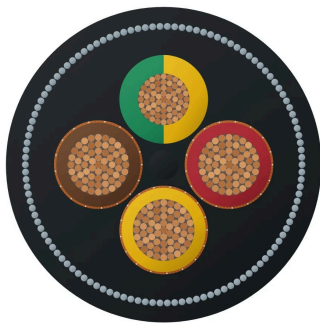
Screened + Pliable Wire Armour

Application

640/1,100 V individually phase-screened and pliable wire-armoured trailing cables to BS 6708:1998 in 3-core (Type 201) and 3P+E (Type 211) constructions from 10 to 120 mm², with MEPR insulation, composite copper/nylon screens and yellow-striped PCP jacket.

Typical uses: Mobile quarry crushers & screens, Mine roadway power extensions, Stage loaders & armoured face conveyors, Gate-end box feeder interconnections, Deep-mine gassy workings, Surface opencast excavating plant

Construction



Cross-section, not to scale

1	Phase & earth conductors	IEC 60228 Class 5
2	Core insulation	BS 7655 MEPR
3	Identification tape	
4	Composite phase screens	
5	Elastomeric cradle	
6	Inner bedding sheath	
7	Pliable wire armour (PWA)	BS 6708:1998 PWA
8	Outer jacket	BS 6708:1998 / BS 7655 EM2

Technical data

Typical values

Rated voltage (U0/U)	640/1,100 V AC (U0/U)	AC test voltage	2.5 kV AC for 5 minutes on finished cable
Current ratings (25 °C)	63 to 295 A continuous current rating at 25 °C ambient across 10 to 120 mm ²	Screens, earth & armour DC res.	Individual composite copper/nylon braid over 3 phase cores (0.500–1.610 Ω/km in parallel) + galvanized steel pliable wire armour (0.299–1.970 Ω/km) + unscreened earth core (10–70 mm ²) in Type 211
Reactance, IR & voltage drop	0.095–0.121 Ω/km (50 Hz) / 0.114–0.145 Ω/km (60 Hz) reactance · 250–560 MΩ·km min. IR at 20 °C · 0.38–4.11 mV/A/m 3-phase voltage drop	Max. conductor & SC temperature	+90 °C maximum continuous conductor temperature · +250 °C short-circuit temperature (MEPR insulation)
Operating temperature range	–25 °C to +90 °C operating range (current ratings referenced at 25 °C ambient)	Minimum bending radius	400 to 810 mm (Type 201) · 430 to 910 mm (Type 211), corresponding to 10 × overall diameter
Maximum pulling tension	180 to 2,000 kgf (Type 201) · 240 to 2,000 kgf (Type 211) maximum pulling tension	Multi-layer armoured construction	MEPR-insulated Class 5 tinned copper cores + composite Cu/nylon phase screens + elastomeric cradle + PCP inner bedding + galvanized steel PWA + heavy-duty PCP outer jacket
Flame retardance	Flame retardant polychloroprene inner and outer sheaths to BS 6708:1998 / IEC 60332-1-2	Crush, oil & quarry resistance	Pliable galvanized steel wire armour + heavy-duty PCP jacket resists rockfall impact, quarry abrasion, mineral oils (IEC 60811-404) and mine water
Standards	BS 6708:1998 (Types 201 & 211); BS EN / IEC 60228 Class 5; BS 7655		

Sizes

16 standard constructions

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

Type · nominal CSA mm ²	Earth core CSA	Insul.+tape Ø mm	Screen Ø mm	Inner sh. Ø mm	Min. OD mm	Max. OD mm	Min. R mm	Max. pull kgf	Mass ≈ kg/km	Current (25 °C) A
BS 6708 Type 201 · 640/1,100 V (3 Screened Phase Cores + Pliable Wire Armour) 8 sizes										
☐ Type 201 · 3×10	— (3P only)	7.70	9.70	25.5–27.5	37.3	39.8	400	180	2,900	63
☐ Type 201 · 3×16	— (3P only)	9.15	11.15	28.7–30.7	40.6	43.4	440	290	3,400	85
☐ Type 201 · 3×25	— (3P only)	10.65	12.65	32.2–34.2	44.6	47.4	480	450	4,100	110
☐ Type 201 · 3×35	— (3P only)	11.90	13.90	35.2–37.2	48.3	51.1	510	630	4,800	135
☐ Type 201 · 3×50	— (3P only)	13.90	15.90	39.5–41.5	53.6	57.4	580	900	5,900	170
☐ Type 201 · 3×70	— (3P only)	16.00	18.00	44.5–47.0	60.7	64.5	650	1,260	7,700	205
☐ Type 201 · 3×95	— (3P only)	17.55	19.55	52.5–55.5	71.8	75.8	760	1,710	10,900	250
☐ Type 201 · 3×120	— (3P only)	20.35	22.35	56.6–59.6	76.7	81.0	810	2,000	12,500	295
BS 6708 Type 211 · 640/1,100 V (3 Screened Phase Cores + 1 Unscreened Earth Core + Pliable Wire Armour) 8 sizes										
☐ Type 211 · 3×10+10E	1×10 mm ²	7.70	9.70	27.9–29.9	39.8	42.3	430	240	3,200	63
☐ Type 211 · 3×16+16E	1×16 mm ²	9.15	11.15	31.6–33.6	44.0	46.8	470	380	3,900	85
☐ Type 211 · 3×25+16E	1×16 mm ²	10.65	12.65	35.4–37.4	48.5	51.3	520	540	4,700	110
☐ Type 211 · 3×35+25E	1×25 mm ²	11.90	13.90	38.8–40.8	52.7	56.5	570	780	5,600	135
☐ Type 211 · 3×50+35E	1×35 mm ²	13.90	15.90	43.7–46.2	59.7	63.5	640	1,110	7,300	170
☐ Type 211 · 3×70+50E	1×50 mm ²	16.00	18.00	51.8–54.8	68.8	72.8	730	1,560	9,500	205
☐ Type 211 · 3×95+70E	1×70 mm ²	17.55	19.55	60.3–63.3	80.6	84.9	850	2,000	13,300	250
☐ Type 211 · 3×120+70E	1×70 mm ²	20.35	22.35	64.9–67.9	86.2	90.5	910	2,000	15,400	295

– Minimum bending radius is 10 × maximum overall diameter across all 16 configurations (400 to 810 mm on Type 201; 430 to 910 mm on Type 211).

Electrical & impedance data

16 sizes

Type · nominal CSA mm ²	Max. phase DC res. Ω/km	Max. earth DC res. Ω/km	3-screen parallel res. Ω/km	Max. armour DC res. Ω/km	Reactance (50 Hz) Ω/km	Reactance (60 Hz) Ω/km	Min. IR (20 °C) MΩ·km	3-phase V-drop mV/A/m
BS 6708 Type 201 · Electrical Parameters 8 sizes								
Type 201 · 3×10	1.950	—	1.330	1.970	0.121	0.145	560	4.11
Type 201 · 3×16	1.240	—	1.610	1.760	0.111	0.134	435	2.62
Type 201 · 3×25	0.795	—	1.100	1.450	0.107	0.128	375	1.68
Type 201 · 3×35	0.565	—	1.200	1.030	0.102	0.123	325	1.20
Type 201 · 3×50	0.393	—	1.400	0.715	0.099	0.119	285	0.85
Type 201 · 3×70	0.277	—	0.700	0.504	0.097	0.116	260	0.61
Type 201 · 3×95	0.210	—	0.850	0.382	0.096	0.116	250	0.47
Type 201 · 3×120	0.164	—	0.500	0.299	0.095	0.114	250	0.38
BS 6708 Type 211 · Electrical Parameters 8 sizes								
Type 211 · 3×10+10E	1.950	1.950	1.330	1.810	0.121	0.145	560	4.11
Type 211 · 3×16+16E	1.240	1.240	1.610	1.630	0.111	0.134	435	2.62
Type 211 · 3×25+16E	0.795	1.240	1.100	1.450	0.107	0.128	375	1.68
Type 211 · 3×35+25E	0.565	0.795	1.200	1.030	0.102	0.123	325	1.20
Type 211 · 3×50+35E	0.393	0.565	1.400	0.715	0.099	0.119	285	0.85
Type 211 · 3×70+50E	0.277	0.393	0.700	0.504	0.097	0.116	260	0.61
Type 211 · 3×95+70E	0.210	0.277	0.850	0.382	0.096	0.116	250	0.47
Type 211 · 3×120+70E	0.164	0.277	0.500	0.299	0.095	0.114	250	0.38

– In Type 211, the unscreened Green/Yellow earth conductor operates in parallel with the three composite phase screens and the galvanized steel pliable wire armour.

Standards and approvals

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.

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Email

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Typical values for this cable type, based on BS 6708:1998. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.