



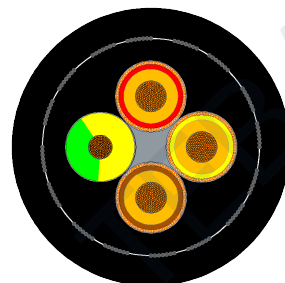
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

BS 6708 TYPE 201 / TYPE 211 640/1100 V CABLE

Flexible trailing cable with galvanised steel pliable wire armouring



APPLICATION

For use as mine roadway extension cables, mechanically protected trailing cables in quarries and coalface lighting.

ENVIRONMENT

Designed for mining and quarry environments, including surface applications and coalface service.

CONSTRUCTION

Parameter	Value
Conductor	Three flexible tinned annealed copper conductors, MEPR insulated and copper/nylon screened
Type 201	Three power cores laid up around an elastomeric cradle centre
Type 211	Three power cores plus one unscreened earth core laid up around an elastomeric centre
Bedding	Extruded PCP bedding sheath
Armour	Pliable galvanised steel wire armour
Overall jacket	Heavy duty flame retardant elastomeric compound, PCP black with yellow stripe

CABLE CHARACTERISTICS

Parameter	Value
Standard	BS 6708:1998
Rated voltage	640/1100 V
Test voltage	2.5 kV
Phase identification	Red, yellow and brown
Type 211 earth core	Unscreened earth core with green/yellow identification

TECHNICAL DATA

Complete nominal dimensional data. Source ordering codes have been omitted.

TYPE 201 CABLE DIMENSIONS								
Parameter	10	16	25	35	50	70	95	120
Nominal diameter over insulation and tape mm	7.70	9.15	10.65	11.90	13.90	16.00	17.55	20.35
Nominal diameter over screen mm	9.70	11.15	12.65	13.90	15.90	18.00	19.55	22.35
Diameter over inner sheath - minimum mm	25.50	28.70	32.20	35.20	39.50	44.50	52.50	56.60
Diameter over inner sheath - maximum mm	27.50	30.70	34.20	37.20	41.50	47.00	55.50	59.60
Overall diameter - minimum mm	37.30	40.60	44.60	48.30	53.60	60.70	71.80	76.70
Overall diameter - maximum mm	39.80	43.40	47.40	51.10	57.40	64.50	75.80	81.00
Minimum bending radius mm	400	440	480	510	580	650	760	810
Maximum pulling tension kgf	180	290	450	630	900	1260	1710	2000
Approximate cable weight kg/km	2900	3400	4100	4800	5900	7700	10900	12500

TYPE 211 CABLE DIMENSIONS								
Parameter	10	16	25	35	50	70	95	120
Phase diameter over insulation and tape mm	7.70	9.15	10.65	11.90	13.90	16.00	17.55	20.35
Phase diameter over screen mm	9.70	11.15	12.65	13.90	15.90	18.00	19.55	22.35
Earth conductor nominal CSA mm2	10	16	16	25	35	50	70	70
Earth diameter over insulation and tape mm	9.70	11.15	12.65	13.90	15.90	18.00	19.55	22.35
Diameter over inner sheath - minimum mm	27.90	31.60	35.40	38.80	43.70	51.80	60.30	64.90
Diameter over inner sheath - maximum mm	29.90	33.60	37.40	40.80	46.20	54.80	63.30	67.90
Overall diameter - minimum mm	39.80	44.00	48.50	52.70	59.70	68.80	80.60	86.20
Overall diameter - maximum mm	42.30	46.80	51.30	56.50	63.50	72.80	84.90	90.50
Minimum bending radius mm	430	470	520	570	640	730	850	910
Maximum pulling tension kgf	240	380	540	780	1110	1560	2000	2000
Approximate cable weight kg/km	3200	3900	4700	5600	7300	9500	13300	15400

TECHNICAL DATA

Complete nominal dimensional data. Source ordering codes have been omitted.

TYPE 201 ELECTRICAL DETAILS								
Parameter	10	16	25	35	50	70	95	120
Continuous current rating at 25 deg C ambient A	63	85	110	135	170	205	250	295
Power conductor DC resistance at 20 deg C ohm/km	1.950	1.240	0.795	0.565	0.393	0.277	0.210	0.164
Screens in parallel DC resistance ohm/km	1.330	1.610	1.100	1.200	1.400	0.700	0.850	0.500
Armour DC resistance at 20 deg C ohm/km	1.970	1.760	1.450	1.030	0.715	0.504	0.382	0.299
Nominal reactance at 50 Hz ohm/km	0.121	0.111	0.107	0.102	0.099	0.097	0.096	0.095
Nominal reactance at 60 Hz ohm/km	0.145	0.134	0.128	0.123	0.119	0.116	0.116	0.114
Min. insulation resistance of power cores MOhm/km	560	435	375	325	285	260	250	250
3 phase voltage drop at 50 Hz mV/A/m	4.11	2.62	1.68	1.20	0.85	0.61	0.47	0.38

TECHNICAL DATA

Complete nominal dimensional data. Source ordering codes have been omitted.

TYPE 211 ELECTRICAL DETAILS								
Parameter	10	16	25	35	50	70	95	120
Continuous current rating at 25 deg C ambient A	63	85	110	135	170	205	250	295
Power conductor DC resistance at 20 deg C ohm/km	1.950	1.240	0.795	0.565	0.393	0.277	0.210	0.164
Earth conductor DC resistance at 20 deg C ohm/km	1.950	1.240	1.240	0.795	0.565	0.393	0.277	0.277
Screens in parallel DC resistance ohm/km	1.330	1.610	1.100	1.200	1.400	0.700	0.850	0.500
Armour DC resistance at 20 deg C ohm/km	1.810	1.630	1.450	1.030	0.715	0.504	0.382	0.299
Nominal reactance at 50 Hz ohm/km	0.121	0.111	0.107	0.102	0.099	0.097	0.096	0.095
Nominal reactance at 60 Hz ohm/km	0.145	0.134	0.128	0.123	0.119	0.116	0.116	0.114
Min. insulation resistance of power cores MOhm/km	560	435	375	325	285	260	250	250
3 phase voltage drop at 50 Hz mV/A/m	4.11	2.62	1.68	1.20	0.85	0.61	0.47	0.38

NOTES

Nominal values are for cable selection. Actual cable dimensions may vary due to manufacturing tolerances.

CERTIFICATIONS

