



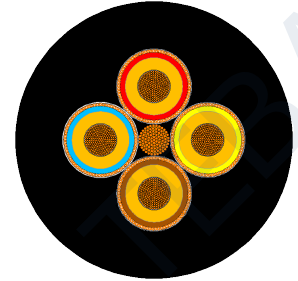
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

BS 6708 TYPE 307M 1900/3300 V CABLE

Power supply cable for coalcutters and other machines



APPLICATION

Used for supplying excavating, crushing machines and equipment.

ENVIRONMENT

For use in deep mines where explosive gases and dust can accumulate, and on the surface.

CONSTRUCTION

Parameter	Value
Conductor	Electrolytic, stranded, tinned copper wire, IEC 60228 Class 5
Insulation	EPR; the earth conductor is not insulated
Separator	Colored textile tape for core identification
Screen	Tinned copper and nylon braided screen over phase and pilot cores
Lay-up	All cores laid up in contact with the bare copper earth conductor
Bedding	Rubber based bedding compound
Outer sheath	Heavy duty chloroprene outer sheath

CABLE CHARACTERISTICS

Parameter	Value
Standard	BS 6708
Rated voltage	1900/3300 V
Test voltage	7.5 kV
Core arrangement	Three screened phase cores, one screened pilot core and a bare copper earth conductor

TECHNICAL DATA

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

CABLE DIMENSIONS						
Parameter	3x25 +25+25	3x35 +25+35	3x50 +35+50	3x70 +50+70	3x95 +50+95	3x120 +70+120
Phase conductor cross section mm2	3x25	3x35	3x50	3x70	3x95	3x120
Phase conductor stranding	196/0.40	276/0.40	396/0.40	360/0.50	475/0.50	608/0.50
Phase conductor diameter nominal mm	6.75	8.35	9.40	11.35	12.75	15.10
Phase insulation diameter nominal mm	13.10	14.75	15.80	17.80	19.20	21.60
Phase screen diameter mm	15.50	17.10	18.20	20.15	21.60	23.95
Earth conductor cross section mm2	1x25	1x25	1x35	1x50	1x50	1x70
Earth conductor stranding	196/0.40	196/0.40	276/0.40	396/0.40	396/0.40	360/0.50
Earth conductor diameter nominal mm	6.75	6.75	8.20	9.80	9.80	11.70
Pilot conductor cross section mm2	1x25	1x35	1x50	1x70	1x95	1x120
Pilot conductor stranding	196/0.40	276/0.40	396/0.40	360/0.50	475/0.50	608/0.50
Pilot conductor diameter nominal mm	6.75	8.35	9.40	11.35	12.75	15.10
Pilot insulation diameter nominal mm	13.10	14.75	15.80	17.80	19.20	21.60
Pilot screen diameter mm	15.50	17.10	18.20	20.15	21.60	23.95
Minimum overall diameter mm	47.4	51.6	56.8	62.8	68.9	73.4
Maximum overall diameter mm	49.9	54.6	59.8	65.8	72.7	77.4
Minimum bending radius mm	399	437	478	526	581	617
Maximum pulling tension kgf	642	834	1200	1680	2000	2000
Approximate cable weight kg/km	4200	5000	6500	8100	9800	11600
Copper weight kg/km	1664	2048	2866	3682	4546	5650

TECHNICAL DATA

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

ELECTRICAL DETAILS						
Parameter	3x25 +25+25	3x35 +25+35	3x50 +35+50	3x70 +50+70	3x95 +50+95	3x120 +70+120
Continuous current rating at 25 deg C ambient A	110	135	170	205	250	295
Intermittent current rating at 25 deg C ambient A	130	155	210	255	315	360
Phase conductor DC resistance at 20 deg C ohm/km	0.795	0.565	0.393	0.277	0.210	0.164
Pilot conductor DC resistance at 20 deg C ohm/km	0.795	0.565	0.393	0.277	0.210	0.164
Four screens and earth in parallel DC resistance ohm/km	0.45	0.45	0.31	0.31	0.25	0.25
Nominal reactance at 50 Hz ohm/km	0.125	0.117	0.113	0.108	0.105	0.101
Nominal reactance at 60 Hz ohm/km	0.150	0.141	0.136	0.129	0.126	0.121
Minimum insulation resistance at 20 deg C MOhm/km	1250	1100	950	820	720	660
3 phase voltage drop at full load mV/A/m	1.69	1.21	0.85	0.61	0.48	0.39

NOTES

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

CERTIFICATIONS

