



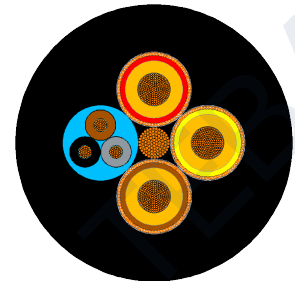
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

BS 6708 TYPE 307S 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 cores; pilot core is not screened
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; 2.5 kV for pilot conductors
Core arrangement	Three screened phase cores, one unscreened pilot unit with three thinner cores and a bare copper earth conductor

TECHNICAL DATA

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

CABLE DIMENSIONS				
Parameter	3x50 +35+3x4	3x70 +50+3x6	3x95 +50+3x6	3x120 +70+3x10
Phase conductor cross section mm2	3x50	3x70	3x95	3x120
Phase conductor stranding	396/0.40	360/0.50	475/0.50	608/0.50
Phase conductor diameter nominal mm	9.40	11.35	12.75	15.10
Phase insulation diameter nominal mm	15.80	17.80	19.20	21.60
Phase screen diameter mm	18.20	20.15	21.60	23.95
Earth conductor cross section mm2	1x35	1x50	1x50	1x70
Earth conductor stranding	276/0.40	396/0.40	396/0.40	360/0.50
Earth conductor diameter nominal mm	8.20	9.80	9.80	11.70
Pilot conductors cross section mm2	3x4	3x6	3x6	3x10
Pilot conductors stranding	56/0.30	84/0.30	84/0.30	80/0.40
Pilot conductor diameter nominal mm	2.60	3.50	3.50	4.40
Pilot insulation diameter nominal mm	5.55	6.40	6.40	7.30
Diameter over sheath nominal mm	17.80	19.80	21.20	23.60
Minimum overall diameter mm	56.8	62.8	68.9	73.4
Maximum overall diameter mm	59.8	65.8	72.7	77.2
Minimum bending radius mm	478	526	581	617
Maximum pulling tension kgf	1200	1680	2000	2000
Approximate cable weight kg/km	5850	7150	8600	10500
Copper weight kg/km	2685	3319	4039	4951

TECHNICAL DATA

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

ELECTRICAL DETAILS				
Parameter	3x50 +35+3x4	3x70 +50+3x6	3x95 +50+3x6	3x120 +70+3x10
Continuous current rating at 25 deg C ambient A	170	205	250	295
Intermittent current rating at 25 deg C ambient A	210	255	315	360
Phase conductor DC resistance at 20 deg C ohm/km	0.393	0.277	0.210	0.164
Pilot conductor DC resistance at 20 deg C ohm/km	5.09	3.39	3.39	1.95
Three screens and earth in parallel DC resistance ohm/km	0.35	0.35	0.28	0.28
Nominal reactance at 50 Hz ohm/km	0.113	0.108	0.105	0.101
Nominal reactance at 60 Hz ohm/km	0.136	0.129	0.126	0.121
Minimum insulation resistance at 20 deg C MOhm/km	950	820	720	660
3 phase voltage drop at full load mV/A/m	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

