



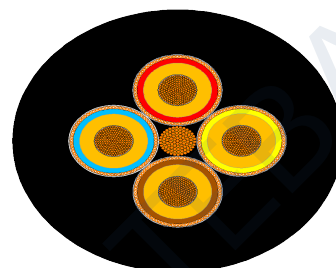
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

BS 6708 TYPE 7M 640/1100 V CABLE

Power supply cable for coalcutters and other machines



APPLICATION

Used for supplying excavating and crushing machines, coalcutters and other equipment in deep mines or surface environments where explosive gases and dust can accumulate.

CONSTRUCTION

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

CABLE CHARACTERISTICS

Parameter	Value
Standard	BS 6708
Rated voltage	640/1100 V
Test voltage	3 kV
Cable type	Composite individually screened phase and pilot cores with central bare earth conductor

TECHNICAL DATA

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

CORE DIMENSIONS							
Nominal cross section	Phase conductor	Phase stranding mm	Cond. dia. mm	Insul. dia. mm	Screen dia. mm	Earth conductor	Pilot conductor
3x16+16+16	3x16	126/0.40	5.50	8.85	11.15	1x16	1x16
3x25+16+25	3x25	196/0.40	6.75	10.35	12.65	1x16	1x25
3x35+18+35	3x35	276/0.40	8.00	11.60	13.90	1x18	1x35
3x50+25+50	3x50	396/0.40	9.75	13.60	15.90	1x25	1x50
3x70+35+70	3x70	360/0.50	11.60	15.70	18.00	1x35	1x70
3x95+50+95	3x95	475/0.50	12.75	17.25	19.55	1x50	1x95
3x120+50+120	3x120	608/0.50	15.10	20.05	22.35	1x50	1x120
3x150+70+150	3x150	740/0.50	17.00	22.20	24.50	1x70	1x150

CABLE DETAILS						
Nominal cross section	Min. OD mm	Max. OD mm	Min. bend radius mm	Max pulling tension kgf	Approx. weight kg/km	Copper weight kg/km
3x16+16+16	35.8	38.6	309	480	2500	1130
3x25+16+25	39.7	42.9	343	642	3150	1380
3x35+18+35	43.1	46.3	370	834	3650	1800
3x50+25+50	48.5	51.8	414	1200	4700	2450
3x70+35+70	55.1	58.8	470	1680	6350	3350
3x95+50+95	62.4	66.1	529	2000	8200	4500
3x120+50+120	68.0	72.5	580	2000	9900	5300
3x150+70+150	70.4	78.4	627	2000	11800	7350

TECHNICAL DATA

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

CURRENT RATINGS		
Nominal cross section	Continuous current rating at 25 deg C A	Intermittent current rating at 25 deg C A
3x16+16+16	85	96
3x25+16+25	110	125
3x35+18+35	135	150
3x50+25+50	170	200
3x70+35+70	205	250
3x95+50+95	250	310
3x120+50+120	295	355
3x150+70+150	320	385

ELECTRICAL DETAILS							
Nominal cross section	Phase DC res. 20 deg C ohm/km	Pilot DC res. 20 deg C ohm/km	Screens+earth res. ohm/km	Reactance 50 Hz ohm/km	Reactance 60 Hz ohm/km	Min. insul. res. Mohm/km	Voltage drop mV/A/m
3x16+16+16	1.24	1.24	0.58	0.109	0.131	435	2.62
3x25+16+25	0.795	0.795	0.47	0.107	0.128	375	1.68
3x35+18+35	0.565	0.565	0.45	0.101	0.121	325	1.20
3x50+25+50	0.393	0.393	0.38	0.098	0.118	285	0.84
3x70+35+70	0.277	0.277	0.27	0.095	0.114	260	0.61
3x95+50+95	0.210	0.210	0.23	0.094	0.113	250	0.47
3x120+50+120	0.164	0.164	0.21	0.092	0.110	250	0.38
3x150+70+150	0.132	0.132	0.158	0.080	0.096	250	0.32

NOTES

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

CERTIFICATIONS

