



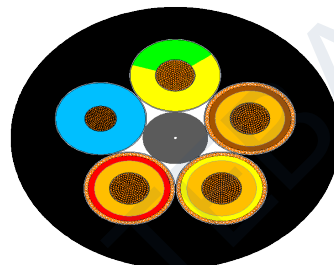
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

BS 6708 TYPE 14 640/1100 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
Separator	Coloured textile tape for core identification
Screen	Tinned copper and nylon braided screen over phase cores; pilot core and earth core are not screened
Pilot core	One unscreened pilot core laid up with the phase and earth cores
Earth core	One unscreened earth core laid up with the phase and pilot cores
Lay-up	Three phase cores with composite individual screens, one unscreened pilot core and one unscreened earth core laid up around an elastomeric cradle and in contact with each other
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 cores with unscreened pilot core and unscreened earth core laid up around an elastomeric cradle

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. thick. mm	Total screen cross section mm2	Earth conductor	Pilot conductor
3x25+2x16	3x25	196/0.40	6.75	1.6	25.4	1x16	1x25
3x35+2x16	3x35	276/0.40	8.00	1.6	25.4	1x16	1x35
3x50+2x25	3x50	396/0.40	9.75	1.7	33	1x25	1x50
3x70+2x35	3x70	360/0.50	11.60	1.8	35	1x35	1x70
3x95+2x50	3x95	475/0.50	12.75	2.0	53	1x50	1x95

PILOT CORE DETAILS				
Nominal cross section	Pilot conductor	Pilot stranding mm	Pilot cond. dia. mm	Pilot insul. thick. mm
3x25+2x16	1x25	196/0.40	6.75	1.5
3x35+2x16	1x35	276/0.40	8.00	1.5
3x50+2x25	1x50	396/0.40	9.75	1.6
3x70+2x35	1x70	360/0.50	11.60	1.6
3x95+2x50	1x95	475/0.50	12.75	1.7

CABLE DETAILS							
Nominal cross section	Min. OD mm	Max. OD mm	Min. bend radius mm	Outer sheath radial thick. mm	Max pulling tension kgf	Approx. weight kg/km	Copper weight kg/km
3x25+2x16	43.2	46.6	420	5.0	638	3550	1307
3x35+2x16	47.3	50.7	457	5.2	729	4280	1675
3x50+2x25	53.7	57.6	519	5.7	910	5650	2340
3x70+2x35	61.2	65.0	585	6.3	1148	7520	3228
3x95+2x50	69.3	73.9	666	7.0	1446	9800	4326

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	Short circuit current for 1 s A
3x25+2x16	110	3450
3x35+2x16	135	3450
3x50+2x25	170	4550
3x70+2x35	205	4820
3x95+2x50	250	7300

ELECTRICAL DETAILS			
Nominal cross section	Phase and earth conductors DC res. at 20 deg C ohm/km	Pilot conductor DC res. at 20 deg C ohm/km	3 screens in parallel connection ohm/km
3x25+2x16	0.795	1.240	1.10
3x35+2x16	0.565	1.240	1.20
3x50+2x25	0.393	0.795	1.40
3x70+2x35	0.277	0.565	0.70
3x95+2x50	0.210	0.393	0.85

NOTES

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

CERTIFICATIONS



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