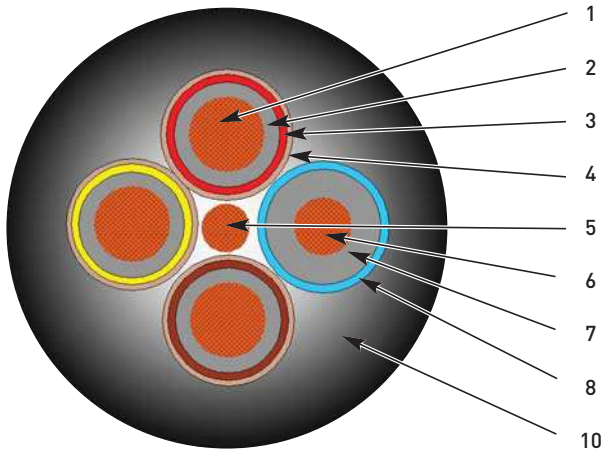




Type 307 Trailing Cable

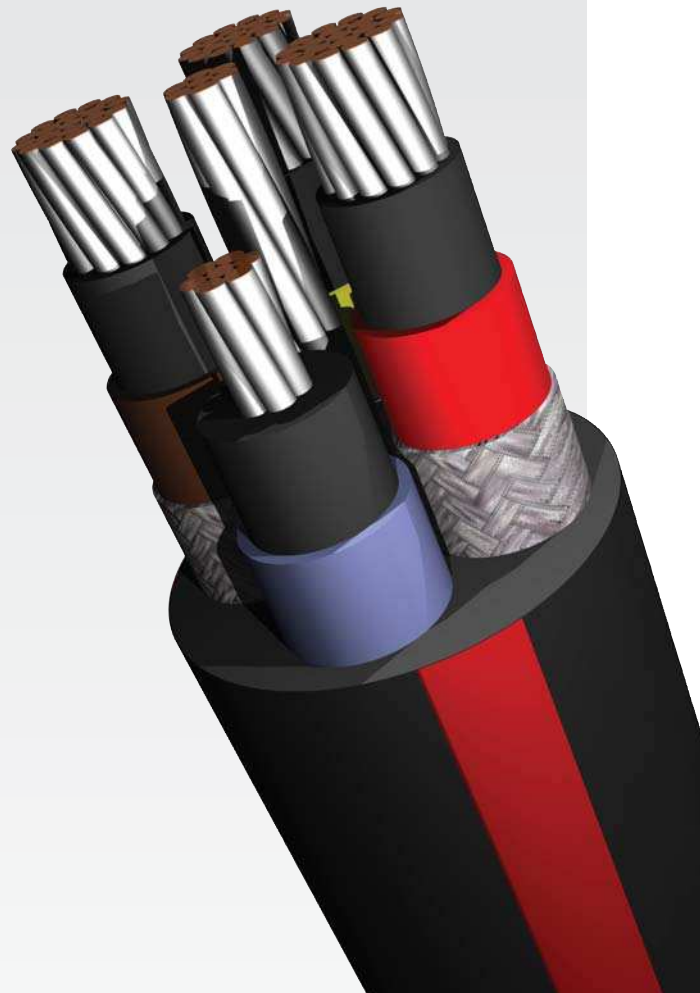
1900/3300 volt in accordance with BS 6708:1998
For use with coal cutters and similar face equipment.



Item	Description	Details
1	Phase conductor	(3 off) TAC flex conductors
2	Phase insulation	Extruded MEPR black
3	Phase identification	Proofed tape – red, yellow, brown
4	Phase core screen	Composite copper/nylon braid
5	Earth conductor	(1 off) TAC flex conductor
6	Pilot conductor	(3 off) TAC flex conductors
7	Pilot insulation	Extruded MEPR black
8	Pilot identification	Proofed tape – blue
9	Lay up	3 power cores + 1 pilot core laid up around the uninsulated earth core
10	Overall sheath	Extruded heavy duty PCP black with red stripe

Description

Flexible tinned annealed copper (TAC) conductors, MEPR insulated, 3 copper/nylon screened power cores plus 1 unscreened pilot core, laid up around a flexible TAC bare earth conductor, sheathed overall with a heavy duty flame retardant elastomeric compound. The pilot core is built-up to the same diameter as the screened phase cores.



Type 307 Trailing Cable To BS 6708:1998

TECHNICAL DETAILS

Phase Conductor								
Number and CSA	mm ²	3 x 25 mm ²	3 x 35 mm ²	3 x 50 mm ²	3 x 70 mm ²	3 x 95 mm ²	3 x 120 mm ²	3 x 150 mm ² *
Nominal stranding	mm	196/0.40	276/0.40	396/0.40	360/0.50	475/0.50	608/0.50	756/0.50
Nominal diameter	mm	7.00	8.50	10.00	11.70	13.50	15.40	17.20
Nominal diameter over insulation	mm	13.10	14.70	15.70	17.70	19.10	21.40	23.00
Nominal diameter over screen	mm	15.50	17.10	17.70	19.70	21.10	23.40	25.00
Earth Conductor								
Number and CSA	mm ²	1 x 25 mm ²	1 x 25 mm ²	1 x 35 mm ²	1 x 50 mm ²	1 x 50 mm ²	1 x 70 mm ²	1 x 95 mm ²
Nominal stranding	mm	196/0.40	196/0.40	276/0.40	396/0.40	396/0.40	360/0.50	475/0.50
Nominal diameter	mm	7.00	7.00	8.50	10.00	10.00	11.70	13.50
Pilot Conductor								
Number and CSA	mm ²	1 x 16 mm ²	1 x 16 mm ²	1 x 25 mm ²	1 x 35 mm ²	1 x 50 mm ²	1 x 70 mm ²	1 x 95 mm ²
Nominal stranding	mm	126/0.40	126/0.40	196/0.40	276/0.40	396/0.40	360/0.50	475/0.50
Nominal diameter	mm	5.50	5.50	7.00	8.50	10.00	11.70	13.50
Nominal diameter over insulation **	mm	11.60	11.60	13.10	14.70	15.70	17.70	19.10
Cable Details								
Overall diameter – minimum	mm	47.40	51.60	56.80	62.80	68.90	73.40	75.90
Overall diameter – maximum	mm	49.90	54.60	59.80	65.80	72.70	77.20	79.70
Minimum bending radius	mm	400	440	480	525	580	615	640
Maximum pulling tension	kgf	640	830	1200	1680	2000	2000	2000
Approximate cable weight	kg/km	3790	4450	5580	7050	8610	10170	12300
Electrical Details								
Continuous current rating at 25°C ambient	Amps	110	135	170	205	250	295	320
Intermittent current rating at 25°C ambient	Amps	130	155	210	255	315	360	385
Maximum d.c. resistance at 20°C:								
- Power conductor	Ω/km	0.795	0.565	0.393	0.277	0.210	0.164	0.132
- Pilot conductor	Ω/km	1.24	1.24	0.795	0.565	0.393	0.277	0.210
- 3 screens and earth in parallel	Ω/km	0.50	0.50	0.35	0.35	0.28	0.28	0.14
Nominal reactance at 50 Hz	Ω/km	0.125	0.117	0.113	0.108	0.105	0.101	0.098
Nominal reactance at 60 Hz	Ω/km	0.150	0.141	0.136	0.129	0.126	0.121	0.118
Minimum insulation resistance of power cores at 20°C	MΩ/km	1250	1100	950	820	720	660	600
3 Phase volt drop based on full load current	mV/A/mt	1.69	1.21	0.85	0.61	0.48	0.39	0.32

* Not included in BS 6708, but designed in accordance with the specification requirements.

** Built up to match the diameter of the phase conductors.

AEI Cables reserves the right to amend the product information without notice or liability. The information is considered accurate at the time of going to print.



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