



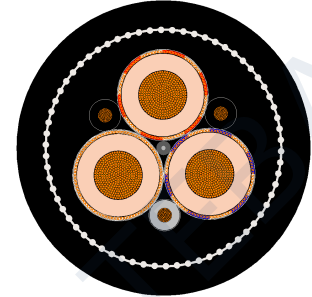
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrialcable

TYPE 450 CLASS 1 COMPOSITE SCREENED CABLE

3.3/3.3 kV to 33/33 kV reeling and trailing cable to AS/NZS 2802



APPLICATION

Class 1 composite screened power cores with two earth cores and one pilot core. General purpose reeling cable for draglines, shovels, excavators, wharf cranes and materials handling equipment. Suitable for slow reeling and trailing applications.

CONSTRUCTION

Parameter	Value
Core	Tinned copper, three power cores plus two earth cores and one pilot core
Conductor barrier	Semiconductive barrier tape and elastomeric screen
Insulation	EPR XR-EP-90 semiconductive elastomer screened insulation
Screen	Composite tinned annealed copper wire and polyester yarn screen under semiconductive tape
Core colours	Red, white and blue with braid tracers
Earth	Two elastomer covered tinned annealed copper wire earths disposed in the cable interstices
Pilot	One elastomer covered tinned annealed copper wire pilot disposed in the cable interstices
Sheath	Extra heavy duty XHD-85-PCP sheath incorporating polyaramid braid reinforcement

CABLE CHARACTERISTICS

Parameter	Value
Standard	AS/NZS 2802
Voltage range	3.3/3.3 kV to 33/33 kV
Maximum continuous operating temperature	+90 deg C
Minimum installation temperature	-25 deg C
Installation conditions	In free air for mobile equipment
Oil / water performance	Excellent immersion performance and very good flexibility
Flame performance	C1

TECHNICAL DATA

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

TYPE 450.3 - 3.3 kV - ELECTRICAL DATA							
Part	Area mm2	Nom. dia. mm	Insul. thick. mm	AC res. oh/km	React. oh/km	Volt drop mV/A.m	Cap. uF/km
25-450-3	25	7.2	2.2	0.951	0.118	1.66	0.395
35-450-3	35	8.4	2.2	0.698	0.113	1.22	0.437
50-450-3	50	9.7	2.4	0.523	0.109	0.925	0.450
70-450-3	70	12.0	2.4	0.346	0.103	0.625	0.525
95-450-3	95	13.3	2.4	0.271	0.0986	0.500	0.563
120-450-3	120	15.3	2.4	0.210	0.0947	0.399	0.628
150-450-3	150	17.2	2.4	0.166	0.0918	0.329	0.687
185-450-3	185	18.8	2.4	0.137	0.0896	0.284	0.741
240-450-3	240	21.7	2.4	0.107	0.0867	0.239	0.833
300-450-3	300	24.3	2.4	0.0851	0.0844	0.208	0.917

TYPE 450.3 - 3.3 kV - SCREEN, EARTH, PILOT AND MASS					
Part	Screen area mm2/phase	Earth and pilot area each mm2	Sheath thick. mm	Nom. dia. mm	Approx mass kg/100m
25-450-3	7.9	8	4.8	46.7	355
35-450-3	8.5	8	5.1	49.7	415
50-450-3	9.3	12	5.6	54.5	515
70-450-3	14	18	6.0	60.5	660
95-450-3	15	25	6.3	63.9	765
120-450-3	16	31	6.4	68.4	900
150-450-3	17	39.5	6.6	72.8	1070
185-450-3	18	50	6.7	76.5	1225
240-450-3	25	60	6.9	83.3	1485
300-450-3	27	80	7.0	89.0	1800

TECHNICAL DATA

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

TYPE 450.6 - 6.6 kV - ELECTRICAL DATA							
Part	Area mm2	Nom. dia. mm	Insul. thick. mm	AC res. oh/km	React. oh/km	Volt drop mV/A.m	Cap. uF/km
25-450-6	25	7.2	3.0	0.951	0.124	1.66	0.309
35-450-6	35	8.4	3.0	0.698	0.118	1.23	0.340
50-450-6	50	9.7	3.0	0.523	0.113	0.927	0.375
70-450-6	70	12.0	3.0	0.346	0.106	0.627	0.435
95-450-6	95	13.3	3.0	0.271	0.102	0.502	0.465
120-450-6	120	15.3	3.0	0.210	0.0979	0.401	0.518
150-450-6	150	17.2	3.0	0.166	0.0948	0.331	0.566
185-450-6	185	18.8	3.0	0.137	0.0923	0.286	0.608
240-450-6	240	21.7	3.0	0.106	0.0893	0.240	0.682
300-450-6	300	24.3	3.0	0.0850	0.0871	0.211	0.754

TYPE 450.6 - 6.6 kV - SCREEN, EARTH, PILOT AND MASS						
Part	Screen area mm2/phase	Earth and pilot area each mm2	Sheath thick. mm	Nom. dia. mm	Approx mass kg/100m	
25-450-6	8.8	8	5.2	51.1	410	
35-450-6	9.3	8	5.5	54.2	470	
50-450-6	10	12	5.9	57.8	560	
70-450-6	15	18	6.3	63.9	710	
95-450-6	16	25	6.4	66.8	810	
120-450-6	17	31	6.5	71.4	950	
150-450-6	18	39.5	6.6	75.5	1120	
185-450-6	20	50	6.8	79.3	1280	
240-450-6	27	60	7.0	86.2	1545	
300-450-6	29	80	7.1	92.3	1875	

TECHNICAL DATA

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

TYPE 450.11 - 11 kV - ELECTRICAL DATA							
Part	Area mm2	Nom. dia. mm	Insul. thick. mm	AC res. oh/km	React. oh/km	Volt drop mV/A.m	Cap. uF/km
25-450-11	25	7.2	5.0	0.951	0.136	1.66	0.217
35-450-11	35	8.4	5.0	0.698	0.129	1.23	0.236
50-450-11	50	9.7	5.0	0.523	0.123	0.931	0.258
70-450-11	70	12.0	5.0	0.346	0.115	0.632	0.296
95-450-11	95	13.3	5.0	0.271	0.111	0.507	0.317
120-450-11	120	15.3	5.0	0.210	0.107	0.408	0.350
150-450-11	150	17.2	5.0	0.166	0.103	0.338	0.381
185-450-11	185	18.8	5.0	0.137	0.100	0.294	0.407
240-450-11	240	21.7	5.0	0.106	0.0964	0.248	0.453
300-450-11	300	24.3	5.0	0.0846	0.0937	0.219	0.499

TYPE 450.11 - 11 kV - SCREEN, EARTH, PILOT AND MASS						
Part	Screen area mm2/phase	Earth and pilot area each mm2	Sheath thick. mm	Nom. dia. mm	Approx mass kg/100m	
25-450-11	14	8	6.3	62.3	565	
35-450-11	15	8	6.4	65.0	625	
50-450-11	16	12	6.5	68.1	715	
70-450-11	17	18	6.6	73.1	855	
95-450-11	18	25	6.7	76.1	965	
120-450-11	20	31	6.9	80.7	1115	
150-450-11	26	39.5	7.0	85.2	1315	
185-450-11	27	50	7.1	89.0	1485	
240-450-11	30	60	7.3	95.5	1745	
300-450-11	32	80	7.4	101	2080	

TECHNICAL DATA

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

TYPE 450.22 - 22 kV - ELECTRICAL DATA							
Part	Area mm2	Nom. dia. mm	Insul. thick. mm	AC res. oh/km	React. oh/km	Volt drop mV/A.m	Cap. uF/km
35-450-22	35	8.4	7.6	0.698	0.142	1.23	0.178
50-450-22	50	9.7	7.6	0.523	0.135	0.936	0.194
70-450-22	70	12.0	7.6	0.346	0.127	0.638	0.219
95-450-22	95	13.3	7.6	0.271	0.122	0.515	0.234
120-450-22	120	15.3	7.6	0.210	0.117	0.416	0.256
150-450-22	150	17.2	7.6	0.165	0.113	0.346	0.276
185-450-22	185	18.8	7.6	0.136	0.110	0.303	0.294
240-450-22	240	21.7	7.6	0.106	0.105	0.258	0.325

TYPE 450.22 - 22 kV - SCREEN, EARTH, PILOT AND MASS						
Part	Screen area mm2/phase	Earth and pilot area each mm2	Sheath thick. mm	Nom. dia. mm	Approx mass kg/100m	
35-450-22	19	8	6.8	77.2	835	
50-450-22	20	12	6.9	80.2	930	
70-450-22	27	18	7.0	85.6	1105	
95-450-22	27	25	7.2	88.9	1230	
120-450-22	29	31	7.3	93.4	1395	
150-450-22	31	39.5	7.4	97.5	1580	
185-450-22	32	50	7.5	101	1760	
240-450-22	34	60	7.7	108	2035	

Note: 33 kV available on request.

CERTIFICATIONS



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