



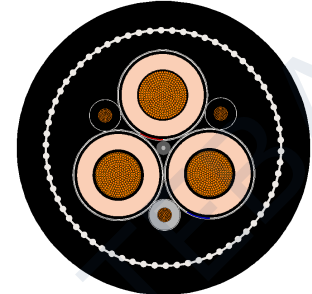
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrialcable

TYPE 455 CLASS 1 SEMICONDUCTIVE SCREENED CABLE

3.3/3.3 kV to 11/11 kV reeling and trailing cable to AS/NZS 2802



APPLICATION

Class 1 semiconductive elastomer 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. Similar to Type 450 but without a composite insulation screen, suitable for slow reeling and trailing applications.

CONSTRUCTION

Parameter	Value
Core	Tinned copper, three power cores plus two earth cores and one pilot core
Insulation	EPR XR-EP-90 semiconductive elastomer screened insulation with numbered cores
Earth	Two elastomer covered earth cores disposed in the cable interstices
Pilot	One elastomer covered 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 11/11 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 455.3 - 3.3 kV - ELECTRICAL DATA

Part	Area mm ²	Nom. dia. mm	Insul. thick. mm	AC res. oh/km	React. oh/km	Volt drop mV/A.m	Cap. uF/km
25-455-3	25	7.3	2.2	0.951	0.112	1.66	0.404
35-455-3	35	8.9	2.2	0.698	0.105	1.22	0.462
50-455-3	50	10.2	2.4	0.523	0.103	0.923	0.473
70-455-3	70	12.7	2.4	0.346	0.0964	0.622	0.555
95-455-3	95	13.8	2.4	0.271	0.0941	0.497	0.593
120-455-3	120	15.7	2.4	0.210	0.0915	0.397	0.633
150-455-3	150	17.6	2.4	0.166	0.0884	0.326	0.719

TYPE 455.3 - 3.3 kV - EARTH, PILOT AND MASS

Part	Earth and pilot area each mm ²	Sheath thick. mm	Nom. dia. mm	Approx mass kg/100m
25-455-3	8	4.5	42.2	300
35-455-3	8	4.8	46.2	360
50-455-3	12	5.2	50.7	455
70-455-3	18	5.7	56.9	585
95-455-3	25	6.1	60.2	700
120-455-3	31	6.4	65.3	850
150-455-3	39.5	6.5	69.1	1010

TYPE 455.6 - 6.6 kV - ELECTRICAL DATA

Part	Area mm ²	Nom. dia. mm	Insul. thick. mm	AC res. oh/km	React. oh/km	Volt drop mV/A.m	Cap. uF/km
25-455-6	25	7.3	3.0	0.951	0.119	1.66	0.316
35-455-6	35	8.9	3.0	0.698	0.112	1.22	0.359
50-455-6	50	10.2	3.0	0.523	0.107	0.925	0.394
70-455-6	70	12.7	3.0	0.346	0.100	0.624	0.459
95-455-6	95	13.8	3.0	0.271	0.0978	0.499	0.490
120-455-6	120	15.7	3.0	0.210	0.0944	0.399	0.540
150-455-6	150	17.6	3.0	0.166	0.0916	0.328	0.591

TYPE 455.6 - 6.6 kV - EARTH, PILOT AND MASS

Part	Earth and pilot area each mm ²	Sheath thick. mm	Nom. dia. mm	Approx mass kg/100m
25-455-6	8	5.0	46.8	345
35-455-6	8	5.3	50.9	415
50-455-6	12	5.6	54.2	500
70-455-6	18	6.0	60.2	635
95-455-6	25	6.3	63.3	745
120-455-6	31	6.5	67.7	890
150-455-6	39.5	6.6	72.0	1055

TECHNICAL DATA

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

TYPE 455.11 - 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
25-455-11	25	7.3	5.0	0.951	0.132	1.66	0.223
35-455-11	35	8.9	5.0	0.698	0.124	1.23	0.251
50-455-11	50	10.2	5.0	0.523	0.119	0.929	0.273
70-455-11	70	12.7	5.0	0.346	0.111	0.629	0.314
95-455-11	95	13.8	5.0	0.271	0.108	0.505	0.334
120-455-11	120	15.7	5.0	0.210	0.104	0.406	0.365
150-455-11	150	17.6	5.0	0.166	0.100	0.336	0.397

TYPE 455.11 - 11 kV - EARTH, PILOT AND MASS				
Part	Earth and pilot area each mm2	Sheath thick. mm	Nom. dia. mm	Approx mass kg/100m
25-455-11	8	6.1	57.6	480
35-455-11	8	6.3	61.5	550
50-455-11	12	6.4	64.4	640
70-455-11	18	6.5	69.8	775
95-455-11	25	6.7	72.7	890
120-455-11	31	6.8	77.0	1040
150-455-11	39.5	6.9	81.3	1215

SERVICE NOTES	
Parameter	Value
Cable type	Class 1 semiconductive screened reeling and trailing cable
Voltage range	3.3/3.3 kV to 11/11 kV
Installation	In free air for mobile equipment
Typical service	Slow reeling and trailing applications for open-cut mining equipment
Mechanical protection	Extra heavy duty sheath with polyaramid braid reinforcement
Performance	Excellent immersion performance, very good flexibility and C1 flame performance

CERTIFICATIONS

