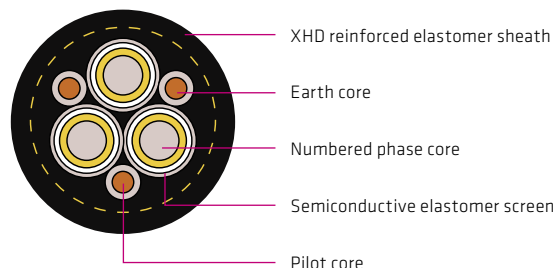


## Type 455 3.3-11 kV



### Cable description

Class 1 semiconductive screened cable for general use.

### Application

3.3/3.3 kV to 11/11 kV reeling cables for use with drag-lines, shovels, excavators, wharf cranes, and materials handling equipment. The cable is similar to Type 450 cables, without a composite insulation screen. This cable is suitable for slow reeling and trailing applications.

### Approvals

AS/NZS 2802

### Behaviour in flame and fire

Fire retardant

### Temperature range

Maximum operating temperature: +90 °C

Minimum operating temperature: -25 °C

### Flexibility

Flexible

### Resistance to

Chemical exposure: Very good/Frequent

Mechanical impact: Heavy

Water exposure: Immersion/Temporary coverage

Solar radiation and

weather exposure: Suitable for direct exposure

### Cable design

Semiconductive elastomer screened power cores with two earth and one pilot core.

Core: Metal: tinned copper, three core plus two earths and one pilot.

Insulation: EPR (XR-EP-90) semiconductive elastomer screened with numbered cores.

Earth: Two semiconductive elastomer covered, disposed in the cable interstices.

Pilot: One, elastomer covered, disposed in the cable interstices.

Sheath: Extra heavy duty XHD-85-PCP, incorporating a polyaramid Kevlar® braid reinforcement.

### Installation conditions

In free air

Mobile equipment

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Physical & electrical characteristics

Type 455 3.3-11 kV												
Voltage rating & part number	Power conductor							Earth & pilot	Cable			
	Nominal area mm <sup>2</sup>	Nominal diameter mm	Insulation thickness mm	ac Resistance @ 90°C & 50Hz Ω/km	Reactance @ 50Hz Ω/km	3 phase voltage drop @ 90°C & 50Hz mV/A.m	Capacitance to earth μF/phase/km		Approx area (each) mm <sup>2</sup>	Sheath thickness mm	Nominal diameter mm	Approx mass kg/1000m
<b>Type 455.3</b>												
25-455-3	25	7.3	2.2	0.951	0.112	1.66	0.404	8	4.5	42.2	300	
35-455-3	35	8.9	2.2	0.698	0.105	1.22	0.462	8	4.8	46.2	360	
50-455-3	50	10.2	2.4	0.523	0.103	0.923	0.473	12	5.2	50.7	455	
70-455-3	70	12.7	2.4	0.346	0.0964	0.622	0.555	18	5.7	56.9	585	
95-455-3	95	13.8	2.4	0.271	0.0941	0.497	0.593	25	6.1	60.2	700	
120-455-3	120	15.7	2.4	0.210	0.0915	0.397	0.633	31	6.4	65.3	850	
150-455-3	150	17.6	2.4	0.166	0.0884	0.326	0.719	39.5	6.5	69.1	1010	
<b>Type 455.6</b>												
25-455-6	25	7.3	3.0	0.951	0.119	1.66	0.316	8	5.0	46.8	345	
35-455-6	35	8.9	3.0	0.698	0.112	1.22	0.359	8	5.3	50.9	415	
50-455-6	50	10.2	3.0	0.523	0.107	0.925	0.394	12	5.6	54.2	500	
70-455-6	70	12.7	3.0	0.346	0.100	0.624	0.459	18	6.0	60.2	635	
95-455-6	95	13.8	3.0	0.271	0.0978	0.499	0.490	25	6.3	63.3	745	
120-455-6	120	15.7	3.0	0.210	0.0944	0.399	0.540	31	6.5	67.7	890	
150-455-6	150	17.6	3.0	0.166	0.0916	0.328	0.591	39.5	6.6	72.0	1055	
<b>Type 455.11</b>												
25-455-11	25	7.3	5.0	0.951	0.132	1.66	0.223	8	6.1	57.6	480	
35-455-11	35	8.9	5.0	0.698	0.124	1.23	0.251	8	6.3	61.5	550	
50-455-11	50	10.2	5.0	0.523	0.119	0.929	0.273	12	6.4	64.4	640	
70-455-11	70	12.7	5.0	0.346	0.111	0.629	0.314	18	6.5	69.8	775	
95-455-11	95	13.8	5.0	0.271	0.108	0.505	0.334	25	6.7	72.7	890	
120-455-11	120	15.7	5.0	0.210	0.104	0.406	0.365	31	6.8	77.0	1040	
150-455-11	150	17.6	5.0	0.166	0.100	0.336	0.397	39.5	6.9	81.3	1215	

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