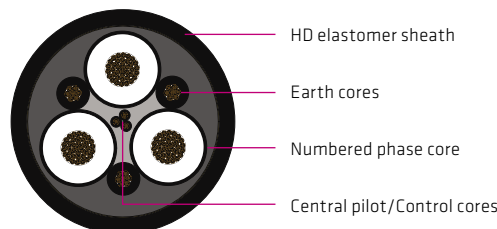


## Type 245SF 1.1-3.3 kV



### Cable description

Ultra flexible cable for general use to AS/NZS 1802.

### Application

These cables have been designed to operate within the tight bending radii experienced with cable chains used on longwall shearers, and provide additional pilot conductors for modern machine monitoring.

For general purpose and especially for trailing applications in cable chains on Longwall Shearer equipment, and in environments calling for maximum flexibility.

### Approvals

AS/NZS 1802

### Behaviour in flame and fire

Fire retardant

### Temperature range

Maximum operating temperature: +90 °C

Minimum operating temperature: -25 °C

### Flexibility

Very 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 screened power cores, with three earth cores and three extensible pilots.

Core: Metal: tinned copper, three core three earths plus three central pilots.

Conductor separator tape:  
1.1/1.1 kV – polyester where necessary.  
3.3 kV and above – semiconductive screen.

Insulation: EPR (R-EP-90) core with durably printed core numbers at intervals less than 300 mm, on black semiconductive insulation screen for phase identification.

Screen: Semiconductive elastomer screen.

Pilot: Three pilots, in the centre of the cable.  
Maximum DC resistance;  
3 Ω/100 m for all cables.

Earth: Three semiconductive elastomer covered flexible earths, located in the interstices.

Sheath: Open weave reinforcement, under heavy duty HD-85-PCP.

### Installation conditions

In free air

In duct

Mobile equipment

Machines

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Physical & electrical characteristics

Type 245SF 1.1-3.3 kV											
Voltage rating & part number	Power conductor							Earth	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
Type 245.1 SF											
50-245-1 SF	50	9.8	1.7	0.523	0.114	0.927	0.544	8	4.8	49.7	425
70-245-1 SF	70	12.0	1.8	0.346	0.107	0.627	0.614	12.5	5.1	54.9	555
95-245-1 SF	95	13.8	2.0	0.271	0.103	0.502	0.630	12.5	5.6	60.3	675
120-245-1 SF	120	15.9	2.1	0.210	0.0988	0.402	0.684	13.75	6.0	65.7	845
150-245-1 SF	150	17.9	2.3	0.166	0.0956	0.332	0.698	17	6.3	70.8	1010
Type 245.3 SF											
50-245-3 SF	50	9.8	3.0	0.523	0.121	0.930	0.359	8	5.7	57.4	525
70-245-3 SF	70	12.0	3.0	0.346	0.271	0.630	0.418	12.5	6.0	62.3	660
95-245-3 SF	95	13.8	3.0	0.271	0.212	0.505	0.46	17.5	6.4	69.0	790
120-245-3 SF	120	15.9	3.0	0.210	0.164	0.405	0.525	21.1	6.7	75.7	989
150-245-3 SF	150	17.9	3.0	0.166	0.0986	0.334	0.578	27	7.0	77.4	1098

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