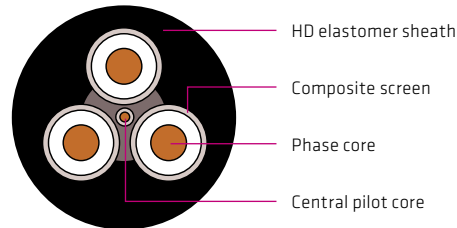


## Type 209 1.1-11 kV



### Cable description

Composite screened cable for general use to AS/NZS 1802.

### Application

1.1/1.1 kV to 11/11 kV general cable used extensively for feeder connection between transformer and gate-end box or similar, or feeder cables to pumps, fans, crushers, etc or as a substitute to Type A or B feeder cables.

This cable can also be used above ground for power supply to mobile equipment.

### Approvals

AS/NZS 1802  
AS/NZS 1972  
AS/NZS 5000.1

### 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

Composite screened cores with a single extensible pilot.

Core: Metal: tinned copper, three core plus central pilot.

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

Insulation: EPR (R-EP-90).

Insulation tape:  
1.1/1.1 kV – proofed textile.  
3.3 kV and above – semiconductive screen.

Screen: Composite screen (earth) of tinned annealed copper wire and polyester yarn.  
Core colours: red, white, blue braid tracers.

Pilot: Single, in centre of cable.  
Maximum DC resistance;  
5.5 Ω/100 m for power cores to 35 mm<sup>2</sup>.  
3 Ω/100 m for power conductors above 35 mm<sup>2</sup>.

Sheath: Heavy duty HD-85-PCP  
Sheath reinforcement is available upon request.

### Installation conditions

In free air  
In duct  
Mobile equipment  
Machines

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Physical & electrical characteristics

Type 209 1.1-11 kV											
Voltage rating & part number	Power conductor							Screen	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 mm <sup>2</sup> /phase	Sheath thickness mm	Nominal diameter mm	Approx mass kg/100m
Type 209.1											
10-209-1	10	4.6	1.5	2.58	0.130	4.47	0.314	8.2	3.8	33.3	175
16-209-1	16	6.2	1.6	1.58	0.118	2.74	0.379	10	4.0	37.3	225
25-209-1	25	7.2	1.6	0.951	0.112	1.66	0.432	12	4.3	40.3	285
35-209-1	35	8.4	1.6	0.698	0.107	1.22	0.493	14	4.6	43.6	335
50-209-1	50	9.7	1.7	0.523	0.104	0.924	0.526	14	5.0	47.7	410
70-209-1	70	12.0	1.8	0.346	0.0981	0.623	0.599	16	5.4	54.0	540
95-209-1	95	13.3	2.0	0.271	0.0955	0.498	0.591	18	6.0	58.9	645
120-209-1	120	15.3	2.1	0.210	0.0925	0.397	0.640	21	6.4	64.6	790
150-209-1	150	17.2	2.3	0.166	0.0907	0.328	0.652	23	6.9	70.4	955
185-209-1	185	18.8	2.5	0.137	0.0902	0.284	0.657	30	7.4	76.5	1155
240-209-1	240	21.7	2.8	0.107	0.0883	0.240	0.672	34	8.2	85.5	1445
300-209-1	300	24.3	3.0	0.0850	0.0873	0.211	0.719	49	8.8	94.3	1790
Type 209.3											
16-209-3	16	6.2	3.0	1.58	0.131	2.75	0.255	14	5.3	47.3	335
25-209-3	25	7.2	3.0	0.951	0.125	1.66	0.280	15	5.6	50.4	400
35-209-3	35	8.4	3.0	0.698	0.119	1.23	0.311	16	5.9	53.5	460
50-209-3	50	9.7	3.0	0.523	0.114	0.927	0.347	17	6.3	57.2	540
70-209-3	70	12.0	3.0	0.346	0.106	0.627	0.408	19	6.6	62.6	665
95-209-3	95	13.3	3.0	0.271	0.102	0.502	0.439	21	7.1	66.4	765
120-209-3	120	15.3	3.0	0.210	0.0985	0.402	0.492	27	7.4	72.0	930
150-209-3	150	17.2	3.0	0.166	0.0954	0.332	0.541	32	7.8	76.7	1095
185-209-3	185	18.8	3.0	0.137	0.0942	0.288	0.584	42	8.2	82.3	1285
240-209-3	240	21.7	3.0	0.106	0.0906	0.242	0.659	48	8.8	89.6	1555
300-209-3	300	24.3	3.0	0.0849	0.0890	0.213	0.727	63	9.4	97.7	1900
Type 209.6											
16-209-6	16	6.2	5.0	1.58	0.143	2.75	0.181	17	6.4	58.2	475
25-209-6	25	7.2	5.0	0.951	0.137	1.66	0.193	19	6.7	61.7	560
35-209-6	35	8.4	5.0	0.698	0.130	1.23	0.212	21	7.0	64.8	630
50-209-6	50	9.7	5.0	0.523	0.124	0.931	0.234	22	7.3	68.2	715
70-209-6	70	12.0	5.0	0.346	0.116	0.632	0.271	23	7.7	73.8	860
95-209-6	95	13.3	5.0	0.271	0.113	0.509	0.292	30	8.1	78.0	995
120-209-6	120	15.3	5.0	0.210	0.108	0.409	0.325	32	8.5	83.2	1155
150-209-6	150	17.2	5.0	0.166	0.105	0.340	0.354	46	8.9	89.2	1370
185-209-6	185	18.8	5.0	0.136	0.102	0.294	0.381	48	9.3	93.3	1540
240-209-6	240	21.7	5.0	0.106	0.0981	0.250	0.426	53	9.9	101	1825
300-209-6	300	24.3	5.0	0.0845	0.0959	0.221	0.467	71	10.4	109	2195
Type 209.11											
25-209-11	25	7.2	7.6	0.951	0.150	1.67	0.150	24	8.1	75.9	805
35-209-11	35	8.4	7.6	0.698	0.143	1.23	0.163	30	8.4	79.6	915
50-209-11	50	9.7	7.6	0.523	0.136	0.936	0.178	32	8.7	83.0	1010
70-209-11	70	12.0	7.6	0.346	0.127	0.638	0.204	35	9.1	88.7	1185
95-209-11	95	13.3	7.6	0.271	0.124	0.516	0.219	48	9.6	93.8	1360
120-209-11	120	15.3	7.6	0.210	0.119	0.418	0.241	53	9.9	98.7	1540
150-209-11	150	17.2	7.6	0.165	0.114	0.347	0.261	56	10.3	103	1725
185-209-11	185	18.8	7.6	0.136	0.111	0.304	0.279	56	10.7	108	1900
240-209-11	240	21.7	7.6	0.106	0.107	0.261	0.309	77	11.3	116	2280

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