



Type 275 1.1 kV



Cable description

Shuttle car cable to AS/NZS 1802.

Application

These cables are used with high-speed reeling equipment employed on shuttle cars, and are subject to the greatest exertion underground. Cable constructions are designed to resist "corkscrewing" in these arduous conditions.

Approvals

AS/NZS 1802

Behaviour in flame and fire

Fire retardant

Temperature range

Maximum operating temperature: +90 °C Minimum operating temperature: -25°C

Flexibility

Flexible

Resistance to

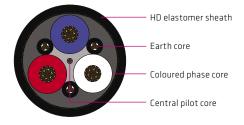
Chemical exposure: Very good/Frequent

Mechanical impact: Heavy

Water exposure: Immersion/Temporary coverage

Solar radiation and

weather exposure: Suitable for direct exposure



Cable design

Non-individually screened power cores, three earth cores and one extensible pilot, laid-up in a semiconductive cradle and fill to 1.1/1.1 kV application.

Core: Metal: tinned copper, three core three earths

plus pilot.

Insulation: EPR (R-EP-90)

Core colours: red, white, blue

Pilot: One pilot, in the centre of the cable.

Maximum DC resistance;

 $5.5 \Omega/100 \text{ m}$ for power conductors up to 35 mm^2 .

3 $\Omega/100$ m for all larger cables.

Earth: Three semiconductive elastomer covered flexible

earths, located in the interstices.

Sheath: Semiconductive elastomer filled, with an

open weave reinforcement, under a heavy

duty HD-85-PCP

Installation conditions

In free air

Mobile equipment

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UNDERGROUND MINE CABLES



Physical & electrical characteristics

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	Power conductor							Earth	Cable		
Voltage rating & part number	Nominal area mm²	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) mm²	Sheath thickness mm	Nominal diameter mm	Approx mass kg/100m
Type 275.1											
16-275-1	16	6.0	1.6	1.58	0.109	2.74	0.377	4.5	3.8	31.8	170
25-275-1	25	7.3	1.6	0.951	0.102	1.66	0.443	6.6	4.0	35.0	225
35-275-1	35	8.9	1.6	0.698	0.0963	1.22	0.521	9	4.3	39.0	285
50-275-1	50	10.2	1.7	0.523	0.0943	0.920	0.551	13.2	4.7	43.3	370

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