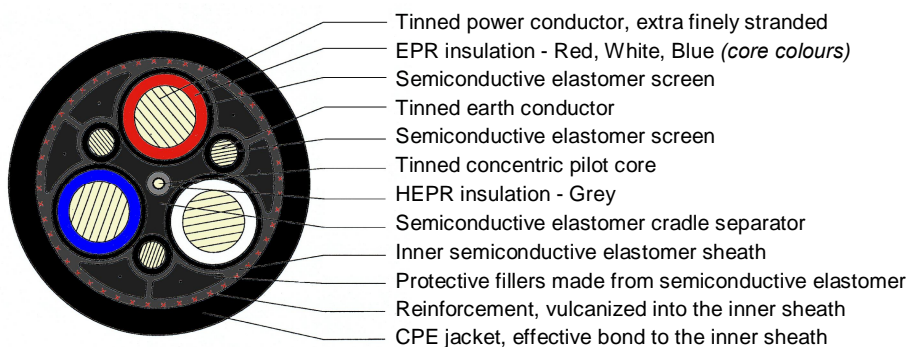


PROTOMONT TYPE 241.1

Trailing and Reeling Cable for Mines 1.1/1.1kV

SIEMENS
Flexible cables



Application

The 241.1 cable is specifically engineered for the Australian mining industry and manufactured in accordance with AS1802. It is an extra heavy duty semi conductive screened cable for mining applications including supply cable for underground cutting machines and pumping.

Design

The Protomont 241.1 cable is for aggressive environments in mining where high mechanical stresses occur from reeling and trailing. A semi conductive cradle separator encapsulates the central pilot core and interstitial earth conductors. The semi conductive layer ensuring a high conductivity low resistance earth circuit. The conductors consist of very finely stranded tinned copper wires, rope laid to maximise flexibility.

The power cores have an inner semi-conductive layer around their conductors. A reinforced polyester braid is embedded between the inner and outer sheaths forming a vulcanised bond protecting against the effects of torsional forces during operation. The specially compounded CPE outer sheath resists damage from hard and abrasive surfaces protecting the cable from mechanical damage



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Description

Conductor	Class 5 finely stranded tinned copper
Insulation	R-EP90 elastomer insulation
Core identification	Three power cores coloured, Red, White, Blue Central pilot coloured Grey Semi conductive earth coloured Black
Phase core screen	Inner & outer semi-conductive layer
Protective earth conductors	Three interstitial earth conductors with semi-conductive layer
Pilot core	Central pilot core enclosed in semi conductive cradle separator
Core arrangement	Three power cores with three interstitial earths
Outer sheath	Specially compounded outer CPE sheath
Marking	PROTOMONT (cross section) (type) (rated voltage)
Electrical Parameters	Rated Voltage U_0/U 1.1kV Maximum AC Voltage 1.1/1.1kV Maximum DC Voltage 0.9/0.8kV AC Test Voltage 3kV Current carrying capacity refer to AS3008
Mechanical Parameters	Minimum Bending radii: Fixed installation = 4 x cable dia Freely flexing = 5 x cable dia Max Tensile load 5N/mm ²

Part No.	Number of cores x Conductor Size mm ²	Approx No. of Strands x Max. Stand Dia mm	3 Phase Volt Drop mV/Am	Cable Overall Diameter mm	Cable Weight kg.km	Protected from Sun Current Carrying Cap A
5DM6 209	3x6+3x6/3E+pilot	84/0.30		31	1130	
5DM6 201	3x35+3x35/3E+pilot	304/0.30	1.2	42	2780	145
5DM6 208	3x70+3x70/3E+pilot	545/0.41	0.61	53.6	5300	220