



Technical Data Sheet TD B104

October 2009

The use of AEI Cables Ltd mineral insulated cable and accessories in areas where potentially explosive atmospheres may exist

AEI Cables Ltd supply a range of glands and seals for their mineral insulated cable which are suitable for use in areas where potentially explosive atmospheres may exist.

The table below shows the correct AEI Cables Ltd seal and gland combinations for each particular application.

Zone	Apparatus Group	Type of Protection	AEI Gland	AEI Seal
0, 1, 2	IIa, b and c	Ex ia	RGM	RPS or RPSL
1,2	IIa, b and c	Ex d	RGM	RPS or RPSL
2	IIa, b and c	Ex e	RGM	RPMAA or RPMKA

Zones

- Zone 0 area where explosive atmosphere is present continuously or for long periods of time.
- Zone 1 area where explosive atmosphere is likely to occur in normal service
- Zone 2 area where explosive atmosphere is unlikely to occur and would be infrequent and for short periods

Apparatus Groups

- Group IIa propane
- Group IIb ethylene
- Group IIc hydrogen

Typical gas classified according to ignitability of gas/air mixture.

(Note: the symbol 'II' is the Roman numeral representing 2)

Type of Protection

- Ex ia intrinsically safe (EN 60079-11)
- Ex d flameproof enclosure (EN60079-1)
- Ex e increased safety (EN 60079-7)

Important

This information is given as guidance to the certification of AEI Cables Ltds glands and seals. The installation of cable systems in and serving areas where potentially explosive atmospheres may exist should only be carried out after the appropriate risk assessments are completed by suitably qualified engineers