

1. General

The ATEX analysis is required when products are intended to be used in, or in connection with, a potentially explosive atmosphere.

Potentially explosive atmospheres within the meaning of Directive 94/9/EC are atmospheres which could become explosive due to local and/or operational conditions.

Products for whose use special regulations apply (e.g. seagoing vessels and their equipment, which are covered by the IMO Convention) are excluded from Directive 94/9/EC.

Standards of explosion safety are classified according to Directive 94/9/EC point 4.4.

2. Classification

The application-specific degree of protection must be indicated by the customer (please mark as applicable).

Type of explosive atmosphere: G (Gas) D (Dust)

Equipment group I

Category M1	Category M2

Equipment group II

Category 1	Category 2	Category 3
Zone 0 (G)	Zone 1 (G)	Zone 2 (G)
Zone 20 (D)	Zone 21 (D)	Zone 22 (D)

Temperature class (Maximum permissible surface temperature)

T1	T2	T3	T4	T5	T6
450°C	300°C	200°C	135°C	100°C	85°C

Is the clogging indicator operated in an intrinsically safe circuit: yes no

If yes: How much cable is approximately needed? _____m

Explanations regarding assignation of appliance groups and categories (zones).

Equipment group I (potentially explosive atmospheres in underground operations)

Degree of protection	Category	Guarantee of protection	Operating conditions ¹⁾
Very high	M 1	Two independent protective means, or safe even if two faults occur independently of each other.	Equipment remains operational and continues to be operated in the event of a potentially explosive atmosphere.
High	M 2	Suitable for normal operation and difficult operating conditions.	Equipment is disconnected in the event of a potentially explosive atmosphere.

Equipment group II (potentially explosive atmospheres in the other areas)

Degree of protection	Category	Guarantee of protection	Operating conditions ¹⁾
Very high	1	Two independent protective means, or safe even if two faults occur independently of each other.	Equipment remains operational and continues to be operated in zones 0, 1, 2 (G) and 20, 21, 22 (D).
High	2	Safe in normal operation and if the usual faults occur.	Equipment remains operational and continues to be operated in zones 1, 2 (G) and/or 21, 22 (D).
Normal	3	Safe in normal operation.	Equipment remains operational and continues to be operated in zone 2 (G) and/or 22 (D).

¹⁾ Note: See also Directive 1999/92/EC on minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres.

3. Documentation and marking

The documentation on equipment for which Directive 94/9/EC applies is produced according to the specific application and equipment.

The documentation shows the classification of the equipment/combination of equipment according to Directive 94/9/EC in a declaration of conformity.

The rating plate(s) indicate the explosion protection symbol, the equipment group, the equipment category and the potentially explosive atmosphere for which the protective system is suitable.