

# Outline of ATEX directive :

Since 1st July 2003, equipment and protective system used in potentially explosive atmospheres within the EU are required to comply with the ATEX directive 94/9/EC.

## ATEX definitions

**Potentially explosive atmospheres are atmospheres likely to become explosive due to local and operational conditions.** (Quotation from Directive 94/9/EC)

The ATEX directive regards **explosive atmospheres** which are defined as **mixtures**

- with air,
- under atmospheric conditions,
- of flammable substances in the form of gases, vapours, mists or dusts
- in which, after ignition has occurred, combustion spreads to the entire unburned mixture.

The standard NF EN 60079-0, NF EN 1127-1 & EN 13463-1 give the list of the generation of ignition sources and installation recommendation.

Our Connectic products, fittings and ball valves, are out of scope of Directive 94/9/EC. Nevertheless, they can be applied in ATEX category 2G/2D (zone 1 and 21), gas group IIB with the recommendation that the installation must be operated to avoid hazards due to static electricity (electrical bonding and earthing for conductive components). Allowance must be made by the user for possible ignition sources which are created during the use of the installation. This is under the responsibility of the user. They can be concerned due to the static electricity phenomenon which can arise under normal operational conditions in pneumatic applications.

Directive 1999/92/EC

The ATEX directive defines categories of equipment and protective systems, which can be used in the corresponding zones as per the following table.

Zone		Equipment category	Presence of the explosive atmosphere
Gas	Dust		
0	20	1	Continuously or for long periods >1000 hours/year
1	21	2	Occasionally 10~1000 hours/year
2	22	3	Rarely or for short periods <10 hours/year

(1)

## CLASSIFICATION ZONE

(1) Potentially Zones for PARKER - LEGRIS' products applications