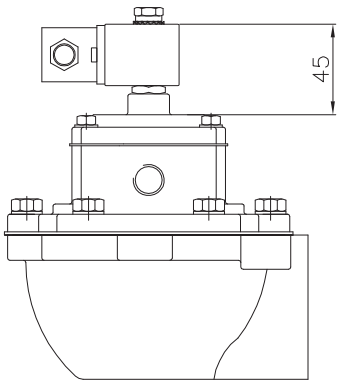
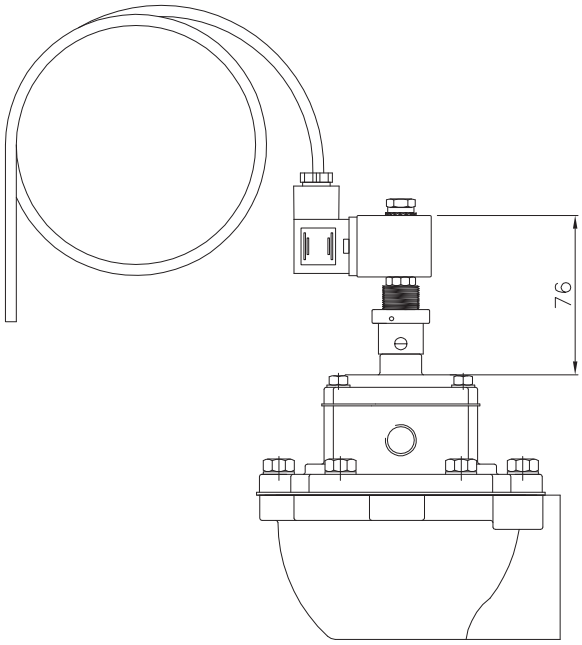
ATEX



Turbo pulse valves for potentially explosive atmospheres according to ATEX 94/9/EC valve is provided with molded coil and connector IP 65.

Valve dimensions are same of standard model.

ATEX II3GD (zone 2 and 22)



Turbo pulse valves for potentially explosive atmospheres according to ATEX 94/9/EC.

Valve use encapsulated molded coil with leads wire of different lenght.

Pilot valve has brass body that change valve dimensions from standard model.

ATEX II2GD (zone 1 and 21)

ATEX

The European Community 94/9/EC Directive establishes the constructional and functional requirements (mandatory since 01/07/2003) for equipment and protection systems intended for use in potentially explosive atmosphere.

The Directive considers explosion hazard due to each source of ignition (electrical and not electrical), and the main important aspects introduced are:
- Essential Health and Safety Requirements (Annex II-ESR)
- Applicability both to materials used for underground mining (group I) and for those used in surface (Group II)
- Classification of equipment in "categories" according to required protection level
- Production surveillance based on Quality Management Systems

Directive 94/9/EC considers for the first time the explosion hazard due to a non-electrical source of ignition, such as mechanical sparks caused by vibrations or impact, high surface temperature of mechanical and electrical components caused by non-electrical sources such as vibrations, high rotating speed, etc.
Furthermore the Directive establishes to carefully evaluate the environment of installation of the equipment, its storage and functioning, in order to classify it according to a possible presence of explosive atmosphere.
The Directive, in fact, through the Essential Health and Safety Requirements considers that equipment themselves can be a source of explosive atmosphere and provides for requirements in order to prevent such risks (Annex II point 1.0.1.)

Aim of the European Directive. Directive 94/9/EC (ATEX) was adopted by the European Community to ensure free movement of products intended for use in potentially explosive atmospheres. It provides for harmonized technical requirements and applicable standards.
This Directive aims to preserve people's health and goods from risks coming from the use of equipment and protection systems in a " potentially explosive atmosphere.

Explosive atmosphere is a mixture with air, under specific atmospheric conditions (temperature from -20°C to +40°C and pressure from 0,8 bar to 1,1 bar according to EN60079 and EN13463-1), of flammable substances in the form of gases, vapors, mists or dusts in which, after ignition has occurred, combustion spreads to the entire unburned mixture (see also Directive 94/9/EC Cap. I art. 1)

Potentially explosive atmosphere is an atmosphere that could become explosive due to local operating conditions

Hazardous explosive areas according to Directive 1992/92/CE. Areas where hazardous explosive atmospheres may occur are classified into zones based on their likelihood and persistence.

Zone 0
Area in which an hazardous explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapor or mist is present continuously or for long periods or frequently.
Zone 1
Area in which an hazardous explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapor or mist is likely to occur in normal operation occasionally
Zone 2
Area in which an hazardous explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapor or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only.