

SÜDMO VALVES FOR EXPLOSIVE ZONES

SVP M2000 SINGLE SEAT VALVES

RATED IN SIZES: METRIC DN ≤ 100, OD-TUBE ≤ 4", ISO ≤ 80

General Restrictions

- they may not be used underground
- the operator should ensure that nothing is being charged
- the maximum surface temperature of the component depends on the temperature of the handled substance, but pneumatic activated components can reach a surface temperature up to +80°C with an environment temperature of +40°C due to internal friction.
→ The substances which can be handled in the component are limited by their ignition and glowing temperature.
- there should be equipotential bonding of the complete unit

Additional Restrictions for Aseptic Models

- please bear in mind when classifying zones of the unit that product escapes from the valve inner chamber into the atmosphere if the bellows or collar bursts
- an aseptic valve monitoring system cannot be used

Potential Areas of Application

Seal	Size	Category 1 (corresponds to zone 0/20)			Category 2 (corresponds to zone 1/21)			Category 3 (corresponds to zone 2/22)		
		explosion group			explosion group			explosion group		
		IIA	IIB	IIC	IIA	IIB	IIC	IIA	IIB	IIC
o-ring / profile packing	①	X	X		X	X	X	X	X	X
metal bellow	①	X	X		X	X	X	X	X	X
collar	①	X	X		X	X	X	X	X	X
PTFE bellow	②	X	X		X	X	X	X	X	X
PTFE bellow	③				X	X		X	X	X

① DN 10-100 metric / 0.5-4 OD-tube / 08-80 ISO

② DN 10-65 metric / 0.5-2.5 OD-tube / 08-50 ISO

③ DN 80-100 metric / 3-4 OD-tube / 65-80 ISO

The spaces marked X symbolise the potential areas of applications

Category 1: Systems in this category are intended for use in zones where there is an explosive atmosphere where the air consists of air and gas mixtures, vapours, mists or mixtures of dust and air frequently, over long periods or continuously.

Category 2: Systems in this category are intended for use in zones where it is expected that an explosive atmosphere where the air consists of air and gas mixtures, vapours, mists or mixtures of dust and air may occasionally occur.

Category 3: Systems in this category are intended for use in zones where it is not expected that an explosive atmosphere where the air consists of air and gas mixtures, vapours, mists or mixtures of dust and air may occur, however if it does, then it is likely to only be rare or brief.

Explosion group IIA: Some example substances from this group are acetaldehyde, acetone, ammonia, benzole, butane, 2-butanone, cyclohexane, 1,2-dichloroethane, dichloromethane,

2,2-dimethylbutane, ethyl acetate, ethane, heptane, hexane, methane,

methanol, 2-methylbutane, methylcyclohexane, pentane, propane, tetrafluoroethene,

tetrahydro-2H-pyran, 1,1,1-trichloroethane, trichloroethane

Explosion group IIB: Some example substances from this group are acrylonitrile, 1,3-butadiene, cyclopropane, diethyl ether,

ethene, ethylene oxide, cis-2-pentene, trans-2-pentene, 1-propyne, propylene oxide

Explosion group IIC: Some example substances from this group are acetylene, carbon disulphide or hydrogen.

All components intended for use in an explosive zone are supplied with operating instructions.