CONNECTION TO INTRINSICALLY SAFE CIRCUITS - "CATEGORY 1G and 2G SENSORS"

The category 1G and 2G NAMUR inductive sensors ATEX SERIES should be connected only to intrinsically safe circuits which are approved with the EC type examination certificate and with following values:

Vo< 17V Io< 17mA Po< 73mW Co> 0.123uF Lo> 175uH

where:

Vo = Maximum output voltage in an intrinsically safe circuit that can appear under open circuit conditions at the connection facilities of the apparatus.

Io = Maximum current in an intrinsically safe circuit that can be taken from the connection facilities of the apparatus.

Po = Maximum electrical power in an intrinsically safe circuit that can be taken from the apparatus.

Co = Maximum capacitance in an intrinsically safe circuit that can be connected to the connection facilities of the apparatus without invalidating intrinsic safety.

Lo = Maximum value of inductance in an intrinsically safe circuit that can be connected to the connection facilities of the apparatus.

CONNECTION TO ENERGY LIMITED CIRCUITS - "CATEGORY 3G SENSORS"

The category 3G NAMUR inductive sensors ATEX SERIES should be connected only to energy limited circuits with following values:

Vo< 17V Io< 17mA Po< 73mW Co> 0.235uF Lo> 195uH

Vo< 15.8V Io< 20mA Po< 79mW Co> 0.475uF Lo> 160uH (SIP40-N15... Models only)

where:

Vo = Maximum output voltage in an energy limited circuit that can appear under open circuit conditions at the connection facilities of the apparatus.

Io = Maximum current in an energy limited circuit that can be taken from the connection facilities of the apparatus.

Po = Maximum electrical power in an energy limited circuit that can be taken from the apparatus.

Co = Maximum capacitance in an energy limited circuit that can be connected to the connection facilities of the apparatus.

Lo = Maximum value of inductance in an energy limited circuit that can be connected to the connection facilities of the apparatus.