

ExMGZ 100/200.ATEX Intrinsically Safe Barrier

ATEX certified

Approval II (2) GD [EEx ib] IIB / IIC

Compensation of voltage drop over zener barrier

Full sensor excitation voltage, high precision

Two independent intrinsically safe inputs

For 1 or 2 sensors

Circuit and power supply galvanically isolated

Shielded from electrical noise



- **ExMGZ 100/200.ATEX**

The ExMGZ 100/200.ATEX intrinsically safe barrier is used for applications in intrinsically safe or explosion proof environments classified as II(2)GD [EEx ib] IIB/IIC. It is designed for single or double channel tension measurement and can be used with any FMS amplifier, controller, and force sensor.

The ExMGZ 100/200.ATEX units are DIN rail mountable, utilize screw terminal connections and are easy to install between the electronic unit in an unprotected area and a force sensor in a protected area.

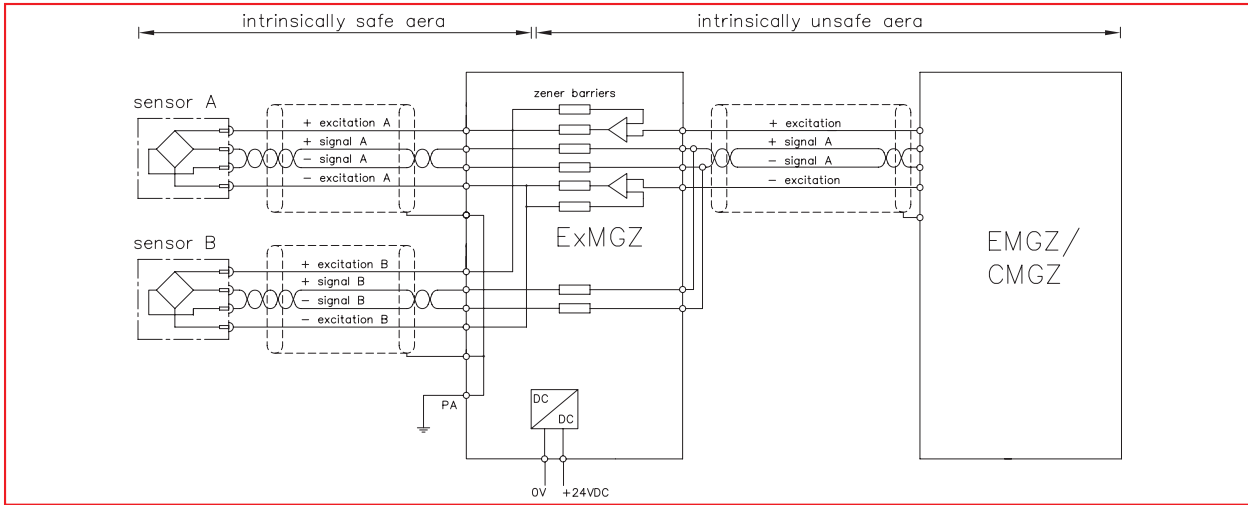
- **Functional description**

The ExMGZ 100/200.ATEX intrinsically safe barrier utilizes a zener limiter on the force sensor side. It controls the voltage to the force sensor while preventing over voltage.

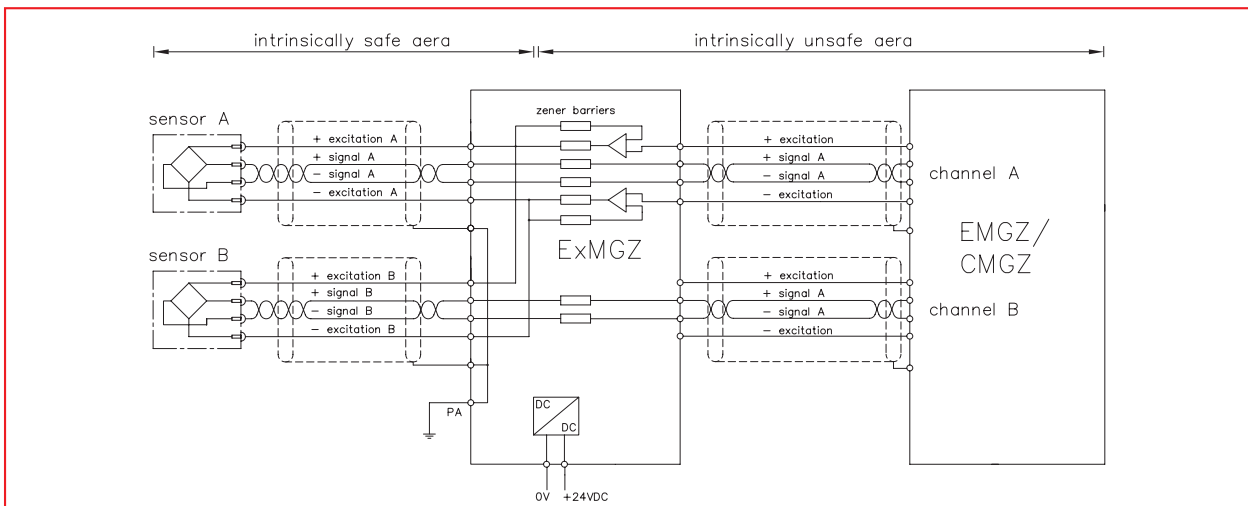
A zener barrier is provided for each channel on the intrinsically safe side. Therefore the explosion proof area remains safe from hazardous voltage levels while still allowing the tension measurement or control to perform in the process.

A control circuit ensures that the voltage drop of the zener barrier is compensated and it is guaranteed that the full excitation voltage is provided to the force sensors.

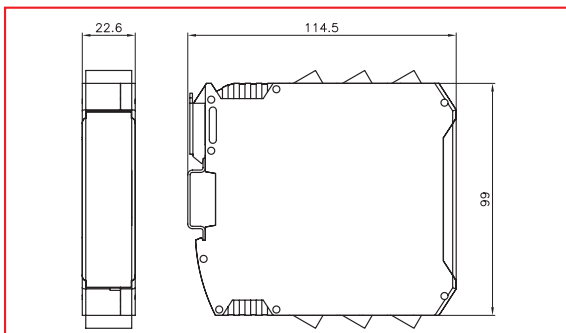
ExMGZ 100 / 200.ATEX • Electrical connection 1 channel



ExMGZ 100 / 200.ATEX • Electrical connection 2 channel



ExMGZ 100 / 200.ATEX • Dimensions in mm



ExMGZ • Technical data

Approval	II(2)GD [EEx ib] IIB/IIC
Applicable standards / directives	EN 50020, 94/4/EG (ATEX 100 a)
Identification	BVS 05 ATEX E 069 X
Sensor power supply	Max. 5 VDC
Explosion proofness	With 1 zener barrier on each line
Power supply	18...36 VDC, galvanically isolated
Power consumption	2.5 W
Connection	Plug-in screw terminals
Temperature range	-20...+50 °C

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