



**EMAG-SERWIS**

*Unlimited possibilities  
Flexibility  
Quality*



# Sensors

for industry

# Sensor series lineup

## MM4 - XRS

## D\*\* - XRS

where \*\* represents the measured quantity

The sensor series is designed for monitoring atmospheric parameters **in mines and chemical plants**.

The sensors are intended for use in areas with potentially explosive gas atmospheres.

These devices belong to category **M1 (for group I) and 1G (for group IIB)**, so it can be used in zones where explosive atmospheres are consistently present.

### TECHNICAL SPECIFICATIONS:

#### PRESENTATION OF MEASUREMENT RESULTS

#### SUPPLY VOLTAGE

#### COMMUNICATION

#### OPERATING TEMPERATURE RANGE

#### RELATIVE HUMIDITY RANGE

#### DIMENSIONAL SPECIFICATIONS

#### WEIGHT

#### ENCLOSURE PROTECTION LEVEL

#### graphic display

8 - 15,5V DC

RS-485 (Modbus RTU)

0,4 - 2V

4 - 20mA

-10°C - +50°C

0 - 95% without condensation

110x75x73,5mm

approx. 0,6 kg

IP54



## PRODUCT

NAME	DESCRIPTION
<b>MM4-XRS</b>	METHANE CONCENTRATION SENSOR
<b>DCH-XRS</b>	METHANE CONCENTRATION SENSOR
<b>DCD-XRS</b>	CARBON DIOXIDE CONCENTRATION SENSOR
<b>DCO-XRS</b>	CARBON MONOXIDE CONCENTRATION SENSOR
<b>DOX-XRS</b>	OXYGEN CONCENTRATION SENSOR
<b>DHS-XRS</b>	HYDROGEN SULFIDE CONCENTRATION SENSOR
<b>DND-XRS</b>	NITROGEN DIOXIDE CONCENTRATION SENSOR
<b>DRC-XRS</b>	PRESSURE DIFFERENCE SENSOR





## Communication

Isolated RS-485 (Modbus RTU)  
0,4 – 2V  
4 – 20mA

## Optical signaling

The device has two optionally activated and adjustable signaling thresholds: a warning threshold and an alarm threshold.

## Configurable two-state output

Bicolor LED (alarm thresholds).

## Power supply

8 + 15,5 VDC (from an intrinsically safe power source, not included).

## Calibration and configuration

Detector calibration and some configuration settings are performed using a wired keyboard KB-ITM (not included). Full configuration capabilities are provided by the monitoring and control system.

## Explosion-proof marking

IM1 Ex ia I Ma/II TG Ex ia IIB T4 Ga for the sensors D\*\* - XRS  
IM1 Ex ia I Ma/II TG Ex ia (CH4) Ga for the sensor MM4 - XRS



## SERIES

MEASUREMENT RANGE	TRANSDUCER
0 ÷ 100% CH <sub>4</sub>	PELLISTOR
0 ÷ 100% CH <sub>4</sub>	INFRARED
0 ÷ 5% CO <sub>2</sub>	INFRARED
0 ÷ 1000 ppm CO	ELECTROCHEMICAL
0 ÷ 25% O <sub>2</sub>	ELECTROCHEMICAL
0 - 100 ppm H <sub>2</sub> S	ELECTROCHEMICAL
0 - 20 ppm NO <sub>2</sub>	ELECTROCHEMICAL
±1000 Pa; ± 2000 Pa; ± 5000 Pa; ± 10 000 Pa; ±20000 Pa	PIEZORESISTIVE

# 30 YEARS

OF INDUSTRY  
EXPERIENCE

CZŁONEK  
**CNP**  
Centrum Naukowo-Przemysłowe EMAG



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