

DrägerSensor® XXS COCl₂

Order no. 68 12 005

| Used in | Plug & Play | Replaceable | Guaranty | Expected sensor life | Selective filter |
|------------------|-------------|-------------|-----------|------------------------|------------------|
| Dräger Pac 8000 | no | yes | 0.5 years | > 1 year at below 25°C | no |
| Dräger X-am 5000 | no | yes | 0.5 years | > 6 months at 35°C | no |
| Dräger X-am 5600 | no | yes | 0.5 years | | no |
| Dräger X-am 8000 | no | yes | 0.5 years | | no |

MARKTSEGMENTE

Manufacture of plastics, chemical industry, insecticides production, dyes, military

TECHNISCHE DATEN

| | |
|--|---|
| Detection limit: | 0,01 ppm |
| Resolution: | 0,01 ppm |
| Measurement range: | 0 bis 10 ppm COCl ₂ (Phosgene) |
| Response time: | ≤ 20 seconds (T ₂₀) |
| Measurement accuracy | |
| Sensitivity: | ≤ ± 5% of measured value |
| Long-term drift, at 20°C (68°F) | |
| Zero point: | ≤ ± 0,01 ppm/year |
| Sensitivity: | ≤ ± 1% of measured value/month |
| Warm-up time: | ≤ 1 hour |
| Ambient conditions | |
| Temperature: | (-20 to 35) °C (-4 to 99) °F |
| Humidity: | (10 to 90)% RH |
| Pressure: | (700 to 1300) hPa |
| Influence of temperature | |
| Zero point: | no effect |
| Sensitivity: | ≤ ± 0.2% of measured value/K |
| Influence of humidity | |
| Zero point: | no effect |
| Sensitivity: | ≤ ± 0.05% of measured value/RH |
| Test gas: | COCl ₂ test gas between 3.8 to 9 ppm (not in Dräger's portfolio) |



Northside Sales, Co.

Safety & Industrial Products

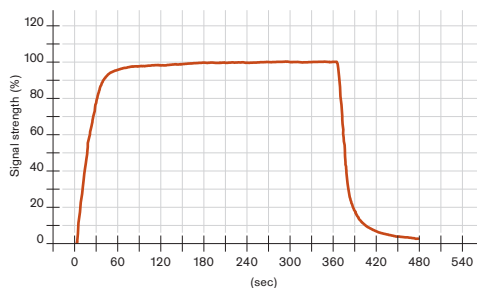
800-467-9005

SPECIAL CHARACTERISTICS

This sensor's advantages include a very low detection limit, excellent linearity and high signal stability.

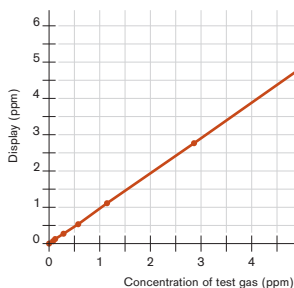
Sensor reaction at 20 °C

Flow = 0.5 l/min, 0.115 ppm COCl₂



Linearity of COCl₂ Sensors

calibrated with 0.28 ppm COCl₂



The values shown in the following table are standard and apply to new sensors. The values may fluctuate by $\pm 30\%$. The sensor may also be sensitive to additional gases (for more information, please contact Dräger). Gas mixtures may be displayed as the sum of all components. Gases with a negative cross sensitivity may displace an existing concentration of COCl₂. To be sure, please check if gas mixtures are present.

RELEVANT CROSS-SENSITIVITIES

| Gas/vapor | Chem. Symbol | Concentration | Reading in ppm COCl ₂ |
|-------------------|--|---------------|----------------------------------|
| Acetylene | C ₂ H ₂ | 20 ppm | No effect |
| Ammonia | NH ₃ | 20 ppm | No effect |
| Carbon dioxide | CO ₂ | 1,5 Vol.-% | No effect |
| Carbon monoxide | CO | 1000 ppm | No effect |
| Chlorine | Cl ₂ | 0,5 ppm | ≤ 0.2 |
| Ethanol | C ₂ H ₅ OH | 260 ppm | No effect |
| Hydrogen | H ₂ | 8000 ppm | No effect |
| Hydrogen chloride | HCl | 0,5 ppm | ≤ 0.7 |
| Hydrogen fluoride | HF | 0,4 ppm | ≤ 0.1 ppm |
| Hydrogen peroxide | H ₂ O ₂ | 1 ppm | No effect |
| Hydrogen sulfide | H ₂ S | 1 ppm | ≤ 1 ¹⁾ |
| Isobutylene | (CH ₃) ₂ CCH ₂ | 100 ppm | No effect |
| Nitrogen dioxide | NO ₂ | 1 ppm | ≤ 0.1 ⁽⁻⁾ |
| Nitrogen monoxide | NO | 30 ppm | No effect |
| Ozone | O ₃ | 0,3 ppm | ≤ 0.05 ⁽⁻⁾ |
| Phosphine | PH ₃ | 0,5 ppm | ≤ 0.1 ppm |
| Propanol | C ₃ H ₇ OH | 500 ppm | No effect |
| Sulfur dioxide | SO ₂ | 2 ppm | No effect |

(-) Indicates negative deviation

1) Permanent exposure to H₂S can result in a reduction of sensitivity.