

CS 21 Transmitter

Low Cost Solid State Sensor



- High sensitivity to a broad range of refrigerants
- Long sensor life
- Fast response

CS 21 with External Sensor

Transmitter for monitoring toxic gases and combustibles

The CS 21 transmitter uses the proven chemisorption detection principle for detection of toxic gases, vapors and combustibles. The rapid response of the transmitter provides opportunity to take counter measures and thereby limit damages. The long life of the sensors makes the CS 21 a low-cost solution for your detection needs. A transmitter can be continuously operated for more than 5 years.

Wall mount installation is straightforward. The distance between transmitter and controller can be greater than 500 m. A rugged aluminum casing protects the sensor and electronics from splashes of water and dirt. The transmitter must not be operated in EX-areas. For measurement of combustible gases in the LEL range the gas needs to be sampled by pump. In this case the EX-protection needs to be guaranteed with suitable external components (e.g. flame-protection).

Detectable gases	Detection range
CH ₂ Cl ₂	20-300 ppm
CH ₃ Cl	20-300 ppm
CH ₄	5-50% or 100% LEL
CH ₄ O	20-1,000 ppm
CH ₄ S	10-100 ppm
CHCl ₂ F	30-3,000 ppm
CHCl ₂ F ₂	20-1,000 or 5,000 ppm
C ₂ Cl ₃ F ₃	30-3,000 ppm
C ₂ Cl ₄	20-300 ppm
C ₂ H ₂ F ₄	20-500, 1,000 or 5,000 ppm
C ₂ H ₆ O	30-2,000 ppm
C ₂ HCl ₃	20-300 ppm
C ₃ H ₃ N	30-5,000 ppm
C ₃ H ₆ O	5-100% LEL
C ₃ H ₈ O	20-300 ppm
C ₃ H ₈	5-50 or 100% LEL
C ₄ H ₄ O	20-1,000 ppm
C ₄ H ₁₀	5-50% or 100% LEL
C ₆ H ₆	20-300 ppm
C ₆ H ₁₄	20-500 ppm
C ₇ H ₈	30-500 or 1,000 ppm
C ₈ H ₈	20-500 or 1,000 ppm
C ₈ H ₁₀	20-500 or 5,000 ppm
C ₈ H ₁₀	5-50% LEL
C ₉ H ₂₀	20-1,000 ppm
C ₉ H ₂₀	5-50% LEL
CCl ₃ F	20-2,000 ppm
CO	20-300 or 1,000 ppm
H ₂	20-10,000 ppm
NH ₃	20-300, 1,000, 3,000 or 10,000 ppm

CS 21 transmitter

Technical Data

Gases

See chart above

Detection principle

Chemosorption

Response time

tA < 14 seconds

Output signal

0.2-1 mA
4-20 mA

Gas supply

Diffusion through stainless steel sinter metal filter

Power supply

10 to 32 V, 300 mA (provided by controller)

Humidity

20 to 96 % r.h., non condensing

Expected sensor life

Greater than 5 years

Pressure

920 to 1,100 hPa

Casing protection

IP 54, dust and splashed water protection

Ambient temperature

-22 to +131°F / -30 to +55°C

Cable connection

Shielded cable
3 x 0.75 mm up to 500 m,
3 x 1.5 mm for more than 500 m
PG11 cable gland

Weight

13.05 ounces (370 grams)

Dimensions

3.94x3.94x2 inches (100x100x57 mm) (HxWxD)

Specifications subject to change without notification

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