Aspirating Smoke Detector TITANUS PRO-SENS®

Cold Storage Version

TITANUS® aspirating smoke detector

The TITANUS[®] family of aspirating smoke detectors covers standard to very early warning fire detection as well as a wide range of extreme applications without compromising high levels of sensitivity and performance. Coverage up to $2 \times 3,000 \text{ m}^2$.



Technology

TITANUS *PRO*·*SENS*[®] aspirating smoke detection system combines High-Power-Light-Source (HPLS) technology with patented LOGIC·*SENS*[®] fire pattern recognition algorithms and a large portfolio of custom accessories to ensure that each system will maintain high levels of sensitivity and false alarm immunity even in challenging environments. Its modular design facilitates cost effective solutions for a wide range of specialized requirements. Optional second plug-in detector module allows one aspirating unit to economically monitor two separate areas or alternatively to be used for cross-zoning alarm verification. TITANUS *PRO*·*SENS*[®] comes with dry contacts for connection to any fire panel as well as free slots for inserting bus modules.

Advantages

- Modular design for cost effective solutions to fit the needs on side.
- Installation inside cold storage facilities to avoid condensation and ice build-up.
- High reliability and extended service life due to physical separation of disturbing influences such as dust, vapor or radiation from the measuring chamber.
- TITANUS *PipeXpress*[®] software for highly reliable ASD planning with just a few mouse clicks.
- Time-saving installation and commissioning thanks to plug & play philosophy..
- Cost-optimized: Only as much technology as necessary, to be expanded and customized
- Intelligent diagnostics tool gives support at inspection and service.

Features

- Max. fire alarm sensitivity 0.015% obsc./m
- System coverage up to 2 x 3,000 m²
- Up to 2 x 300 m pipe length and up to 2 x 63 holes
- Operating temperature: from -40°C up to 60°C
- PIPE·GUARD patented airflow monitoring system, sensing changes in total airflow as little as +/-10%
- Dry contacts for connection to any fire panel
- Free slots for integration of additional modules such as bus modules
- Optional 2nd detector module for double-knockalarm verification or for increased area of coverage
- Pre-alarm optional via 2nd detector module
- Designed for harsh environments, with a wide range of accessories for special applications
- Also available as standard version and SILENT version

Approvals



Versions TP-1-F-U available, approved according to UL, ULC and FM.

Further approvals on request and at www.wagnergroup.com



Aspirating Smoke Detector | TITANUS PRO-SENS® Cold Storage Version

| TITANUS PRO-SENS® | Components | | |
|-------------------|------------|----------|-------------------|
| | 0 | 2 | 3 |
| 1.1.2 | | | |
| | | | |
| | + | WASHERED | |
| | | | TEMAGE PRO SENS'3 |

The aspirating smoke detector consists of the basic device (1), one or two detector modules (2) and an adhesive front film sheet (3).

| TITANUS PRO·SENS® | | | | |
|--|--|--|----------------------|--|
| System | TITANUS PRO·SENS® | | | |
| | Cold Storage Version | | | |
| Basic device | | | | |
| Туре | TP-1-F/a ¹ | | | |
| Max. fire alarm sensitivity | 0.015% obsc./m | | | |
| No. of pipe connections | 1-2 aspiration pipes, d _a = 25 mm (plus 1 air return) | | | |
| No. of detector modules (zones) | 1-2 | | | |
| Max. no. of aspiration holes | 2 × 63 | | | |
| Max. area of coverage | 2 x 3,000 m ² | | | |
| Max. pipe length | 2 x 300 m | | | |
| Double-knock alarm verification | | optional | | |
| No. of alarm levels per zone | 1 | | | |
| Supply voltage | 24VDC | 24 V DC (14 to 30 V DC) according to EN 54-4 | | |
| Front indicators | fault, operation; per zone: 1 alarm | | | |
| Current consumption min. Operational | 200 mA | | | |
| (24VDC, 1 detector module) Alarm | 210 mA | | | |
| Current consumption min. Operational | 220 mA | | | |
| (24 V DC, 2 detector modules) Alarm | 240 mA | | | |
| Operating temperature | -40°C to +60°C | | | |
| Sound pressure level (ISO 3744) | as low as 45 dB(A) | | | |
| Weight (basic configuration) | 1.35 kg | | | |
| Humidity range | 10% to 95% (noncondensing) | | | |
| Dimensions | 292 x 200 x 113 mm | | | |
| Material and colour | ABS, papyrus white (RAL 9018) | | | |
| Cable entries | 5 x M20 and 2 x M25 | | | |
| Terminal connections | max. 1.5 mm ² | | | |
| IP rating | standard: IP 20, optional: IP 52 | | | |
| No. of output relays | 4 relays (alarm: form C, fault: normally closed) | | | |
| Contact load, max. | 1 A, 30 V, max. 24 W | | | |
| 2 Detector modules | | | | |
| Туре | DM-TP-50-L-F | DM-TP-10-L-F | DM-TP-01-L-F | |
| Weight | | 0.10 kg | | |
| Sensitivity | | | | |
| Earliest possible fire detection, class A+ ² | | | special excellence | |
| $\mathop{\mathrm{s}}_{\mathop{\mathrm{s}}}$ Earliest possible fire detection class A | 450 m ² | 1,350 m ² | 3,000 m ² | |
| Earliest possible fire detection class B | 1,050 m² | 3,000 m² | 3,000 m² | |
| | | | | |

2,250 m²

0.50% obsc./m

3/7/15

Data sheet, Art. no. 68-20-1351, VM/HÄ, Last revised 03/2020

¹ NF approved version: TP-1NF-F/a

² Detection of 2 g material decomposition at 180 seconds cable pyrolysis with pyrolysis generator type PYS 100

Using 1 (2) detector modules, type



3,000 m²

0.015%obsc./m

40/63/63

3,000 m²

0.10%obsc./m

9/32/40

FW-TP-1 (FW-TP-2)