Aspirating Smoke Detector

TITANUS *PRO·SENS*®

Standard and *SILENT* 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 x 3,000 m².

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.
- 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*® oftware for highly reliable ASD planning with just a few mouse clicks.
- Time-saving installation and commissioning thanks to plug & play philosophy.
- Discreet installation for maintaining aesthetics and providing safety against vandalism.
- 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 depending on version up to 2 x 72 holes
- Operating temperature: from -20 °C up to 60 °C depending on version
- PIPE·GUARD atented 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
- Sound pressure level from 23 dB(A) for *SILENT* version
- Designed for harsh environments, with a wide range of accessories for special applications
- Also available as cold storage version from -40 °C

Approvals

VdS $C\epsilon$ EN 54-20 ISO 7240-20 LPCB NF PC IBS

G 216069

Versions TP-1(-SL)-U available, approved according to UL, ULC and FM. Standard version is NF approved.

Further approvals on request and at **www.wagnergroup.com**

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Aspirating Smoke Detector | TITANUS *PRO·SENS*®

TITANUS *PRO·SENS*® | Components

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*® Standard Version	TITANUS *PRO·SENS*®–SL *SILENT* Version
❶ Basic device		
Type	**TP-1/a** [1]	**TP-1-SL**
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 x 63	2 x 63 (1 x 100 or 2 x 72) [2]
Max. area of coverage	2 x 3,000 m²	
Max. pipe length	2 x 300 m	
Double-knock alarm verification	optional	
No. of alarm levels per zone	1	
Supply voltage	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 (24 V DC, 1 detector module)	200 mA	140 mA
Alarm	210 mA	150 mA
Current consumption min. Operational (24 V DC, 2 detector modules)	220 mA	170 mA
Alarm	240 mA	180 mA
Operating temperature	-20 °C to +60 °C	0 °C to +40 °C
Sound pressure level (ISO 3744)	as low as 45 dB(A)	as low as 23 dB(A) [3]
Weight (basic configuration)	1.35 kg	1.5 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 mm²	
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	

❷ Detector modules			
Type	**DM-TP-50-L**	**DM-TP-10-L**	**DM-TP-01-L**
Weight	0.10 kg		
Sensitivity			
Earliest possible fire detection, class A+ [4]	--	--	special excellence
EN 54-20 — Max. coverage class A	450 m²	1,350 m²	3,000 m²
EN 54-20 — Max. coverage class B	1,050 m²	3,000 m²	3,000 m²
EN 54-20 — Max. coverage class C	2,250 m²	3,000 m²	3,000 m²
Max. fire alarm sensitivity	0.50 % obsc./m	0.10 % obsc./m	0.015 % obsc./m
Max. no. of aspiration holes			
EN 54-20 class A / B / C	3 / 7 / 15	9 / 32 / 40	40 / 100 / 100

❸ Adhesive front film sheets	
Using 1 (2) detector modules, type	**FW-TP-1 (FW-TP-2)**

[1] NF approved version: TP-1NF/a

[2] Fan controller type FC-3 required

[3] with sound absorber type SD-1/a

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

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