

# Aspirating Smoke Detector

## TITANUS FUSION®

### 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 1,600m<sup>2</sup>.



#### Technology

TITANUS FUSION® 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 FUSION® 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 site.
- 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.
- 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 2x1,600m<sup>2</sup>
- Operating temperature: from -30°C up to 60°C depending on version
- Up to 2 x 160 m pipe length and depending on version up to 2 x 20 holes
- 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 2<sup>nd</sup> detector module for double-knock alarm verification or for increased area of coverage
- Pre-alarm optional via 2<sup>nd</sup> detector module
- Sound pressure level from 23dB(A) for SILENT version
- Designed for harsh environments, with a wide range of accessories for special applications

#### Approvals



G 216069

Further approvals on request and at [www.wagnergroup.com](http://www.wagnergroup.com)

# Aspirating Smoke Detector | TITANUS FUSION®

## TITANUS FUSION® | 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 FUSION®			
System		TITANUS FUSION® Standard Version	TITANUS FUSION®-SL SILENT Version
<b>1 Basic device</b>			
Type		TF-1	TF-1-SL
Max. fire alarm sensitivity		0.015% obsc./m	
No. of pipe connections		1–2 aspiration pipes, d <sub>a</sub> = 25 mm (plus 1 air return)	
No. of detector modules (zones)		1–2	
Max. no. of aspiration holes		2 x 20	
Max. area of coverage		2 x 1,600 m <sup>2</sup>	
Max. pipe length		2 x 160 m	
Double-knock alarm verification		optional	
No. of alarm levels per zone		1–2	
Supply voltage		24 VDC (14 to 30 VDC) according to EN 54-4	
Front indicators		fault, operation; per zone: 1 alarm	
Current consumption min. Operational (24 VDC, 1 detector module)	Alarm	200 mA	140 mA
	Alarm	210 mA	150 mA
Current consumption min. Operational (24 VDC, 2 detector modules)	Alarm	220 mA	170 mA
	Alarm	240 mA	180 mA
Operating temperature		-30°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) <sup>1</sup>
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 mm <sup>2</sup>	
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	
<b>2 Detector modules</b>			
Type		DM-TF-50-L	DM-TF-10-L
Weight		0.10 kg	
<b>Sensitivity</b>			
Earliest possible fire detection, class A+ <sup>2</sup>		--	special excellence
EN 54-20	Max. coverage class A	450 m <sup>2</sup>	1,600 m <sup>2</sup>
	Max. coverage class B	1,050 m <sup>2</sup>	1,600 m <sup>2</sup>
	Max. coverage class C	1,600 m <sup>2</sup>	1,600 m <sup>2</sup>
Max. fire alarm sensitivity		0.50% obsc./m	0.015% obsc./m
<b>Max. no. of aspiration holes</b>			
EN 54-20 class A/B/C		3/7/15	8/12/20
<b>3 Adhesive front film sheets</b>			
Using 1 (2) detector modules, type		FW-TF-1 (FW-TF-2)	

<sup>1</sup> with sound absorber type SD-1/a

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