

# TITANUS FUSION®

# **AETF**

### Description

Early smoke detection to obtain the maximum advantage of the time factor.

The TITANUS Family Aspirating Air Sampling Smoke Detectors are designed for standard to highly sensitive fire detection, and to detect the smallest smoke particles, even in the most challenging environmental conditions.

### **Technology**

Thanks to active aspiration smoke detection, TITANUS® FUSION continually checks for the presence of aerosols in room air by taking air samples. The patented LOGIC  $\cdot$  SENS fire pattern identification analyzes air samples and offers maximum security against false alarms, according to the TM operating mode and VDE 0833-2, to avoid false alarms. The use of High-Power-Light-Source (HPLS) technology makes the TITANUS® FUSION optical smoke detector incredibly effective and responsive in recognizing even the slightest trace of smoke particles. The slightest defect in the circulation of the samples can be ruled out due to the monitoring of the constant air flow in the measurement chamber.



### Equipment and characteristics of use

- Sensitivity from 0.015% obsc./m in the alarm.
- Coverage up to 2 x 1,600 m2
- Max pipe length 2x160 m with up to 2 x 20 suction holes
- Operating temperature range from -30 °C to +60 °C, depending on the model.
- Operational safety with PIPE · GUARD, the patented airflow monitoring, which detects changes as small as +/- 10%
- Potential free contacts for alarm and fault information on the fire detection control panel
- Free connections, p. ex. for couplers
- Optional second plug-in detector module, allowing an air sampling unit to economically monitor two separate areas or to be used for cross-zone alarm verification
- Optional adjustable pre-alarm
- SILENT version (silent) with low sound pressure level from 23 dB (A)
- Wide range of accessories certified according to DIN EN 54-20 and ISO 7240-20

#### Advantage

- Modular system for demand-based surveillance of a wide range of applications for surveillance of rooms and equipment
- Operational safety and long service life due to physical separation of the measuring chamber and interference factors such as dust, condensation humidity or electromagnetic radiation
- $\bullet$  Easy system design and pipeline planning in seconds with TITANUS® PipeXpress
- $\bullet$  Installation and start-up time savings thanks to the Plug & Play equipment installation design
- Once installed, the system is discreet and goes unnoticed, preserving the architectural aesthetic and protecting it against vandalism.
- Low operating costs and attractive investment: The technology you really need is available, can be flexibly expanded or adapted.
- The intelligent diagnostic tool aids in inspection and maintenance.

TECHNICAL CHARACTERISTICS - BASIC UNIT <sup>1</sup>					
Titanus Fusion	TITANUS FUSION STANDAR	TITANUS FUSION TOP SILENT (silent)			
Maximum sensitivity of fire alarm	0,015% obsc./m				
Number of pipe connections	1-2 air sampling pipes, double conductor = 25mm (plus 1 air return)				
Number of detector modules	1-2				
Maximum number of suction holes	2x20				
Maximum surveillance area coverage	2x1.600m <sup>2</sup>				
Max length of pipe.	2x160m				
Cross zone alarm verification	Optional				
Alarm phases	1-2				
Supply voltage	24Vcc (14 a 30 Vcc) <sup>1</sup>				
Light indications	1-2 alarm / 1 fault / 1 power				
Current consumption min. Sleep mode	200mA	140mA			
(24Vdc, 1 detector module) Alarm	210mA	150mA 1			



# TITANUS FUSION®

# **AETF**

TECHNICAL CHARACTERISTICS - BASIC UNIT <sup>1</sup>						
Current consumption min. Standby mode	220mA 170mA					
(24Vdc, 2 detector modules) Alarm	24	l0mA	180mA			
Operating temperature range	De -30°C	C a +60°C	De 0°C a +40°C			
Sound pressure	from 45	6 dB(A)	from 23dB(A) <sup>2</sup>			
Weight (without detector modules)		35Kg	1,5Kg			
Humidity range	10% to 95% (non-condensing)					
Dimensions: height x width x depth	292x200x113mm					
Housing material and color	Synthetics (ABS), white papyrus (RAL 9018)					
Number of pipe accesses	5 x M20 y 2 x M25					
Terminal connections max.	1,5m <sup>2</sup>					
IP rating	Stándar: IP20, optional: IP52					
Output relays	Potential free contacts (alarm and fault)					
Charge on contact		1 A, 30 V, máx. 24W				
TECHNICAL CHARACTERISTICS - DETECTOR MODULES <sup>2</sup>						
TYPE	DM-TF-50-L	DM-TF-10-l		DM-TF-01-L		
Weight	0,10Kg					
SENSITIVITY:				. 1.1		
Early smoke detection, class A + 3				especial idoneidad		
Maximum monitored area class A	450m <sup>2</sup>	$1.200 \text{m}^2$		1.600m <sup>2</sup>		
Maximum monitored area class B	1.050m <sup>2</sup>	1.600m <sup>2</sup>		1.600m <sup>2</sup>		
Maximum monitored area class C	1.600m <sup>2</sup>	$1.600 m^2$		$1.600 \text{m}^2$		
Max fire alarm.	0,50% obsc./m	0,10%obsc.	/m	0,15% obsc./m		
Max No. suction ports						
EN 54-20 Class A/B/C/	3 / 7 / 15	8 / 12 / 20		8 / 12 / 20		
TECHNICAL CHARACTERISTICS - POLYCARBONATE <sup>3</sup>						
With 1 (2) detector modules, type	FW-TF-1 (FW-TF-2)					
	·					

 $<sup>\</sup>frac{1}{1}$  according to EN 54-13 in parallel operation in sleep mode  $\frac{2}{1}$  with SD-1 silencer

## **APPROVALS**



# TITANUS FUSION COMPONENTS



<sup>&</sup>lt;sup>3</sup> Detection of pyrolysis of 2 g cable with PYS100 pyrolysis generator in 180 seconds