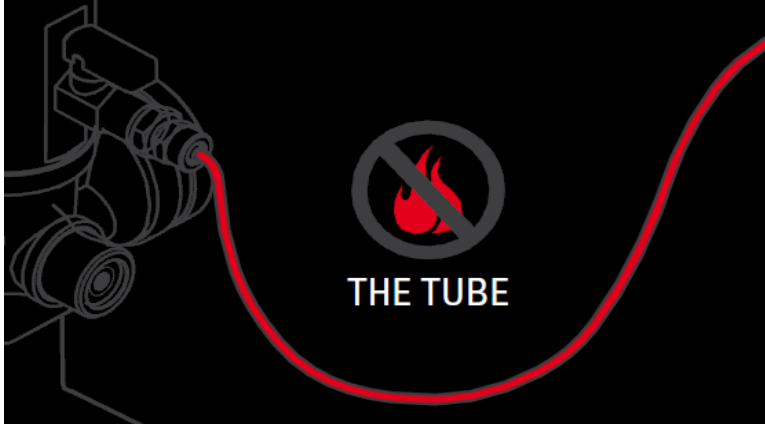


	<b>Technical data sheet</b>	Dwg.N°	Rev.	Date	pg.	of
		SSA SG 702901	0	30.04.10	1	2

FIREDETEC APPLICATION		
Part name & Code	FireDeTec Tube	SSA SG 702901

## FireDeTec TUBE



### THE DETECTION TUBE:

#### A SIMPLE BUT REVOLUTIONARY IDEA

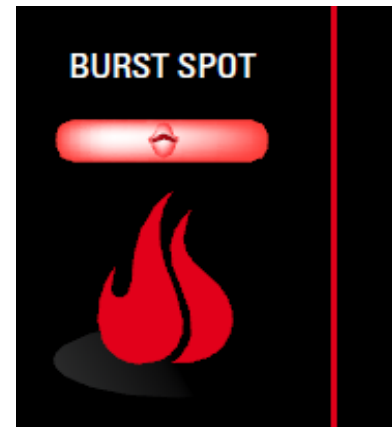
The FireDeTec tube relies on a simple idea detect the fire and extinguish it. The tube, as well as our system, is developed and manufacture inhouse. It is made out of highly advantaced polymers that will burst at the hottest spot and then starting the extinguishing process either on a direct or in direct manner.

Thanks to its advanced characteristics, the tube is a linear detection system that does not need any source of energy and can be submitted to harsh environments.

It simply extinguishes the fire in the most effective way, befor the fire spreads.

### THE DIFFERENCE

- Acts as a multi-sensor and multi extinguishing jet
- When bursting at the hottest spot, it ruptures as a nozzle shaped opening
- Made of a high-tech polymer
- Combines
  - Long-time resistance
  - Flexibility
  - Temperature sensitivity
- Autonomous system, no external powder required



### APPLICATIONS

- Electric cabinets
- Medical / Laboratory equipment
- Cnc machines
- Cable ducts / Switchgear
- Transmitters
- Heavy machinery and special vehicles
- Storage areas and Flammable liquid stores
- Public transportation
- Military
- Marine



**SAFE Technology Ind. & Trade Co. Limited**

**SAFE Teknoloji Sanayi ve Ticaret Ltd. Şti.**

© SAFE February 2009 rev.00

Güzelyurt Mah. 5775 sok. No.30/A 45030 Manisa-Türkiye

Tel. +90 (236) 236 3360 Fax. +90 (236) 236 3362

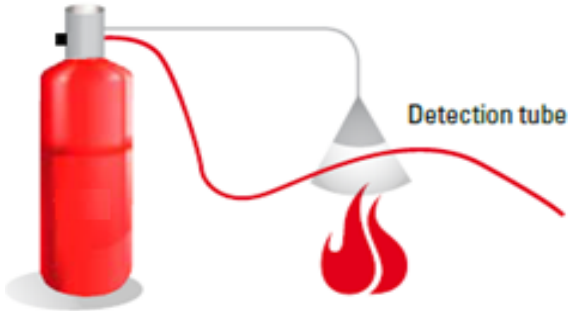
www.safe-tr.com info@safe-tr.com

**FIREDETEC APPLICATION**

Part name &amp; Code

**FireDeTec Tube**

SSA SG 702901

**INDIRECT SYSTEM****DIRECT SYSTEM****ADVANTAGES**

- Fully autonomous, no external power needed, no electronics
- Continuous linear detection along the tube
- Easy to install
- Low maintenance
- No electrical power needed
- 24/7 detection and readiness
- Modular system, adaptable to any situation
- Protects even most unaccessible spots
- Detection tube bursts and extinguishes at the hottest spot
- One system can also protect many different sections  
(with additional regulation valves)

**LOW PRESSURE (LP) & HIGH PRESSURE (HP) APPLICATIONS**Indirect  
Low Pressure ValeIndirect  
High Pressure ValveDirect  
Low Pressure ValveDirect  
High Pressure Valve

	<b>Technical data sheet</b>	Dwg.N°	Rev.	Date	pg.	of
		SSA SG 702901	0	30.04.10	3	4

<b>FIREDETEC APPLICATION</b>		
Part name & Code	<b>FireDeTec Tube</b>	SSA SG 702901

## FireDeTec Detection Tubing

### General Product Descriptions

Stock number	: SSA SG 70201
Design	: Mono-Layer
Color	: RAL 3000 (red)
Length	: 100 m
Internal diameter	: 4 +/- 0.1 mm
Outside diameter	: 6 +/- 0.05 mm
Bending radius (min)	: 100 mm
Working pressure (max)	: 20 bar @ 20°C
Burts pressure	: 100 bar @ 20°C
Temperature range	: - 30°C / + 80°C
Permeability	: min. 10 <sup>-4</sup> mbar l/s (100% Helium)
Life time	: 5 years (under normal conditions)
Marketing	: FireDeTec Automatic Fire Detection Tube
Week/year of production - do not cut, kink, crush	



### Physical Properties

#### Mechanical Properties

		Standard	Unit	State	Values
Tensile E-Modulus	1 mm/min	ISO 527	Mpa	dry / cond.	1800 / 600
Tensile strength at yield	50 mm/min	ISO 527	Mpa	dry / cond.	50 / 25
Elongation at yield	50 mm/min	ISO 527	%	dry / cond.	15-Apr
Tensile strength at break	50 mm/min	ISO 527	MPa	dry / cond.	40
Elongation at break	50 mm/min	ISO 527	%	dry / cond.	> 50
Impact strength	Charpy 23°C	ISO 179/2-1eU	kJ/m <sup>2</sup>	dry / cond.	no break
Impact strength	Charpy -30°C	ISO 179/2-1eU	kJ/m <sup>2</sup>	dry / cond.	no break
Notched impact strength	Charpy 23°C	ISO 179/2-1eU	kJ/m <sup>2</sup>	dry / cond.	65 / 115
Notched impact strength	Charpy -30°C	ISO 179/2-1eU	kJ/m <sup>2</sup>	dry / cond.	15
Shore hardness D		ISO 868		dry / cond.	75 / 67

#### Electrical Properties

Dielectric strength		IEC 60243-1	kV/mm	dry / cond.	42 / 39
Comparative tracking index	CTI	IEC 60112		cond.	600
specific volume resistivity		IEC 60243-1	Ω-m	dry / cond.	10 <sup>12</sup> / 10 <sup>11</sup>
Specific surface resistivity		IEC 60243-1	Ω	cond.	10 <sup>12</sup>



**FIREDETEC APPLICATION**

Part name & Code

**FireDeTec Tube**

SSA SG 702901

**FireDeTec Detection Tubing**

**Thermal Properties**

		<b>Standard</b>	<b>Unit</b>	<b>State</b>	<b>Values</b>
Melting point	DSC	ISO 11357	C°	dry	222
Heat deflection temperature HDT/A	1.80 Mpa	ISO 75	C°	dry	50
Heat deflection temperature HDT/B	0.45 Mpa	Iso 75	C°	dry	9-May
Thermal expansion coefficient long.	23-55°C	ISO 11359	10 <sup>-4</sup> /K	dry	1,3
Thermal expansion coefficient tran.	23-55°C	ISO 11359	10 <sup>-4</sup> /K	dry	1,5
Maximum usage temperature	long term	ISO 2578	C°	dry	80-100
Maximum usage temperature	short term	ISO 2578	C°	dry	180

**Burst temperature is in relation with the internal pressure of the tube**

