

# Smokemaster – Smoke Curtain

## Datasheet

### Automatic Smoke Curtain

#### SMOKEMASTER SM-5

Smoke containment systems prevent the movement of smoke and heat from one area to another. These often take the form of physical barriers such as smoke curtains. Smoke curtains are generally used either to create a smoke reservoir by containing and limiting the travel of smoke, to channel smoke in a predetermined direction, or to prevent or retard smoke entry to another area or void.

Movable (as opposed to fixed) smoke curtains may be used where a fixed smoke curtain might be either impractical or aesthetically unacceptable.

The curtain comprises a flexible, heat resistant fabric, which is impervious to smoke and hot gases, wound round a circular tube. The tube contains an electric motor which holds the curtain retracted at ceiling level, and which unrolls the fabric automatically upon a signal from a fire detection system. A bottom bar is fitted to the bottom edge of the fabric to keep it taut and provide a suitable finish when the curtain is retracted.

The curtain material is 0.4 mm thick glass fibre with a weight of 490 g/m<sup>2</sup>.

Smokemaster has undergone two tests: one test to 600°C for 30 minutes, providing a D30 time/temperature classification, and another to 600°C for 120 minutes, providing D120, D90 and D60 time/temperature classifications.

Accordingly it has two “ABZ” Certificates (No. Z-78.9.102 for D30 and No. Z-78.9.117 for D120). These are in the course of being converted to an EN 12101-1 (2006) certificate.

#### PRODUCT DESCRIPTION

In many buildings smoke containment systems such as Smokemaster are used to prevent the movement of smoke and heat from one area to another. Smokemaster is rated to contain smoke at a temperature of up to 600 °C for 30, 60, 90 or 120 minutes, depending on which version is selected.



▲ Smokemaster in lowered position



▲ Harmonious integration



▲ Computer simulation



▲ Individual solutions

Its compact and flexible design offers many opportunities for modification to suit the requirements of the building. For instance Smokemaster is available with T- and corner pieces.

There are two types available. The “G” (Gravity) version falls under gravity in a controlled manner to a predetermined level in a fire situation or on loss of power, in accordance with ASB 1/3 of EN 12101-1.

The “D” (Drive) version drives down in a controlled manner to a predetermined level upon receipt of a signal, in accordance with ASB 2/4 of EN 12101-1.

It can also be driven down to an intermediate position, for instance over an escalator, where it is held at that position for some time before descending further. Smokemaster is designed to be linked to a fire detection system.

Smokemaster is also available with side guides where a high degree of deflection is likely.

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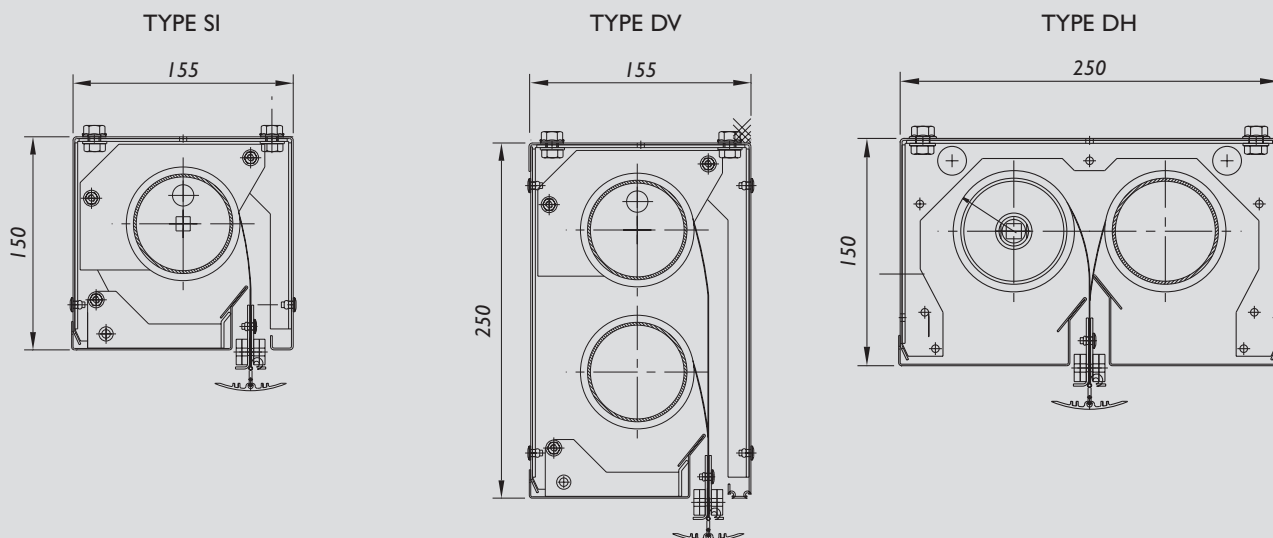
Smokemaster is delivered to site in a carefully pre-packaged consignment for ease of installation. Two bottom bars are available depending upon aesthetic requirements: the “Industrial” Bottom Bar and the “Comfort” Bottom Bar. The “Comfort” Bottom Bar is virtually invisible, and is available in any RAL colour.

For ease of servicing, Smokemaster “D” (Drive) version may be driven down to any intermediate position.

### SMOKEMASTER IS AVAILABLE IN THREE VERSIONS:

- 1) Single units (type “SI”).
- 2) Double vertical (type “DV”) units, where continuous runs with overlapped fabric to form a continuous barrier are required.
- 3) Double horizontal (type “DH”) units, where there is a premium on space under the ceiling.

Overall curtain lengths for single units are available from 1080 to 4580 mm, and drops are available from 500 to 5000 mm. A requirement above these dimensions will be met by installing either double horizontal or double vertical units.



### ROLLER ASSEMBLY

The roller assembly contains all the electronic components. All Smokemaster curtains require a 230 V ac power source.

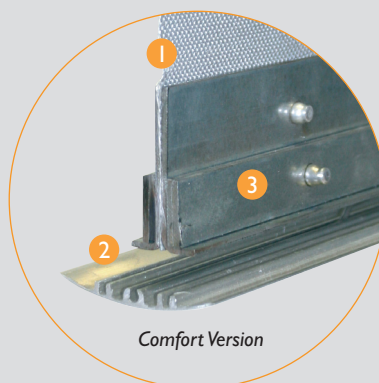
With the “D” version an additional 24 V dc source is required for the brake.

The technical details of the two different curtains is given below:

G-VERSION	10GF	25GF	D-VERSION	
Power when curtain blocked	33 VA	36 VA	<b>AC POWER</b>	
Power when curtain raised	22 VA	42 VA	Power supply	230 V AC / 50Hz
Power when curtain held up	2.3 VA	2.7 VA	Power rating	126 W
<b>AC POWER</b>			Current	0,55 A
Minimum voltage	22 V AC	22 V AC	Torque	12 Nm / 17 min <sup>-1</sup>
Maximum voltage	40 V AC	40 V AC	<b>INTERNAL BRAKE</b>	
<b>DC POWER</b>			Power supply	24 V DC (+10%)
Minimum voltage	30 V DC	30 V DC	Power rating	6 W
Maximum voltage	50 V DC	50 V DC	Additional loads permissible for	4 Minutes
<b>PULLING UP WEIGHT</b>	5 kg	10 Kg	Insulation Class	H DIN57700 + VDE 0700
			Protection Class	IP 44

### BOTTOM BAR

For either the “Industrial” or the “Comfort” version, a bottom bar is fixed to the lower edge of the fabric to assist in lowering the curtain, to reduce sideways movement of the fabric in air currents and to provide a neat finish when retracted.



- 1 - Non-flammable glass fibre
- 2 - Extruded aluminium bottom bar
- 3 - Weight profile