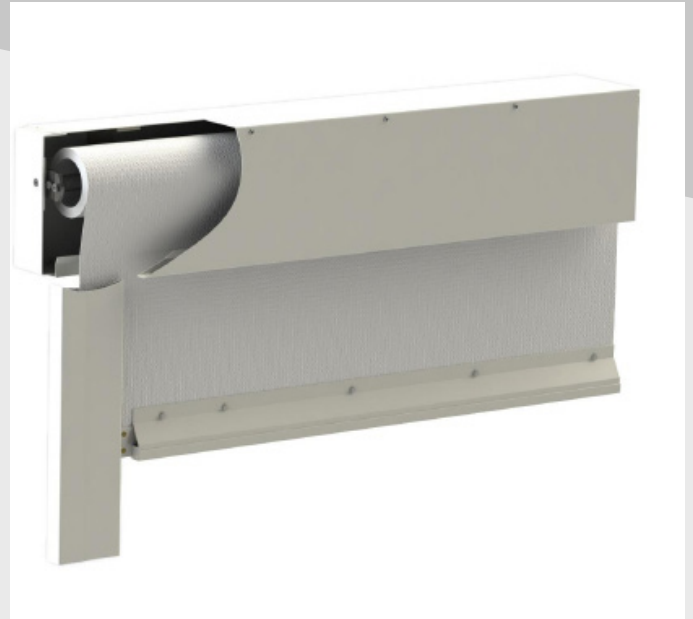


SPECIFICATION - MODEL FC8 Fire Curtain (BS8524)

OVERVIEW

The BLE Model FC8 active fire curtain comprises of a glass fibre, stainless steel wire reinforced fabric with a fire-retardant polymer coating. The fabric is wound on to a steel roller, which is powered by an internal 24Vdc electric motor.

The roller is enclosed within a 1.2mm galvanised mild steel headbox. A weighted steel bottom bar is fitted to the bottom edge of the fabric curtain to ensure the curtain deploys under gravity. Steel side guides incorporating a fabric retaining mechanism are used to limit the deflection of the curtain under the pressure created in a fire and, when incorporating brush seals, minimise smoke leakage.



PRODUCT PERFORMANCE

The complete FC8 Fire Curtain system has been extensively tested in both single and multiple overlapping roller configurations and meets the requirements of BS8524-1:2013 – Active fire curtain barrier assemblies.

Third party certification is held under the Warrington Certification ewcl⁵ scheme. The Electrical Control Panels conform to BS ISO 21927-9 and the Power Supply conforms to BS EN 12101-10, as required by BS8524-2:2013

Table 1 - Designations, size limitations & performance for the FC8 Fire Curtain

Model	Max Width (M)	Max Drop (M)	Fire Resistance (mins)		Smoke Seal	Product Standard	Certification
			Integrity (E)	Irradiance (W)			
Single Roller	5.0	6.0	180	-	Yes	BS8524	Warrington Certification ewcl ⁵
Multiple Roller	Unlimited	6.0	120	-	No		

HEADBOX SIZING

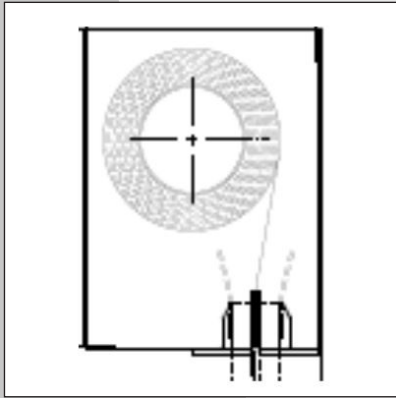
The size of the curtain roller housing, or headbox, depends on the curtain width and drop. Table 2 gives details of the range of headbox sizes required for the FC8 fire curtain, as follows:

Table 2a - Single Roller Headbox Sizing Guide

Table 2b - Over / Under Multiple Roller Headbox Sizing Guide

Table 2c - Side by Side Multiple Roller Sizing Guide

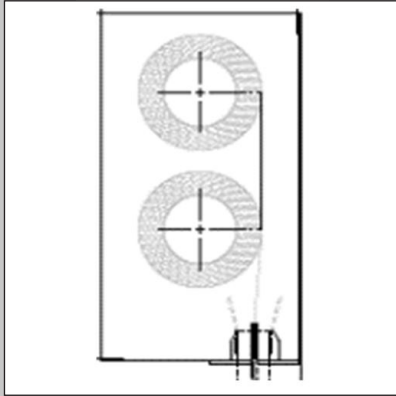
Table 2a - FC8 Single Roller



Headbox size (width x drop)	FC8	
	Max Width (M)	Max Drop (M)
150 x 200mm	5.0	4.0
180 x 220mm	5.0	6.0

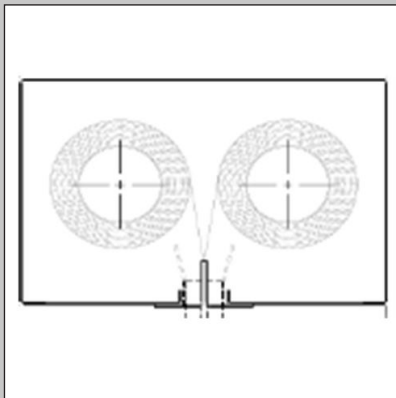
Headbox size (width x drop)	FC8 with Smoke Seal	
	Max Width (M)	Max Drop (M)
150 x 200mm	5.0	3.5
180 x 220mm	5.0	4.5
180 x 260mm	5.0	6.0

Table 2b - FC8 Over / Under Multiple Roller



Headbox size (width x drop)	FC8	
	Max Width (M)	Max Drop (M)
180 x 340mm	Unlimited	4.0
200 x 400mm	Unlimited	6.0

Table 2c - FC8 Side by Side Multiple Roller



Headbox size (width x drop)	FC8	
	Max Width (M)	Max Drop (M)
300 x 200mm	Unlimited	4.0

CONTROL SYSTEMS

MK5 MONO CONTROL UNIT

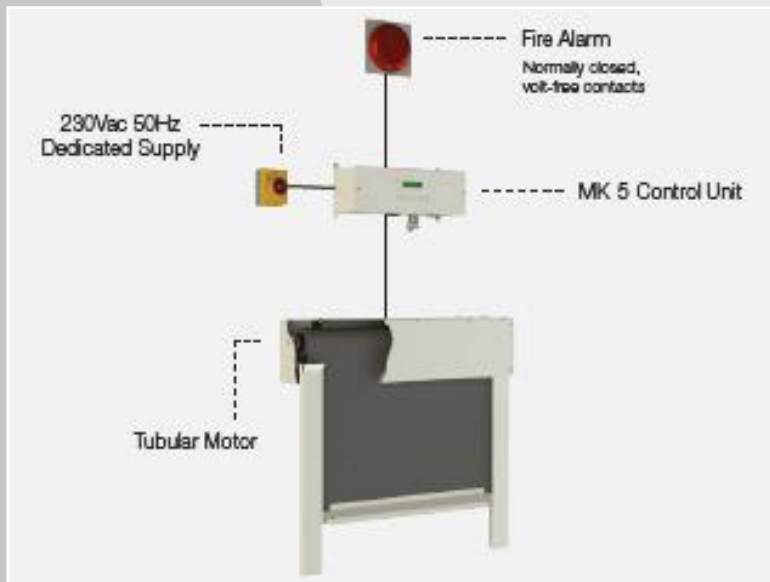
For single FC8 Fire Curtains, up to 4m wide x 4m drop, the BS8524 compliant MK5 Control Panel is most commonly specified. The MK5 contains all the fire alarm interface and motor control functionality in a single unit. The curtain roller is supplied with a 24Vdc permanent magnet electrical motor fitted with an internal 24Vdc electromagnetic brake as standard.

When the FC8 Fire Curtain is fully retracted, the internal electromagnetic brake is powered, keeping the curtain in its retracted position. The motor includes built in short circuit and open circuit protection, meaning the curtain will deploy under total controlled gravity failsafe at a descent rate compliant with BS8524 even if the motor wires are severed. In the event of an alarm activation the electromagnetic brake will de-energise and the curtain will immediately deploy to its Fire Operational Position. In the event of a mains power failure the curtain will be held in the retracted position for 30 minutes by the backup batteries before deploying to its Fire Operational Position. If an alarm activation is received during a mains power failure, the curtain will immediately deploy to its Fire Operational Position.



MK5 CONTROL PANEL PRODUCT FEATURES

- Plug & play wiring
- 24Vdc motor with internal electromagnetic brake
- Adjustable electronic descent speeds
- Motor protected from short circuits or open circuits
- Adjustable battery back up
- Enabled for 'Self Test'
- Programmable two stage descent
- Programmable timed manual override
- Fault and event log



CONTROL SYSTEMS

VARIOSPEED®6 MULTIPLE MOTOR CONTROL UNIT

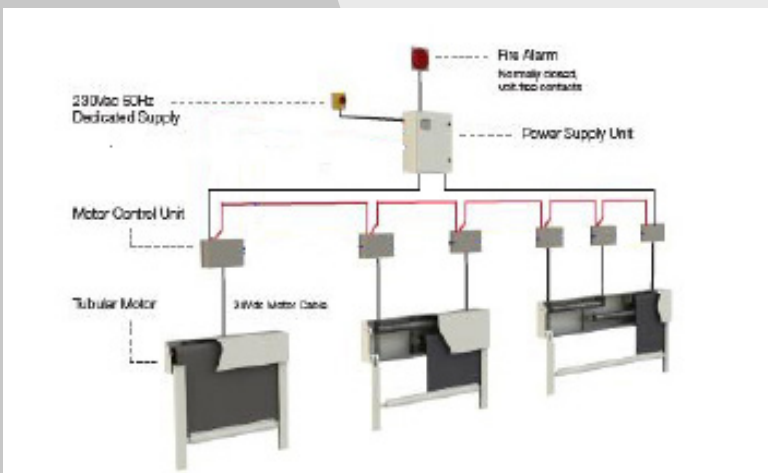
Where more than one fire curtain is required in the same installation the Variospeed®6 Control Panel is required. The Variospeed®6 control panel can operate up to 8 fire curtain motors, each of which requires a individual Motor Control Card (MCC). Up to 3 MCCs can be contained within the standard 500mmx400mmx210mm Variospeed®6 cabinet.

The curtain roller is supplied with a 24Vdc permanent magnet electrical motor fitted with an internal 24Vdc electromagnetic brake fitted as standard. When the FC8 Fire Curtain is fully retracted, the internal electromagnetic brake is powered, keeping the curtain in its retracted position. The motor includes built in short circuit and open circuit protection, meaning the curtain will deploy under total controlled gravity failsafe at a descent rate compliant with BS EN 12101 and BS8524 even if the motor wires are severed. In the event of an alarm activation the electromagnetic brake will de-energise and the curtain will immediately deploy to its Fire Operational Position. In the event of a mains power failure the curtain will be held in the retracted position for 30 minutes by the backup batteries before deploying to its Fire Operational Position. If an alarm activation is received during a mains power failure, the curtain will immediately deploy to its Fire Operational Position.

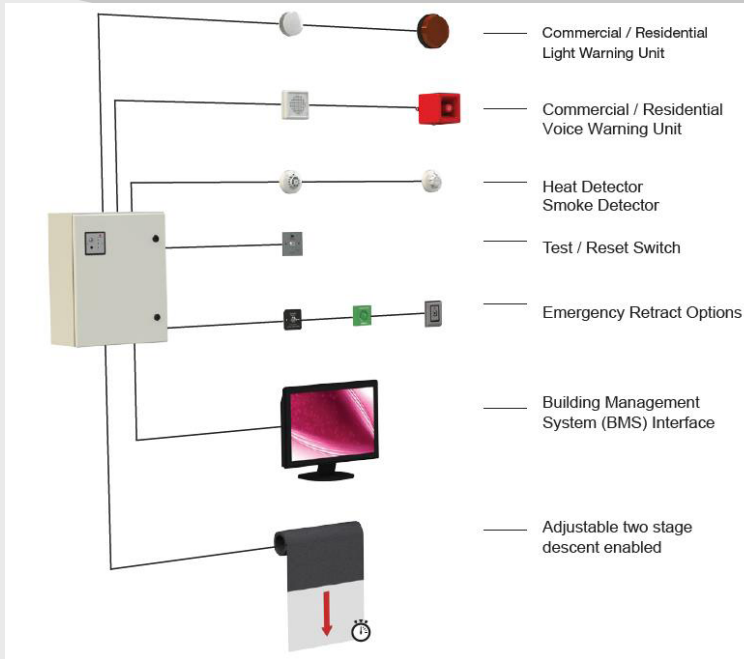


VARIOSPEED®6 PRODUCT FEATURES

- Slave line for overlapping / multiple roller systems
- Up to 8 fire curtain rollers from 1 Control Unit
- 24Vdc motors with internal electromagnetic brakes as standard
- Motor protected from short circuits or open circuits
- Can be connected to BMS for monitoring of system
- Adjustable electronic descent speeds
- Adjustable battery backup
- Multiple alarm inputs and outputs
- Low power consumption



OPTIONAL EXTRAS



Feature	MK5	Variospeed®6
Light Warning Units	Yes	Yes
Voice Warning Units	Yes	Yes
Heat Detector / Smoke Detector	Yes	Yes
Test / Reset Switch	Yes	Yes
Emergency Retract Options	Yes	Yes
BMS Interface	Yes	Yes
Two Stage Descent	Yes	Yes
Safety Edge / Bump Stop	Yes	Yes
Obstruction Warning	Yes	Yes

WARRANTY

A manufacturers warranty is provided for 1 year from completion of the installation if this is carried out by BLE, or 1 year from delivery of equipment if supplied for installation by a third party.

CONTACT

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