

1. INTRODUCTION

FES90M-P

High Security Electric EcoStrike™ with Pre-load Capability –Australian Footprint

The patented FES90M-P series of motorised High Security Electric EcoStrike with up to 35kg Pre-Load capability is a revolutionary electric locking solution. With its high Pre-Load /Side-Load tolerance and minimal energy consumption in ‘Sleep-Mode’ it is a truly “Green Locking Solution”.

2. FEATURES

The strike accepts voltages from 10 to 30VDC. It has a 10mm lip, is pre-drilled for extension lips and has a unique and simple fail secure (power to open)/ fail safe (power to lock) changeover function. The Strike is also provided with a sound reducing buffer.

The **FES90MP** door strike provides 2 forms of monitoring:

1. LSS - Lock Status Sensor - state of internal locking mechanism
2. DSS - Door Latch Sensor - Door latch engaged within strike keeper

The EcoStrike consumes current less than **12mA @ 12VDC** in the locked or unlocked state. Unlike conventional coil powered door strikes this strike is equally suitable for fail safe or fail secure applications. There is no need to provide a large battery backup facility for multiple fail safe door strikes. Conventional strikes require approximately 200mA in fail safe mode, the FES90M-P requires 12mA.

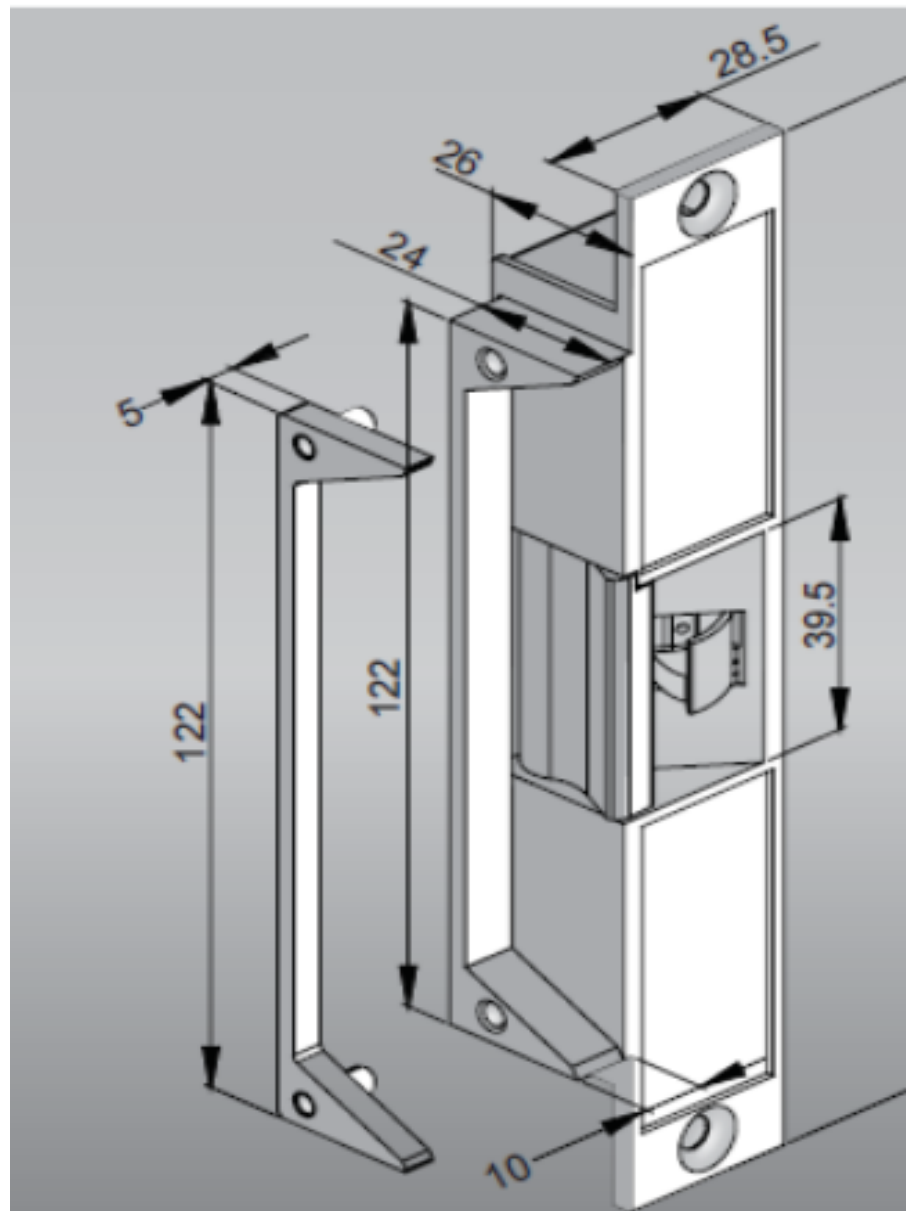
Only during locking and unlocking action the electric strike draws current up to 200mA @ 12VDC when under full 35kg pre-load.

3. TECHNICAL DATA

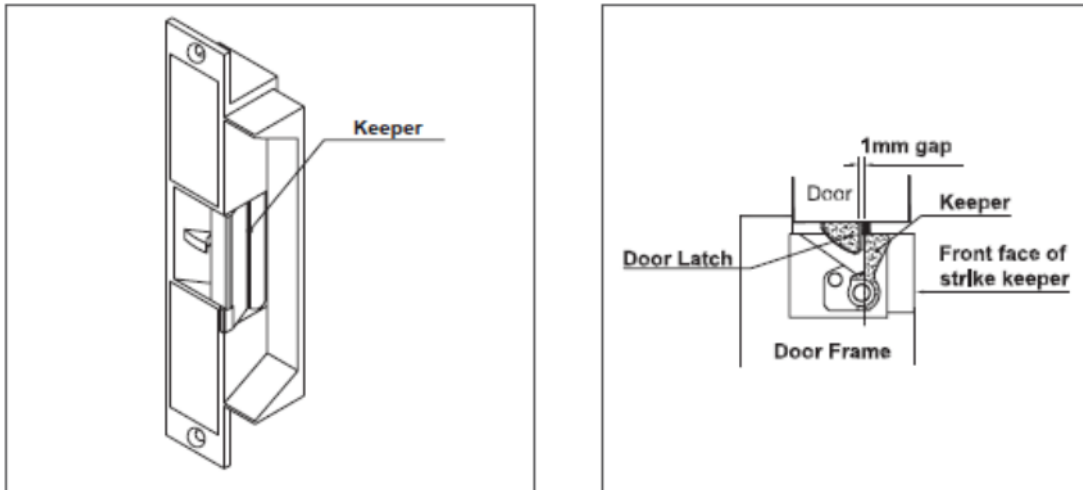
PART NO.	FES90M-P
FUNCTION	Mortice Mount, Power to Lock/Power to Open field interchangeable, 35kg of Pre-Load capacity
HOLDING STRENGTH	Up to 1370kg, Tested to 1.5Mill full 35kg pre-load cycles
VOLTAGE/CURRENT	Multi Voltage 10—30VDC
	Action mode: up to 300mA@12VDC at full 35kg pre-load only during locking and unlocking action
	Sleep mode: 12mA@12VDC in locked or unlocked mode
APPROVALS	4 hour fire rated to A.S. and B.S. Standards
	CE & C-TICK
MONITORING	LSS - Status Sensor of the internal locking mechanism
	DSS - Door Latch Sensor, Door latch engaged within strike keeper
ENVIRONMENTAL	Operational Temperature Range - 20 deg. C to 60 deg. C.

4. DIMENSIONS

If the frame is not prefabricated, use the enclosed stick-on template to prepare strike cut-out in frame. Install strike as described in diagram.



5. POSITION OF DOOR LATCH



As drawn in the diagrams, there should be a 1mm gap between the door latch and the front-face of the strike keeper, preventing the door from creating back pressure on the strike keeper when the door is closed.

6. ORDER DETAILS AND ACCESSORIES

PART NO.	PRODUCT DESCRIPTION
FES90M-P	High Security Electric Eco Strike with pre-load capabilities, Australian Footprint monitored
FES20-EL15	FES20 Extension Lip 15mm
FES20-EL25	FES20 Extension Lip 25mm
FES20-EL50	FES20 Extension Lip 50mm
FES20-EL75	FES20 Extension Lip 75mm
FES20-Rebate	Rebate Kit for FES20 Series and FES90M-P

7. CHANGING FUNCTION FROM FAIL SAFE TO FAIL SECURE

Fail Safe or Power to Lock or PTL is the factory default

Fail Secure or Power to Open or PTO is the other option available.

The operation mode is set by a small Mode Selection Switch on the side of the lock.

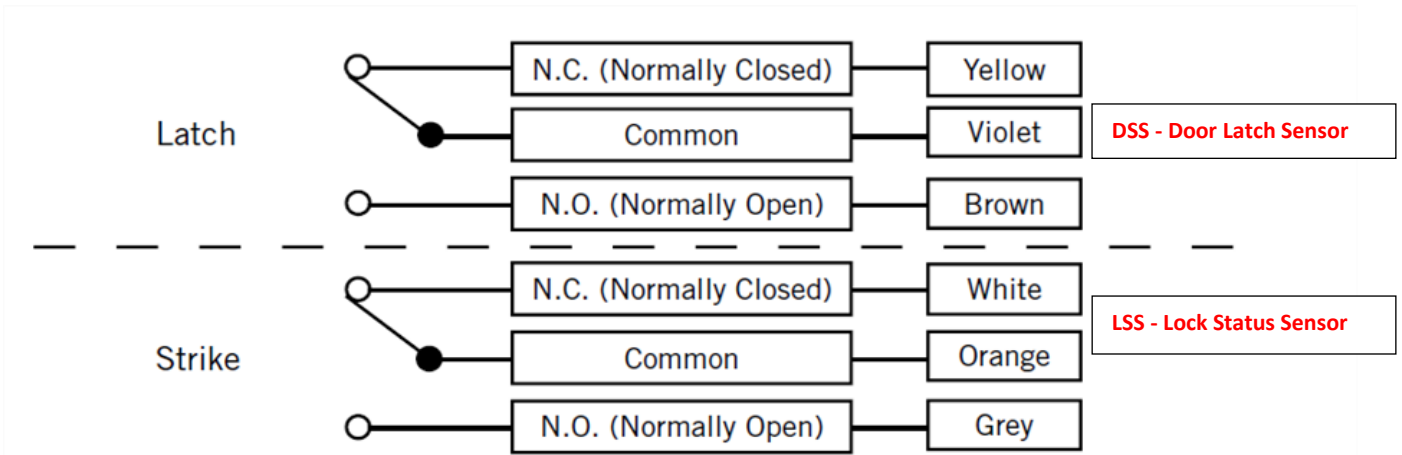
The default setting ex-factory is Power to Lock (Fail Safe). If Power to Open (Fail Secure) Locking Mode is required, simply move the Mode Selection Switch to the FAIL SECURE (PTO) position.

CAUTION - TAKE CARE SLIDING THE FRAGILE SWITCH - NO WARRANTY FOR BROKEN SWITCHES DUE TO NEGLECT.

One locking cycle may be required to finalize the mode selection and to ensure that the changeover has occurred.



8. WIRING DIAGRAMS



The wiring diagram is shown for the lock being locked, and door closed.

2 wire mode.

The lock is connected in the traditional way and is a direct wiring replacement of existing strikes.

NOT RECOMMENDED FOR FAIL SECURE or POWER TO OPEN OPERATION

Red and blue connected to POS+ 10-30VDC

Black connected to NEG- 0V

Maximum Current at full 35 kg preload is 300mA-150mA (90mA-180mA with no preload).

Hold current within 5 seconds of activation is less than 12mA

3 Wire mode. RECOMMENDED FOR BOTHE FAIL SAFE AND FAIL SECURE OPERATION.

In this configuration the power supply may be connected close to the lock, with the access control being located at a longer distance without any voltage drop to the lock.

Red is connected permanently to POS+ 10-30VDC

Blue is connected to access control

Black is connected to NEG- 0V

FES90M-P Electric Strike ex-factory setting is Power to Lock (PTL).

The control circuit for the door strike is protected against reverse polarity connection.

No additional diode protection required.

