

# D51MX

## Generation 6 *MX* Detection Range Duct Sampling Unit

### Features

- Duct Sampling Unit for *MX* Addressable Loop
- Compatible with *MX* Addressable Loop on SIMPLEX 4100ESi, VIGILANT *MX1* and VIGILANT MX4428 fire panels
- Pre-wired base for *MX* 850P/PH detector
- Rugged construction, reliable performance
- Remote termination for easy installation
- Sampling tube length 160mm to 1800mm with optional extension

### Description

The D51MX consists of a D51 duct sampling housing fitted with a detector base wired to suit an *MX* analogue addressable 850P/PH or 814P/PH photoelectric smoke detector. When fitted with the detector, the DSU is designed to detect smoke in the air passing through an air conditioning duct by extracting some air through the smoke detector. The D51MX is fitted on the outside of the duct, allowing easy access for detector servicing and replacement of the dust filters.

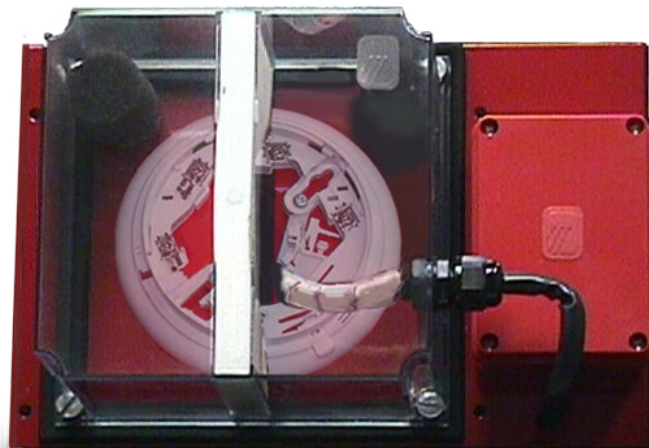
To cater for most duct sizes, a sampling tube extension is available in 3 metre lengths.

The VIGILANT E500 Mk2 Series Remote Indicator can be used for remote indication of an alarm.

### Installation

#### Mounting D51MX on Duct

- Mark on duct – holes for sampling tubes, 122mm apart.
- Drill 2 holes 24mm in diameter.
- Position D51MX duct sampling unit oriented as shown.
- Mark on duct mounting screw holes. Drill and fix housing firmly to duct.
- Insert sampling tube extension, tighten holding screw and refit filter.



### Specifications

Operating Voltage <sup>1</sup>	20 to 40Vdc
Quiescent Current	275µA (typ.)
Alarm Current	10mA with LED on
Duct Pressure	-1.15 to +3.0 kPa
Duct air velocity for alarm at 8%Obs/m <sup>2</sup>	1, 2, 4, 8m/s
Sampling Tube Length	160mm minimum
Duct Width (maximum)	1.8m
Remote Indicator	E500 Mk2 Series
Dimensions	
Base & Cover (LWH)	278x190x113 mm
Sampling Tube Pitch	122mm
Duct Holes Required	24mm dia. x 2 places
Ambient Temperature	-10°C to +55°C
Relative Humidity	10% to 95% (n/cond)
ActivFire Listed <sup>2</sup>	afp-1496

#### Part Numbers

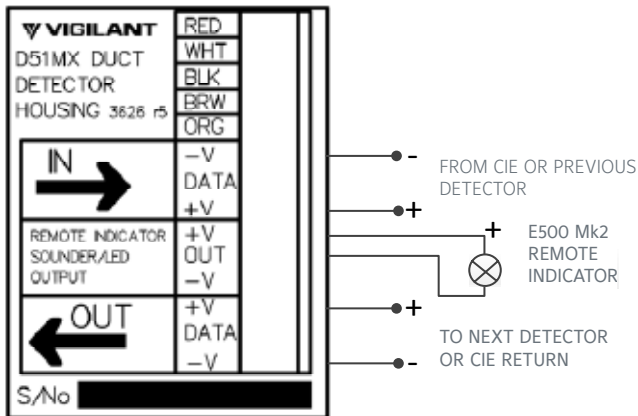
D51MX	DSU with <i>MX</i> Base
D51L	Baffle - bag of 10
D51F	Filter - bag of 10
D51T3	3m Sampling Tube
D51K100	D51K10 End Cap - bag of 10

1. Addressable loop voltage provided by *MX* CIE.

2. Listed with 850P/850PH or 814P/814PH

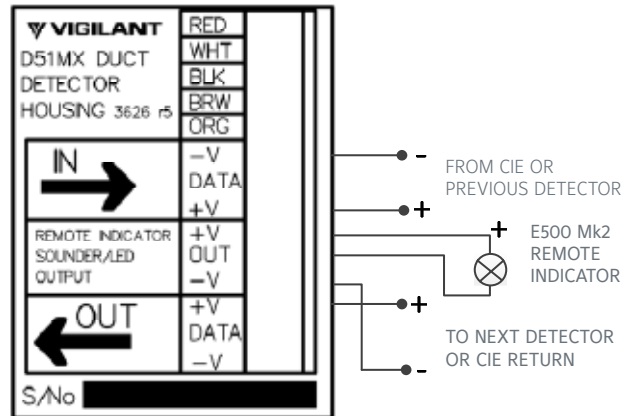
## Wiring

All field wiring terminates in the red termination box to push-fit clamping terminals. Connect field wiring to the terminals as per the drawing.



### D51MX with 850P/PH on MX1/4100ESi

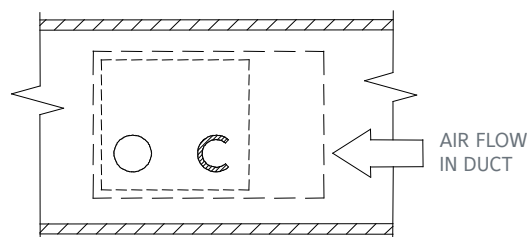
The D51MX contains a Vigilant 3626 R5 version of Termination PCB. Connect the MX Addressable Loop into the IN +V, -V terminals and the outgoing loop to the OUT +V, -V terminals, when an 850P or 850PH detector is used with an MX1 or 4100ESi panel.



### D51MX with 850P/PH on MX4428, or 814P/PH

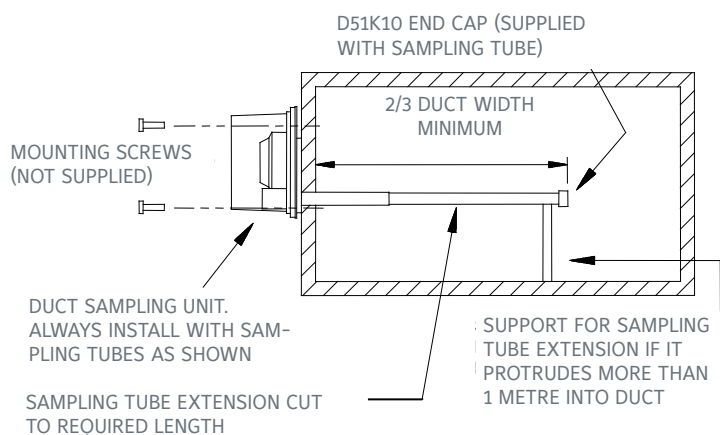
The D51MX contains a Vigilant 3626 R5 version of Termination PCB. Connect the MX Addressable Loop into the IN +V, -V terminals and the outgoing loop to the OUT +V and REMOTE INDICATOR -V terminals when an 814P or 814PH detector is used, or an 850P/PH is used on an MX4428 panel.

## Sampling Tube Extension (supplied separately)



SECTION THROUGH DUCT.

ONLY ONE SAMPLING TUBE EXTENSION IS REQUIRED. SLOT IN TUBE MUST FACE AIR FLOW AS SHOWN. (HOLDING SCREWS SUPPLIED)



Australia Level 3, 95 Coventry Street Southbank VIC 3006 Tel: 1300 725 688 Tel: +61 3 9313 9700 Email: tfppcustservice.au@tycofp.com  
New Zealand 17 Mary Muller Drive Hillsborough PO Box 19-545 Woolston Christchurch 8241 Tel: +64 9 635 0617 Email: tsp.sales.nz@tycoint.com

VIGILANT, a respected regional brand of Johnson Controls, is a technology leader in the Australian and New Zealand fire detection markets with AS and NZS product approvals. The VIGILANT product line includes a comprehensive range of MX TECHNOLOGY fire detection products and the market-leading QE90 voice evacuation systems. VIGILANT product is widely supported throughout Australia and New Zealand by a network of installation companies, service companies and distributors.

© 2017 Johnson Controls. All rights reserved. All specifications and other information shown were current as of document revision date and are subject to change without notice.

D51MXdatVIG1708 August 2017

www.vigilant-fire.com.au