

B524IEFT ISOLATOR BASE

FEATURES:

- *Low profile (26mm)*
- *Low Current consumption (100µA)*
- *Up to 99 isolators per loop*
- *Complete isolation of short circuits*
- *Automatic restore when short circuit is corrected*
- *Rugged industrial construction*
- *Remote LED Connection*
- *Sensor continues to operate in case of a short circuit on either side of isolator base*

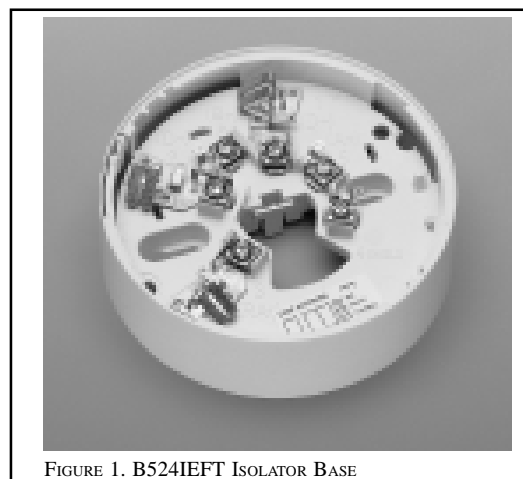


FIGURE 1. B524IEFT ISOLATOR BASE

DESCRIPTION:

The System Sensor B524IEFT isolator base is designed for use with all System Sensor 200 and 500 series analogue addressable detectors. The B524IEFT isolator base prevents an entire communications loop from being disabled when a short circuit occurs. It achieves this by isolating the part of the loop containing the short from the remainder of the circuit. The base also automatically restores the entire loop when the cause of the short circuit is corrected. Up to 20 devices may be isolated per isolator base, depending on the device type (see tables 1 and 2).

This base accepts the following System Sensor detectors : 1551E, 2551E, 5551E, 5551HTE, 5551RE, 1251E, 2251E and 3251.

SPECIFICATIONS:

Base Diameter:	102mm
Base Height:	26mm
Operating Temperature Range:	-30°C to +70°C
Operating Humidity Range:	10% to 93% Relative Humidity (non condensing)
Operating Voltage:	15 to 28.5VDC
Standby Current:	100µA maximum
Maximum ON Resistance (24V)	0.2Ω
Maximum ON Resistance (15V)	0.29Ω
Maximum cable size:	2.5mm ²

Detector / module type	Maximum number between isolators
Standard Detectors in B501 base (1251E, 2251E, 5551E, 5551RE, 5551HTE)	20
Standard modules M500ME, M500CHE, M501ME, M503ME, M500KAC, SSM500DKM, M512ME (External power)	20
M512ME (Loop power)	Not compatible with isolators
Loop-powered Sounders EMA24ALx, DBS24ALx	8
Omni Sensor	Consult panel manufacturer
Any detector (except Omni Sensor) in B524RE relay base	5

TABLE 1. MAXIMUM NUMBERS OF DETECTORS AND MODULES BETWEEN ISOLATORS

EUROPEAN HEADQUARTERS
SYSTEM SENSOR EUROPE
3 HORSHAM GATES
HORSHAM
WEST SUSSEX
RH13 5PJ
UNITED KINGDOM
TEL. : +44 1403 276500
FAX : +44 1403 276501
e-mail: Sales@systemsensor.co.uk

EUROPEAN MANUFACTURING CENTRE
PITTMAY TECNOLOGICA SPA
VIA CABOTO 19
34147 TRIESTE
ITALY

TEL. : +39 40 9490 111
FAX : +39 40 382137





FIGURE 2. B524IEFT BASE DIMENSIONS



FIGURE 3. WIRING DIAGRAM

USING MIXED DEVICE TYPES BETWEEN ISOLATORS

Since devices of different types are likely to be mixed between isolators, it is useful to be able to calculate the maximum number of devices between isolators where different types of device are mixed. To do this, we have allocated an 'isolator compatibility number' to each analogue / addressable device. To check whether the current draw between a pair of isolators is within specification, simply add up the compatibility number for all the devices between each pair of isolators. The number should be equal to or less than 20, if the B524IEFT is used.

Detector / module type	Compatibility Number
Standard Detectors in B501 base (1251E, 2251E, 5551E, 5551RE, 5551HTE)	1
Standard modules M500ME, M500CHE, M501ME, M503ME, M500KAC, SSM500DKM, M512ME (External power)	1
M512ME (Loop power)	Not compatible with isolators
Loop-powered Sounders EMA24ALx, DBS24ALx	2.5
Omni Sensor	Consult panel manufacturer
Any detector (except Omni Sensor) in B524RE relay base	4

TABLE 2. COMPATIBILITY RATINGS WHEN MIXED DEVICE TYPES ARE USED

Example:

Six 2251E detectors in B501 bases, one 5551E detector in a B524RE base, two 1251E detectors in B501 bases and two loop-powered sounders used between a pair of B524IEFT isolators:

Total compatibility number = $6 \times 1 + 1 \times 4 + 2 \times 1 + 2 \times 2.5 = 17$

Since the maximum compatibility number for the B524IEFT is 20, the system will work correctly.