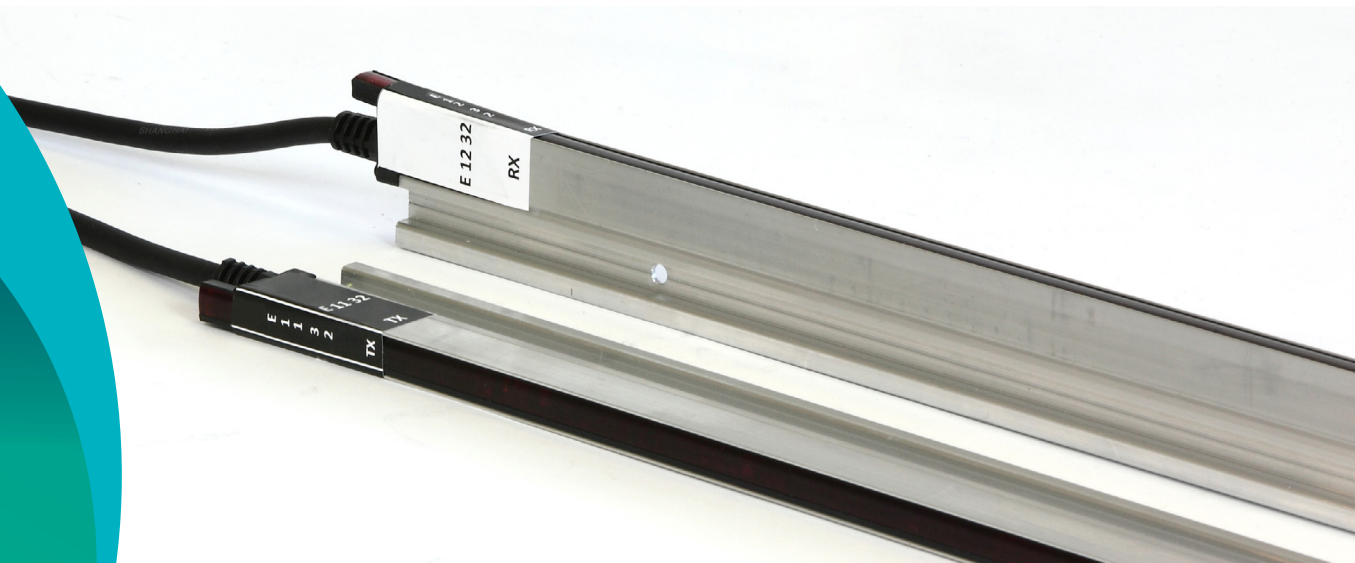


# Memco E-Series Elevator Light Curtains

## Product Datasheet



Memco's E-Series elevator light curtains is a versatile range with up to 40-diode versions, supporting up to 194 criss-cross beams for premium safety.

The flexibility of different numbers of diodes enables a wide range in detection capabilities. The 32 and 40-diode systems have a dense beam pattern that will pick up even small objects between the doors. Interruption to the infra-red beams across the door opening causes the high reliability opto-relay to switch state.

The specially developed filters, unique to Memco, incorporate bespoke lens designs that are used with the surface mount transmit and receive diodes. This optimises the safety performance allowing diagonal beams to close. Improved circuit protection has been added which guards against common wiring errors during installation. Communication between the Tx and Rx diodes is now delivered optically, there is no communication wire required.

The Rx has a diagnostics LED that is visible through the lens and provides an indication of a trigger or a possible system fault. The system has been designed to be tolerant to the infra-red content equivalent to 100k lux.

This results in very high levels of light immunity and outstanding reliability. The Detectors are housed in a robust 10mm slim profile.

## Key Features

- + Designed for new & existing installations.
- + Suitable for Dynamic or Static installations.
- + Reduced installation time:
  - No setting up required
  - No communication wire
  - No configuration needed
- + Extended range of input voltages 11-42VDC to suit all applications
- + Robust Electronics
- + Timeout Software
- + diagnostic LEDs
- + Auto Beam Disabling (ABD)

# Detector Profiles

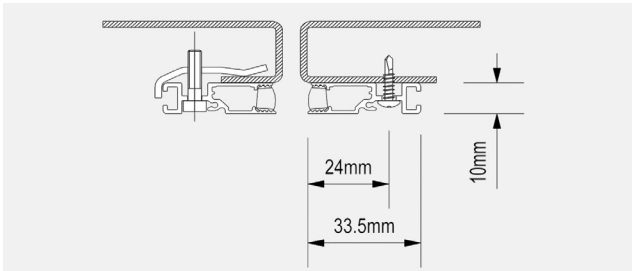


Fig 1: E10 Fixing Clamp & Self-Tapping Screw for side and centre-opening

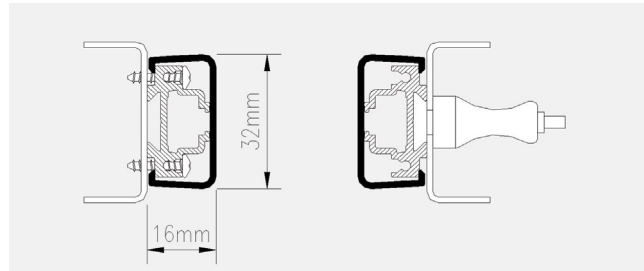


Fig 2: E32 Fitted to the leading Edge for side and centre-opening

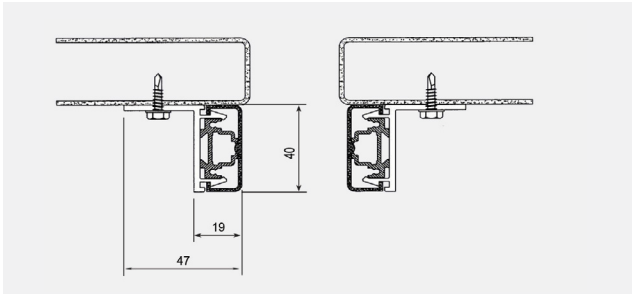


Fig 3: E40 Centre-opening Doors

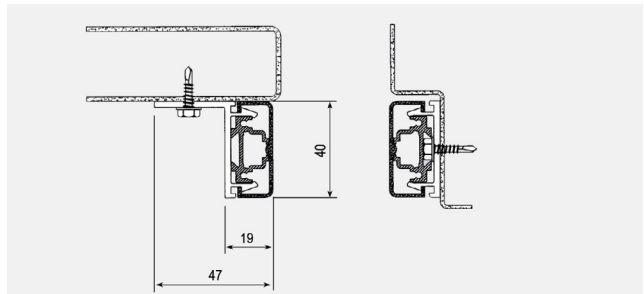


Fig 4: E40 Side-opening Doors

	16 Diodes	18 Diodes	32 Diodes	40 Diodes
Bottom diode from sill mounted 5mm above sill	E10 25mm E32 32mm -	E10 25mm - E40 32mm	E10 25mm E32 32mm E40 32mm	E10 25mm - E40 32mm
Top diode from sill mounted 5mm above sill	E10 1564mm E32 1571mm -	E10 1807mm - E40 1814mm	E10 1807mm E32 1814mm E40 1814mm	E10 1807mm - E40 1814mm
Detector height from sill mounted 5mm above sill	E10 1763mm E32 1905mm E40 1905mm	E10 2005mm - E40 2105mm	E10 2005mm E32 2105mm E40 2105mm	E10 2005mm E32 2105mm E40 2105mm

Table 1: Positioning of Diodes from Sill

## Beam Patterns

The Memco E-Series product portfolio supports systems with 16, 18, 32 and 40 diodes which enables a wide range of detection capabilities. The 32

and 40-Diode systems have a dense beam pattern shown in Fig 4 & 5 for maximum passenger protection.

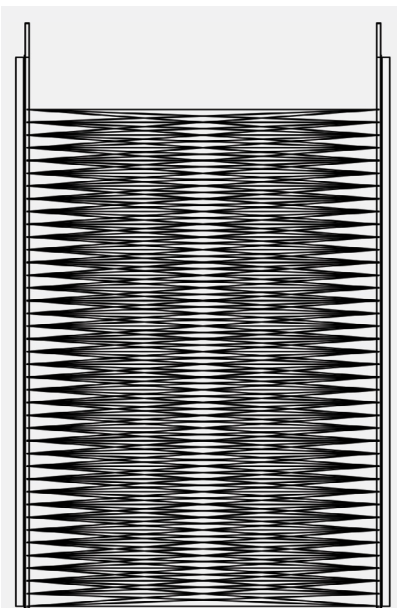


Fig 5: 40-Diode Beam Pattern

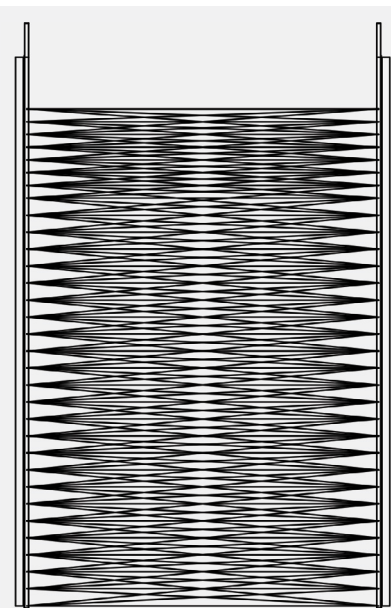


Fig 6: 32-Diode Beam Pattern

### Available Models

- + E-Series 10mm profile
  - 16, 18, 32, 40 Diodes
- + E-Series 32mm profile
  - 18, 32 Diodes
- + E-Series 40mm profile
  - 18, 32, 40 Diodes

# Technical Specification

10mm Profile	E10 16	E10 18	E10 32	E10 40
32mm Profile	E32 16	-	E32 32	-
40mm Profile		E40 18	E40 32	E40 40
No. of Diodes	16	18	32	40
Total No. of Beams at a separation of	74Beams >500mm 46Beams <500mm & >200mm 16Beams <200mm	84Beams >500mm 52Beams<500mm &>200mm 18Beams <200mm	154Beams>500mm 94Beams<500mm	194Beams>500mm 118Beams<500mm
IP Rating	IP65	IP65 (E10) IP54 (E32 & E40)	IP65 (E10) IP54 (E32 & E40)	IP65 (E10) IP54 (E40)
Maximum Range	3m	3m	3m	3m
Max. Response Time	100ms	100ms	100ms	100ms
Scan Time	30ms	40ms	60ms	75ms
Light Immunity	>100,000 lux	>100,000 lux	>100,000 lux	>100,000 lux
Input Voltage	+11VDC - +42VDC Continuous 44VDC [Max] Peak			
Output Voltage	Maximum Switching Voltage=45vdc/30vac Maximum Switching Current=350ma Maximum on State Resistance=2Ohms			
Current Average	<100mA	<100mA	<100mA	<100mA
Peak Current	<100mA	<100mA	<100mA	<100mA
Operating Temperature Range	-10°C - 60°C as per BS2011 Part2.1 Ab & Part2.2 Bb			
Storage Temperature	-25°C to 60°C			
EMC Emissions	EN12015:2004 Immunity 12016:2004, Fast Transient Bursts >4kV			
Random Vibration	20-500Hz 0.002g2/Hz, 4 hours per axis			
Sinusoidal Vibration	30Hz 3.6g RMS 30mins per axis			
Protection Rating	IP65 (E10), IP54 (E40) BS EN60529:1992			
Humidity 93%	93% BS60068-2-30:2005:Part2.1Db:1981, Variant2 @ 55°C			
Cables	Tx=2 Cores & Rx=5 Cores, Length=2.7m			

## Ordering Information

E10 xx	Set of E10 detectors 2.7m cable		
E40 xx	Set of E40 detectors 2.7m cable		
E10 xx-B	Set of Model E10 Detectors with 4m cable		
E10 xx-S	Set of Model E10 Detectors with 0.4m pluggable cable (extension cables to be ordered separately)		
E40 xx-S	Set of E40 detectors with 0.4m pluggable cable		
Extension cables for E10 & E40 detectors			
E10 884	Set of E10 Extension cables, 4m	E10 800	Standard dynamic kit (included with detectors)
E10 885	Set of E10 Extension cables, 5m	E10 802	Static kit, support brackets 19mm wide x 2612mm
E10 887	Set of E10 Extension cables, 7m	E10 803	Clamp plate kit (per detector)
E 10 890	Set of E10 Extension cables, 10m	E10 805	Short Static kit, alu. bracket 1400mm
		E10 812	Static kit, slim, brackets 15mm wide x 2612mm

# AVIRE

Memco is a brand of Avire

Avire Ltd

Clyde House,  
Reform Road  
Maidenhead  
Berkshire  
SL6 8BY, UK

T: 01628 540100

F: 01628 621 947

E: sales.uk@avire-global.com

W: www.memco-global.com

W: www.avire-global.com