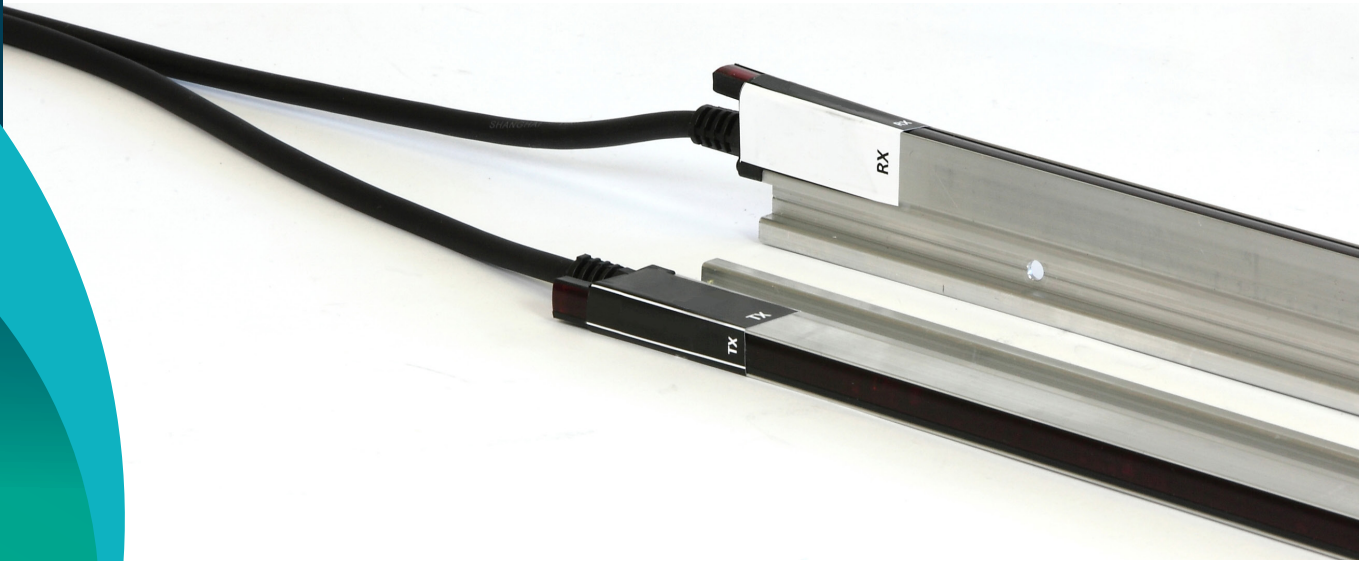


# Memco® E-Series EN81-20 Compliant Elevator Light Curtains

## Product Datasheet



Memco's E-Series elevator light curtains is a versatile range with 20-, 36- or 40-diode versions, supporting up to 194 criss-cross beams for premium safety.

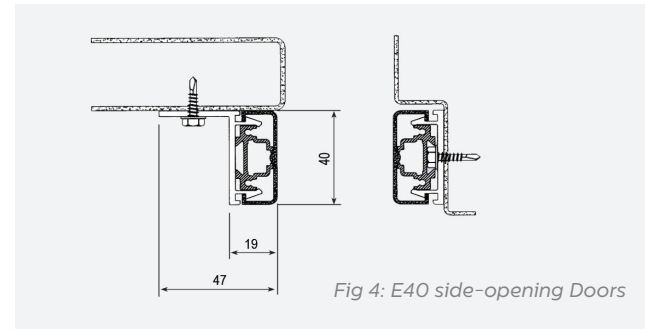
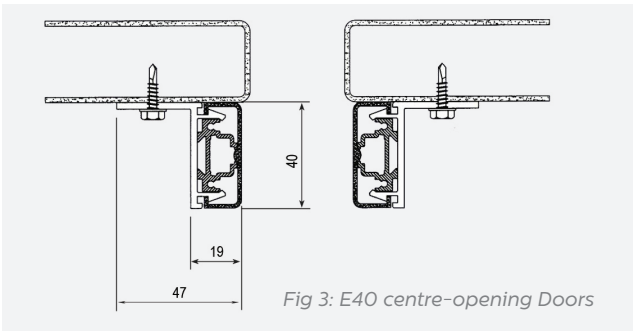
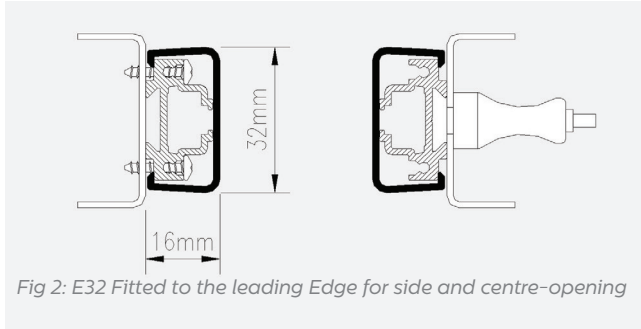
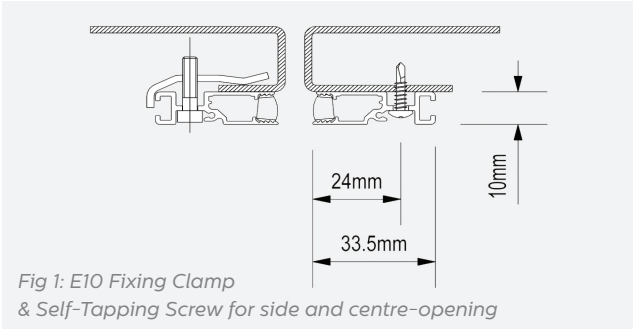
The 36- and 40-diode versions are able to detect a 50mm target in compliance with EN81-20 standards. The 20-diode system is a cost-effective solution which is EN81-20 compliant for certain installations (see last page for details).

The RX has a diagnostic LED that is visible through the lens and provides an indication of a permanent trigger or a possible system fault. In case of failure of the light curtain, the optional diagnostic output on the RX will inform the lift controller so that the kinetic energy of the closing doors can be limited to the required level.

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 10, 32 or 40mm profile.

## Key Features

- + EN81-20 compliant
- + 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
- + Optional Timeout Software
- + Diagnostic LEDs
- + Diagnostic output



- ### Available Models
- + E-Series 10mm profile
    - 20, 36, 40 Diodes
  - + E-Series 32mm profile
    - 36, 40 Diodes
  - + E-Series 40mm profile
    - 36, 40 Diodes
  - + E-Series Cut-Down units
    - E10 08
      - 8 diodes - parallel beams only
      - 10mm profile
      - 550mm length
      - 2m range
    - E10 16C
      - 16 diodes
      - 10mm profile
      - 1020mm length
      - 3m range

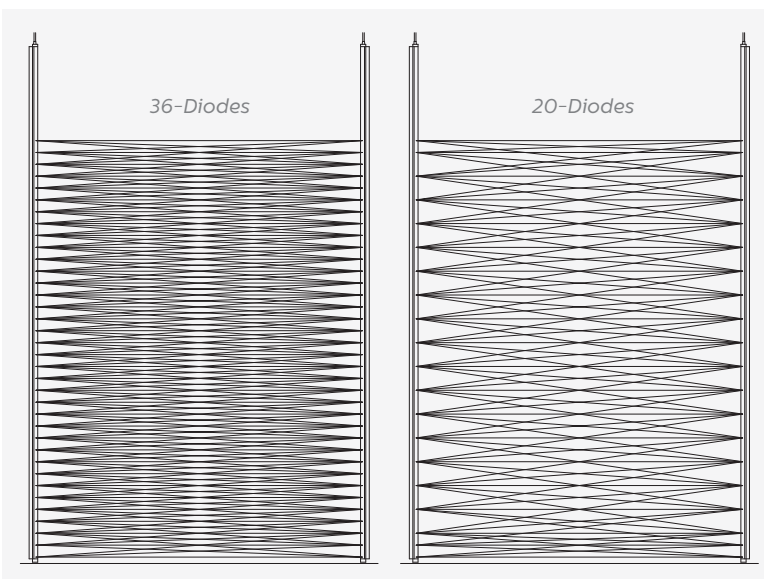


Fig 5: Diode beam pattern for 20 and 36-diode detectors

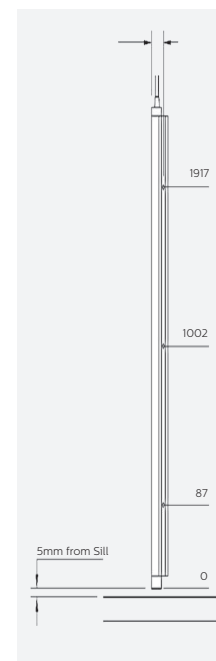


Fig 6: E10 Fixture Holes

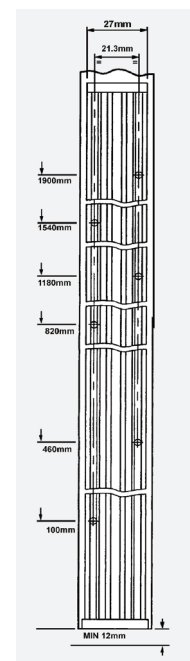


Fig 7: E32 Fixture Holes

# Technical Specification

	<b>E10 20*</b>	<b>E10 36</b>	<b>E10 40</b>
	<b>32mm Profile</b>	<b>E32 36</b>	<b>E32 40</b>
	<b>40mm Profile</b>	<b>E40 36</b>	<b>E40 40</b>
<b>External Dimensions</b>	10mm x 33.5mm x 2000mm (E10)** 32mm x 16.5mm x 2100mm (E32) 40mm x 19mm x 2100mm (E40)		
<b>No. of Diodes</b>	20	36	40
<b>Total No. of Beams at a separation of</b>	84 Beams >500mm 58 Beams <500mm & >200mm 20 Beams <200mm	174 beams >500mm 106 beams <500mm & >200mm	174 beams >500mm 106 beams <500mm & >200mm
<b>Top Diode position</b>	>1600mm		>1800mm
<b>Bottom Diode position</b>	<25mm		
<b>IP Rating</b>	IP65 (E10), IP54 (E32), IP54 (E40)		
<b>Maximum Range</b>	3m		
<b>Max. Response Time</b>	100ms		
<b>Light Immunity</b>	>100,000 lux		
<b>Input Voltage</b>	+11VDC - +42VDC Continuous 44VDC [Max] Peak		
<b>Trigger Output</b>	Maximum Switching Voltage=45VDC/30VAC Maximum Switching Current=350 mA Maximum on State Resistance=2 Ohms NPN,PNP,NC,NO user configurable		
<b>Diagnostic Output (optional)</b>	Maximum Switching Voltage=45VDC/30VAC Maximum Switching Current=350 mA Maximum on State Resistance=2 Ohms NPN,PNP user configurable; NC only		
<b>Current Average</b>	<100mA		
<b>Peak Current</b>	<100mA		
<b>Operating Temp. Range</b>	-10°C - 60°C as per BS2011 Part2.1 Ab & Part2.2 Bb		
<b>Storage Temperature</b>	-25°C to 60°C		
<b>EMC Emissions</b>	EN12015:2014 Immunity 12016:2013		
<b>Random Vibration</b>	20-500Hz 0.002g <sup>2</sup> /Hz, 4 hours per axis		
<b>Sinusoidal Vibration</b>	30Hz 3.6g RMS 30mins per axis		
<b>Humidity</b>	93% BS60068-2-30:2005:Part2.1Db:1981, Variant2 @ 55°C		
<b>Cables</b>	TX=2 Cores & RX= 5 Cores (7 Cores with diagnostic output), Length= N: 2.7m, B: 4m, S: 0.5m		

Note: Static kits need to be ordered separately for static installations.

\*E10 20 complies with EN81-20 in certain static installations only. See guide on next page for details.

\*\*10mmx24mm profile is also available on request. Auto Beam Disabling is no longer a standard feature on this product. If you do require this feature, please contact your local sales office.

For advice on multi-door installations, please contact your local sales office.

## Ordering Information

### Part Number Code

e.g.:-

Product	Profile* (mm)	No. of Diodes		Product Options	Custom Cables
<b>E</b>	<b>10</b>	<b>20</b>	<b>-</b>	<b>1</b>	<b>N</b>
E	10	20		1 = Diagnostic Output, Timeout Enabled	N = Std Cable 2.7m
	32	36		2 = No Diagnostic Output, Timeout Disabled	B = 4m Cable
	40	40		3 = No Diagnostic Output, Timeout Enabled	S = 0.4m pluggable Cable

Extension cables for E10 & E40 detectors		Fixing Kits	
E10 884	Set of E10 Extension cables, 4m	E10 800	Standard dynamic kit (included with detectors)
E10 894	Set of E10 Extension cables, 4m (diagnostic output)	E10 802	Standard static kit
		E10 803	Clamp plate kit (per detector)

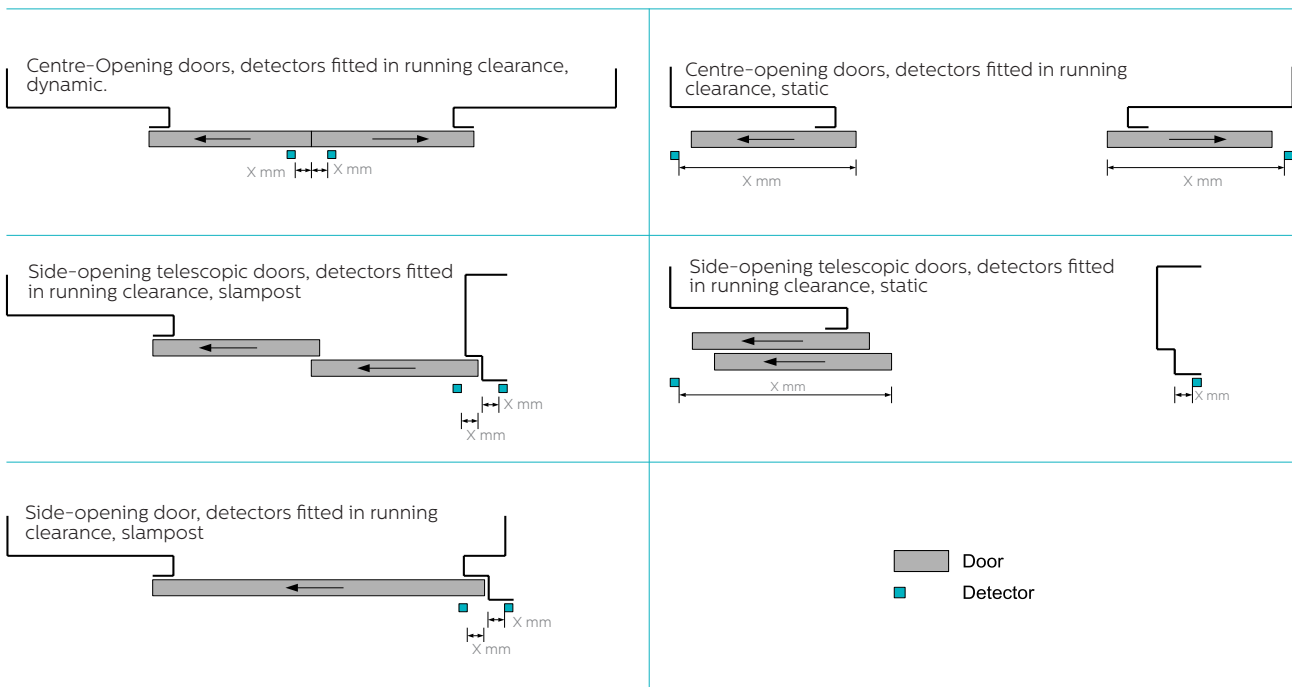
# Available On Request

Detector variants with extended range

TOE = Timeout enabled; TOD = Timeout disabled

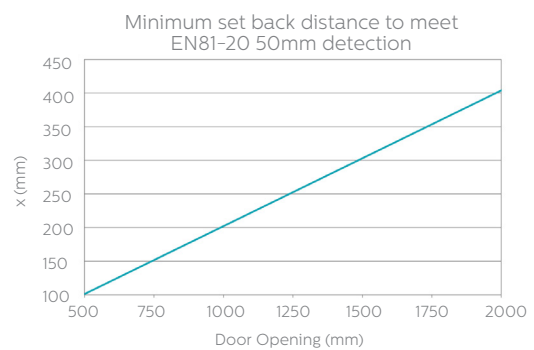
Item	Description
E10 36-1NX	E10 36,Diag,TOE,2.7mCable,extended max range spec - 4m
E10 36-2NX	E10 36,NoDiag,TOD,2.7mCable, extended max range spec - 4m
E10 36-3NX	E10 36,NoDiag,TOE,2.7mCable, extended max range spec - 4m

## EN81-20 Installation Guidelines for E10 20



Light curtains with diode spacing greater than 50mm can still comply with EN81-20 when installed at some set back distance from the edge of the elevator door. This guide shows how E10 20 can comply with EN81-20 in specific installations.

E10 36 is compliant in all installations.



Note: x = 0mm for E10 36

*This product is designed for use in elevators with powered automatic doors where the closing energy is less than 10J in normal operation and less than 4J during de-activation of the light curtains or less as per EN81 requirements. It should be installed by qualified personnel only, therefore any use outside of this application is at the installer's own risk and should be assessed appropriately.*

*As a result of our policy of continual improvement, the information in this document is subject to change without notice and it is intended only as general guidance on product performance and suitability. This information shall not form part of any contract.*

# AVIRE

Memco is a brand of Avire

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